

UIPlanner Detailed Model User Guide

***UTILITIES INTERNATIONAL, INC.
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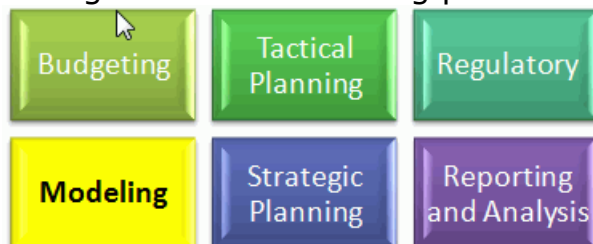
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UIPLANNER OVERVIEW

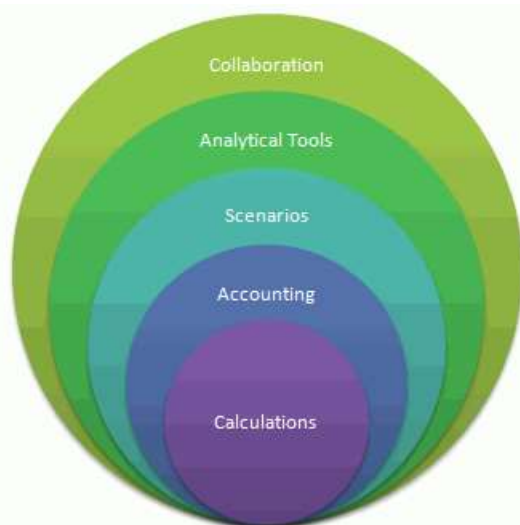
{ XE "Model Overview" * MERGEFORMAT }{ XE "Detailed Model Overview" * MERGEFORMAT }Detailed Model Overview

A diagram of the modeling process in UIPlanner is depicted below:



Scope

Modeling can be thought of in layers of functionality as depicted below. Calculations are at the heart of a model. Accounting processes surround calculations. Scenarios are created and compared. Results are analyzed. All of this is done in a collaborative environment.



Calculations

At the core of UIPlanner is the ability to process calculations. UIPlanner enables you to:

- Build powerful, transparent calculations
- Include both actual and planned results
- Process calculations over any set of items and timeframe
- Link together all elements of a plan
- Manage complex interdependencies efficiently

Accounting

Virtually all business plans incorporate financial information. Financial statements should adhere to accounting rules. UIPlanner includes a pre-built framework that allows you to:

- Manage differences between cash and accrual accounting
- Use two-sided accounting
- Produce integrated, verifiable financial statements
- Consolidate results by legal entity, line of business, etc.
- Generate elimination entries automatically

Scenarios

Business plans of any type typically present one or more scenarios. Powerful scenario management in UIPlanner helps you:

- Organize information into logical groups
- Answer what-if questions
- Lock data and scenarios for future reference
- Compare every detail of the plan across multiple scenarios

Analytical Tools

UIPlanner is a great platform to produce business plans of various types. UIPlanner provides reporting and analysis tools that enable you to:

- Produce flexible, useful reports
- Analyze business drivers, not just what has changed
- Create dashboards to manage performance
- Analyze results faster by drilling into charts and graphs
- Effectively analyze underlying business logic and information
- Automatically pull data into spreadsheets that you built.

The ability to effectively and efficiently analyze plans and actual results enables you to see trends, understand cause and effect, and of greatest importance, make better decisions.

Collaboration

It is very difficult to effectively collaborate using stand-alone spreadsheets. Good plans are built on a foundation of sharing information in an efficient and controlled process.

UIPlanner enables you to collaborate effectively, and to manage (and speed up) the planning process. Resulting plans are internally consistent. UIPlanner also increases communication and cross-training of staff. In summary, it enables you to:

- Share information with team members
- Enable independent work when appropriate
- Track all changes and who made them.

- Easily illustrate your processes
- Manage tasks and milestone completion

Objectives

UIPlanner Modeling was designed to support the following objectives:

Efficiency

- Avoid wasting time passing and reconciling data.
- Shorten turnaround time and accelerate investment recovery.
- Better utilize staff for analysis, not clerical tasks.

Integration

- Avoid disjoint spreadsheets and processes that are subject to error.
- Make forecasts consistent and avoid reconciling multiple models.
- Improve communication among key parties.

Transparency

- Calculations performed by others become accessible and understandable.
- Transparency can lead to better conclusions and results.
- Auditable results are more likely to be accurate and to withstand scrutiny.

Calculations

Build powerful, transparent calculations

Why?

Calculations serve a variety of purposes in planning and budgeting. In UIPlanner, all calculations are reportable. In fact, the terms calculations and reports are often used interchangeably in UIPlanner. Calculations are typically constructed for one or more of the following five purposes:

1. Calculate part of a plan such as revenue, project spending or taxes, etc.
2. Define inputs that are financial or non-financial (such as number of customers).
3. Present a report to management, such as an Income Statement or Balance Sheet.
4. Analyze the business drivers behind a change.
5. Check for reasonable or accuracy of a result.

How?

Transparency: With UIPlanner, you use the Calculation Editor to build transparent business logic. It is not uncommon for spreadsheets to be maintained and understood by only a single person. If you did have access to another person's spreadsheet, you might see complex cell formulas such as "IF(A1=A3,MAX(D12,E20),SUM(Sheet1!C10:D21))" that only the author will understand. UIPlanner makes it easier for all users to understand the logic behind calculations.

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Because transparency is so important in planning, UIPlanner uses accessibility and clarity to deliver complete transparency. Any authorized user can [view or edit a calculation](#). There are no hidden processes or business logic.

Clarity is achieved first by breaking calculations into understandable pieces. Financial plans for large enterprises are inherently complex. UIPlanner promotes simplicity and enforces a rule that you can have no more than one function on a single line. UIPlanner cannot make a calculation that is inherently complex simple, but having the ability to see complex calculations one step at a time makes complex calculations much more understandable.

Another way that clarity is achieved is that you can see line labels in formulas to make calculations easier to understand, e.g., look at a formula and see "KWh used", not "Sheet19!Q92". If you change a label on a line from "Rate" to "Tariff Rate", all references to that line change as well. (C: KWh used * D: Rate] is automatically updated to be [C: KWh used * D: Tariff Rate].

Spreadsheet-like formulas: UIPlanner assigns every line in your calculation a letter reference (e.g. A, B, C ... AA, AB, etc.) You simply enter a formula into a calculation much the same as entering formulas in a spreadsheet (e.g. "A + B"). All basic math functions are supported. You maintain the calculations and do not need the assistance of a programmer to write or modify a calculation.

Verifiable and consistent: Working in concert with the step by step approach described above is the ability to see a calculation result in its local context. For example, a calculation might be being processed over fifty bond issues over a sixty month period. Seeing a calculation result in its local context right next to the formulas and line labels makes a calculation easier to verify.

If you were not using UIPlanner in the example of a formula applying to fifty bond issues over a sixty month period, you could copy a formula into 3,000 (50 times 60) cells in a spreadsheet. When rushing to get a plan completed, someone might put an adjustment of "... +100000" into one of those 3,000 cells and then later forget that it is there. Outside studies have shown that this is one of the many factors contributing to significant error rates in spreadsheets. In contrast, by using UIPlanner and, therefore entering a formula only once, consistency is assured.

Traceable: When viewing or editing a formula, the line might be using one or more precedent lines and one or more other formulas may be depending on its result. In UIPlanner, you can trace dependencies within and across various calculations/reports.

Leverage spreadsheets: You can still leverage the advantages that spreadsheets provide. Spreadsheets are good means to capture numbers and display results. Using UIPlanner you can enter data via Excel and also send a report to Excel.

Define any input: Many input values are required in various calculations. You provide inputs by simply adding a line and then use the input function to indicate that the lines value will be entered or read into the system.

Efficiency: Efficiency is achieved by using pre-built functions that would be time consuming and inefficient to replicate such as tax depreciation, thirteen month averages, amortization factors, etc.

{ XE "Navigation" * MERGEFORMAT }{ XE "Colorixe Tabs" * MERGEFORMAT }{ XE "Refresh" * MERGEFORMAT }{ XE "UIPlanner Navigation" * MERGEFORMAT }{ XE "UIPlanner" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }UIPlanner Navigation

Navigation in UIPlanner is accomplished by making selections from the *Menu Item* list located at the top of all UIPlanner screens, or by selecting screen tabs you create.

As users work with a system, they develop their own preferences and style in how they like to use it. Some users gravitate towards the mouse, with right and left click actions. Other users prefer working with the keyboard, and like keyboard shortcut combinations. The navigation options in UIPlanner are designed to accommodate these differing user preferences:

- **Shortcut Key Combinations** – UIPlanner includes keyboard shortcut combinations to allow you to invoke many common events. A number of these are common throughout UIPlanner, and are available on all tabs. Additionally, because of the importance and complexity of the **CALCULATION EDITOR**, there are a number of shortcut key combinations specific to that screen.
- **Typing and Searching** – There are text search capabilities found throughout UIPlanner. A search option exists in the Export-to-Excel-Table class. Every table in the application which uses that class has a Search Table right-click option. If you enter a text string in the search field, it will scroll to the cell that has that text. There is a **NEXT** button

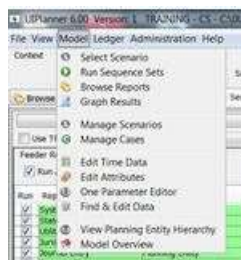
to iterate through all matches in the table. The search text-field at the top of all **INDEXED SEARCH DIALOGS** starts with cursor focus in the text-field and focus on it, so that you can start typing without using your mouse.

- **Tree Views** - Two right-click options have been added to all tree objects (e.g. planning hierarchy tree view, or the planning ledger). They are *Collapse Expand Tree Below This Node* and *Expand Tree Below This Node*. These allow you to collapse or expand the tree with one click.
- **Export to Excel** - Tables in UIPlanner allow you to export to Excel or HTML by right-clicking at the top of the table.
- **Message Boxes** - All UIPlanner message boxes have focus on the **OK** buttons, so that all you have to do to clear them is press enter.
- **Right-Click Menus** - Many UIPlanner screens have unique menus accessed by a right mouse click on certain screen features. For these screens, the individual right-click menus will be detailed in the individual help sections.

Menu Items

Menu items are the primary navigational means to access screens used in UIPlanner (shown below). Menu items listed on your UIPlanner screen may be different than the example shown depending on your configuration and version. (See **MANAGE MENUS** for more detail.) All menu items, however, function in the same way.

The screen print below shows menu items along the top. The menu item has been selected displaying the list of screens and options grouped under that item.



Each menu item will contain a drop-down list of related screens. The content of the menu items in this example are described below.

File contains screens or options related to saving and refreshing the data base.

View contains options that allow you to manage your stored preferences and set the display style for UIPlanner screens.

Budget: contains most of the UIPlanner Budget Subsystem screens.

BudgetAdmin contains administrator screens for the UIPlanner Budget Sub-system. Only budget administrators will have access to most of these screens.

Calculations contains screens and options used for the creation, running and maintenance of calculations in UIPlanner.

Data contains screens and options for the viewing, editing, and processing of data in UIPlanner.

Accounting allows you to perform accounting functions such as managing the ledger, posting associations, lag factors and inputting actuals.

Scenarios contains screens and options used for the creation and maintenance of scenarios.

Analyze contains additional analysis options, such as graphing and managing reports.

Collaborate contains tools to coordinate the various applications of UIPlanner, as well as ways to share information with other users, such as managing switchboards and work plans.

Strategic Model contains screens used in the operation of UIPlanner's Strategic Model application.

Regulatory contains screens related to allocations and assignments of report lines for regulatory reporting or analysis, such as Customer Revenue model and schedule management screens.

Daily Cash contains screens related to the Daily Cash Forecast module.

Administration contains screens and functions related to the administration of all areas of UIPlanner.

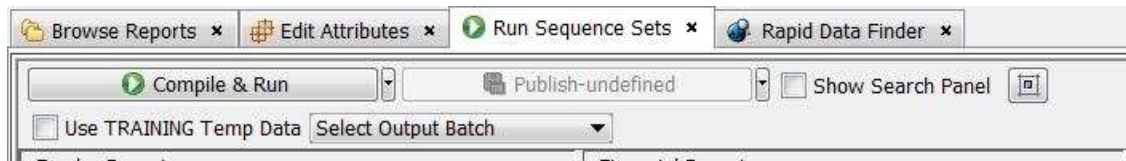
Help contains access to open the help system as well as documentation on recent releases of UIPlanner.

Again, please note that your menu configuration may differ in organization and/or content from this example.

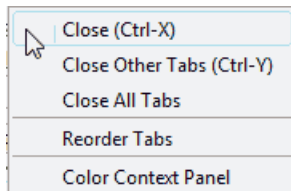
Screen Tabs

Every time you open a screen, a new tab is created for the screen. There will be one tab for each screen that you have open. In the example below, there are four screens open, each with its own tab. To visit a screen that is already open, just click on the tab associated with the desired screen.

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There are two ways to close a tab. The first way is to click on the small "X" on the right side of the tab label. The second is to right-click on the tab. This will open a small dialog box with three options for closing tabs. This options dialog box is shown below.



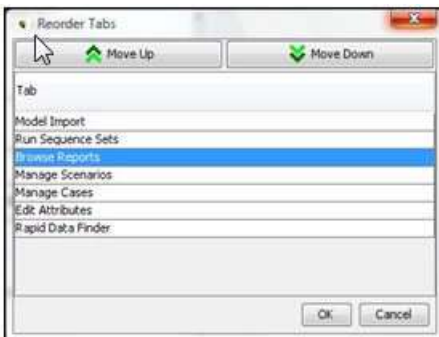
Close (or CTRL-x) will close the selected screen tab.

Close Other Tabs (or CTRL-y) will close all screen tabs except the one that is currently selected.

Close All Tabs will close all screen tabs.

Reorder Tabs

Another right-click option allows you to change the order of the active tabs (see below). This allows you to put the tabs in a logical order.

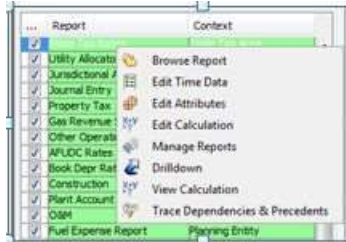


Color Context Panel

You also have the ability to set the color of the tab backgrounds for each tab, to assist with navigation and identifying specific tabs. By right clicking on the tab you can choose its color.

Right Click Drop Box

In UIPlanner, most screens allow you to navigate by right-clicking your mouse. Shown below is a dialog box with navigation options available from the **RUN SEQUENCES** screen. This drop-down menu is available after selecting (highlighting) a report in a sequence.



Options presented in the drop-down menu are designed to show the most likely destination from the current screen position.

Shortcut Key Combinations

The global shortcut keys used in UIPlanner are as follows:

ESC The <escape> key closes the active screen/dialog box with some exceptions, e.g., the **CALCULATION EDITOR**.

CTRL-S Opens the **VIEW PENDING ATTRIBUTE SAVES** dialog box.

CTRL-W Closes the active dialog box. If no dialog box is open, it will close UIPlanner, prompting the user if there are unsaved changes.

Login

The Release ID of the UIPlanner software is displayed on the title of the login screen. (See below)

UIPlanner Detailed Model User Guide

{ XE "Logon" * MERGEFORMAT } { XE "UIPlanner Logon Screen" * MERGEFORMAT } UIPlanner Login Screen

UIPlanner may be opened in a number of different ways, depending on your installation. In most cases, you will open UIPlanner by clicking an icon on your desktop:



Clicking on the UIPlanner icon will launch the **UIPLANNER LOGIN** screen. This screen has options for two databases:

- 1) The Enterprise DB (Oracle, SQL Server)
- 2) MS-Access

When the login screen opens, it will automatically display the database you last logged into. This will almost always be the Enterprise database. See the screen print below.

To log in to the selected database, simply click **OK** to continue the login process and open UIPlanner. More detailed information on the screen features and functions is provided below.

Screen Layout:

The top region of the screen, *Provide Login Information*, contains fields for your login ID and for you to select a version. The logon ID defaults to your network ID. The Version # drop-down list will display all current versions.

The middle of the screen is where you choose the database to use. If you select Enterprise DB, it will be populated with the database connection string information. If you select MS Access, it will display a drop-down list of recent local databases used, with the most recent one listed in the box.

The bottom region of the login screen contains a window that echoes information on the login process.

The **OK** button to launch the login process is located in the bottom right region of the screen.

Log in to UIPlanner

Once you open the **LOGIN** screen, you need to choose whether to enter the production version (Enterprise) or a local MS Access copy.

Enterprise DB

As indicated above, virtually all of the time you will be logging into Production. Note that the **LOGIN** screen will be populated with what you last logged into, so almost always you can just click **OK**. Below is an example where you last logged into the Enterprise database, Version 1.

Provide Login Information

Login Id: Look up Version Names (next login)

Version #:

Database Type: MS-Access Enterprise DB

Provide Database Connection Information

Database URL:

Database Login:

Database Password:

Login Progress

When Enterprise DB is selected, the *Login ID* field is disabled. To log into the Enterprise DB, you must use your network ID, and this is pre-populated.

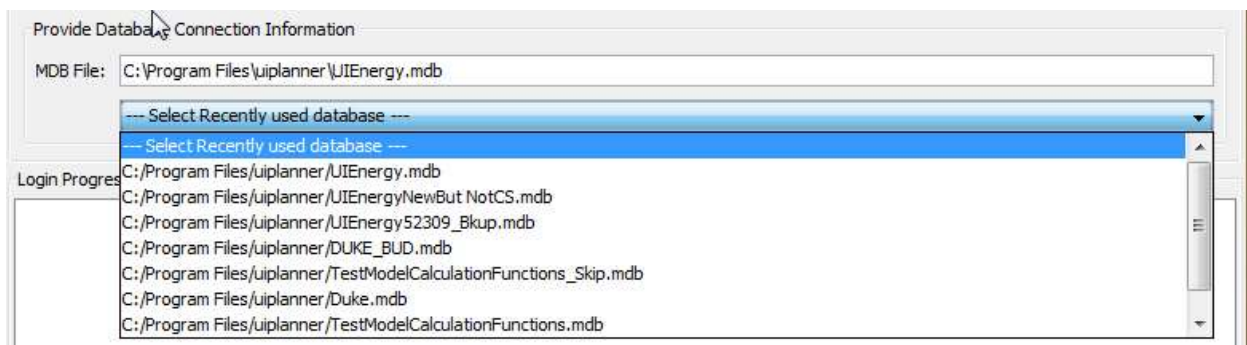
Also, the screen contains the database connection information (URL, ID and Password). This information is populated from the UIPlanner.bat file that launches the login and is maintained by the System Administrator. **You should not change the information in this field.**

If you want to log into a different version, select it from the *Version #* drop-down list in the top region of the screen. If you are not sure which version to pick, contact your system administrator for more information.

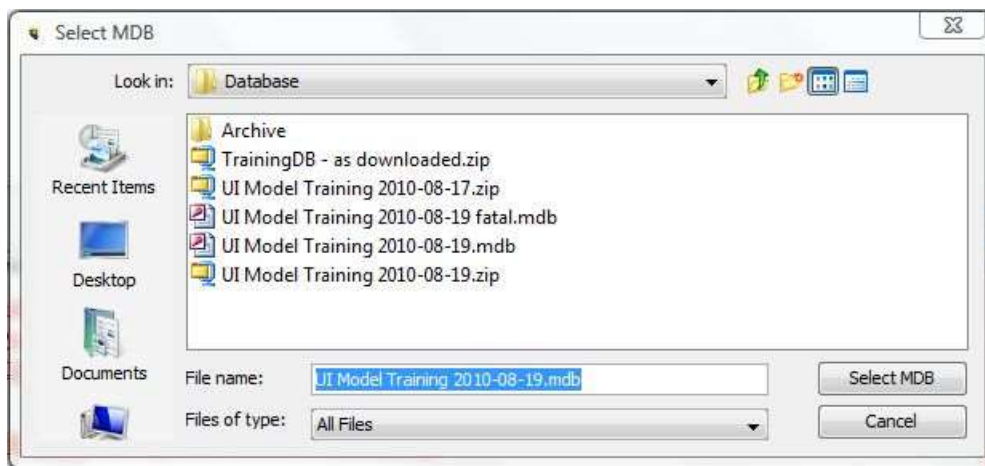
When you click **OK**, it will log you into the Enterprise DB, and the progress window will echo the login steps. Also, the login process will be echoed to the stack trace (or the error.txt file), depending upon your configuration.

MS Access Local Database

If you want to log into a local MS Access database, select the MS Access radio button. This will change the **LOGIN** screen. Rather than the database connection information, the screen will contain a drop-down list of your recently opened MS Access databases, with the most recent one listed first.



If you need to work with a database that is not listed, double-click in the *MDB file* field to open an Explorer Window (see below). Browse to find the database you want, and click **SELECT MDB**.



The path to your selected database will appear in the **LOGIN** screen. Click **OK** to complete the login process to the selected database.

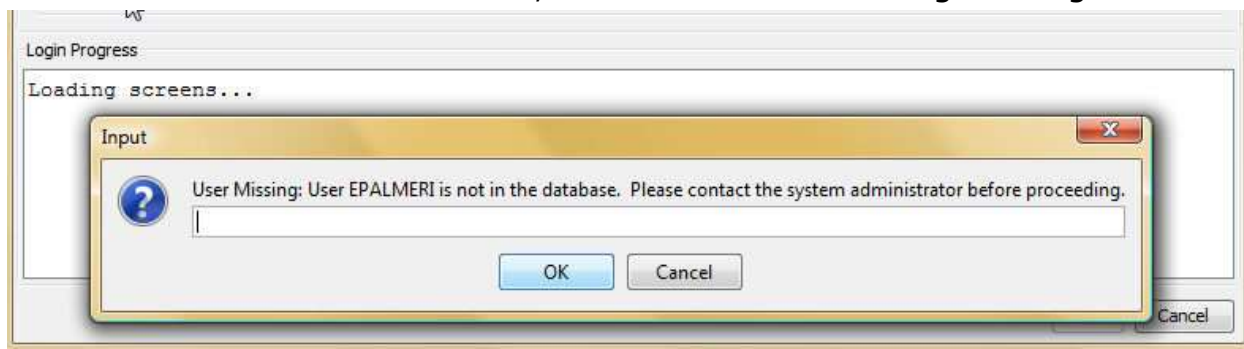
Note that if you are using MS Access, you **CAN** change the login ID. This allows you to log in as a different user if your id is not yet in security for that local copy.

UIPlanner Detailed Model User Guide

Note: Clients will often use local MS Access database versions of their implementation for testing or for remote work. See [Copy to Local Database](#) for more information.

What To Do If You Encounter Problems

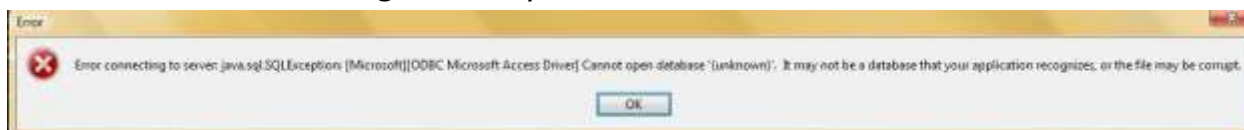
You enter a user ID and click **OK**, but receive the following message:



If you are logging into the Enterprise database, you are not yet added to UIPlanner security. Click **CANCEL** and contact your system administrator.

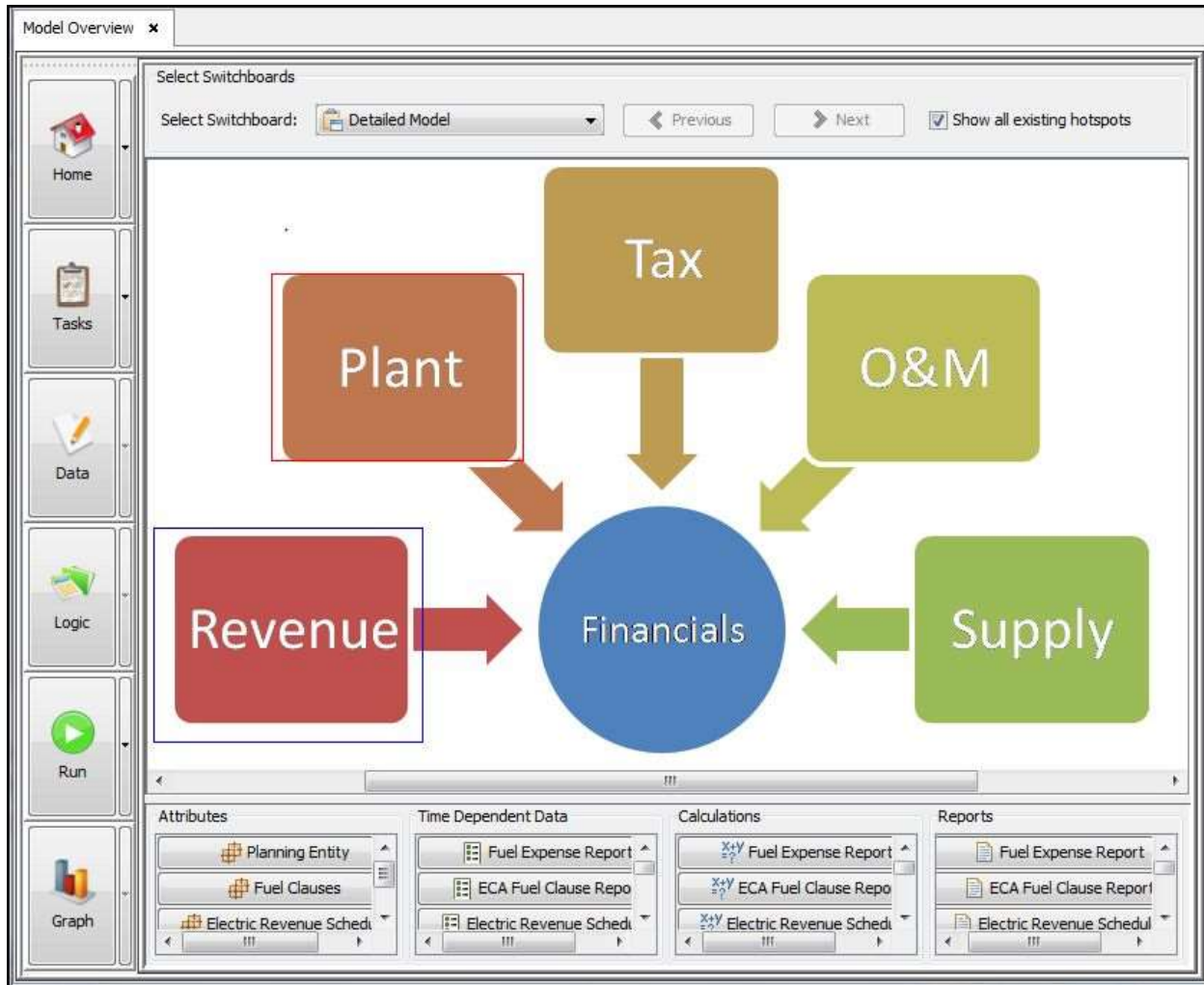
If you are trying to log into a local MS Access database, you either have mistyped the User ID or you are not in security in that database. Click **CANCEL** and retry the User ID with one already in security. You may need to contact your system administrator (or whoever sent you the database) to obtain a valid User Id.

You receive this message when you click **OK**:



As indicated, UIPlanner cannot locate or recognize the database chosen. Contact your system administrator.

{ XE "Model Overview Screen" * MERGEFORMAT }Model Overview Screen



The **MODEL OVERVIEW** screen is a management tool that enables you to access key functionality of the model from a single screen. From this screen you can:

- View available switchboards and assign one switchboard as a "home"/default view.
- View and manage work plans.
- Find and edit data.
- View a graphical display of model report relationships.
- Run the model and automatically output a selected report batch.
- Display graph data.

Screen Layout:

The **MODEL OVERVIEW** screen consists of a series of six buttons aligned as a toolbar. This toolbar can be repositioned to the top of the screen, left side or as a floating panel.

1. **HOME** ("Switchboard") – a drop-down list is available (down arrow) that allows you to select a switchboard to view.
2. **TASKS** – a drop-down list is available (down arrow) that allows you to select a work plan to view.
3. **DATA** - a means of finding and editing data.
4. **LOGIC** - a graphical display that allows you to view report precedents and dependencies.
5. **RUN**– a drop-down list is available (down arrow) that allows you to select a report batch to output.
6. **GRAPH** - access to graphing capability.

List of Task or Operations That Are Performed With This Screen:

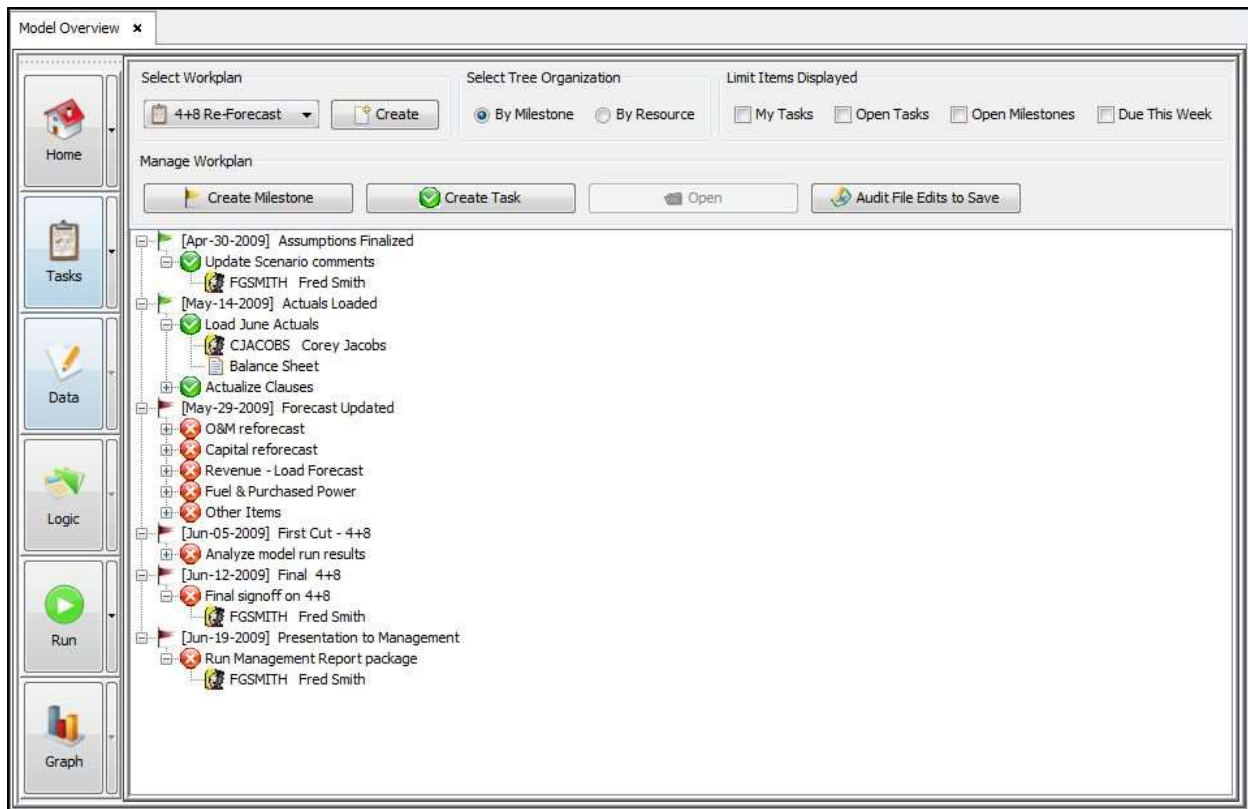
View Switchboard:

- Click **HOME**.
- Select a switchboard from the *Select Switchboards* drop-down list, e.g., Detailed Model, to view a desired switchboard (example is shown above).

View and Manage Work Plans:

- Click **TASKS**.

Note: The **VIEW AND MANAGE WORKPLANS** screen is launched. See below:

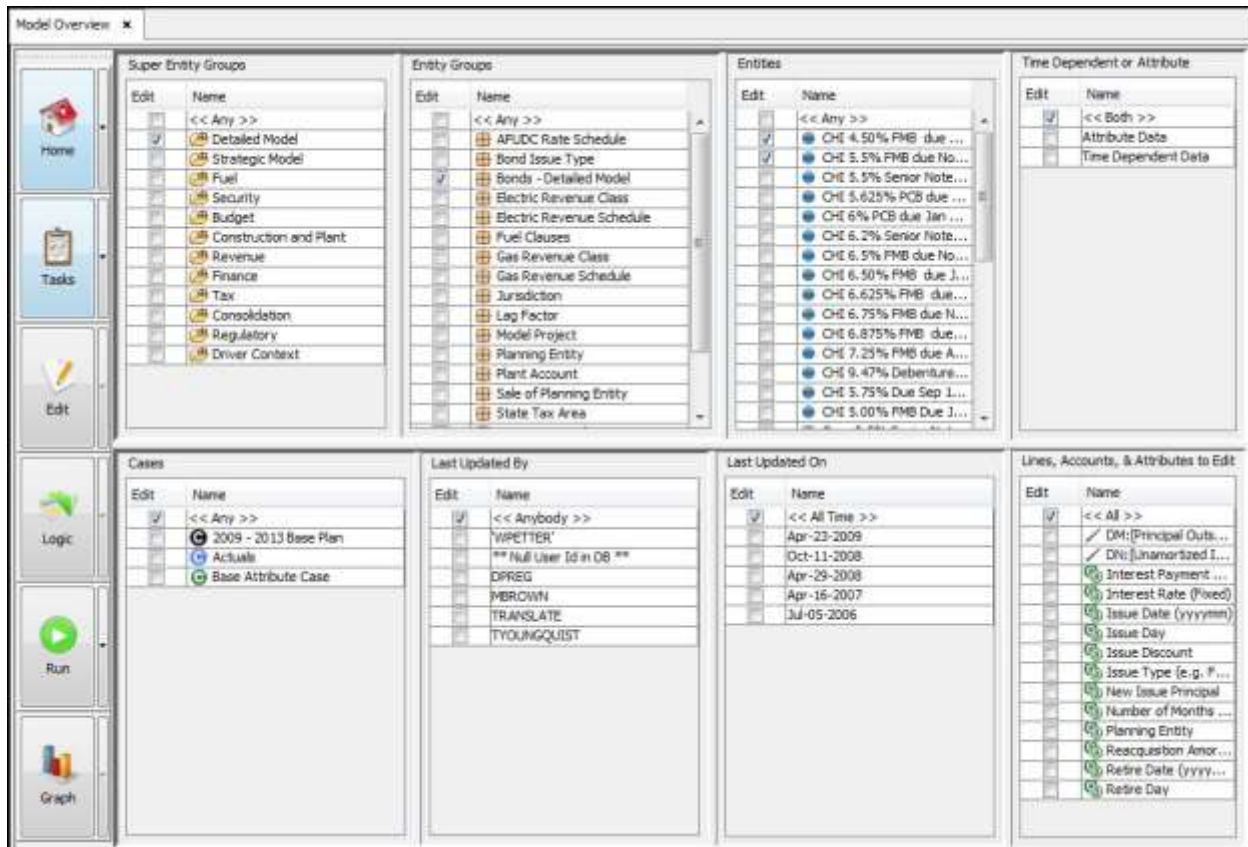


Find and Edit Data:

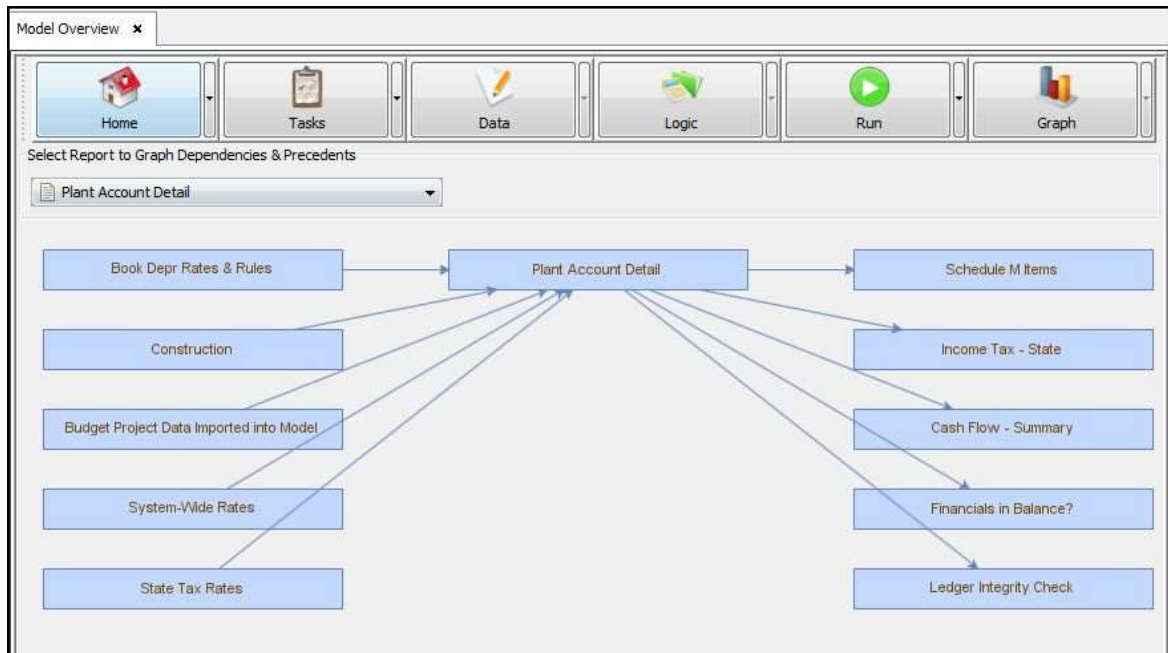
- Click DATA.

Note: The **FIND AND EDIT DATA** screen is launched. See below:

UIPlanner Detailed Model User Guide

**Display Logic:**

- Click **LOGIC**.
 - Use the *Select Report to Graph Dependencies & Precedents* drop-down list to select a report, e.g., *Plant Account Detail*.
 - A graphical display will appear displaying relationships between the selected report and other model reports.
 - Double-click on one of the report's precedents or dependents to see that report's relationships to other reports.



Run Model and Produce Report Batches:

- Use the down arrow to select a report batch from the drop-down list.
- Click **RUN**.

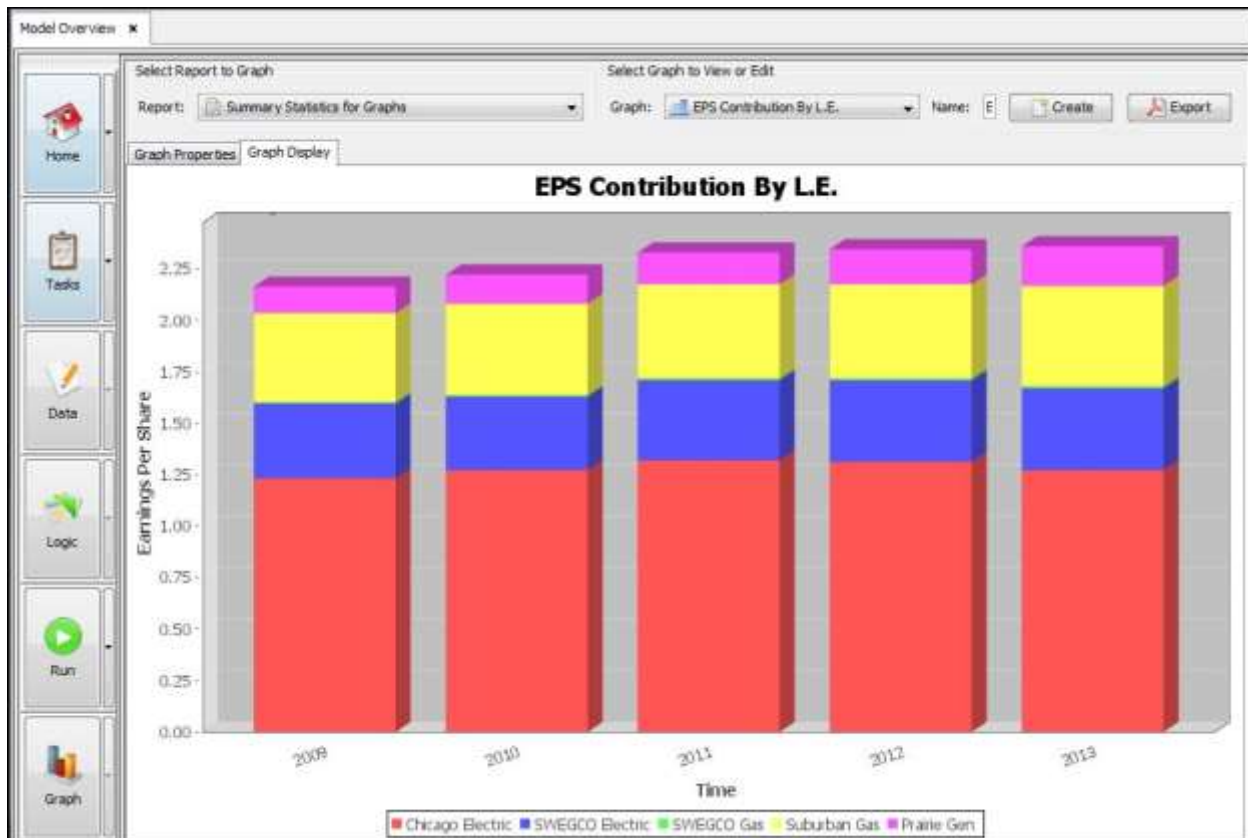
Note: The full model sequence will be run, and the **BROWSE REPORTS** screen will be launched displaying the report batch selected. The **REPORT BATCH SETTINGS** tab on the **BROWSE REPORTS** screen will determine the output display.

Graph Data:

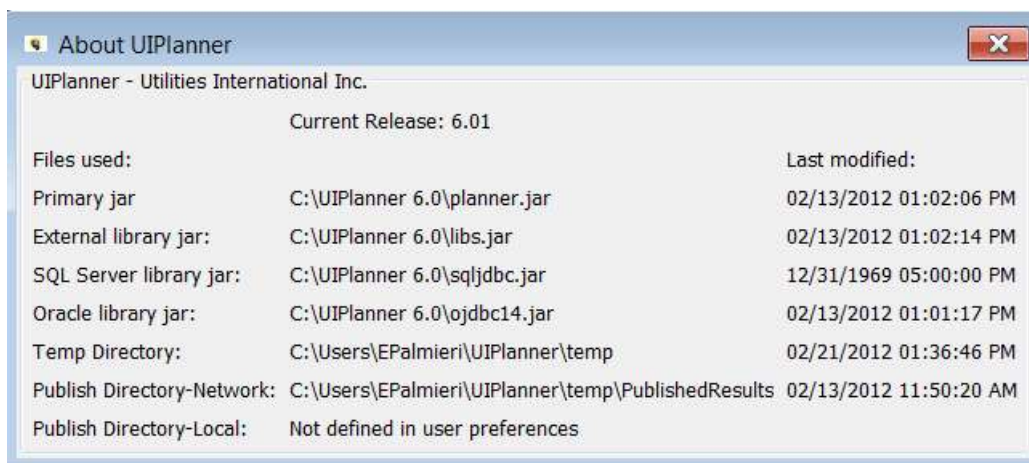
- Click **GRAPH**.

Note: The **GRAPH RESULTS** screen will be launched. See details under **GRAPH RESULTS**.

UIPlanner Detailed Model User Guide



{ XE "About UIPlanner" * MERGEFORMAT }{ XE "UIPlanner" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }About UIPlanner Dialog Box



UIPlanner features are listed by release number. This screen is designed to give users a listing of program files and the dates of their most recent modifications. Click the "X" in the top right corner to close the box.

MODEL QUICK START

{ XE "Tutorial" * MERGEFORMAT }{ XE "Quick Start" * MERGEFORMAT }
Model Quick Start

This topic introduces some terminology and describes some commonly used screens. It provides a quick tour through the main screens of the Model, and illustrates a common way you would use those screens.

UIPlanner creates monthly and annual **reports** for business **entities**. Entities may be legal entities, departments, rate classes, or construction projects – any type of business concept that you want to report. Reports have **lines**, which may be input data or may be a formula.

For example, this is a small report:

2011 Budget Scenario	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011
Residential					
Sales (MWh)	1,000	900	700	600	750
Average Rate per MWh	150	150	150	150	155
Rate Revenue	150,000	135,000	105,000	90,000	116,250

This is how the report was defined:

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Sales (MWh)	Input()
C	Average Rate per MWh	Input()
D	Rate Revenue	B:[Sales (MWh)] * C:[Average Rate per MWh]
E		Label Only

The report has five lines. Line A has a special formula to indicate where you want the entity name, in this case "Residential." Lines B & C are input, and line D is a formula.

Line E is a blank line.

You can display the report in Excel:

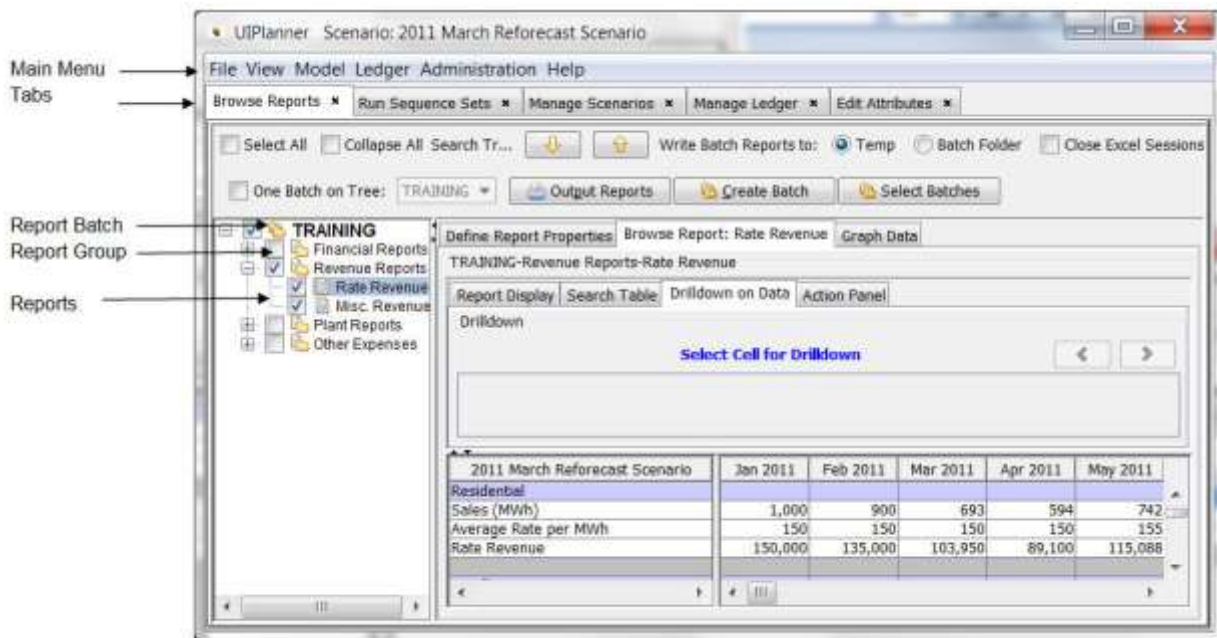
	A	B	C	D	E
1					
2	2011 Budget Scenario	Jan 2011	Feb 2011	Mar 2011	Apr 2011
3					
4	Residential				
5	Sales (MWh)	1,000	900	700	600
6	Average Rate per MWh	150	150	150	150
7	Rate Revenue	150,000	135,000	105,000	90,000

You input the data in Excel:

UIPlanner Detailed Model User Guide

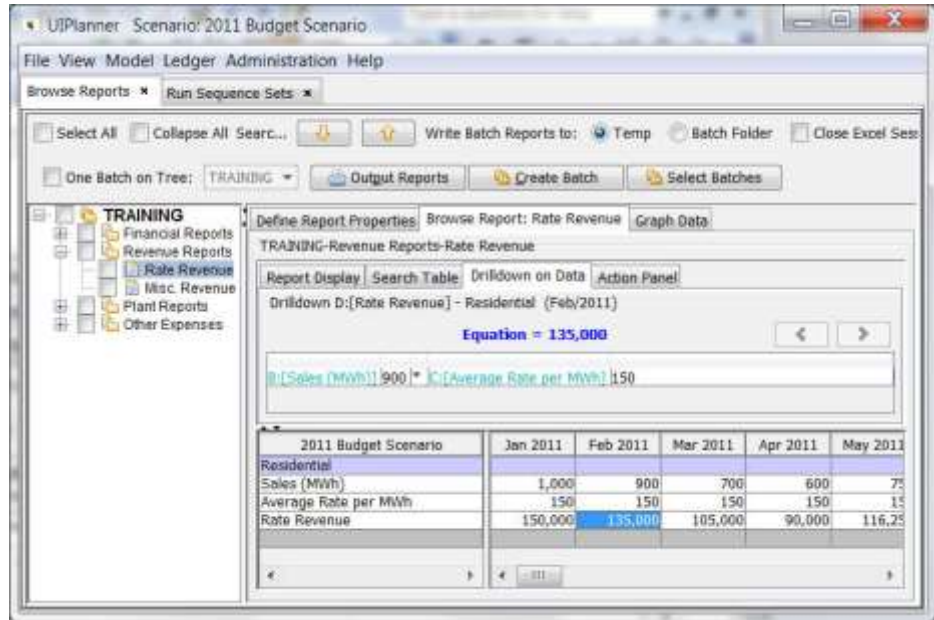
	B	C	D	E	F
1	Rate Revenue	Jan	Feb	Mar	Apr
2		2011	2011	2011	2011
3	2011 Budget Forecast Data				
4	Residential				
5	Sales (MWh)	1,000	900	700	600
6	Average Rate per MWh	150	150	150	150
7					

You open most screens in UIPlanner by making selections on the Main Menu. As you select screens, those screens become tabs. The next section shows the screens in UIPlanner for the report. You may want to start with **BROWSE REPORTS**, the most complex screen. See the example below displaying a Rate Revenue Report:

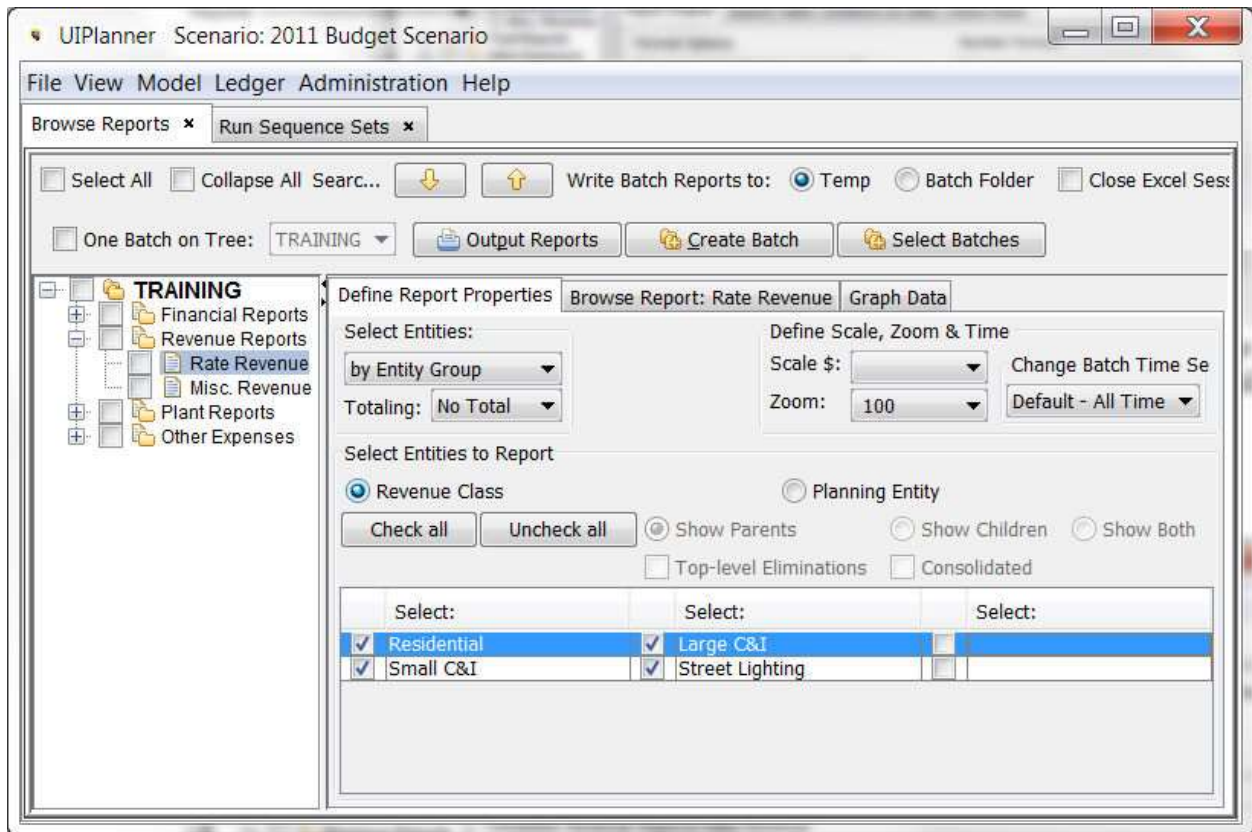


You select options for how you want to display your report on each of the levels on the report group tree on the left of the screen: *Report Batch*, *Report Group* and *Report*.

When the report tab is open, you have the option of selecting from three sub-tabs. When you activate the drill down sub-tab, you can access formulas used for the calculation of individual cell amounts. To do so, click on a cell. The upper part of the display area will display the formula used to calculate the value.

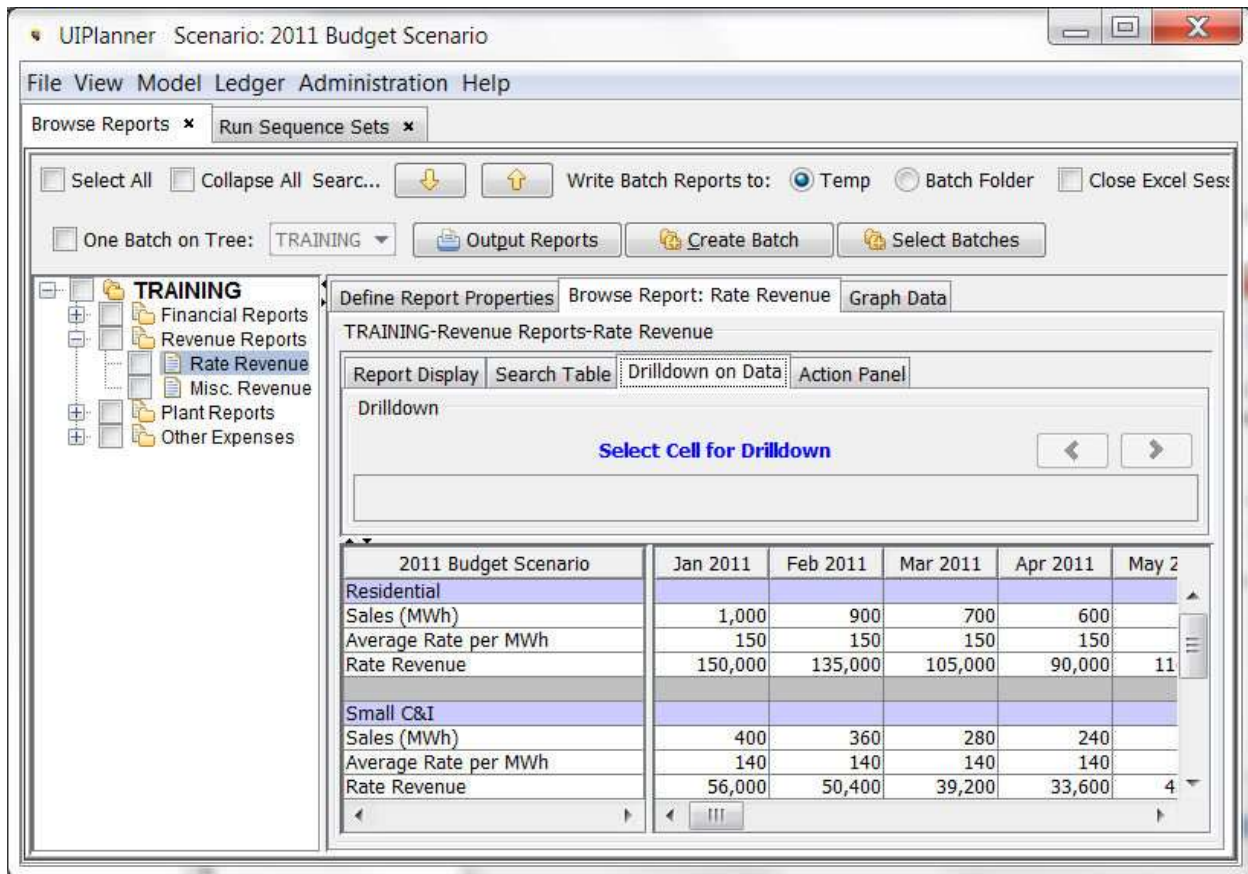


Next, activate the *Define Report Properties* tab, and select some more rate classes to display:

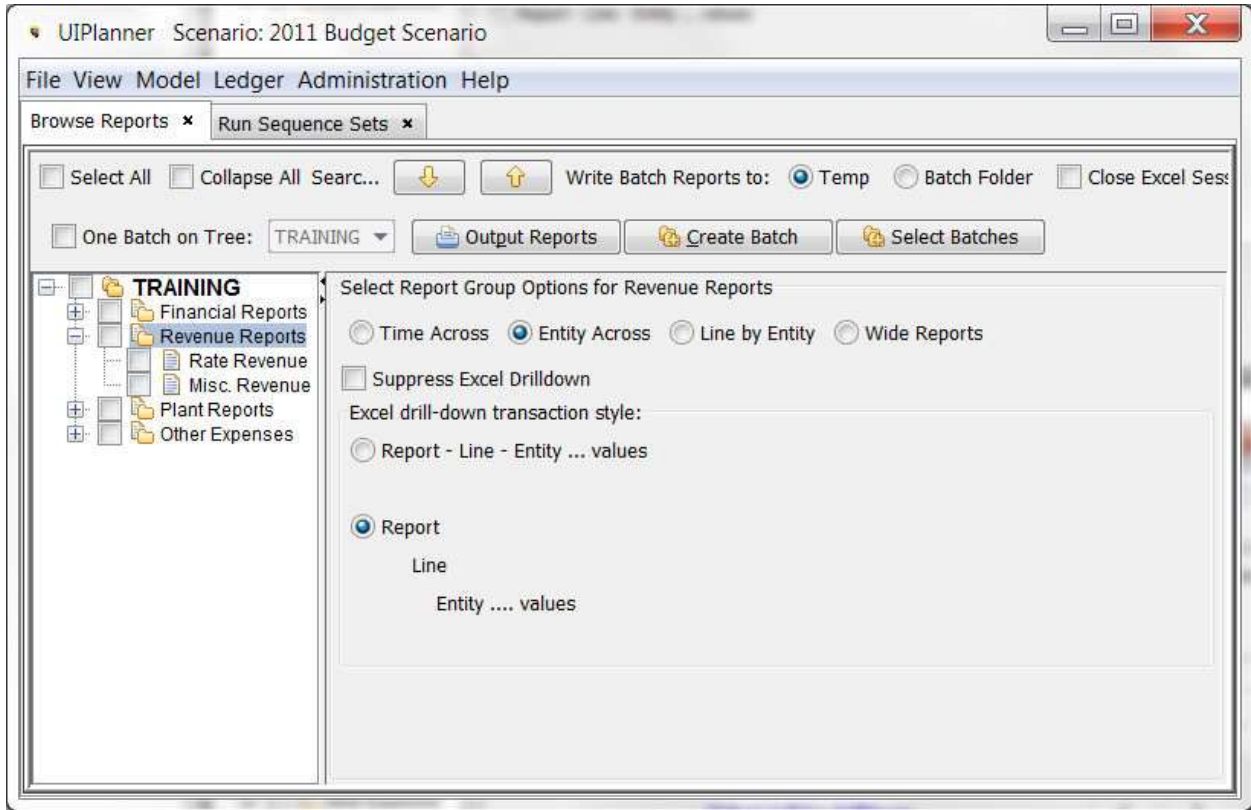


Re-select the *Browse Report: Rate Revenue* tab, to see more rate classes.

UIPlanner Detailed Model User Guide

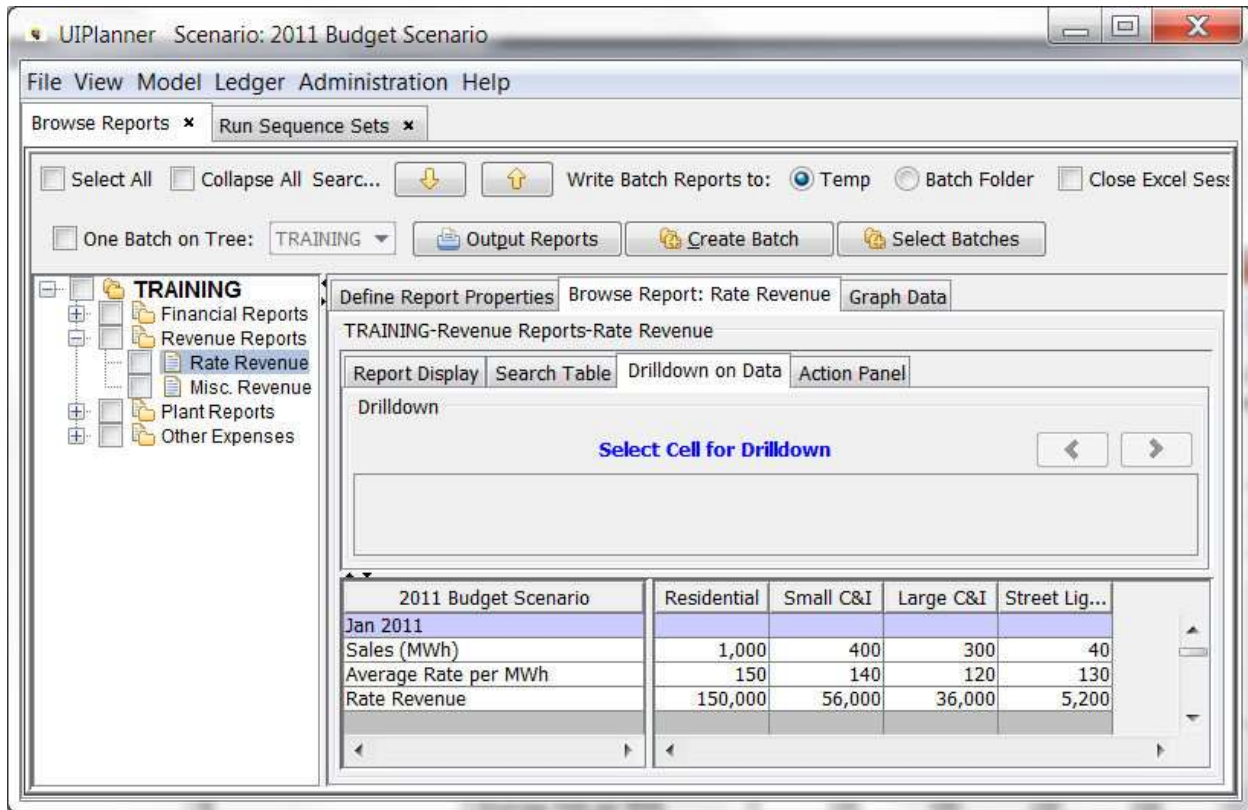


Now select the *Report Group* on the tree, and choose *Entity Across*. Note that when you select options selected for the report group, the options apply to all of the reports in the group.

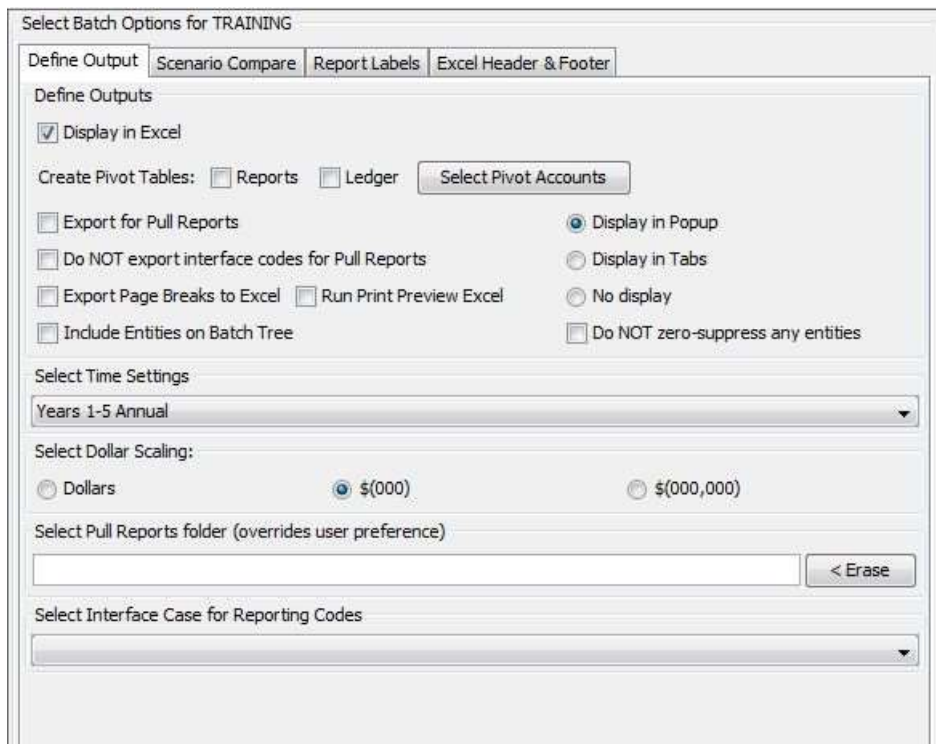


When you click on the Rate Revenue report on the tree, the display changes as shown below:

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Next, select the Report Batch *Training* and note how the right region of the screen changes. There are four sub-tabs with batch options:



Options you select on this screen apply to all of the reports in the report batch. This example only has one batch, i.e. *Training*, but you could have many. You use report batches to pre-select and save many options, so that a set of reports print the same way each time.

Check the batch, the *Revenue Reports* group, and two revenue reports, plus the *Display in Excel* option. Then, click **OUTPUT REPORTS**, and open an Excel report.

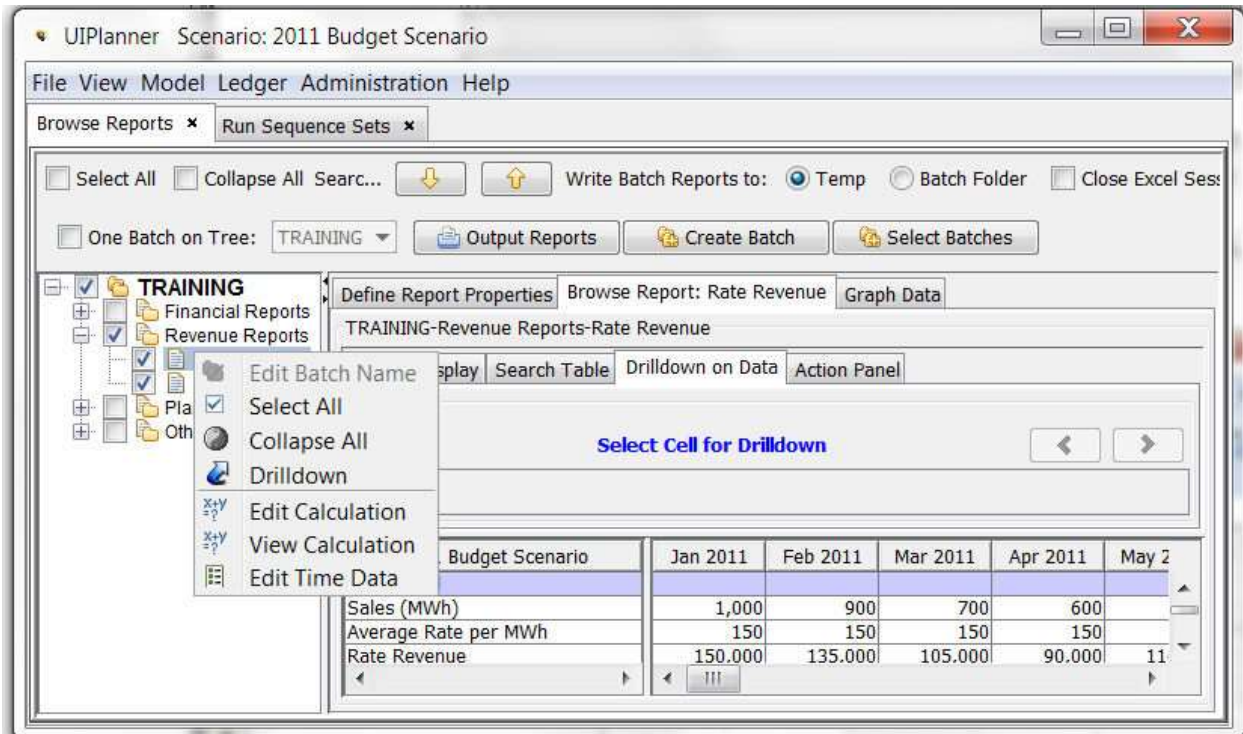
The screenshot shows a Microsoft Excel window titled 'Microsoft Excel - TRAINING - March 10, 2010 13-34-47.xls'. The spreadsheet displays data for a '2011 Budget Scenario' across five months: Jan 2011, Feb 2011, Mar 2011, Apr 2011, and May 2011. The data is organized into two main categories: Residential and Small C&I. The Residential category includes Sales (MWh), Average Rate per MWh, and Rate Revenue. The Small C&I category also includes Sales (MWh), Average Rate per MWh, and Rate Revenue. The Rate Revenue for Residential is 150,000 in Jan, 135,000 in Feb, 105,000 in Mar, 90,000 in Apr, and 116,250 in May. The Rate Revenue for Small C&I is 56,000 in Jan, 50,400 in Feb, 39,200 in Mar, 33,600 in Apr, and 43,500 in May.

	A	B	C	D	E	F
1						
2	2011 Budget Scenario	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011
3						
4	Residential					
5	Sales (MWh)	1,000	900	700	600	750
6	Average Rate per MWh	150	150	150	150	155
7	Rate Revenue	150,000	135,000	105,000	90,000	116,250
8						
9	Small C&I					
10	Sales (MWh)	400	360	280	240	300
11	Average Rate per MWh	140	140	140	140	145
12	Rate Revenue	56,000	50,400	39,200	33,600	43,500
13						

Each selected report is on a sheet. The *Scenario Info* sheet documents assumptions.

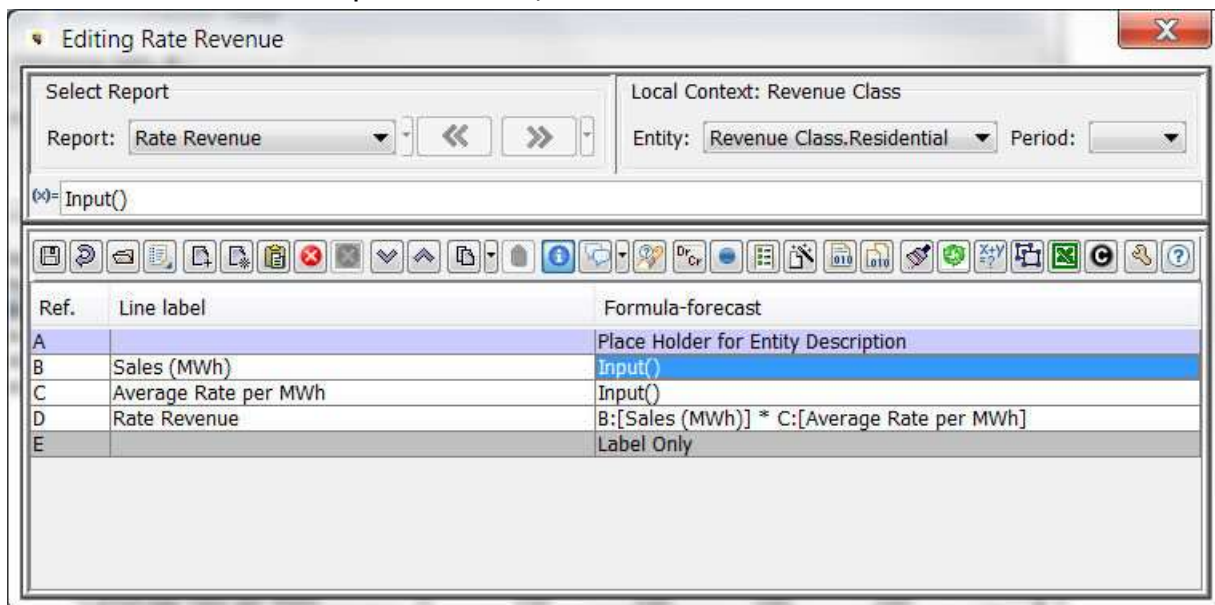
Note that the Report nodes on the tree have a right-click menu:

UIPlanner Detailed Model User Guide



Calculation Editor Screen

Next, select the **Edit Calculations** item from the UIPlanner menu, which opens the second most complex screen, the **CALCULATION EDITOR**:



You use this screen to define the logic of your reports.

The toolbar buttons perform various functions, such as "add a line", "delete a line", "format the line", etc. Hover the cursor over a button and a tool tip explains what it does.

Next, open the screen for editing time-dependent (monthly or annual) data:

This data is stored in a case. The screen shows all of the cases in the current scenario (upper left table). You might think of cases as alternate views of the future. In this example, the March Reforecast Case has new information to replace the data in the Budget Case. The Actuals Case is a special case containing only actual data. The system does not read data from the actual case in future periods.

Select the periods you want to edit in the upper right box. Select entities in the lower left table, and lines on the lower right table.

When you click **EDIT & RETURN** or **EDIT & CLOSE**, the system reads the data from the database, and sends it to Excel for editing. You can use formulas to change data, but note that the formulas are not saved. Only the resulting numbers are saved to the database.

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	B	C	D	E	F	G	H	I	J	K	L
1	Rate Revenue	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
2		2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
3	2011 Budget Forecast Data										
4	Residential										
5	Sales (MWh)	1,000	900	700	600	750	850	950	1,050	850	750
6	Average Rate per MWh	150	150	150	150	155	160	160	160	155	150
7	2011 March Reforecast Data										
8	Sales (MWh)			693	594	743	842	941	1,040	842	743
9	Average Rate per MWh										

Running the Model

Next you can run the model using the **RUN SEQUENCE SETS** screen:

UIPlanner TRAINING - Rel 4.02 - CS - C:\OClients\OUI\Data\QuickStart.mdb Version: 1

File View Model Ledger Administration Help

Context

Scenario Type: Show All Scenario Group: All Scenarios Scenario: 2011 March Reforecast Scenario

Browse Reports x Run Sequence Sets x

Run Sequences Compile & Run More run options Select Sequence Set and Sequence Subset

Publish-Network Cancel Run Show Search Panel Default Report Sequence Set

Use TRAINING Temp Data Select output batch: -- No output -- -- None Selected --

Inputs & Feeder Reports Taxes, Short-term Financing, Goal Seeking

Run All Run All Pass 40 change 0

Run	Report	Context
<input checked="" type="checkbox"/>	Rate Revenue	Revenue Class
<input checked="" type="checkbox"/>	Misc. Revenue	Planning Entity
<input checked="" type="checkbox"/>	Construction	Construction Project
<input checked="" type="checkbox"/>	Plant Accounting	Plant Account
<input checked="" type="checkbox"/>	O&M	Department
<input checked="" type="checkbox"/>	Fuel & Purchased Power	Planning Entity

Run	Report	Context
<input checked="" type="checkbox"/>	Income Statement	Planning Entity
<input checked="" type="checkbox"/>	Income Taxes	Planning Entity
<input checked="" type="checkbox"/>	Short-term Financing	Planning Entity

Since you have changed the data, you need to re-process the reports. You can also turn on the *Context* section of the main screen. This is the **Show/Hide Scenario Info Panel** option in the **View** Menu. Also you can select a different scenario in the upper right drop-down list.

Reports on this screen process in order. Construction is before Plant Accounting, because the Plant Accounting report needs data from the Construction report. The second set of reports have circular logic – tax payments cause increases in short-term debt, which changes interest, which changes taxes. However, these changes do not affect O&M. Try to limit the number of reports in the circular logic to minimize run time.

Next, browse the report again. The drill-down shows the original input and the revised overlay data.

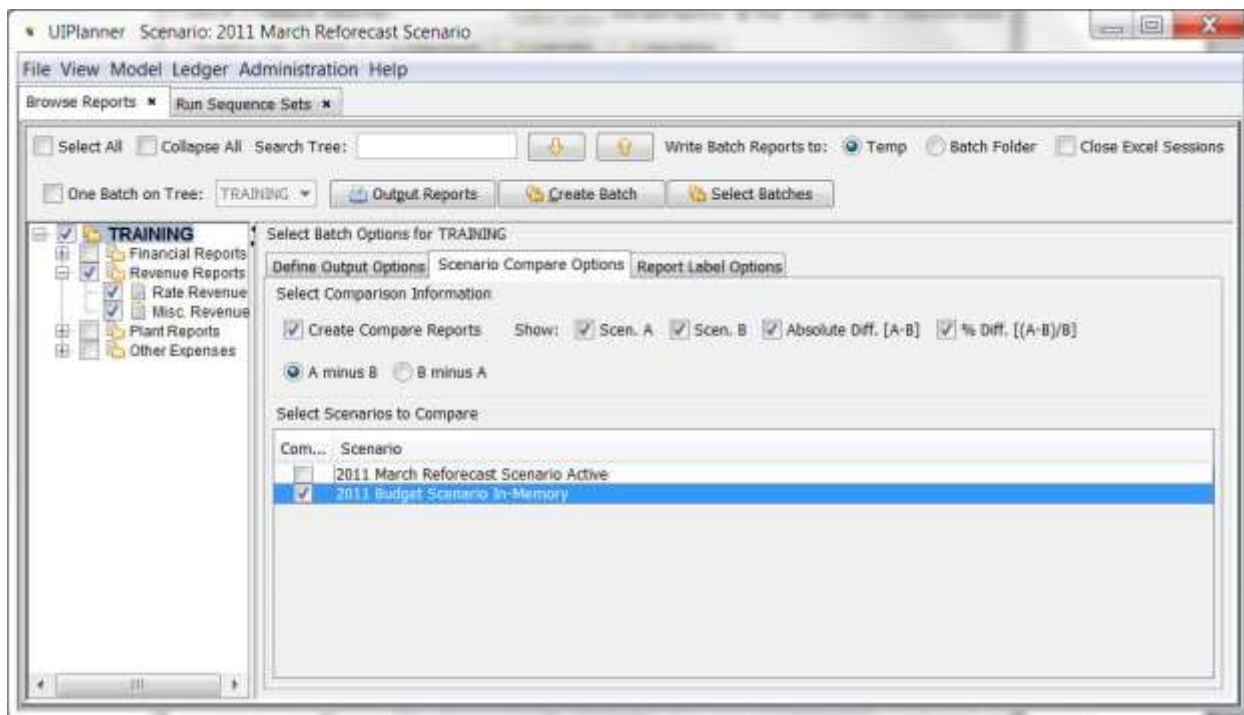
The screenshot shows the UIPlanner software interface. The main window displays a report drill-down for 'Rate Revenue' under the 'TRAINING' batch. The interface includes a menu bar (File, View, Model, Ledger, Administration, Help) and a search tree on the left. The main data table shows the following data:

Case	Type	Value	Winner	Last Updated By	Last Updated
2011 Budget Forecast	Overlay		700	700WPETTER	Tue Mar 09 15:49:18
2011 March Reforecast	Overlay		693	693TRAINING	Wed Mar 10 14:56:34

2011 March Reforecast Scenario	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011	Jul 2011	Aug
Residential								
Sales (MWh)	1,000	900	693	594	742	842	940	
Average Rate per MWh	150	150	150	150	155	160	160	
Rate Revenue	150,000	135,000	103,950	89,100	115,088	134,640	150,480	
Small C&I								
Sales (MWh)	400	360	280	240	300	340	380	

You may select compare reports options by touching the *TRAINING* batch, and the *Scenario Compare Options* tab:

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Then display the compare report:

FILE**{ XE "Save" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Save Screen**

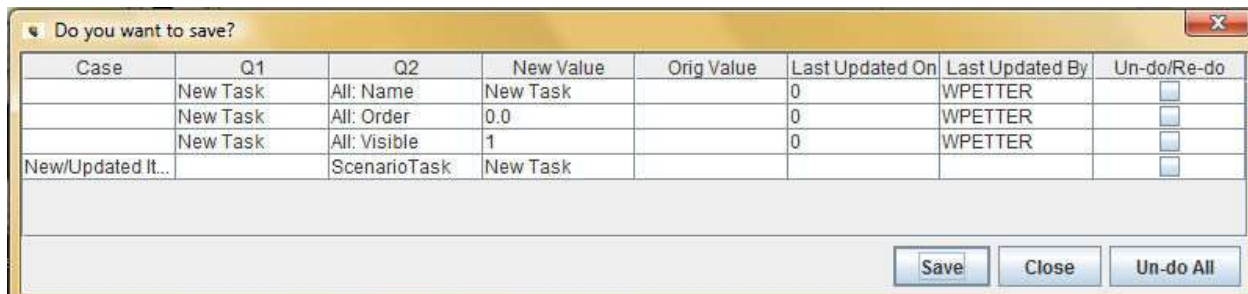
Selecting **Save** from the UIPlanner menu will save all attribute data you have changed, and update your active UIPlanner session with any changes made by others to the database.

You can view pending attribute saves by selecting **File** from the UIPlanner menu and then **View Pending Attribute Saves**.

{ XE "View Pending" * MERGEFORMAT }{ XE "View Pending Attribute Saves" * MERGEFORMAT }{ XE "Save" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }View Pending Attribute Saves Dialog Box

This selection opens a dialog box displaying changes to attribute data that have not yet been saved. You have a choice to save or undo changes.

Attribute changes will be listed, showing old and new values:



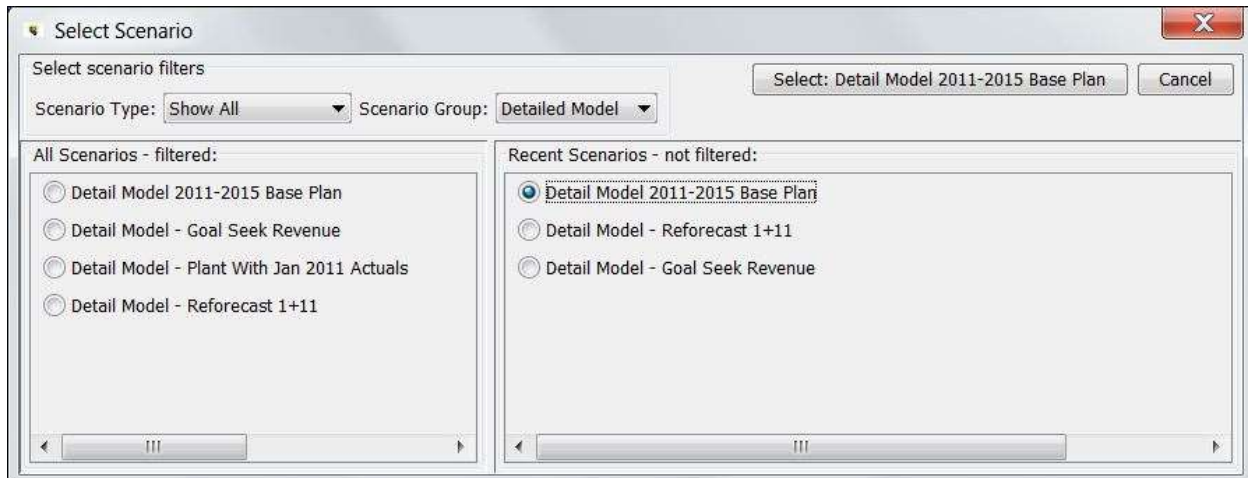
Case	Q1	Q2	New Value	Orig Value	Last Updated On	Last Updated By	Un-do/Re-do
	New Task	All: Name	New Task		0	WPETTER	<input type="checkbox"/>
	New Task	All: Order	0.0		0	WPETTER	<input type="checkbox"/>
	New Task	All: Visible	1		0	WPETTER	<input type="checkbox"/>
New/Updated It...		ScenarioTask	New Task				<input type="checkbox"/>

Buttons: Save, Close, Un-do All

If you would like to confirm all attribute changes displayed, click **SAVE**. The screen also gives you the option of undoing or re-doing select changes. Either select the box next to an individual change or click **UN-DO ALL**. After clicking **UN-DO ALL**, checks will appear in all the boxes listed and the **UN-DO ALL** button will change to read **RE-DO ALL**. If you decide to keep changes you have marked to be discarded, click on the box next to those changes or, where applicable, click **RE-DO ALL**. Note that once you close the window, all checked changes (those to be un-done) will be discarded and will no longer be available to be saved.

{ XE "Scenario" * MERGEFORMAT }Select Scenario Screen

UIPlanner Detailed Model User Guide



The **SELECT SCENARIO** window provides a structured, simplified means for a user to select what scenario to process. While you can select a scenario to run using the drop down list on the Scenario Info Panel, the **SELECT SCENARIO** window provides all the information in a single screen and makes it easier to see the scenarios to choose from. You can filter scenarios by type or by group; the screen also displays the last ten scenarios you have used. You choose the one you want and hit the **SELECT** button. The window will close and the model will change to the scenario you selected.

Screen Layout

The **SELECT SCENARIO** window is laid out in two regions, each of which displays a list of scenarios. Each scenario has a radio button next to it - once you select a scenario, the Select button at the top of the screen changes to show that scenario name. Hitting this button will change to that scenario.

T

he left region has a list of scenarios available to run. Above this panel are two drop-down lists for filtering scenarios to show in the panel. One drop down list is for Scenario Type (Model, Budget, Customer Revenue, etc); the other is for Scenario Groups (as defined by the user).

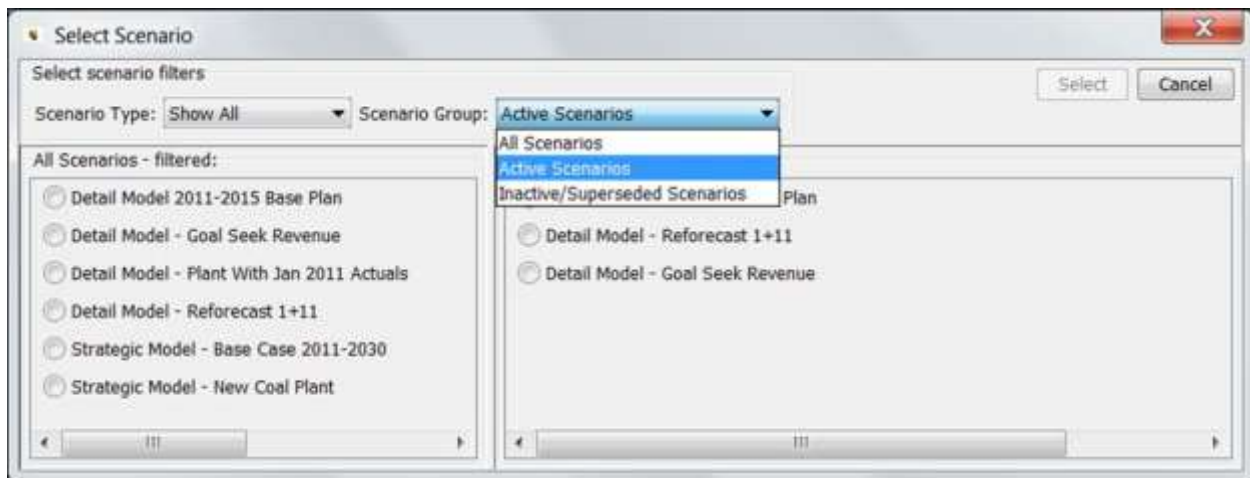
The right region lists the last ten scenarios that you have opened. These are listed in order, and are not filtered by the choices on the left.

Note – archived scenarios cannot be run, and thus do not appear in the list of available scenarios. However, if you have recently archived one of the recent scenarios, it will still appear in the recents list, but you will not be able to run it. You will get a warning message to that effect.

List of Operations or Tasks That Are Performed With This Screen

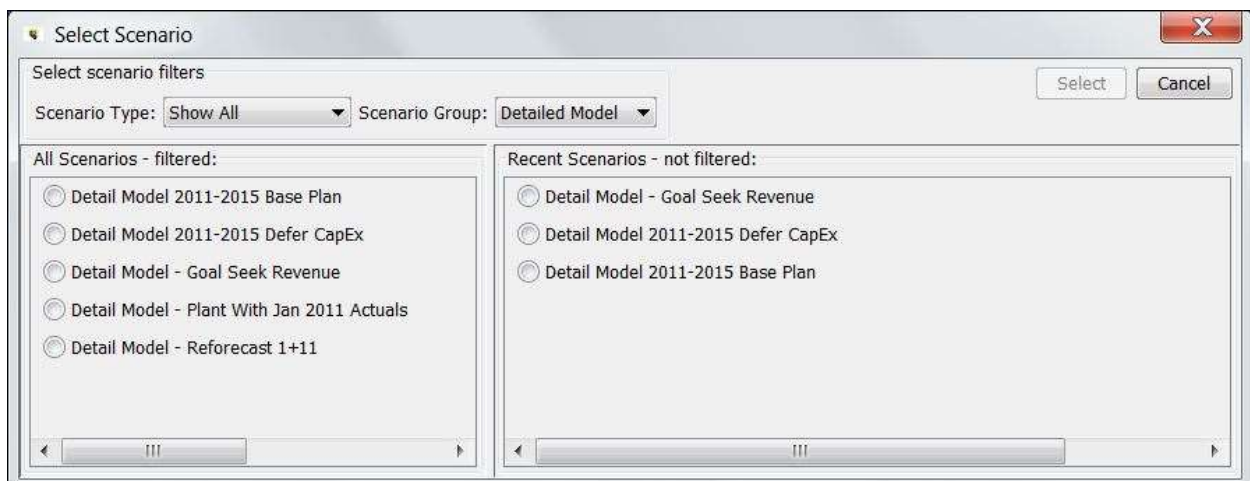
Filter Scenarios:

You can filter the scenario list in the left region using the two drop down lists. One drop down list is for Scenario Type (Model, Budget, Customer Revenue, etc); the other is for Scenario Groups (as defined by the user – see [CREATING A SCENARIO GROUP](#)). See below:



Select a Scenario:

To select a scenario to run, choose the radio button next to the one you want to run. Note that label on the **SELECT** button will change accordingly. Use the **CANCEL** button to deselect a scenario.



To change to that scenario, just hit the **SELECT** button. The window will close, and UIPlanner will change to the selected scenario.

{ XE "Refresh UIPlanner" * MERGEFORMAT }Refresh UIPlanner

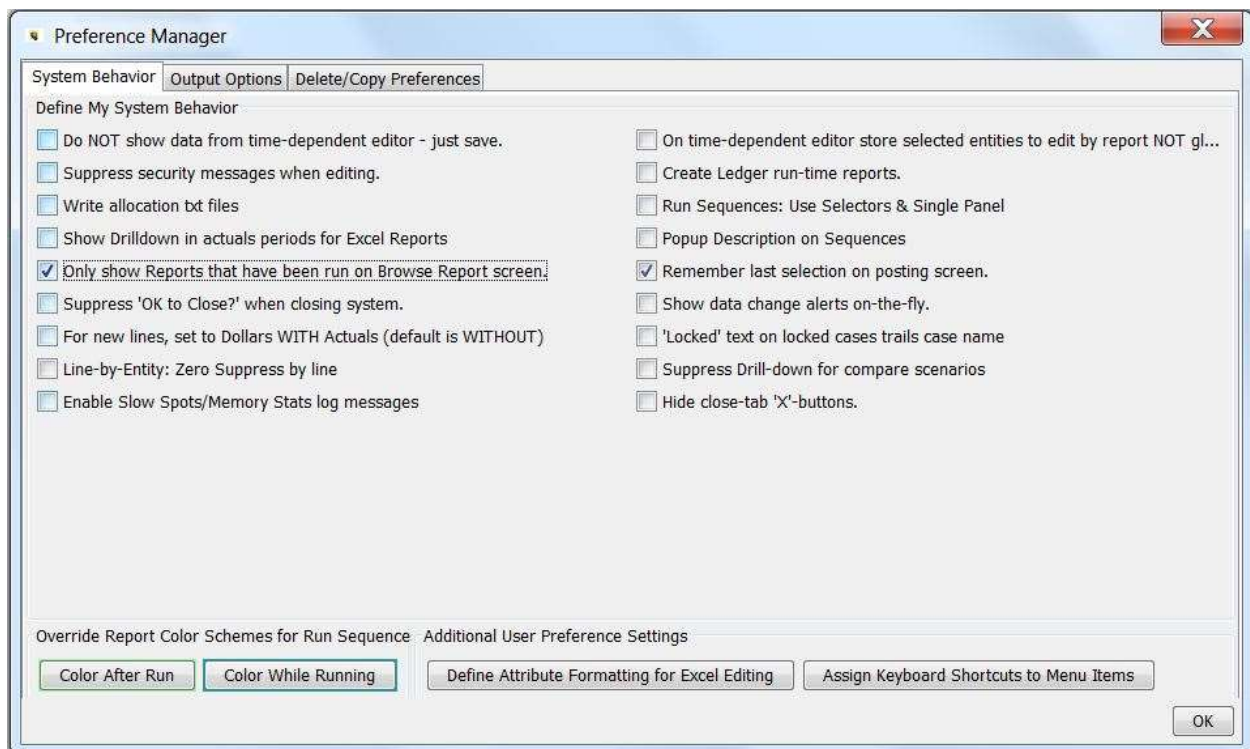
Many operations in UIPlanner require a restart of the application before they can take full effect. The **Refresh** function allows you to accomplish this without exiting and logging back into UIPlanner.

Select **File**, then **Refresh** from the UIPlanner menu.

VIEW MENU

Preferences

{ XE "Preference Manager Screen" * MERGEFORMAT }{
XE "Preferences" * MERGEFORMAT }{ XE "My
Preferences" * MERGEFORMAT }Preference Manager
Screen



The **PREFERENCE MANAGER** screen (also called **MY PREFERENCES**) is where you set various settings and choices that are user-specific rather than global across all users. These settings do not have any effect on model runtime or model results, and thus can be user-specific. These settings are generally in two categories:

- 1) User Interface – settings that determine how the model interface behaves for you. For example, you can choose to have:
 - a. only reports that you have run appear on **BROWSE REPORTS**. This makes that screen more concise.
 - b. “Locked” text on locked cases trails case name to assist in sorting cases (the default is “Locked” preceding the case name).

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- c. the last selection on the posting screen remembered, i.e., the last account selected so that when using the Account function, you do not have to drill-down to select the account.
- 2) Output – settings that allow you to decide where you want to save output data for Pull Reporting.

Note that this screen controls only **some** of the user preferences. Specifically, it controls the ones that can be reduced to a switch or path setting. There are many other user preference items throughout UIPlanner. For example, all of the settings for your User Batch on the **BROWSE REPORTS** screen are user preferences.

Also, UIPlanner saves under your user name the tabs you had open, selections on each tab and screen sizes at the end of your user session. The next time you open the model, it will open to the same as before.

There is one exception to this:

- [Run Sequences](#) - the sequence and report selections are set during your user session. Each time you re-open the model and want to run, you need to confirm the sequence and report checks. Also, the selection box to use the data in the User Temp Data case is session-specific. You need to check it each time you run.

The **PREFERENCE MANAGER** screen (like **PLANNER PROPERTIES**) changes relatively frequently. As features are added to UIPlanner, sometimes various users request User Preference or Planner Property switches to enable/disable them or to tailor how they behave. Also, as UIPlanner continues to evolve, certain *User Preferences* become no longer applicable.

The **PREFERENCE MANAGER** screen is a “modal” screen. It opens as a dialog box rather than a tab. You cannot do anything else in UIPlanner until you close it.

Screen Layout:

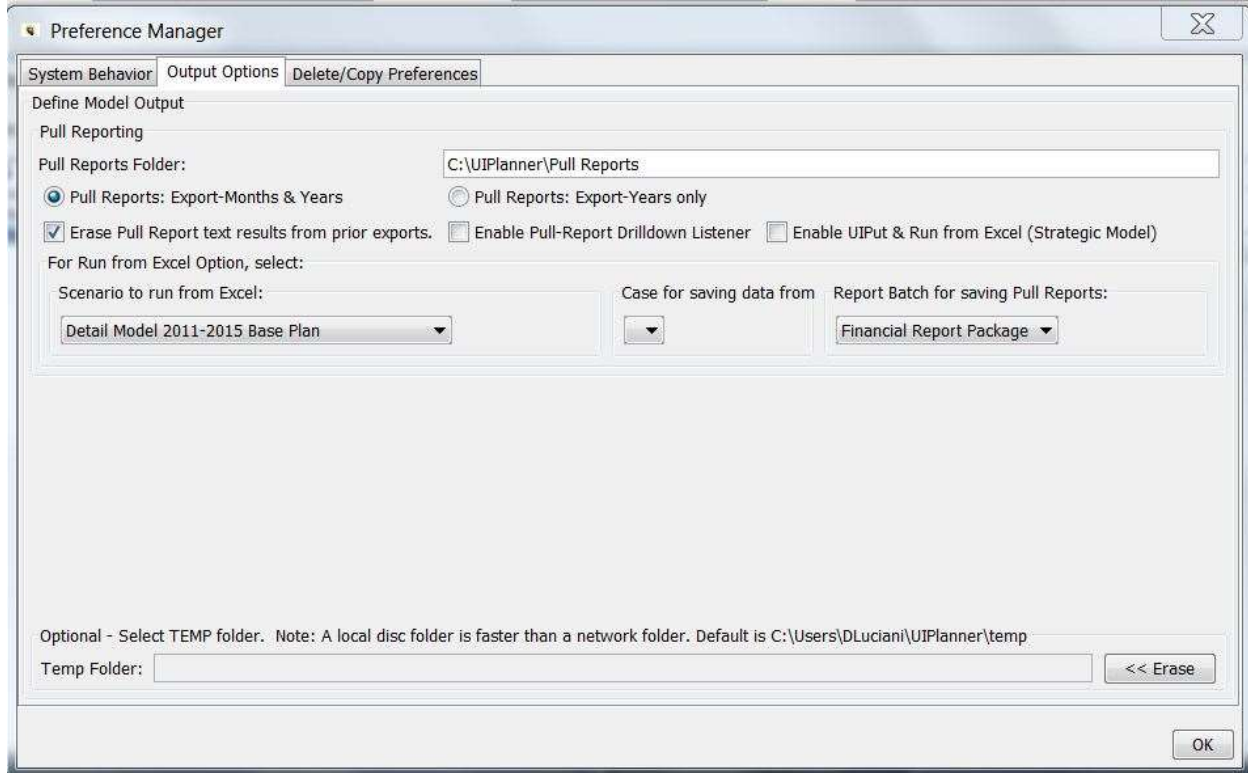
The **PREFERENCE MANAGER** screen consists of three tabs.

System Behavior – This tab has a series of checkboxes that allow you to control various aspects of how UIPlanner behaves. These include things like suppressing warning messages, or controlling how UIPlanner displays locked cases on the screen. This tab is shown above. See [System Behavior](#) for more details on this tab.

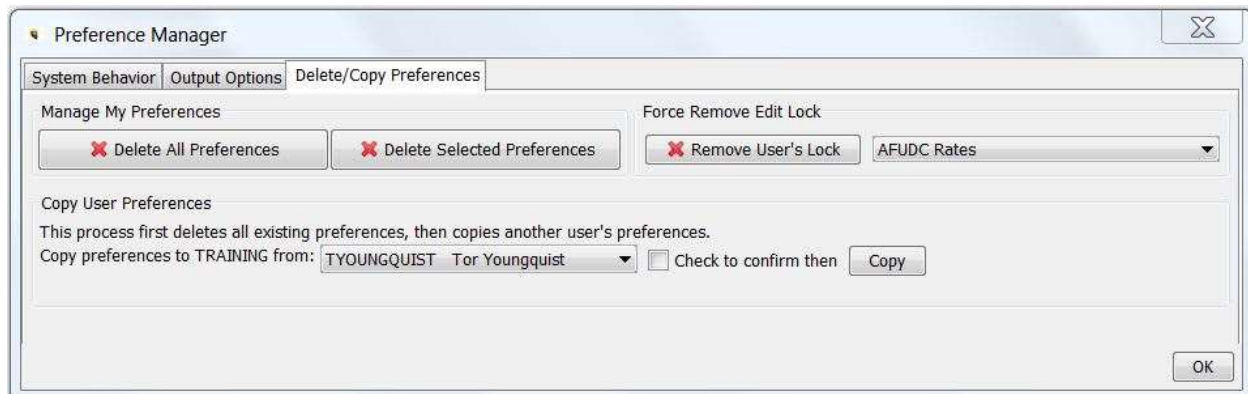
Output Options – This tab is where you can configure your own settings for two key data processes.

- Pull Reports, and
- User Temp Folder. The user preference for temp folder may need to be set if the default folder fails, or optionally set if the current temp folder is a network folder. A temp folder on C:\ is faster.

See [Output Options](#) for more details on this tab.



Delete/Copy Preferences – This tab is where you manage your user preferences. You can delete your own preferences or delete another user's edit lock on a report (stored as user preference). You can also copy another user's preferences.

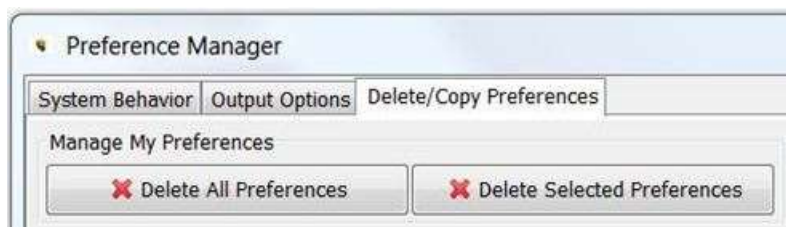


For more information, see the following topics:

[Delete/Copy User Preferences](#)

[Remove User Locks](#)

{ XE "User Preferences" * MERGEFORMAT }{ XE "How To Delete User Preferences" * MERGEFORMAT }Delete/Copy User Preferences



From the **PREFERENCE MANAGER** screen you can either delete all of your *User Preferences* or just delete certain ones. Generally, you delete preferences if you are encountering an error in UIPlanner that appears to be related to the system trying to enable a certain screen or tab. Deleting your preferences resets the system settings to the UIPlanner default preferences.

DELETE ALL PREFERENCES

Generally, you delete preferences if you are encountering an error in UIPlanner that appears to be related to the system trying to enable a certain screen or tab. Deleting your preferences resets the system settings to the UIPlanner default preferences.

Clicking **DELETE ALL PREFERENCES** will delete all of the user preferences that you have set in previous and current sessions of UIPlanner. Note that you will not be prompted to confirm this action after clicking the **DELETE** button and there is no restore feature.

Note: Using the **MODEL SECURITY** screen the System Administrator can delete all user preferences for a specific user. For example, if a user is having problems entering the system due to a screen issue, the System Administrator can delete all user preferences for him/her.

DELETE SELECTED PREFERENCES

If you know a specific preference or screen that you want to delete (but keep all others) clicking on this button will allow you to delete only certain preferences rather than ALL preferences, as described above. Generally, you will use this option to delete all preferences related to a specific screen. For example, if you are encountering an error whenever you try to open a specific screen, you might just delete your preferences to remove any invalid selections. To delete select preferences for a specific screen or form:

- Click **DELETE SELECTED USER PREFERENCES**

Form	Key	Value	Delete/Undelete	Restore Value
COM.UTILINC.PL...	YPOS	274	<input type="checkbox"/>	
REPORTSEQUENC...	LR305593331	606	<input type="checkbox"/>	
COM.UTILINC.PL...	MILESTONE-STRU...	1	<input type="checkbox"/>	
REPORTSEQUENC...	LR305593332	1212	<input type="checkbox"/>	
TIMEDEPENDENTE...	YPOS		<input type="checkbox"/>	
REPORTBATCH	ESAC30617650	1	<input type="checkbox"/>	
REPORTSEQUENC...	43050.ENT	112	<input type="checkbox"/>	
REPORTBATCH	ESAC2066	1	<input type="checkbox"/>	
COM.UTILINC.PL...	YPOS	232	<input type="checkbox"/>	
ANOTHERHEADER...	HEADER-FOOTER	215	<input type="checkbox"/>	
REPORTBATCH	INCLUDECHILDRE...	0	<input type="checkbox"/>	
REPORTSEQUENC...	43054.RUN	50	<input type="checkbox"/>	
SCENARIOSELECT...	HEIGHT	497	<input type="checkbox"/>	
REPORTBATCH	NAME	TRAINING	<input type="checkbox"/>	
REPORTBATCH	ESAC2080	1	<input type="checkbox"/>	
REPORTBATCH	ESACGROUP1602	1602	<input type="checkbox"/>	
PREFERENCEDIAL...	ENABLE_UIPUT_T...	1	<input type="checkbox"/>	
COM.UTILINC.PL...	UP-DOWN	263	<input type="checkbox"/>	
SCENARIOSELECT	YPOS	88	<input type="checkbox"/>	

- Click on the *Form* column to sort the preferences by form.
- Scroll to find the form/screen you want to purge.
- Check the box next to each of preferences for that screen. See below.

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Form	Key	Value	Delete/U...	Restore ...
SCENARIOEDITOR	CASES	153	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	HEIGHT	497	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	YPOS	89	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	XPOS	77	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	WIDTH	893	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	SPLIT	665	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	RECENT_SCENARIO1	30572651	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	RECENT_SCENARIO0	192	<input type="checkbox"/>	
TIMEDEPENDENTEDITOR	YPOS		<input checked="" type="checkbox"/>	33
TIMEDEPENDENTEDITOR	INPUTONLY		<input checked="" type="checkbox"/>	true
TIMEDEPENDENTEDITOR	LAST_REPORT		<input checked="" type="checkbox"/>	10498
TIMEDEPENDENTEDITOR	12327EDIT_DISPLAY_ORDER		<input checked="" type="checkbox"/>	1
TIMEDEPENDENTEDITOR	HEIGHT		<input checked="" type="checkbox"/>	598
TIMEDEPENDENTEDITOR	WIDTH		<input checked="" type="checkbox"/>	624
TIMEDEPENDENTEDITOR	10498EDIT_DISPLAY_ORDER		<input checked="" type="checkbox"/>	1
TIMEDEPENDENTEDITOR	11355EDIT_DISPLAY_ORDER		<input checked="" type="checkbox"/>	1
TIMEDEPENDENTEDITOR	XPOS		<input checked="" type="checkbox"/>	79
WORKPLANMANAGEMENTPANEL	GROUP_BY_MILESTONE_OR...	By Milestone	<input type="checkbox"/>	

- When you close this window, the checked preferences will be deleted. Note - as with the **DELETE ALL** feature, you will not be asked to confirm the deletion.

Note: you can search any column by right clicking on the header. This will bring up the following dialog. Type in a text string and click **OK**. This is helpful if you do not know the underlying name for a screen/form.

The top dialog, 'Delete Selected Preferences', contains the following table:

Form	Key	Value	Delete/Undelete	Restore Value
COM.UTILINC.PLANNER.UI.RE...	YPOS	274	<input type="checkbox"/>	
REPORTSEQUENCEEDITOR	LR.305593331	606	<input type="checkbox"/>	
COM.UTILINC.PLANNER.WOR...	MILESTONE-ST...	1	<input type="checkbox"/>	
REPORTSEQUENCEEDITOR	LR.305593332	1212	<input type="checkbox"/>	
TIMEDEPENDENTEDITOR	YPOS		<input checked="" type="checkbox"/>	
REPORTBATCH	ESAC30617650	1	<input type="checkbox"/>	
REPORTSEQUENCEEDITOR	43050.ENT	112	<input type="checkbox"/>	
REPORTBATCH	ESAC2066	1	<input type="checkbox"/>	

The bottom dialog, 'Search Table', has a search input field with the text 'time' and a 'Find Next' button.

COPY PREFERENCES

Copy User Preferences

This process first deletes all existing preferences, then copies another user's preferences.

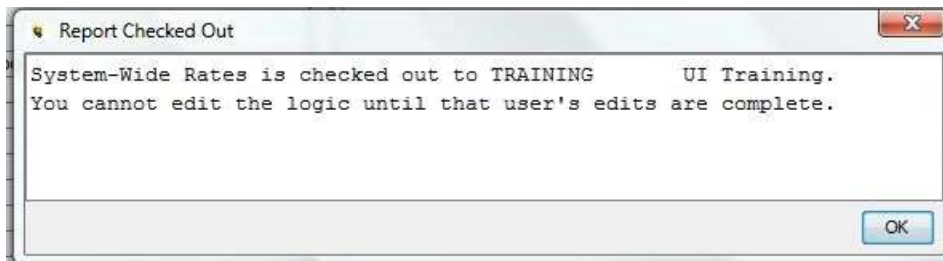
Copy preferences to TRAINING from: Check to confirm then

You can copy another user's preferences to your own, if you want. You might do this if you have deleted all of your preferences and want to set them. Or in the case of a new user, he/she may want to have preferences set for them.

To copy preferences, select the user you want to copy FROM, and select the checkbox to confirm. Then, click **COPY**. This action will first delete all of your User Preferences, and then copy from that user.

{ XE "User Locks" * MERGEFORMAT }{ XE "How To Remove User Locks" * MERGEFORMAT }{ XE "User Preferences" * MERGEFORMAT }Remove User Locks

UIPlanner maintains internal control to ensure that only one user at a time is editing a report. Each time a report is opened in the **CALCULATION EDITOR**, it notes that user has "locked" the report. Once they are through editing, the lock is supposed to be released. If for some reason the lock is not released, other users will get a warning message and will not be able to edit that report.



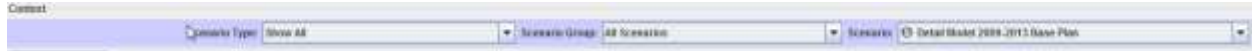
See **TROUBLESHOOTING REPORT EDITING** for more information.

You can use the **REMOVE USER'S LOCK** button on the **PREFERENCE MANAGER** to force a delete of the edit locks on a report. Select a report using the drop-down list, then click **REMOVE USER'S LOCK**. This will purge any locks on that report and it will be available for editing. See below.



{ XE "Scenario Panel" * MERGEFORMAT }Show/Hide Scenario Panel

The Scenario Panel at the top of the UIPlanner window displays scenario, scenario group and, for Budget applications, active department information:



To toggle this display on and off, select **View**, then **Show/Hide Scenario Info** from the UIPlanner menu.

{ XE "Scenario Order" * MERGEFORMAT }{ XE "Sort Order" * MERGEFORMAT }{ XE "Alpha Order" * MERGEFORMAT }

Select Sort Order Screen



You have the option of viewing all objects in either Alpha Order or Scenario order by clicking the buttons provided on the Select Order screen (shown above.) Alternately, you can select alpha or scenario order for specific

objects. When you are done making your selections, click **OK** to save your sort preferences. Note that selecting Alpha Order will cause UIPlanner to display entities without regard to their place in any established rollup.

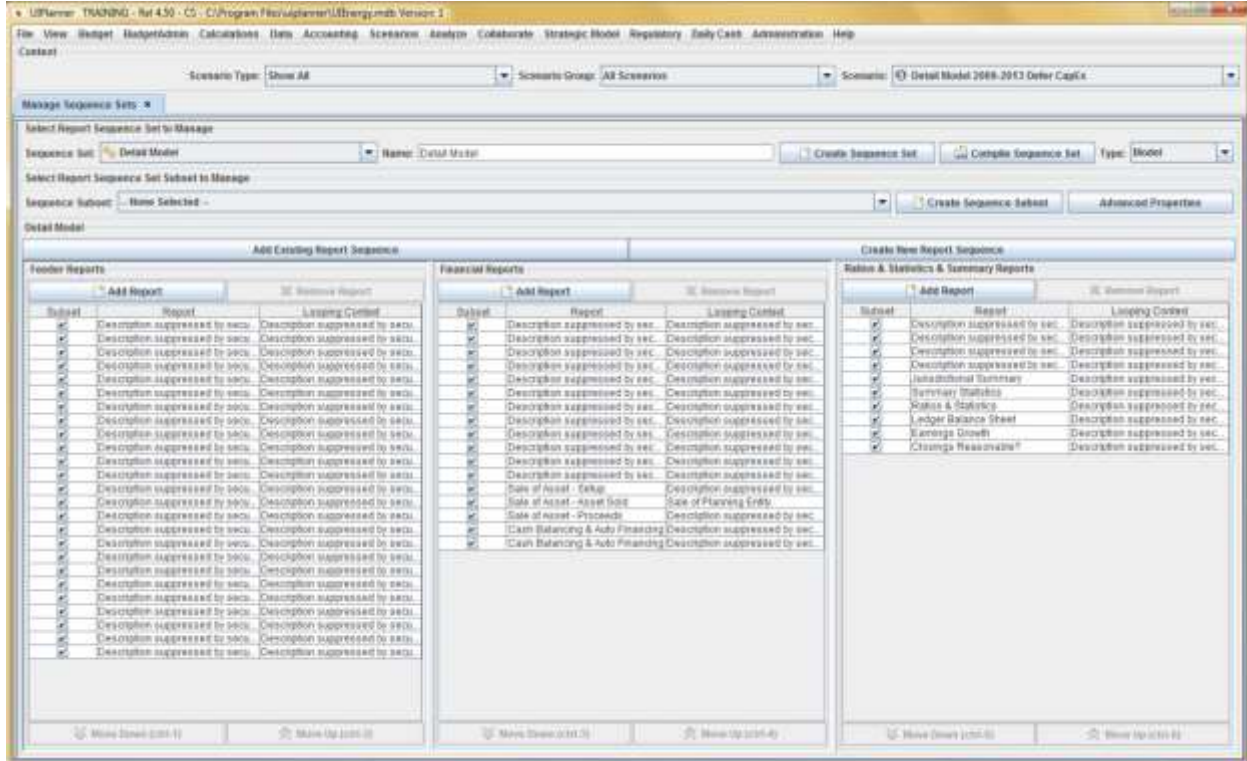
To access this screen, select the **Sort Order Preference** menu item from the UIPlanner menu.

{ XE "Metal Style" * MERGEFORMAT } { XE "Windows Style" * MERGEFORMAT } { XE "View Display Style" * MERGEFORMAT } { XE "Screen" * MERGEFORMAT } Change Display Style

The **Display Style Windows** and **Display Style Metal** menu options enable you to format the display in one of two ways.

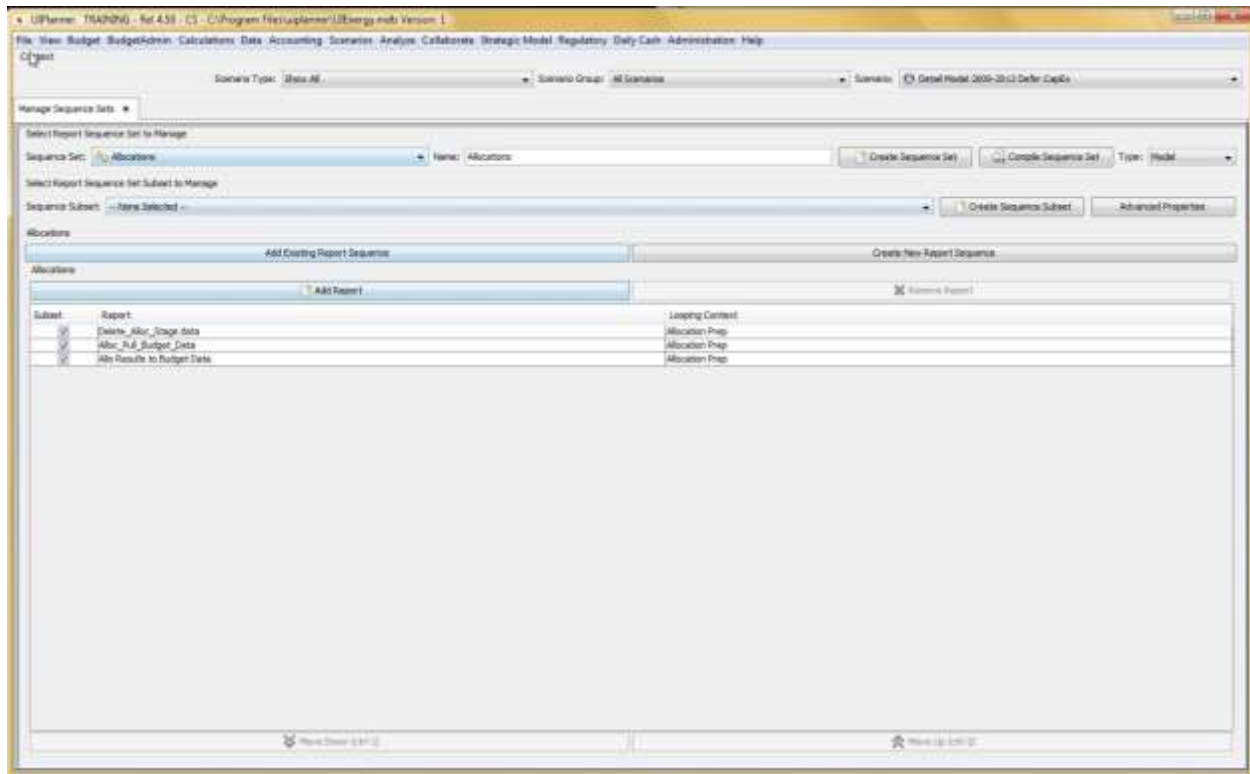
These options allow you to change the look and feel view style used on your computer screen. You can experiment by changing styles and selecting the one you prefer. Functionally, there is no difference between the two screens.

Metal Style

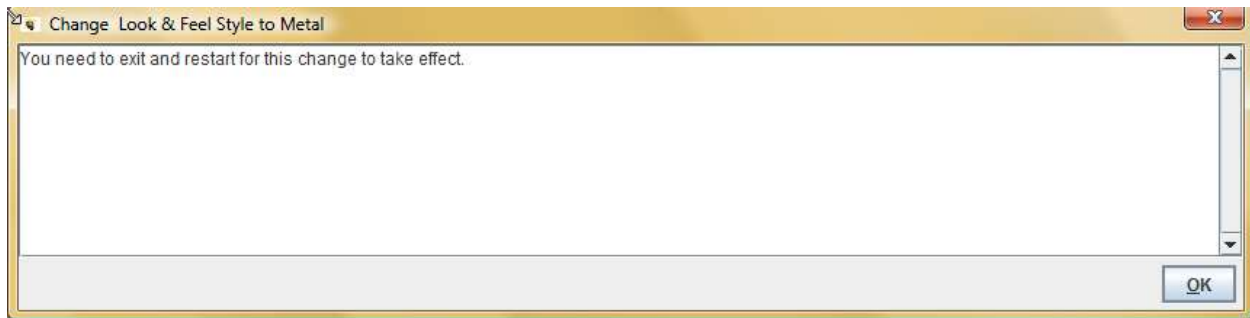


Windows Style

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When the setting is changed, the dialog box below will open indicating that you must restart the application for the change to take effect.



CALCULATIONS

{ XE "Sequence" * MERGEFORMAT }{ XE "Report" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }{ XE "Sequence Reports" * MERGEFORMAT }Concept - Sequencing Reports

Sequencing reports and sequence sets is the process UIPlanner uses to organize reports. Sequencing determines the order in which reports will be run. Each sequence set is made up of multiple sequences. Each sequence is made up of a set of reports.

Sequences can be set with unique *tolerance*, *iteration*, and *iteration method* settings.

Each sequence set contains a number of sequences. Although any number of sequences can be created, typically, the three described below are used.

Once sequences are created they can be added to any sequence set. If a sequence is used in more than one sequence set, changes to the sequence will be reflected in all sequence sets in which it is used.

Feeder Report Sequence

This sequence contains detailed reports which are calculated and posted to the planning ledger. Generally these reports are processed one time, i.e., one iteration.

Financial Reports Sequence

This sequence generally contains reports that create financial statements and allocations. The sequence normally has a high number of iterations because results on reports are dependent on each other. For example, short term debt, is dependent on tax payments, which are dependent on income taxes, which are dependent on short term interest expense. All need to be iterated until an acceptable difference is achieved (tolerance).

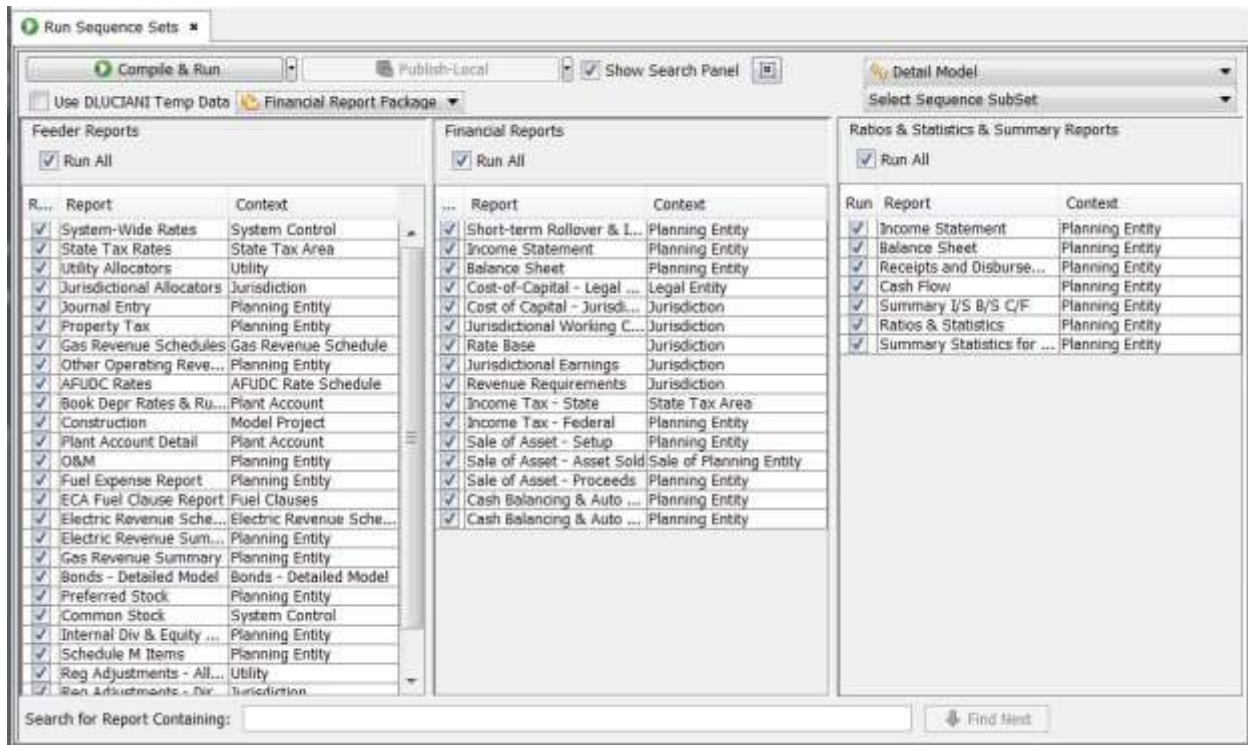
Note: Careful consideration should be made on reports included in this sequence as well as their order and iteration method.

Ratio, Statistical and Summary Reports

This sequence contains reports that are summary or analytic in nature. Financial statement report data, having been run in prior sequences and posted to the planning ledger, are available for use.

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The example below displays three sequences and various control settings. (See **RUN SEQUENCES SCREEN** for more details).



Run Order

All reports in each sequence are run in order. Sequences are processed from left to right, and reports in each sequence are run from top to bottom. Reports not placed in a sequence are not run.

As reports are run you will see them change color on the screen. You select the color desired on the **PREFERENCE MANAGER** screen.

The **MANAGE SEQUENCE SETS** screen contains an **ADVANCED PROPERTIES** button. The more complex options are available on a dialog that is launched when you click **ADVANCED PROPERTIES**.

These more advanced property options are detailed below.

Tolerance and Iteration

All reports in a sequence will be processed according to the tolerance and iteration settings for that sequence. Individual report settings for iteration and tolerance will override sequence settings for that report. See [Group Reports](#).

Tolerance and iteration always work together in UIPlanner. The system will continue to process reports for the specified maximum number of iterations (number of times), or until the largest change in any number in the last time period is less than the tolerance value, whichever comes first.

Iteration Method

Each sequence contains iteration method options. This refers to the processing of reports, either down or across. Both methods process all entities for all time periods in all reports, but in a different order.

Iterations Across processes each report for all time periods then processes the next report for all time periods. The first report is run, then the second, then the third, etc., each for all time periods before proceeding to the next report. When this process is complete, the second iteration will repeat the process, if iteration is set to more than one.

This iteration method is generally used when there is minimal interdependency between reports.

Iterations Down processes all reports in order for the first time period, then all reports for the second time period. then all reports for the third time period, etc. When this process is complete the second iteration will repeat the process, if iteration is set to more than one.

This iteration method is generally used when there is significant interdependency between reports.

Solve More Interdependencies by Looping across all Sequences.

UIPlanner's great ability to solve complex interdependencies has been further expanded. The discussion that follows is primarily aimed at users already familiar with the nuances of UIPlanner's iterative logic and who are concerned with refining how they solve simultaneous equations.

You loop across sequence sets, not just within a sequence set. Consider the following example:

- Sequence 1: contains calculations for O&M, Fuel, Revenue and Bonds along with an estimate of AFUDC rates.

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- Sequence 2: contains Plant and Construction
- Sequence 3: contains Interest, Taxes, and Goal Seeking
- Sequence 4: contains Ratios and Statistics

In this example, let us assume you want UIPlanner to use AFUDC rates based on a projected balance sheet (which itself depends on AFUDC rates and Closings to Plant). The ability to iterate across sequences allows you to do this. An example is shown below:

The screenshot shows the 'Default Sequence' configuration interface. At the top, there are four columns for different report sequences. Each column has a title, a control for 'Overall Iterations to run-number or 'max'', and a 'Sequence Tolerance & Iterations' section with 'Tolerance' and 'Iterations' fields. Below these are 'Iterate Across or Down' radio buttons and 'Add Report'/'Remove Report' buttons. At the bottom, there are four tables, one for each sequence, listing reports with checkboxes for 'Subset', 'Report', and 'Looping Context'.

Sequence	Report	Looping Context
Inputs & Feeders	Tax Payment Pat...	System Control
	AFUDC Rates (n...	AFUDC Schedule
	Debt Allocation P...	Segment
	Planning Entity B...	Segment
	Bonds	Bonds
	Bond Transactio...	Segment
	Preferred Stock	Preferred Stock
	Preferred Trans...	Segment
	Sched M Perma...	Segment
	Common Stock	System Control
	Rate Base Alloc...	Rate Base
	OSM	Segment
	CLAP Return On...	Segment
	CLAP SBC	Segment
	Construction & Plant	Construction
Plant Account		Plant Account
Sched M Timing		Segment
Interest, Taxes & Goal Seek	Short-term Inter...	Segment
	Unbundled Reve...	Electric Revenue...
	Unbundled Reve...	Segment
	CTA	Segment
	Income Statement	Segment
	Unitary State Inc...	U.S. State for ST...
	Income Tax	Segment
	Common Dividen...	Segment
	Balance Sheet	Segment
	Cost of Capital B...	Legal Entity
	AFUDC Rate Cal...	Legal Entity
	Rate Base	Rate Base
	Goal Seek Capt...	Segment
	Cost of Capital B...	Rate Base
	Cash Balancing	Segment
Ratios & Statistics	Cash Flow	Segment
	Receipts and Dis...	Segment
	Ledger Balance ...	Segment

Based on the settings at the top of screen, the processing order would be as defined in the table below:

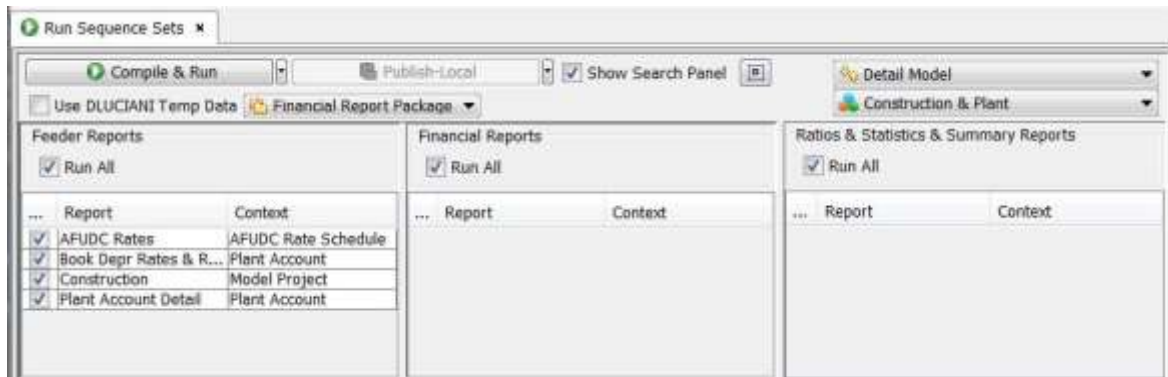
<u>Overall Iteration #</u>	<u>Sequence Set Processed</u>
1	<u>Inputs & Feeders</u>
1	<u>Construction & Plant</u>
1	<u>Interest, taxes & Goal Seek</u>
2	<u>Inputs & Feeders</u>
2	<u>Construction & Plant</u>
2	<u>Interest, taxes & Goal Seek</u>
3	<u>Construction & Plant</u>
3	<u>Interest, taxes & Goal Seek</u>
4	<u>Construction & Plant</u>
4	<u>Interest & taxes</u>
5	<u>Construction & Plant</u>
5	<u>Interest, taxes & Goal Seek</u>
5	<u>Ratios & Statistics</u>

Beginning in pass #3, AFUDC would come from the projected Balance Sheet, not from the assumptions in the Inputs and Feeders sequence.

Report Sequence Subsets

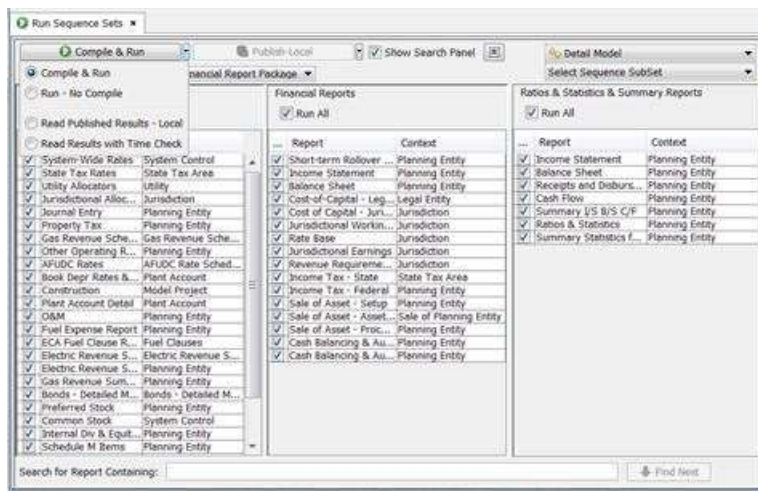
You have the ability to take the core Detailed Model sequence and create a predefined subset to run. Then when you select this subset to run, you see only the reports you want to run. If you want to run other reports, you can always go back to that subset and add more reports to it. This allows you to run only certain reports without having to go to the core sequence and un-select all of the other reports not to run. This has benefits of performance (running only certain reports), efficiency (not having to select/un-select reports), and accuracy (not having to worry about accidentally leaving off reports you want to run). A sequence subset for running only the construction and plant related reports is shown below.

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Run Sequence Sets

{ XE "Iterations" * MERGEFORMAT }{ XE "Run Sequences" * MERGEFORMAT }{ XE "Run" * MERGEFORMAT }{ XE "Run Sequence Sets" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Run Sequence Sets Screen



You run reports in UIPlanner via sequence sets. UIPlanner runs by processing a series of reports. The **RUN SEQUENCES** screen runs (executes) reports set up in report sequence sets. A driver report determines over what Entity Group those calculations will loop. When running sequences, the reports in the **CALCULATION EDITOR** loop over an entity group for the time setting of the active scenario.

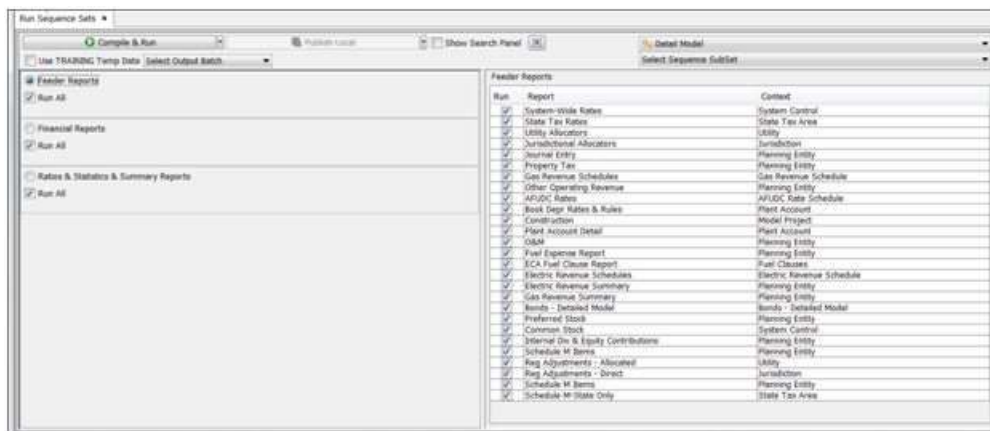
Screen Layout:

The **RUN SEQUENCES** screen contains action buttons near the top, and displays sequences in the active sequence set in the body of the screen. As reports run in the sequence and are completed, their entry on the screen will change color to indicate that the report has been run.

Each sequence in the sequence set is displayed in the order that it will be run, from left to right. The reports are displayed in each sequence in the order that they will be run, from top to bottom.

Alternate Panel View.

You have the option to display the **RUN SEQUENCES SCREEN** in an alternate view, with a panel on the left listing the report sequences. The right side of the screen will list the reports in whatever report sequence you select on the left. This alternative layout was created because some UIPlanner implementations had four or even five sequences, and they were difficult to see in the standard columnar view. The single panel view provides more efficient screen real estate for these multiple sequences. See below.



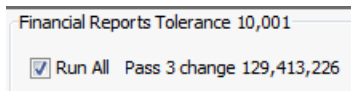
Note that this is display only. The **RUN SEQUENCES** screen functions the same regardless of which view you choose. When you run the model, the reports will run in the proper order and will iterate. The iteration results will be shown in the left panel, under each sequence.

Selection of this alternate view is a **USER PREFERENCE**. (*Run Sequences: Use Selectors & Single Panel*) You can switch views without exiting the model. Just change your user preference and close and reopen the Run Sequences screen.

Pass and Change

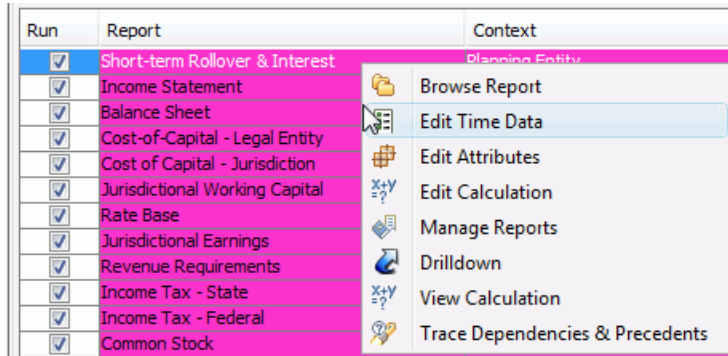
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UIPlanner displays the number of iterations and the tolerance from the last iteration near the top of each sequence.



Right Click Navigation

Right click the active report to open a navigation menu list (shown below). Select the desired screen. The selected screen will be opened and the relevant options will be displayed.



List of Operations or Tasks That Are Performed With This Screen:

- Run Sequence:** This button initiates a sequence run. When you run sequences, the model refreshes all of the data and then runs all of the reports that you have checked in the displayed sequence. Click the arrow to the right to open a drop-down list and select one of four options:
 - Compile & Run** – select to compile all checked reports in a sequence set before running that sequence.
 - Run - No Compile** – select to run sequence sets without compiling reports. This option runs all checked reports, but does not precompile them. If any report has been changed, and thus needs to be compiled, you will be given a warning message and will need to do a Compile and Run.
 - Read Published Results** – Local (option available if the sequence has been published – See [Publish Results](#) for details.)
 - Read Published Results with Time Check** (option available if the sequence has been published).
- Publish:** Select the location to receive published results from the drop-down list. (See [Concept - Publish Reports](#) or more details.)
- Cancel Run:** Terminates the sequence set run while it is executing.
- User Temp Data Case:** Selecting this check box allows you to use a temporary data case for this run. This is saved as a user preference until you un-select the box. See [Using a User Temp Data Case](#) for details.

- **Select Output Batch:** Select a report batch to be output from the drop-down list of report batches.
- **Show Search Panel:** Select to display a panel for searching report context at the bottom of the screen
- **Run All:** Selecting or un-selecting one of these boxes will select or un-select all reports in the sequence.

What to Do If You Encounter Problems

Model Run Errors

If you are running a report sequence, you may get a text message that indicates that UIPlanner has encountered missing or invalid relationships, or that data needed for posting results or for consolidating results is missing. Note that UIPlanner will still finish running and will use all information that it has.

See [Troubleshooting - Model Run Errors](#) for more information.

Visibility/Security Errors

If the Run Sequences screen shows "*Description Suppressed by Security*" instead of the report names, this indicates that you do not have security rights to view these scenarios. You need to contact the System Administrator to modify your security rights, as appropriate. See [Troubleshooting - Visibility/Security](#) for more information.

Compile Errors

If you are running the model and get a "**COMPILATION ERROR**" message box, this indicates that there are serious errors in a report calculation that prevent it from compiling. See [Troubleshooting - Compile Errors](#) for more information.

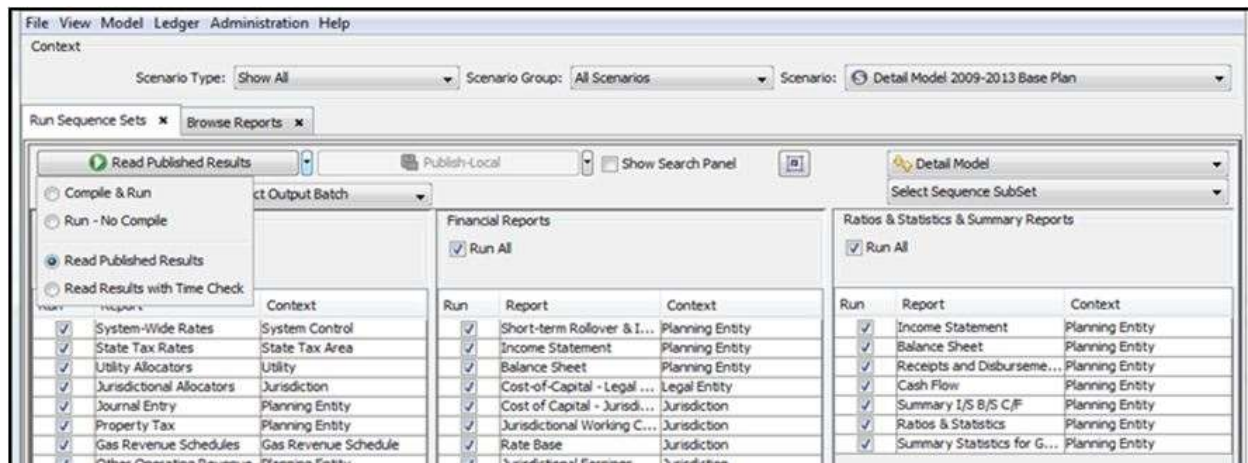
Memory Issues

If the UIPlanner application suddenly becomes unresponsive, you may be running out of memory. See [Troubleshooting -Running Low On Memory](#) for more information.

{ XE "Sequence" * MERGEFORMAT }{ XE "Run Sequences" * MERGEFORMAT }{ XE "Run" * MERGEFORMAT }Run Sequences

When you run sequences, the model refreshes all of the data and then runs all of the reports that you have checked in the displayed sequence.

The **RUN** button has two options: Compile and Run and Run – No Compile. See the screen print below:



There are two choices for running the model. Click on the down arrow next to the Run button, and select from the following two options. Note that when you do, the caption on the button changes accordingly. Then select the Run button.

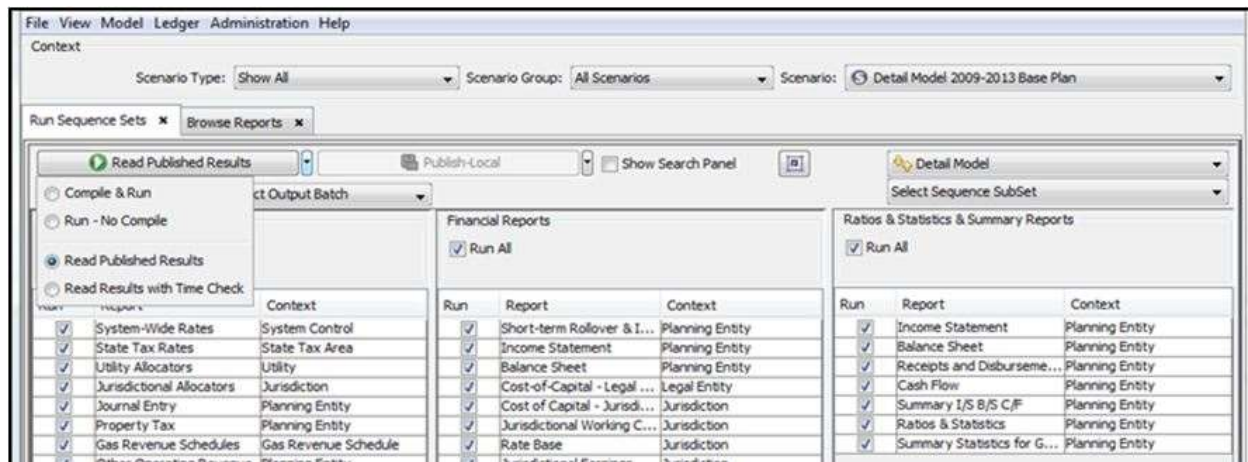
- **Compile and Run** – this option compiles all checked reports and runs them in the sequence order.
- **Run – No Compile** – this option runs all checked reports, but does not precompile them. If any report has been changed, and thus needs to be compiled, you will be given a warning message and will need to do a Compile and Run.
-

Publish Results

From the **RUN SEQUENCES** screen, instead of rerunning the model, you can read the current scenario back from published results. If you have previously published the scenario and you use this option, the model is not rerun. This option can be a major time saver, since it does not require you to rerun the model. In addition, it can help prevent errors, as it ensures

that no changes are made before running. Note that if you wish, you can still run the current scenario.

The **RUN** button has four options, two of which are Read Published Results and Read Results with Time Check. See the example screen below. See [Run Sequences Screen](#) for details on the other two options (Run - No Compile and *Compile & Run*).



One thing to note – if you have NOT previously published that scenario, or it is not available in the folder you designated for published results, these options will not appear. See PUBLISH RESULTS for more information.

The two Read options are:

- Read Scenario From Published Results – select this option, and the button label will change. Select the button, and the model will read back in all the results. The reports change color immediately – you can go directly to Browse Reports.
- Read Results with Time Check - select this option, and the button label will change. Then select the button. If you use the time-check option, the time-stamp on the records on the cases in the scenario is compared to the publish time stamp, and if any data has been updated, the scenario is recalculated. This is an important safety check, to ensure that you have the most current data.

Manage Sequence Sets

{ XE "Sequence" * MERGEFORMAT }{ XE "Manage Sequence Sets" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Manage Sequence Sets Screen

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The screenshot shows the 'Manage Sequence Sets' interface. At the top, there are controls for 'Sequence Set' (set to 'Detail Model'), 'Name' (set to 'Detail Model'), and 'Type' (set to 'Model'). Below this, there are controls for 'Sequence Subset' (set to '-- None Selected --'). The main area is divided into three sections: 'Feeder Reports', 'Financial Reports', and 'Ratios & Statistics & Summary Reports'. Each section has a table of reports with columns for 'Subset', 'Report', and 'Looping Context'. The 'Feeder Reports' table lists 20 items, the 'Financial Reports' table lists 18 items, and the 'Ratios & Statistics & Summary Reports' table lists 7 items. Each item has a checkmark in the 'Subset' column and a 'Looping Context' value. The screen also includes buttons for 'Add Report', 'Remove Report', 'Move Down', and 'Move Up' for each section.

The **MANAGE SEQUENCE SETS** screen is used to create, delete or modify report sequences sets and subsets. It is also used to set sequence iterations and tolerances, and to define whether to iterate across or down.

Screen Layout:

Along the top of the screen are controls for naming and controlling the active sequence. The body of the screen displays each sequence in the active sequence set.

List Of Operations or Tasks That Are Performed With This Screen:

Select Report Sequence Set to Manage

SEQUENCE SET: Drop-down list that displays all sequence sets. Upon selecting a sequence set, all sequences within the selected sequence set will be displayed.

NAME: Displays the name of the active (selected) sequence set. The sequence set name can be changed by entering the new name in the display box.

CREATE SEQUENCE SET: Opens the **ADD OBJECT** Dialog Box where a new sequence set can be added.

COMPILE SEQUENCE SET: Compiles all reports in the active sequence set.

TYPE: Drop-down list used to define sequence sets, e.g., model sequence sets can be defined as Model, Customer Detail, Cost Accounting, etc.

Select Report Sequence Subset to Manage

SEQUENCE SUBSET: Drop-down list that displays all sequence subsets. Upon selecting a sequence subset, all sequences within the selected sequence set will be selected.

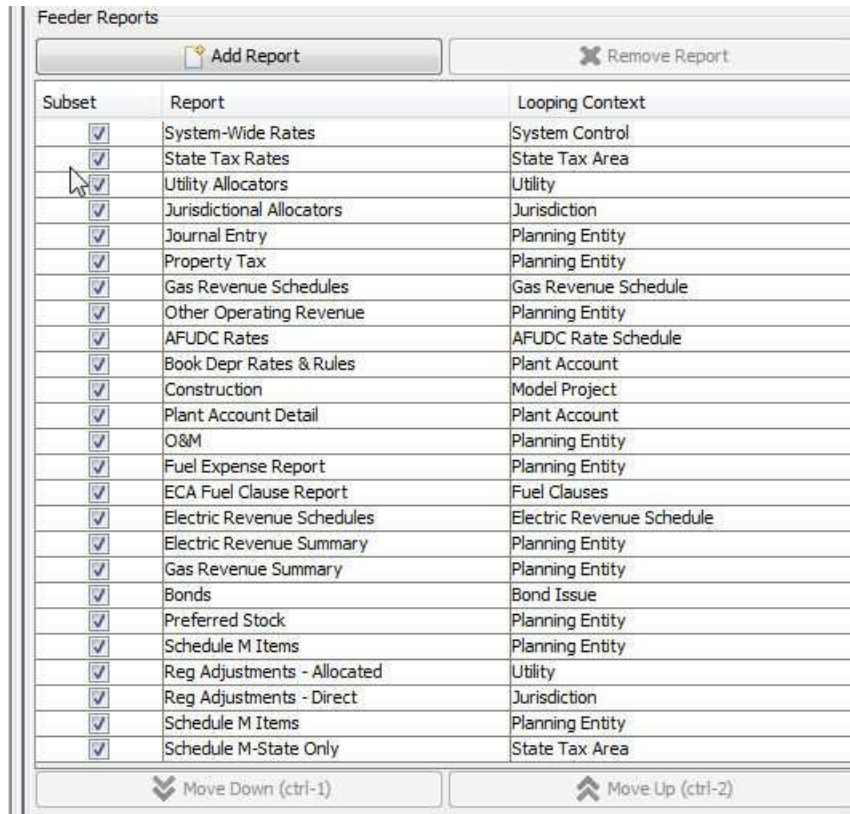
CREATE SEQUENCE SUBSET: Opens the universal **ADD OBJECT** Dialog Box where a new sequence subset can be added.

ADVANCED PROPERTIES: Opens the **SET ADVANCED PROPERTIES FOR DETAIL MODEL** dialog box, which is used to set overall iterations and sequence tolerances/iterations (shown below).

Actions on each sequence

Each sequence set can contain multiple sequences. Each sequence in the active sequence set will be displayed on the screen.

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Name: Change the name of the sequence.

< Left > Right: Moves the sequence to the right or left in the sequence set.

Remove Sequence: Deletes this sequence from the sequence set.

Tolerance: Sets the Tolerance for this sequence.

Iteration: Sets the number of iterations for this sequence.

Iterate Across or Down: Sets the iteration as across or down

Add Report: Opens a dialog box displaying all reports. Select reports for addition to the sequence.

Remove Report: Removes the active report from the sequence.

Up and Down Arrow buttons: Up and down arrows at the bottom of each sequence will move the active report up or down in the sequence.

The bottom region of the screen contains two lists: *Report* and *Looping*, displaying the report name and the entity group it is run over.

Create or Add Sequence buttons

Add Existing Report Sequence: Opens a dialog box displaying all sequences in the active scenario. Select a sequence from the list, to add it to the active sequence set.

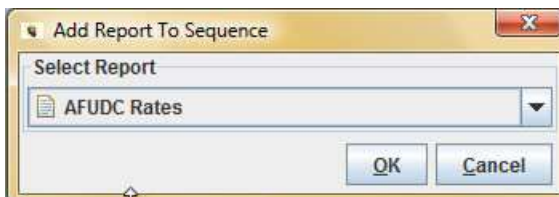


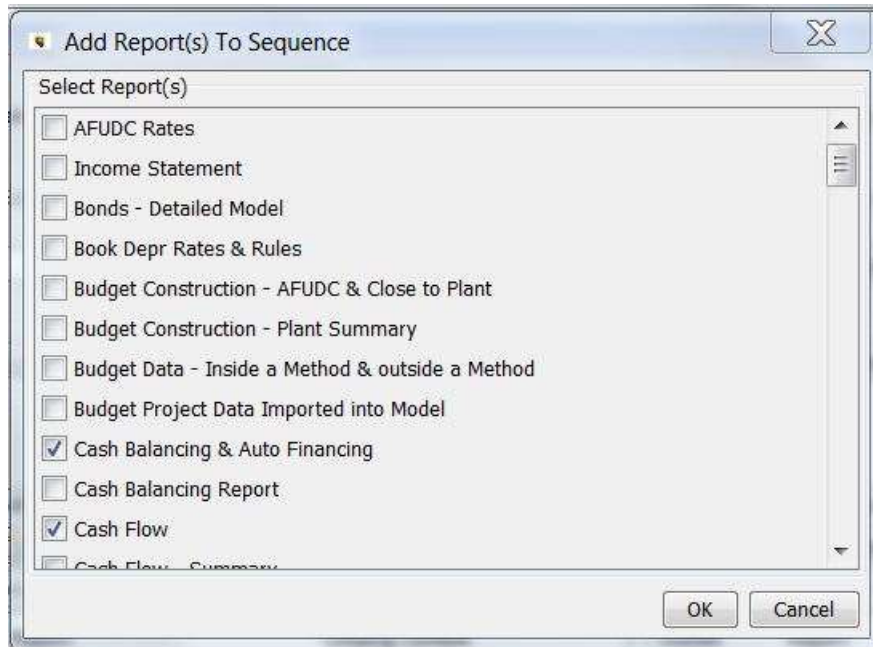
Create New Report Sequence: Creates a new blank sequence in the active sequence set.

{ XE "Sequence" * MERGEFORMAT }{ XE "Remove:Report" * MERGEFORMAT }{ XE "Remove" * MERGEFORMAT }{ XE "Report:Remove" * MERGEFORMAT }{ XE "Report" * MERGEFORMAT }{ XE "Add" * MERGEFORMAT }Add or Remove a Report from a Sequence

Adding a Report to a Sequence

- Open the **MANAGE SEQUENCE SETS** screen.
- Select the desired sequence set.
- Click **ADD REPORT** in the sequence to which you want to add the report. The **ADD REPORT TO SEQUENCE** dialog box will open:





- Check report(s) in the list and click **OK**. The selected report(s) will be added to the bottom of the sequence list.
- Move the report to the desired position in the sequence using the arrows at the bottom of the sequence section.
- Select **Save** from the UIPlanner menu.

Removing a Report from a Sequence

- Open the **MANAGE SEQUENCE SETS** screen.
- Select the desired sequence set.
- Highlight the report you want to remove from a sequence and click **REMOVE REPORT** at the top of the sequence section. The selected report will be removed from the sequence.
- Select **Save** from the UIPlanner menu.

Edit Calculations

{ XE "Postings" * MERGEFORMAT }{ XE "Functions" * MERGEFORMAT }{ XE "Reports" * MERGEFORMAT }{ XE "Calculation Editor" * MERGEFORMAT }Concept - Calculation Editor

Ref.	Line label	Formula-forecast	Formula-actual	Post: Case ...	Local C...
AT	Long-Term Auto-finance Interest:	Label Only	Label Only	<input type="checkbox"/>	
AU	Beg Balance Auto-finance LTD	Previous(AW:[End Balance Auto-finance LTD])		<input type="checkbox"/>	
AV	+ LTD Issued (Repurchased)	AF:[Long-term Debt Issued] - AP:[Long-Term Debt Repurchased]		<input type="checkbox"/>	
AW	End Balance Auto-finance LTD	AU:[Beg Balance Auto-finance LTD] + AV:[+ LTD Issued (Repurc...		<input type="checkbox"/>	
AX		Label Only	Label Only	<input type="checkbox"/>	
AY	LTD Interest Rate	Input()		<input type="checkbox"/>	
AZ	Auto-finance LTD Interest	{ AU:[Beg Balance Auto-finance LTD] + AW:[End Balance Auto-fi...		<input checked="" type="checkbox"/>	
BA		Label Only	Label Only	<input type="checkbox"/>	
BB	Short-term automatic finance	Label Only	Label Only	<input type="checkbox"/>	
BC	Net Cash after Long-term Finance	H:[Net Cash] + AV:[+ LTD Issued (Repurchased)]		<input type="checkbox"/>	
BD	if	BC:[Net Cash after Long-term Finance] > 0		<input type="checkbox"/>	
BE	Cash Surplus after LT Finance	BC:[Net Cash after Long-term Finance]		<input type="checkbox"/>	
BF	else			<input type="checkbox"/>	
BG	Cash Shortage after LT Finance	- BC:[Net Cash after Long-term Finance]		<input type="checkbox"/>	
BH	end if	BD:[if]		<input type="checkbox"/>	
BI		Label Only	Label Only	<input type="checkbox"/>	
BJ	Money Pool Financier	Association To(Money Pool Financier)		<input type="checkbox"/>	
BK	if	BJ:[Money Pool Financier] > 0		<input type="checkbox"/>	
BL	Post to Invest in Money Pool (TCI)	BE:[Cash Surplus after LT Finance]		<input checked="" type="checkbox"/>	
BM	Post to Borrow from Money Pool (STD)	BG:[Cash Shortage after LT Finance]		<input checked="" type="checkbox"/>	
BN	else			<input type="checkbox"/>	
BO	Post to External TCI	BE:[Cash Surplus after LT Finance]		<input checked="" type="checkbox"/>	

The **EDIT CALCULATIONS** screen (also referred to as the "Calculation Editor") is the main means of customizing UIPlanner to fit your needs without the need to modify the UIPlanner software. It allows you, the user, to encode your own business logic. There is no need for custom SQL or Java code for each client. The underlying architecture of UIPlanner is that once you make a change to a report, it is immediately available to all users. When you save the change and 'compile' the report your java version compiles the report logic so that it runs fast (compile is the equivalent of making an .exe file).

The **CALCULATION EDITOR** is the tool you use to build reports, which are custom calculations that are used to implement your business logic. Reports and lines are key dimensions of UIPlanner. UIPlanner runs by processing a series of reports. A driver report determines over what Entity Group those calculations will loop. When running sequences (**RUN SEQUENCES** screen), the reports in the **CALCULATION EDITOR** loop over an entity group, for the time setting of the active scenario.

Reports (calculations) are all user definable. The **CALCULATION EDITOR** is laid out in a grid, with lines for logic and columns for labels and formulas. You enter formulas and functions line by line to build out the business logic in a simple, logical way. Reports are built using spreadsheet-like formulas utilizing a) standard mathematical operators, b) UIPlanner's numerous built-in functions, or c) a powerful logical testing capability.

The **CALCULATION EDITOR** has a feature (local context) that greatly helps in building reports and analyzing results. When you run the model with the report in the sequence, you can come back to the **CALCULATION EDITOR** and see the results in the grid (for a specific entity and time period). You can then scroll through time and see results change on the fly. This can be very helpful when you are building a complex calculation/report and want to see the results of the detail calculations.

Finally, navigation is accomplished in several, straight-forward ways, i.e., via command buttons, right-clicks, and short-cut keys.

Edit Calculations Screen

```
{ XE "Local_Context" \* MERGEFORMAT }{ XE "Edit Calculations"
\* MERGEFORMAT }{ XE "DModel" \* MERGEFORMAT }{ XE
"Screen" \* MERGEFORMAT }Edit Calculations Screen
```

Ref.	Line label	Partially-forecast	Partially-actual	Part: Cash & Base Attribute Cash	Local Context
A	Expenditures	Label Only	Label Only		
A1	Cash Construction Expenditures	Sum(0)	Sum(0)		
A2	Removal Cost	Sum(0)	Sum(0)		
A3	Salvage	Sum(0)	Sum(0)		
A4	Total Cash Expenditures	Sum(Sum(0) [Expenditures])			
A5	Removal Inv (Removal less Salvage)	Sum(0) - 0 [Salvage]			
A6		Label Only	Label Only		
A7	Cash	Sum(0)	Sum(0)		
A8	Debt	Sum(0)	Sum(0)		
A9	APUDC / Capitalized Interest	Label Only	Label Only		
A10	Cash CWP Balance	C [Beginning CWP - Cash]			
A11	Plan 1/2 Expenditures	E [Total Cash Expenditures] / 2			
A12	Cash Basis for APUDC / DE	C [Cash CWP Balance] + E [Plan 1/2 Expenditures]			
A13	(-) APUDC CWP	D [Beginning CWP - APUDC Debt] + E [Beginning CWP - APUDC Equity]			
A14	Start APUDC Basis	AA [Cash Basis for APUDC / DE] + AB (-) APUDC CWP			
A15	(+) APUDC % Single	Sum(0)	Sum(0)		
A16	Net APUDC Item	AC [Start APUDC Basis] * AD [(+) APUDC % Single]			
A17		Label Only	Label Only		
A18	APUDC Debt Rate	Copy From with Path: APUDC Rates, APUDC Debt Rate, Initial Construction Project Policy, Plant Account, APUDC			
A19	APUDC Equity Rate	Copy From with Path: APUDC Rates, APUDC Equity Rate, Initial Construction Project Policy, Plant Account, APUDC			

EDIT CALCULATIONS screen (also known as the **CALCULATION EDITOR**) is the tool used to build reports. It can be accessed via the:

- UIPlanner menu
- **RUN SEQUENCES** screen (by right-clicking on a select report and selecting Edit Calculation from the drop-down list)
- **BROWSE REPORTS** screen (by right-clicking on a selected report in the Report Tree)
- **GROUP REPORTS** screen (using the **EDIT CALC** button)

Screen layout:

The **CALCULATION EDITOR** is divided into three main regions:

- A. Top Region – Displays the report being edited, local context and line context (described below).
- B. Center Region – Control buttons used for line editing / formatting and report actions. See [Control Button Panel](#) for more details.
- C. Lower Region – Calculation Grid containing report calculation lines. See [Calculation Grid](#) for more details.

List of Tasks or Operations that are performed with this Screen:

The Top Region of the **CALCULATION EDITOR** is comprised of several sections:

Select Report

Report: drop-down list of all reports in UIPlanner. You need to select a report calculation to view or edit.

Left and Right arrows: pointer to the last report(s) selected.

Down arrows: drop-down list of recently accessed reports.

Local Context

If you view a report calculation after running the model, the *Local Context* column will display report results for a specific entity/time period.

Entity: drop-down list of entities in the Entity Group defined for the active report. Select the entity for which you want to display results in the local context column of the *Calculation Grid*. Note: You must compile and run reports in order to see results.

Period: Select the period you want displayed in the local context column of the Calculation Grid.

Line Context

Each line in the **Calculation Grid** can be assigned a series of characteristics.

(X) = : displays the content of the active line in the Calculation Grid.

Line Usage: defines how the line will be used in a report (formula, label, etc.)

Line Visibility: defines the visibility of the line in a report (Always Show, Always Hide, etc.)

Month to Annual: defines how the line will be displayed on a report in the annual view (sum of months, ending balance, etc.)

Annual to Month: defines how annual input for time dependent data will be stored in UIPlanner and interpreted when used in the report.

See [Line Context – Edit Calculations](#) for more detailed information.

What to Do if you encounter problems**Compile Errors:**

When you click **SAVE AND COMPILE** as you are building a report, you may get a "Compilation Error" message box.

This message indicates that there is an error in a report calculation. It can be a number of things, for example: a) you have not supplied all required arguments for a function, or b) you have put in illegal syntax. The compilation error message box gives you information to find the source of the error. It gives you report (its object ID), the line, and the reason for the error.

See [Troubleshooting - Compile Errors](#) for more information

Report Editing:

If you try to open the **CALCULATION EDITOR** to edit a certain report and get a message box such as "Report is checked out to . . . username", this indicates that another user is editing that report. Note: A report can be edited by only one user at a time.

Click **OK** to open the **CALCULATION EDITOR**. Note that you will be in view mode only. See [Troubleshooting - Report Editing](#) for more information.

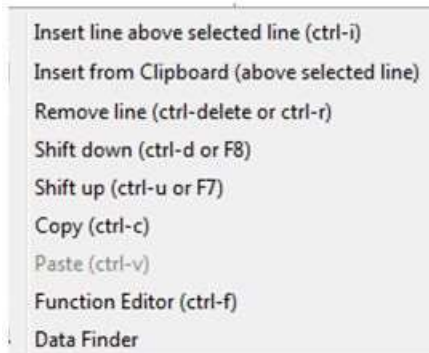
```
{ XE "Control Buttons#Line_Format_Buttons" \* MERGEFORMAT
}{ XE "Control Buttons" \* MERGEFORMAT }Control Buttons -
Calculation Editor
```



Control buttons (shown above) are displayed in a strip in the middle region of the **CALCULATION EDITOR**. These buttons are organized into four types of "actions":

- **Line Action** buttons – perform specific tasks related to one or more lines in the report.
- **Line Format Action** buttons – perform formatting on a report line.
- **Report Lines Action** buttons – perform specific tasks that apply to ALL lines in a report.
- **Report Action** buttons – perform specific tasks related to the entire report.

You can hover over each button to see the action it performs. There are also shortcut keys for many actions. Also, by right-clicking in the formula columns, a drop-down list is available to perform specific actions:










Note: This center region of the screen also includes the Copy check box. (See [Calculation Grid – Calculation Editor](#) for more detailed information.) Also, you can use the <esc> shortcut key any time to undo your current edit.

Line Action Buttons

Icon	Action	Description	Shortcut key
	Add Line	Adds a blank line at the bottom of the report Calculation Grid.	CTRL-A
	Insert Line	Inserts a line above the selected (highlighted) line.	CTRL-I
	insert from Clipboard	Inserts a line(s) above selected line from the Clipboard	CTRL-R OR CTRL-DELETE
	Remove Line	Removes the selected line(s) (or block remove, if range checked in MM-Mark lines for block move in – See Select Columns to Display)	CTRL-R OR CTRL-DELETE
	Remove Section of Lines	Removes a section (“block”) of selected lines. See Calculation Grid for details on block moves.	
	Recover Deleted	Recovers a deleted line or lines, and inserts them below the	









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	Line(s)	selected line. See Line Actions - Calculation Grid for details on recovering deleted lines.	
	Shift Down	Shifts the selected line(s) down one line.	CTRL-D OR F8
	Shift Up	Shifts the selected line(s) up one line.	CTRL-U OR F7
	Copy	Copies selected line(s), or a block of lines, to the clipboard. The down arrow to the right of this icon enables you to copy formulas only. See Calculation Grid for details on block copies.	CTRL-C
	Paste	Inserts a line(s) from the clipboard above the selected line. This control button is also used to paste formats.	CTRL-V
	Line Trace	Opens the LINE TRACE DIALOG box. See Calculation Grid for details.	
	Function Editor	Opens the FUNCTION EDITOR .	CTRL-F
	Show/Hide Format Panel	Toggles the display showing or hiding the format buttons above. (Positioned on the <i>Control Button</i> panel above the format buttons.)	



Line Format Buttons

Note: In the **CALCULATION EDITOR**, you set formatting for line labels in the label column and for data in the *Local Context* column.



Icon	Action	Description	Shortcut key
------	--------	-------------	--------------





	Bold	Toggles the contents of the active cell to Bold.	
	Italic	Toggles the contents of the active cell to Italic.	
	Underline	Toggles the contents of the active cell to Underline. The down arrow to the right of this icon enables you to specify the underline or cell border format.	
	Align Left	Aligns the contents of the active cell Left.	
	Align Center	Aligns the contents of the active cell Center.	
	Align Right	Aligns the contents of the active cell Right.	
	Indent Left	Indents the contents of the active cell left. Each time the Indent is pressed, the cell contents will be further indented. This can be reversed by Clicking on Indent Right	
	Indent Right	Indents the contents of the active cell right. Each time the Indent is pressed, the cell contents will be further indented. This can be reversed by Clicking on Indent left.	

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	Select Color	Select a color for the active cell or row. A color select dialog box will appear, you can color the active cell or the active line with options in the color dialog box.	
	Assign Number Format	Available when a value is selected in the <i>Local Context</i> column on the Calculation Grid . Select a format option from the drop down list.	

Report line Action Buttons






Icon	Action	Description	Shortcut Key
	Show full line name	Toggles the line reference letter in all formulas to include the Line Name as well. This toggle button also controls the display of report line references in the FUNCTION EDITOR dialog box.	CTRL-N
	Make formula lines from empty label	Makes all lines with empty labels formulas. Sets any line in the Calculation Grid with empty formula labels to formula lines. The down arrow to the right allows you to make a line a comment (CTRL-/) or line label (CTRL-')	CTRL-L

	Show/Hide Formula Usage	Toggle button to show or hide the <i>Line Context</i> area of the screen.	
	Show/Hide Long Formulas	Toggle button to show or hide the long formula in the <i>Line Context</i> area of the screen.	
	Edit Line Settings in Excel	Exports only those format and line attribute type columns to Excel. See Edit Line Settings in Excel for details.	
	Select Columns to Display	Opens the SELECT COLUMNS TO DISPLAY dialog box.	

Report Action Buttons

Icon	Action	Description	Shortcut key
	Save	Saves and compiles the current report.	CTRL-S
	Undo All	Undo all changes made since the last save.	CTRL-Z
	Open Calculation	Opens the SELECT REPORT dialog box.	CTRL-O
	Assign Postings	Opens the DEFINE POSTINGS screen.	CTRL-P
	Limit Entities to Run	Opens the SELECT ENTITIES NOT TO RUN dialog box.	
	Edit Time Data	Opens the EDIT TIME DATA screen.	CTRL-T
	Compile	Compiles the currently active report	

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	Compile All	Compiles all reports listed on the RUN SEQUENCES screen.	
	Export to HTML	Exports and opens an HTML file displaying the active report.	CTRL-T
	Split Screen	Displays a second Calculation Grid . The current report or a second report can be viewed and edited from this additional grid.	
	View Generated Source	Displays the Java code generated for the active report.	
	Launch Help	Opens the UIPlanner HELP dialog box.	

{ XE "Calculation Grid" * MERGEFORMAT }Calculation Grid - Calculation Editor

Ref.	Line label	Formula-forecast	Formula-actual	Post	Local Context
A	Constructive	Place Holder for Entity Description	Place Holder for Entity Description		
B		Label Only	Label Only		
C	Beginning CWIP - Cash	Previous(C)[Ending CWIP - Cash]			
D	Beginning CWIP - AFUDC Debt	Previous(C2)[Ending CWIP - AFUDC Debt]			
E	Beginning CWIP - AFUDC Equity	Previous(DA)[Ending CWIP - AFUDC Equity]			
F	Beginning CWIP - CIAC	Previous(DB)[Ending CWIP - CIAC]			
G	Total Beginning CWIP - Book	Sum Down(C)[Beginning CWIP - Cash]			
H		Label Only	Label Only		
I	Beginning CWIP - Cash	Previous(DE)[Ending CWIP - Cash]			
J	Beginning CWIP - Constr. Period Interest	Previous(DP)[Ending CWIP - Constr. Period Interest]			
K	Beginning CWIP - ADR	Previous(DG)[Ending CWIP - ADR]			
L	Total Beginning CWIP - Tax	Sum Down(I)[Beginning CWIP - Cash]			
M		Label Only	Label Only		
N	Expenditures:	Label Only	Label Only		
O	Cash Construction Expenditures	Input()	Input()		128
P	Removal Cost	Input()			0
Q	Salvage	Input()			
R	Total Cash Expenditures	Sum Down(N)[Expenditures:]			128
S	Removal Net (Removal less Salva	P[Removal Cost] - Q[Salvage]			0
T		Label Only	Label Only		

The **Calculation Grid** region of the **CALCULATION EDITOR** looks like Excel, with line labels and cells displayed vertically and Excel-like functionality.

Using the **Calculation Grid**, you can build reports (calculations) using spreadsheet-like formulas. The grid display is controlled via the **SELECT COLUMNS TO DISPLAY** dialog box in that you define which columns to display there. As formulas are the key elements of this grid, you will typically keep the following columns displayed, as a minimum (See [Select Columns to Display](#) for details):

- Ref

- *Line Label*
- *Formula-forecast*
- *Formula-actual*

The *Formula-forecast* and *Formula-actual* columns are the core of the **Calculation Grid**. They allow UIPlanner to process logic differently depending upon whether the period being processed is actual or forecast. The functionality in these columns is powerful in that it incorporates the use of mathematical operators, conditional statements, and numerous UIPlanner functions. (See [Formulas](#) for details.)

A vast array of actions can be taken to facilitate the build-out of reports in the **Calculation Grid**. These can be sub-divided as:

- **Line Actions** – tasks related to one or more lines in the reports.
- **Line Format Actions** – tasks related to formatting report lines individually or in blocks.
- **Report Lines Actions** – tasks that apply to ALL lines in the report.
- **Report Actions** – tasks related to the entire report.

These actions, which are discussed in detail below, are accomplished in several, straight-forward ways, via: control buttons in the middle region of the **CALCULATION EDITOR**, right-clicks and short-cut keys.

Line Actions – Calculation Grid

See [Control Buttons](#) for a complete discussion of control buttons and shortcut keys associated with the line-related actions.

- **Add or Insert:** You can add a line at the bottom of the **Calculation Grid** or insert a line (or lines from a Clipboard) above the selected line.

Note: When a new line is added, it automatically defaults to a Formula line type as most report lines are formulas. Also, the default for a new line is Dollars (000) without Actuals (Annual-to-Month setting, see [Line Context](#)). There is also a user preference (**PREFERENCE MANAGER** screen) that gives you the option to set the default to Dollars (000) with Actuals.

- **Remove:** You can remove a selected line or section (“block”) of lines. For a block delete, first check MM-Mark lines for block move in the **SELECT COLUMNS TO DISPLAY** dialog box to display the MM column on the grid. As this block remove action is for a range, you only need to select (i.e., check the check box in the column) the first and lines you want to delete. Also, note that if the range includes lines that are referenced by lines outside the block, the delete button will not be

enabled. You need to either modify the range or remove the dependency before the **REMOVE** control button will be enabled.

- **Move:** You can move selected line(s) up or down one line using one of the shift buttons.
- **Copy / Paste:** You can copy/paste a selected line or a block of lines. You also have the option to **Copy Formula Only** (via the arrow to the right of the **COPY** button). Unlike a “full” copy, this will not insert a new line, but will only copy the formula onto an existing line. Note that it will copy both the forecast formula and actual formula (if there is one).

To copy a block of lines either within a report or from report to report, use the MM column (discussed above under “Remove”). Check the first and last lines to copy, and then copy/paste the lines where you want them to go. You do not need to add blank lines first. Note that line references within the block of lines to be copied will be updated when they are pasted depending upon whether the lines they reference are inside the block or outside of it. References to lines outside the copy block will be copied unchanged, while references to other lines within the copy block will be updated with the new line numbers.

Since references to lines outside the copy block retain the original line and the copy lines feature can be used across reports, note that a reference to the original line can be brought to the new report. This is appropriate when you copy a block of lines with a **COPY FROM()** function. However, if you copy a block of lines with a **SUM DOWN()** function, it would be appropriate to include the line referenced in the **SUM DOWN()** function in the copy block so that the target report uses the relative position approach and not the original line approach.

- **Recover Deleted Lines:** You can recover deleted lines or groups of lines (i.e., insert previously deleted lines under a selected line) using the **RECOVER DELETED LINES** button. See Recover Deleted Lines for details.
- Open **FUNCTION EDITOR:** You can open the **FUNCTION EDITOR** dialog box using a control button, clicking <CTRL-F> on your keyboard, or right-clicking when you select a line in either the Formula-forecast or Formula-actual columns.

Line Format Actions – Calculation Grid

You can utilize the control buttons in the format panel to format individual or blocks of lines. You can “block” format by first checking the MM-Mark lines for block move in the **SELECT COLUMNS TO DISPLAY** dialog box to first display the MM column on the grid. As the block format is for a range of lines, you only need to select (i.e., check the checkbox in the MM column) the first and last lines you want to affect. Note: You can also copy formats on a series of lines using the Copy checkbox on the format panel. To start, check the box

then format the line you want copied. Select the line(s) to which you want to copy the format and then uncheck Copy when you are done.

See **CONTROL BUTTONS – CALCULATION EDITOR** for the specific control buttons and steps for line formatting. You can toggle the **CALCULATION EDITOR** display to show or hide the format buttons using the **SHOW/HIDE FORMAT PANEL** control button. When the format buttons are displayed, they are only activated when you select a line when in the *Line label* or *Local Context* columns of the Calculation Grid.

Note that formats set in the Calculation Grid are carried forward to the report displayed on the **BROWSE REPORTS** screen, and to Excel upon export.

Report Lines Actions – Calculation Grid:

Several actions affect a set of report lines. These are used to:

- **MAKE FORMULA LINES**
- **SHOW/HIDE FORMULA USAGE**
- **SHOW/HIDE LONG FORMULA**
- **EDIT LINE SETTINGS IN EXCEL** (see [Edit Line Settings in Excel](#))
- **SELECT COLUMNS TO DISPLAY**

See **Control Buttons – Calculation Editor** for a complete description of control buttons and shortcut keys associated with the above report lines-related actions.

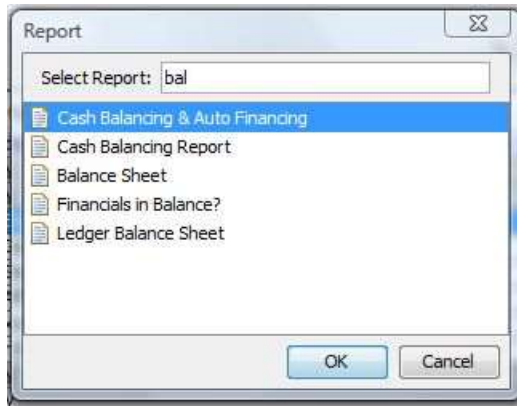
Reports Actions – Calculation Grid

See **Control Buttons – Calculation Editor** for a complete description of report-related actions and the associated control buttons and shortcut keys.

- **Open Calculation:** While you are in the **CALCULATION EDITOR** you may want to open another report to edit. There are a number of navigational techniques.
 - Use the << and >> arrows in the *Select Report* region at the top of the **CALCULATION EDITOR**.
 - Open a report directly from the drop-down list in that top region, or
 - Use the **OPEN CALCULATION** button which is more convenient.

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Click this button to open the **SELECT REPORT** dialog box which consists of a drop-down list of all reports. Select the desired report to be opened for editing. Note: This dialog box has text search. You can type in the box and it will show all reports with that text in the name. See the example below where "bal" is entered.



{ XE "Line" * MERGEFORMAT }{ XE "Calculation Editor" * MERGEFORMAT }{ XE "Line Context#Annual_to_Month" * MERGEFORMAT }{ XE "Line Context" * MERGEFORMAT }Line Context (Edit Calculations screen)

Each line on the *Calculation Grid* can be assigned a series of characteristics defining the format and display of the line when the report is run. These four characteristics are described below along with options that you may select.

Line Usage: defines how the line will be used in the report.

- *Formula* – most common use of a line. See [Formulas – Calculation Editor](#) for detailed information.
- *Comment* - used to place comments on the calculation whenever the author wants to write an explanation.
- *Label Only* - used as label line. Typically used to label sections of the report.
- *Place Holder for Entity Description* – prints the name of the entity currently being processed (typically set as the first line in the report).
- *Place Holder for Sub-Entity Description* - prints sub-entity names on the report. This is used only when the report is run over two or more entities.

Line Visibility: used to show or hide lines on a report.

- *Always show* - Line is always displayed. This setting is the default.

- *Always hide* - Line is never displayed. This may be used for comment lines, or "If" statement lines that are not wanted on the final report.
- *Suppress if all zero* - If all months are zero the line will not be displayed.

Month to Annual: defines how annual totals will be displayed on a report. Typical reports will have monthly columns with a total. The default setting is to total the months and display that total in the annual column. However, there are situations where you will not want a total displayed in the annual column. Below are the options:

- *Total (sum of months)* - Total column will be the sum of the months. This is the default setting for all lines in a report.
- *Beginning Balance* - Beginning balance of the year
- *Peak Value* - Peak value in the last 12 months
- *Ending Balance* - Last monthly value
- *Average Value* - Average of the monthly values (12)
- *No Annual Value* - Annual column will be blank.
- *Rolling 12 Month's Total* - Total of the last 12 months
- *13 Month Average Value* - Average value using the last 13 months
- *2 Point (Beg+End)/2 Average* - Beginning and ending average

Annual to Month: defines how annual input for time dependent data will be spread across the months in a report. The Annual to Month characteristic defines how monthly data is determined when annual data is entered in time-dependent data. All time-dependent data is stored as 12 monthly numbers in UIPlanner. If time-dependent data is input as one number for each year (annual), you must define how to spread this annual number back to months.

- *Dollars (000) with Actuals* - Annual value is divided by 12 to generate monthly values.
- *Dollars (000) without Actuals* - Annual value is divided by 12 for the monthly values.
- *Percent - divided by 12 for Monthly* - Allows you to enter the annual percent as an integer either monthly or annually. UIPlanner will put the annual percent in all months.
- *Percent - same value for month or annual* - Total value is used for each monthly value.
- *Peak Value* - Highest value in the time period.
- *Average Value* - Annual value is divided by 12 for the monthly values.
- *Statistics with Actuals* - Amounts that are non-dollar and therefore will not be scaled.
- *Statistics without Actuals* - Amounts that are non-dollar and therefore will not be scaled.

{ XE "Calculations" * MERGEFORMAT }{ XE "Formula Editor" * MERGEFORMAT }{ XE "Calculation Editor" * MERGEFORMAT }formulas - Calculation editor

Ref.	Line label	Formula-forecast	Formula-actual
A	Construction	Place Holder for Entity Description	Place Holder for Entity Description
B		Label Only	Label Only
C	Beginning CWIP - Cash	Previous(CY:[Ending CWIP - Cash])	
D	Beginning CWIP - AFUDC Debt	Previous(CZ:[Ending CWIP - AFUDC Debt])	
E	Beginning CWIP - AFUDC Equity	Previous(DA:[Ending CWIP - AFUDC Equity])	
F	Beginning CWIP - CIAC	Previous(DB:[Ending CWIP - CIAC])	
G	Total Beginning CWIP - Book	Sum Down(C:[Beginning CWIP - Cash])	
H		Label Only	Label Only
I	Beginning CWIP - Cash	Previous(DE:[Ending CWIP - Cash])	
J	Beginning CWIP - Constr. Period Interest	Previous(DF:[Ending CWIP - Constr. Period Interest])	
K	Beginning CWIP - ADR	Previous(DG:[Ending CWIP - ADR])	
L	Total Beginning CWIP - Tax	Sum Down(I:[Beginning CWIP - Cash])	
M		Label Only	Label Only
N	Expenditures:	Label Only	Label Only
O	Cash Construction Expenditures	Input()	Input()
P	Removal Cost	Input()	
Q	Salvage	Input()	
R	Total Cash Expenditures	Sum Down(N:[Expenditures:])	

The functionality in the Formula-forecast and Formula-actual columns (shown above) may be grouped as follows:

- Mathematical Operators
- Conditional statements
- UIPlanner functions

Mathematical Operators

Formulas are easily created on report lines in the **EDIT CALCULATION** screen. They are based on the reference line letter and the standard convention for the order of mathematical expressions.

Variables in formulas are line reference letters.

Line reference letters in the "Ref" column are used to create formulas in the *Formula-forecast* and *Formula-actual* columns. This is more easily seen when the **SHOW FULL LINE NAME** icon on the control button panel (See [Control Buttons](#)) is toggled to hide line names as shown below. This displays the "pure" formulas on each line.

Ref.	Line label	Formula-forecast
BU	If	R = C
BV	Month of Issue:	Label Only
BW	New Issue Amount	L
BX	Issue Day	E
BY	Percent of Month Outstanding	(31 - BX) / 30
BZ	Interest - Issue Month	BW * BY * BQ
CA	elseif	AF = 1
CB	Month of Retirement:	Label Only
CC	Retire Day	D
CD	Percent of Month Outstanding	CD / 30
CE	Interest - Retire Month	AJ * CD * BQ
CF	else	G <> 0
CG	Intervening Months:	Label Only
CH	Percent of Month Before Sinking Fund Day	AC / 30
CI	First part of month balance for interest	BH * CH
CJ	Interest - First part of Month	CI * BQ
CK	Second part of month balance for interest	BM * (1 - CH)
CL	Interest - Second part of Month	CK * BQ
CM	end if	

Formulas are entered by typing in the *Formula-forecast* and *Formula-actual* columns on a selected (highlighted) line. You can simply type in the line reference in these columns (A, B, C, etc.) and the desired mathematical operators as shown above.

Allowable operators are the standard mathematical operators:

- + Addition
- Subtraction
- * Multiplication
- / Division
- (Open Parentheses
-) Close Parentheses
- ^ Exponent

Conditional Statements

"If – end if" statements are available in UIPlanner reports. The "if - end if" statements are control flow statements used in your report to execute certain lines on your report calculation if conditional tests evaluate to true.

Four of these statements are allowed: "if", "end if", "else" and "Else if". After typing one of these statements in the *Line label* column of the Calculation Grid, the line will change color to help distinguish and delimit the "if" logic in your report. When you type "If" in the *Line label* column the "end if" line will also be added and both lines will be colored. "else" and "else if" lines can be added as needed by typing them in the Line label column.

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The condition test which yields a true or false answer is typed in the line formula (*Formula-forecast* or *Formula-actual* column) using the following expressions:

- < Less than
- > Greater than
- <= Less than or Equal
- >= Greater than or Equal
- <> Not Equal
- = Equal

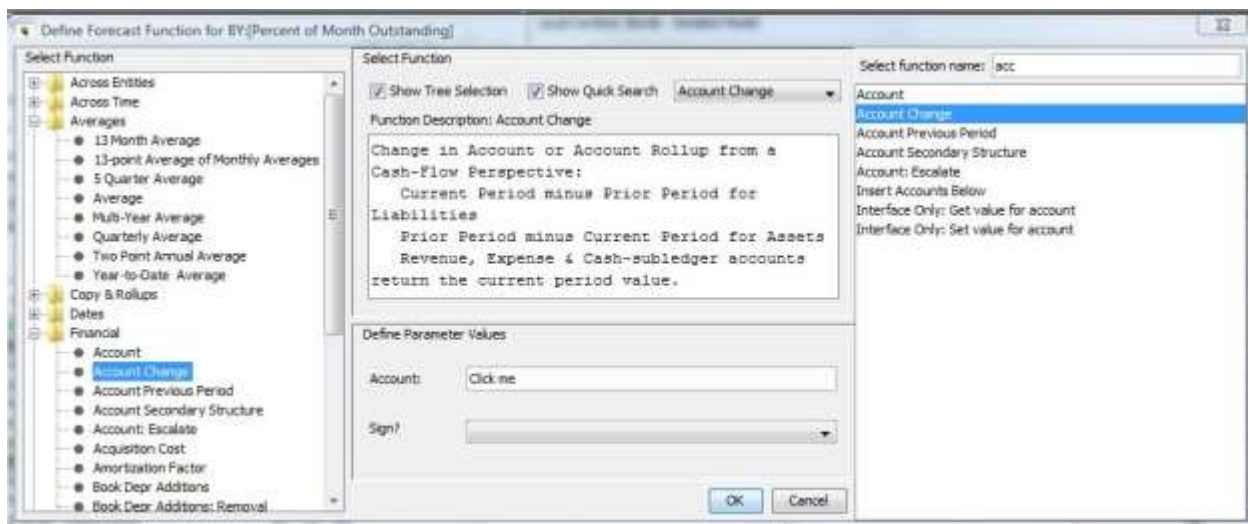
"If" statements follow standard programming logic. An example of conditional statement syntax in a bonds report is shown below.

Note: Additional operators, e.g., "and" and "or", are valid in conditional statements.

UIPlanner Functions

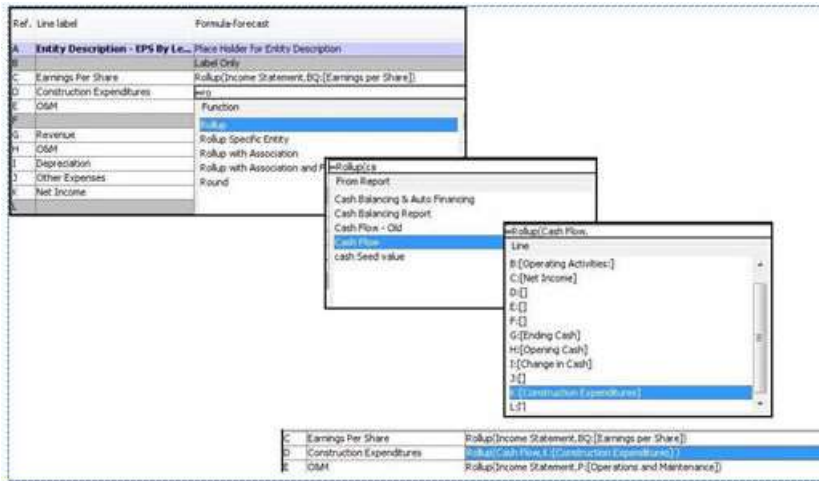
UIPlanner's **FUNCTION EDITOR** provides a wide array of functions that can be used in report logic. The **FUNCTION EDITOR** dialog box (shown below) is accessed from the **CALCULATION EDITOR** by selecting a report line in one of the formula columns and either:

- clicking the Function Editor icon (See [Command Buttons](#)),
- pressing <CTRL F> on your keyboard, or
- right-clicking and selecting **FUNCTION EDITOR**.



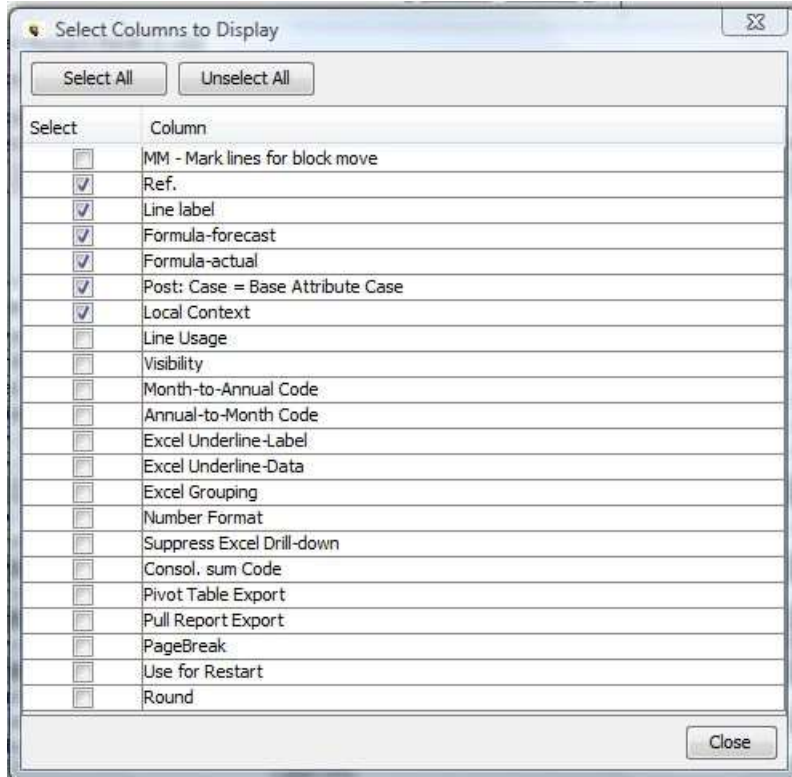
Notes:

The **CALCULATION EDITOR** remembers the last function used and presents it as a suggestion. Thus, if you are adding several account functions on a report, it will default to that first, so you do not have to search for the account function every time. It also allows you to type in a formula if you already know the function and any arguments. If you type "=" to enter a function, as you type the start of the name of that function a list of functions will be shown. Use the up/down arrows and the enter button to make your selection. Then as you continue typing, any required function arguments will be presented. This process is shown below.



{ XE "Columns" * MERGEFORMAT }{ XE "Selecting Columns to Display" * MERGEFORMAT }{ XE "Calculation Editor" * MERGEFORMAT }{ XE "Calculation Grid" * MERGEFORMAT }Select Columns To Display

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**Screen layout:**

The **SELECT COLUMNS TO DISPLAY** dialog box allows you to define the columns that are displayed in the **CALCULATION GRID**. This dialog box is accessed via the **SELECT COLUMNS TO DISPLAY** control button on the center region of the **CALCULATION EDITOR** screen (see [Control Buttons](#) for more details). When you select specific check boxes and then click **CLOSE**, the calculation grid automatically is refreshed displaying those columns.

Although the entire set of columns can be displayed simultaneously, for practical purposes you would typically select only a subset of those columns. For example, the example above shows columns that are most often displayed on the grid. See below for the resulting grid display.

Ref.	Line label	Formula-forecast	Formula-actual	Post: Case = Base Attri...	Local Context
A		Place Holder for Entity Description	Place Holder for Entity Description		
B		Label Only	Label Only		
C	Issue Date YYYYMM	Attribute(Issue Date (yyyymm))			Aug 2002
D	Retire Date YYYYMM	Attribute(Retire Date (yyyymm))			May 2013
E	Issue Day (1-30)	Attribute(Issue Day)			15
F	Retire Day (1-30)	Attribute(Retire Day)			15
G	Sink Day (1-30)	Attribute(Sink Day)			
H	Payment Month	Attribute(Interest Payment Month (1-12))			1
I	Months between payments	Attribute(Number of Months Between Payments)			6
J	Fixed Interest Rate	Attribute(Interest Rate (Fixed))			4
K	Variable Rate Switch	Attribute(Fixed vs Variable Switch (Fixed =0))			
L	New Issue Principal	Attribute(New Issue Principal)			
M	New Issue Issue Cost Percent	Attribute(New Issue Cost (Percent))			
N		Label Only	Label Only		
O	prior tick	PreviousP:[current tick]			24
P	current tick	O:[prior tick] + 1			25
Q	Payment month switches:	Label Only	Label Only		
R	current YYYYMM	Current Date (YYYYMM)()			201,001
S	in first month only, copy inst...	Label Only	Label Only		
T	Payment month (1=YES)	Month Interval(Issue Date (yyyymm),Number of Months B...			0
U	otherwise add increment	Label Only	Label Only		

{ XE "Line Settings" * MERGEFORMAT }{ XE "Edit Line Settings in Excel" * MERGEFORMAT }{ XE "How To Edit Line Settings in Excel" * MERGEFORMAT }Edit Line Settings in Excel - Calculation Editor

While you can edit all line attributes directly in the [Calculation Grid](#), you can also export to Excel line attributes across all lines and edit them there. This is very helpful if you want to edit a number of lines. Below are the line attributes eligible for editing in Excel.

Select Columns to Display ☒

Select All Unselect All

Select	Column
<input type="checkbox"/>	MM - Mark lines for block move
<input checked="" type="checkbox"/>	Ref.
<input checked="" type="checkbox"/>	Line label
<input checked="" type="checkbox"/>	Formula-forecast
<input checked="" type="checkbox"/>	Formula-actual
<input checked="" type="checkbox"/>	Post: Case = Base Attribute Case
<input checked="" type="checkbox"/>	Local Context
<input type="checkbox"/>	Line Usage
<input type="checkbox"/>	Visibility
<input type="checkbox"/>	Month-to-Annual Code
<input type="checkbox"/>	Annual-to-Month Code
<input type="checkbox"/>	Excel Underline-Label
<input type="checkbox"/>	Excel Underline-Data
<input type="checkbox"/>	Excel Grouping
<input type="checkbox"/>	Number Format
<input type="checkbox"/>	Suppress Excel Drill-down
<input type="checkbox"/>	Consol. sum Code
<input type="checkbox"/>	Pivot Table Export
<input type="checkbox"/>	Pull Report Export
<input type="checkbox"/>	PageBreak
<input type="checkbox"/>	Use for Restart
<input type="checkbox"/>	Round

Close

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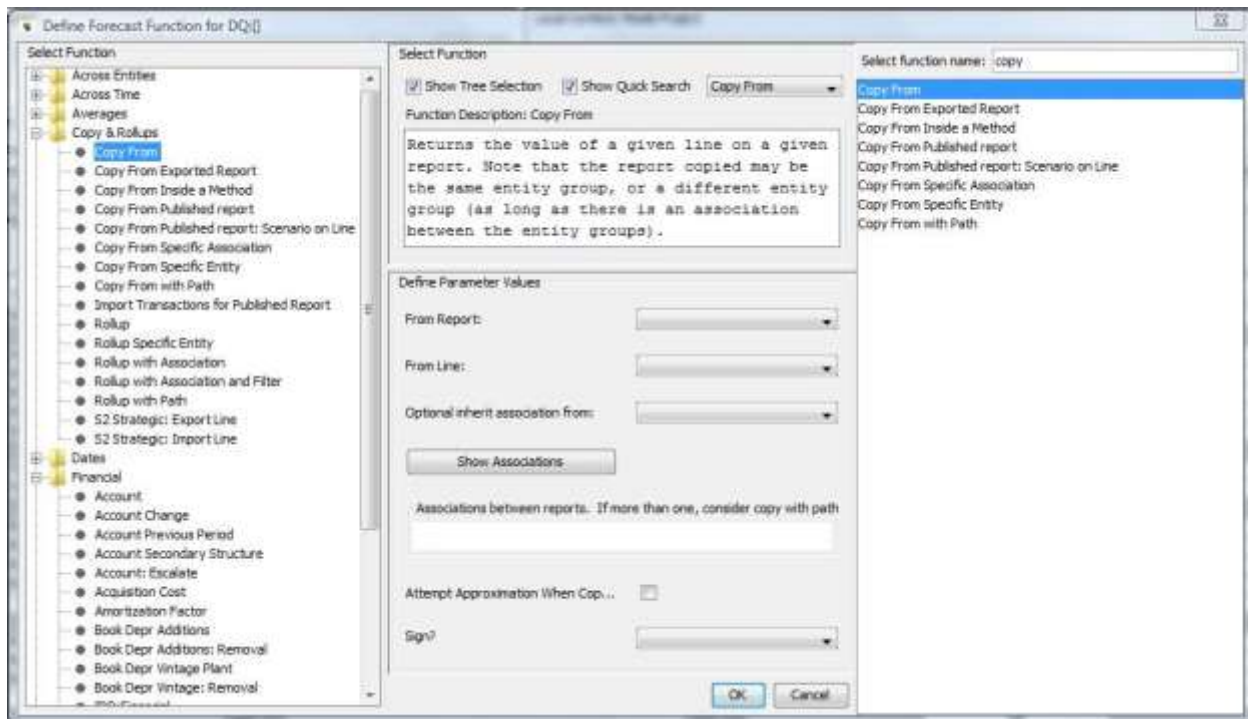
See below for the resulting **Calculation Grid** Display.

Ref.	Line label	Line Usage	Visibility	Month-to...	Annual-to...	Excel Und...	Excel Und...	Excel Gro...	Number F...	Suppress ...	Consol. s...	Pivot Tabl...	Pull Repor...	Round
A	Income Statement	Place ...	Always...	Total L...	Dollar...				Defaul...		Total L...			
B		Label ...	Always...	Total L...	Dollar...				Defaul...		Total L...			
C	Operating Revenues:	Label ...	Always...	Total L...	Dollar...				Defaul...		Total L...			
D	Electric Revenue	Formula	Suppr...	Total L...	Dollar...				Defaul...		Total L...			
E	Gas Revenue	Formula	Always...	Total L...	Dollar...				Defaul...		Total L...			
F	Steam Revenue	Formula	Always...	Total L...	Dollar...				Defaul...		Total L...			
G	Affiliate Revenue	Formula	Always...	Total L...	Dollar...				Defaul...		Total L...			
H	Goal Seek Revenue	Formula	Suppr...	Total L...	Dollar...				Defaul...		Total L...			
I	Total Operating R...	Formula	Always...	Total L...	Dollar...		Overl...		Defaul...		Total L...			
J		Label ...	Always...	Total L...	Dollar...				Defaul...		Total L...			
K	Operating Expens...	Label ...	Always...	Total L...	Dollar...				Defaul...		Total L...			
L	Fuel	Formula	Always...	Total L...	Dollar...				Defaul...		Total L...			
M	Purchased Power	Formula	Always...	Total L...	Dollar...				Defaul...		Total L...			
N	Cost of Gas Sold	Formula	Always...	Total L...	Dollar...				Defaul...		Total L...			

Upon clicking the **Edit Line Settings in Excel** button on the **CALCULATION EDITOR**, the columns and data are exported to Excel for editing.

You can edit and add attribute lines in Excel and then import them back into the **CALCULATION EDITOR**. UIPlanner has built in functionality for editing in Excel, as described further in the [Edit Attributes in Excel](#).

{ XE "Functions" * MERGEFORMAT }{ XE "Function Editor" * MERGEFORMAT }Function Editor



The **FUNCTION EDITOR** dialog box is accessed from the **CALCULATION EDITOR** by selecting a report line in one of the formula columns and either:

- clicking the Function Editor icon (See [Command Buttons - Calculation Editor](#)),
- pressing <CTRL F> on your keyboard, or
- right-clicking and selecting **FUNCTION EDITOR**.

The **FUNCTION EDITOR** has search capability. Two search options are displayed if you select the checkboxes *Show Tree Selection* and *Show Quick Search*:

- *Show Tree Selection* – Displays a tree view of the functions (shown on the left above) which is used to see the functions grouped by type.
- *Show Quick Search* – Displays a "quick search" option (shown on the right above) which is used if you know the names of the various functions. This option allows you to type in any part of a function name, and as you type, it shows all functions with that text string anywhere in the function name.

The example above shows both options for the **COPY FROM** function. On the left, the **COPY FROM** function has been found in its place on the tree view (under the *Financial* group). Alternatively, by typing in 'copy' on the right, all functions with 'copy' somewhere in the name are shown in the list, including ones with 'copy' in the middle or at the end of the name.

The middle section contains a short description of the selected function. Below the description, there is a section listing the parameters associated with that function, and any current values.

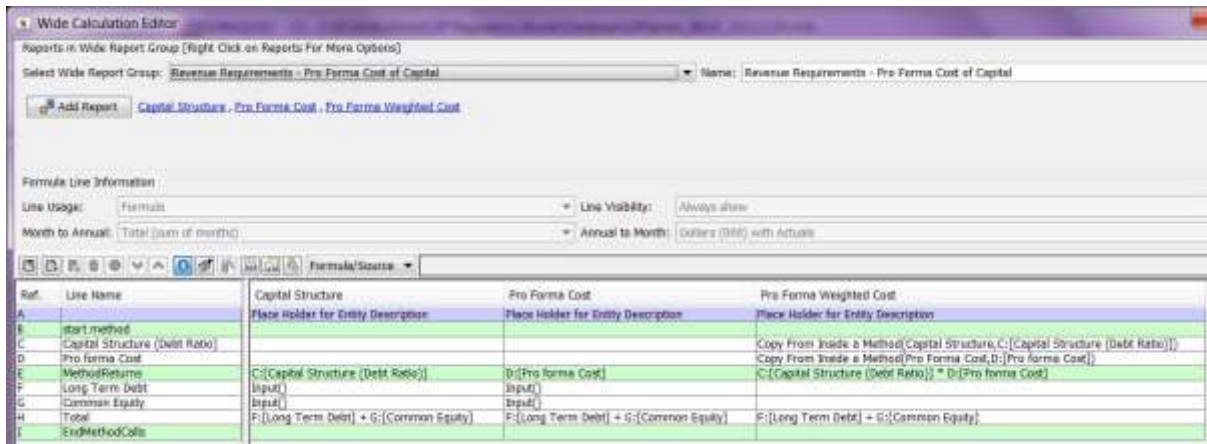
Select the desired function (e.g., **COPY FROM**), select the *Parameter Values*, some of which are optional, and click **OK** to utilize the function for that report line. Note: All functions support an optional argument *Sign?*. The default is no. If *Switch Sign* is selected, the return value is negated.

Wide Calculation Editor (Group by Shared Labels)

{ XE "Wide Calculation Editor" * MERGEFORMAT }{ XE "Shared Labels" * MERGEFORMAT }{ XE "Calculations" * MERGEFORMAT }Wide Calculation Editor Screen

The **WIDE CALCULATION EDITOR** is a variant of the standard **CALCULATION EDITOR** that is used to build and modify groups of reports that share common line labels. It is a simplified view, in that a number of the buttons are removed, and it does not have Local Context. What it does do as an extension of the standard **CALCULATION EDITOR** is that it allows you create a group of related reports, and to see their formulas side by side. Below is an example of a wide report group calculation in the **WIDE CALCULATION EDITOR**.

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When you add a line, it adds that line to all reports. However, you can enter different formulas on each report for the same line. Finally, when you click **SAVE AND COMPILE**, the **CALCULATION EDITOR** compiles and saves all reports in the group.

There is a separate menu item for accessing the **WIDE CALCULATION EDITOR**.

Note that you can post from a report in a Wide Group – just select it in the standard **CALCULATION EDITOR**.

For more information, see **CONCEPT – WIDE REPORTS**.

Screen layout:

The **WIDE CALCULATION EDITOR** is divided into two main regions.

The top region is where you:

- Select which group to edit or create a new Wide Report group
- Use the "Add Report" drop-down list to add a new report to the group if you are already editing a Wide Report group
- Delete a report from a Wide Report Group.

The bottom half of the screen is essentially the **CALCULATION EDITOR** for the selected group. It has a limited selection of action buttons across the top, and below that is the standard calculation editor grid. Note that each of the reports in the group show up as columns, with the line labels in the left hand column.

Note that the calculation grid portion of the screen does not display postings, local context or the actuals formula, as these would be impossible to display for a grid with multiple reports. If you want to edit a report in the **STANDARD CALCULATION EDITOR**, you can access it using a right-click option on the blue list of reports.

List of operations or tasks that are performed with this screen

CREATE A WIDE REPORT GROUP

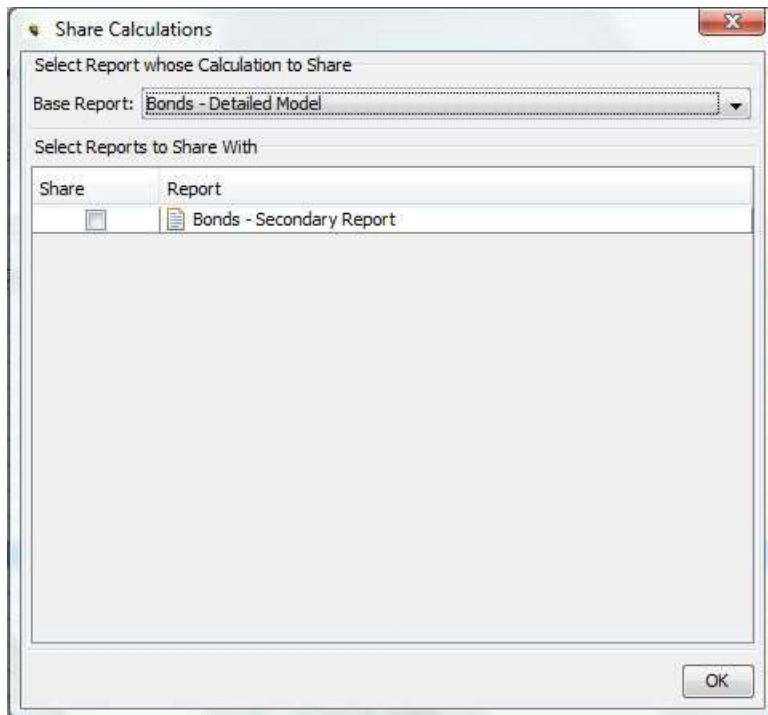
MODIFY REPORTS – WIDE REPORT GROUP

WIDE REPORTS - BUILD A CALCULATION INSIDE A METHOD

ADD/DELETE A REPORT - WIDE REPORT GROUP

Share Calculations

{ XE "Share Calculations" * MERGEFORMAT }{ XE "Screen - Share Calculations" * MERGEFORMAT }{ XE "Calculations" * MERGEFORMAT }Share Calculations Dialog Box



The **SHARE CALCULATIONS** dialog box is used to set up the sharing of calculation logic from one report to another. Sharing calculations allows you to specify that the lines and logic from one report is used in another. This

reduces maintenance needs, since any change you make to the first report is reflected in the second.

Note that the processing is identical in the two reports. If you want to use the same lines in the reports but have different logic in the two reports, you should use the **WIDE CALCULATION EDITOR**.

Screen Layout:

This is a very straightforward screen. The drop-down list at the top lists all reports in the model. The report area below lists all reports in the model that have no lines defined. Note: In order to share calculations, the report you are sharing with must be completely blank to start.

List Of Operations And tasks That are Performed With This Screen:

Share a Report Calculation

1. Create a new, blank report and name it appropriately (use **GROUP REPORTS**). Make sure you specify the entity group it is to run over, but do not check the box for an initial line for entity. The report must exist, but have no lines.
2. Open the **SHARE CALCULATIONS** screen. Select the report you want to share (the source report) from the drop-down list.
3. Select the new blank report in the *Select Reports to Share With* area
4. Click **OK**. You will get a message box confirming the action. Click **OK** again. Note that you cannot undo this action – once the lines are shared, the reports are permanently linked.
5. Click **Refresh** from the UIPlanner menu. When you go to the **CALCULATION EDITOR**, this new report will have all the same lines as the source. Note that the top information bar lists the report name and the report it is shared with. See below.

Editing: Bonds - Secondary Report. Shared with Bonds - Detailed Model Bonds - Strategic Model

Select Report: Report: Bonds - Secondary Report Local Context: Bonds - Detailed Model Entity: Bonds - Detailed Model-CH-4.90% FHE due May 15, 2013

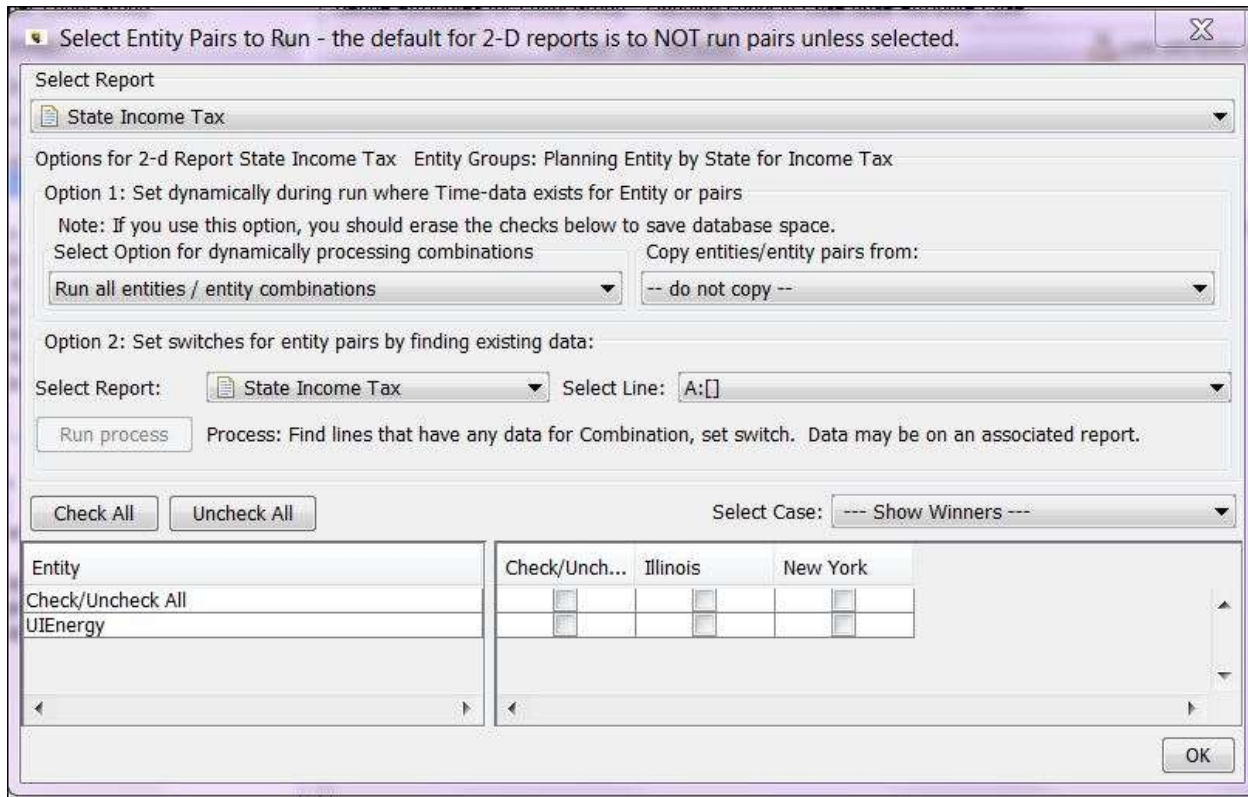
Editing Bonds - Secondary Report

M...	Ref.	Line label	Formula-forecast	Formula-actual
A			Place Holder for Entity Description	Place Holder for Entity Description
B			Label Only	Label Only
C		Issue Date YYYYMM	Attribute[Issue Date (yyymm)]	
D		Retire Date YYYYMM	Attribute[Retire Date (yyymm)]	
E		Issue Day (1-30)	Attribute[Issue Day]	
F		Retire Day (1-30)	Attribute[Retire Day]	
G		Sink Day (1-30)	Attribute[Sink Day]	
H		Payment Month	Attribute[Interest Payment Month (1-12)]	
I		Months between payments	Attribute[Number of Months Between Payments]	
J		Fixed Interest Rate	Attribute[Interest Rate (Fixed)]	
K		Variable Rate Switch	Attribute[Fixed vs Variable Switch (fixed =0)]	
L		New Issue Principal	Attribute[New Issue Principal]	
M		New Issue Issue Cost Percent	Attribute[New Issue Cost (Percent)]	
N			Label Only	Label Only
O		prior tick	Previous[P-current tick]	
P		current tick	O[prior tick] + 1	
Q		Payment month switches:	Label Only	Label Only
R		current YYYYMM	Current Date (YYYYMM)	
S		7 in first month only, copy initial payment month	Label Only	Label Only
T		Payment month (1=YES)	Month Interval[Issue Date (yyymm),Number of Months Between...	
U		otherwise add increment	Label Only	Label Only
V		beginning payment tick	Previous[U-ending payment tick]	
W		increment	T:[Payment month (1=YES)] + 1:[Months between payments] * A...	
X		ending payment tick	V:[beginning payment tick] + W:[increment]	
Y			Label Only	Label Only
Z		if	G:[Sink Day (1-30)] = 0	

Limit Entities to Run

{ XE "Limit Entities to Run" * MERGEFORMAT }{ XE "Screen - Limit Entities to Run" * MERGEFORMAT }Limit Entities to Run Screen

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The purpose of the **LIMIT ENTITIES TO RUN** screen is to give you control over which entities will be run for a specific report. This screen behaves differently for 1D reports and 2D reports

- For 1D reports, you indicate which entities NOT TO RUN
- For 2D reports, you indicate which entities TO RUN

By default, 1-dimensional reports are run for all entities, so you will generally not even need to open this screen for most reports. For 2D reports, you need to define a rule, using this screen. Generally, the only time users will open the Limit Entities to Run screen will be for 2-Dimensional reports.

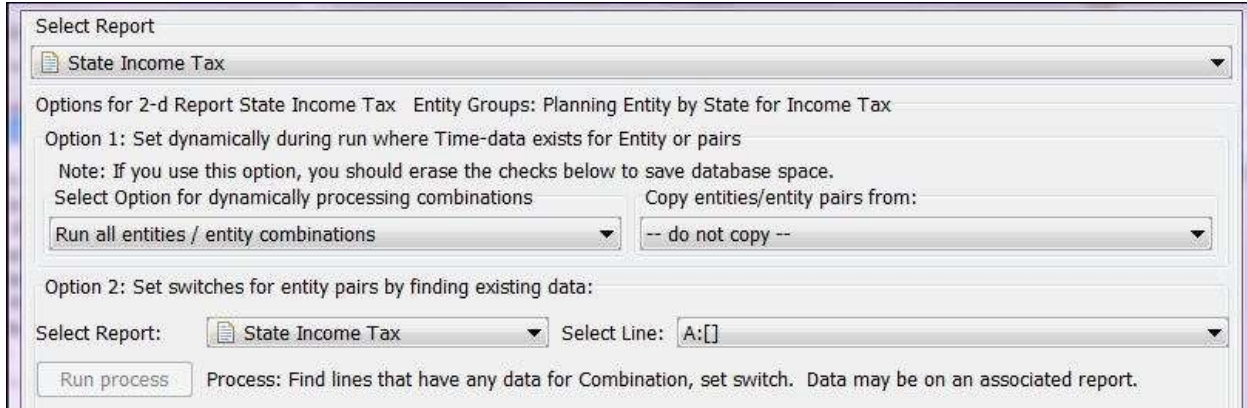
One item to note and be cognizant of – when you first create a 2-D report, you will need to open the **LIMIT ENTITIES TO RUN** screen and set the settings. If you do not do this, that report will not run ANY entities. This gives rise to an issue commonly faced by users. When users create a 2-Dimensional report, they sometimes forget to open this screen and define the Entities to Run rule. Then when they run the model, they get no results.

The **LIMIT ENTITIES TO RUN** screen is invoked from either a menu item or from within the **CALCULATION EDITOR**.

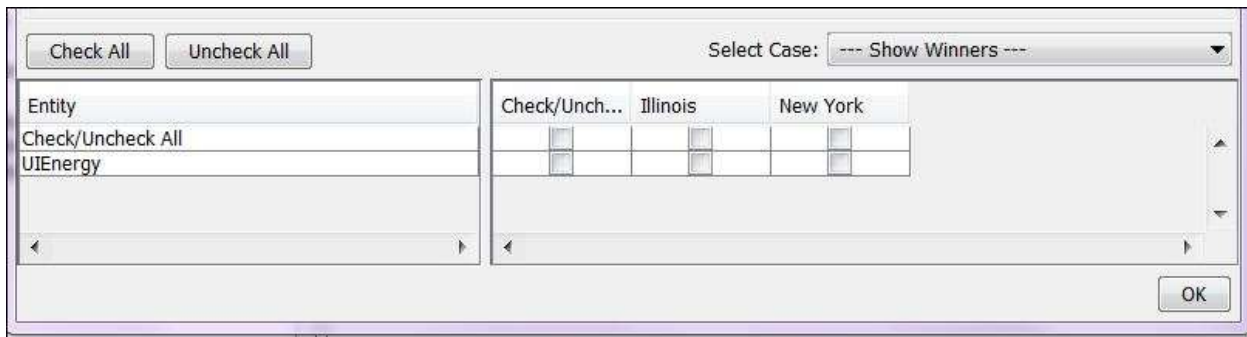
Screen Layout:

The **LIMIT ENTITIES TO RUN** screen is divided into two regions:

The top of the screen contains drop-down lists which you can use to set processing rules.



The bottom of the screen contains a grid that lists the entities (or entity pairs – for 2-Dimensional reports). You can manually check entities to set processing rules. Note that the entity selections are case-specific, allowing winner logic. The screen shows the winners.


List of Operations or Tasks That Are Performed With This Screen:**Set Processing Rules for 2D Report**

While you can manually select entity pairs to run (see below), most commonly users will define processing rules. In this case, the report follows a rule set and dynamically chooses the entity pairs based on the rule set. This is the most common setting for the **LIMIT ENTITIES TO RUN** Screen. The rules are set in the top region of the screen. Below are some of the settings available to you.

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- *Process Entities/Entity Combinations where Time Data Exists* – with this setting, the model run only those combinations where there is data to process. This option is helpful in entity structures that are “sparsely populated”, with limited and scattered combinations.
- *Run All Entities/Entity Combinations* – with this setting, the model will run all combinations
- *Use Entities/Entity Combinations from Another Report* – this setting allows you to choose another report from which to set the entities to run. This way, if you have previously set combinations in another report, you can mirror those in the current report.

Note regarding choosing an option to use vs. processing speed: Depending upon the number of combinations, you should consider first setting the rule to be “*Run All Entities/Entity Combinations*”, and only making it more restrictive if there are issues with processing time. With processing speed of most computers, in many cases you should be able to run all pairs with no impact on speed. You might only need to tailor the settings in the **LIMIT ENTITIES TO RUN** screen if you encounter performance issues with these settings.

Manually Select Entity Pairs to Run

There may be cases where you want to specifically designate the entity pairs to run. Select the case from the dropdown list. Then check the entities to run. You can check all or uncheck all using the buttons to the left, or you can select full rows or columns using the top row or left hand column. Below is an example.

Select Entity Pairs to Run – the default for 2-D reports is to NOT run pairs unless selected.

Options for 2-d Report O&M by WO x Cost Type: Entity Groups: WO by Cost Element

Option 1: Set dynamically during run where Time-data exists for Entity or pairs
 Note: If you use this option, you should erase the checks below to save database space.
 Select Option for dynamically processing combinations: Process entities / entity combinations where time-data exists Copy entities/entity pairs from: -- do not copy --

Option 2: Set switches for entity pairs by finding existing data:
 Select Report: O&M by WO x Cost Type Select Line: A:[]
 Run process: Process: Find lines that have any data for Combination, set switch. Data may lie on an associated report.

Check All Uncheck All Select Case: Base Attribute Case

Entity	Check/Unch...	ST Labor - Salary	ST Labor - Union	ST Labor - Hourly	Other Union Labor	PTO, VHA, ETO	OT - Hourly	OT - Union
Check/Uncheck All								
127 UNDERGROUND LOCATING	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
169 Line Extensions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
170 Kent Substation rebuild	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
171 French Turbine Overhaul	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
425 KArc-Flash Hazard Study	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
586 Non-Capital Initiatives	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
590 Smith Turbine Overhaul	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
694 SW & HW Leases	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

In this case, the report will only be run for the checked entity pairs. It is advisable to use this option only when the list of entities is relatively stable. Otherwise, if new entity pairs are added, they will not be run unless you manually add them.

Exclude Entities for Processing – 1D Report

There may be cases where you want to limit the entities to run for a 1-dimensional report. For example, there may be a report that you want to run only for a certain entity (or entities). You thus turn the report OFF for all other entities. What you do in this case is to use the **LIMIT ENTITIES TO RUN** screen to turn OFF those entities. Below is an example.

Select Entities NOT to Run - the default for 1-D reports is to run all.

Options for 1-d Report Property Tax Entity Group: Planning Entity

Option 1: Set dynamically during run where Time-data exists for Entity or pairs
Note: If you use this option, you should erase the checks below to save database space.
Select Option for dynamically processing combi Copy entities/entity pairs from:
-- do not copy --

Option 2: Limit Entities to Run By Edit Group

Optional: Limit Entities by Edit Group: -- Limit by Checkbox Selection --

Check All Uncheck All Select Case: Base Attribute Case

Entity	Select
UI Energy Consolidated	<input checked="" type="checkbox"/>
UI Energy Elim	<input type="checkbox"/>
UI Energy Parent	<input type="checkbox"/>
Tri-State Consol	<input type="checkbox"/>
Tri-State Elim	<input type="checkbox"/>
Tri-State Parent	<input type="checkbox"/>
Chicago Electric	<input type="checkbox"/>
SWEGCO Electric	<input type="checkbox"/>
SWEGCO Gas	<input type="checkbox"/>
Suburban Gas	<input type="checkbox"/>
Acquisition Co	<input type="checkbox"/>
Prairie Gen	<input type="checkbox"/>
Top-Level Segment Elim	<input checked="" type="checkbox"/>
Electric Segment Consol	<input checked="" type="checkbox"/>
Electric Segment Elim	<input checked="" type="checkbox"/>
Gas Segment Consol	<input checked="" type="checkbox"/>
Gas Segment Elim	<input checked="" type="checkbox"/>
Other Segment Consol	<input checked="" type="checkbox"/>
Other Segment Elim	<input checked="" type="checkbox"/>

OK

In this case, this report will NOT be run for the checked entities. Note that the checkbox selections are made in the Base Attribute case.

What to do if you encounter problems

NO RESULTS OR INCOMPLETE RESULTS – 2D REPORT:

You ran a 2-Dimensional report, but got either no results at all, or incomplete results (entity pairs you expected were not returned.) This situation could arise if:

- You did not set a processing rule for the 2-D report

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- b) You set a rule that returned no pairs
- c) You manually set the pairs to run and new pairs were found.

Review the rules you set for the 2D pairs.

Trace Precedents and Dependencies

{ XE "Precedents" * MERGEFORMAT }{ XE "Dependencies" * MERGEFORMAT }{ XE "Trace Dependencies" * MERGEFORMAT } Trace Precedents And Dependencies Screen

Report	Line	Relation	Report	Line
O&M	B:[]	Dependent	O&M	J:[Total O&M Expense (Bef...
O&M	H:[Insurance - Service Com...	Dependent	O&M	R:[Insurance Expense Accr...
O&M	J:[Total O&M Expense (Bef...	Dependent	O&M	N:[O&M Target Adjustment]
O&M	J:[Total O&M Expense (Bef...	Dependent	O&M	P:[Total O&M Expense (Aft...
O&M	J:[Total O&M Expense (Bef...	Precedent	O&M	B:[]
O&M	L:[O&M Target]	Dependent	O&M	N:[O&M Target Adjustment]
O&M	L:[O&M Target]	Dependent	O&M	M:[if]
O&M	M:[if]	Precedent	O&M	L:[O&M Target]
O&M	N:[O&M Target Adjustment]	Dependent	O&M	P:[Total O&M Expense (Aft...
O&M	N:[O&M Target Adjustment]	Precedent	O&M	L:[O&M Target]
O&M	N:[O&M Target Adjustment]	Precedent	O&M	J:[Total O&M Expense (Bef...
O&M	P:[Total O&M Expense (Aft...	Precedent	O&M	J:[Total O&M Expense (Bef...
O&M	P:[Total O&M Expense (Aft...	Precedent	O&M	N:[O&M Target Adjustment]
O&M	R:[Insurance Expense Accr...	Precedent	O&M	H:[Insurance - Service Com...
Gas Revenue Summary	D:[Energy]	Dependent	Gas Revenue Summary	I:[Total Revenue]
Gas Revenue Summary	D:[Energy]	Precedent	Gas Revenue Schedules	O:[Energy Revenue - Total]
Gas Revenue Summary	E:[Demand]	Precedent	Gas Revenue Schedules	S:[Demand Revenue - Total]
Gas Revenue Summary	F:[Fuel]	Precedent	Gas Revenue Schedules	V:[Fuel Revenue]
Gas Revenue Summary	G:[Customer]	Precedent	Gas Revenue Schedules	Z:[Customer Revenue]
Gas Revenue Summary	H:[Other]	Precedent	Gas Revenue Schedules	AB:[Other Revenue (Input)]
Gas Revenue Summary	I:[Total Revenue]	Dependent	Gas Revenue Summary	N:[Revenue per Unit sales]
Gas Revenue Summary	I:[Total Revenue]	Dependent	Gas Revenue Summary	O:[Revenue per Customer]
Gas Revenue Summary	I:[Total Revenue]	Precedent	Gas Revenue Summary	D:[Energy]
Gas Revenue Summary	K:[Unit Sales]	Dependent	Gas Revenue Summary	N:[Revenue per Unit sales]
Gas Revenue Summary	K:[Unit Sales]	Precedent	Gas Revenue Schedules	F:[MDT Sales - Total]

The **TRACE PRECEDENTS AND DEPENDENCIES** screen allows you to see all the precedents and dependents for an entire report or an entire report sequence. You use the drop-down list to select a report sequence or a specific report. This is a major extension of the current trace dependents

feature in the **CALCULATION EDITOR** (which works on a single line in a report). Below is an example showing the trace for a single report. Key features include the following:

- You can limit the trace to only links to other reports. If unchecked, the trace results will show intra report results as well.
- You can choose to see line formulas instead of dependencies.
- Trace results can be exported to MS Excel or a text file.

Push From Report to Report

```
{ XE "Push from Report to Report" \* MERGEFORMAT }{
XE "Regulatory" \* MERGEFORMAT }{ XE "RegSmart" \*
MERGEFORMAT }Push From Report to Report Screen
```

Concept – Push from Report to Report

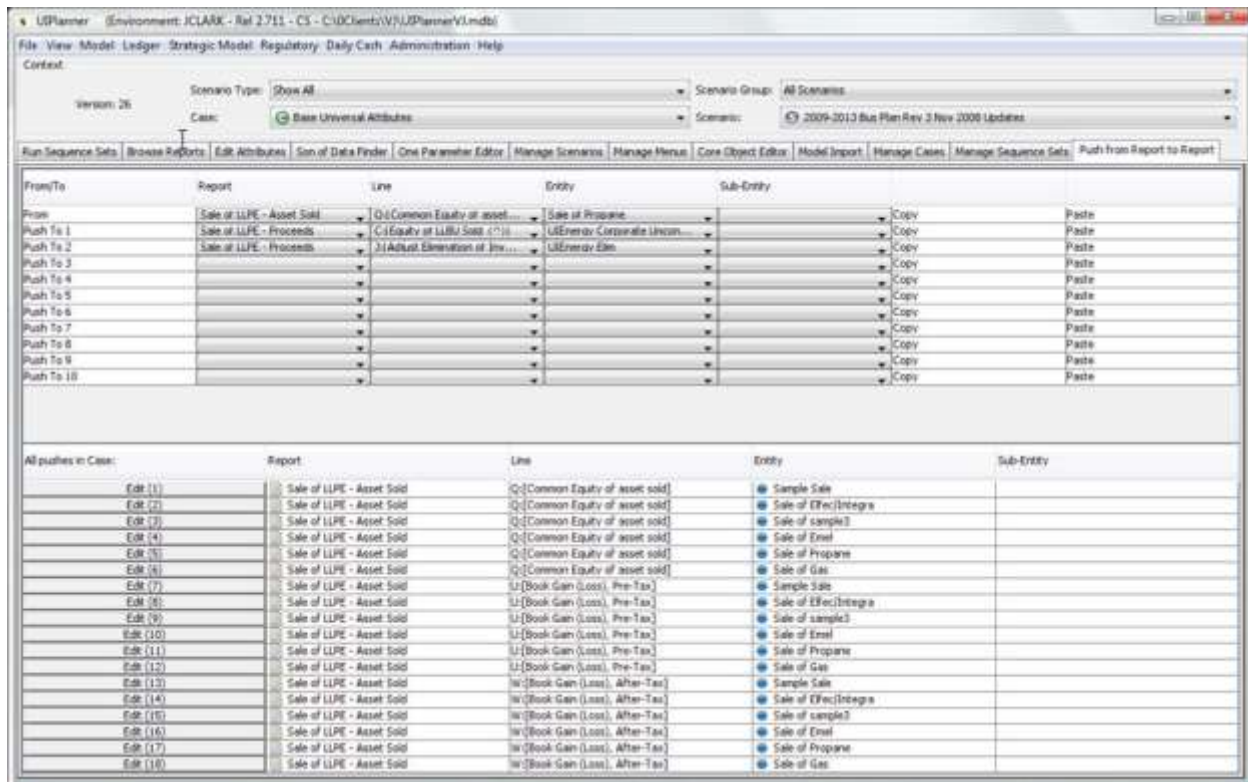
The "Push from Report to Report" functionality was developed to allow the user to take data from one report/entity and copy it to a specific line on another report/entity – without the need for any association or relationship between the two.

Under most circumstances, users will use the **COPY FROM** or **ROLLUP** functions in the destination report to 'pull' the data from the other report. However, these functions require that there be an association between the entities involved in the two reports. In some cases, it may be too difficult or too complicated to define the needed relationships. For example, the user may have a report for sales of LLPEs and wants to record the proceeds and gain/loss on the correct owning entity. Rather than try to build all the pointers and mappings, it may be easier to just take the proceeds and gain/loss for each sale and "push" each one to the right destination LLPE.

-

Below is an example of the **PUSH FROM REPORT TO REPORT** screen with several transactions configured as indicated above.

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To configure a transaction to be “pushed” from one report to another, follow these steps:

- Select the report, line and entity that you want to push. This is on Line 1. In the above example, we want to go to the *Sale of LLPE* report, and get the common equity for the propane entity.
- Choose the report, line and entity where you want it pushed (where it should end up). Note that you can take one amount and push it to more than one entity. Use additional lines for multiple pushes. In the above example, the objective is to take the common equity of the propane entity that was sold, and put it on the *Sale of LLPE – Proceeds* report for two entities – the parent and the elim co.
- Open the **CALCULATION EDITOR** and select the destination report.
- In this report, indicate that the relevant lines are to be populated using Push from Report to Report by selecting the function : **Line is a Target of Push from Report/Line/Entity**

▼ Edit Calculation

Select Report: **Sale of LLPE - Proceeds** Report Context: Entity Group: **Low-Level Planning Entity** Secondary: Calc. Consolidations Iterations: 1

Actuals Date: Expiration Years To Run: 0 Pure Monthly Mixed Annual Tolerance: 0

Line Context

Line Usage: **Formula** Line Visibility: **Always show**

Month to Annual: **Total (sum of months)** Annual to Month: **Dollars (000) with Actuals**

Format Options Number Format: **Default** Excel Underline:

NM ... Ref.	Line label	Formula-forecast	Formula-actual	Post
A	Ent Desc Sale of asset - proceeds	Place Holder for Entity Description		
B	For sub that gets proceeds	Label Only		
C	Equity of LLBU Sold (*)	Line is Target of Push from report(line/entity)		
D		Label Only		
E	Pre-Tax Book Gain (Loss) - Not Posted	Line is Target of Push from report(line/entity)		
F		Label Only		
G	Gain (Loss), After Tax	Line is Target of Push from report(line/entity)		
H		Label Only		
I	For related ElmCo.	Label Only		
J	Adjust Elimination of Investment in Subs/Equity of Sold Sub	Line is Target of Push from report(line/entity)		

DATA

Core Object Editor

{ XE "Core Object Editor" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Core Object Editor Screen

The **CORE OBJECT EDITOR** screen is the primary screen for editing object data within UIPlanner. This screen allows editing of any object related record.

Care should be taken when using this screen. Object data, if deleted, cannot be reversed. Inadvertent deletions can produce compile or report run errors, or go unnoticed and yield invalid results.

Screen Layout:

The **CORE OBJECT EDITOR** screen is comprised of two regions:

1. **Top "Select Objects to Edit"** region, which contains two drop-down lists, a series of preset filters for delimiting object selections, and one button, as defined below:

Object Type: This drop-down list contains a list of object types. Selection of an object type will limit what is in the *Filter By* drop-down list, which is used to further limit your selection.

Note: The objects in the list may be limited by a preset filter, which are selected using the checkboxes to the right of the drop-down list. Hover over the boxes to view the labels. The two preset filters that are used by model users are:

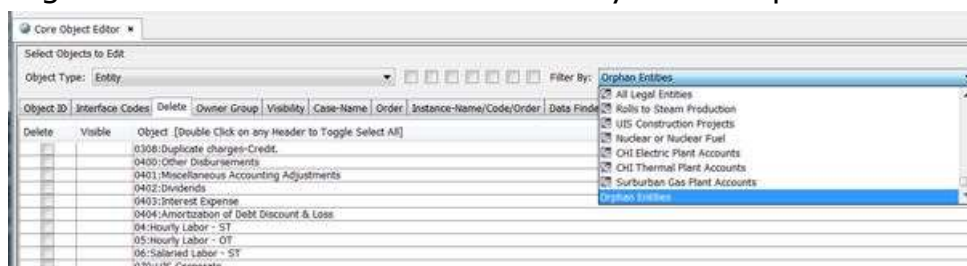
- ✓ **Model objects** – basic, e.g., reports, lines, entities, etc.
- ✓ **Model objects** – extended, e.g., line attribute, case group, report batch, etc.

If no preset filters are selected, all object types are listed in the "*Object Type*" drop-down list.

Filter By: This drop-down list is limited by the *Object Type* selection. For example, when *Report* is selected, the "*Filter By*" list will include report groups and when *Line* is selected, the list will include reports. In some cases there are no additional filtering options available. Once you have made your selections from the two drop-down lists, the results will appear on the bottom region of the screen.

Note: Orphan entities, e.g., entities that may remain after their entity group has been deleted, are identified using the "*Filter By*" list. To identify orphan entities, select *Entity* in the *Object Type* drop-down list.

Then scroll to the bottom of the "Filter By" drop-down list and select "Orphan Entities." In the example below, the list of entities in the bottom region of the screen now includes only those orphan entities.



Load Data: Click **LOAD DATA** to refresh the results of the search.

2. **Bottom region**, which includes a series of sub-tabs. Each sub-tab, listed below, displays a different screen panel.
 - **Object ID:** This tab is pictured at the top of this section. It displays each object and the internal Object ID. This information is not editable. However, you can search for a specific item and find its Object ID. Or, you can specify the Object ID and click **FIND** to find the specify item associated with that *Object ID*. This information can also be exported to Excel or HTML.
 - [Interface Codes](#)
 - [Delete](#)
 - [Owner Group](#)
 - [Visibility](#)
 - [Case-Name](#)
 - [Order](#)
 - [Instance-Name/Code/Order](#)
 - [Data Finder](#)
 - [Alerts](#)

Additional Filters on Core Object Editor

Preset Object Filters: In order to make it easier to use this screen when viewing and editing objects, there are a series of preset filters denoted by checkboxes. You apply the filters by choosing the appropriate check box. Note that due to space limitations, the check boxes do not have description labels; instead the descriptions are in the form of tool tips that show up if you hover over them. When you select a filter, it will limit the list of items in the Object Type drop-down list. The current filters are:

- **Model Objects - Basic** - this limits the Object Type to the most commonly viewed Model items:
 - Accounts

- Case
- Reports
- Account Rollups
- Entity
- Scenario
- Attribute Definitions
- entity Group
- Calculations
- Lines
- **Model Objects - Extended** – this contains the remaining Model Object Types, such as Allocation Path, Allocation Scheme, Custom Column Set, Report Sequence, Report Sub Sequence, etc.
 - Accounts
 - Case
 - Reports
 - Account Rollups
 - Entity
 - Scenario
 - Attribute Definitions
 - entity Group
 - Calculations
 - Lines
- **Budget Objects - Basic**– this limits the Object Type list to the most commonly viewed Budget items:
 - Attribute Definition
 - Entity Group
 - Calculation
 - Line
 - Case
 - Report
 - Entity
 - Scenario
- **Budget Objects – Extended** – this list contains the remaining Budget Object Types, such as DataSet Definition, Loading Definition, Loading Filter, Stored Procedure Definition, and Validation Rule Set, to name a few.
- **System Objects** – this limits the list to several key System level items, such as Calc Function, Q2 and UIMenuItem.

These filters are combinable; if you select Model - Basic and Model - Extended, you get the members of both. These filters can help simplify

The screenshot shows the 'Core Object Editor' window with the 'Select Objects to Edit' tab active. The 'Object Type' is set to 'Entity' and the 'Filter By' is 'Planning Entity'. The table below shows the interface codes for various entities.

Planner Object	Export Mapping	Import Demo	Import Mapping
UI Energy Consolidated		UIEC	
UI Energy Elim		UIEE	
UI Energy Parent		UIEP	
Tri-State Consol		TSC	
Tri-State Elim		TSE	
Tri-State Parent		TSP	
Chicago Electric		CE	
SWEGCO Electric		SWE	
SWEGCO Gas		SWG	
Suburban Gas		SG	
Acquisition Co		ACD	
Prairie Gen		PG	

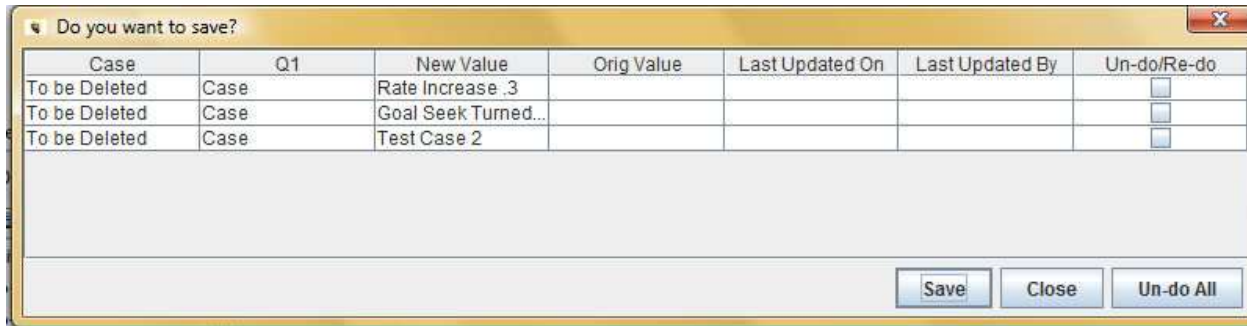
This tab of the **CORE OBJECT EDITOR** displays interface codes for the selected Object group (Entity, in the example shown above). The active interface cases are shown as columns

You can edit Interface Codes in Excel by right-clicking on the header row. Select the **EDIT IN EXCEL** option.

{ XE "Core Objects Editor: Sub-Screen - Mass Delete" * MERGEFORMAT }{ XE "Mass Delete" * MERGEFORMAT }{ XE "Sub Screen" * MERGEFORMAT }Delete Tab - Core Object Editor

The screenshot shows the 'Core Object Editor' window with the 'Select Objects to Edit' tab active. The 'Object Type' is set to 'Entity' and the 'Filter By' is 'Planning Entity'. The table below shows a list of objects with checkboxes for 'Delete' and 'Visible'.

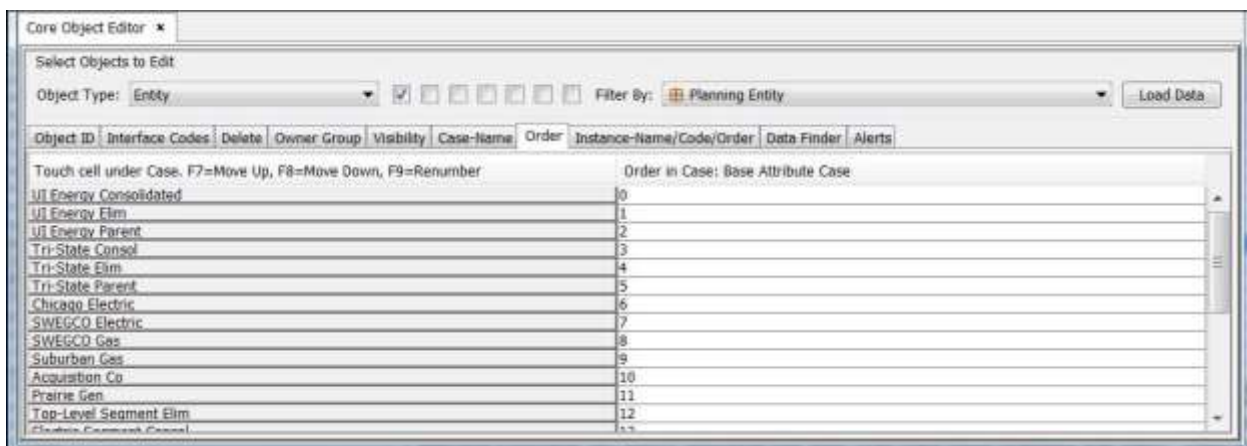
Delete	Visible	Object [Double Click on Header to Toggle Select All]
<input type="checkbox"/>	<input type="checkbox"/>	UI Energy Consolidated
<input type="checkbox"/>	<input type="checkbox"/>	UI Energy Elim
<input type="checkbox"/>	<input type="checkbox"/>	UI Energy Parent
<input type="checkbox"/>	<input type="checkbox"/>	Tri-State Consol
<input type="checkbox"/>	<input type="checkbox"/>	Tri-State Elim
<input type="checkbox"/>	<input type="checkbox"/>	Tri-State Parent
<input type="checkbox"/>	<input type="checkbox"/>	Chicago Electric
<input type="checkbox"/>	<input type="checkbox"/>	SWEGCO Electric
<input type="checkbox"/>	<input type="checkbox"/>	SWEGCO Gas
<input type="checkbox"/>	<input type="checkbox"/>	Suburban Gas
<input type="checkbox"/>	<input type="checkbox"/>	Acquisition Co
<input type="checkbox"/>	<input type="checkbox"/>	Prairie Gen
<input type="checkbox"/>	<input type="checkbox"/>	Top-Level Segment Elim
<input type="checkbox"/>	<input type="checkbox"/>	Electric Segment Consol
<input type="checkbox"/>	<input type="checkbox"/>	Electric Segment Elim
<input type="checkbox"/>	<input type="checkbox"/>	Gas Segment Consol
<input type="checkbox"/>	<input type="checkbox"/>	Gas Segment Elim
<input type="checkbox"/>	<input type="checkbox"/>	Other Segment Consol
<input type="checkbox"/>	<input type="checkbox"/>	Other Segment Elim
<input type="checkbox"/>	No	Chicago Steam
<input type="checkbox"/>	No	Chicago Nonutility
<input type="checkbox"/>	No	SWEGCO Common
<input type="checkbox"/>	No	UI Int'l
<input type="checkbox"/>	No	ION Trans
<input type="checkbox"/>	No	UI Services



Delete Limit –

You can right click on the header of the **CORE OBJECT EDITOR'S DELETE** tab table to specify the maximum number of deletes you can do at a time. Different databases have different delete count per save – this allows you to set the amount appropriately (the default is 1,000). Also, if you routinely add large numbers of entities, this can make it easier to delete large batches (if need be). If a user tries to do a mass delete by double-clicking on the header, the model will check only up to the maximum and display a warning message: "Delete exceeds limit of 'xxxx'. To delete more, do a save". Note that when you set the limit, it is global for all users, and it applies to all objects that can be deleted using the **CORE OBJECT EDITOR**.

{ XE "Core Objects Editor: Sub Screen - Owner Group" * MERGEFORMAT }{ XE "Owner Group" * MERGEFORMAT }{ XE "Sub Screen" * MERGEFORMAT }Owner Group Tab - Core Object Editor



The **OWNER GROUP** tab contains owner group data for each object in the database.

Columns explained:

Object This column displays the object selected, e.g., scenario.

Owner Group The second column displays the owner group for this object.

Owner groups can be added to any object by clicking the owner group column on the desired line. A list of owner groups will be displayed for selection, as shown above.

You can edit Owner Groups in Excel by right-clicking on the header row. Select the **EDIT IN EXCEL** option.

{ XE "Core Objects Editor: Sub Screen - Visibility" * MERGEFORMAT }{ XE "Visibility" * MERGEFORMAT }{ XE "Sub Screen" * MERGEFORMAT }Visibility Tab - Core Object Editor

Object ID	Interface Codes	Delete	Owner Group	Visibility	Case-Name	Order	Instance-Name/Code/Order	Data Finder	Alerts
Object					Winner				Base Attribute Case
Top-Level Segment Elim					true				true
Electric Segment Consol					true				true
Electric Segment Elim					true				true
Gas Segment Consol					true				true
Gas Segment Elim					true				true
Other Segment Consol					true				true
Other Segment Elim					true				true
Chicago Steam					false				false
Chicago Nonutility					false				false
SWEGCO Common					false				false
UI Intl					false				false
JON Trans					false				false
UI Services					false				false

The **VISIBILITY** tab contains core object data for each object in the database, data for each attribute case in the scenario, and the winner.

Object This column displays the list of objects selected.

Winner The second column displays the winner Property value based on the attribute cases in the scenario. The example above displays the winner of the two attribute cases.

Remaining columns will display visibility property values for all attribute cases in the active scenario. The example above contains three attribute cases.

Winner logic is shown on this tab from right to left. Note that the first object *AFUDC Rate Schedules* has a winner visibility value of *True*. This value is the result of the last attribute case (far right) indicating *True*.

{ XE "Core Objects Editor: Sub Screen - Case-Name" * MERGEFORMAT }{ XE "Name" * MERGEFORMAT }{ XE "Case" * MERGEFORMAT }{ XE "Sub Screen" * MERGEFORMAT }Case Name Tab - Core Object Editor

Object ID	Interface Codes	Delete	Owner Group	Visibility	Case-Name	Order	Instance-Name/Code/Order	Data Finder	Alerts
Instance Default Name					Winner				Base Attribute Case
UI Energy Consolidated					UI Energy Consolidated				UI Energy Consolidated
UI Energy Elim					UI Energy Elim				UI Energy Elim
UI Energy Parent					UI Energy Parent				UI Energy Parent
Tri-State Consol					Tri-State Consol				Tri-State Consol
Tri-State Elim					Tri-State Elim				Tri-State Elim
Tri-State Parent					Tri-State Parent				Tri-State Parent
Chicago Electric					Chicago Electric				Chicago Electric
SWEGCO Electric					SWEGCO Electric				SWEGCO Electric
SWEGCO Gas					SWEGCO Gas				SWEGCO Gas
Suburban Gas					Suburban Gas				Suburban Gas
Acquisition Co					Acquisition Co				Acquisition Co
Prairie Gen					Prairie Gen				Prairie Gen
Top-Level Segment Elm					Top-Level Segment Elm				Top-Level Segment Elm
Electric Control Council					Electric Control Council				Electric Control Council

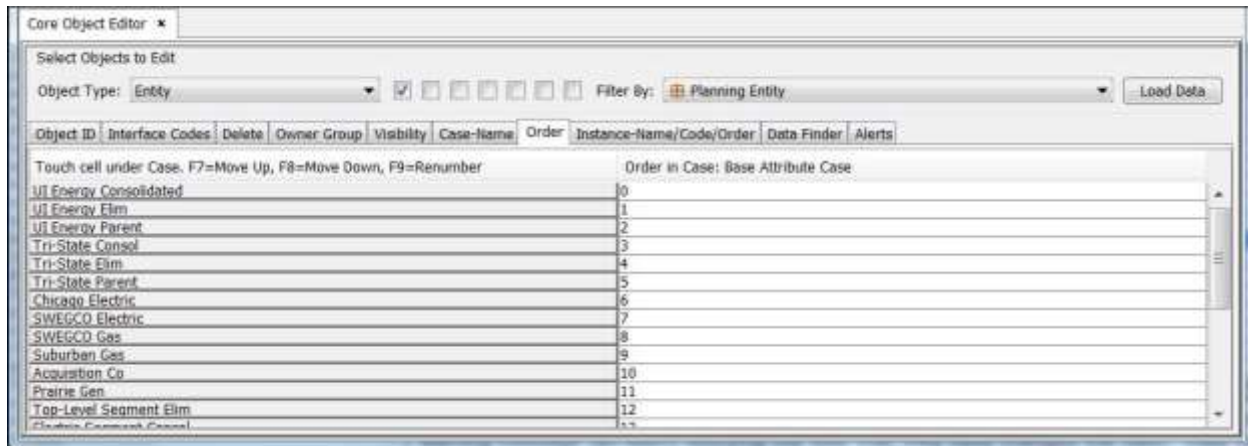
The **CASE-NAME** tab displays the names of selected objects by case, as well as the winner of all attribute cases in the scenario. The **CASE-NAME** tab for entity groups is shown above. This example shows object names for the scenario by each case in the scenario.

Columns explained:

Instance Default: Displays the Object name.

Name in Case: Displays the name value of all cases in the scenario. In this example there is only one available case.

{ XE "Core Objects Editor: Sub Screen - Order" * MERGEFORMAT }{ XE "Order" * MERGEFORMAT }{ XE "Ordering" * MERGEFORMAT }{ XE "Sub Screen" * MERGEFORMAT }Order Tab - Core Object Editor



The **ORDER** tab is used to change the internal order of objects.

This tab will display all cases in the active scenario, and a winner, where more than one case is available.

Touch Cell under Case: To activate (make active) the correct object, and case, select the desired cell on the screen.

F7=Move Up: F7 will move the active object up in the list

F8=Move Down: F8 will move the active object down in the list

F9=Renumber: F9 will renumber the objects in the active case beginning at 0.0.

Features

- Negative numbers and numbers with decimals are valid. Order will appear from lowest to highest.
- Arrange objects in alphanumeric order by checking the box *Show in Alpha-Order* then pressing F9.
- Object order is updated the next time you save your changes by selecting **File** then **Save** from the UIPlanner menu.
- The Winner column will change as objects are reordered in any case to reflect the new winner.

Ordering Objects

Objects are ordered within UIPlanner by order number. Several screens allow order changes by highlighting an object and pressing the up and down arrows or a similar button. This approach is convenient and commonly used. However, when significant changes to object order are necessary, the **CORE OBJECT EDITOR** screen can be used.

Care should be taken when reordering objects. Once reordering is done, it cannot be reversed easily. Inadvertent changes to object order can produce compile and report run errors, and yield invalid results.

- Go to the Order tab on the **CORE OBJECT EDITOR**.
- Select the desired *Object Type* from the drop down list.

- Limit the selected object type further by making a selection from the *Filter By* drop-down list.

The screen example below shows the *Bond Issues* entity group entity order.

Select Objects to Edit

Object Type: Filter By: Show in Alpha-Order

Core Data	Interface Codes	Mass Delete	Owner Group	Visibility	Name	Order	
Touch cell under Case. F7=Move Up, F8=Move Down, F9=Renum...				Winner	System Created Case ...	Test Attrib Case Two	June Attribute Changes
Corp 6% FMB Due 8/1/20				0.0	0.0		
Corp 5.875% Senior Notes due April 1, 2016				1.0	1.0		
Corp 6.5% Senior Notes due April 1, 2011				2.0	2.0		
Corp 5.5% Senior Notes due Dec. 1, 2008				3.0	3.0		
Corp 6.2% Senior Notes due April 1, 2023				4.0	4.0		
CHI 5.5% Senior Notes due 2017 (New Issue)				5.0	5.0		
CHI 6.2% Senior Notes due April 1, 2033				6.0	6.0		

- Place your cursor on an entity row and the case column you want to reorder.
- Two methods can be used to change the order of the active object. Type in a new order number, or press F7 and F8 to move the selected object up or down in order. Order changes will display immediately on the screen.
- Order changes displayed on this screen will be made permanent the next time you select **File, Save** from the UIPlanner menu.

{ XE "Core Objects Editor: Sub Screen - Instance-Name/Code" * MERGEFORMAT }{ XE "Code" * MERGEFORMAT }{ XE "Instance" * MERGEFORMAT }{ XE "Name" * MERGEFORMAT }{ XE "Sub Screen" * MERGEFORMAT }Instance-Name/Code/Order Tab - Core Object Editor

Core Object Editor

Select Objects to Edit

Object Type: Filter By:

Object ID	Interface Codes	Delete	Owner Group	Visibility	Case-Name	Order	Instance-Name/Code/Order	Data Finder	Alerts
Object - Winner Name - may be from Case					Default Name		Default Code		Default Order
Detail Model - Goal Seek Revenue					Goal Seek Revenue		30609655		12.0
Detail Model - Plant With Jan2009 Actuals									0.0
Detail Model - Reforecast 1+11					1+11 Reforecast		30572651		0.0
Detail Model 2009-2013 Base Plan					2006-2010 Base Scenario				0.0
Detail Model 2009-2013 Defer CapEx					2007-2011 Detail Model - Defer CapEx				0.0
Strategic Model - Acquisition					Strategic Model - Acquisition		30620450		17.0
Strategic Model - Base Case 2009-2028					Strategic Model - Base Case 2009-2028				0.0
Strategic Model - Defer CapEx					2007-2011 Strategic - Defer CapEx				0.0
Strategic Model - New Coal Plant					Strategic Model - New Coal Plant		30620065		16.0
Strategic Model - What If					Strategic - What If		30614450		13.0

The Instance table within the UIPlanner database contains the basic elements of all database objects. These elements are displayed on the **INSTANCE-NAME/CODE/ORDER** tab.

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Object: Displays the object name. The object name is unchangeable.

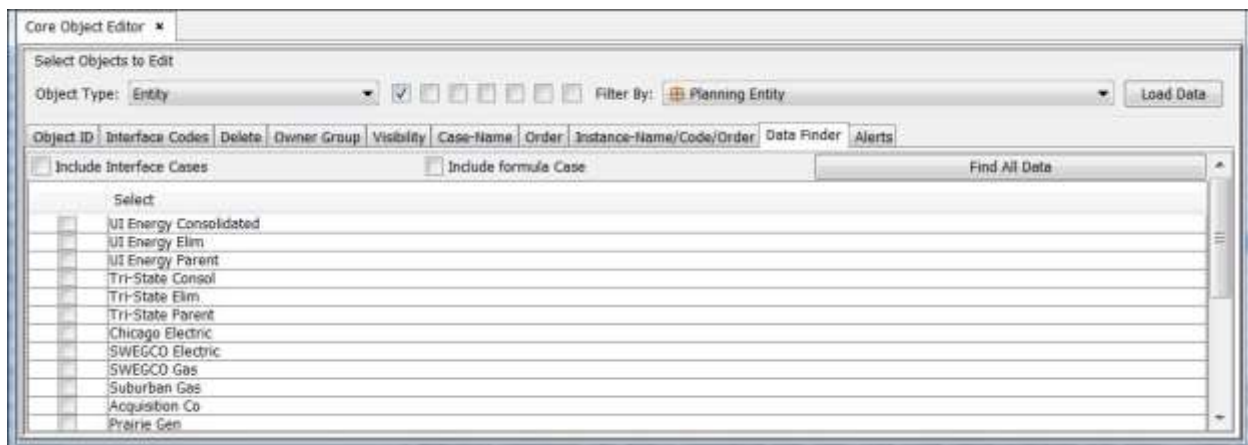
Default Name: Displays the Default name for the object. The default name can be changed.

Default Code: Typically only Budget system objects need a unique default code. This code is generally assigned when budget records are loaded into the system.

Default Order: Displays the Default order for the object.

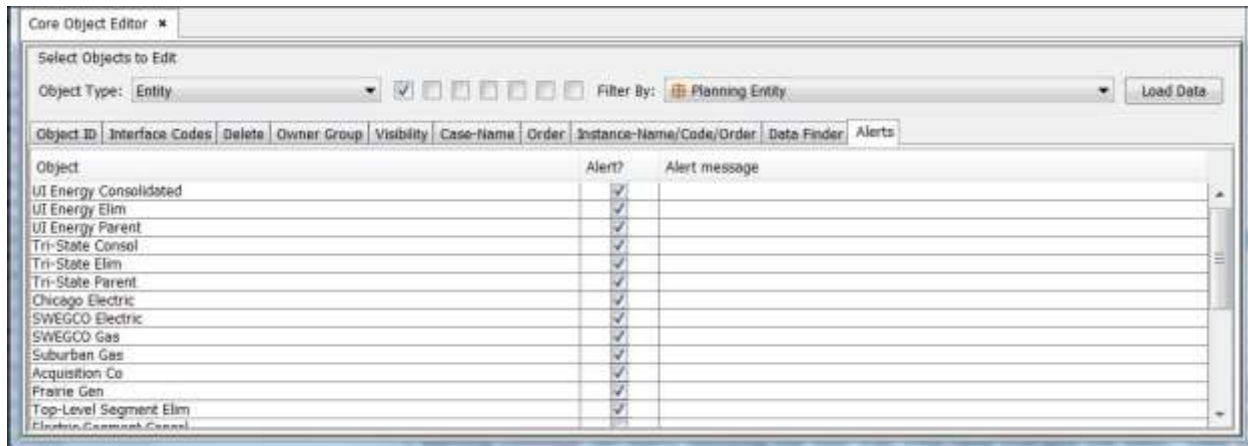
The Default name and Default order can be modified in a Scenario via winner logic applied to multiple cases.

{ XE "Core Objects Editor: Sub-Screen - Data Finder" * MERGEFORMAT }{ XE "Data Finder" * MERGEFORMAT }Data Finder Tab - Core Object Editor



The **CORE OBJECT EDITOR** includes a **DATA FINDER** tab. Once you select an item in the list, you can click **FIND ALL DATA**, and UIPlanner will return a listing (exportable to Excel) of all cases with that data. The default is *Attribute Cases*. You can choose to include interface or formula cases as well.

{ XE "Sub Screen - Alerts" * MERGEFORMAT }{ XE "Alerts" * MERGEFORMAT }{ XE "Core Object Editor" * MERGEFORMAT }Alerts Tab - Core Object Editor



Alerts are an optional layer of security. They allow the System Administrator to tag an item so that if a user changes it, the system will display a warning message (an Alert) notifying the user that they have changed the item. They can choose to undo the change or proceed to save (as long as they have appropriate security).

Note that the Alert mechanism does not prevent the item from being changed. It merely warns the user that they are about to change an important item. This helps prevent accidental or unintended changes, while not completely locking the items down. Alerts are a 'softer' alternative to using security to lock these items down.

Some items that are candidates for alerts:

- Planning Entity Attributes – Rollup Hierarchy, Legal/Segment structure, etc.
- Scenario Settings – actuals date, start date, years to run
- Attributes that should not change – Revenue Schedule -> Fuel Clause, Revenue Schedule -> Revenue Class or Bond Issue->Legal Entity.
- Accounts – put alerts on all of the accounts in the Planning Ledger. This would display an alert if an account was moved or deleted.
- Postings – Q2s for Line - Post Switch or the various Post Q2's. This would display an alert if a user changed a posting.

Setting Alerts

Alerts are set on the **ALERTS** tab of the **CORE OBJECT EDITOR**. You select the *Object Type*, and the relevant items to tag, using the check boxes. You can also put in a specific message to be displayed. In the example above, alerts are set on several of the attributes of planning entity.

Alert Message and User Options

If a user changes one or more of the tagged Attributes, when they go to save, the system will display a warning message (or the tailored message, if appropriate). The user can then choose to accept the changes, discard all changes, or cancel the save (they might wish to go back and undo the specific change).

On-the-Fly Alert Message

If a user wishes, they can elect to have the system to display the alert message on the fly, as soon as they have made the change, rather than at Save time. This is a user preference.

Note that this message just alerts the user right when the change was made. They will have the various options available when they go to save.

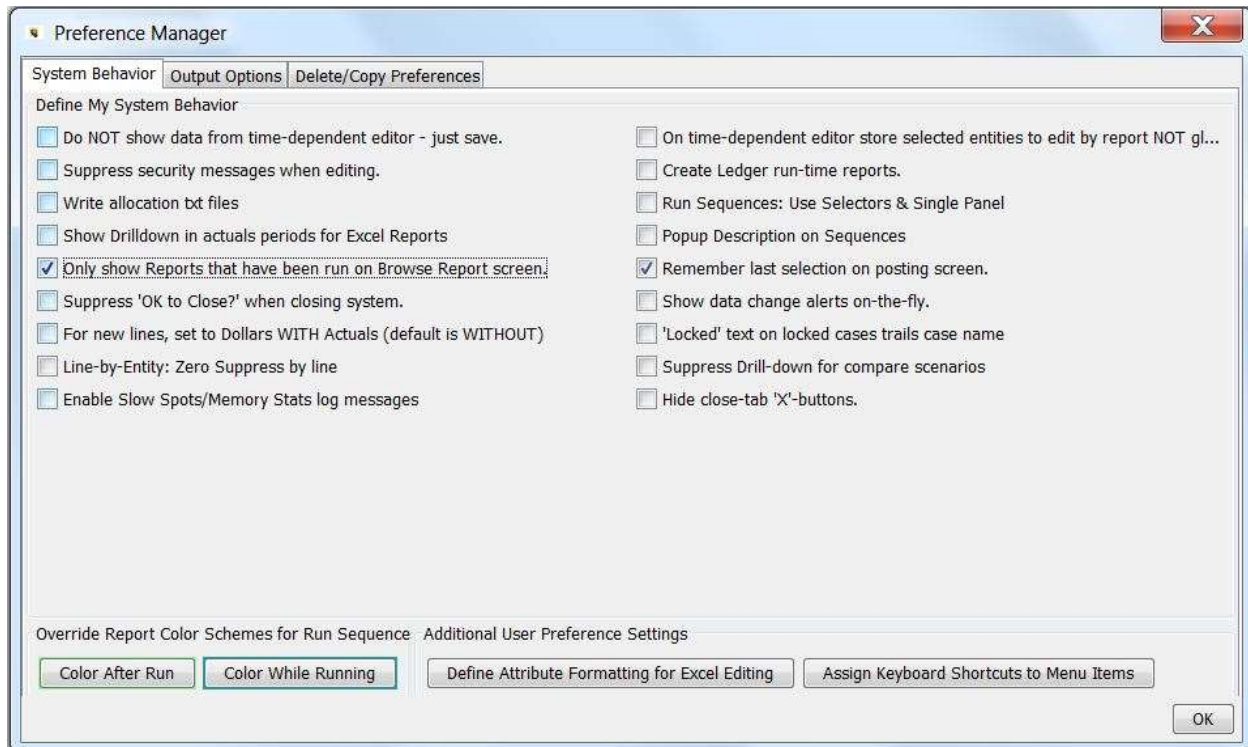
On-the-fly Alert Messages were made a user preference, because some users may not want to have the warning messages displayed every time they make a change.

Security over Alerts

The right to set Alerts is an Administrative option with its own Security setting.

Preferences

{ XE "Preference Manager Screen" * MERGEFORMAT }{ XE "Preferences" * MERGEFORMAT }{ XE "My Preferences" * MERGEFORMAT }Preference Manager Screen



The **PREFERENCE MANAGER** screen (also called **MY PREFERENCES**) is where you set various settings and choices that are user-specific rather than global across all users. These settings do not have any effect on model runtime or model results, and thus can be user-specific. These settings are generally in two categories:

- 1) User Interface – settings that determine how the model interface behaves for you. For example, you can choose to have:
 - a. only reports that you have run appear on **BROWSE REPORTS**. This makes that screen more concise.
 - b. “Locked” text on locked cases trails case name to assist in sorting cases (the default is “Locked” preceding the case name).
 - c. the last selection on the posting screen remembered, i.e., the last account selected so that when using the Account function, you do not have to drill-down to select the account.
- 2) Output – settings that allow you to decide where you want to save output data for Pull Reporting.

Note that this screen controls only **some** of the user preferences. Specifically, it controls the ones that can be reduced to a switch or path setting. There are many other user preference items throughout UIPlanner. For example, all of the settings for your User Batch on the **BROWSE REPORTS** screen are user preferences.

Also, UIPlanner saves under your user name the tabs you had open, selections on each tab and screen sizes at the end of your user session. The next time you open the model, it will open to the same as before.

There is one exception to this:

- [Run Sequences](#) - the sequence and report selections are set during your user session. Each time you re-open the model and want to run, you need to confirm the sequence and report checks. Also, the selection box to use the data in the User Temp Data case is session-specific. You need to check it each time you run.

The **PREFERENCE MANAGER** screen (like **PLANNER PROPERTIES**) changes relatively frequently. As features are added to UIPlanner, sometimes various users request User Preference or Planner Property switches to enable/disable them or to tailor how they behave. Also, as UIPlanner continues to evolve, certain *User Preferences* become no longer applicable.

The **PREFERENCE MANAGER** screen is a “modal” screen. It opens as a dialog box rather than a tab. You cannot do anything else in UIPlanner until you close it.

Screen Layout:

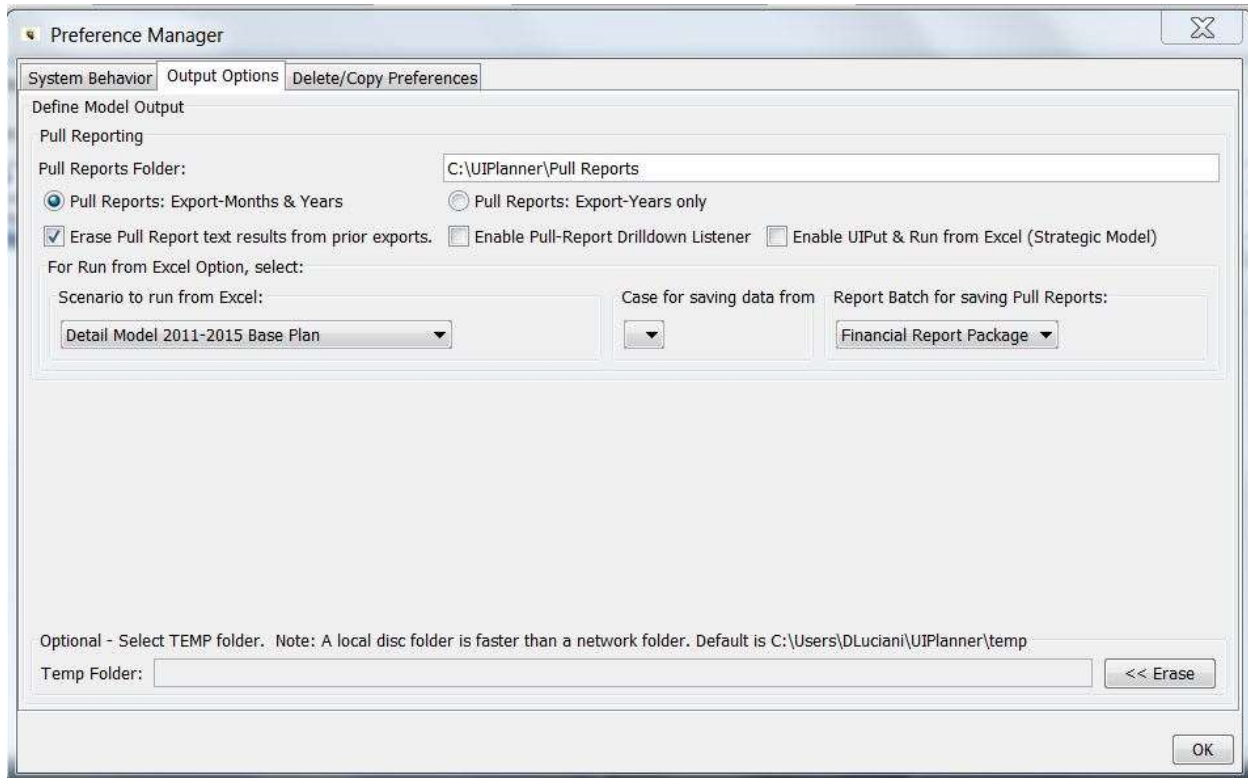
The **PREFERENCE MANAGER** screen consists of three tabs.

System Behavior – This tab has a series of checkboxes that allow you to control various aspects of how UIPlanner behaves. These include things like suppressing warning messages, or controlling how UIPlanner displays locked cases on the screen. This tab is shown above. See [System Behavior](#) for more details on this tab.

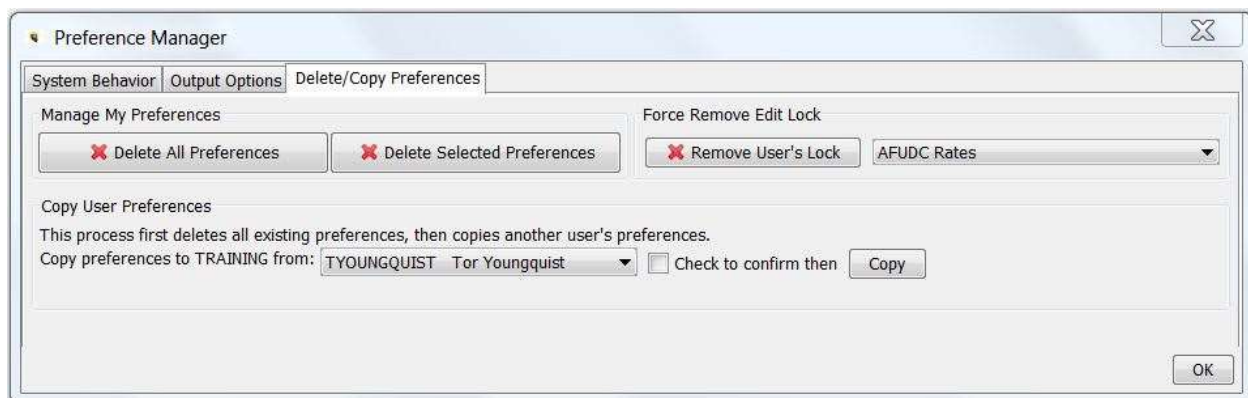
Output Options – This tab is where you can configure your own settings for two key data processes.

- Pull Reports, and
- User Temp Folder. The user preference for temp folder may need to be set if the default folder fails, or optionally set if the current temp folder is a network folder. A temp folder on C:\ is faster.

See [Output Options](#) for more details on this tab.



Delete/Copy Preferences – This tab is where you manage your user preferences. You can delete your own preferences or delete another user’s edit lock on a report (stored as user preference). You can also copy another user’s preferences.



For more information, see the following topics:

[Delete/Copy User Preferences](#)

[Remove User Locks](#)

{ XE "User Preferences" * MERGEFORMAT }{ XE "How To Delete User Preferences" * MERGEFORMAT }Delete/Copy User Preferences



From the **PREFERENCE MANAGER** screen you can either delete all of your *User Preferences* or just delete certain ones. Generally, you delete preferences if you are encountering an error in UIPlanner that appears to be related to the system trying to enable a certain screen or tab. Deleting your preferences resets the system settings to the UIPlanner default preferences.

DELETE ALL PREFERENCES

Generally, you delete preferences if you are encountering an error in UIPlanner that appears to be related to the system trying to enable a certain screen or tab. Deleting your preferences resets the system settings to the UIPlanner default preferences.

Clicking **DELETE ALL PREFERENCES** will delete all of the user preferences that you have set in previous and current sessions of UIPlanner. Note that you will not be prompted to confirm this action after clicking the **DELETE** button and there is no restore feature.

Note: Using the **MODEL SECURITY** screen the System Administrator can delete all user preferences for a specific user. For example, if a user is having problems entering the system due to a screen issue, the System Administrator can delete all user preferences for him/her.

DELETE SELECTED PREFERENCES

If you know a specific preference or screen that you want to delete (but keep all others) clicking on this button will allow you to delete only certain preferences rather than ALL preferences, as described above. Generally, you will use this option to delete all preferences related to a specific screen. For example, if you are encountering an error whenever you try to open a specific screen, you might just delete your preferences to remove any invalid selections. To delete select preferences for a specific screen or form:

- Click **DELETE SELECTED USER PREFERENCES**

Delete Selected Preferences. Click column header to sort.

Form	Key	Value	Delete/Undelete	Restore Value
COM.UTILINC.PL...	YPOS	274	<input type="checkbox"/>	
REPORTSEQUENC...	LR305593331	606	<input type="checkbox"/>	
COM.UTILINC.PL...	MILESTONE-STRU...	1	<input type="checkbox"/>	
REPORTSEQUENC...	LR305593332	1212	<input type="checkbox"/>	
TIMEDEPENDENTE...	YPOS		<input type="checkbox"/>	
REPORTBATCH	ESAC30617650	1	<input type="checkbox"/>	
REPORTSEQUENC...	43050.ENT	112	<input type="checkbox"/>	
REPORTBATCH	ESAC2066	1	<input type="checkbox"/>	
COM.UTILINC.PL...	YPOS	232	<input type="checkbox"/>	
ANOTHERHEADER...	HEADER-FOOTER	215	<input type="checkbox"/>	
REPORTBATCH	INCLUDECHILDR...	0	<input type="checkbox"/>	
REPORTSEQUENC...	43054.RUN	50	<input type="checkbox"/>	
SCENARIOSELECT...	HEIGHT	497	<input type="checkbox"/>	
REPORTBATCH	NAME	TRAINING	<input type="checkbox"/>	
REPORTBATCH	ESAC2080	1	<input type="checkbox"/>	
REPORTBATCH	ESACGROUP1602	1602	<input type="checkbox"/>	
PREFERENCEDIAL...	ENABLE_UIPUT_T...	1	<input type="checkbox"/>	
COM.UTILINC.PL...	UP-DOWN	263	<input type="checkbox"/>	
SCENARIOSELECT	YPOS	89	<input type="checkbox"/>	

- Click on the *Form* column to sort the preferences by form.
- Scroll to find the form/screen you want to purge.
- Check the box next to each of preferences for that screen. See below.

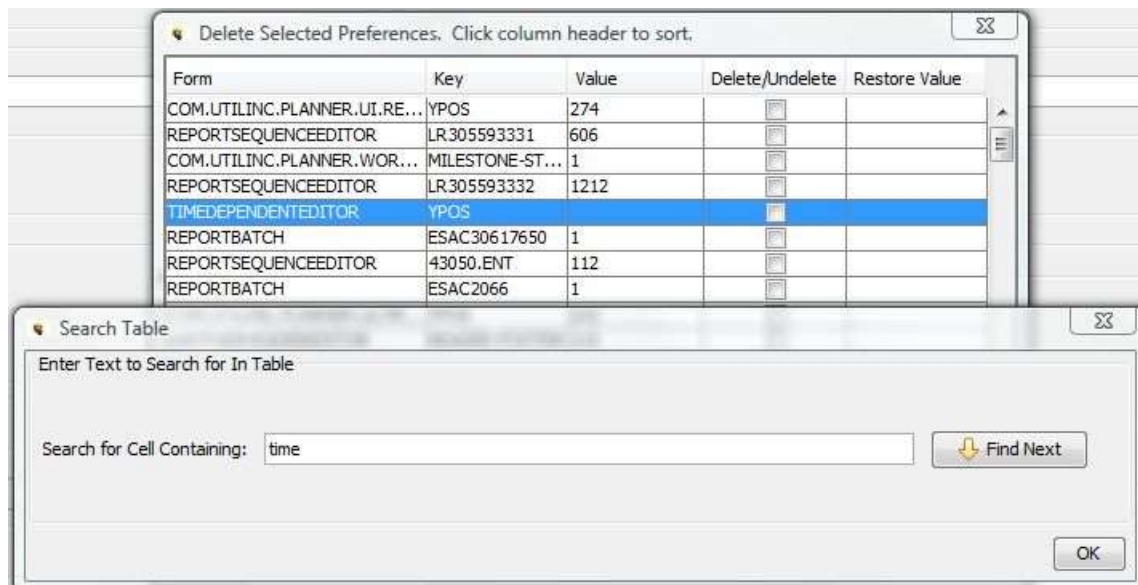
Delete Selected Preferences. Click column header to sort.

Form	Key	Value	Delete/U...	Restore ...
SCENARIOEDITOR	CASES	153	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	HEIGHT	497	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	YPOS	89	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	XPOS	77	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	WIDTH	893	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	SPLIT	665	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	RECENT_SCENARIO1	30572651	<input type="checkbox"/>	
SCENARIOSELECTIONDIALOG	RECENT_SCENARIO0	192	<input type="checkbox"/>	
TIMEDEPENDENTEDITOR	YPOS		<input checked="" type="checkbox"/>	33
TIMEDEPENDENTEDITOR	INPUTONLY		<input checked="" type="checkbox"/>	true
TIMEDEPENDENTEDITOR	LAST_REPORT		<input checked="" type="checkbox"/>	10498
TIMEDEPENDENTEDITOR	12327EDIT_DISPLAY_ORDER		<input checked="" type="checkbox"/>	1
TIMEDEPENDENTEDITOR	HEIGHT		<input checked="" type="checkbox"/>	598
TIMEDEPENDENTEDITOR	WIDTH		<input checked="" type="checkbox"/>	624
TIMEDEPENDENTEDITOR	10498EDIT_DISPLAY_ORDER		<input checked="" type="checkbox"/>	1
TIMEDEPENDENTEDITOR	11355EDIT_DISPLAY_ORDER		<input checked="" type="checkbox"/>	1
TIMEDEPENDENTEDITOR	XPOS		<input checked="" type="checkbox"/>	79
WORKPLANMANAGEMENTPANEL	GROUP_BY_MILESTONE_OR...	By Milestone	<input type="checkbox"/>	

- When you close this window, the checked preferences will be deleted. Note - as with the **DELETE ALL** feature, you will not be asked to confirm the deletion.

Note: you can search any column by right clicking on the header. This will bring up the following dialog. Type in a text string and click **OK**. This is helpful if you do not know the underlying name for a screen/form.

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COPY PREFERENCES

Copy User Preferences

This process first deletes all existing preferences, then copies another user's preferences.

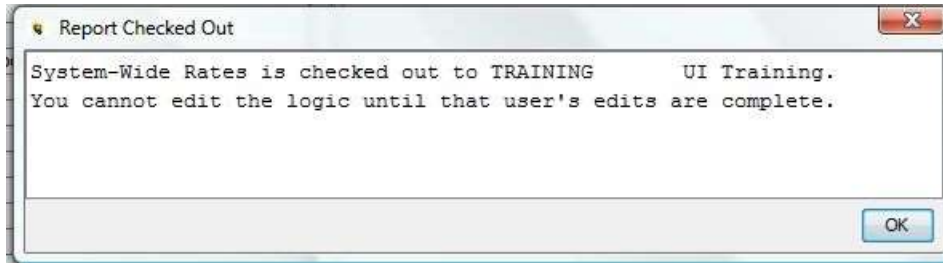
Copy preferences to TRAINING from: Check to confirm then

You can copy another user's preferences to your own, if you want. You might do this if you have deleted all of your preferences and want to set them. Or in the case of a new user, he/she may want to have preferences set for them.

To copy preferences, select the user you want to copy FROM, and select the checkbox to confirm. Then, click **COPY**. This action will first delete all of your User Preferences, and then copy from that user.

{ XE "User Locks" * MERGEFORMAT }{ XE "How To Remove User Locks" * MERGEFORMAT }{ XE "User Preferences" * MERGEFORMAT }Remove User Locks

UIPlanner maintains internal control to ensure that only one user at a time is editing a report. Each time a report is opened in the **CALCULATION EDITOR**, it notes that user has "locked" the report. Once they are through editing, the lock is supposed to be released. If for some reason the lock is not released, other users will get a warning message and will not be able to edit that report.



See ***TROUBLESHOOTING REPORT EDITING*** for more information.

You can use the **REMOVE USER'S LOCK** button on the **PREFERENCE MANAGER** to force a delete of the edit locks on a report. Select a report using the drop-down list, then click **REMOVE USER'S LOCK**. This will purge any locks on that report and it will be available for editing. See below.



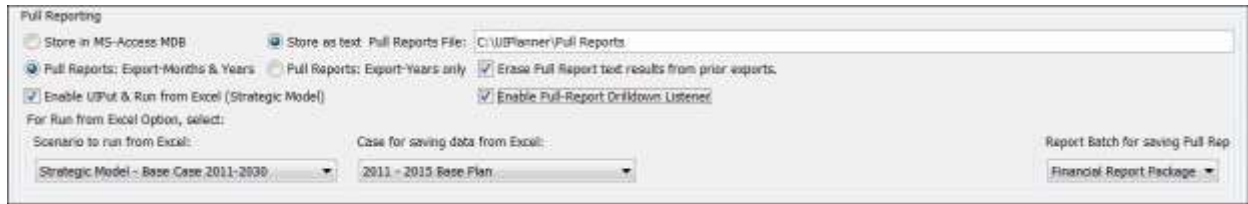
{ XE "Model Output" * MERGEFORMAT }{ XE "How To Define Model Output" * MERGEFORMAT }{ XE "User Preferences" * MERGEFORMAT }{ XE "Pull Reporting" * MERGEFORMAT }Output Options Tab (Preference Manager)

The ***OUTPUT OPTIONS*** tab of the ***PREFERENCE MANAGER*** is used to define model output and related scenario actions:

Pull Reports / Strategic Model

The top region is where you can define your preferences for sending data to pull reports, as well as settings for the Strategic Model Excel interface (if applicable).

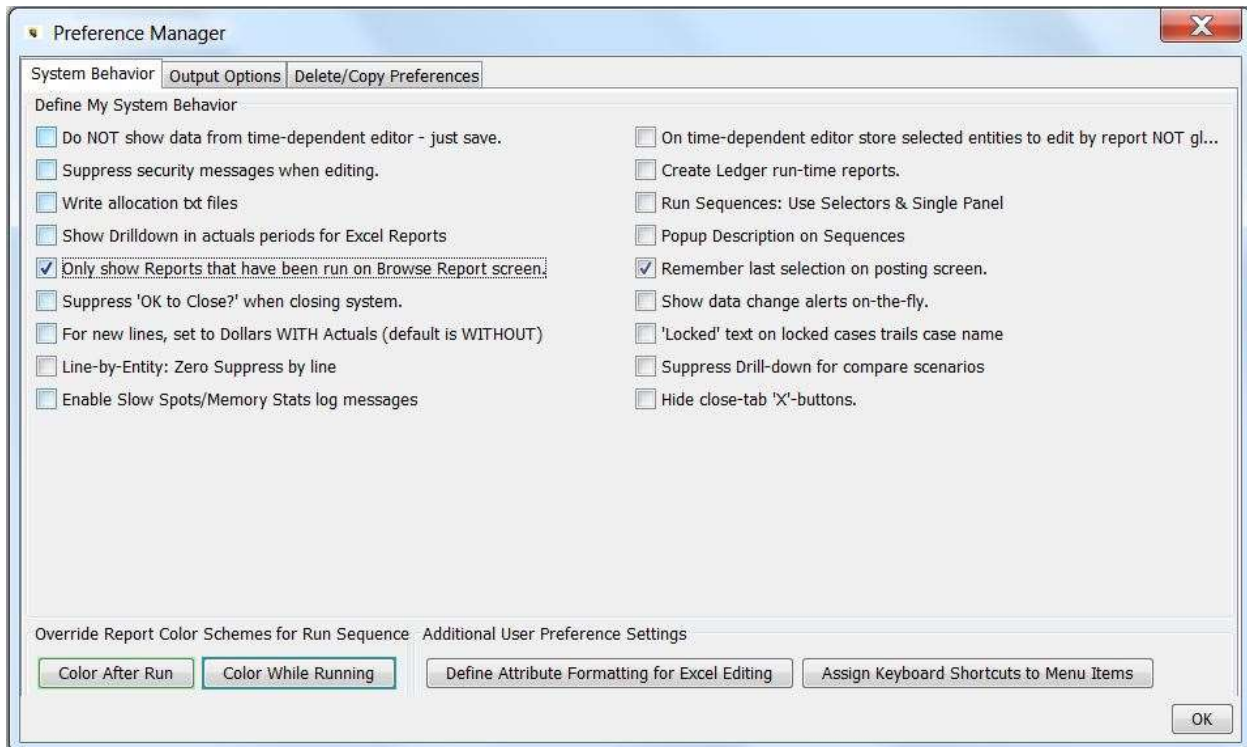
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Below are descriptions of the various settings and options.

- **Store Pull Reporting As Text** – this checkbox turns on the functionality to store Pull Report data. Use the dialog box to select a file folder – this folder will be used unless you override on a Report Batch level (see Browse Reports). Note – the MS Access MDB option is no longer available.
- **Pull Reports: Months & Years vs Years Only** – select one of the two options, to send both monthly and annual data or just annual (saves space)
- **Erase Pull Report Text Results From Prior Reports** – if checked, when you send a pull report dataset, it will first erase prior exports from that scenario, to avoid possible obsolete data. Note, if you use the zip option, prior exports are always deleted. Note that accompanying this option are drop-down plists for selecting the Scenario, Case and report batch needed for the Strategic Model to run from Excel.
- **Enable UInput & Run From Excel Option**– this option is available on the Strategic Model. If checked, the model will listen for data sent from a Pull Report, and will save that data. With the Run from Excel option, the model will rerun and send out revised Pull Reports.
- **Enable Pull Report Drilldown Listener** – this checkbox turns on the functionality to allow you to select a cell in a pull report and drill back into the associated UIPlanner report. See [Drill Down Into UIPlanner From A Pull Report](#) for more information.

{ XE "System Behavior" * MERGEFORMAT }{ XE "How To Define My System Behavior" * MERGEFORMAT }{ XE "User Preferences" * MERGEFORMAT }System Behavior Tab

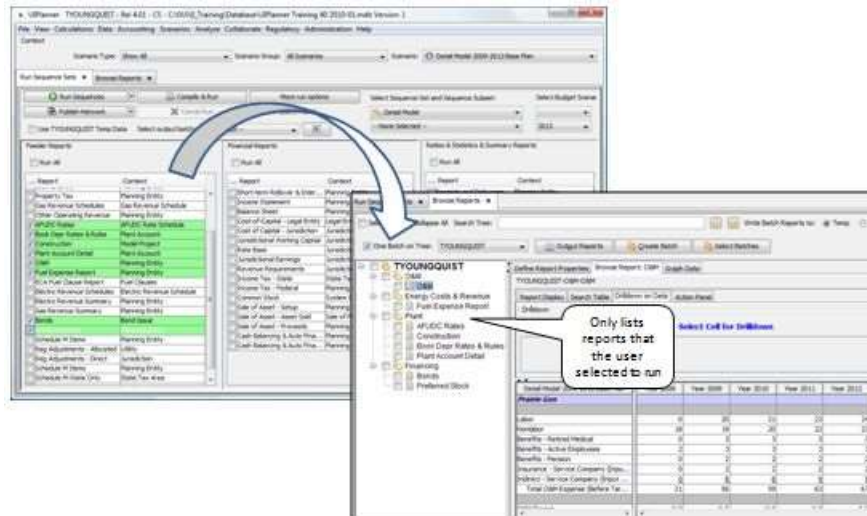


This tab on the **PREFERENCE MANAGER** allows you to control how the system behaves as you interact with it. It consists of a series of check boxes. These include things like suppressing warning messages, or controlling how UIPlanner displays locked cases on the screen.

Below are detailed descriptions of each of the System Behavior User:

- DO NOT SHOW DATA FROM TIME-DEPENDENT EDITOR - JUST SAVE:** If checked, this option will suppress the **PREPARE TO SAVE** dialog box that displays the changed time data rows returned from the MS Excel Time Data template. Any changed data will be saved automatically, without this intermediate window.
- WRITE ALLOCATION TXT FILES:** Check this box to allow allocation values to be written a text file that can be opened by Excel. However, this information is also available via the **BROWSE REPORTS** Screen Drilldown option
- ONLY SHOW REPORTS THAT HAVE BEEN RUN ON BROWSE REPORTS:** When this box is checked, the **BROWSE REPORTS** screen report tree will not display any reports or report groups that were not run in the last run on the **RUN SEQUENCES** screen. See below for an example.

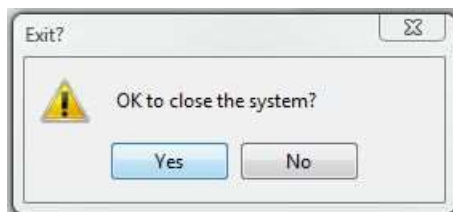
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- **FOR NEW LINES, SET TO DOLLARS WITH ACTUALS (DEFAULT IS WITHOUT)** – If this box is checked, any new report lines added in the *CALCULATION EDITOR* will be configured as Dollars with Actuals.
- **ENABLE PULL-REPORT DRILLDOWN LISTENER** – this checkbox turns on the functionality to allow you to select a cell in a pull report and drill back into the associated UIPlanner report. See [Drill Down Into UIPlanner From A Pull Report](#) for more information.
- **ON TIME-DEPENDENT EDITOR STORE SELECTED ENTITIES TO EDIT BY REPORT NOT GLOBALLY** – If this box is checked, in the *TIME DATA EDITOR*, your user preferences will remember entity selections by individual report. The default is across all reports (e.g., if you select specific planning entities on one report, when you select a different report also by planning entity, it will use that same selection).
- **REMEMBER LAST SELECTION ON POSTING SCREEN** – If this box is checked, the *POSTING* screen will remember the last selected expense or revenue account selected in the account tree, making it easier for you to perform multiple successive posts.
- **LOCKED TEXT ON LOCKED CASES TRAILS CASE NAME** – If this is checked, when a case is locked, the term "Locked" is appended to the case name (e.g., "Case Name – Locked". If unchecked, locked cases will be displayed as "Locked - Case Name." Keeping "Locked" after the case name makes it easy to sort cases by name. See below:

Show Locked prefix:		Create	Merge/Copy Case	
Case	Case Type	Case Owner	Locked?	Order
<input checked="" type="radio"/> Capital Budget	Overlay			
<input checked="" type="radio"/> Demonstrate Model Concepts	Overlay			
<input checked="" type="radio"/> Goal Seek Turned On	Overlay			
<input checked="" type="radio"/> Locked-1+11 Reforecast Case	Overlay		Yes	
<input checked="" type="radio"/> Locked-2009 - 2013 Base Plan	Overlay		Yes	
<input checked="" type="radio"/> Locked-2009 - 2013 Defer CapE...	Overlay		Yes	
<input checked="" type="radio"/> New Allowed ROE% for CHI Ele...	Overlay			
<input checked="" type="radio"/> Rate Increase of .2	Overlay			
<input checked="" type="radio"/> Strategic - Goal Seek Turned On	Overlay			
<input checked="" type="radio"/> Strategic Model - Acquisition Co ...	Overlay			
<input checked="" type="radio"/> Strategic model Out-year (2012...	Overlay			

- **SUPPRESS "HIGH LEVEL ROLLUP" NOTICE WHEN OPENING BUDGET GRID** – n/a for Model
- **SUPPRESS SECURITY MESSAGES WHEN EDITING** - Each time a screen sends a value to the attribute table the security is checked before it goes to the save list. If this box is checked, you will not get warning messages until you hit Save.
- **SHOW DRILLDOWN IN ACTUALS PERIODS FOR EXCEL REPORTS** – If this box is checked, **BROWSE REPORTS** will show values from lines that are posted during actual periods.
- **SUPPRESS "OK TO CLOSE?" WHEN CLOSING SYSTEM** – If checked, you will not get the below confirmation dialog when you close UIPlanner (either by the "X" or <ctrl> w). UIPlanner will close immediately.



- **LINE BY ENTITY - ZERO SUPPRESS BY LINE** – If this option is checked, when you run a report Line-by-Entity in **BROWSE REPORTS**, any lines that are zero in all periods will not be shown in the report results.
- **HIDE CLOSE-TAB "X" BUTTONS** – If checked, open tabs will not display the "X" for closing them.
- **CREATE LEDGER RUN-TIME REPORTS** - This selection will send posted Planning Ledger values by LLPE to be written a text file. Note that this User Preference needs to be enabled if you are using the Daily Cash module of UIPlanner.
- **POPUP DESCRIPTION ON SEQUENCES** - This selection will displays the report description (Report\Entity Group) upon mouse-over of a report name in a sequence set.

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- **SHOW DATA ALERTS ON-THE-FLY** - When this box is checked, any alerts attached to an object in the **CORE OBJECT EDITOR** will display immediately as that item is edited. Otherwise the alert will not display until a Save is invoked. See [Core Object Editor: Sub Screen - Alerts](#) for more information.
- **RUN SEQUENCES: USER SELECTORS & SINGLE PANEL** - If checked, the Run sequences screen will be formatted in the alternate view, with a list of sequences on the left, and the right panel will show only the reports for the selected sequence. Note that you can switch the view on the fly. Just change this preference here and just close/open the Run Sequences screen to switch the view.
- **SELECT EXCEL EDITOR/REPORT FORMATTING MACRO FILE** - n/a, as the RS_Ed.xls has been replaced by the UIPlanner.xla.
- **OVERRIDE REPORT COLOR SCHEMES IN RUN SEQUENCES** - Clicking either button opens a color palette that allows you to select the highlighting color for reports as they are being run and as they are finished running in the BROWSE REPORTS screen.



See below where an alternate color scheme has been selected.

Run	Report	Context
<input checked="" type="checkbox"/>	Short-term Rollover & Interest	Planning Entity
<input checked="" type="checkbox"/>	Income Statement	Planning Entity
<input checked="" type="checkbox"/>	Balance Sheet	Planning Entity
<input checked="" type="checkbox"/>	Cost-of-Capital - Legal Entity	Legal Entity
<input checked="" type="checkbox"/>	Cost of Capital - Jurisdiction	Jurisdiction
<input checked="" type="checkbox"/>	Jurisdictional Working Capital	Jurisdiction
<input checked="" type="checkbox"/>	Rate Base	Jurisdiction
<input checked="" type="checkbox"/>	Jurisdictional Earnings	Jurisdiction
<input checked="" type="checkbox"/>	Revenue Requirements	Jurisdiction
<input checked="" type="checkbox"/>	Income Tax - State	State Tax Area
<input checked="" type="checkbox"/>	Income Tax - Federal	Planning Entity
<input checked="" type="checkbox"/>	Common Stock	System Control
<input checked="" type="checkbox"/>	Sale of Asset - Setup	Planning Entity
<input checked="" type="checkbox"/>	Sale of Asset - Asset Sold	Sale of Planning Entity
<input checked="" type="checkbox"/>	Sale of Asset - Proceeds	Planning Entity
<input checked="" type="checkbox"/>	Cash Balancing & Auto Financing	Planning Entity

- **DEFINE ATTRIBUTE FORMATTING FOR EXCEL EDITING** – Click on this button to select the Excel number format for the attributes of a chosen entity groups. See below.

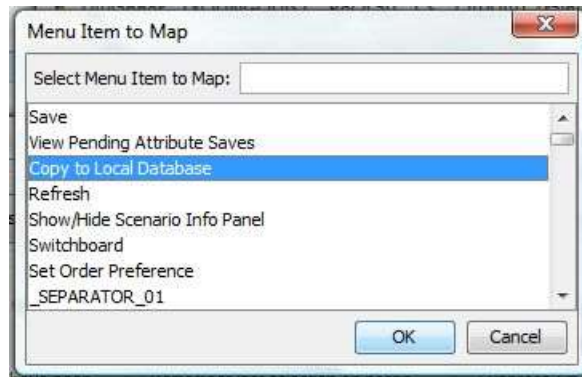
Attribute Definition	Number Format
Tax Rate	Percent #,##0.00%;[Red](#,##0.00%...
Sale Price	Dollar \$#,##0;[Red](\$#,##0);" (Scala...
Adjustment to Calculated Book Value	
Book Value Override Amount	
Gain Override Amount	
Transaction Cost	
Tax Basis Input Amount	
Additional Taxes	

- **ASSIGN KEYBOARD SHORTCUTS TO MENU ITEMS** – You can assign keystrokes (CTRL plus a keyboard character) to any UIPlanner menu item. The steps are as follows:

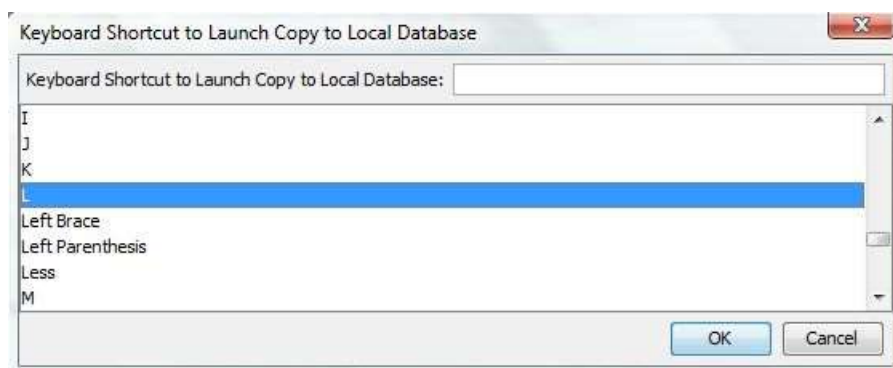
Key Event	Menu Item
Ctrl-S	View Pending Attribute Saves
Ctrl-W	Close Window (Dialog or System)
Ctrl-X	Close Current Tab
Ctrl-Y	Close All Other Tabs
Ctrl-PageDown	Select Next Open Tab
Ctrl-PageUp	Select Previous Open Tab
F1	Launch Online Help for Current Screen

- Click on the **CREATE** button to designate a new shortcut:

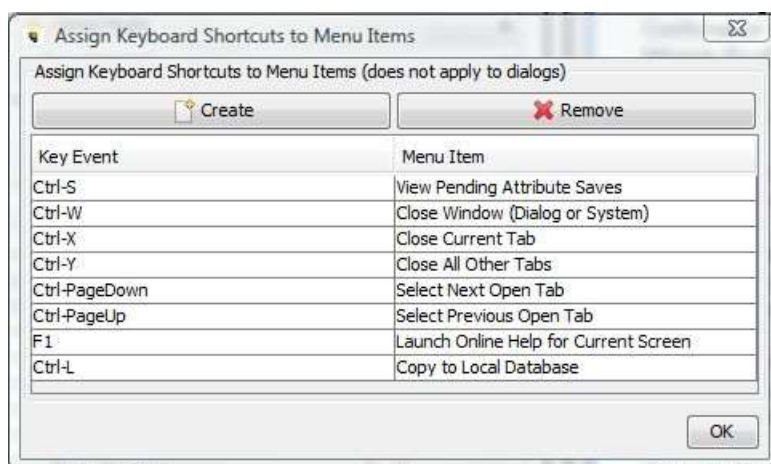
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- Select a menu item and click **OK** to move to the next step:



Make your selection and click **OK** to complete the operation. The shortcut will be added to the list.



You will need to exit and re-open UIPlanner for the shortcut to be enabled.

Note – use the **REMOVE** button to delete any shortcut that you have assigned. You cannot delete the system default shortcuts.

Define Other Preference Items: Preference Manager

Additionally, at the very bottom of the screen are some additional User Preference settings:

- **SELECT EXCEL EDITOR/REPORT FORMATTING MACRO FILE** - N/A, as the RS_Ed.xls has been replaced by the UIPlanner.xla.
- **OVERRIDE REPORT COLOR SCHEMES IN RUN SEQUENCES** - Clicking either button opens a color palette that allows you to select the highlighting color for reports as they are being run and as they are finished running in the **BROWSE REPORTS** screen.

See below where an alternate color scheme has been selected.

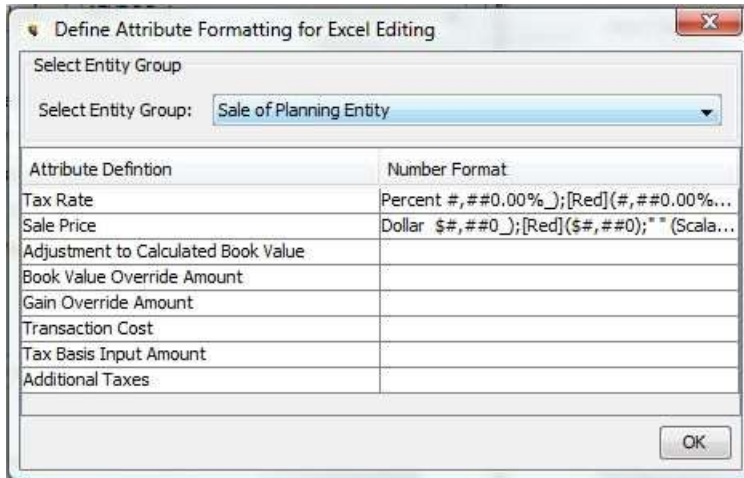
Financial Reports

Run All

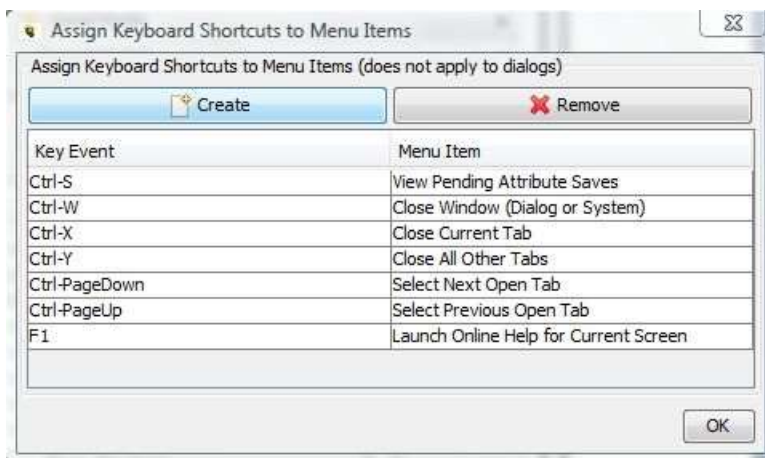
Run	Report	Context
<input checked="" type="checkbox"/>	Short-term Rollover & Interest	Planning Entity
<input checked="" type="checkbox"/>	Income Statement	Planning Entity
<input checked="" type="checkbox"/>	Balance Sheet	Planning Entity
<input checked="" type="checkbox"/>	Cost-of-Capital - Legal Entity	Legal Entity
<input checked="" type="checkbox"/>	Cost of Capital - Jurisdiction	Jurisdiction
<input checked="" type="checkbox"/>	Jurisdictional Working Capital	Jurisdiction
<input checked="" type="checkbox"/>	Rate Base	Jurisdiction
<input checked="" type="checkbox"/>	Jurisdictional Earnings	Jurisdiction
<input checked="" type="checkbox"/>	Revenue Requirements	Jurisdiction
<input checked="" type="checkbox"/>	Income Tax - State	State Tax Area
<input checked="" type="checkbox"/>	Income Tax - Federal	Planning Entity
<input checked="" type="checkbox"/>	Common Stock	System Control
<input checked="" type="checkbox"/>	Sale of Asset - Setup	Planning Entity
<input checked="" type="checkbox"/>	Sale of Asset - Asset Sold	Sale of Planning Entity
<input checked="" type="checkbox"/>	Sale of Asset - Proceeds	Planning Entity
<input checked="" type="checkbox"/>	Cash Balancing & Auto Financing	Planning Entity

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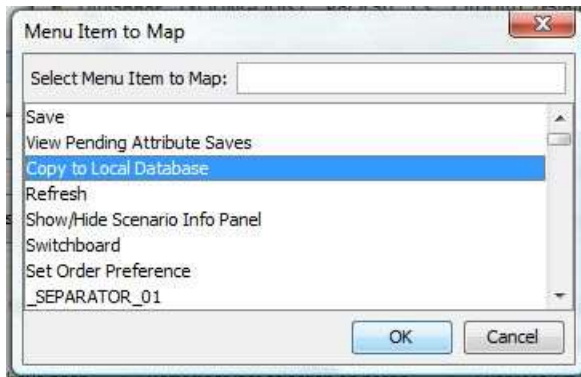
- **DEFINE ATTRIBUTE FORMATTING FOR EXCEL EDITING** – Click on this button to select the Excel number format for the attributes of a chosen entity groups. See below.



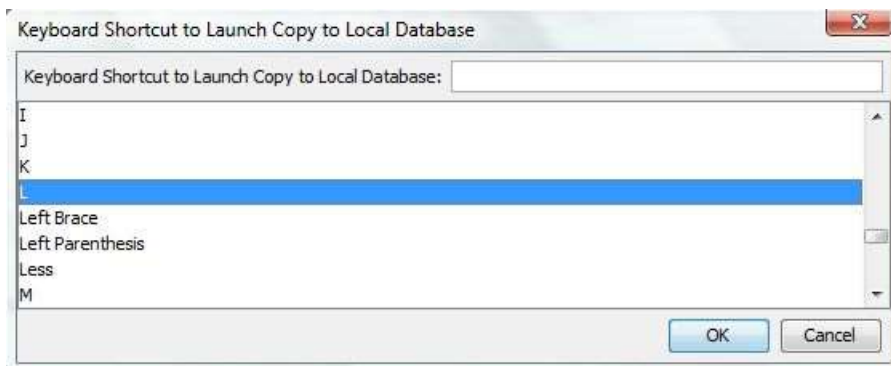
- **ASSIGN KEYBOARD SHORTCUTS TO MENU ITEMS** – You can assign keystrokes (CTRL plus a keyboard character) to any UIPlanner Menu item. The steps are as follows:



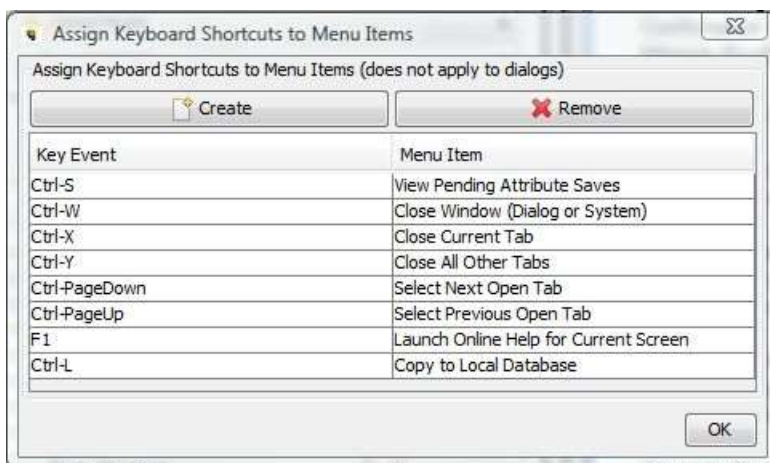
Click on the **CREATE** button to designate a new shortcut:



Select a menu item and click **OK** to move to the next step:



Make your selection and click **OK** to complete the operation. The shortcut will be added to the list.



You will need to exit and re-open UIPlanner for the shortcut to be enabled. Note – use the **REMOVE** button to delete any shortcut that you have assigned. You cannot delete the system default shortcuts.

Add Objects

```
{ XE "Objects" \* MERGEFORMAT }{ XE "Add Objects"
\* MERGEFORMAT }{ XE "Add" \* MERGEFORMAT }{ XE
"Screen" \* MERGEFORMAT }Add Object Dialog Box
```

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Enter or Paste Name(s) To Add. Use the | character after name for default code: 'New name|0052'. Right column shows characters remaining.

Order	Name
0.0	CHI 4.50% FMB due May 15, 2013
1.0	CHI 5.5% FMB due Nov 1, 2035
2.0	CHI 5.5% Senior Notes due May 15, 2017
3.0	CHI 5.625% PCB due May 15, 2033
4.0	CHI 6% PCB due Jan 1, 2009
5.0	CHI 6.2% Senior Notes due April 1, 2033
6.0	CHI 6.5% FMB due Nov 1, 2036
7.0	CHI 6.50% FMB due Jun. 1, 2028
8.0	CHI 6.625% FMB due Nov. 15, 2008

The **ADD OBJECT** dialog box is used throughout UIPlanner to create objects. The dialog is opened from numerous screens, typically via an **ADD** or **CREATE** button.

Screen layout:

The top section of the screen contains drop-down lists that vary depending on the type of objects being added. In most cases, the first selection is Parent and second selection is Optional Security Group (Owner), as shown above for the Add Entity dialog. These selections differ when adding reports and cases.

The middle section of the screen contains the area to enter the new object to be added. Multiple objects can also be added at one time by pasting in a list from another source (e.g., MS-Work and Excel).

The bottom section of the screen contains all existing objects of a given type as well as their order. By highlighting an object in the list prior to adding the new object(s), you can select where in the list the object(s) will appear.

List of Tasks or Operations that are performed with this Screen:

Note: Click **CANCEL** at any time to close the dialog without saving data.

1. **Select parent:** Select a parent from the drop-down list. Parent defaults to an Entity Group when adding entities as you select a parent on the tree prior to clicking CREATE. In some cases, e.g., **ADD REPORT BATCH** dialog and **ADD SCENARIO** dialog, no parent is required.

Note: When adding reports and cases, the *Select parent* drop-down list is replaced with a *Select Entity Group* or *Select Case Type* list, respectively. (See **Add Report Dialog** and **Add Case Dialog** below).

2. **Optional Security Group (Owner):** If a security structure exists where owner groups are associated with the new object, e.g., report or case, select the owner group from the drop-down list.

3. **Enter or Paste Name(s):** Enter or paste object names in the space provided. Each object should be entered on a separate line. Note: Some objects may require a code in addition to the object name. These are typically budget objects. When entering codes with objects, the object name should be entered then the | key followed by the code.

4. **Select line to insert below:** To insert objects at a particular location in the list, highlight an object in the list. All objects added will be inserted immediately below the highlighted line.

5. **Save to disc:** Check box if you want to save all objects to the database. If this box is not checked before you add the objects, you can alternatively click **File/Save** from the UIPlanner menu to save the new objects to the database.

6. **Add Objects Listed Below:** Click button to add all objects entered.

Add Report Dialog – Additional notes



When the **ADD REPORT** dialog box opens, the default Entity Group is Planning Entity. Be careful to select the appropriate entity group over which the

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report will be run. (Note: You do have the ability to change the entity group on the **GROUP REPORTS** screen if required.)

Additionally, when adding a new report from the **GROUP REPORTS** screen the **ADD REPORT** dialog will contain the additional control options below.

Add initial line for Entity Description: When this item is checked, the first line of the new report will contain a line usage format of "Placeholder for Entity Description" (see below)

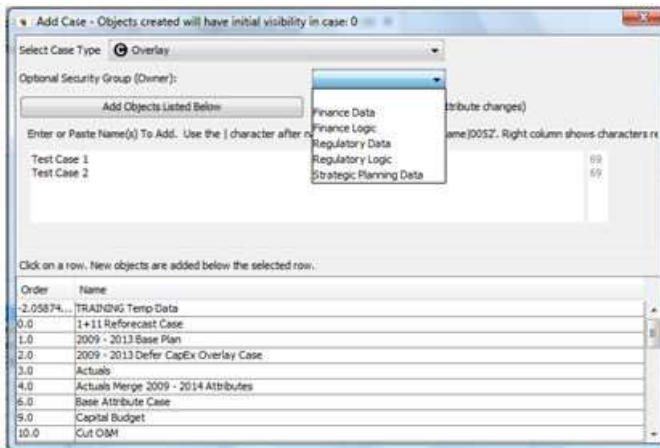
Ref.	Line label	Formula-forecast	Formula-actual
A	Balance Sheet	Place Holder for Entity Description	Place Holder for Entity Description

Create for Validation: When this box is checked, the report will be identified as a validation type report and two additional drop-down lists will be added to the top of the screen. (As validation reports are specific to budget scenarios, this check box should not be selected when in the Detailed Model.)

Select Cluster Group: Define the cluster group used in this validation report.

Select dimension: Define the dimension of the validation report.

Add Case Dialog – Additional notes



When the **ADD CASE** dialog box opens, a **Select Case Type** drop-down list replaced the Parent list that exists on most **ADD OBJECT** dialog boxes (see above). The default case type is **Overlay**. Be careful to select the appropriate case type. You also have the option to select an owner group for the new case(s).

Edit Attributes

{ XE "Entities" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Attributes

An attribute definition is a placeholder for data (facts) about entities within an entity group. Attribute definitions are defined for the entity group. Attributes are defined for the entity group. *Attribute data* is then entered for each entity within the entity group. Entity groups must exist prior to assigning attributes for the group. Entities must exist prior to entering attribute data. The example below shows the Bond entity group, with attributes shown across the top and attribute data shown in the body of the chart for each bond entity.

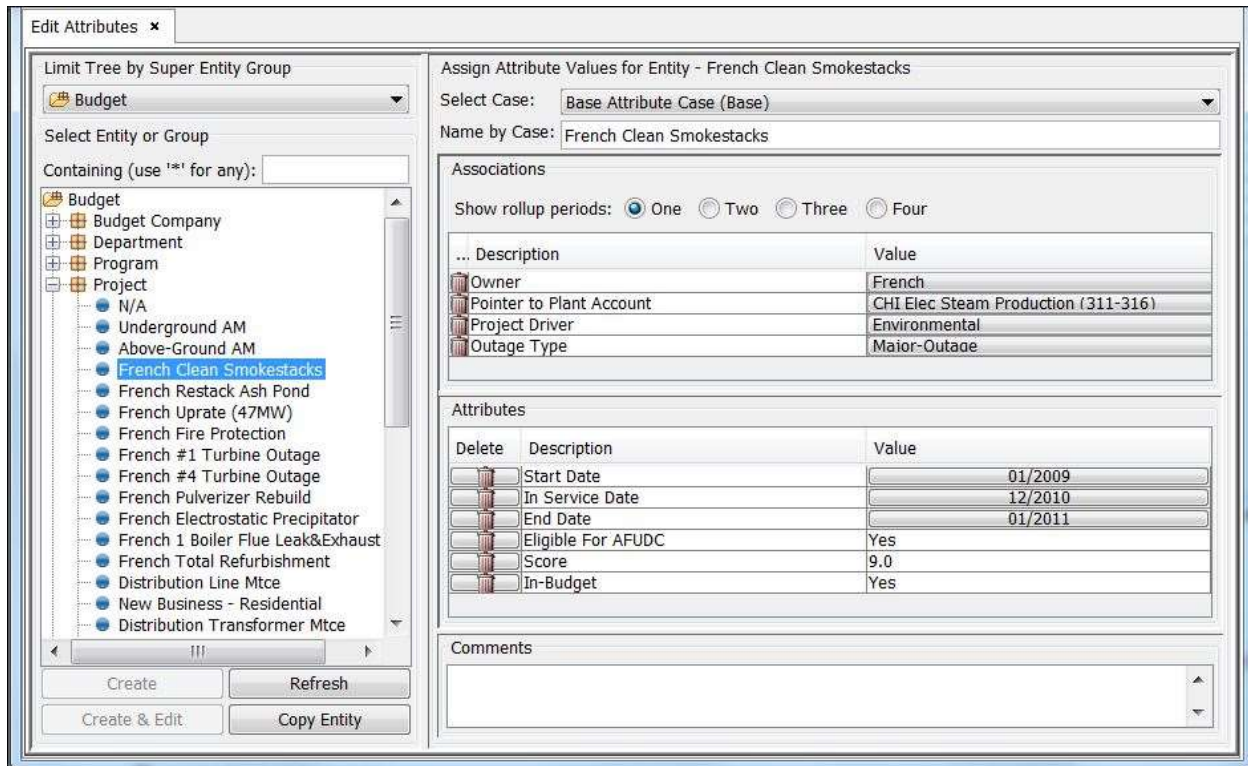
Bonds (Entity Group)						
					(Association)	(Association)
Attribute -->		Issue Date	Retire Date	Interest Rate	Type	Owner
Attribute Data -->	Bond 1	August 15, 1994	August 15, 2024	7.13%	First Mortgage	Parent Co.
	Bond 2	May 30, 1989	May 30, 2019	5.25%	First Mortgage	Subsidiary Co.
	Bond 3	June 30, 2008	June 30, 2038	6.50%	Pollution Control	Parent Co.

Attributes can take two forms. Typically an attribute will represent a fact about the entity such as issue date, shown in the chart above. In many cases an association attribute will be used. An association is used in UIPlanner as a pointer to another entity group. This is an important concept and a powerful tool in creating dynamic and flexible reports.

In the chart above, two attributes are associations: *bond type* and *owner*.

{ XE "Attributes" * MERGEFORMAT }{ XE "Edit Attributes" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Edit Attributes Screen

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The **EDIT ATTRIBUTES** screen is the core screen for maintenance and creation of entity groups and attributes. Here you can see all entity groups, entities and attributes that exist in the system, add or change attribute definitions and add new entity groups and entities

Screen layout:

This screen has two major region. Along the left region is the entity group tree, which shows the selected super entity group, entity group, and entities. In the example above, the super entity group selected (highlighted) is *Budget* and the entity group selected is *Project*. No individual entity is selected. The "+" symbol next to the entity group "**Project**" indicates that individual entities exist for that group.

The center right region of the screen displays differently depending on the active entity group tree node. The entity group tree node becomes active when highlighted.

Super entity group is active: Select a super entity group on the entity group tree on the left side of the screen. No information will be displayed on the right side of the screen.

Entity group is active: Select an entity group in the tree. The *Define Attributes for Entity Group* region is displayed to the right of the tree:

Limit Tree by Super Entity Group

Budget

Select Entity or Group

Containing (use "*" for any):

- Budget
 - Account
 - Activity
 - Budget Company
 - Department
 - Program
 - Project
 - Resource
 - TransTypes

Create Refresh

Create & Edit Copy Entity

Define Attributes for Entity Group - Project in Case Base Attribute Case

Create new attribute Link attribute to Entity Group Remove link to Entity Group

Edit	Tree	Name	Type	Option Set
		Start Date	Date (YYYYMM)	
		In Service Date	Date (YYYYMM)	
		End Date	Date (YYYYMM)	
		Owner	Pointer to another entity	Department
		Eligible For AFUDC	Yes or No	
		Score	Input parameter value (dollars, dates,...)	
		In-Budget	Yes or No	
		Pointer to Plant Account	Pointer to another entity	Plant Account
		Project Driver	Pointer to another entity	Project Driver
		Outage Type	Pointer to another entity	Outage Type

Individual Entity is Selected: Click on the + next to the selected entity group to view all entities in that group. Next, click on one of those entities. The attribute and association information for the selected entity will populate the right side of the screen in the *Assign Attribute Values for Entity* region.

Limit Tree by Super Entity Group

Budget

Select Entity or Group

Containing (use "*" for any):

- Project
 - N/A
 - Underground AM
 - Above-Ground AM
 - French Clean Smokestacks
 - French Restack Ash Pond
 - French Uprate (47MW)
 - French Fire Protection
 - French #1 Turbine Outage
 - French #4 Turbine Outage
 - French Pulverizer Rebuild
 - French Electrostatic Precipitator
 - French 1 Boiler Flue Leak&Exhaust
 - French Total Refurbishment
 - Distribution Line Mtce
 - New Business - Residential
 - Distribution Transformer Mtce
 - T&D Blanket
 - M

Create Refresh

Create & Edit Copy Entity

Assign Attribute Values for Entity - French Uprate (47MW)

Select Case: Base Attribute Case (Base)

Name by Case: French Uprate (47MW)

Associations

Show rollup periods: One Two Three Four

Delete	Description	Value
	Owner	French
	Pointer to Plant Account	OH1 Elec Steam Production (311-316)
	Project Driver	Economic
	Outage Type	Major-Outage

Attributes

Delete	Description	Value
	Start Date	01/2009
	In Service Date	12/2010
	End Date	01/2011
	Eligible For AFUDC	Yes
	Score	-0.2
	In-Budget	Yes

Comments

List of Tasks or Operations that are performed with this Screen:

Entity Group Level Actions

When an entity group is selected, the right hand side of the screen will be populated with the associations and attributes for that entity group:

Edit	Tree	Name	Type	Option Set
<input type="checkbox"/>	<input type="checkbox"/>	Start Date	Date (YYYYMM)	
<input type="checkbox"/>	<input type="checkbox"/>	In Service Date	Date (YYYYMM)	
<input type="checkbox"/>	<input type="checkbox"/>	End Date	Date (YYYYMM)	
<input type="checkbox"/>	<input type="checkbox"/>	Owner	Pointer to another entity	Department
<input type="checkbox"/>	<input type="checkbox"/>	Eligible For AFUDC	Yes or No	
<input type="checkbox"/>	<input type="checkbox"/>	Score	Input parameter value (dolla...	
<input type="checkbox"/>	<input type="checkbox"/>	In-Budget	Yes or No	
<input type="checkbox"/>	<input type="checkbox"/>	Pointer to Plant Account	Pointer to another entity	Plant Account
<input type="checkbox"/>	<input type="checkbox"/>	Project Driver	Pointer to another entity	Project Driver
<input type="checkbox"/>	<input type="checkbox"/>	Outage Type	Pointer to another entity	Outage Type

This grid allows you to define attributes for each entity in the selected entity group. Note that associations are attributes that are pointers to another entity group whereas other attributes require data entry.

Each line contains three fields:

- **Name:** This field may be edited.
- **Type:** Attribute type defines the type of data to be collected. The drop box selections are described below.

Drop down selection	Description
Total (sum of the months)	Used to input any value or text.
Percent - divided by 12 for monthly (e.g. Interest rates)	Used to input any value or text.
Percent - same value for months or annual (e.g. Tax Rates)	Used to input any value or text.
Pointer to another Entity	This is a special attribute that serves as a pointer to another entity group. When this type is selected the option set drop box will appear to select the entity group you want to point.

Input parameter value (dollars, rates, rates, etc)	Used to input any value or text.
Date (YYYYMM)	Used to input a year and month date.
Yes or No	Used as yes or no variables. When this attribute is called from a Report <i>Function</i> . "Yes" will return a value of 1, "No" (or null) will return the value of 0.

- **Option Set:** Option set is only relevant if the attribute type is "pointer to another entity". Select the desired entity group from the drop-down list.

When an entity group is selected, note that each association and attribute line on the grid is preceded by a small round "O" button and a small round "T" button. By clicking on one of these, you can:

[View the Relevant Tree \(for an Association only\)](#)

[Open the One Parameter Editor \(for an Attribute only\)](#)

There are three actions you can perform for the selected entity group:

[Create a New Attribute](#)

[Link an Attribute to an Entity Group](#)

[Remove a Link](#)

Entity Level Actions

When an entity is selected, you can do the following thing:

[Select the Rollup Period](#)

[Add Comments for the Entity](#)

Change the Entity Level Name

To change an entity name, edit it in the text box. You can specify names by case – use the drop down list to select the case. Note that you can also change names using the [CORE OBJECT EDITOR](#).

Tree View Actions

At the bottom of the tree view on the left side of the screen, there are four buttons which allow you to do the following things:

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Create: Create a new super entity group, entity group, or entity.

Refresh: Refresh changes to an entity group or entity.

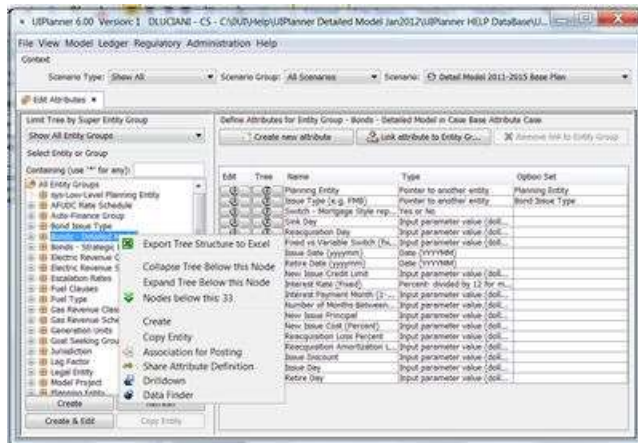
Copy Attributes: Copy the characteristics from one entity to another.

Create and Edit: Create and edit a new entity group, or entity.

In addition, regardless of where you are on the tree, right-click on that node to:

- Export Tree Structure to Excel
- Collapse or Expand Tree Below the Node
- See Number of Nodes Below. See example below where there are 33 entities (bonds) below the selected entity group (bonds-detailed model).

Note: The above options are available for most tree structures within UIPlanner. Other options vary.



What to Do If You Encounter Problems:

If you change attribute data but it does not change on the screen, this indicates that the case is locked or you do not have security rights to edit the data. You need to contact the System Administrator to unlock the case or to modify your security rights, as appropriate. See [Troubleshooting - Editing Data](#) for more information.

If there are entities or entity groups that you know exist but you do not see them on the Edit Attributes screen, this indicates that you do not have security rights to view these entities. You need to contact the System Administrator to modify your security rights, as appropriate. See [Troubleshooting - Visibility/Security](#) for more information.

{ XE "Entity Rollup Period" * MERGEFORMAT }{ XE "Selecting an Entity Rollup Period" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }{ XE "Edit Attributes" * MERGEFORMAT }Select an Entity Rollup Period

When an individual entity is selected in the [Edit Attributes](#) screen, the values for that entity's associations and attributes are displayed on the right side of the screen:

The screenshot shows the 'Associations' window with the 'Show rollup periods' set to 'One'. Below the radio buttons is a table with the following data:

...	Description	Value
	Owner	SR: South Region
	Pointer to Plant Account	CHI Elec Dist General IL (391-398)
	Project Driver	Economic: Economic
	Outage Type	001: Non-Outage

Attributes and associations can be changed over time. Upon selecting a rollup period other than *One*, the display will change to allow entry of a date for the change and the new association beginning at that time. This feature is commonly used to forecast future organizational changes.

The screenshot shows the 'Associations' window with the 'Show rollup periods' set to 'Two'. Below the radio buttons is a table with the following data:

Icon	Description	Value	Change Date 1	Change Value 1
	Owner	SR: South Region	04/30/10	622: Greenbay
	Pointer to Plant Account	CHI Elec Dist General IL (391-398)		
	Project Driver	Economic: Economic		
	Outage Type	001: Non-Outage		

{ XE "Adding an Entity Comment" * MERGEFORMAT }{ XE "Comments" * MERGEFORMAT }{ XE "Attributes" *

MERGEFORMAT }{ XE "Edit Attributes" * MERGEFORMAT }Add an Entity Comment

If an individual entity is selected in the *EDIT ATTRIBUTES* screen, the right side of the screen will contain an area in which to add comments:

Delete	Description	Value
<input type="checkbox"/>	Owner	SR: South Region
<input type="checkbox"/>	Pointer to Plant Account	CHI Elec Dist General IL (391-398)
<input type="checkbox"/>	Project Driver	Economic: Economic
<input type="checkbox"/>	Outage Type	001: Non-Outage

Comments

- Enter the desired comment:

Comments

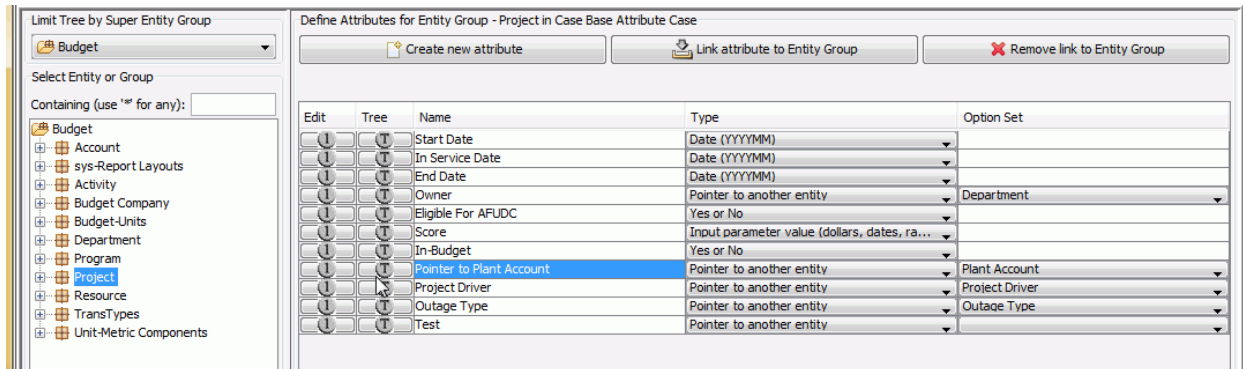
Owner and plant account will change in second rollup period beginning 4/10/2010

When you are done with entry, select **File** then **Save** from the UIPlanner menu to save the comment.

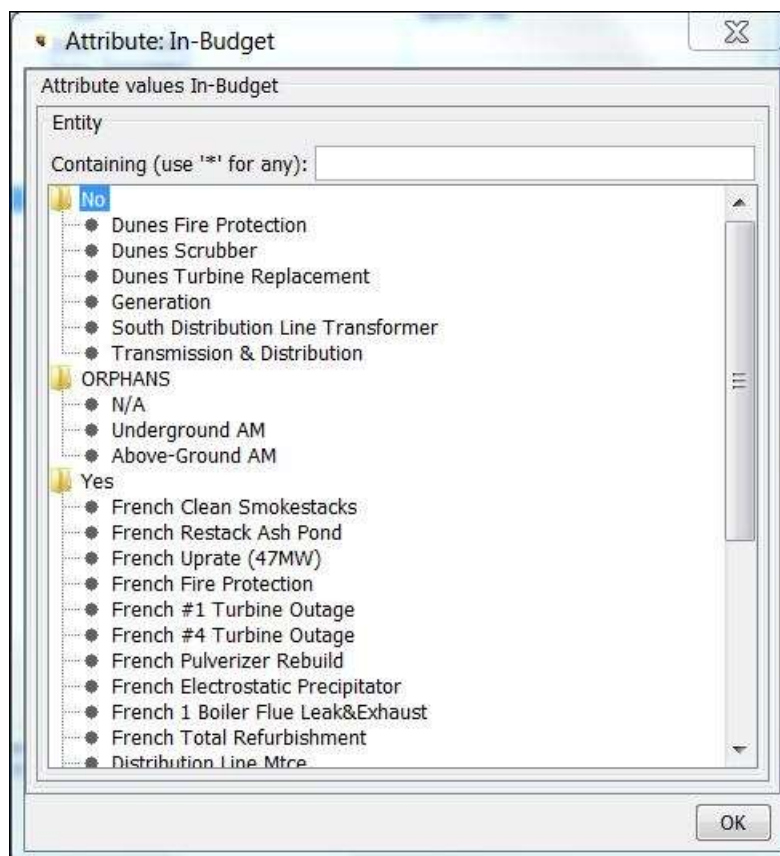
{ XE "Viewing an Association Tree" * MERGEFORMAT }{ XE "Association" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }{ XE "Edit Attributes" * MERGEFORMAT }View an Association Tree in the Edit Attributes Screen

Entity Associations or Attributes may be organized into a tree structure. To view an Association or Attribute tree, follow these steps:

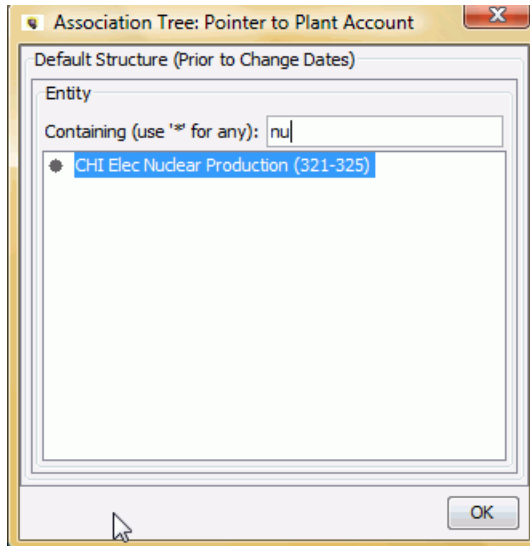
- In the **EDIT ATTRIBUTES** screen, select a super entity group.
- Select an entity group, such as *Project* as shown below.
- Click on an association or attribute to highlight it.



- Click on the round "T" button to the left to view the tree structure of the selected association or attribute:



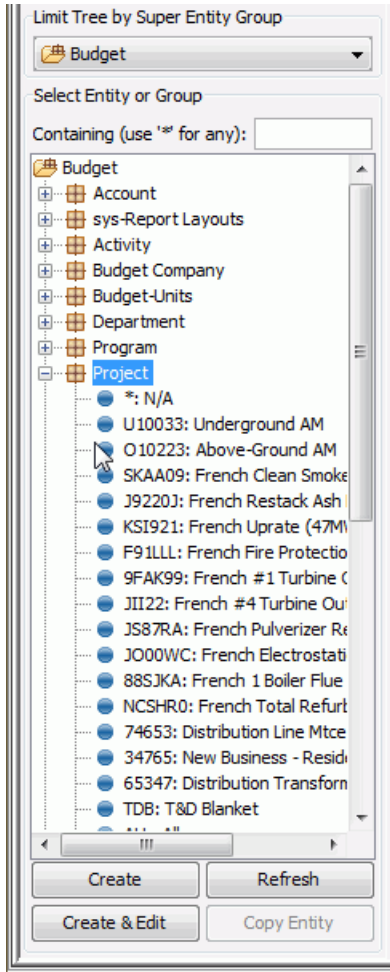
You can either scroll down the tree or use the search box to locate an item by character string.



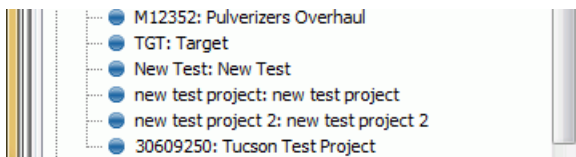
Click **OK** to close this window.

{ XE "Creating a Super Entity Group, Entity Group, or Entity" * MERGEFORMAT }{ XE "Entity" * MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }{ XE "Edit Attributes" * MERGEFORMAT }{ XE "Entity Group" * MERGEFORMAT }{ XE "Super Entity Group" * MERGEFORMAT }Create an Entity Group or Entity

The **EDIT ATTRIBUTES** screen displays a tree of entity groups and entities for a selected super entity group. There are various action buttons available below the tree depending on whether an entity group or an entity is selected. The **CREATE** button is available for both types of items.



- To create an entity within an entity group, highlight the entity group, e.g., *Project* in the example above
- Click **CREATE**, which opens the **ADD OBJECT** dialog box.
- Add the entity, e.g. *Tucson Test Project*, and it will appear in the appropriate section of the tree when you return to the **EDIT ATTRIBUTES** screen:



{ XE "Entities" * MERGEFORMAT }{ XE "Create" * MERGEFORMAT }{ XE "Entity Group" * MERGEFORMAT }Create an Entity Group

- Open the [Edit Attributes](#) screen.
- Highlight any super entity group from tree on the left side of the screen.
- Click **CREATE** at the bottom of the tree to open the **ADD OBJECT** Dialog Box.
- Add the new entity group using the **ADD ENTITY GROUP** Dialog Box.
- The dialog will close, and the new entity group will appear on the tree.
- If you want the newly created entity group assigned to a super entity group, see [Assign Entity Groups to a Super Entity Group](#) for instructions.

{ XE "Create Entities" * MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }{ XE "Create" * MERGEFORMAT }Create an Entity

- Open the **EDIT ATTRIBUTES SCREEN**.
- Highlight the entity group to which you want to add an entity(ies).
Note: If the entity group has not been created, it must be created first. See [Create an Entity Group](#).
- Click **CREATE** at the bottom of the entity group tree display to open the **Add Object dialog box**.
- Add the new entity using the **ADD ENTITY** Dialog Box.
- When the dialog box closes, the new entity will appear on the tree.

Note: Be careful to use the **CREATE** button **under** the entity group tree structure. **Do not** use the **CREATE** button near the top right of the screen as this button is used to create attributes.

Create and Edit Button

The **CREATE AND EDIT** button on the Attribute Editor allows you to create an entity, assign it to a Security Group, and populate attribute data, time dependent data, interface codes and set the order, all from one screen. Below is an example of a screen displayed after an entity has been created. This example shows the attribute data screen ready for entry. Note the radio selections for populating the other data elements for the entity just created.

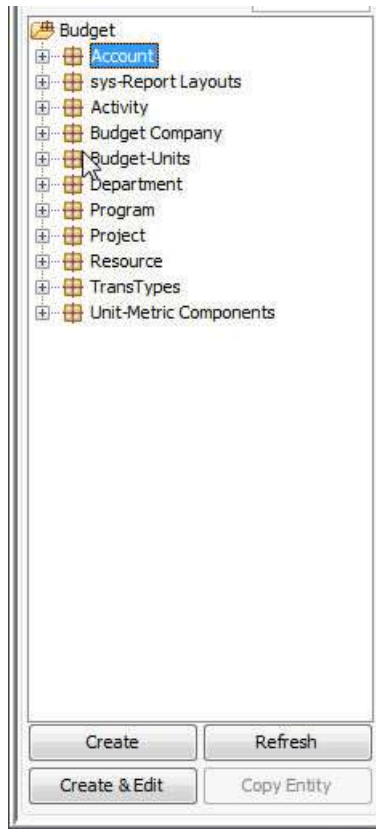
Note: The **CREATE AND EDIT** dialog also allows you to view existing entities. This provides a central point to view or edit all data related to an entity. The screen references and leverages existing screens to minimize the learning curve.

{ XE "Create Attributes" * MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }{ XE "Create" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }{ XE "Entity Group" * MERGEFORMAT }Create Attributes for an Entity Group

Attribute definitions are placeholders for *attribute data* values. Typically, attributes definitions are assigned to entity groups, and attribute data is assigned to each entity in the entity group.

- Open the **EDIT ATTRIBUTES** screen.
- Highlight the desired entity group from the *Entity Group Tree* along the left side of the screen (shown below).

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- Click the **CREATE** button near the top of the right hand section of the screen.
- Note: Single attribute definitions are objects in UIPlanner. The **CREATE** button above will open the **ADD OBJECT** Dialog Box.
- Once you have added the new definition, locate the new attribute definition and assign the attribute *Type* and attribute *Option Set* via the drop boxes to the right of the attribute name (shown below).

Edit	Tree	Name	Type	Option Set
<input type="checkbox"/>	<input type="checkbox"/>	Start Date	Date (YYYYMM)	
<input type="checkbox"/>	<input type="checkbox"/>	In Service Date	Date (YYYYMM)	
<input type="checkbox"/>	<input type="checkbox"/>	End Date	Date (YYYYMM)	
<input type="checkbox"/>	<input type="checkbox"/>	Owner	Pointer to another entity	Department
<input type="checkbox"/>	<input type="checkbox"/>	Eligible For AFUDC	Yes or No	
<input type="checkbox"/>	<input type="checkbox"/>	Score	Input parameter value (dolla...	
<input type="checkbox"/>	<input type="checkbox"/>	In-Budget	Yes or No	
<input type="checkbox"/>	<input type="checkbox"/>	Pointer to Plant Account	Pointer to another entity	Plant Account
<input type="checkbox"/>	<input type="checkbox"/>	Project Driver	Pointer to another entity	Project Driver
<input type="checkbox"/>	<input type="checkbox"/>	Outage Type	Pointer to another entity	Outage Type

Attribute definition type defines the type of data to be collected. The drop box selections are described below.

Drop down selection	Description
Total (sum of the months)	Used to input any value or text.
Percent - divided by 12 for monthly (e.g. Interest rates)	Used to input any value or text.
Percent - same value for months or annual (e.g. Tax Rates)	Used to input any value or text.
Pointer to another Entity	This is a special attribute that serves as a pointer to another entity group. When this type is selected the option set drop box will appear to select the entity group you want to point.
Input parameter value (dollars, rates, rates, etc)	Used to input any value or text.
Date (YYYYMM)	Used to input a year and month date.
Yes or No	Used as yes or no variables. When this attribute is called from a Report <i>Function</i> , "Yes" will return a value of 1, "No" (or null) will return the value of 0.
Pointer to a named filter	This is a special attribute that serves as a pointer to a filter group. When this type is selected the option set drop box will appear to select the filter group you want to point.

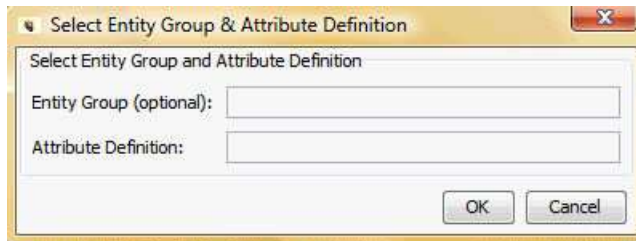
After you have made your selections, select **File** then **Save** from the UIPlanner menu to complete the operation.

Now that you have created a new attribute definition, see [Input Attribute Data](#) for more information.

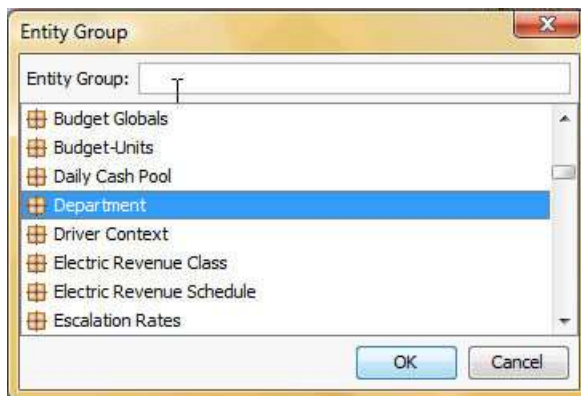
{ XE "Linking an Attribute to an Entity Group" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }{ XE "Edit Attributes" * MERGEFORMAT }Link an Attribute to an Entity Group

When an entity group is selected in the **EDIT ATTRIBUTES** screen, one of the options available is the ability to link an attribute of the selected entity group to another entity group.

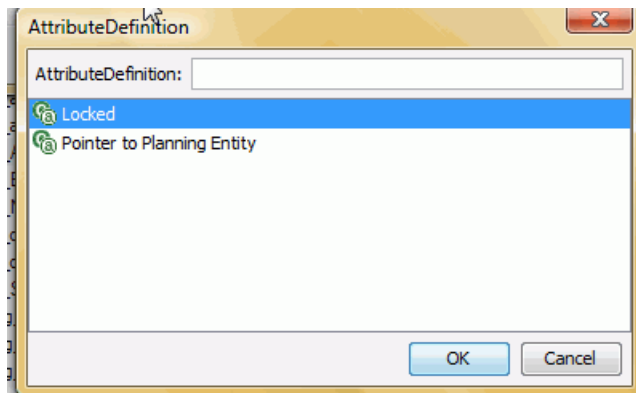
- Select the entity group from the entity group tree.
- Click **LINK ATTRIBUTE TO ENTITY GROUP**. The following dialog box will be displayed:



- Click in the *Entity Group* field to open a list of available options, and select one. Next, click **OK**:



- Click in the *Attribute Definition* field to open the available list and select one. Next, click **OK**:



- Click **OK** again to return to the **EDIT ATTRIBUTES** screen.

{ XE "Removing a Link to an Attribute Group" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }

XE "Edit Attributes" * MERGEFORMAT }Remove a Link to Entity Group

When an entity group is selected in the **EDIT ATTRIBUTES** screen, one of the options available is to remove any links from an attribute to another entity group. If a link exists that is no longer needed, use the removal feature to remove the link.

Highlight the link row, *not* the original attribute, then click **REMOVE LINK TO ENTITY GROUP**.

{ XE "Copy Attribute Data Screen" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }Copy Attribute Data Screen

You can copy attribute and association values from one entity to one or more other entities in the same entity group. The **COPY ATTRIBUTE** dialog box is launched from a button under the entity tree on the **EDIT ATTRIBUTES** screen.

- Select the entity to be copied.
- Click **COPY ENTITY** to open the dialog box below:

Copy Attributes

Select Entity to Copy

Entity to Copy: F911LL: French Fire Protection

Values to Copy

Copy	Q2	Q3	Value
<input checked="" type="checkbox"/>	Association-Initial Parent	Pointer to Plant Account	CHI Elec Steam Product...
<input checked="" type="checkbox"/>	All: Attribute Value	9996873	10
<input checked="" type="checkbox"/>	All: Attribute Value	In-Budget	Yes
<input checked="" type="checkbox"/>	Association-Initial Parent	Project Driver	Safety: Safety
<input checked="" type="checkbox"/>	All: Attribute Value	Eligible For AFUDC	Yes
<input checked="" type="checkbox"/>	Association-Initial Parent	Owner	FRE: French
<input checked="" type="checkbox"/>	Association-Initial Parent	Outage Type	002: Major-Outage
<input checked="" type="checkbox"/>	All: Attribute Value	End Date	201101.0
<input checked="" type="checkbox"/>	All: Attribute Value	In Service Date	201012.0
<input checked="" type="checkbox"/>	All: Attribute Value	Start Date	200901.0
<input checked="" type="checkbox"/>	All: Attribute Value	Score	0.0

Targets

Accept Copy	Project
<input type="checkbox"/>	8853KA: French 1 Boiler Flue Leak/Exhaust
<input type="checkbox"/>	NCS4RD: French Total Refurbishment
<input type="checkbox"/>	74653: Distribution Line Mtor
<input type="checkbox"/>	34765: New Business - Residential
<input type="checkbox"/>	65347: Distribution Transformer Mtor
<input type="checkbox"/>	TD6: T&D Blanket
<input type="checkbox"/>	ALL: All
<input type="checkbox"/>	13232: Dunes Fire Protection
<input type="checkbox"/>	43920: Dunes Scrubber
<input type="checkbox"/>	77892: Dunes Turbine Replacement
<input type="checkbox"/>	GEN: Generation
<input type="checkbox"/>	86729: South Distribution Line Transformer
<input type="checkbox"/>	TD: Transmission & Distribution
<input type="checkbox"/>	M12345: Stack-Reclaimer Overhaul
<input type="checkbox"/>	M12346: Condenser Retubing
<input type="checkbox"/>	M12347: LP Turbine Overhaul
<input type="checkbox"/>	M12348: Boiler Tube Leaks
<input type="checkbox"/>	M12349: Boiler Feedwater Train-A Pmp/Mtr O/H
<input type="checkbox"/>	M12350: Boiler Feedwater Train-B Pmp/Mtr O/H
<input type="checkbox"/>	M12351: Precipitator Repairs
<input type="checkbox"/>	M12352: Pulverizers Overhaul
<input type="checkbox"/>	TGT: Target
<input type="checkbox"/>	New Test: New Test
<input type="checkbox"/>	new test project: new test project
<input type="checkbox"/>	new test project 2: new test project 2

Do Copy Close

- Select the entity to copy from in the drop-down list in the top left region of the screen.
- Check the target entity or entities (*Accept Copy* boxes on the right region of the dialog).
- Check all or only some attribute/association values to Copy (left region).
- Click **Do Copy** when you have made your selections.
-

Note: As a time-saving measure, the copy function can be used to populate one or more new entities that will share all or most of the attribute or association values of an existing entity. After the copy is complete, only the values that need to be changed for the new entities need to be edited.

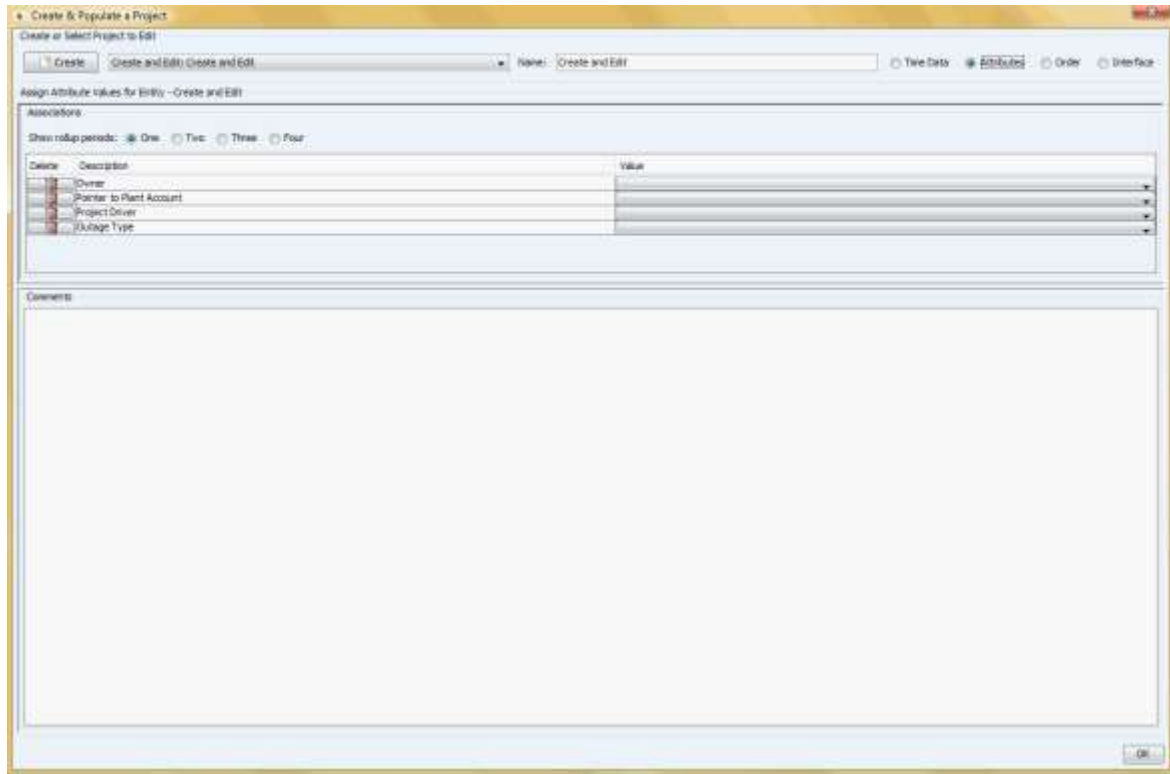
{ XE "Creating and Editing Super Entity Groups, Entity Groups, and Entities" * MERGEFORMAT }{ XE "Entity" * MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }{ XE "Edit Attributes" * MERGEFORMAT }{ XE "Entity Group" * MERGEFORMAT }{ XE "Super Entity Group" * MERGEFORMAT }Create and Edit Entity Groups and Entities

On the left side of the *EDIT ATTRIBUTES* screen, below the entity tree, there are up to four action buttons available, depending upon whether an entity group or entity is selected in the tree. One button that is enabled for both selections is **CREATE AND EDIT**.

- Select the category for which you would like to create and edit a new object, such as a specific entity.
- Click **CREATE AND EDIT**. The following dialog box will open:

The screenshot shows the 'Create & Populate a Project' dialog box. The 'Name' field is set to 'New'. The 'Select Report to Edit' dropdown is set to 'Budget Construction - AFUDC & Close to Plant'. The 'Select Cases to Edit' section has 'Capital Budget' selected. The 'Select Entities to Edit' section has a list of projects, with 'New' selected. The 'Select Lines to Edit' section has 'Construction Expenses' selected. The 'Start Year' is 2008, 'Years to Edit' is 1, and 'Years by Month' is 1. The 'View Existing Data' button is disabled. The 'OK' button is visible at the bottom right.

- Click on the **CREATE** button in the top left region of the dialog and enter a name for the new entity or entity group, e.g., *new project*.
- Click **OK** to create this entity (or entity group) and return to the **CREATE AND EDIT** dialog.
- Click *Attributes* (located in the top right section of the **CREATE AND EDIT** dialog). The attributes for the selected entity will be displayed:



- Select the values for each of the attributes. Next, click **OK** to close this screen and return to the **EDIT ATTRIBUTES** screen. Your new entity or entity group will appear in the appropriate place on the tree.
- Select **File** then **Save** from the UIPlanner menu to save the new entity or entity group and its attributes.

One Parameter Editor

{ XE "Parameters" * MERGEFORMAT }{ XE "One Parameter Editor" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }One Parameter Editor Screen

Object description	Start Date	In Service Date	End Date	Owner
Above-Ground AM				
All	200901	201009	201210	All
Boiler Feedwater Train-A Pmp/Mtr O/H	200909		200910	Maxwell Station
Boiler Feedwater Train-B Pmp/Mtr O/H	200909		200910	Maxwell Station
Boiler Tube Leaks	200909		200910	Maxwell Station
Condenser Retubing	200909.0	-2904.0	200910.0	Maxwell Station
Distribution Line Mtc	200901	201208.0	201409.0	South Region
Distribution Transformer Mtc	200901.0	201009.0	201210.0	South Region
Dunes Fire Protection	200901	201009	201210	Dunes
Dunes Scrubber	200901	201009	201210	Dunes
Dunes Turbine Replacement	201009.0	201205.0	201406.0	Dunes
French #1 Turbine Outage	200901.0	201012.0	201101.0	French
French #4 Turbine Outage	200901.0	201012.0	201101.0	French
French 1 Boiler Flue Leak&Exhaust	200907	201208.0	201209.0	French
French Clean Smokestacks	200901.0	201012.0	201101.0	French
French Electrostatic Precipitator	200905.0	201107.0	201108.0	French
French Fire Protection	200901.0	201012.0	201101.0	French
French Pulverizer Rebuild	200901.0	201012.0	201101.0	French
French Re-stack Ash Pond	200901.0	201012.0	201101.0	French
French Total Refurbishment	200904	201106.0	201107.0	French
French Upgrade (47MW)	200901	201012.0	201101.0	French
Generation	200901	201009	201210	Generation

The **ONE PARAMETER EDITOR** screen displays attribute data in a multidimensional screen layout. You can view, enter or edit attribute data in a variety of screen configurations.

Screen Layout:

This screen is similar to an Excel Pivot table. Table selections are made from drop-down menus along the top of the screen. Results are displayed in the body of the screen.

List Of Operations Or Tasks That Are Performed With This Screen:

First, a word about report attributes. While entities can have many attributes, reports do not have attributes. However, in this screen the report attribute displayed is the actuals date. Report actuals date is assigned, if needed, to each report on this screen (or the **CALCULATION EDITOR** screen). The report data will override the default actuals date for the active scenario.

Selections are made from left to right at the top of the screen. The *Select Super Group* drop-down list limits menu choices presented in the *Select Entity/Edit/Report Group*, which in turn limit choices presented in *Select Attribute or Case*. These three drop-down menus control the display in the body of this screen.

Select Super Group: This drop-down menu limits the *Entity/Edit/Report Group* drop-down list.

Any Super Entity Group	This selection will cause the Entity/Edit/Group drop-down list to display all entity groups and edit groups.
A listing of all Entity Groups	A selection of any listed super entity groups will cause the Entity/Edit/Group drop-down list to display all entity groups and edit groups in the super entity group.
All Reports Groups	This selection will cause the Entity/Edit/Group drop-down list to display all report groups, and the <i>All Reports</i> option.

The result of selections from the *Select Super Entity* drop-down list will be either a listing of entity groups or reports.

Select the Entity/Edit/Report Group and "Attribute or Case":

The table below describes the resulting choices from the super group selections.

Entity/Report Group	Attribute or Case	Result
Any Report	Show All Winners	The Objects column will show all reports in the report group. The body of the report will show the actuals date winner for each report.
Any Report	Any Case from the list	The Objects column will show all reports in the report group. The body of the report will show the actuals date override for each report.
Any Report	Actuals Date	Upon selecting actuals date, the objects column will show all reports in the report group. The body of the screen will show all cases with an actuals date override and a winner.
An Entity Group	Show All Winners	This choice will display entities in the Objects column and the case winner values for each attribute in the body of the screen.
An Entity Group	Any Case from the list	Upon selecting a case, the Objects column will show all entities for the

		entity group. The body of the screen will show all attribute values for each entity.
An Entity Group	Any Attribute from the list	The objects column will show all entities for the entity group. The body of the screen will show all cases and the winner values.

Edit groups are a *Select Group* option on the **ONE PARAMETER EDITOR**. Edit groups are filtered by the super entity group (when selected) based on their associated entity group.

Select Sort Behavior: This drop-down list provides various options for sorting the results shown in the body of the screen. The sort options, e.g., alpha sort, scenario sort, user defined entity sort, etc., will depend on how the screen has been delimited.

Special Features:

Right-click the header of a column in the grid to display an options menu (shown below):

Assign Values for Selected Attribute [Right Click to Copy, Fill, & Export]

Object description	Planning Entity	Issue Type (e.g. FMB)
CHI 4.50% FMB due May 15, 20...		First Mortgage Bond
CHI 5.5% FMB due 1/1/2035		First Mortgage Bond
CHI 5.5% Senior Notes due 2017		Note
CHI 5.625% Pollution Control Bor...		Pollution Control Bond
CHI 6% Pollution Control Bond due 2...	Chicago Electric	Pollution Control Bond
CHI 6.2% Senior Notes due April 1, ...	Chicago Electric	Note

Edit in Excel: See [Edit Attribute Data in Excel](#) for details.

Export to Excel - Click **EXPORT TO EXCEL** to export to Excel. This functionality differs from Edit in Excel (above) in that data is exported to Excel without the ability to save changes directly to the database.

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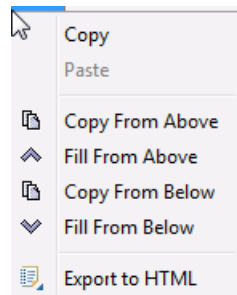
	A	B	C	D	E
1	Object description	Planning Entity	Issue Type (e.g. FMB)	Switch - Mortgage Style repayment	Sink Day
2	CHI 4.50% FMB due May 15, 2013	Chicago Electric	First Mortgage Bond		
3	CHI 5.5% FMB due 11/1/2035	Chicago Electric	First Mortgage Bond		
4	CHI 5.5% Senior Notes due 2017 (New Issue)	Chicago Electric	Note		
5	CHI 5.625% Pollution Control Bond due May 15, 2033	Chicago Electric	Pollution Control Bond		30
6	CHI 6% Pollution Control Bond due 2007	Chicago Electric	Pollution Control Bond		
7	CHI 6.2% Senior Notes due April 1, 2033	Chicago Electric	Note		
8	CHI 6.5% FMB due 11/1/2036	Chicago Electric	First Mortgage Bond		
9	CHI 6.50% FMB due Jun. 1, 2028	Chicago Electric	First Mortgage Bond		
10	CHI 6.625% FMB due Nov. 15, 2006	Chicago Electric	First Mortgage Bond		
11	CHI 6.75% FMB due 11/1/2037	Chicago Electric	First Mortgage Bond		
12	CHI 6.875% FMB due Dec. 1, 2095	Chicago Electric	First Mortgage Bond		
13	CHI 7.25% FMB due Aug. 1, 2024	Chicago Electric	First Mortgage Bond		
14	CHI 9.47% Debenture due March 1, 2006	Chicago Electric	Debenture		
15	CHI 5.5% Senior Notes due Dec 1, 2008	Ill. Energy Serv	Note		

Export Data in HTML Format - Any data displayed in the body of this screen can be exported in HTML format by right clicking the body of the displayed data and selecting the Export to HTML item from the options menu.

Search Table - Select the final item from the header right-click menu to search for table rows that contain a specific character string:



Other options are available to help you enter attribute data. Right click while hovering over an input cell to open the following dialog box:



The table below describes how to use each menu choice.

Copy	Copy current cell to the clipboard
Paste	Paste clipboard to the current cell
Copy from Above	Copy from the cell above the active cell
Fill From Above	Fill data in all cells above the active cell from the first cell above found with data

Copy From below	Copy from the cell below the active cell
Fill From Below	Fill data in all cells below the active cell from the first cell below found with data
Export to HTML	Export the data from the body of the screen to HTML

{ XE "Input Attribute Data" * MERGEFORMAT }{ XE "Input" * MERGEFORMAT }{ XE "One Parameter Editor" * MERGEFORMAT }Input Attribute Data

Attribute data can be entered for each entity in an entity group using the **ONE PARAMETER EDITOR** screen. Attributes must be created prior to entering attribute data. See [Create Attributes for an Entity Group](#).

Before you can enter any data, you must select the appropriate objects to be displayed.

- Select the appropriate case in the *Select Attribute or Case* drop-down list.
- Select the appropriate super entity group in the *Select Super Group* drop-down list. This selection will limit the entity groups displayed.
- Select the desired entity group or the report group from the *Select Entity/Edit/Report Group* drop-down list.

Enter attribute data

After completing the steps above, an attribute table will be displayed showing entities on the left with attributes in columns to the right (shown below).

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Object description	Planning Entity	Issue Type (e.g. FMR)	Switch - Mortgage Note report	Date Due	Recalculation Day	Fixed or Variable Switch	Issue Date (months)
200 0.00% CD 0.27% Due Dec 1	Finance Electric	First Mortgage Bond					09/2010
CD 4.50% FMR due May 15, 2013	Finance Electric	First Mortgage Bond					09/2007
CD 6.0% FMR due 11/15/06	Finance Electric	First Mortgage Bond					11/2008
CD 6.0% Senior Notes due 2/17	Finance Electric	None					11/2005
CD 5.50% Publicly Traded 2006	Finance Electric	Publicly Traded Bond					03/2002
CD 6% Publicly Traded 2006	Finance Electric	Publicly Traded Bond					09/2002
CD 6.2% Senior Notes due April	Finance Electric	None					
CD 6.5% FMR due 11/15/06	Finance Electric	First Mortgage Bond					09/2002
CD 6.50% FMR due Jan 1, 2009	Finance Electric	First Mortgage Bond					09/2002
CD 6.625% FMR due Nov 15, 2008	Finance Electric	First Mortgage Bond					11/2002
CD 6.75% FMR due Dec 1, 2008	Finance Electric	First Mortgage Bond					09/2002
CD 7.25% FMR due Aug 1, 2008	Finance Electric	First Mortgage Bond					11/2002
CD 6.47% Debenture due March	Finance Electric	Debenture					09/2002
Corp 5.7% Senior Notes due Dec	IF Facility Power	None					08/1998
Corp 5.75% Senior Notes due A	IF Facility Power	First Mortgage Bond					06/2004
Corp 6% FMR due 01/01	IF Facility Power	None					04/2002
Corp 6.2% Senior Notes due April	IF Facility Power	None					04/2002
Corp 6.4% Senior Notes due April	IF Facility Power	None					04/2002
7.7% Note due December 30, 20	IF Facility Power	Debenture					12/2002
Public Corp 5.25% FMR due Sept	Public Corp	First Mortgage Bond					11/2010
20 4.10% Note due Nov 1, 2000	Submarine Loan	None					11/2004
20 5.25% Debenture (unsecured)	Submarine Loan	Debenture					01/2002
20 5.25% Debenture (unsecured)	Submarine Loan	None					
20 6.375% Note due Nov 1, 2002	Submarine Loan	None					
20WEC 2% Exp 1, 2011 (Mortgage)	20WEC Finance	First Mortgage Bond					09/2002
20WEC 5.0% Debenture (unsecured)	20WEC Finance	Debenture					12/2004
20WEC 6.00% FMR due Sept 1, 20	20WEC Finance	First Mortgage Bond					09/2002
20WEC 6.25% FMR due March 1, 2	20WEC Finance	First Mortgage Bond					03/2002
20WEC 6.50% FMR due Jan 20, 20	20WEC Finance	First Mortgage Bond					09/2002
20WEC 6.50% FMR due Jan 20, 20	20WEC Finance	First Mortgage Bond					11/2002
20WEC 7% Note due December 31,	20WEC Finance	None					

- Attributes that are defined as a *Pointer to another Entity* will have a drop-down list to select the appropriate entity group. Select the desired entity group from the list.
- Attributes defined as *Yes or No* will have a drop-down list for selection of either a *Yes, No, or Null*.
- Attributes defined as a *Date (MM/YYYY)* will display a date finder dialog box for date selection.
- The remaining attribute types require direct data entry. It is important that you understand the intended use of the attribute data so that data entry is consistent.
- Comments can also be entered for each entity if desired.

Report Attributes

As indicated above, Reports are included in the **ONE PARAMETER EDITOR**. This is a handy way to see (and edit) the Actuals Date. See below:

Object description	Winner	Base Attribute Case	Test Actuals Dates
Acquisition Transaction Info			
AFUDC Rates			
Balance Sheet			
Bonds - Detailed Model	201012	12/2010	
Bonds - Strategic Model	201012	12/2010	
Book Depr Rates & Rules			
Budget Construction - AFUDC & Close to Plant	201103	03/2011	
Budget Construction - Plant Summary			
Budget Data - Inside a Method & outside a Method			
Budget Project Data Imported into Model			
Cash Balancing & Auto Financing			
Cash Balancing Report			
Cash Flow			
Cash Flow - Summary			
cash Seed value			
Closings Reasonable?			
Common Stock			
Construction	201105	03/2011	05/2011
Cost of Capital - Jurisdiction			

Edit in Excel

You can edit Attribute Data from the One Parameter Editor in Excel by right-clicking on the header row. Select the **EDIT IN EXCEL** option. You must first be on an editable view (Show Winners is not editable). Below is an example from the above Bond entity group:

B	C	D	E	F	G	H
Bonds - Detailed Model - Base Attribute Case	Planning Entity	Issue Type (e.g. FMB)	Sink Day	Reacquisition Day	Issue Date (yyyymm)	Retire Date (yyyymm)
CHI 4.50% FMB due May 15, 2013	Chicago Electric	First Mortgage Bond			Aug-02	May-13
CHI 5.00% FMB Due July 1, 2042 (Planned)	Chicago Electric	First Mortgage Bond			Jul-12	
CHI 5.5% FMB due Nov 1, 2035	Chicago Electric	First Mortgage Bond			Nov-09	Nov-35
CHI 5.5% Senior Notes due May 15, 2017	Chicago Electric	Senior Notes			Nov-05	May-17
CHI 5.625% PCB due May 15, 2033	Chicago Electric	Pollution Control Bond	30		Mar-02	May-33
CHI 5.75% Due Sep 1, 2040 (Planned)	Chicago Electric	First Mortgage Bond			Sep-10	
CHI 6% PCB due Jan 1, 2009	Chicago Electric	Pollution Control Bond			Sep-02	Jan-09
CHI 6.2% Senior Notes due April 1, 2033	Chicago Electric	Senior Notes				Apr-33
CHI 6.5% FMB due Nov 1, 2036	Chicago Electric	First Mortgage Bond				Nov-36
CHI 6.50% FMB due Jun. 1, 2028	Chicago Electric	First Mortgage Bond			May-02	Jun-28
CHI 6.625% FMB due Nov. 15, 2008	Chicago Electric	First Mortgage Bond				Nov-08
CHI 6.75% FMB due Nov 1, 2037	Chicago Electric	First Mortgage Bond			Dec-02	Nov-37
CHI 6.875% FMB due Dec. 1, 2095	Chicago Electric	First Mortgage Bond			Jun-02	Dec-95
CHI 7.25% FMB due Aug. 1, 2024	Chicago Electric	First Mortgage Bond			Nov-02	Aug-24
CHI 9.47% Debenture due March 1, 2008	Chicago Electric	Debenture			Sep-02	Mar-08
Corp 5.5% Senior Notes due Dec. 1, 2010	UI Energy Parent	Senior Notes				Dec-10
Corp 5.875% Senior Notes due April 1, 2016	UI Energy Parent	Senior Notes			Apr-96	Apr-16
Corp 6% FMB due Aug 1, 2020	UI Energy Parent	First Mortgage Bond	1		Jun-08	Aug-20
Corp 6.2% Senior Notes due April 1, 2023	UI Energy Parent	Senior Notes			Apr-03	Apr-23
Corp 6.5% Senior Notes due April 1, 2013	UI Energy Parent	Senior Notes			Apr-01	Apr-13
Prairie Gen 5.60% FMB due Sept. 15, 2033	Prairie Gen	First Mortgage Bond				Sep-33
Prairie Gen 5.65% Due Jan. 1, 2025	Prairie Gen	Other LTD			Jan-95	Jan-25
SG 4.75% Note due Nov 1, 2020	Suburban Gas	Senior Notes			Nov-10	Nov-20

Group Entities

{ XE "Entities" * MERGEFORMAT }{ XE "Entity Group" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Entities and Entity Groups

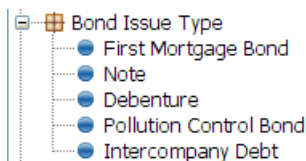
Entities, within the context of UIPlanner, are placeholders for data. Entities, entity groups and super entity groups are the structure UIPlanner uses to organize all data. Several examples below from the **EDIT ATTRIBUTE** screen show examples of entity groups and the entities within the group.

- *Bond Issue* entity group with each bond as an entity.

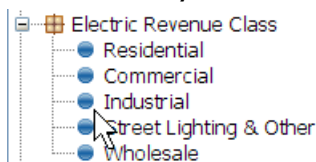
Entity Group	Entity
Bond Issue	Corp 6% FMB Due 8/1/20
Bond Issue	Corp 5.875% Senior Notes due April 1, 2016
Bond Issue	Corp 6.5% Senior Notes due April 1, 2011
Bond Issue	Corp 5.5% Senior Notes due Dec. 1, 2008
Bond Issue	Corp 6.2% Senior Notes due April 1, 2023
Bond Issue	CHI 5.5% Senior Notes due 2017 (New Issue)
Bond Issue	CHI 6.2% Senior Notes due April 1, 2033

- *Bond Issue Type* entity group with each bond type as an entity.

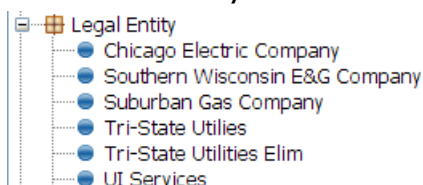
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- *Electric Revenue Class* entity group with each revenue class as an entity.



- *Legal Entity* (operating company) entity group, with each legal entity as an entity.



Nearly all data is organized by entity group structure. Allocation factors, rate schedules, and even groupings of other entities are all used in UIPlanner to organize data. Regardless of how your entities are structured, the simple rule is to think of an entity group as a collection of entities and each entity containing data about itself.

Note: Entity groups must be created before entities are created. Entities are then added to entity groups. Individual entities cannot exist separate from an entity group. Super entity groups are optional, but recommended, allowing you to separate entity groups into categories by function or type.

```
{ XE "Group Entities" \* MERGEFORMAT }{ XE "Entities" \* MERGEFORMAT }{ XE "Screen" \* MERGEFORMAT }Group Entities Screen
```

The **GROUP ENTITIES** screen is used for viewing and modifying the *entity group tree* structure.

Screen layout:

The entity group tree structure is located along the left side of the screen. Action buttons along the top portion of the screen are used to modify the entity group tree

List Of Operations Or Tasks That Are Performed With This Screen:

Search Tree: Input the text you want to search for. Using the up and down arrows, move to the entity groups with that text.

Selected Node: Indicates the active node on the entity group tree.

Filter Children: This feature will filter entity groups within the selected super entity group.

Collapse All: When this box is checked, all entity groups will be collapsed displaying only super entity groups in the tree.

Create Super Entity Group: Opens the **ADD OBJECT** dialog box which enables you to create a new super entity group in the entity group tree. After adding the new super entity group using this dialog, that new group will appear at the selected location on the entity group tree.

Add Entity Group: Opens a dialog box with all entity groups. Select the entity group to add to the active super entity group.

Remove: Removes the active entity group from the super entity group tree node to which it currently belongs.

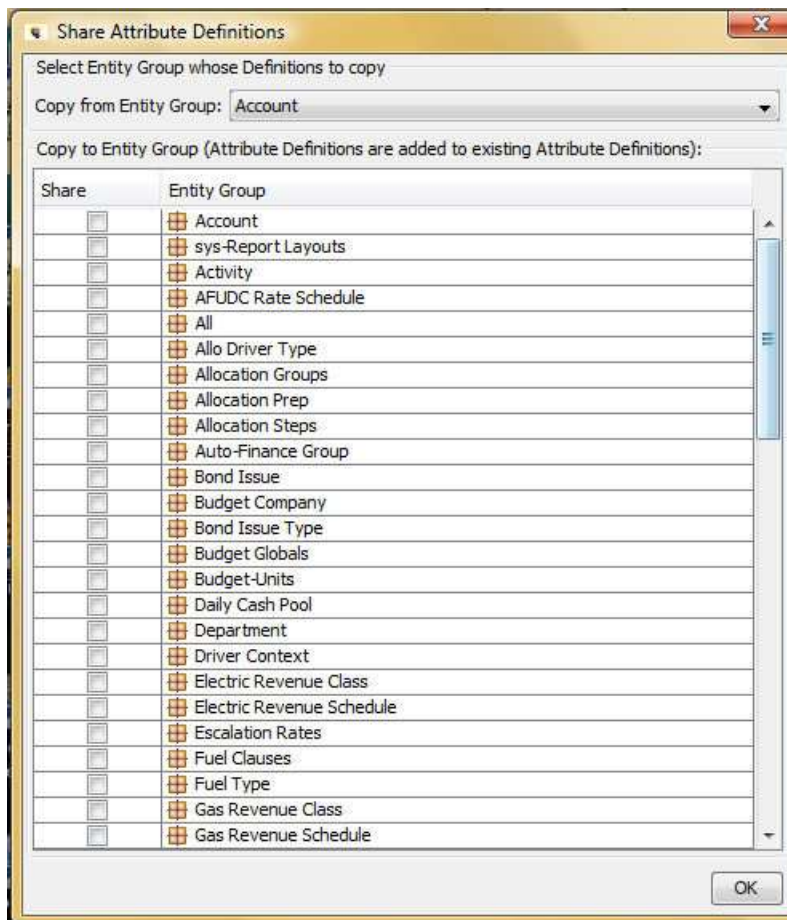
{ XE "Assign Entity Groups" * MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }{ XE "Super Entity Group" * MERGEFORMAT }Assign Entity Groups to a Super Entity Group

- Open the **GROUP ENTITIES** screen.
- Highlight the super entity group in order to add an existing *entity group* to it.
- Click **ADD ENTITY GROUP**. The **ENTITY GROUP** dialog box will open with all entity groups listed.
- Select the desired entity group from the drop-down list and click **OK**. The selected entity group will be added to the highlighted super entity group.
- Entity groups can also be created in a super entity group. See **Create an Entity Group**.

Share Attribute Definitions

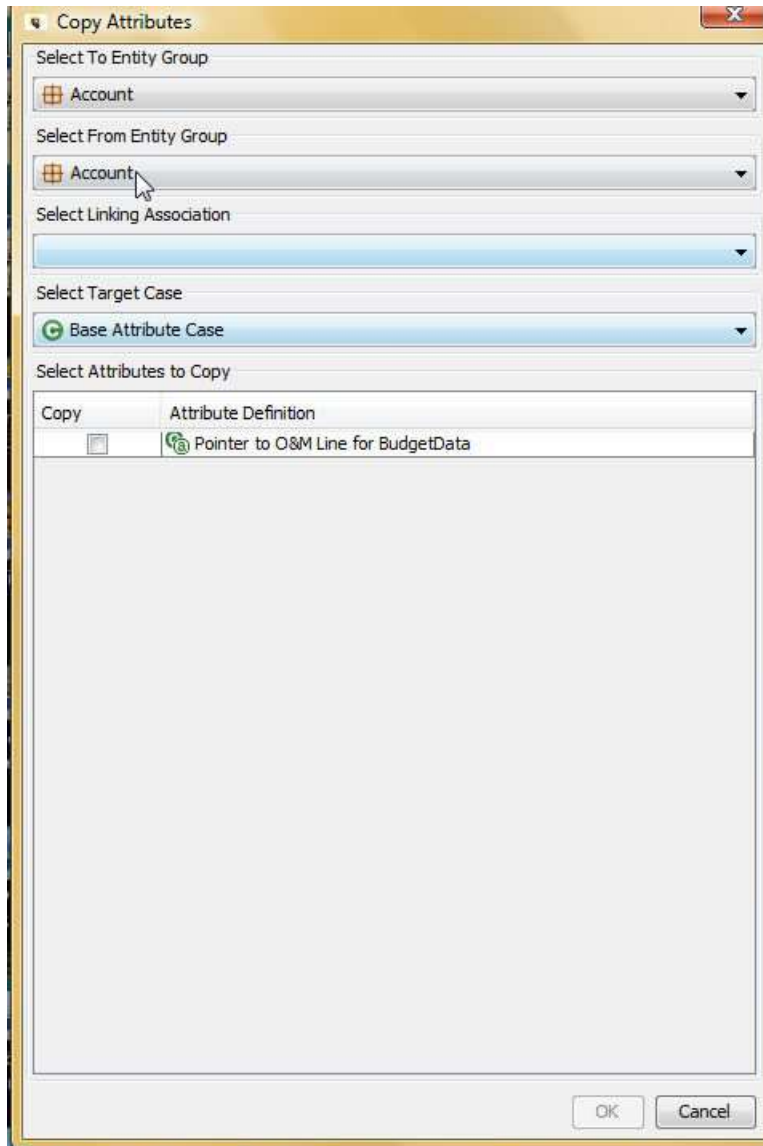
Share Attribute Definitions Dialog

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Copy Attributes

Copy Attributes Dialog Box



Editing Attribute Data in Excel

{ XE "Attribute" * MERGEFORMAT }{ XE "How to Edit Attribute Data in Excel" * MERGEFORMAT }Edit Attribute Data in Excel

The **Edit Data in Excel** process is accessible from the three following screens:

- **ONE PARAMETER EDITOR** screen, where you can edit attributes and associations of entities.
- **CALCULATION EDITOR** screen, where you can edit line attributes.
- **EDIT ALLOCATIONS** screen, where you can edit allocation data.

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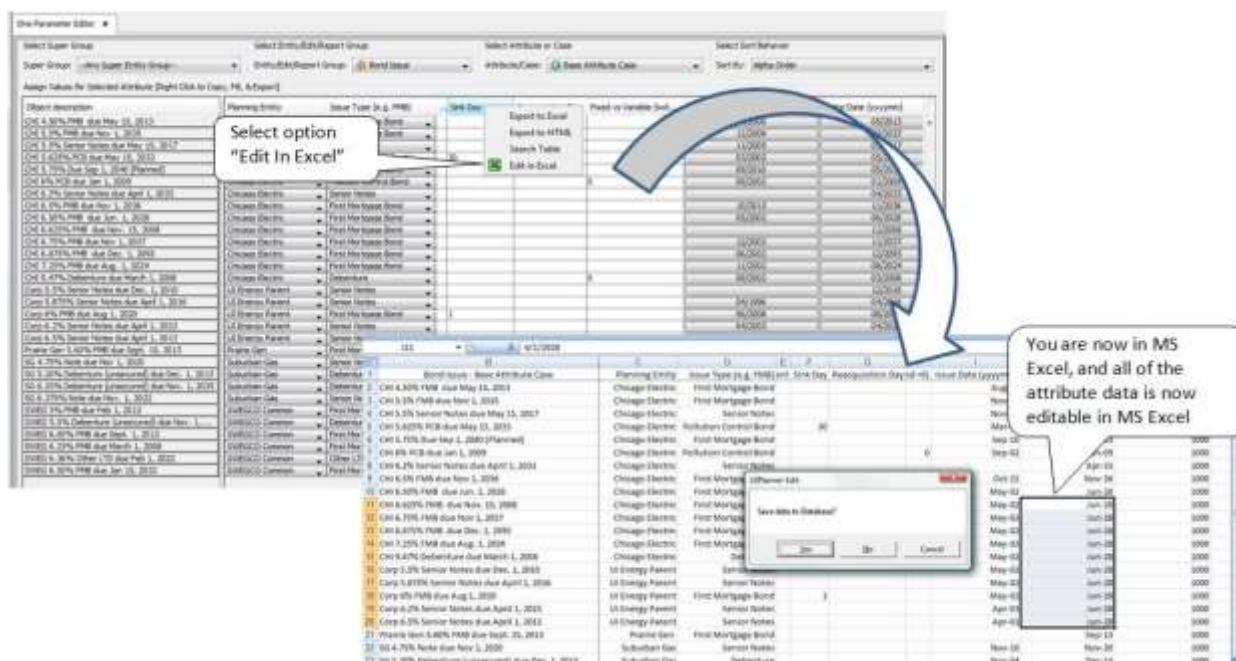
This process will be demonstrated using the **ONE PARAMETER EDITOR**. But the functionality is identical when editing line attributes.

- Right-click on a column header on the One Parameter Editor screen.
- Click **EDIT IN EXCEL** to launch Excel.

Note: The controls on the **ONE PARAMETER EDITOR** become disabled when Excel launches. The controls will become re-enabled when you conclude your Excel edit or if you leave the One Parameter Editor tab.

- Once in Excel, you can directly type in or edit the data there, using all of the functionality of Excel, such as cut/paste, copy, etc.
- When you are done, click the "X" to close the screen. You will then be prompted as to whether you want to save the data to the database.

This process is shown in the diagram below.



- Before the save is executed, UIPlanner will perform spell checks against valid values. When it does not find an exact match, it will prompt you with a suggested value.
 - For drop-down type selections (e.g. - Associations, Yes/No, Range Formats, etc.), a custom spell-checker is provided that looks for the best match within the valid entry set. Therefore, if you make a best guess, or provide the start of the intended name, or some identifying portion of the text, the spell-checker will detect your intentions and confirm your meaning prior to updating your change.
 - UIPlanner will only require you to confirm one correction per identical Excel text entry per attribute type. If you misspell or

abbreviate an entry and drag it down, you only have one confirmation message to approve.

- The spell-check confirmation dialog gives you an opportunity to choose a different entry if the spell-checker guesses wrong, or can find no appropriate match for your entry.
- If you select a new value on the spell-check confirmation dialog that choice will be set for all identical Excel text entries for the given attribute.
- The spell-checker is not case sensitive. It first looks for exact matches, then identical starting characters, with ties going to the smaller word, then highest percent of shared characters.
- For dates, any entry that Excel identifies as a date will be converted to the UIPlanner format of YYYYMM.

See below for an example of the spell-check prompt process.

The screenshot shows an Excel spreadsheet with columns B through I. A yellow highlight is on cell C13. A blue arrow points from the dialog box to the highlighted cell. A speech bubble points to the dialog box with the text "Type in Entity names. If it does not match, UIPlanner makes a guess at what you intended." Another speech bubble points to the "Did You Mean?" column of the dialog box with the text "You still have the full droplist to choose from".

For Attribute	You Provided	Did You Mean?	Update
Planning Entity	Chicago Elec	Chicago Electric	<input checked="" type="checkbox"/>
Issue Type (e.g. FMB)	FMB	First Mortgage Bond	<input checked="" type="checkbox"/>
Planning Entity	Suburban	Suburban Gas	<input checked="" type="checkbox"/>
Planning Entity	UI Energy Par	UI Energy Parent	<input checked="" type="checkbox"/>

Note: If you return to UIPlanner and leave the **ONE PARAMETER EDITOR** tab prior to ending your MS Excel edit session, your unsaved changes currently in MS Excel will not be made.

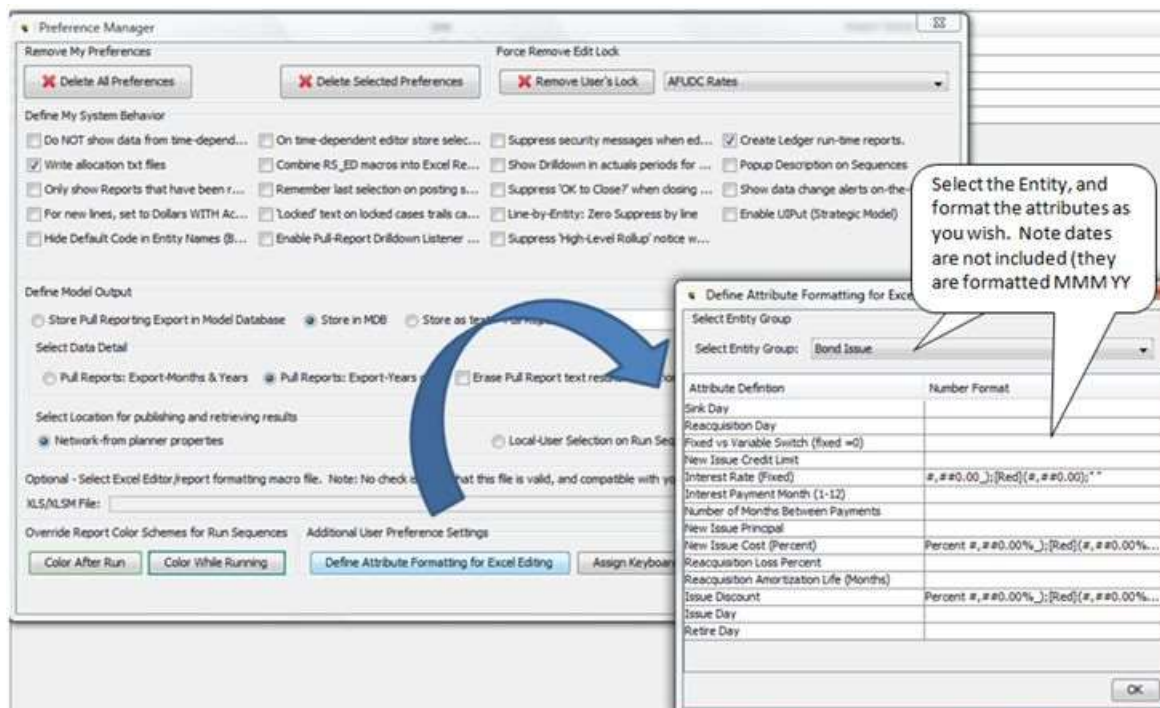
Formatting Attribute Data in Excel

As a User Preference you can set how certain attribute data will show up in Excel.

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- Go to the **PREFERENCE MANAGER** screen and click **DEFINE ATTRIBUTE FORMATTING FOR EXCEL**. This will open the **DEFINE ATTRIBUTE FORMATTING FOR EXCEL** dialog box.
- Select the entity and then the format(s) for a given attribute(s). This formatting will be reflected when editing attributes in Excel.

See below for an example for formatting attributes for *Bond Issue*.



Note: Dates cannot be formatted as noted above. When editing date attributes in Excel they will now be displayed as MMM YYYY instead of YYYYMM. Users find this presentation more readable. All Excel date formats and the UIPlanner YYYYMM format are still acceptable as inputs when editing in Excel. See the example above. Note the Issue Cost Percent is now formatted as specified above on the **Preference Manager** screen.

Edit Time Data

```
{ XE "Time Data" \* MERGEFORMAT }{ XE "Edit Time Data" \* MERGEFORMAT }{ XE "Screen" \* MERGEFORMAT }Edit Time Data Screen
```

The **EDIT TIME DATA** screen (typically referred to as the **TIME DATA EDITOR**) is the tool used to view, edit, or delete time dependent data. Time dependent data is stored by year and month, as opposed to attribute data, which is a single value for all time.

The **TIME DATA EDITOR** is report-centric. All time dependent data is stored by report in any line that is designated as 'input' (in either the forecast or the actual column of the report). Upon selecting a report, you can edit any data on these input lines. This screen launches Excel as an input mechanism. Time dependent data can be populated in UIPlanner in two ways:

1. Using **TIME DATA EDITOR** through the Excel interface, and
2. Using the **MODEL IMPORT** screen.

All of the selections you make on this screen (by report) are saved as user preferences so that the next time you open the screen it will remember your choices.

The **TIME DATA EDITOR** can be accessed in multiple ways, for example:

- UIPlanner menu item
- **GROUP REPORTS** screen

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- ***CALCULATION EDITOR*** screen
- ***RUN SEQUENCES*** screen
- ***MANAGE SEQUENCES*** screen
- ***BROWSE REPORTS*** screen

Note: Ledger data is accessed using the ***INPUT ACTUALS*** screen. It is laid out slightly differently, but has the same functionality

Screen layout:

All time data is stored in a report by case, entity, line, and time period. Hence, the ***TIME DATA EDITOR*** is organized in regions based on these five dimensions. The sixth region launches actions once you have defined the data.

The six regions of the ***TIME DATA EDITOR*** screen are:

- A. [Select Report](#) (top uppermost left region) – Drop-down list of all reports.
- B. [Select Cases to Edit](#) (top left region) – Grid of all cases for the active scenario and associated control buttons/check boxes.
- C. [Select Time Period and Formatting](#) (top right region)
- D. [Select Entities / Edit Groups to Edit](#) (center left region) – Grid containing all entities and edit groups for the selected report.
- E. [Select Lines to Edit](#) (center right region) – Grid containing the selected report's line labels.
- F. *Action Panel* (lower region) – Control buttons used for data related tasks (view, edit, delete, etc.).

Other Options Available:

- Select [Excel Template Order](#)
- Using [UIPlanner Assisted Data Selection](#)

List Of Operations Or Tasks that Are Performed With This Screen:

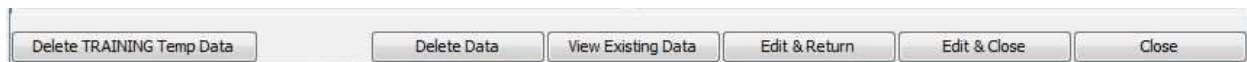
A. Data Selection

1. *Select Report to Edit* (Note: You can only edit one report at a time)
2. *Select Case(s) to Edit*
3. *Select Entity(ies)/Entity Group(s) to Edit*
4. *Select Line(s) to Edit*
5. *Select Time Period and Formatting*
6. *Select Excel Template Order*

B. Initiate View, Edit or Delete

1. VIEW EXISTING DATA
2. EDIT DATA AND RETURN
3. EDIT DATA AND CLOSE
4. DELETE DATA
5. DELETE TEMP DATA
6. Close *TIME DATA EDITOR*

Once you have configured your data selection, you have several choices of what task to do next. A series of action buttons are available on the lower region of the *TIME DATA EDITOR*. This functionality is the core of the *TIME DATA EDITOR* screen.



You can launch MS-Excel to enable you to enter, delete or edit data, or you can merely view the data in a dialog window. Note that until you have made a selection in all dimensions, these buttons will not be enabled.

1. **VIEW EXISTING DATA:** Opens a dialog to display existing data for viewing only. See below.

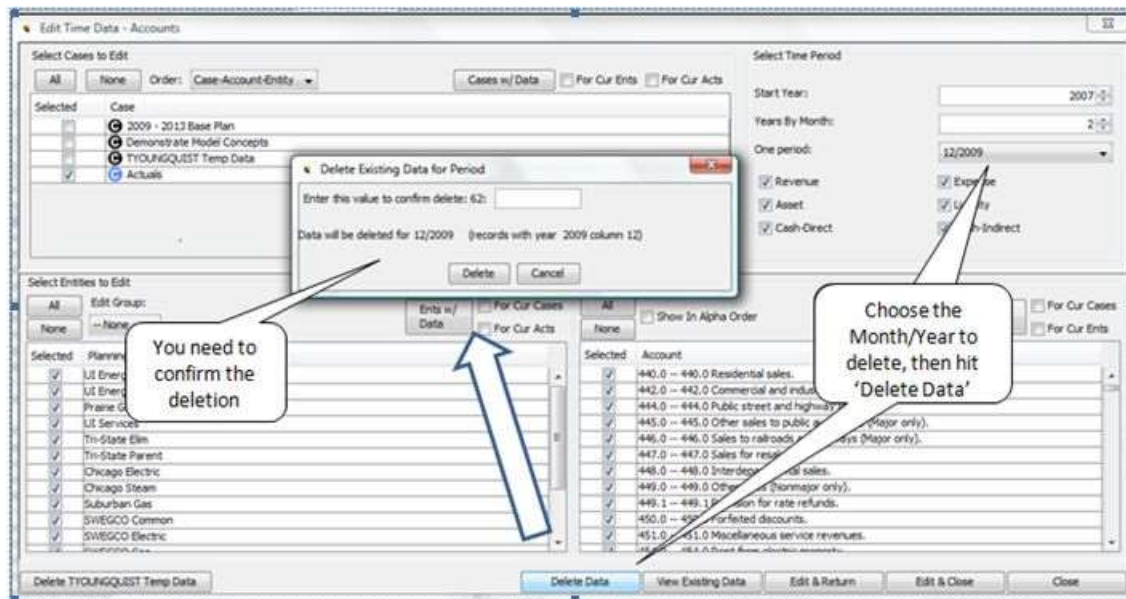
Case	Qualifier 1	Qualifier 2	Qualifier 3	Year	Jan	Feb	Mar	Apr	May
2009 - 2013...	Bonds - Detailed Model	BC:[Reacquisition of Principal]	CHI 7.25% FMB due Aug. 1, 2...	2010					
2009 - 2013...	Bonds - Detailed Model	BC:[Reacquisition of Principal]	CHI 6.625% FMB due Nov. 15...	2009					
2009 - 2013...	Bonds - Detailed Model	BC:[Reacquisition of Principal]	CHI 6.50% FMB due Jun. 1, 2...	2011				275,000	

Note that the screen only displays data with non-zero rows. It is more concise than the Excel template which shows all combinations, whether they have data or not. Like most data dialogs in UIPlanner, this screen can also be exported to Excel.

2. **EDIT AND RETURN:** Launches the Excel template editor, and upon exiting Excel reopens the *TIME DATA EDITOR*. See [Edit Time Data in Excel](#) for details.
3. **EDIT AND CLOSE:** Launches the Excel template editor, but then upon exiting Excel closes the *TIME DATA EDITOR*.
4. **DELETE DATA:** Enables you to erase one period of data. Once you have selected the Cases, Entities, and Lines, if you use the drop-down list to

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select a single period. You are prompted to confirm the delete by entering a specified number (to prevent accidental deletes). See below.



To erase multiple periods of data, you need to go to Excel (See How to Edit Time Data).

5. **CLOSE:** Closes the **TIME DATA EDITOR**.

Finally, the **TIME DATA EDITOR** screen is where you can delete all data from your *User Temp Data Case*:

6. **DELETE TEMP DATA:** Deletes the *User Temp Data* which includes results for your data only for each scenario. See [Using a User Temp Data Case](#).

What to Do If You Encounter Problems

Time Data – You make time data changes and when you hit Save, you get an error message.

Why it happens and what to do about it:

This probably indicates that the case is locked or you do not have security rights to edit the data. See [Troubleshooting - Data Editing](#) or [Troubleshooting - Visibility/Security](#) for more information.

Visibility – There are entities or scenarios that you know exist but you do not see them on the **EDIT TIME DATA** screen.

Why it happens and what to do about it:

These indicate that you do not have security rights to view these entities or scenarios. See [Troubleshooting - Visibility/Security](#) for more information.

{ XE "Select a Report or Case to Edit" * MERGEFORMAT }{ XE "Time Data" * MERGEFORMAT }Select a Report and Case to Edit - Time Data Editor

These are the first two objects you must select in the *TIME DATA EDITOR*.

Select Report to Edit

Select a report from the drop-down list of all reports in order to edit that report's time data.

Select Case(s) to Edit – Time Data Editor

Select the desired case(s).

- **ALL** – Click to select all cases.
- **NONE** – Click to un-select all cases.
- Individually select cases using the check-boxes next to the case names.
- Have UIPlanner populate the selection for you. See [UIPlanner Assisted Data Selection – Time Data Editor](#).

{ XE "Selecting Entities or Edit Groups to Edit" * MERGEFORMAT }{ XE "Entites" * MERGEFORMAT }{ XE "Time Data" * MERGEFORMAT }{ XE "Edit Groups" * MERGEFORMAT }Select Entities / Edit Groups to Edit – Time Data Editor

Select Entities to Edit: Select the desired entities. (Note that if the report is a 2-dimensional report, there will be two entity lists.)

- **ALL** – Click to select all entities.
- **NONE** – Click to un-select all cases.
- Individually select entities using the check boxes next to the entity name.
- Have UIPlanner populate the selection for you. See [UIPlanner Assisted Data Selection – Time Data Editor](#).

Edit Group: Select an Edit Group (if applicable) from the drop-down list as desired to further limit the entity list.

Reverse Entity Order: If you are editing data for a 2 dimensional report, you can choose to view the two entities in either order.

{ XE "Lines" * MERGEFORMAT }{ XE "Selecting Lines To Edit" * MERGEFORMAT }{ XE "Time Data" * MERGEFORMAT }Select Lines to Edit - Time Data Editor

Select Lines to Edit: Select the desired line(s).

- **ALL** – Click to select all lines.
- **NONE** – Click to un-select all lines.
- Individually select lines using the check boxes next to the line name.
- Have UIPlanner populate the selection for you. See [UIPlanner Assisted Data Selection – Time Data Editor](#).

You can only enter data on lines designated as 'input'. However, you have the option to show all lines in the report by un-checking the *Only Inputs* box. When you edit a report, as soon as you designate a line as 'input', it will appear in this list.

{ XE "Selecting Time Period and Formatting" * MERGEFORMAT }{ XE "Time Data" * MERGEFORMAT }Select Time Period and Formatting - Time Data Editor

Select Time Period:

- **Start Year:** Select the start year.
- **Years to Edit:** Select the number of years in total to edit.
- **Years by Month:** Select the number of years to edit by month.
- **One Period:** This option enables you to edit a single month/year. If you select a date, the Excel template will display only that month/year. The layout of the rows and columns is determined by the ordering you selected.

This option is very helpful if you are editing or viewing data across several lines for each entity for a specific time period, such as year-end Plant in Service and Accumulated Depreciation across all Plant Accounts, or Principal Outstanding and Interest Payable across all Bonds (as shown below). This option also supports 2-D reports.

Select a single Month/Year to Edit

	B	C	D
	Bonds	Dec 2009	Dec 2009
		Principal Outstanding	Interest Payable
4	Actuals		
5	CHI 4.50% FMB due May 15, 2013	70,000	1,500
6	CHI 5.5% FMB due Nov 1, 2035		
7	CHI 5.5% Senior Notes due May 15, 2017		
8	CHI 5.625% PCB due May 15, 2033	400,000	25,000
9	CHI 6% PCB due Jan 1, 2009	100,000	1,000
10	CHI 6.2% Senior Notes due April 1, 2033	105,000	1,200
11	CHI 6.5% FMB due Nov 1, 2036	75,000	1,500
12	CHI 6.50% FMB due Jun 1, 2028	275,000	33,500
13	CHI 6.625% FMB due May 15, 2033	200,000	2,000
14	CHI 6.75% FMB due Nov 1, 2036	150,000	15,000
15	CHI 6.8% FMB due Nov 1, 2036	50,000	2,200
16	CHI 7.25% FMB due Nov 1, 2036	125,000	
17	CHI 9.4% FMB due Nov 1, 2036	40,000	
18	CHI 5.75% FMB due Nov 1, 2036		
19	Corp 5.5% FMB due Nov 1, 2036		
20	Corp 5.875% Senior Notes due April 1, 2016		
21	Corp 6% FMB due Aug 1, 2020		

Time Data Editor – just Dec 2009 lists Entities down and Lines across the top

Excel Format: The default for viewing data in Excel is how the data is formatted on the **BROWSE REPORTS** screen. However, you have the option to use this drop-down list to select another format.

- General – no formatting
- Line Format – format specified on the **BROWSE REPORTS** screen for that line.
- User specified formats – e.g., #,# #0, #,# #0.0, etc.

{ XE "Excel Template" * MERGEFORMAT }{ XE "Selecting Excel Template Order" * MERGEFORMAT }{ XE "Time Data" * MERGEFORMAT }Select Excel Template Order - Time Data Editor

Order: Use the drop-down list to select one of the following options for organizing the Excel template:

- Case-Line-Entity
- Case-Entity-Line
- Line-Case-Entity
- Line-Entity-Case
- Entity-Case-Line
- Entity-Line-Case

Depending upon what data you are trying to edit and how the data is populated, these multiple ordering options can be very useful in organizing and facilitating editing.

{ XE "Assisted Data Selection" * MERGEFORMAT }{ XE "UIPlanner Assisted Data Selection" * MERGEFORMAT }{ XE "Time Data" * MERGEFORMAT }UIPlanner Assisted Data Selection - Time Data Editor

The *TIME DATA EDITOR* has a useful feature that allows you to have UIPlanner set the check boxes on the screen for you based on the existence of data. If you set the check boxes in one or both of the other dimensions, you can have UIPlanner fill in the check boxes for you for a selected dimension (case, entity or line). In the example below, the user proceeded as follows to have UIPlanner select the entities:

- *Select Report and Cases to Edit:*
 - o Select *Actuals* case by checking the box.
- *Select Lines to Edit* region:
 - o *Check For Cur Cases* check box.
 - o Click the **LINES W/ DATA** button to have UIPlanner set the check boxes for the lines. As a result, all lines with data in the *Actuals* case are selected.
- *Select Entities to Edit* region:
 - o *Check For Cur Cases and For Cur Lines* check boxes.
 - o Click the **LINES W/ DATA** button to have UIPlanner set the check boxes for the entities. As a result, all entities with lines / data in the *Actuals* case are selected.

The screenshot shows the 'Edit Time Data - Bonds - Detailed Model' dialog box. It is divided into several sections for selecting data to edit:

- Select Report to Edit:** A dropdown menu showing 'Bonds - Detailed Model'.
- Select Cases to Edit:** Includes buttons for 'All', 'None', 'Order: Case-Entity-Line', 'Cases w/ Data', 'For Cur Ents', and 'For Cur Lines'. Below is a table with columns 'Selected' and 'Case':

Selected	Case
<input type="checkbox"/>	2009 - 2013 Base Plan
<input checked="" type="checkbox"/>	Demonstrate Model Concepts
<input checked="" type="checkbox"/>	TRAINING Temp Data
<input checked="" type="checkbox"/>	Actuals
- Select Entities to Edit:** Includes buttons for 'All', 'None', 'Edit Group: -- None --', 'Ents w/ Data', 'For Cur Cases', and 'For Cur Lines'. Below is a table with columns 'Selected' and 'Bonds - Detailed Model':

Selected	Bonds - Detailed Model
<input checked="" type="checkbox"/>	CHI 6.75% FMB due Nov 1, 2037
<input checked="" type="checkbox"/>	CHI 6.875% FMB due Dec. 1, 2095
<input checked="" type="checkbox"/>	CHI 7.25% FMB due Aug. 1, 2024
<input checked="" type="checkbox"/>	CHI 9.47% Debenture due March 1, 2008
<input checked="" type="checkbox"/>	CHI 5.75% Due Sep 1, 2040 (Planned)
<input checked="" type="checkbox"/>	CHI 5.00% FMB Due July 1, 2042 (Planned)
<input checked="" type="checkbox"/>	Corp 5.5% Senior Notes due Dec. 1, 2010
<input checked="" type="checkbox"/>	Corp 5.875% Senior Notes due April 1, 2016
<input checked="" type="checkbox"/>	Corp 6% FMB due Aug 1, 2020
- Select Lines to Edit:** Includes buttons for 'All', 'None', 'Only Inputs', 'Lines w/ Data', 'For Cur Cases', and 'For Cur Ent'. Below is a table with columns 'Selected' and 'Line':

Selected	Line
<input type="checkbox"/>	BA: [Sinking Fund]
<input type="checkbox"/>	BC: [Reacquisition of Principal]
<input type="checkbox"/>	BS: [Interest Rate (Monthly) - Variable]
<input type="checkbox"/>	DH: [Reacquisition Loss (Gain)]
<input checked="" type="checkbox"/>	DM: [Principal Outstanding]
<input checked="" type="checkbox"/>	DN: [Unamortized Issue Cost]
<input type="checkbox"/>	DO: [Unamortized Discount (Premium)]
<input type="checkbox"/>	DP: [Interest Payable]
<input type="checkbox"/>	DC: [Unamortized Reacquisition Loss (Gain)]

At the bottom of the dialog, there are buttons: 'Delete TRAINING Temp Data', 'Delete Data', 'View Existing Data', 'Edit & Return', 'Edit & Close', and 'Close'.

Once you have set the check boxes, you can then view or edit the data as you wish. Note that these buttons are optional. They are available to enable you to search for data more efficiently. If you wish, you can set all check boxes manually. An additional benefit of this feature is that it will allow you to easily identify cases/entities/lines that have no data on the chosen report.

{ XE "Time Data" * MERGEFORMAT }{ XE "Edit Time Data#Preparing_to_Save_Dialog" * MERGEFORMAT }{ XE "Edit Time Data" * MERGEFORMAT }Edit Time Data in Excel

Once you have selected the data to edit and clicked the **EDIT&RETURN** or **EDIT&CLOSE** button, UIPlanner queries the data from the database and opens up a customized edit screen in a dedicated Excel session.

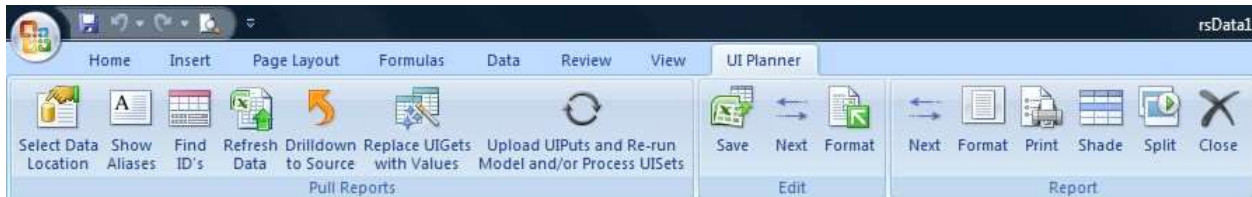
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	B	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	Bonds	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2		2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
3	2009 - 2013 Base Plan													
4	CHI 4.50% FMB due May 15, 2013													
5	Interest Rate (Monthly) - Variable	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
6	Principal Outstanding													
7	Interest Payable													
8	CHI 5.5% FMB due Nov 1, 2035													
9	Interest Rate (Monthly) - Variable	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
10	Principal Outstanding													
11	Interest Payable													
12	Actuals													
13	CHI 4.50% FMB due May 15, 2013													
14	Interest Rate (Monthly) - Variable													
15	Principal Outstanding	100,000												
16	Interest Payable	2,500												
17	CHI 5.5% FMB due Nov 1, 2035													
18	Interest Rate (Monthly) - Variable													
19	Principal Outstanding	50,000												
20	Interest Payable	1,500												
21														

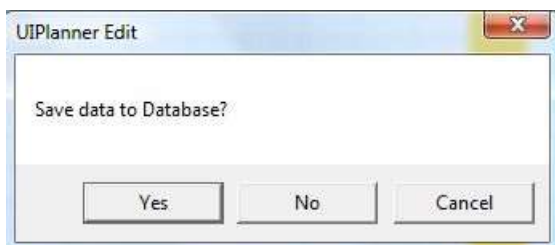
Note that the window has highlighting to denote the ordering. In the above example, it was case, entity, then line. Cases are yellow, entities are grey, and lines are white. The window also has the month ended for each year in gold to help you to distinguish year ends.

Type, or copy, the desired data into the Excel template, or delete data as desired. Note that you are in Excel, with full drag, drop, copy and paste functionality available. You can create formulas to calculate values, but these will not be saved. Only values are saved.

Note: In addition, there is a custom UIPlanner menu (or toolbar available depending on the version of Excel) that allows you to save data and exit from Excel, jump from section to section (via the **NEXT** button), and format the edit screen for printing. See below.



Close the **EXCEL TEMPLATE EDITOR** once you have completed your edits. You will be prompted to save to the database. This will open the dialog box below.



If you want to accept the changes, click **OK**. When the editor closes, it will bring up a final dialog box that will show all of the data rows you changed. See below and note the data dimensions (case, report, line, entity and year). You can review the data here or send it to Excel. If you want to save it, click **SAVE** and it will be saved to the database. Otherwise, click **CANCEL**.

Case	Qualifier 1	Qualifier 2	Qualifier 3	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Actuals	Bonds - Det...	DP:[Interest Payable]	CHI 5.5% FMB due...	2009												1,500
2009 - 2013 Base Plan	Bonds - Det...	BS:[Interest Rate (Mo...	CHI 4.50% FMB d...	2009												0.045
Actuals	Bonds - Det...	DP:[Interest Payable]	CHI 4.50% FMB d...	2009												2,500
Actuals	Bonds - Det...	BS:[Interest Rate (Mo...	CHI 4.50% FMB d...	2009												0.045
2009 - 2013 Base Plan	Bonds - Det...	BS:[Interest Rate (Mo...	CHI 5.5% FMB due...	2009												0.055
Actuals	Bonds - Det...	DM:[Principal Outstan...	CHI 4.50% FMB d...	2009												100,000
Actuals	Bonds - Det...	BS:[Interest Rate (Mo...	CHI 5.5% FMB due...	2009												0.055
Actuals	Bonds - Det...	DM:[Principal Outstan...	CHI 5.5% FMB due...	2009												50,000
Actuals	Bonds - Det...	BS:[Interest Rate (Mo...	CHI 4.50% FMB d...	2010	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045
2009 - 2013 Base Plan	Bonds - Det...	BS:[Interest Rate (Mo...	CHI 4.50% FMB d...	2010	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045
Actuals	Bonds - Det...	BS:[Interest Rate (Mo...	CHI 5.5% FMB due...	2010	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055
2009 - 2013 Base Plan	Bonds - Det...	BS:[Interest Rate (Mo...	CHI 5.5% FMB due...	2010	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055

Some key features of the Excel editor are the following:

- 1. Even Spreading** - All data is stored in monthly values. If you selected annual periods to edit, UIPlanner will follow the rules of the annual to monthly forecast for that line, e.g., divide by 12 to create the monthly values. Or, if it is a percent, it will put the same values in all months.
- 2. Patterned Spreading** - If you select a combination of monthly and annual periods, the template will take the pattern from the last monthly year and apply that to the annual ones.
- 3. Comments** - You can enter and store comments on any monthly cell by right-clicking and entering the comment text. Note that you cannot put comments on annual amounts. Comments are saved as attribute data, so you need to click 'Save' in order to view them again.

Cautionary notes:

- 1. Changing the Template** - You should not modify the Excel template (change or delete rows, headers, etc.). It is only an input sheet.
- 2. Data Only in Valid Cells** - Only enter data in the appropriate rows and columns. Data input outside the valid area will be ignored.
- 3. Numeric Data** - Inputs must be numeric. Text data will not be saved. You can build formulas but only the result is saved.

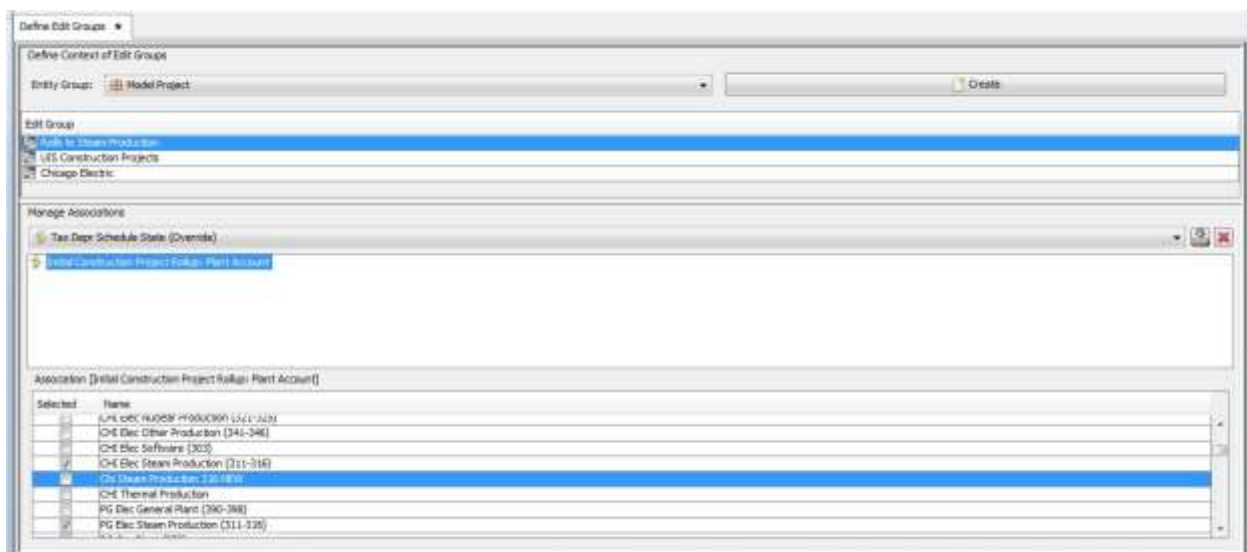
Define Edit Groups

{ XE "Concept - Edit Groups" * MERGEFORMAT }{ XE "Edit Groups" * MERGEFORMAT }Concept - Edit Groups

Edit groups are a predefined filter against a specific entity group. This helps in managing data review and entry for entity groups that have a large number of members. In this regard, edit groups have two key uses:

- **Time Data** - The *EDIT TIME DATA* screen allows you to use edit groups to display a filtered entity list.
- **Attribute Data** - Edit groups are one of the selection options for entities in the *ONE PARAMETER EDITOR*. You can choose an edit group to display a filtered entity list.

Below is an example.



Edit groups are also available in the UIPlanner graphing engine. The UIPlanner graphing engine allows you to build graphs using edit groups.

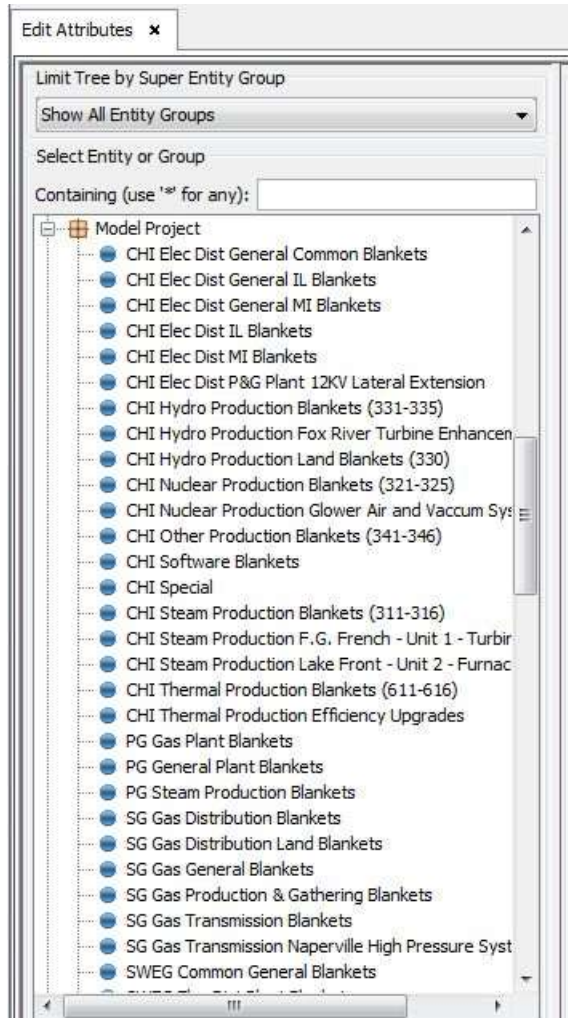
When to Use an Edit Group

You should use edit groups where you have a large number of entities and want to view and edit these in smaller, filtered groups. For example,

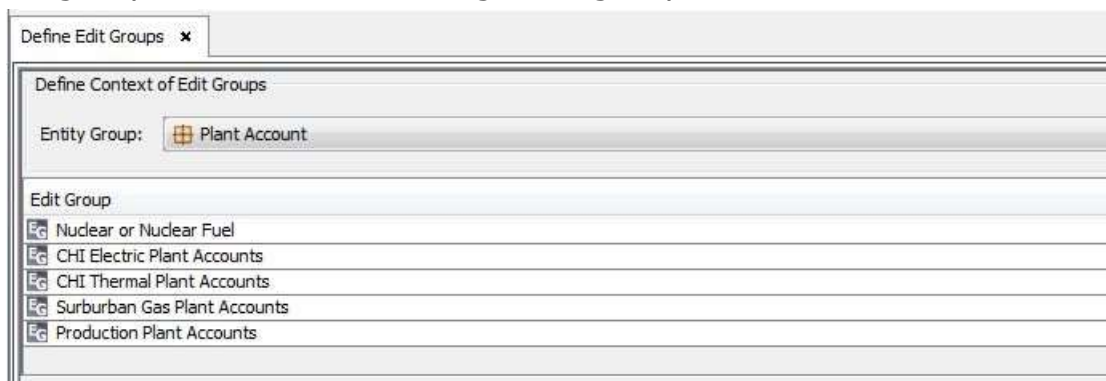
- **Bonds** - if you have a large number of bonds, you may want to edit the time data or parameters for bonds by legal entity.
- **Construction Projects** - Projects generally have an association to a plant account. However, you may want to see projects for specific

planning entities or projects rolling up to groups of plant accounts (by function). Both of these can be handled by building edit groups.

In the example below, the list of plant accounts is quite extensive.



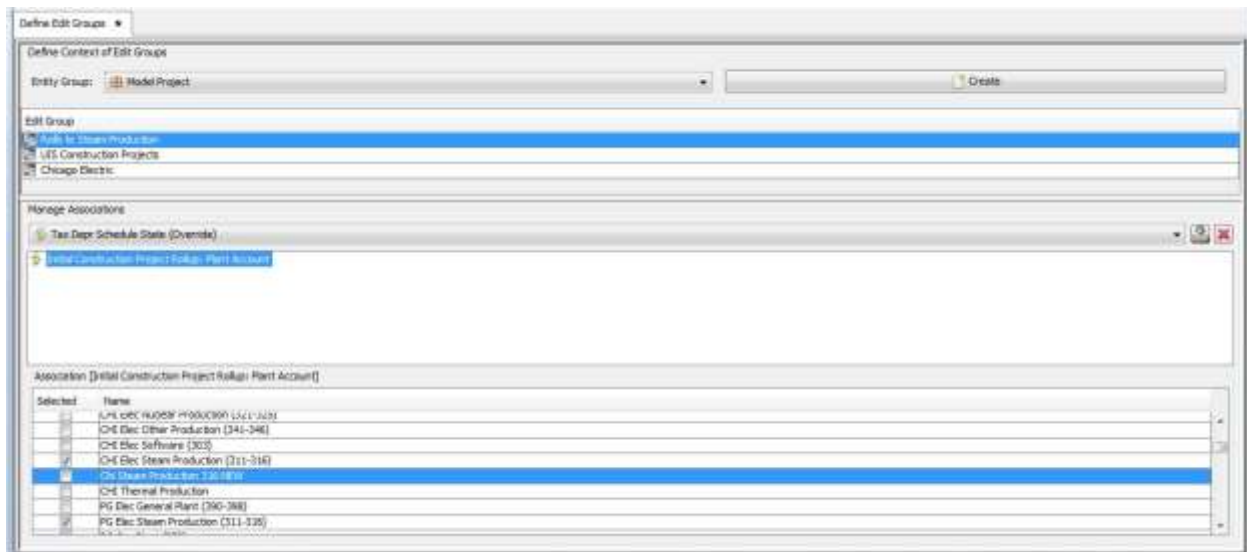
Edit groups break it into manageable groups.



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MAINTAINING EDIT GROUPS

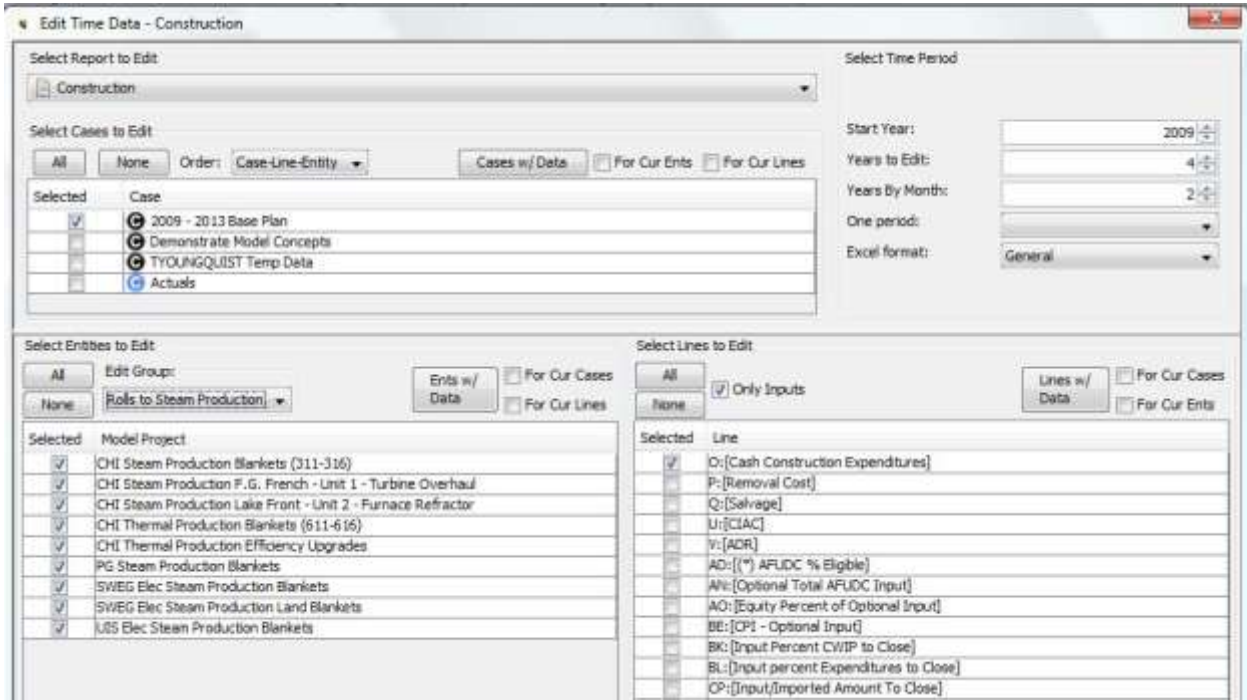
Note that edit groups are not dynamically maintained. If you add an entity to an entity group that defines an edit group, you will need to add it to that edit group. In the example below, if the edit group defined is set up to reflect steam plant accounts, when you add a new plant account that is steam-related, you need to add it to the edit group.



On the other hand, if you add projects to the project list, they will automatically be reflected in the edit group, as long as the appropriate associations are populated.

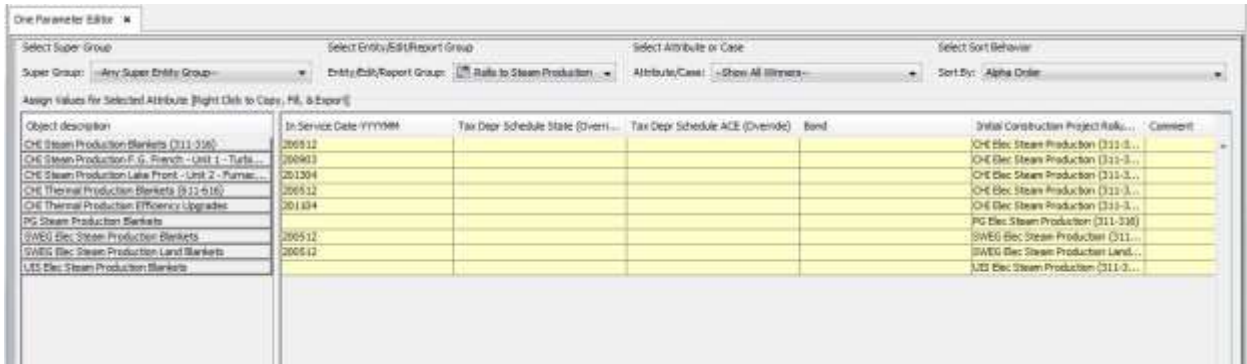
EDIT GROUPS - TIME DATA

The **EDIT TIME DATA** screen allows you to filter down the entity list using edit groups. Below is an example.



EDIT GROUPS - ONE PARAMETER EDITOR

In the **ONE PARAMETER EDITOR**, edit groups are one of the selection options. You can choose entities by entity, to see the full list, or you can select an edit group, to see a filtered list. Below is an example.



EDIT GROUPS - GRAPHING

The UIPlanner graphing engine allows you to use edit groups in building graphs. This provides an additional layer of functionality, in that you can create graphs for predefined subsets of entities without having to select them each time. See the example below.

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Define Report Properties | Browse Report: Construction | Graph Data

Select Graph to View or Edit

Graph: Name:

Graph Properties | Graph Display

Graph Type:

Primary Independent Variable:

Secondary Independent Variable:

Hold Line Constant As:

Hold Scenario Constant As:

Define a Entity (or Edit Group) set to Graph

Entity (or Edit Group)

Rolls to Steam Production

Define a Time set to Graph

Time

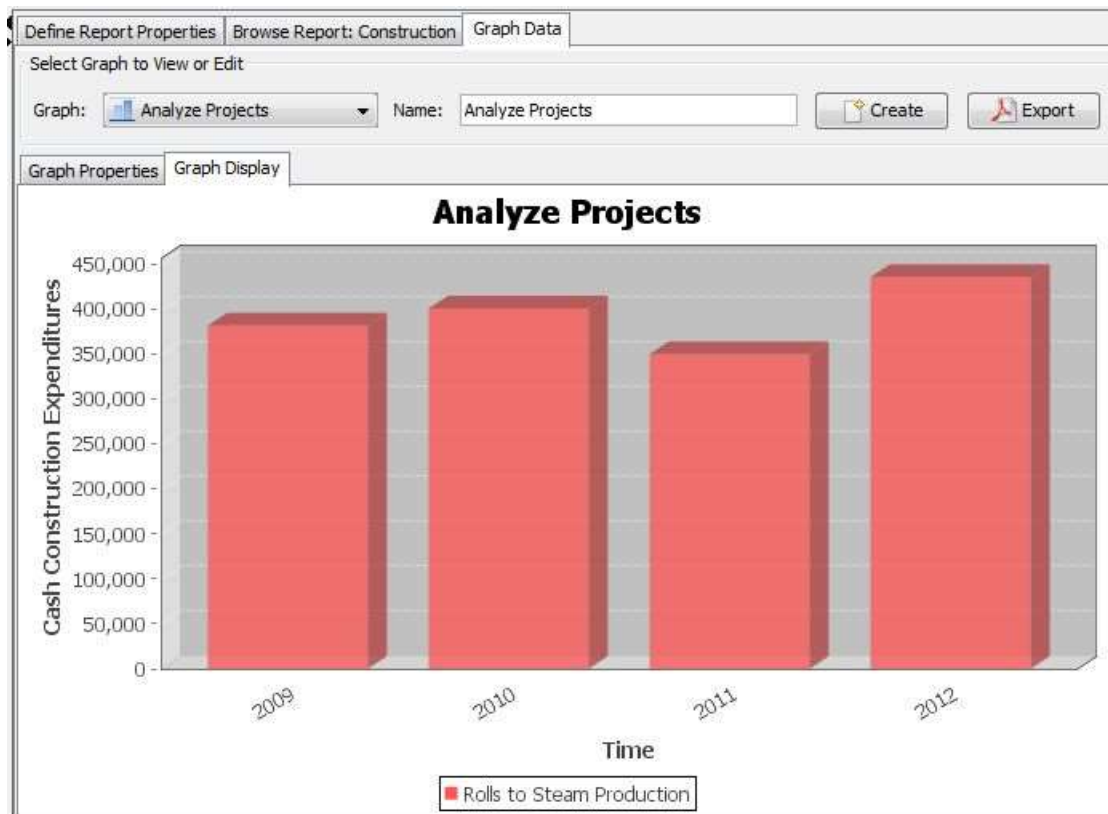
2009

2010

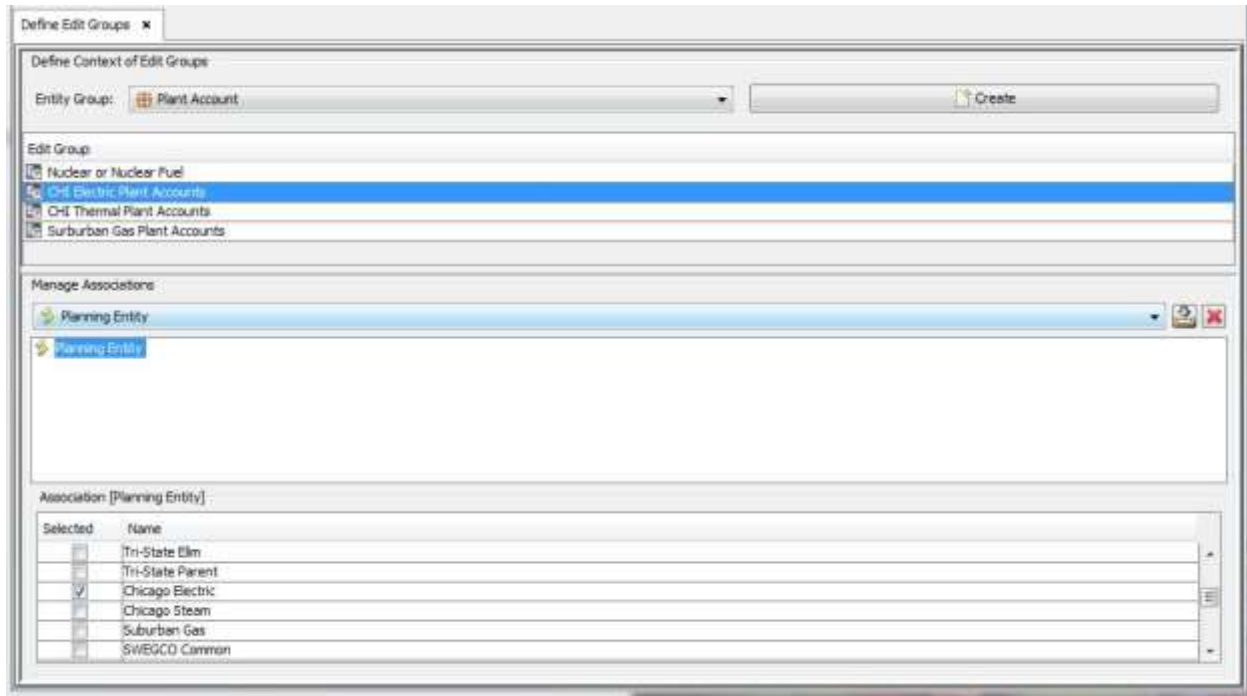
2011

2012

Below is the resulting graph.



{ XE "Edit Groups" * MERGEFORMAT }{ XE "Define Edit Groups" * MERGEFORMAT }{ XE "Screen - Define Edit Groups" * MERGEFORMAT }Define Edit Groups Screen



The **DEFINE EDIT GROUPS** screen is where you set up and configure edit groups for a specific entity group. Edit groups enable you to set up a predefined filter against an entity group. This helps in managing data review and entry for entity groups that have a large number of members. For further information, see [Concept - Edit Groups](#).

Screen layout:

The **DEFINE EDIT GROUPS** screen is divided into two regions.

The *Define Context of Edit Groups* region is where you can see the existing edit groups for a specific entity group (selected using the *Entity Group* drop-down list). This region also contains the button for creating a new edit group.

The *Manage Associations* region is where you build an edit group or view the configuration of an existing edit group. For a new edit group, you use the drop-down list to select the association upon which you want to build the edit group, and then use the check boxes to select one or more of the

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related entities to use for the edit group. For an existing edit group, just select the association, and the members of the edit group will be displayed below.

List of Tasks or Operations that are performed with this Screen:

You can do perform the following tasks on the Define Edit Groups screen:

Create an Edit Group

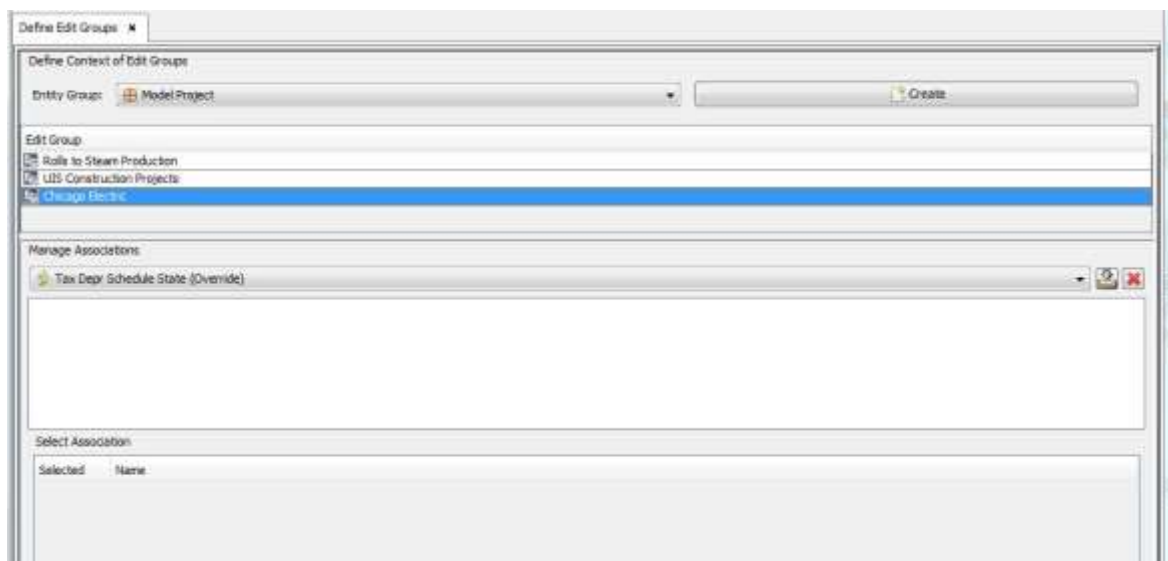
Manage an Edit Group

Delete an Edit Groups

{ XE "Creating an Edit Group" * MERGEFORMAT }{ XE "Edit Groups" * MERGEFORMAT }Create an Edit Group

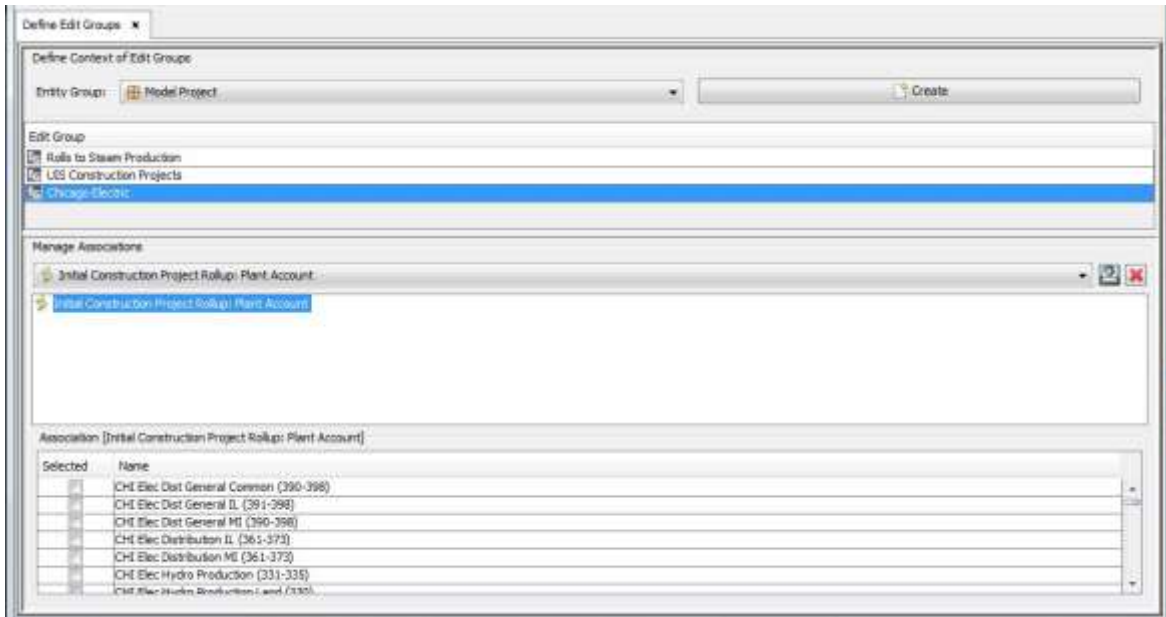
To create an edit group, follow these steps:

- Open the *DEFINE EDIT GROUPS* screen.
- Use the drop-down list to select the entity group within which you want to create an edit group. This will bring up the *ADD OBJECT* dialog. Once the edit group has been added, it will appear in the list of edit groups available for that entity group. In the screen print below, **Chicago Electric** was just created – in preparation for creating an edit group for all projects rolling to that planning entity.



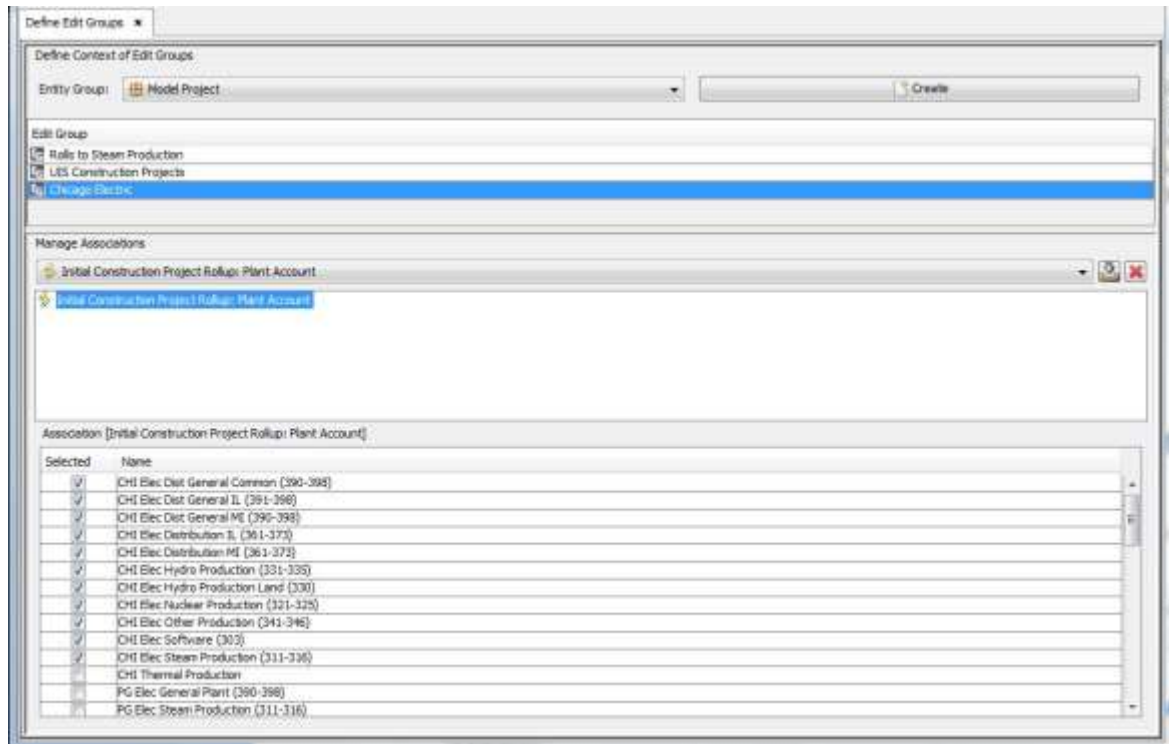
- Use the *Manage Associations* drop-down list to select the association upon which you want to build the edit group. Click **CREATE** (with the

down arrow, just to the right of the drop-down list). The selected association will appear in the *Manage Associations* region, and the members of that entity group will be listed in the bottom pane. Here, the association selected is *Plant Account*.



- In the bottom of the screen, use the check boxes to select which entities in the associated entity group you want to be in the edit group you just set up.

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- Select **FILE**, then **SAVE** from the UIPlanner menu.

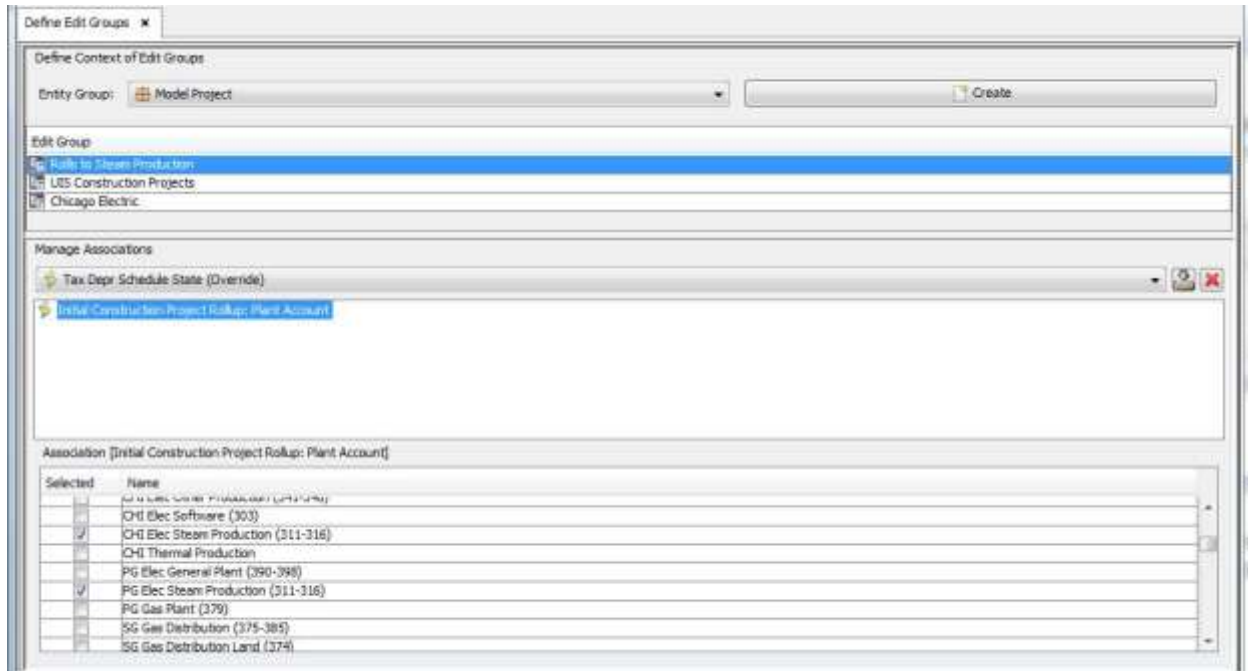
{ XE "Managing Edit Groups" * MERGEFORMAT }{ XE "Edit Groups" * MERGEFORMAT }manage an Edit Group

To manage an existing edit group, follow these steps:

- Open the **DEFINE EDIT GROUPS** screen.
- Use the drop-down list to select the applicable entity group. Its existing edit groups will be listed in the *Edit Group* region.



- Select the edit group you want to manage, and select the association that appears in the *Manage Associations* region. Note that the currently selected entities will be checked in the bottom pane. Select any additional entities you want to add, or unselect ones you want to delete from the group.



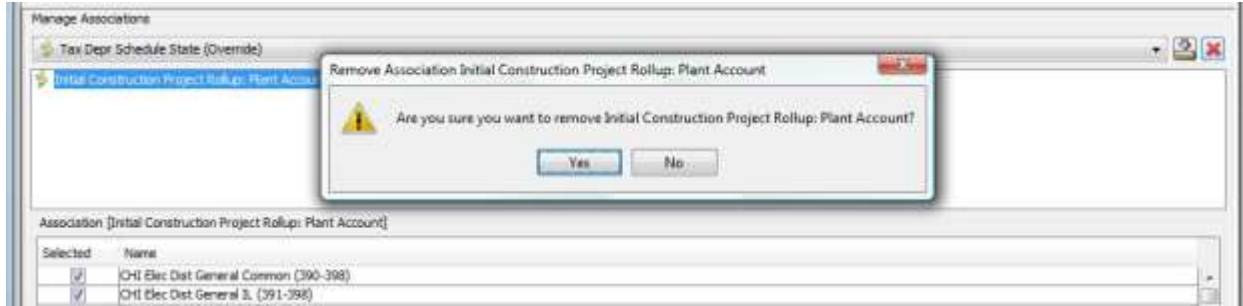
- Select **FILE**, then **SAVE** from the UIPlanner menu.

{ XE "Deleting Edit Groups" * MERGEFORMAT } { XE "Edit Groups" * MERGEFORMAT } Delete an Edit Groups

To delete an edit group, follow these steps:

- Open the **DEFINE EDIT GROUPS** screen.
- Select the association you want to delete from the edit group, and click the delete (red "X") button.
- When the **REMOVE ASSOCIATION** confirmation dialog box comes up, click **YES** to confirm the deletion or **No** to cancel the operation.

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Interface Codes

{ XE "Concept -Interface Codes" * MERGEFORMAT }{ XE "Interface Codes" * MERGEFORMAT }Concept - Interface Codes

Interface Codes are a construct in UIPlanner that facilitates importing (and exporting) data from external systems. As indicated above (see [DETAILED MODEL OVERVIEW](#)) UIPlanner integrates data from multiple systems. One of the strengths of UIPlanner is that its architecture does whatever it can to make it easy on the providing system. External systems always have their own names or codes for the entities that we need imported into UIPlanner, while in UIPlanner we may have our own naming or numbering convention. Examples include:

I

Object ID	Interface Codes	Delete	Owner Group	Visibility	Case-Name	Order	Instance-Name/Code/Order	Data Finder	Alerts
433.0 -- 433.0	Extraordinary Income					433			
434.0 -- 434.0	Extraordinary income.					434			
xxx.012 --	Goal Seek Revenue					xxx			
440.0 -- 440.0	Residential sales.					440			
442.0 -- 442.0	Commercial and industrial sales.					442			
444.0 -- 444.0	Public street and highway lighting.					444			
445.0 -- 445.0	Other sales to public authorities (Major only).					445			
446.0 -- 446.0	Sales to railroads and railways (Major only).					446			
447.0 -- 447.0	Sales for resale.					447			
448.0 -- 448.0	Interdepartmental sales.					448			
449.0 -- 449.0	Other sales (Nonmajor only).					449			
449.1 -- 449.1	Provision for rate refunds.					449			
xxx.011 --	Discontinued Operations (Income)					xxx			
450.0 -- 450.0	Forfeited discounts.					450			
451.0 -- 451.0	Miscellaneous service revenues.					451			
453.0 -- 453.0	Steam Revenue					453			
454.0 -- 454.0	Rent from electric property.					454			

In UIPlanner, we can assign the values from the external systems as Interface Mapping Codes on the corresponding entities in UIPlanner. These

then act as a translation mechanism that interacts with a file being imported. That way, the providing system can give us their existing codes, and UIPlanner does the work of mapping them to the proper entities in the model. Note that interface codes can not only map one-to-one, but also many-to-one, to allow the model to roll up values on the fly during import.

You can use Interface Mapping codes to assist in translating anything being imported. These include:

- **Entities** – Accounts, Projects, Plant Accounts, etc.
- **Reports** – identify the destination report (calculation) in UIPlanner
- **Line** – identify the destination line on the selected report
- **Attribute** – identify the attribute being populated.

While Interface Mapping Codes are most often used to facilitate importing data into UIPlanner, they have several other uses:

- **Export** – when exporting information from UIPlanner for use in an external system, you can choose to send an item's interface code instead of its text name in UIPlanner. See [MODEL EXPORT](#).
- **Line Attributes** – you can put a line's or entity's interface code as a column on a custom column set. See [REPORT COLUMNS](#) screen.

One important rule in UIPlanner regarding Interface Mapping Codes is that a given interface code can be used only ONCE in a given case. This ensures that imported items would be translated to one and only one destination. If an interface code appears twice, then that imported item would be sent to two different destinations. UIPlanner raises warning errors when you try to import a file and the Interface Case chosen has multiples. See [MODEL IMPORT - UNMAPPED ITEMS](#) for more information and the steps to take.

For information on how to create Interface Codes, see [Create and Modify Interface Codes](#).

Interface Mapping Cases

Interface codes are contained in Interface Mapping cases. Note that unlike the other case types, Interface Mapping cases are not associated with one specific scenario. Interface Mapping cases are used on the Import and Export screens and are available to any scenario at run time.

You may have multiple Interface Mapping cases, to meet specific needs, such as the GL import, Plant Data import or export to an external system. Having separate cases makes it easier to manage the different types of

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interface codes. Another reason for having multiple cases is to avoid possible duplicate interface codes within one case (not allowed in UIPlanner). For example, the text strings for account numbers (e.g. the 300 level - for the Actuals import) can also represent plant accounts (300 detail - for plant account balances). You would then set up one interface case for Actuals and another one for the Plant Actuals. This would avoid duplicate interface codes. Below is an example with several interface Mapping cases.

Planner Object	Actuals Import	Plant Data Import	Export Mapping
433.0 -- 433.0 Extraordinary Income	433		
434.0 -- 434.0 Extraordinary income.	434		
xxx.012 -- Goal Seek Revenue	xxx		
440.0 -- 440.0 Residential sales.	440		
442.0 -- 442.0 Commercial and industrial sales.	442		
444.0 -- 444.0 Public street and highway lighting.	444		
445.0 -- 445.0 Other sales to public authorities (Major only).	445		
446.0 -- 446.0 Sales to railroads and railways (Major only).	446		
447.0 -- 447.0 Sales for resale.	447		
448.0 -- 448.0 Interdepartmental sales.	448		
449.0 -- 449.0 Other sales (Nonmajor only).	449		
449.1 -- 449.1 Provision for rate refunds.	449		
xxx.011 -- Discontinued Operations (Income)	xxx		
450.0 -- 450.0 Forfeited discounts.	450		
451.0 -- 451.0 Miscellaneous service revenues.	451		
453.0 -- 453.0 Steam Revenue	453		
454.0 -- 454.0 Rent from electric property.	454		
455.0 -- 455.0 Interdepartmental costs	455		

See the **MANAGE CASES** screen for information on how to create Interface Mapping cases.

**{ XE "Create and Modify Interface Codes" *
MERGEFORMAT } { XE "Interface Codes" *
MERGEFORMAT } Create and Modify Interface Codes**

All Interface Mapping codes can be viewed and edited using the Interface Code tab. This tab lists all of the active Interface Cases. Note that there is no winner column, as these cases stand on their own. Use the Object dropdown list to select the appropriate object, and its members will be displayed down the left, with interface codes in the appropriate case column. See below.

Planner Object	Actuals Import	Plant Data Import	Export Mapping
433.0 -- 433.0 Extraordinary Income	433		
434.0 -- 434.0 Extraordinary income.	434		
xxx.012 -- Goal Seek Revenue	xxx		
440.0 -- 440.0 Residential sales.	440		
442.0 -- 442.0 Commercial and industrial sales.	442		
444.0 -- 444.0 Public street and highway lighting.	444		
445.0 -- 445.0 Other sales to public authorities (Major only).	445		
446.0 -- 446.0 Sales to railroads and railways (Major only).	446		
447.0 -- 447.0 Sales for resale.	447		
448.0 -- 448.0 Interdepartmental sales.	448		
449.0 -- 449.0 Other sales (Nonmajor only).	449		
449.1 -- 449.1 Provision for rate refunds.	449		
xxx.011 -- Discontinued Operations (Income)	xxx		
450.0 -- 450.0 Forfeited discounts.	450		
451.0 -- 451.0 Miscellaneous service revenues.	451		
453.0 -- 453.0 Steam Revenue	453		
454.0 -- 454.0 Rent from electric property.	454		
455.0 -- 455.0 Interdepartmental costs.	455		

Note - you can use a wild card character in the interface codes. This option is a checkbox on the MODEL IMPORT screen. If the incoming file codes are distinct up to a point (e.g., 4 characters 400.xxx) and after that can be any characters, instead of specifically mapping each one, you can instead use a wild card - 400%. If you put this as the interface code, you do not need to do anything else - all of the following will be accepted. 400.1, 400.12, 400.234, etc. Note however, that if any specific code is put in (e.g. if you mapped 400.12 elsewhere), that will be accepted instead of the wild card translation.

There are several ways to populate or modify Interface Mapping codes.

Individually - select the desired line (entity, line, etc.) and column (Interface Case), and just type in the desired interface code.

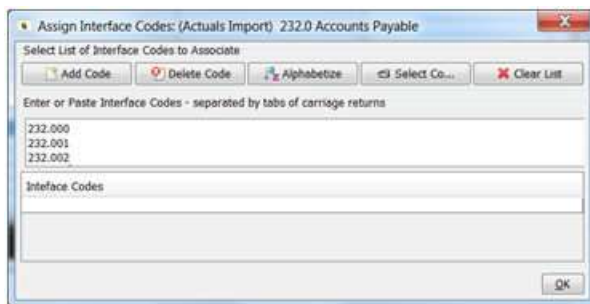
Edit in Excel - right click on the header row, and select "Edit in Excel." You can then type, paste in, or otherwise populate interface codes in the appropriate case column. Then select close and save, to save them back to the database.

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C2		=LEFT(B2,5)		
	B	C	D	E
1	Interface Codes - Account - Asset	Actuals Import	Plant Data Import	Export Mapping
2	101.0 Plant In Service	101.0		
3	102.0 -- 102.0 Plant purchased or sold.	102.0		
4	101.1 -- 101.1 Property Under Capital Leases	101.1		
5	103.0 -- 103.0 Experimental plant unclassified.	103.0		
6	104.0 -- 104.0 Plant leased to others.	104.0		
7	105.0 -- 105.0 Plant held for future use.	105.0		
8	105.1 -- 105.1 Production properties held for future use.	105.1		
9	106.0 -- 106.0 Completed construction not classified	106.0		
10	114.0 -- 114.0 Plant acquisition adjustments.	114.0		
11	108.0 -- 108.0 Accumulated Depreciation	108.0		
12	110.0 -- 110.0 Accumulated Amortization (Non-Major Utility)	110.0		
13	116.0 -- 116.0 Other Plant adjustments.	116.0		
14	117.1 -- 117.1 Gas stored-base gas.	117.1		
15	117.2 -- 117.2 System balancing gas.	117.2		
16	117.3 -- 117.3 Gas stored in reservoirs and pipelines--noncurrent.	117.3		
17	117.4 -- 117.4 Gas owed to system gas.	117.4		

Multiple Interface Codes – In many cases, you may want to map a number of entities to one destination in UIPlanner (this will roll up the input values). Whenever multiple values are saved, the Core Object Editor will say “*Edit Group*” instead of a single value. You can view or edit the individual values using the **EDIT GROUP** dialog.

- 1) Right click in the destination Item and Case, and select “Edit Group”
- 2) This will bring up the following dialog box.



3) You can type in individual interface codes to add them to the list or you can paste in a list of values. You can paste directly into the entry box, or you can browse to paste in a list from a text file.

4) You can also delete individual codes, by highlighting them and selecting “Delete Code”; you can also clear the entire list by selecting “Clear List”.

5) If you have a long list, you can alphabetize it by selecting the “ALPHABETIZE LIST” button.

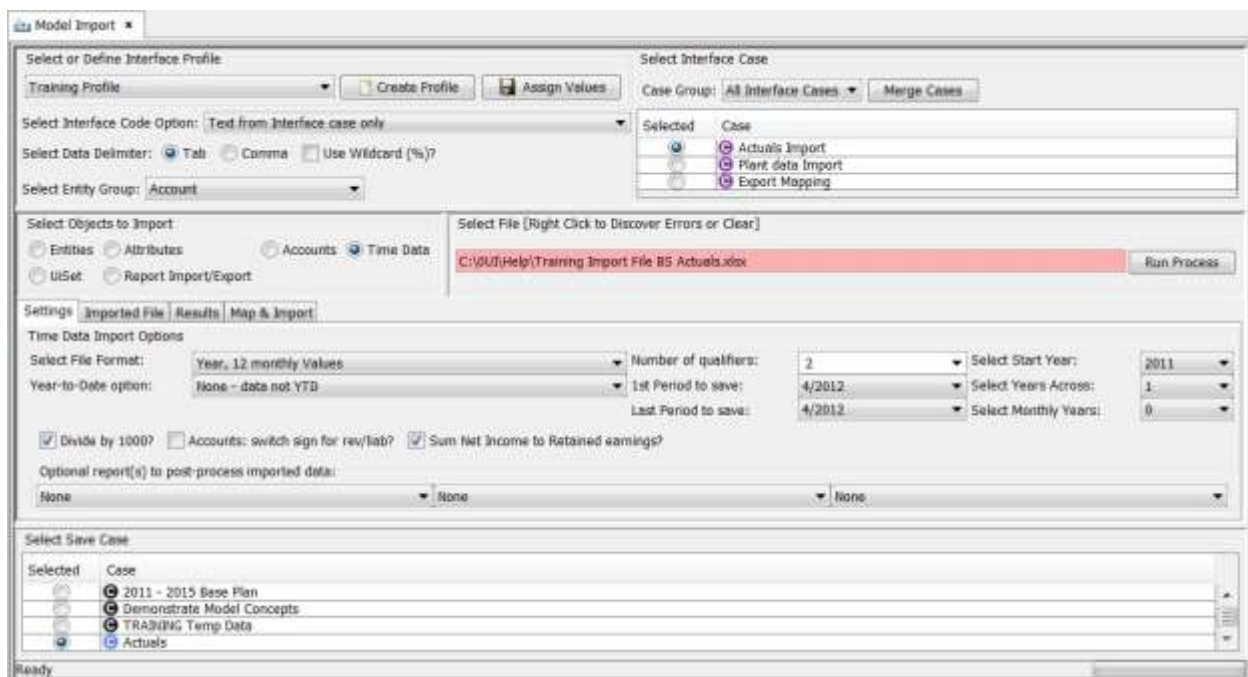
Map During Import – You can create Interface Mapping codes on the fly. You would do this when you are running an import using the MODEL IMPORT screen, and UIPlanner identifies an item that is unmapped (meaning that it is not found in the list of interface codes in the Interface Case for that

import). See [MODEL IMPORT - UNMAPPED ITEMS](#) for more information and the steps to take.

Dynamically during import – when you import entities using the Extended Entity Import, the source file is made up of Entity Names and Interface codes. The import process adds the entities and populates their interface codes at the same time. See [IMPORT ENTITIES USING EXTENDED IMPORT](#).

Model Import

{ XE "Import" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Model Import Screen



The **MODEL IMPORT** screen allows UIPlanner users to import large data files into the model. It is used generally for recurring data imports. One of the most common uses (found at every UIPlanner client) is the monthly import of actuals from the G/L or other actuals system. It is a very flexible interface, with a number of switches and settings to allow for the customizing of a wide variety of data files. A key feature of this screen is the ability to save your settings as a named profile. Each time you want to run an import, you simply need to select that profile and all the settings will be populated for you.

This screen is also used to launch custom interfaces. If UII develops a custom data interface for you, a button will appear on this screen that allows you to launch the interface.

Finally, this screen launches functionality that allows you to export/import UIPlanner reports. This allows you to have a report exported from another UIPlanner database (e.g., if you want to use a report from another client) and import it into the current scenario.

When you import a data file using this interface, UIPlanner tries to map and assign the information as best it can (using the interface codes). Wherever it cannot translate an item to an entity/report/line/account, it flags that in pink. You can resolve these mapping errors on the fly, and as they are fixed, the pink shading will be removed. Once there are no more errors, the file will show all white meaning that all data will successfully import. See below under **Mapping Errors** for more information.

Screen Layout:

The **MODEL IMPORT** screen is laid out in three regions, separated by sizing bars.

Select or Define Interface Profile – the top region of the screen is where you can elect to save the current screen settings as a named profile for later use. Also in this region are where you select which interface case to use and how to interpret the codes in the file.

Select Objects to Import – the center region of the screen is where you select the type of data you are importing, browse to find the file to import, and actually launch the import. This region also contains the various detailed settings and switches for the import. Finally, this region contains a window that displays the original imported file columns and rows along with the import results – how it translates to report lines and entities in UIPlanner. You can import:

- Entities (in one of two ways)
- Attributes
- Time Data
- Accounts
- Reports
- UISet

Select Save Case – the bottom region of the screen is where you select the destination case for saving the imported data.

See the following topics for more information on each region:

Interface Profile Region
Select Objects to Import Region
Select Save Case Region

List Of Operations Or Tasks That Are Performed With This Screen:

Using the *MODEL IMPORT* screen, you can perform the following tasks:

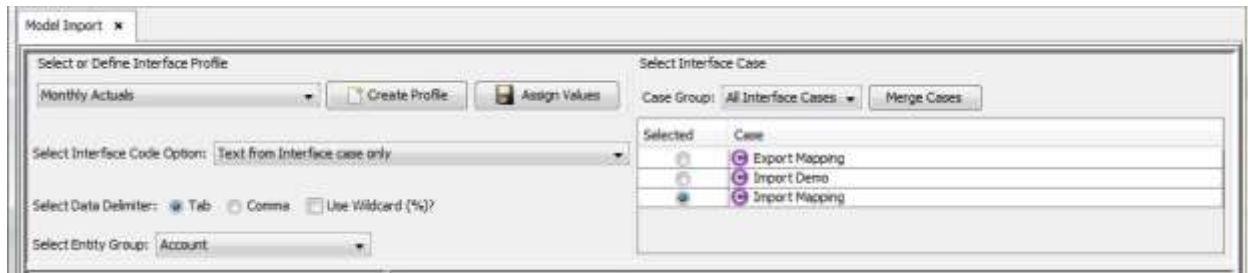
- Create an Import Profile**
- Import Time Data**
- Import Entities**
- Import Entities Using Extended Entity Import**
- Import Attributes**
- Import Accounts**
- Enable and Run a Custom Import Interface**
- Export and Import Reports**
- Import Using UISet**

What To Do if You Encounter Problems:

Mapping Errors: If an item is highlighted in pink after an import, this indicates that UIPlanner does not know how to map it to anything in the model. Please see [Troubleshooting - Model Import - Unmapped Items](#) for more information

Duplicate Interface Codes: You receive an error message indicating that in the listed interface case, you have used the same code more than once. Typically, this message is received when you open the Model Import screen. See [Troubleshooting - Model Import - Duplicate Interface Codes](#) for more information.

```
{ XE "Interface Profile Region - Model Import" \*
MERGEFORMAT }{ XE "Model Import" \* MERGEFORMAT
}Interface Profile Region - Model Import Screen
```

The following buttons/choices are found in this region of the **MODEL IMPORT** screen:

Interface Profile Options:

SELECT OR DEFINE INTERFACE PROFILE: Use this drop-down list to select a pre-defined *Interface Profile*, which will pre-populate all screen settings.

CREATE PROFILE / ASSIGN VALUES: Use these buttons to create a new profile and to save the current screen settings to it. See [Create An Import Profile](#) for more information.

Interface Options

SELECT INTERFACE CASE: Choose the case that contains the interface codes you want to use.

Note: The **MERGE CASES** button allows you to link multiple interface cases into a merged *Virtual Interface Case*. When you do an import with a merged interface case, if any of the contained actual interface cases has a matching interface code the import will pass for that item. This provides a workaround to import data in the case where your interface codes might be in multiple cases. The merge of the interface cases follows winner logic, so you should put the individual interface cases you want in the merge in the desired winner order, in case there are differences between cases. Note that this merged interface case is indeed a virtual case. It is created only at import time and not saved to the database

SELECT INTERFACE CODE OPTION: This drop-down list allows you to choose how UIPlanner will interpret the codes in the file. Most commonly you will use interface codes. However you might import files that already contain UIPlanner object IDs, or you do not have interface codes and want to just rely on names. The options are:

- *Text from Interface Case only*
- *Interface Case then match name*
- *Data has UIPlanner Object ID only*
- *Text from Case then Object ID*
- *Object ID then text from case*

The name-related match selections work only for entities and accounts. Reports and lines must have an interface code.

USE WILDCARD(%): If you turn this option on, the model will pay attention to wildcards in the interface codes. For example, if you have defined an account interface code as 401%, imported data of 401, 401.1 and 401.112 will all be interpreted as 401.

Data Options

SELECT DATA DELIMITER: You can choose either tab or comma delimited.

Entity Group Options

SELECT ENTITY GROUP: If you are importing entities either with the standard Entity Import or the Extended Entity Import, use this drop-down list to select the destination entity group.

{ XE "Select Objects To Import - Model Import Screen" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Select Objects To Import - Model Import Screen

The following buttons/choices are found in this region of the **MODEL IMPORT** screen:

Objects to Import

SELECT OBJECTS TO IMPORT: Use the radio buttons to choose what you are importing. Note that if you have enabled a custom interface or the *Extended Entity Import* they will appear as additional options. The choices are:

- [Entities](#)
- [Entities Using Extended Import](#)

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- [Attributes](#)
- [Accounts](#)
- [Time Data](#)
- [UISet](#)
- [Reports](#)

Select File

SELECT FILE: Use this text box to find the data file you are going to import.

Run Process/Save

RUN PROCESS: Once you have located the file to import, click **RUN PROCESS** to run the file through the import process using the chosen settings.

SAVE: After you have reviewed the data and how it will be translated, click **SAVE** to actually save it to the database.

Settings / Information Panel

This tab is where you set some of the detailed settings for the import. Note that many of the settings are optional, e.g., the time period settings are not needed depending upon the file format.

SELECT FILE FORMAT: Use this drop-down list to select what the data looks like on each row in the imported file.

- Year, 12 monthly values – one column with the year, and then 12 monthly values
- Year, monthly and annual values – columns for the year and then 12 months and an annual total
- Year, month, value – vertical file with year
- Values across – data in months, for any number of years
- Monte Carlo – data formatted for Monte Carlo run
- Daily Cash Actuals – used only in Daily Cash module

YEAR TO DATE OPTION: This drop-down list has options that allow you to take data that is year-to-date and convert it to monthly data in UIPlanner. This is typically used when importing G/L Actuals.

- None – data not YTD. The default - use if you are importing monthly data
- Prior YTD values are in import file – if each monthly column contains YTD values
- Read and Calc Prior YTD from Target Case – this option looks at the previous columns and adds them across to calculate the prior YTD

amounts, then uses the YTD imported amount to back into current month

- Ret Earn Only Read and Calc Prior Net Income from Target Case – same as the previous, but it does it ONLY for the Net Income entry

NUMBER OF QUALIFIERS: Select how many qualifiers the import file has.

- 2 - G/L data generally has 2 (Planning Entity and Account)
- 3 – most report level data has 3 (Entity, Report, Line)
- 4 – 2-d Reports (Primary Entity, Secondary Entity, Report, Line)

SELECT START YEAR/ SELECT YEARS ACROSS/SELECT MONTHLY

YEARS: Use these three drop-down lists to tell the model how the data is laid out if the year is not one of the columns.

FIRST PERIOD TO SAVE / LAST PERIOD TO SAVE: Use these two drop-down lists if you want to save only certain month(s) of the data. The default is to save all periods (the first option). If you want to save only one specific month, select that in both drop-down lists.

DIVIDE BY 1000?: Check this box if you need to divide the imported data by 1000 (e.g., if the imported data is in dollars, but data is stored in UIPlanner in thousands).

ACCOUNTS: SWITCH SIGN FOR REV/LIAB?: Check this box if you want to automatically flip signs upon storing the data. UIPlanner stores liabilities and revenues as negative numbers (like all G/Ls). If you are populating actuals from a reporting system rather than a true G/L, it is possible that all amounts are shown as positive. You then need to flip signs for liabilities/revenues. You generally do not need to use this option if you are importing a file from a G/L

SUM NET INCOME TO RETAINED EARNINGS?: Check this box if you want UIPlanner to calculate the current month net income/loss and post it to the equity account. Most G/Ls only close net income at the end of the year. This box is usually enabled for importing actuals.

OPTIONAL REPORT(S) TO POST-PROCESS IMPORTED DATA: These three drop-down lists are used if you want UIPlanner to run selected reports while it is doing the import. These reports will use the special Interface Only set of functions.

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Information Panel

Once you have run an import, this area has tabs that show you the imported file as well as how it will be translated to the UIPlanner structures.

IMPORTED FILE: This region will bring up a grid showing the imported file. Below is an example:

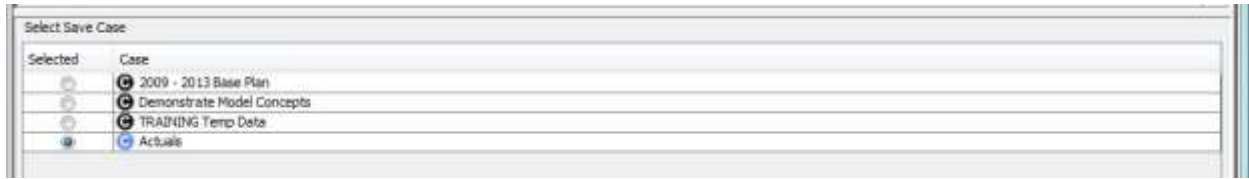
Line #	Qual 1	Qual 2	Year	Month	Value
1	136	SWC	2008	12	0
2	131	SWC	2008	12	114
3	144	SWC	2008	12	-4389
4	146	SWC	2008	12	0
5	142	SWC	2008	12	67001
6	173	SWC	2008	12	45176
7	154	SWC	2008	12	13667
8	164	SWC	2008	12	20156
9	151	SWC	2008	12	12569
10	158	SWC	2008	12	0
11	182	SWC	2008	12	0
12	191	SWC	2008	12	0
13	165	SWC	2008	12	7120

Results

This region will show how the imported file was translated, with the original columns plus what they were translated to in UIPlanner. Below is an example for the same file above:

Maps to Report	Maps to Line/Account	Maps to Entity (1)	Maps to Entity (2)	Line #	Qual 1	Qual 2	Year	Month	Value
	115.0 Accumulated provision for amortization of electric...	SWEGCO Common		22	115	SWC	2008	12	0
	117.3 Gas stored in reservoirs and pipelines-noncurrent.	SWEGCO Common		23	117.3	SWC	2008	12	0
	107.0 CWSP	SWEGCO Common		24	107	SWC	2008	12	35124
	123.0 Investment in associated companies.	SWEGCO Common		25	123	SWC	2008	12	0
	181.0 Unamortized debt expense.	SWEGCO Common		26	181	SWC	2008	12	0
	186.0 Miscellaneous deferred debits.	SWEGCO Common		27	186	SWC	2008	12	32689
	232.0 Accounts Payable.	SWEGCO Common		28	232	SWC	2008	12	-100217
	234.0 Accounts payable to associated companies.	SWEGCO Common		29	234	SWC	2008	12	0
	237.0 Interest accrued.	SWEGCO Common		30	237	SWC	2008	12	-9800
	229.0 Accumulated provision for rate refunds.	SWEGCO Common		31	229	SWC	2008	12	0
	242.0 Miscellaneous current and accrued liabilities.	SWEGCO Common		32	242	SWC	2008	12	-15050
	238.0 Dividends declared.	SWEGCO Common		33	238	SWC	2008	12	0

**{ XE "Select Save Case Region - Model Import Screen"
 * MERGEFORMAT } { XE "Model Import" *
 MERGEFORMAT } Select Save Case Region - Model Import
 Screen**



The bottom region of the **MODEL IMPORT** screen lists the available cases for storing the imported data. The cases listed here will change depending upon the type of data being imported. If you are importing time data, all data cases will be listed (overlay, incremental and actuals).

{ XE "Import Profile" * MERGEFORMAT }{ XE "How To Create an Import Profile" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Create an Import Profile

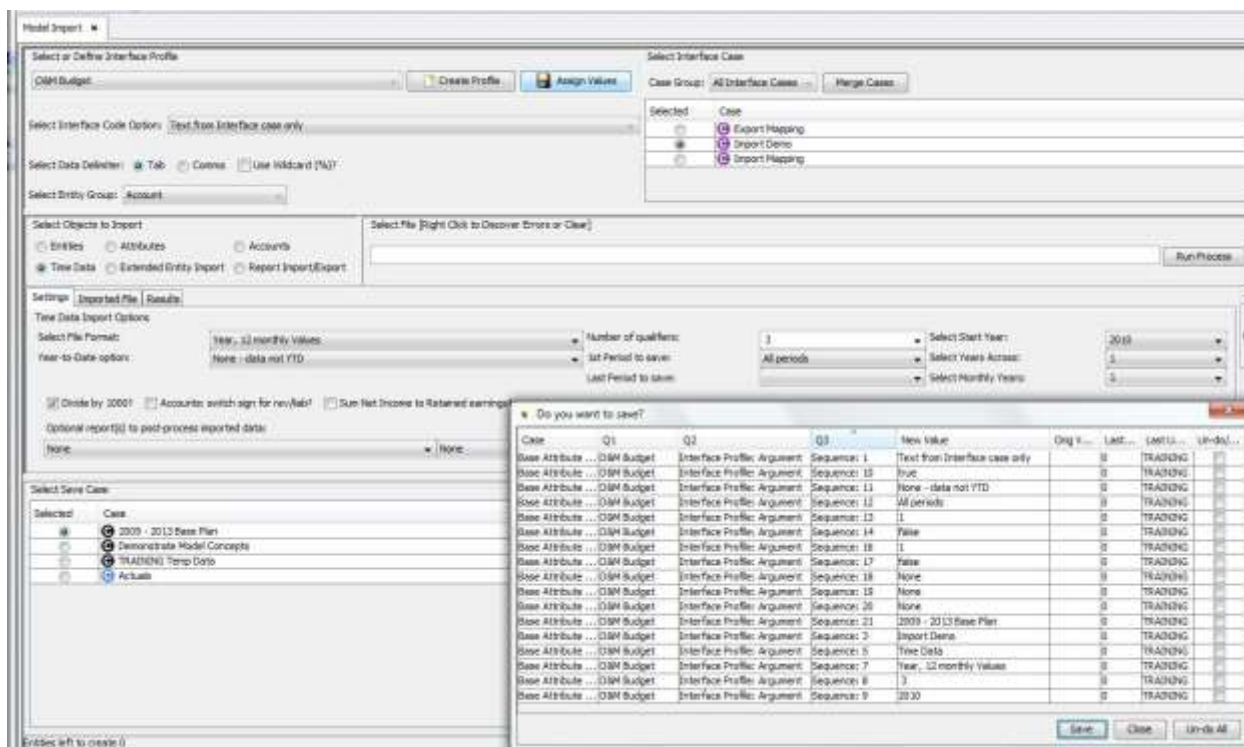
The **MODEL IMPORT** screen is used for recurring data imports. A key feature of this screen is the ability to save your settings as a named profile. Then the next time you want to run an import, you only need to select that profile, and all of the settings will be populated for you.

To create an import profile:

- 1) Open the **MODEL IMPORT** screen.
- 2) Pick a specific recurring import that you want to set up a profile for
 - a. Configure the switches and settings appropriately.
 - b. Do a test import of the data to make sure they are correct.
- 3) Click **CREATE**. This will bring up the **ADD OBJECT** Dialog Box.
 - a. Enter the name for this profile.
- 4) Save the settings.
 - a. Clear the *Import File name* box, since you do not need that as part of the import profile. If you leave it in the profile, you will get an error message when you select the profile if it can't find that file. This is not fatal, but distracting.
 - b. Click **ASSIGN VALUES**. This will save all of these settings.
- 5) Select **File, Save** from the UIPlanner menu.
- 6) Test the settings by changing to another profile and then re-select this one. Make sure the settings look correct.

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Below is a sample screen print:



Note that even though you save the settings in an import profile, in some cases you will still need to change one or two settings when you call up the profile. Examples:

- If the current scenario does not contain the same destination case. The profile will default to the first data case in the list.
- If you want to save only certain months, e.g., you import an actuals file containing all months of the year but each time you only want to save the most recent month. You need to change the *1ST PERIOD TO SAVE* and *LAST PERIOD TO SAVE* each month.

{ XE "How To Import Time Data" * MERGEFORMAT }{ XE "Time Data" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Import Time Data

By far the most common use of the *MODEL IMPORT* screen is to import time data into the model. Types of time data include:

- Monthly Actuals for Income Statement and Balance Sheet

- Capital and O&M Budgets
- Fuel and Purchased Power Forecasts

These data files are needed on a recurring basis, and while users could cut and paste the data into the *TIME DATA EDITOR*, the *MODEL IMPORT* screen provides the capability to click a button and have the model do the importing and translating to where the data should be stored. Essentially, to run an import of time data:

- The file must be either tab or comma delimited
- You need the first 2-4 columns "qualifiers" that contain the data elements to map into the Model.
 - G/L data generally has 2 qualifiers (Planning Entity and Account)
 - Most report level data has 3 qualifiers (Entity, Report, Line)
 - 2-d Reports have 4 qualifiers (Primary Entity, Secondary Entity, Report, Line)
- The values must be in one of the specified formats
 - Year, 12 monthly values – one column for the year, and then 12 monthly values
 - Year, monthly and annual values – columns for the year and then 12 months and an annual total
 - Year, month, value – year and month in each row
 - Values across – data in months, for any number of years

Note that UIPlanner has a very important and helpful concept of Interface Codes for mapping outside elements into UIPlanner structures. Therefore in these columns we can generally just take the values prepared by the outside system. As long as we have defined the interface codes for the destination structures in UIPlanner, the model will do the translation.

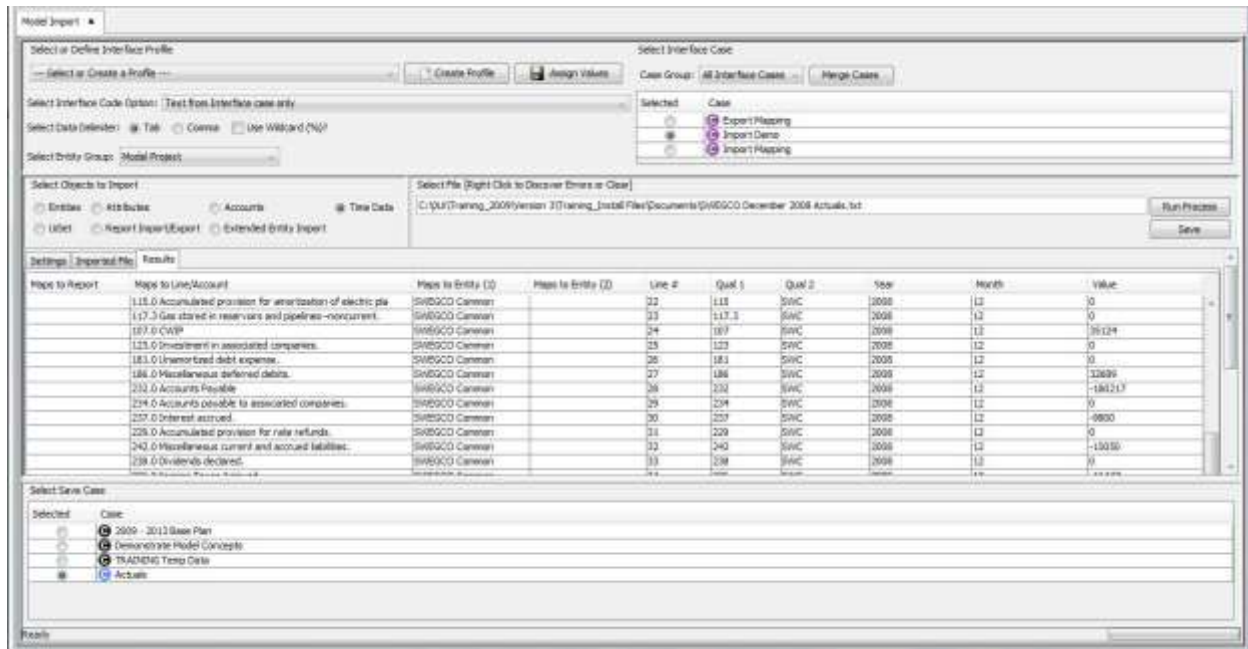
The steps to follow to import time data follow:

- 1) Open the *MODEL IMPORT* screen.
- 2) Select the *Import Profile* (if one exists), or configure the import individually, as follows:
- 3) Select the appropriate interface case and interface options.
- 4) Select "*Time Data*" from the *Select Objects to Import* region.
- 5) Set the required settings:
 - a. File Format,
 - b. Start Year, Years Across, Monthly Years (if applicable)
 - c. Number of Qualifiers
 - d. Periods to Save (if applicable)
 - e. Divide by 1000 (if applicable)

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- f. Year-to-date option – set this if the data you are given is cumulative rather than monthly
- 6) If you are importing actuals, into the planning ledger, there are some additional settings (See [Select Objects to Import](#) for details on these options.)
- Year-to-date option – set this if the data you are given is cumulative rather than monthly (most commonly for G/L data).
 - Accounts: switch sign.
 - Sum Net Income to Retained Earnings.
- 7) Click **RUN PROCESS**.
- 8) Review the data to be saved. Note and confirm the *Destination Case*, *Report/Account*, and the time periods to be saved.
- 9) Click **SAVE**.

Below is an example of settings for importing a time data file (for G/L Actuals), along with the results.



SOME IMPORTANT NOTES

- General format - If the file you are being given is created initially from an Excel file that is saved as text, make certain that the data is first formatted as General. Excel sometimes puts quotation marks around dollar amounts
- Label row – If you want to have the first row contain column labels, etc. prefix the row with "//". When UIPlanner sees this character string, it interprets the entire row as comments and does not try to decode or import it.

{ XE "Import Entities" * MERGEFORMAT }{ XE "How To Import Entities" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Import Entities

Importing Entities into UIPlanner works as follows. UIPlanner internally identifies everything with an Object ID, and the names/descriptions are merely attributes (see the **CORE OBJECT EDITOR**). Thus when you import lists of entities, UIPlanner will just add them to the existing list, with the description you give. Below is a layout of the file format plus some sample rows.

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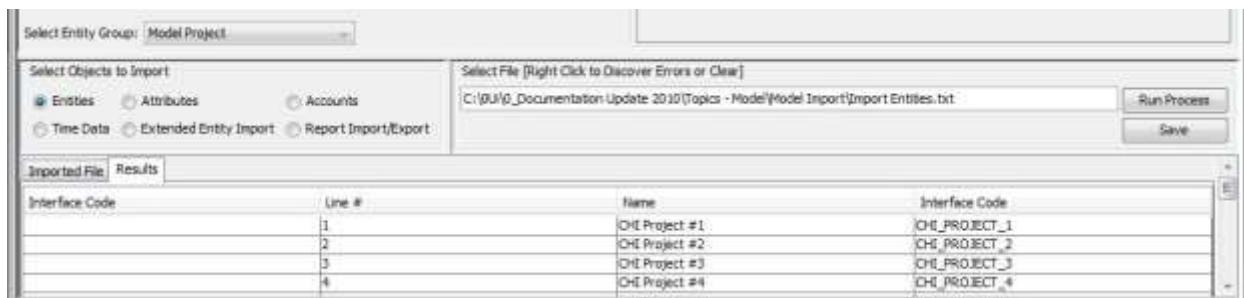
COLUMN 1	COLUMN 2
Entity Name	Entity Interface Code
CHI Elec Dist General Common Blankets	CHI_EL_DS_CM_BL
CHI Elec Dist General IL Blankets	CHI_EL_DS_GN_IL_BL
CHI Elec Dist General MI Blankets	CHI_EL_DS_GN_MI_BL
KY Gas Dist General Blankets	KY_GS_DS_BL
KY Gas Dist Meters Blankets	KY_GS_DS_MT_BL

If you are given larger lists of entities with both new entities and ones that should already be in UIPlanner, you should consider using the Extended Entity Import.

To import a list of entities:

- 1) Open the **MODEL IMPORT** screen.
- 2) Select the appropriate interface case.
- 3) Select *Entities* from the *Select Objects to Import* region.
- 4) Browse to find the file.
- 5) Click **RUN PROCESS**. This will bring up the list of entities to be created (New Entity), plus their values.
- 6) Click **SAVE**.

Below is an example of several entities imported into the *Model Project* entity group. Note that they will be added to the list, regardless of whether a similarly named project may already exist.



{ XE "How To Import Entites Using Extended Entity Import" * MERGEFORMAT }{ XE "Import Entities" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Import Entities Using Extended Import

Because some clients want to import lists of entities into an existing entity group but not have to identify which are new entities, there is a special type of import that can take a list of entities and only add the new ones. This interface setting brings in a list of entities/interface codes from a file to add to a chosen entity group. You just need to give it a tab delimited file of Interface codes and descriptions. See below:

DESCRIPTION	INTERFACE CODE
CHI 4.50% FMB, due 5/15/13	CHI 4.50% FMB
CHI 3.75% FMB, due 5/31/24	CHI 3.75% FMB
CHI 4.25% PCB, due 12/31/25	CHI 4.25% PCB
CHI 5.5% FMB 11/1/35	CHI 5.5% FMB
CHI 5.5% Senior Notes, due 5/ 15/17	CHI 5.5% Senior
CHI 5.625% PCB, due 5/15/33	CHI 5.625% PCB
CHI 6.2% Senior Notes, due 4/1/33	CHI 6.2% Senior
CHI 6.5% FMB, due 11/1/36	CHI 6.5% FMB
CHI 6.50% FMB, due 6/1/28	CHI 6.50% FMB
CHI 6.625% FMB, due 11/15/20	CHI 6.625% FMB

When you run the import, it processes each row as follows:

1. Identifies the entity via the interface code (the first column).
2. If it finds a match (i.e. that entity already exists), it just updates the description from the second column.
3. If it does not find a match (i.e. that entity is assumed not to already exist), it creates the entity and assigns it the interface code from the second column.
4. There is a third column on the pending import display which is reserved for an existing entity that matches the interface code in the import file. The third column is blank if the interface code has no existing matches. It glows pink if it has a match, and that match exists in a different entity group than the one being updated. In this event it will still just update the entity name (since duplicate interface codes in the same interface case is considered an error condition that will break other aspects of interface functionality).
5. Finally, it will write a file to the user's temp directory which will contain the name of any entities that existed prior to the interface execution but which were not listed in the import file.

Note regarding cases - The entity name, order and visibility are stored in the Base Attribute case, while the Interface Code is stored into the Interface case selected in the top region.

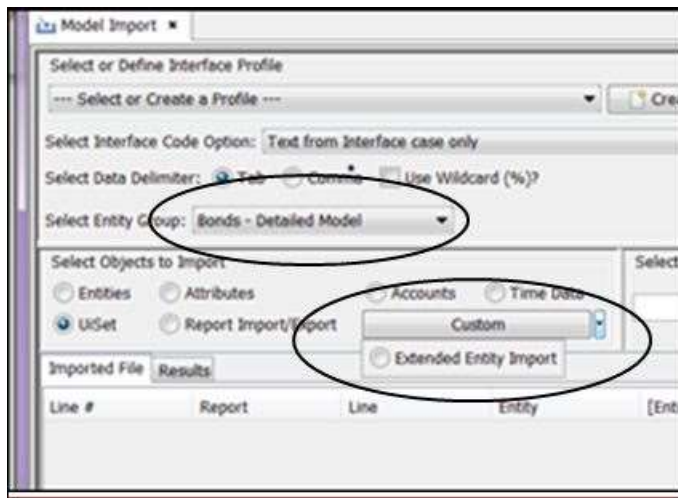
To import a list of entities using the Extended Entity Import:

1. Open the **MODEL IMPORT** screen.
2. Select the *Import Profile* (if one exists), or configure the import individually, as follows
3. Select the appropriate Interface case

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4. Select "*Extended Entity Import*" from the drop-down list in the *Select Objects to Import* region. See below.

5. Select the Entity Group you are importing these entities into. This is a *VERY* important step, because the drop-down list has the first entity group already populated (e.g., with Planning Entity). If you leave it selected, your entities will be created in THAT entity group, which may not be the one you intended

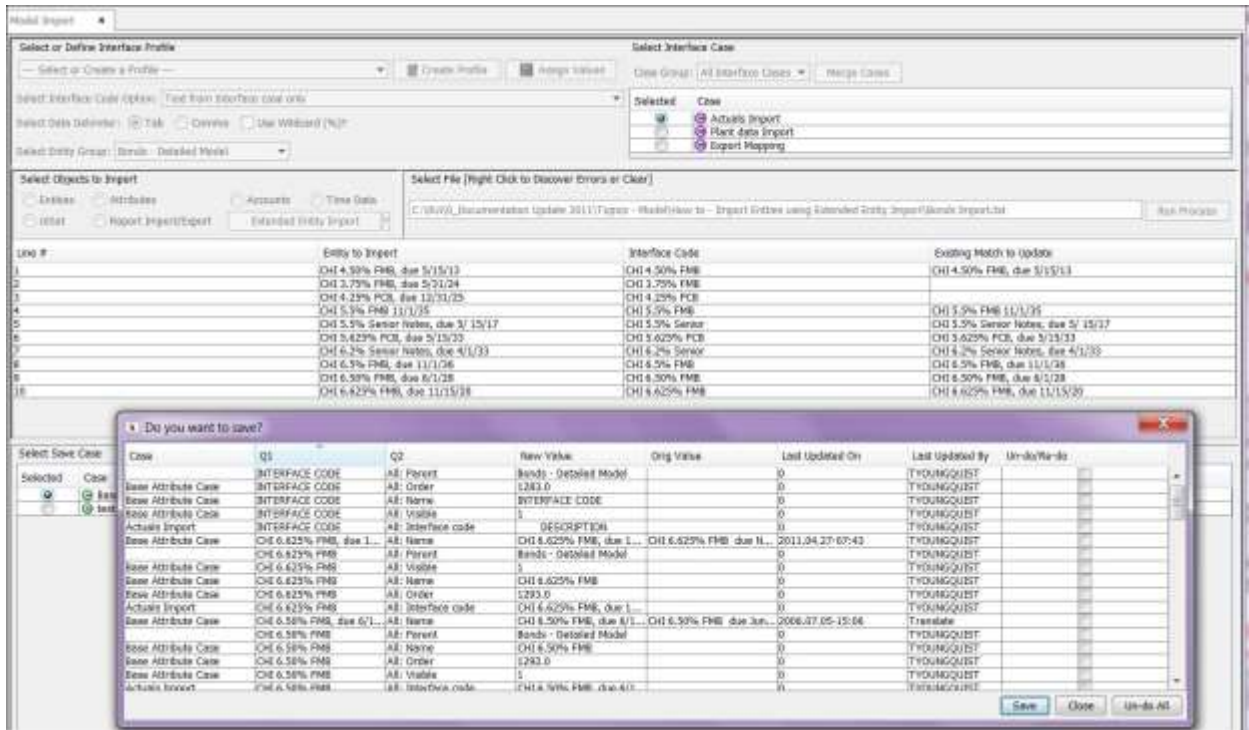


6. Browse to find the file

7. Click **RUN PROCESS** This will bring up the list of entities to be created (New Entity), plus their values. For pre-existing entities the dialog will show the new description.

8. Click **SAVE**.

Below is an example of several entities imported using the *Extended Entity Import*. Note that even though the imported file contained the full list of entities, only the several new entities were actually created. For all pre-existing entities just the descriptions were updated.



After the import is done, the model will bring up a dialog listing any entities that were already in the model entity group but were NOT in the import file. The reason for this is that usually clients import complete lists of the active entities in the group. This dialog may help identify entities that are defunct or obsolete, and can be hidden or deleted. See below.

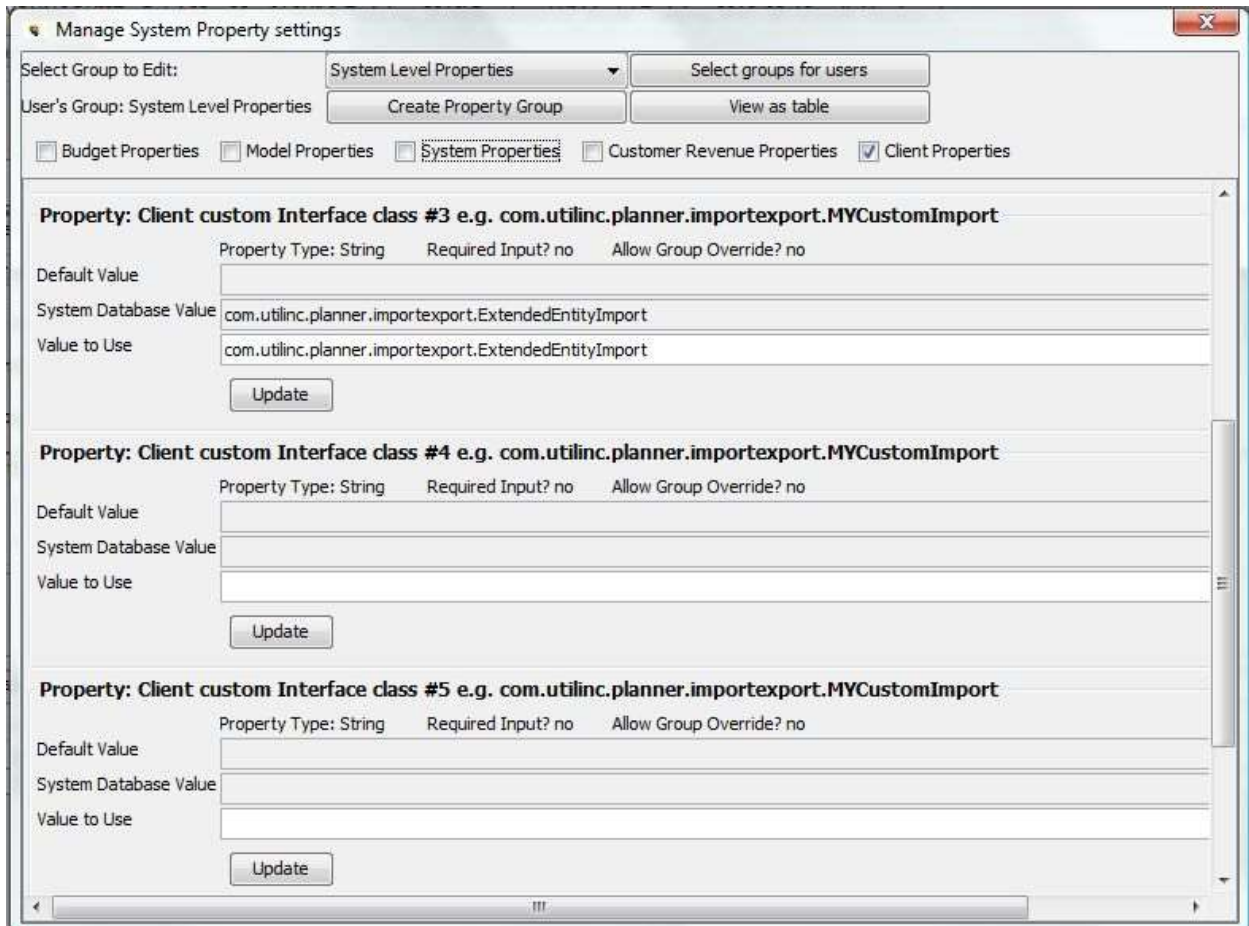
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```

20120125211311_entity_import.txt - Notepad
File Edit Format View Help
Bonds - Detailed Model not in File.=====
CHI 6% PCB due Jan 1, 2009      558
CHI 6.75% FMB due Nov 1, 2037  509
CHI 6.875% FMB due Dec. 1, 2095    523
CHI 7.25% FMB due Aug. 1, 2024  516
CHI 9.47% Debenture due March 1, 2008  565
CHI 5.75% Due Sep 1, 2040 (Planned)  30610650
CHI 5.00% FMB Due July 1, 2042 (Planned)  30619452
Corp 5.5% Senior Notes due Dec. 1, 2010 467
Corp 5.875% Senior Notes due April 1, 2016  453
Corp 6% FMB due Aug 1, 2020    20066003
Corp 6.2% Senior Notes due April 1, 2023  474
Corp 6.5% Senior Notes due April 1, 2013  460
Prairie Gen 5.65% Due Jan. 1, 2025    30621651
Prairie Gen 5.60% FMB due Sept. 15, 2033  635
SG 4.75% Note due Nov 1, 2020    656
SG 5.20% Debenture (unsecured) due Dec. 1, 2013  621
SG 6.25% Debenture (unsecured) due Nov. 1, 2035  628
SG 6.375% Note due Nov. 1, 2032    614
SWEG 5% FMB due Feb 1, 2013    572
SWEG 5.5% Debenture (unsecured) due Nov. 1, 2014  607
SWEG 6.00% FMB due Sept. 1, 2012    586
SWEG 6.25% FMB due March 1, 2038    579
SWEG 6.36% Other LTD due Feb 1, 2022  593
SWEG 4.5% FMB Due Feb. 1, 2039  30624280
SWEG 6.50% FMB due Jan 15, 2032    600
C|

```

The Extended Entity Import is enabled by setting a ***PLANNER PROPERTY*** (Client Custom Interface class), found under CLIENT PROPERTIES. Set it to **com.utilinc.planner.importexport.ExtendedEntityImport**. See below.



{ XE "How To Import Attributes" * MERGEFORMAT }{ XE "Import Attributes" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }{ XE "Attributes" * MERGEFORMAT }Import Attributes

The import of attributes is used to populate various attributes of UIPlanner entities from an external text file. Below is a layout of the required file format plus some sample rows.

COLUMN 1	COLUMN 2	COLUMN 3
Entity or Account Interface Code	Attribute Definition Interface Code	Attribute Value Interface Code
CHI_EL_DS_CM_BL	PLANT_ACCOUNT	CH_EL_DS_CM_390-398
CHI_EL_DS_CM_BL	IN_SERVICE_DATE	201006
CHI_EL_DS_GN_IL_BL	PLANT_ACCOUNT	CH_EL_DS_GN_IL_391-398
CHI_EL_DS_GN_IL_BL	IN_SERVICE_DATE	201212

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When you run the import (see **Model Import** for more information), it processes each row as follows.

1. Identifies the entity via the interface code (the first column).
2. Identifies which attribute this row is for (the second column).
3. If those match, it populates the value (from the third column).

Following are the steps to take to import a text file of attributes:

1. Be certain that interface codes are set up (see **CORE OBJECT EDITOR**) for:
 - a. Entities
 - b. Attribute Definitions
2. Select the *Import Profile* (if one exists) or configure the import individually, as follows.
3. Select *Attributes* from the *Select Objects to Import* region.
4. Confirm the destination Attribute case.
5. Browse to find file.
6. Check any import errors (in pink). Using the mapping widget, map them to the appropriate entity.
7. Save the data.

Below is an example of a source file and the final mapping to UIPlanner entities/attributes.

The screenshot shows the 'Import Attributes' dialog box. The 'Imported File' is 'C:\04\0\Documentation Update 2010\Topics - Model\Model Import\Import Attributes.txt'. The 'Results' table is as follows:

Line #	Entity Interface Code	Attribute Definition Interface Code	Attribute Value Interface Code
1	CH_E_DS_CH_BL	PLANT_ACCOUNT	CH_E_DS_CH_290-298
2	CH_E_DS_CH_BL	IN_SERVICE_DATE	201005
3	CH_E_DS_GH_BL	PLANT_ACCOUNT	CH_E_DS_GH_BL_291-298
4	CH_E_DS_GH_BL	IN_SERVICE_DATE	201212

The screenshot shows the 'Import Attributes' dialog box with a mapping table. The 'Imported File' is 'C:\04\0\Documentation Update 2010\Topics - Model\Model Import\Import Attributes.txt'. The 'Results' table is as follows:

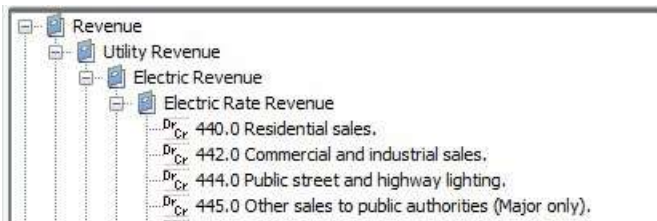
Maps to Entity	Maps to Attribute	Line #	Entity Interface Code	Attribute Definition Interface Code	Attribute Value Interface Code
CH Elec Dist General Common Blankets	Initial Construction Project Rankup: Plant Account	1	CH_E_DS_CH_BL	PLANT_ACCOUNT	CH_E_DS_CH_290-298
CH Elec Dist General Common Blankets	In Service Date (YYYYMM)	2	CH_E_DS_CH_BL	IN_SERVICE_DATE	201005
CH Elec Dist General IL Blankets	Initial Construction Project Rankup: Plant Account	3	CH_E_DS_GH_BL	PLANT_ACCOUNT	CH_E_DS_GH_BL_291-298
CH Elec Dist General IL Blankets	In Service Date (YYYYMM)	4	CH_E_DS_GH_BL	IN_SERVICE_DATE	201212

{ XE "Import Accounts" * MERGEFORMAT }{ XE "How To Import Accounts" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }{ XE "Account" * MERGEFORMAT }Import Accounts

The import of accounts allows you to import a file to build accounts in the planning ledger along with their rollup hierarchy. Note that this process is generally done in the initial setup of UIPlanner, in order to populate the Planning Ledger account structure, rather than entering it manually through the **MANAGE LEDGER** screen. Below is a layout of the required file format plus some sample rows. Note that it is a normalized view of the rollup hierarchy, with each row also identifying its parent.

COLUMN 1	COLUMN 2	COLUMN 3
Account Interface Code	Account Description to Assign	Account Parent Interface Code to Match
Revenue	Revenue	
Utility Revenue	Utility Revenue	Revenue
Electric Revenue	Electric Revenue	Utility Revenue
Electric Rate Revenue	Electric Rate Revenue	Electric Revenue
440.0	440.0 Residential sales.	Electric Rate Revenue
442.0	442.0 Commercial and industrial sales.	Electric Rate Revenue
444.0	444.0 Public street and highway lighting.	Electric Rate Revenue
445.0	445.0 Other sales to public authorities (Major only).	Electric Rate Revenue

The above import file would produce the following segment of the UIPlanner Planning Ledger:



When you run the import, it processes each row and builds the individual accounts and rollup structure. Following are the steps to take to import a text file of accounts.

1. Open the **MODEL IMPORT** screen.
2. Build the required import file, and confirm proper file format.
3. Select *Accounts* from the *Select Objects to Import* region.
4. Confirm the destination case is the Base Attribute case.
5. Browse to find file.
6. Check any import errors (in pink).
7. Save the data.

{ XE "Import Interface" * MERGEFORMAT }{ XE "How To Enable and Use a Custom Import Interface" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Enable and use a Custom Import Interface

While the *MODEL IMPORT* screen has a large amount of flexibility, at various UIPlanner implementations there have been requests to develop customized interfaces for importing data. Examples of these custom interfaces include:

- Importing capital projects along with attributes and performing preprocessing of AFUDC and closes to plant prior to summarization to Plant Account
- Interface panel that allows importing current month data from several systems at once, and performing some derivation of account and allocation methodology

All UIPlanner custom interfaces are part of the core Java code, so UIPlanner can still work as a single set of common code across all clients. However, they are enabled on a client by client basis by setting a *PLANNER PROPERTY* (Client Custom Interface class), found under Client Properties. See below for an example.

If this Planner Property is not set, the button does not appear. Thus, clients without these custom interfaces never see the buttons to enable them.

{ XE "Import Reports" * MERGEFORMAT }{ XE "Export Reports" * MERGEFORMAT }{ XE "How To Export and Import Reports" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Export and Import Reports

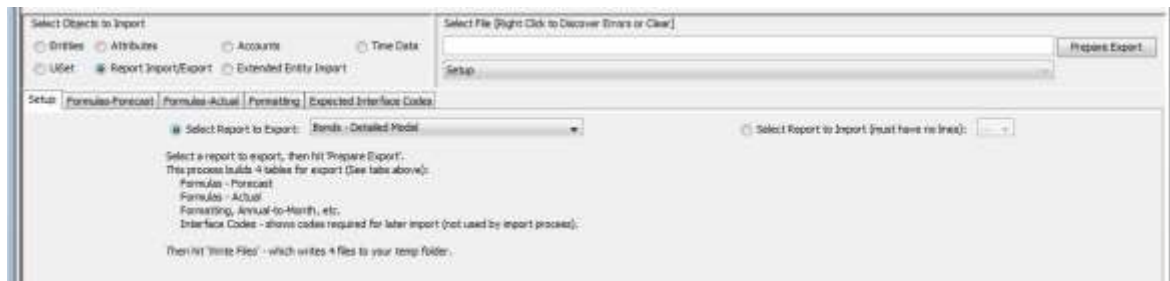
The ***MODEL IMPORT*** screen allows you to export a report from one UIPlanner database/installation and import it into another. This can save significant time in that it eliminates the need to reenter the lines, formulas, etc. Note that you still need to review the report in detail to ensure that all of the functions were copied over appropriately, along with their parameters. In particular, ***ATTRIBUTES***, ***COPY FROMS*** and ***ROLLUPS*** should be reviewed, as most likely the same entities or reports may not exist in both UIPlanner instances. Nevertheless, the *Export/Import report* functionality can save a significant amount of time just in preserving the mathematical formulas.

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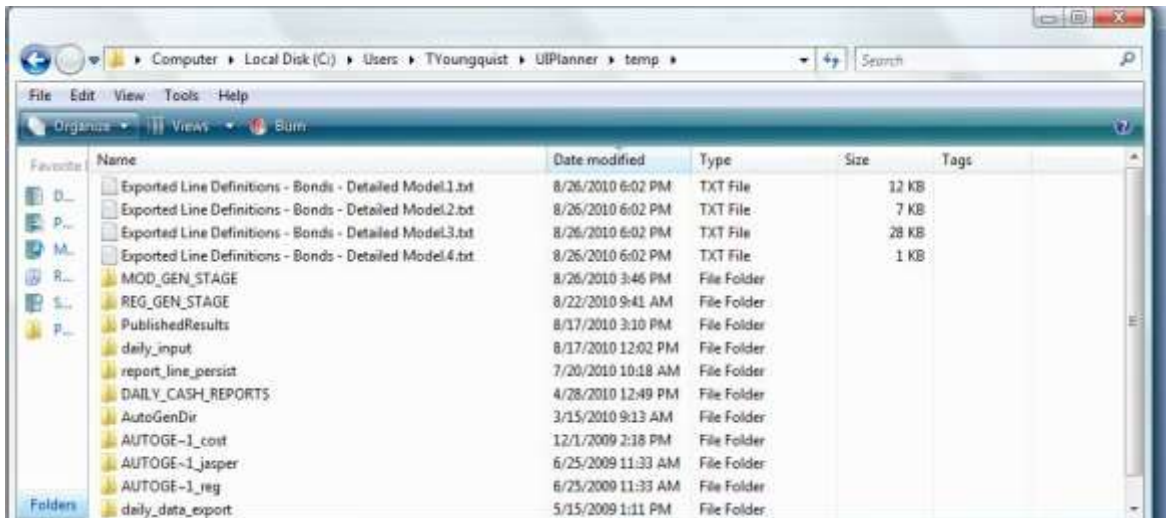
You first need to export the report (sent out in a series of files) from the source implementation and then open the destination implementation and import the report (files). Both of these actions are launched from the **MODEL IMPORT** screen in the respective implementations. For example, if another UIPlanner client has developed a Derivatives report and it is approved for them to send you the logic, you would have them (or UII) export the report and send the files to you. You would then import the files into your UIPlanner implementation.

EXPORT REPORT (SOURCE)

1. Open the **MODEL IMPORT** screen.
2. Select *Report Export/Import* from the *Select Objects to Import* region.
3. Select the report you want to export from the *Report to Export* drop-down list.



4. Click **PREPARE EXPORT**.
5. When the **WRITE FILES** button appears, select it. This will write four text files into your Users\xxxx\UIPlanner\Temp folder. These files contain the underlying information for the report, essentially by column:
 - a. Formulas – Forecast
 - b. Formulas – Actual
 - c. Formatting
 - d. Interface codes



6. Copy all of the text files into another directory to use to import later. You need to have a copy elsewhere, because UIPlanner empties out the 'temp' folder upon startup.

IMPORT REPORT (DESTINATION)

To import a report, you need to have a blank report ready – one with no lines at all. You then use the **MODEL IMPORT** screen to reverse the process. You import the text files and UIPlanner will use them to build the report in your database.

Create Report

1. Open the **GROUP REPORTS** screen.
2. Create a new report (the destination shell) in the appropriate report group. The only setting you should set is the entity group it should run over. **DO NOT** select the option to inset the first line for entity group.
3. Click **ADD OBJECT**. This will create a shell report.

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Add Report - Objects created will have initial visibility in case: Base Attribute Case

Select Entity Group: Bonds - Detailed Model Add initial line for Entity Description Create for Validations

Optional Security Group (Owner):

Save to disc (saves all attribute changes)

Enter or Paste Name(s) To Add. Use the | character after name for default code: 'New name|0052'. Right column shows characters remaining.

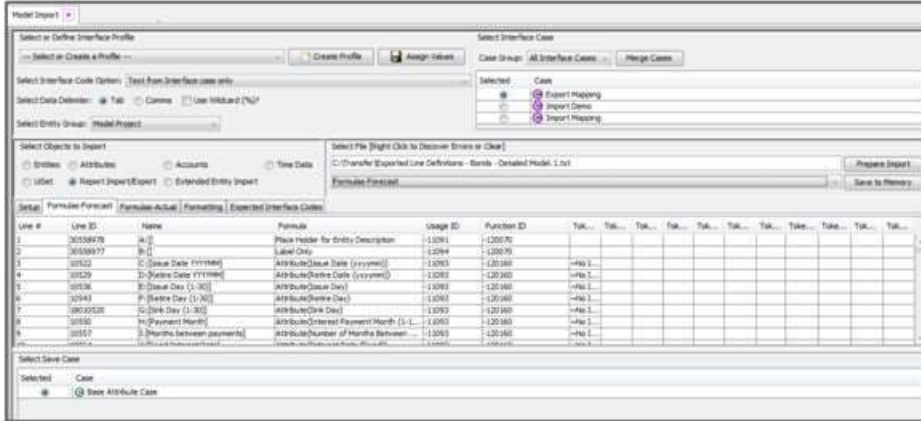
BONDS - IMPORTED	64
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Click on a row. New objects are added below the selected row.

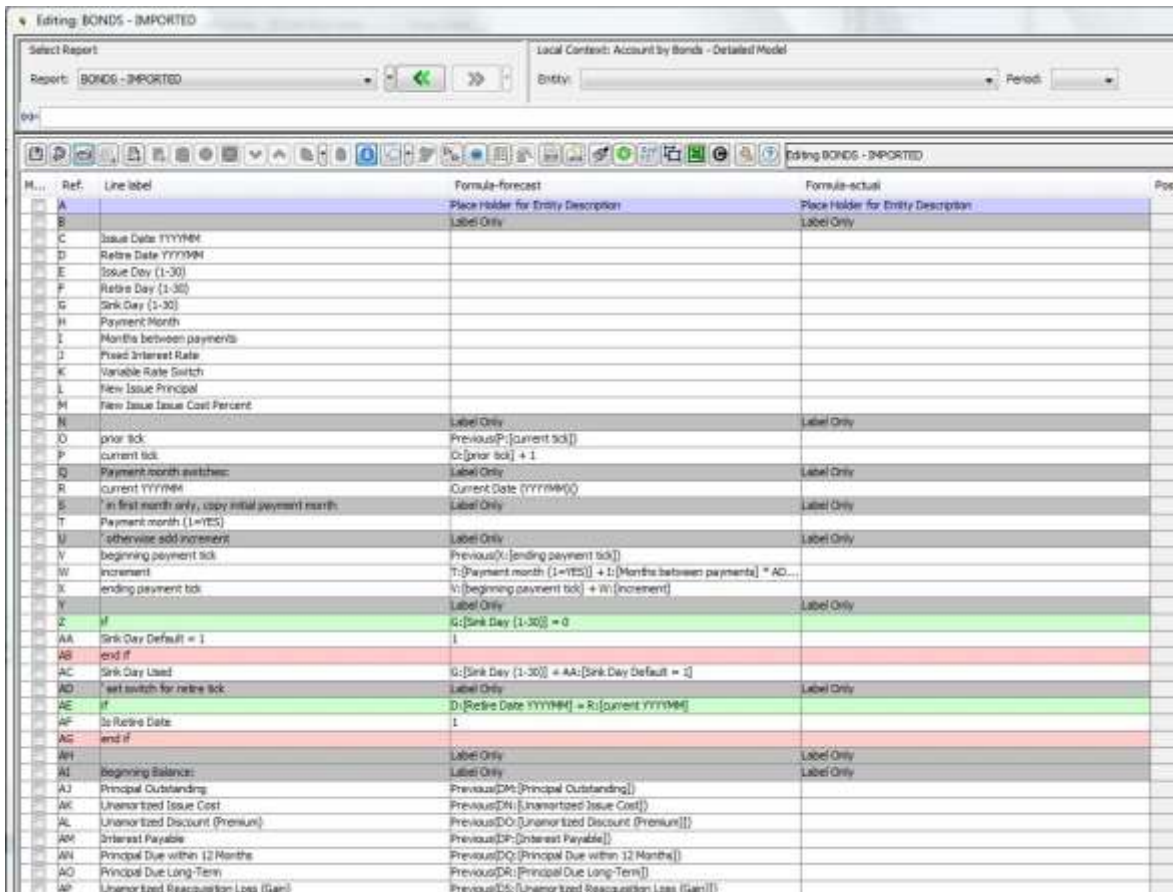
Order	Name
0.0	AFUDC Rates
14.0	Income Statement
15.0	Bonds - Detailed Model
16.0	Book Depr Rates & Rules
17.0	Budget Construction - AFUDC & Close to Plant
18.0	Budget Construction - Plant Summary
19.0	Budget Data - Inside a Method & outside a Method
20.0	Budget Project Data Imported into Model
24.0	Cash Balancing & Auto Financing
25.0	Cash Balancing Report
26.0	Cash Flow
27.0	Cash Flow - Summary

Import Text Files

1. Open the **MODEL IMPORT** screen.
2. Select *Report Export/Import* from the *Select Objects to Import* region.
3. Choose the report you want to import INTO – the drop-down list will contain ONLY empty shell reports. The one you created should be in this list.
4. From the *Select File* region shown above, select the *Formulas Forecast* tab.
5. Using the selection area under it, browse to where you saved the text files, and find Text File #1 for the report you want to import.
6. When you select that file, and click **SELECT FILE**, it will return to this screen and the screen will be populated with the information for the report. Note that all you need to do is select one of the four files and match it with the import choice (Text file #1 is *Formulas-Forecast*). UIPlanner will automatically find the others.
7. When the screen is populated, click **PREPARE IMPORT**, and when the **SAVE TO MEMORY** button appears, click that.



8. Select **File, Save** from the UIPlanner menu. This will save from memory into the database.
9. You can now go to the **CALCULATION EDITOR** and select your new report. It should have all of the imported lines. See below.

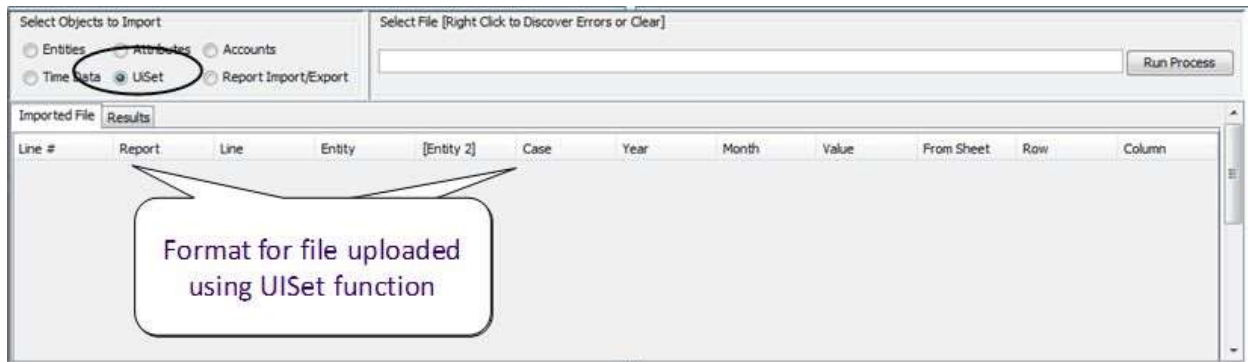


Note – As indicated above, you should review the report in detail, to ensure that all **COPY FROMS** and **ROLLUPS** are correct, and that all functions are

parameterized appropriately. As seen in the report above, some of the attribute functions did not copy over.

{ XE "UISet" * MERGEFORMAT }{ XE "How To Import Using UISet" * MERGEFORMAT }{ XE "Model Import" * MERGEFORMAT }Import (Load) Data Using UISet

UISet gives you an import format that now includes Case as an argument. The parameters for UISet are UISet(value, year, month, case, report, line, entity, entity). See below.



Model Export

{ XE "Mdel export" * MERGEFORMAT }{ XE "Screen - Model Export" * MERGEFORMAT }Model Export Screen

The screenshot shows the 'MODEL EXPORT' interface. At the top, there are tabs for 'Export Mapping', 'Main Output Panel', 'Main Info Panel', and 'Main Data Panel'. Below this is the 'Define Output' section, which includes a 'Procedure Explanation' area with text about file naming and column/line structures. There are two 'Define Column Names & Include Row Line Interface Code & Name' sections, each with radio buttons for 'Use Entire Code', 'Tokenize by Space', and 'Split on Character Position'. Below these are 'Define Line Names' sections with radio buttons for 'Do not Include' and 'Append Name Column'. The 'Preview Results and Export Options' section contains a 'Select Report' dropdown, 'Preview', and 'Export Current Selection' buttons. At the bottom, there is a 'Start Date' and 'End Date' selector, a 'Report Name' dropdown, and a 'Ledger' dropdown. The main data table has columns for 'CO Code', 'UIP entity', 'Account', 'Line', and 'Year' (2011-2012). The table contains several rows of data, including 'CO-1', 'CO-2', 'CO-3', 'CO-4', 'CO-5', 'CO-6', 'CO-7', 'CO-8', 'CO-9', 'CO-10', 'CO-11', 'CO-12', 'CO-13', 'CO-14', 'CO-15', 'CO-16', 'CO-17', 'CO-18', 'CO-19', 'CO-20', 'CO-21', 'CO-22', 'CO-23', 'CO-24', 'CO-25', 'CO-26', 'CO-27', 'CO-28', 'CO-29', 'CO-30', 'CO-31', 'CO-32', 'CO-33', 'CO-34', 'CO-35', 'CO-36', 'CO-37', 'CO-38', 'CO-39', 'CO-40', 'CO-41', 'CO-42', 'CO-43', 'CO-44', 'CO-45', 'CO-46', 'CO-47', 'CO-48', 'CO-49', 'CO-50', 'CO-51', 'CO-52', 'CO-53', 'CO-54', 'CO-55', 'CO-56', 'CO-57', 'CO-58', 'CO-59', 'CO-60', 'CO-61', 'CO-62', 'CO-63', 'CO-64', 'CO-65', 'CO-66', 'CO-67', 'CO-68', 'CO-69', 'CO-70', 'CO-71', 'CO-72', 'CO-73', 'CO-74', 'CO-75', 'CO-76', 'CO-77', 'CO-78', 'CO-79', 'CO-80', 'CO-81', 'CO-82', 'CO-83', 'CO-84', 'CO-85', 'CO-86', 'CO-87', 'CO-88', 'CO-89', 'CO-90', 'CO-91', 'CO-92', 'CO-93', 'CO-94', 'CO-95', 'CO-96', 'CO-97', 'CO-98', 'CO-99', 'CO-100'. The table also includes columns for 'Jan', 'Feb', 'Mar', 'Apr', 'May', 'Jun', 'Jul', 'Aug', 'Sep', 'Oct', 'Nov', and 'Dec'. The 'Manage Named Export Definitions' section at the bottom has buttons for 'Save Current State as New Definition', 'Show Current State of Selected Definition', 'Delete Current State of Selected Definition', and 'Export All Definitions'.

The **MODEL EXPORT** screen allows you to export the results of UIPlanner reports (or the ledger results) to external files, for import into other applications, as needed. Its functionality includes the following:

- It exports the underlying data in a report in a simplified column/row format. UIPlanner reports generally include totals and subtotals, and are sent by entity, and are thus not formatted for easy import into other applications.
- It allows you to use interface codes assigned to translate the UIP entities, reports and lines to the codes expected by the system being exported to.
- It allows you to set up export definitions and then save these for future use. You can call up one definition and export it or you can export all definitions at once.

Screen Layout:

The **MODEL EXPORT** screen is divided into three regions:

- *Define Outputs* – the top part of the screen is where you configure an export, include choosing the source report, the destination for the data, and define the column names
- *Preview Results and Export* – once you have defined the export, you can preview the data before you actually run the export.
- *Manage Named Export Definitions* – along the bottom of the screen is an area that allows you to save the settings defined above to a named definition. The next time you want to run that export, you can just call up the saved definition. You can also delete an

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existing definition. There is also a button you can use to run all saved definitions at once.

Note at the top of the screen there are buttons that allow you to hide each of these sections, if screen real estate is an issue.

Define Outputs

The *Define Outputs* region is where you set where the exported data will go (text file or database), and where you can define the columns in the export file. You can not only define what goes into each column (interface code, UIP entity name, etc.), but also the column names themselves.

Preview Results and Export

CO_Code	UIP_entity	Acct	UIP_line	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
CE-1	Chicago Elec...	E-REV	Electric Rev...	2011	460340.00676	408623.77676	399975.69784	348823.77206	379368.10768	451157.76968	528048.22592	522246.66238	468152.47794	389416.17374	398022.38777
CE-1	Chicago Elec...	PL-EL	Fuel	2011	130474.40958	130474.40958	130474.40958	130474.40958	130474.40958	130474.40958	130474.40958	130474.40958	130474.40958	130474.40958	130474.40958
CE-1	Chicago Elec...	PP-VILL	Purchased P...	2011	12898.12984	12898.12984	12898.12984	12898.12984	12898.12984	12898.12984	12898.12984	12898.12984	12898.12984	12898.12984	12898.12984
SWG-2	SWEGCO Gas	G-REV	Gas Revenue	2011	6162.37321	5443.60174	4549.36378	494.04305	3564.63766	3316.58844	3691.40111	3890.90152	3935.46918	4076.06057	3885.54601
SWG-2	SWEGCO Gas	COST_GAS	Cost of Gas ...	2011	2414.2482	2414.2482	2414.2482	2414.2482	2414.2482	2414.2482	2414.2482	2414.2482	2414.2482	2414.2482	2414.2482

The *Preview Results and Export* area is where you choose the report or saved definition and the time period to export. You can then get a preview of the data before you actually do the export.

Manage Named Export Definitions

The *Manage Named Export Definitions* region is where you can save the settings for a specific export for use again later. You can also modify or delete existing definitions. Finally, you can choose to run all exports at once.

List Of Operations Or tasks that Are Performed With This Screen:

Configure an Export

Before you can export a report using the Export functionality, you need to have assigned interface codes to the report, the lines you want to export and each entity it runs over. See the **CORE OBJECT EDITOR** for information on assigning interface codes.

- Use the *Interface Case* drop-down list to select the interface case to use.
- Choose where to send the exported data, either to a text file or an Access MDB. Once you choose, click in the window to browse to set the destination you want.
- In the *Preview Results* region:
 - Select the report to export from the drop-down list.
 - Set the date range desired. If you do not specify a date range, all years of the scenario will be exported.
- Choose whether to send 000's, or dollars and cents.
- Add other columns as desired and configure contents.
 - You can tailor how interface codes are sent in the data (full code or split into multiple columns).
 - You can add additional columns for the UIPlanner names.
 - You can name the columns in the export file.

When you are done, click **PREVIEW**, and the data to be exported will be displayed in the grid. You can export this to Excel by right-clicking in the header. Once you have determined the data is ready for export, click **EXPORT CURRENT SELECTION**, and the data will be sent to your chosen destination (text file or MDB). A message will be displayed confirming the export to the chosen destination.

Export a Report Using a Named Export Definition

- Select the definition you want to use from the *Stored Export Definitions* drop-down list
- Confirm the time periods are correct and confirm the column settings
- Click **PREVIEW** to bring the data into the grid
- Once you have verified the data, click **EXPORT CURRENT SELECTION** to export the data to the specified destination

Export Ledger Data

Before you can export ledger data using the Export functionality, you need to have assigned interface codes to the accounts and planning entities you want to export. See the **CORE OBJECT EDITOR** for information on assigning interface codes.

The steps for exporting Ledger data are the same as for reports except you click on the **LEDGER** button.

Create a Named Export Definition

- Configure the export you want to save.
- Click **STORE CURRENT STATE AS A NEW DEFINITION**. When prompted, enter the name you want for the export you just set up.
- Click **OK** to save the definition.
- Note: To modify an existing definition, choose it first, make changes as desired, and then click **STORE CURRENT STATE OF SELECTED DEFINITION**.

Delete a Named Export Definition

- Use the *Stored Export Definitions* drop-down list to select the definition you want to delete.
- Click **DELETE CURRENTLY SELECTED DEFINITION**.

Rapid Data Finder

```
{ XE "Rapid Data Finder" \* MERGEFORMAT }{ XE
"Screen - Rapid Data Finder" \* MERGEFORMAT }{ XE
"Data Finder" \* MERGEFORMAT }Rapid Data Finder
Screen
```

The **RAPID DATA FINDER** screen provides a single entry point for finding data, both attribute and time data, in UIPlanner across all cases, reports and entities. It allows you to find data by case, User ID or date updated, or by a combination of these. The **RAPID DATA FINDER** can be very valuable if you are trying to find out what data has been entered in the last x days, which can be very useful if you need to see what has changed. Alternatively, you might want to see what data is in a case that you are thinking of removing from a scenario.

Once you have used the **RAPID DATA FINDER** to find data, you can send it to Excel for filtering and analysis. Finally, you can delete some or all of the data from the results set returned. This option is only available only for attribute data.

List Of Operations And Tasks That Are Performed With This Screen:

Setting Search Criteria

The **RAPID DATA FINDER** screen has various options for setting your search criteria. The various search settings are as follows:

Find Attribute Data / Find Time Data – First, decide whether you want to find attribute data or time data. The **RAPID DATA FINDER** searches for each one separately. Note that when you make a selection, the case list changes to show the cases of that type.

Select Cases for Search – Use the check boxes to choose which cases in which you want to search. The list will change depending upon whether you selected time data or attribute data. Note that the attribute case list includes not only attribute cases but also interface cases, the formula case and the “zero” case (the case that holds

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entities and names). If you are searching time data, you have an additional option – you can limit the search to only the cases in the active scenario, or all cases.

Updated By – This drop-down list shows all UIPlanner users. Use this if you want to find all data entered by a specific user. The default is *Any User*.

Updated When – This drop-down list provides a number of different time options. Use this if you want to find all data changed or entered during a specific time period, such as in the last day, or the last week. The default is *Any Date*.

Select Entity Group / Select Entities– Use the *Select Entity* drop-down list if you want to find data related to a specific entity group, such as bonds or planning entities. Note that if you select an entity group, you need to select at least one entity from the list by checking the check-box next to the entity. If you do not select any entities, the **RAPID DATA FINDER** will ignore the *Entity* box and return all data.

Q2 Attributes Only – This drop-down list allows you to select some very specific structural components of UIPlanner – the "Q2s." These include things like attribute value, line options, or scenario settings.

These selections are all optional. If you do not select them, they will not be used in the search. However, the less you limit your search the more data will be returned.

Running a Search

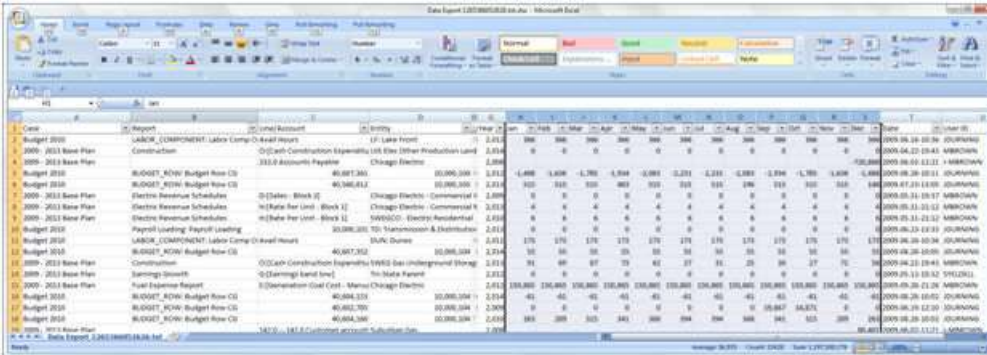
Once you have set your selection search criteria, click **SEARCH**. UIPlanner will return the search results in a dialog box. See below for examples of time data and attribute data search results.

Time Data:

Case	Report	Line/Account	Entity	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	State	User ID	
Budget 2010	1400R_CO	Local Hours	FL1 Labor Prod	2010	300	300	300	300	300	300	300	300	300	300	300	300	06/20/2009 08:28	EAUNING	
2009 - 2012 Base Plan	Construction	Cr Cash Construction	LBS Elec Other Prod	2014	0.270	0.340	0.210	0.260	0.210	0.284	0.272	0.244	0.285	0.264	0.236	0.204	09/24/2009 04:20	MBCOUSA	
2009 - 2012 Base Plan	BUDGET_A0	4000104	Chicago Electric	2010													02/04/2009 08:20	EAUNING	
Budget 2010	4000104	4000104	Chicago Electric	2010	-5,467.5	-1,636.20	-1,740	-1,933.70	-2,002.5	-2,233.20	-2,253.20	-2,062.5	-1,633.70	-1,260	-1,630.20	-1,460.20	09/24/2009 08:20	EAUNING	
Budget 2010	4000104	4000104	Chicago Electric	2011	334.93	334.93	334.93	402.060	334.93	334.93	334.93	334.93	334.93	334.93	334.93	334.93	04/20/2009 07:23	EAUNING	
2009 - 2012 Base Plan	Electric Ret	Cr Sales - Block 12	Chicago Electric - Cr	2009	0	0	0	0	0	0	0	0	0	0	0	0	02/06/2009 05:31	MBCOUSA	
2009 - 2012 Base Plan	Electric Ret	Cr Rate Per Unit - 08	Chicago Electric - Cr	2010	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	09/24/2009 08:20	EAUNING
2009 - 2012 Base Plan	Electric Ret	Cr Rate Per Unit - 08	Chicago Electric - Cr	2011	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	09/24/2009 08:20	EAUNING
2009 - 2012 Base Plan	Electric Ret	Cr Rate Per Unit - 08	Chicago Electric - Cr	2012	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	09/24/2009 08:20	EAUNING
Budget 2010	4000104	4000104	Chicago Electric	2010	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	02/03/2009 06:26	EAUNING	
Budget 2010	4000104	4000104	Chicago Electric	2011	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	02/03/2009 06:26	EAUNING	
Budget 2010	4000104	4000104	Chicago Electric	2012	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	02/03/2009 06:26	EAUNING	
2009 - 2012 Base Plan	Construction	Cr Cash Construction	Chicago Gas Undergr	2010	66,663	66,663	66,76	75,000	40,033	28,443	31,263	25,249	28,695	28,940	26,723	28,641	02/03/2009 04:23	MBCOUSA	
2009 - 2012 Base Plan	Storage Dr	Cr Storage Unit [02]	No Case Item	2010	0	0	0	0	0	0	0	0	0	0	0	0	02/03/2009 04:23	MBCOUSA	
2009 - 2012 Base Plan	Storage Dr	Cr Storage Unit [02]	Chicago Electric	2010	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	02/03/2009 04:23	MBCOUSA
2009 - 2012 Base Plan	Storage Dr	Cr Storage Unit [02]	Chicago Electric	2011	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	02/03/2009 04:23	MBCOUSA
2009 - 2012 Base Plan	Storage Dr	Cr Storage Unit [02]	Chicago Electric	2012	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	02/03/2009 04:23	MBCOUSA
Budget 2010	4000104	4000104	Chicago Electric	2010	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	02/03/2009 04:23	MBCOUSA
Budget 2010	4000104	4000104	Chicago Electric	2011	0	0	0	0	0	0	0	0	0	0	0	0	02/03/2009 04:23	MBCOUSA	
Budget 2010	4000104	4000104	Chicago Electric	2012	0	0	0	0	0	0	0	0	0	0	0	0	02/03/2009 04:23	MBCOUSA	
2009 - 2012 Base Plan	Electric Ret	Cr Rate Per Unit - 08	Chicago Electric - Cr	2010	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	09/24/2009 08:20	EAUNING
2009 - 2012 Base Plan	Electric Ret	Cr Rate Per Unit - 08	Chicago Electric - Cr	2011	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	09/24/2009 08:20	EAUNING
2009 - 2012 Base Plan	Electric Ret	Cr Rate Per Unit - 08	Chicago Electric - Cr	2012	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	6.130	09/24/2009 08:20	EAUNING
2009 - 2012 Base Plan	Construction	Cr Cash Construction	LBS Gas Distribution	2010	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	09/24/2009 04:23	MBCOUSA
2009 - 2012 Base Plan	Construction	Cr Cash Construction	LBS Gas Distribution	2011	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	09/24/2009 04:23	MBCOUSA
2009 - 2012 Base Plan	Construction	Cr Cash Construction	LBS Gas Distribution	2012	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	0.387	09/24/2009 04:23	MBCOUSA
2009 - 2012 Base Plan	Electric Ret	Cr Sales - Block 1	Chicago Electric - Cr	2010	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	02/03/2009 04:23	MBCOUSA
2009 - 2012 Base Plan	Electric Ret	Cr Sales - Block 1	Chicago Electric - Cr	2011	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	02/03/2009 04:23	MBCOUSA
2009 - 2012 Base Plan	Electric Ret	Cr Sales - Block 1	Chicago Electric - Cr	2012	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	02/03/2009 04:23	MBCOUSA

Note that the screen returns the case, report, line/account and entity, along with the data and User ID.

You can send the results to Excel by right clicking anywhere on the title line of the screen. The Excel screen has preset filters for each column, for easier searching of the result set.



Attribute Data:

Case	Q1	Q2	Q3	Q4	Q5	Q6	New Value	Orig Value	Last Updated On	Last Updated By	Delete/Undelete
Base Attribute Case	314.0 - 830.0 Dep.	314.0 - 830.0 Dep.					314.0	314.0	2009-04-28 13:43	MBRCOWAN	
Base Attribute Case	314.0 - 874.0 Man.	314.0 - 874.0 Man.					314.0	314.0	2009-04-28 13:43	MBRCOWAN	
Base Attribute Case	303.0 - 803.0 Res.	303.0 - 803.0 Res.					303.0	303.0	2009-04-28 13:43	MBRCOWAN	
Base Attribute Case	303.0 - 828.0 Regs.	303.0 - 828.0 Regs.					303.0	303.0	2009-04-28 13:43	MBRCOWAN	
Base Attribute Case	Other Operating Exp.	Other Operating Exp.					347.0	347.0	2009-04-28 13:43	MBRCOWAN	
Base Attribute Case	Removal Expenditures	Removal Expenditures					365.0	365.0	2009-04-28 13:43	MBRCOWAN	
Base Attribute Case	Other Segment Exp.	Association-Other R	Segment						2009-04-23 09:29	MBRCOWAN	
Base Attribute Case	Other Operating Exp.	Other Operating Exp.							2009-06-25 11:44	MBRCOWAN	
Base Attribute Case	Removal Expenditures	Removal Expenditures							2009-06-25 11:44	MBRCOWAN	
Base Attribute Case	Investment Tax Crs.	Investment Tax Crs.					31.0	31.0	2009-04-28 13:43	MBRCOWAN	
Base Attribute Case	Jurisdictional	Report Search - Inve	Arachnological Summary				10	10	2009-04-22 20:26	MBRCOWAN	
Base Attribute Case	Benefit Plan Items	Benefit Plan Items					121.0 Bonds	121.0 Bonds	2009-04-28 13:43	MBRCOWAN	
Base Attribute Case	Investment Tax Crs.	Investment Tax Crs.					5	5	2009-08-25 13:13	MBRCOWAN	
Base Attribute Case	Investment Tax Crs.	Investment Tax Crs.							2009-08-25 13:13	MBRCOWAN	
Base Attribute Case	Construction/BD	Lines Display or Hig							2009-08-25 13:11	MBRCOWAN	
Base Attribute Case	Yrs	Report Search - Inve	Income Tax - Equip				14.4	14.4	2009-09-29 16:36	MBRCOWAN	
Base Attribute Case	Income Tax - State	Lines Normal	Sequence: 3				3105(-)-11-187772.06	3105(-)-11-187772.06	2009-09-24 13:51	MBRCOWAN	
Base Attribute Case	Income Tax - State	Lines Normal	Sequence: 2				3102(-)-11-187772.06	3102(-)-11-187772.06	2009-09-24 14:25	MBRCOWAN	
Base Attribute Case	Income Tax - State	Lines Normal	Sequence: 1				31020(-)-11-187772.06	31020(-)-11-187772.06	2009-09-24 14:43	MBRCOWAN	
Base Attribute Case	Tax	Report Search - Inve	Schedule in-State Only				-0.1	-0.1	2009-09-24 15:54	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 5				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 4				31020(-)-11-187772.06	31020(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 3				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 2				31020(-)-11-187772.06	31020(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 1				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 5				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 4				31020(-)-11-187772.06	31020(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 3				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 2				31020(-)-11-187772.06	31020(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 1				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 5				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 4				31020(-)-11-187772.06	31020(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 3				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 2				31020(-)-11-187772.06	31020(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	
Base Attribute Case	Preferred Stock/PL	Lines Normal	Sequence: 1				31050(-)-11-187772.06	31050(-)-11-187772.06	2009-09-28 20:50	MBRCOWAN	

Note that the attribute result screen is different. It returns the Case plus the 5 qualifier values, along with the attribute value and the User ID and last update date. One thing to note is that the attribute value comes up with values in both the *New Value* and *Orig Value* columns.

The **DATA FINDER** screen for attribute data also includes a *Delete/Undelete* column. If you hit the check mark for a line to delete it, note that the new value changes to a blank. When you click **CLOSE**, that item will be deleted. You can also delete ALL of the results listed by clicking **DELETE ALL**. This will set all the values to blank. When you click **CLOSE**, ALL of them will be deleted. Before clicking **CLOSE**, you can Undelete one or all items.

The delete option is a very powerful one, but one that should be used very carefully.

Common Search Examples

Below are some common search examples

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Find all Time Data entered in the last day – Select **FIND TIME DATA** and select *Within One Day* from the *Updated When* drop-down list. Select all cases. Leave the other selections blank.

The screenshot shows the 'Rapid Data Finder' window. The 'Select Entity Group' is set to 'Planning Entity'. The 'Updated by' dropdown is set to 'Any user'. The 'Updated when' dropdown is set to 'Within one day'. The 'Find Attribute data' radio button is selected, and the 'Find Time data' radio button is unselected. The 'Select Cases for Search' section has 'Check All' selected. The 'Selected' list on the right includes: Base Attribute Case, Export Mapping, Import Demo, Import Mapping, Monte Carlo, Report Formats, and Zero Case.

Find all Attribute Data entered by a specific user in the last week

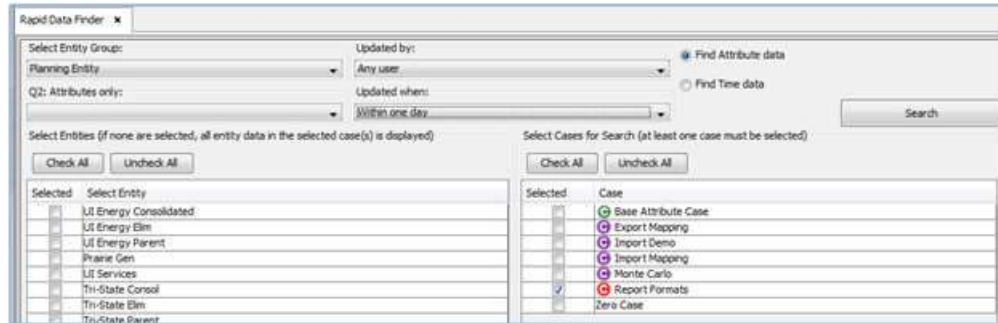
Select **FIND ATTRIBUTE DATA**, and select *Within One Week* from the *Updated When* drop-down list, and select the user you want from the *Updated By* drop-down list. Select all cases. If you just want attribute data you can un-check the interface cases. Leave the other selections blank.

The screenshot shows the 'Rapid Data Finder' window. The 'Select Entity Group' is set to 'Planning Entity'. The 'Updated by' dropdown is set to 'Any user'. The 'Updated when' dropdown is set to 'Any Date'. The 'Find Attribute data' radio button is selected, and the 'Find Time data' radio button is unselected. The 'Limit Cases to Active Scenario' checkbox is checked. The 'Selected' list on the right includes: 2009 - 2013 Base Plan, Demonstrate Model Concepts, TYOUNGQUIST Temp Data, Actuals, Budget 2010, and Zero Case.

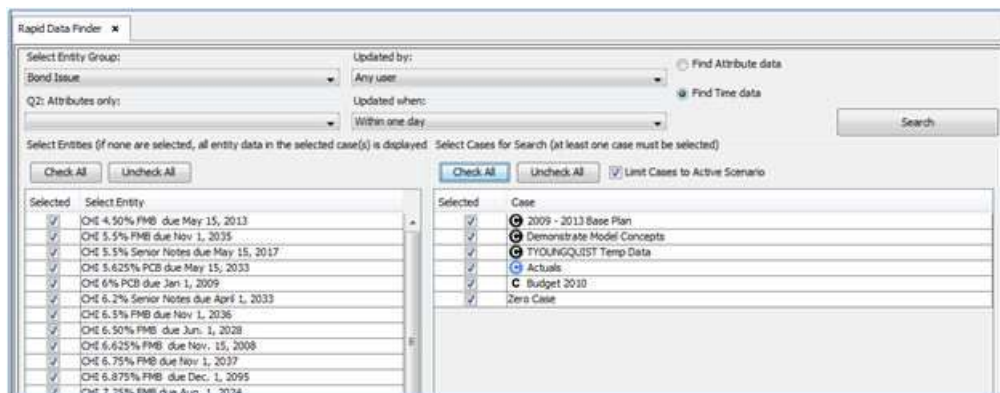
Find all data in a specific Time Data Case – Select **FIND TIME DATA** and check the case you want from the list. Un-check the other cases and leave the other drop-down list selections blank.

The screenshot shows the 'Rapid Data Finder' window. The 'Select Entity Group' is set to 'Planning Entity'. The 'Updated by' dropdown is set to 'Any user'. The 'Updated when' dropdown is set to 'Any Date'. The 'Find Attribute data' radio button is unselected, and the 'Find Time data' radio button is selected. The 'Limit Cases to Active Scenario' checkbox is checked. The 'Selected' list on the right has 'Actuals' checked, while all other cases are unchecked.

Find all Report Format changes made in the last two days - Select *Find Attribute Data* and select only the *Report Formats* case from the case list. Leave the other selections blank.



Find out what cases Bond Time Data is in - Select *Find Time Data*. Select *Bond Issue* from the select entity group drop-down list and check all bonds in the *Select Entities* window. Select all cases from the case list. Leave the other selections blank.



Find Equations with Numbers

{ XE "Equations" * MERGEFORMAT }{ XE "Find Equations with Numbers" * MERGEFORMAT }{ XE "Screen - Find Equations with Numbers" * MERGEFORMAT }Find Equations with Numbers Screen

The **FIND EQUATIONS WITH NUMBERS** screen allows users to search across all report calculations and display any lines that contain input numbers. This is a valuable audit tool that will allow you to verify that the calculations do not inadvertently include hard coded numbers that might not be updated when needed.

When the screen is opened, all lines containing numbers are listed.

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Because there are certain numbers or values that are properly used in equations such as 0, 1, etc., the screen allows you to filter equations with those numbers out to assist in diagnostics.

Once you identify a number that you feel should not be hard coded in your equation, you can convert that number to a parameter or time dependent data by going to the **CALCULATION EDITOR** screen and making the modification in the report itself.

If the parameter or time dependent data has not already been created, you can do so by going to the **EDIT ATTRIBUTES** screen and then proceed to the **CALCULATION EDITOR** screen.

Screen Layout:

The top of the **FIND EQUATIONS WITH NUMBERS** screen includes five check boxes that allow you to filter out common valid hard coded numbers, such as:

- Zeros – often used in if tests or to compare amounts to zero
- Ones – often used in if tests or in multiplying amounts by -1
- Twelves – often used to flag annual amounts
- Thirteens – often used to flag annual amounts
- Hundreds – often used to convert attribute numbers to percents

The main portion of the screen includes four columns containing the report, line, forecast formula and actual formula.

An **EXPORT TO EXCEL** button is on the bottom right of the screen.

List Of tasks Or Operations That Are Performed With This Screen:**Finding Equations with Numbers:**

Merely opening the screen will show all equations with numbers. You can filter down the results as follows:

- Select the *Ignore Zeroes* check box to eliminate all equations containing a "0".
- Select the *Ignore Ones* check box to eliminate all equations containing a "1".
- Select the *Ignore Twelves* check box to eliminate all equations containing a "12".
- Select the *Ignore Thirteens* check box to eliminate all equations containing a "13".

- Select the *Ignore One Hundreds* check box to eliminate all equations containing a "100".

As you select the various check boxes, the screen automatically refreshes. After filtering out zeroes, ones, twelves, thirteens and one hundreds in the screen above, these values would no longer appear. See screen above.

In the example above, you may choose to change the Federal Tax Rate on the *Income Tax – Federal* report from the currently hard coded value of .35 to time dependent data either on this report or copied from another report by going to the **CALCULATION EDITOR** screen.

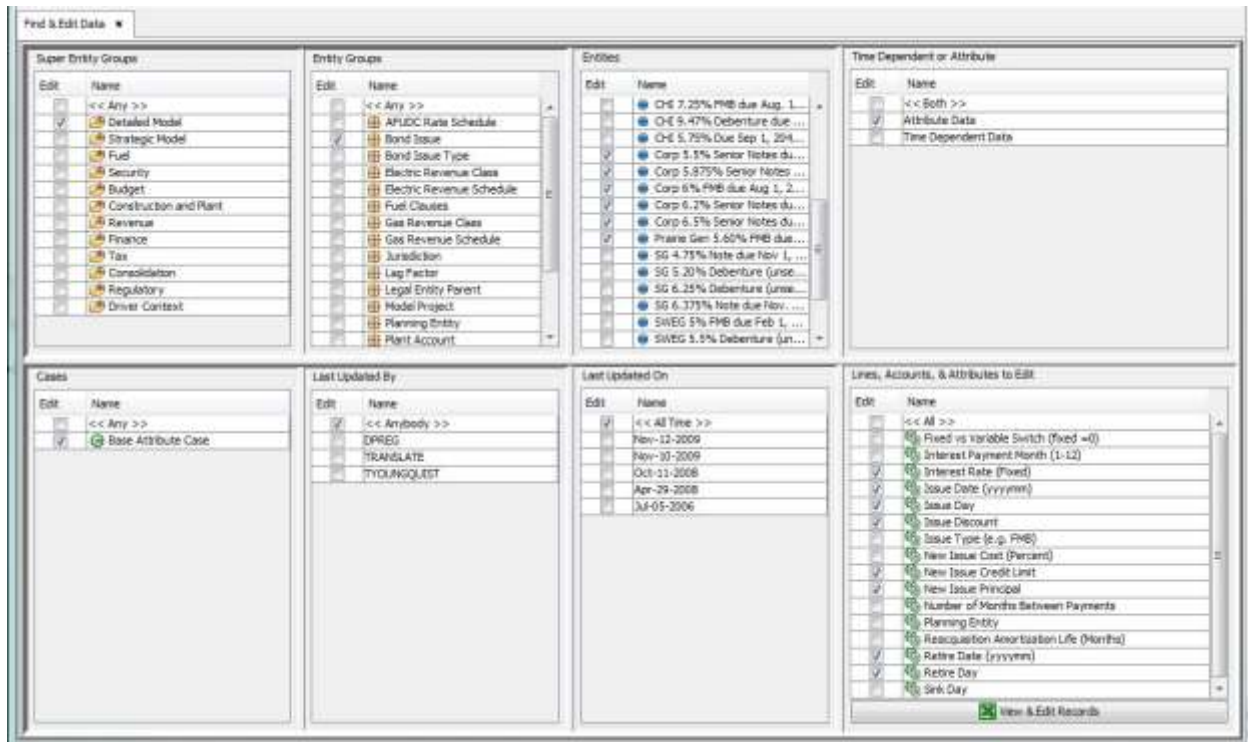
Additionally, the date (200912) for cash seed value in the above example should probably be changed in the report to either an input value or derived from the dates in the current scenario using a function.

If desired, the **EXPORT TO EXCEL** button is available for your use.

Find and Edit Data

{ XE "Find and Edit Data" * MERGEFORMAT }{ XE "Data" * MERGEFORMAT }{ XE "Screen - Find and Edit Data" * MERGEFORMAT }Find and Edit Data Screen

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The **FIND & EDIT DATA** screen allows you to search for data in the current scenario starting with an entity group, and then by applying additional filters. This screen is an alternative to the **RAPID DATA FINDER**. It provides an entity-centric perspective on finding editing data as opposed to a report-centric view (as used in the **RAPID DATA FINDER**).

The screen consists of a series of panels/filters:

1. Super Entity Groups
2. Entity Groups
3. Entities
4. Data Type (Time Data or Attribute)
5. Case
6. User (Last updated by)
7. Date (Last updated on)
8. Line-Account-or-Attribute-Definitions to Edit

Once all panels have enabled, and you have made your final selection, click **VIEW & EDIT RECORDS**. This will apply the filters and display the result in a pop-up window. There you can view the resulting records, or choose to edit them (in MS Excel) and then save them back to the database.

SCREEN LAYOUT:

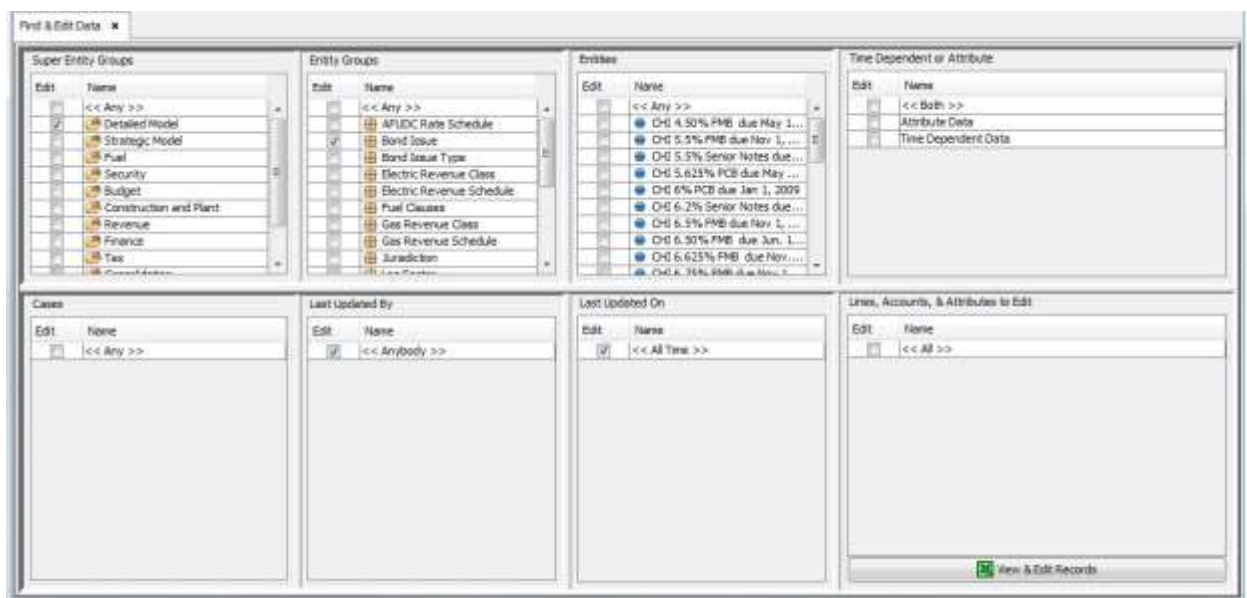
The **FIND AND EDIT DATA** screen is laid out in a series of panels. You go through the panels in order, and make your selections. As you select the filter in each panel, the next one activates. It will contain appropriate choices based on your previous selections (see the example above). When all eight panels have been selected, you can apply the filters and see the result in a dialog window. It will contain all the data in the current scenario that meet the specified criteria, in separate tables for Attribute data and Time data. You can view the data in the dialog window or export it to MS Excel for filtering and sorting. If you wish to edit the data you can send it to MS Excel (click **VIEW & EDIT RECORDS**).

List of Tasks or Operations that are performed with this Screen:**Finding Data**

As indicated above, the purpose of this screen is to find data in the current scenario from an entity perspective using a series of selection panels. Each panel contains a list of possible selections (along with a choice for *All*), each with a check box. Simply select the one(s) you want. This will enable the next panel, and it will contain selections based on your choices so far.

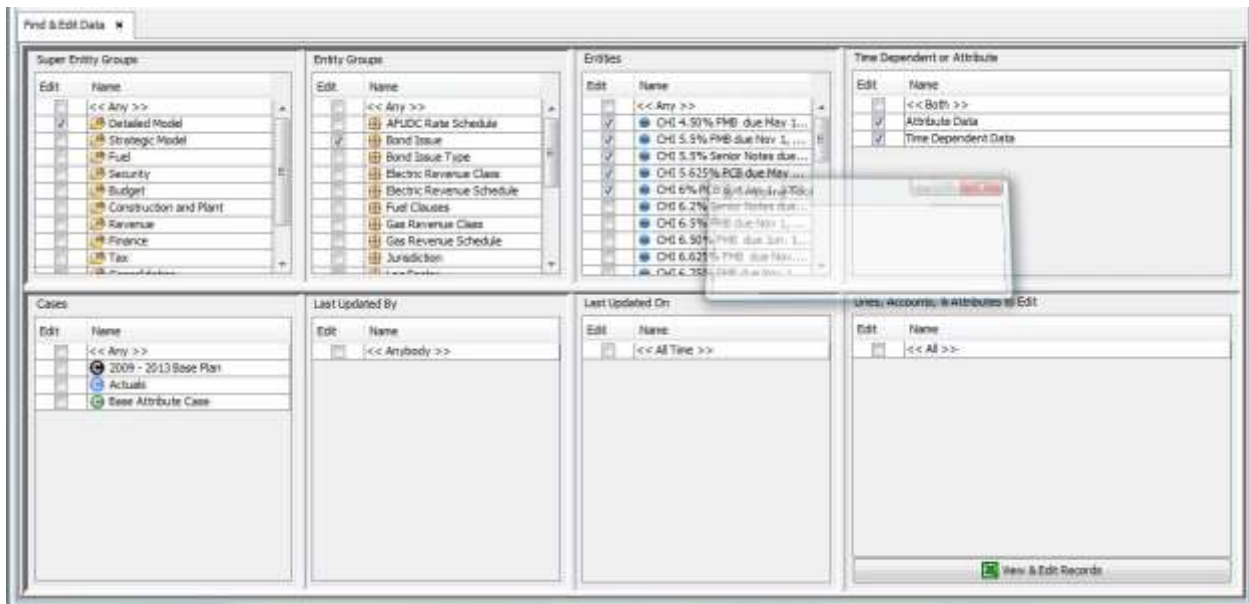
Following are several screens showing a sequence of selections, along with the final **VIEW/EDIT** screen.

Selection 1: Detailed Model entity groups, then bonds. This enables the list of bond entities to choose from.

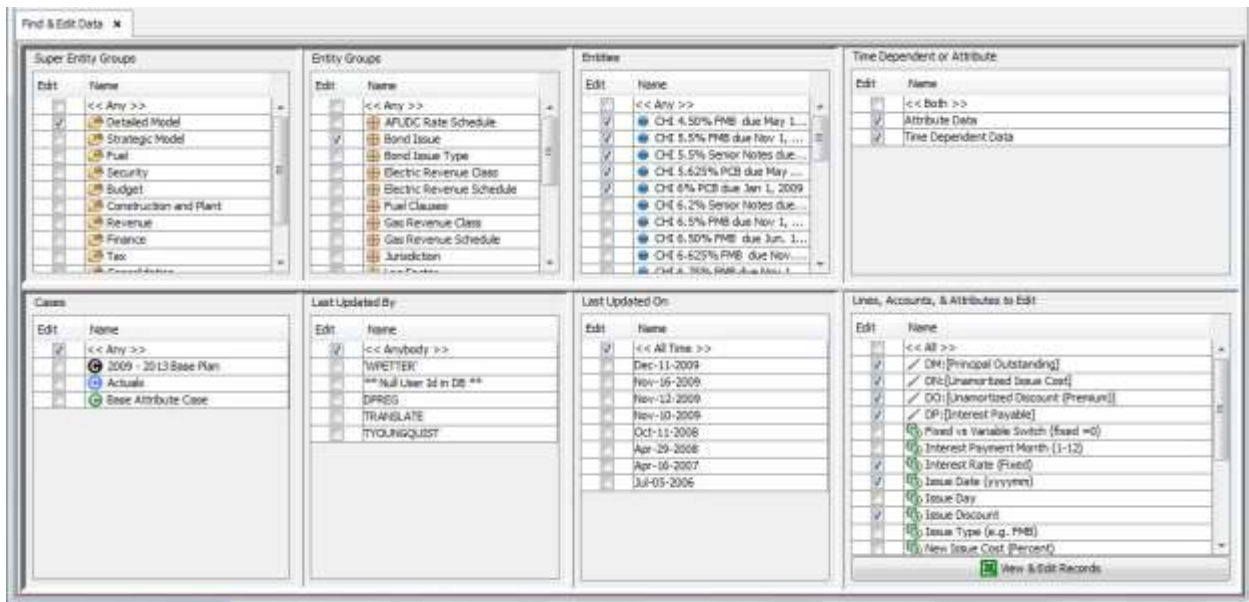


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Selection 2: Selected several bonds, plus both time and attribute Data. This brings up a list of the active cases.



Selection 3: Selected all cases, all users and all time, and then selected certain time data items and certain attribute data items. This activates the **VIEW AND EDIT RECORDS** button.



Display Results: Click **VIEW & EDIT RECORDS**. This brings up a dialog window with the result set. It has separate panels for attribute and time data. In each panel you can sort the data by clicking on the column header, or export it to Excel/html by right-clicking.

View & Edit Selected Data

Case	Entry	Attribute Definition	Value	Last Edited By	Last Edited
Base Attribute Case	CH 4.50% PNB due May 15, 2013	Issue Date (yyyymm)	200309	Translate	07/05/06 15:06:55
Base Attribute Case	CH 6% PCF due Jan 1, 2009	Retire Date (yyyymm)	200901	DPREC	10/11/08 11:25:41
Base Attribute Case	CH 5.5% Senior Notes due May 15, 2013	Interest Rate (Fixed)	5.5	Translate	07/05/06 15:06:55
Base Attribute Case	CH 5.625% PCF due May 15, 2013	Interest Rate (Fixed)	5.625	Translate	07/05/06 15:06:55
Base Attribute Case	CH 6% PCF due Jan 1, 2009	Planning Entry	Chicago Electric	Translate	07/05/06 15:06:55
Base Attribute Case	CH 6% PCF due Jan 1, 2009	Issue Date (yyyymm)	200209	Translate	07/05/06 15:06:55
Base Attribute Case	CH 4.50% PNB due May 15, 2013	Issue Type (e.g. PNB)	First Mortgage Bond	DPREC	20/11/08 11:18:44
Base Attribute Case	CH 5.5% PNB due Nov 1, 2035	Issue Discount	0000	Translate	07/05/06 15:06:55
Base Attribute Case	CH 4.50% PNB due May 15, 2013	Issue Day	23	TYOUNQUEST	20/02/08 05:42:22
Base Attribute Case	CH 6% PCF due Jan 1, 2009	Fixed vs variable Switch (Fixed =0)	0	Translate	07/05/06 15:06:55
Base Attribute Case	CH 5.5% PNB due Nov 1, 2035	Planning Entry	Chicago Electric	Translate	07/05/06 15:06:55
Base Attribute Case	CH 6% PCF due Jan 1, 2009	Issue Day	15	TYOUNQUEST	04/29/08 06:42:22
Base Attribute Case	CH 5.5% Senior Notes due May 15, 2013	Retire Date (yyyymm)	201305	DPREC	10/11/08 11:17:34
Base Attribute Case	CH 5.625% PCF due May 15, 2013	Retire Date (yyyymm)	200305	DPREC	10/11/08 11:17:34
Base Attribute Case	CH 5.5% PNB due Nov 1, 2035	Issue Day	1	Translate	07/05/06 15:06:55

Edit Lines

Case	Report	Line	Entry	Sub-Entry	Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Last Ed...	Last Ed...
2009...	Bonds	DMC	CH		2007													830,000	03/11/08...
Actuals	Bonds	DMC	CH		2007													750	04/26/07...
2009...	Bonds	DMC	CH		2008	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000	03/11/08...
Actuals	Bonds	DMC	CH		2007													400,000	10/11/08...
2009...	Bonds	DMC	CH		2008	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	1,050	04/26/07...
Actuals	Bonds	DMC	CH		2008	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	10/11/08...
2009...	Bonds	DMC	CH		2007													830,000	04/26/07...
Actuals	Bonds	DMC	CH		2007													400,000	04/26/07...
2009...	Bonds	DMC	CH		2008	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	130,000	04/26/07...
Actuals	Bonds	DMC	CH		2007													70,000	04/26/07...
2009...	Bonds	DMC	CH		2007													1,650	04/26/07...
Actuals	Bonds	DMC	CH		2007													130,000	10/11/08...
2009...	Bonds	DMC	CH		2008	750	750	750	750	750	750	750	750	750	750	750	750	750	04/26/07...
Actuals	Bonds	DMC	CH		2007													4,000	04/26/07...

Edit Data in Excel: From the dialog window you can choose to edit the data in Excel. Note that you can uncheck items you do not want to send to Excel (all items are initially checked by default.) Clicking **EDIT** will bring up MS Excel sessions showing the attribute or time data. See the examples below.

Attribute Data Example:

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	B	C
1	Attribute Data	Base Attribute Case
2	Issue Date (yyyymm)	
3	CHI 4.50% FMB due May 15, 2013	Aug-00
4	CHI 5.5% FMB due Nov 1, 2035	Nov-09
5	CHI 5.5% Senior Notes due May 15, 2017	Nov-05
6	CHI 5.625% PCB due May 15, 2033	Mar-02
7	CHI 6% PCB due Jan 1, 2009	Sep-02
8	Corp 5.875% Senior Notes due April 1, 2016	Apr-96
9	Corp 6% FMB due Aug 1, 2020	Jun-08
10	Corp 6.2% Senior Notes due April 1, 2023	Apr-03
11	Corp 6.5% Senior Notes due April 1, 2013	Apr-01
12	Interest Rate (Fixed)	
13	CHI 4.50% FMB due May 15, 2013	4.5
14	CHI 5.5% FMB due Nov 1, 2035	5.5
15	CHI 5.5% Senior Notes due May 15, 2017	5.5
16	CHI 5.625% PCB due May 15, 2033	5.625
17	CHI 6% PCB due Jan 1, 2009	6
18	Corp 5.5% Senior Notes due Dec. 1, 2010	5.5
19	Corp 5.875% Senior Notes due April 1, 2016	5.875
20	Corp 6% FMB due Aug 1, 2020	6
21	Corp 6.2% Senior Notes due April 1, 2023	6.2
22	Corp 6.5% Senior Notes due April 1, 2013	6.5
23	Prairie Gen 5.60% FMB due Sept. 15, 2013	5.6
24	Issue Discount	
25	CHI 5.5% FMB due Nov 1, 2035	1000
26	CHI 5.5% Senior Notes due May 15, 2017	1625
27	Corp 6% FMB due Aug 1, 2020	500
28		

Time Data:

	B	AE	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX
1	Time Dependent Data	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2		2007	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008	2008
3	2009 - 2013 Base Plan													
4	Bonds/DM:[Principal Outstanding]													
5	CHI 4.50% FMB due May 15, 2013	70000	70000	70000	70000	70000	70000	70000	70000	70000	70000	70000	70000	70000
6	CHI 5.625% PCB due May 15, 2033	400000	400000	400000	400000	400000	400000	400000	400000	400000	400000	400000	400000	400000
7	CHI 6% PCB due Jan 1, 2009	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000	100000
8	Corp 5.5% Senior Notes due Dec. 1, 2010	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000
9	Corp 5.875% Senior Notes due April 1, 2016	1050000	1050000	1050000	1050000	1050000	1050000	1050000	1050000	1050000	1050000	1050000	1050000	1050000
10	Corp 6.2% Senior Notes due April 1, 2023	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000
11	Corp 6.5% Senior Notes due April 1, 2013	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000
12	Prairie Gen 5.60% FMB due Sept. 15, 2013	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000
13	Bonds/DN:[Unamortized Issue Cost]													
14	Prairie Gen 5.60% FMB due Sept. 15, 2013	275												
15	Bonds/DO:[Unamortized Discount (Premium)]													
16	Prairie Gen 5.60% FMB due Sept. 15, 2013	136												
17	Bonds/DP:[Interest Payable]													
18	Prairie Gen 5.60% FMB due Sept. 15, 2013	840												

When you are done with your edits, you can close Excel and then save back to the database.

Report Trees

{ XE "Report" * MERGEFORMAT }{ XE "Report Trees" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Report Trees

Report trees give you the ability to summarize and group reports with nearly unlimited flexibility. Some report tree options are as follows:

- **Unlimited rollup nodes:** Report trees can be created with any number of rollup nodes, and any number of rollup levels.
- **Multiple report trees:** Multiple report trees can be created for any entity group. When browsing a report run over an entity group, for which you have created report trees, these trees are available for use.
- **Report Tree display options:** You can further customize your report view by turning on or off report nodes and entities via check boxes on the **BROWSE REPORTS** Screen.

Once report trees are created, they become available on the **BROWSE REPORTS** screen.

Using Report Trees

Basic Requirements

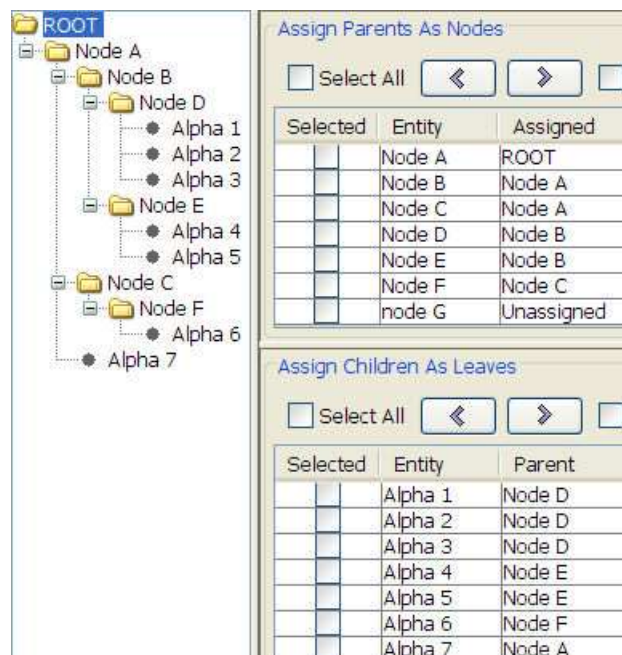
Report trees require two entity groups. One serves as the parent and contains entities for each report tree rollup node. The second entity group contains the report leaves, or entities in the *report entity group*.

Generally, parent entity groups are created specifically for rollup trees. Entities in the parent entity group can be tailored to enhance your report viewed with report trees. The example below is generic to help you understand the concept. You may want to include entities in the parent entity groups such as "Total Revenue", "Total Residential", or "Sub Total Commercial."

Create a Report Tree

Report trees are created from the [Report Tree Screen](#). As shown below, the parent entity group serves as a source for report nodes, the child entity group as the source for leaves in the report tree. In the example below, the parent group contains report node descriptions (Node A - Node G).

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n-level Tree Option

From the [Browse Reports Screen](#), the radio button by *n-level Tree* must be selected to use report trees. This selection will open a panel *Select Rollups to Report* showing all available report trees for the report entity group. Customize your report tree further by using the check boxes provided.

If multiple report trees had been created using the same report entity group for *Children*, additional radio buttons will appear next to *Alpha Report Tree*.

To view this section on the **BROWSE REPORTS** screen, the desired report must be active, and the Browse Reports check box must be unchecked.

Browse Reports for Two-Dimensional reports allows you to see and select from the secondary entities (previously, the only option available was the primary entity list). There is an option on the **BROWSE REPORTS** screen (*Report by Association*). This extends the reporting to handle situations where there are multiple associations to another entity group. For example, a planning entity may have associations to other planning entities for different reasons - legal entity rollup, money pool financier, dividend parent, etc. You can roll up across any association.

Report Tree Example

The examples below illustrate the use of report trees when viewing a report. The first two examples show a simple report calculation, and report results.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Alpha Entity	Input()

Report Results (with the *by tree* radio button selected)

	Jun
Alpha 1	
Alpha Entity	100
Alpha 2	
Alpha Entity	200
Alpha 3	
Alpha Entity	300
Alpha 4	
Alpha Entity	400
Alpha 5	
Alpha Entity	500
Alpha 6	
Alpha Entity	600
Alpha 7	
Alpha Entity	700
Total	
Alpha Entity	2,800

The example below shows the same report displayed using the report tree.

	Jun
Node A	
Alpha Entity	2,800
Node B	
Alpha Entity	1,500
Node D	
Alpha Entity	600
Alpha 1	
Alpha Entity	100
Alpha 2	
Alpha Entity	200
Alpha 3	
Alpha Entity	300
Node E	
Alpha Entity	900
Alpha 4	
Alpha Entity	400
Alpha 5	
Alpha Entity	500
Node C	
Alpha Entity	600
Node F	
Alpha Entity	600
Alpha 6	
Alpha Entity	600
Alpha 7	
Alpha Entity	700

Other Features:

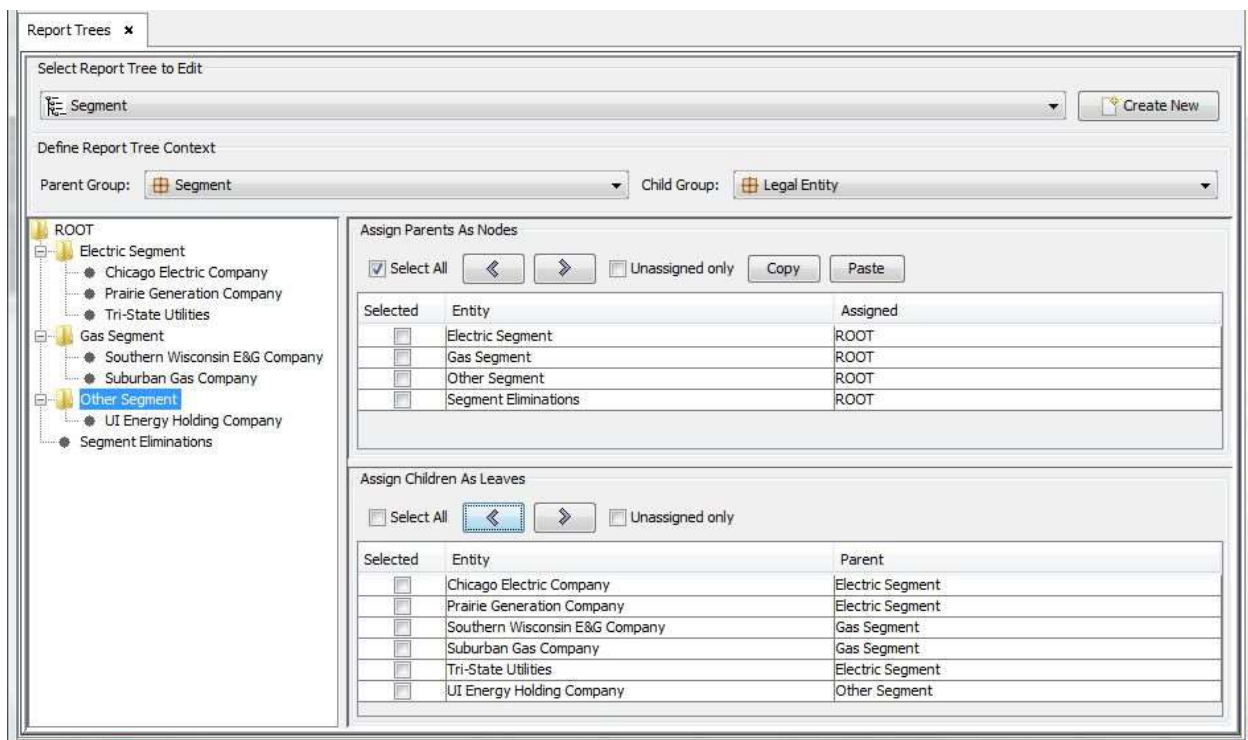
- Each parent node appears as a line in the report display with a subtotal of all children entities under the parent node.
- Parent entities can only be used one time in the report tree. It is not necessary to use all parent entities in the report tree.
- Parent nodes can roll up to other parent nodes, but child nodes can only roll up to parents. An error message will open if you attempt to

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place a child entity under the root, or a parent node under a child entity.

- The report trees does not need to be uniform in structure. See how Alpha 7 appears under the first parent level node.
- Child entities not included in the report tree, will not be included in the report results using the tree. However entities not included by un-checking the box on the *Select Rollups to Report* panel **will** be included in parent node sub totals.

{ XE "Report" * MERGEFORMAT }{ XE "Report Trees#Building_a_Report_Tree" * MERGEFORMAT }{ XE "Report Trees" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Report Trees Screen



Report trees are custom formatted rollup structures you can create for use in viewing reports. Report trees are created on the **REPORT TREES** screen then selected as a report option on the **BROWSE REPORTS** screen.

Screen layout:

The **REPORT TREES** screen is comprised of four regions. The top of the screen contains controls that allow you to select trees and to select the report tree context. The left side of the screen contains the active report tree. Two

panels located on the right side of the screen control parent tree nodes and the leaf entities in the report tree.

Select a Report Tree to Edit:

Select a Report Tree To edit: Use the drop down box to select a report tree to edit.

Name: Shows the name of the active report tree. Use the drop-down list to select a report tree previously created.

Create New: Opens the [Add Object dialog box](#) for creating a report tree.

Define Report Tree Context:

Parent Group: Select the parent entity group from which you can select report tree parent nodes.

Child Group: Select the report entity group from which you can select report tree child nodes.

Report Tree:

Prior to creating a report tree, the report tree screen section contains only a root node. Once the tree is created, (below) this section will contain the full tree.

The *Assign Parents As Nodes* and *Assign Children as leaves* panels on the right of the screen are used to build the tree by allowing you to designate parent nodes and add child nodes to parents in the tree.

Assign Parents Rollup Nodes and Child entities

The two screen panels shown below are used to add, delete, or move nodes and leaves on the report tree. Control buttons on the two panels (except **COPY** and **PASTE**) are identical, and perform the same functions for both the parent nodes and the children leaves. Control buttons on each panel only control the nodes or leaves listed on the panel.

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Assign Parents As Nodes

Select All << >> Unassigned only Copy Paste

Selected	Entity	Assigned
<input type="checkbox"/>	Node A	ROOT
<input type="checkbox"/>	Node B	Node A
<input type="checkbox"/>	Node C	Node A
<input type="checkbox"/>	Node D	ROOT
<input type="checkbox"/>	Node E	Unassigned
<input type="checkbox"/>	Node F	Unassigned
<input type="checkbox"/>	Node G	Unassigned

Assign Children As Leaves

Select All << >> Unassigned only

Selected	Entity	Parent
<input type="checkbox"/>	Alpha 1	Node B
<input type="checkbox"/>	Alpha 2	Node B
<input type="checkbox"/>	Alpha 3	Node B
<input type="checkbox"/>	Alpha 4	Node C
<input type="checkbox"/>	Alpha 5	Node C
<input type="checkbox"/>	Alpha 6	Node D
<input type="checkbox"/>	Alpha 7	Node A

Copy: Will copy the active tree to the clipboard.

Paste: Will paste a tree structure saved to the clipboard to the active report tree.

Select All: Toggles the *Selected* column of boxes from checked to not checked. Un-checking this box will un-check the "selected" box for all nodes on the list.

Left Arrow: Moves the selected entities to the tree under the parent node selected on the tree.

Right Arrow: Moves the selected entities from the tree. Also moves the selected nodes to a new location on the tree.

Unassigned Only: When this box is checked, only entities not already assigned to the tree will be displayed. If un-checked, all entities will be displayed.

Entity Column: Displays the entity

Assigned or Parent column: Indicates placement of the entity on the report tree. This column will show the parent for the entity in that row, or indicate the entity is "unassigned," i.e., has no parent.

Building a Report Tree.

Add a node or leaf to the tree

- Highlight a node on the tree under which new nodes are to be added.
- Select the item to be moved to the tree by using the check boxes in the *Assign...* panels.
- Click the "<" left arrow in the appropriate panel.

The nodes or leaves selected will be added to the tree at under the selected node, and the *Assigned* or *Parent* column will indicate the Parent node.

Remove a node or leaf from the tree

- Using the check boxes, select the node or leaf to be removed from the tree in the *Assign...* panel.
- Click the ">" right arrow on the appropriate panel.

The nodes or leaves selected will be removed from the report tree.

Move a node or leaf to a new location on the tree

- Highlight the destination node i.e. the tree node you want nodes or leaves moved to.
- Select the desired nodes or leaves in the appropriate panel. Click the < left arrow.

The selected nodes or leaves will be moved to the highlighted node.

Features

Parent nodes are assigned to all nodes or leaves in the tree, and displayed in the *Assigned* or *Parent* columns. The parent assignment remains on the entity even if it is not part of the tree. With this feature you can remove nodes from the tree, but maintain its parent designation.

Subtotals will be printed for each report tree node on the final report.

{ XE "Create" * MERGEFORMAT }{ XE "Report" * MERGEFORMAT }{ XE "Editing:Report Tree" * MERGEFORMAT }{ XE "Editing" * MERGEFORMAT }{ XE "Report Trees:edit" * MERGEFORMAT }{ XE "Report Trees" * MERGEFORMAT }Create or Edit a Report Tree

Report trees must be created and selected as a display option on the **BROWSE REPORT** Screen.

- Open the **REPORT TREES** screen.

The screenshot shows a window titled "Report Trees". It contains two main sections:

- Select Report Tree to Edit:** A dropdown menu currently shows "Report tree Alpha". To its right is a text field labeled "Name:" containing "Report tree Alpha". Further right are two buttons: "Create New" (with a plus icon) and "Remove" (with a minus icon).
- Define Report Tree Context:** This section has two dropdown menus. The first is labeled "Parent Group:" and shows "Report Tree for Alpha". The second is labeled "Child Group:" and shows "Entity Group Alpha".

- To edit an existing tree, select the desired report tree from the drop-down list on the left.

To Create a New Report Tree:

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- Click **Create New** to create a new report tree in the [Add Object Dialog Box](#) which is used to add all objects. Add the new report tree to the list.

When the dialog box closes, the new report tree will appear on the screen.

After the report tree has been created, assign parent and child groups:

- Select the parent group from the drop-down list of entity groups. Generally you should [create an entity group](#) with good rollup node descriptions.
- Select the child group from the drop list of entity groups.
- Using the screens sections *Assign Parents As Nodes* and *Assign Children As Leaves*, create the report tree.

See [Build a Report Tree](#) for additional information.

Line Attribute Editor

{ XE "Attribute Editor" * MERGEFORMAT }{ XE "Line Attribute Editor" * MERGEFORMAT }{ XE "Screen - Line Attribute Editor" * MERGEFORMAT }Line Attribute Editor Screen

The **LINE ATTRIBUTE EDITOR** screen brings together items that are stored by Report/Line. Currently, the two elements in this screen are:

- a) *Report Line Attributes*: which allow you to add text values as attributes to lines in order to add additional information to a report, and
- b) *Posting by Case*: which shows those lines that are tagged to post across all attribute cases. The value of this screen is that it shows all postings in across all cases. Thus, if you have put an override posting in an additional attribute case, it is highlighted here.

Note: Although line formats are also stored by Report/Line, these are more logically (and more easily) edited from the **BROWSE REPORTS** screen.

Screen Layout:

This screen has two regions.

Along the top is the *Select Report* region, where you can select a specific report group and report using the drop-down list. It is common to both tabs described below since each tab is report centric. This is where you select the report for which lines are displayed.

The **LINE ATTRIBUTE EDITOR** screen includes two tabs (as shown above): *Line Attributes* and *Posting – by Case*.

Line Attributes

When *Line Attributes* is chosen, lines on the selected report will appear in the main region. Line attributes are shown as columns. This is where you enter the values for the attributes by line.

At the top right on this tab is a drop-down list which allows you to select the attributes case in which to store the values.

The top region also includes the **ADD LINE ATTRIBUTE** button which also allows you to create a new line attributes.

Posting – by Case:

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When *Posting – by Case* is chosen, lines on the selected report will be displayed with the active attribute case(s) as columns. The column(s) has check boxes which indicate lines selected for posting.

On the top right of this tab is the **ASSIGN POSTING** button, which opens the **ASSIGN POSTING** screen. Note: An alternate method for accessing this screen is the **ASSIGN POSTINGS** button on the **CALCULATION EDITOR** screen.

List of Tasks or Operations that are performed with this Screen:

This screen is used for two main tasks:

Add a New Line Attribute

Manage Postings

{ XE "Adding a New Line Attribute" * MERGEFORMAT }{ XE "Line Attribute Editor" * MERGEFORMAT }Add a New Line Attribute

New line attributes are added in the Line Attribute Editor screen. Adding a new line attribute involves creating the line attribute, creating a custom column set that uses the attribute, and then populating the line attribute with values. To add a new line attribute, follow these steps.

Add A New Line Attribute:

- Click **ADD LINE ATTRIBUTE** to open the **ADD OBJECTS** dialog box. In the example below, "FERC Account" and "Line Number" are entered.

Name(s) To Add	Characters Remaining
FERC Account	68
Line Number	69

- In order to have a line attribute displayed when you run reports, you need to create a custom column set that includes that attribute. Custom column sets are created in the **REPORT COLUMNS** screen.

In the example below showing the **REPORT COLUMNS** screen, *Line Number* and *FERC Account* have been added as a FERC account custom column set. These attributes are available to all reports.

Report Columns * []

Custom Report Column Set
This year vs. last year by quarter and year (Scenario Compare)
Rate Periods (12-Month Ending December Only)
Excel Group
1/11 Forecast
FERC Accounts

Add 12 Months Add Year Copy A Values to B Delete B Values Create Widen Narrow

A	B	C	D	E	F	G
Column Type	Attribute	Attribute	Date	Date	Date	Date
Scenario A-Period			Year	Year	Year	Year
Scenario A-Year			1	2	3	4
Scenario B-Period						
Scenario B-Year						
Excel Group 2						
Excel Group 1						
Page Break After Column	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Line Attribute	Line Number	FERC Account				
Delete Column	<input type="checkbox"/> Del	<input type="checkbox"/> Del	<input type="checkbox"/> Del	<input type="checkbox"/> Del	<input type="checkbox"/> Del	<input type="checkbox"/> Del
Insert Column	<input type="checkbox"/> Ins	<input type="checkbox"/> Ins	<input type="checkbox"/> Ins	<input type="checkbox"/> Ins	<input type="checkbox"/> Ins	<input type="checkbox"/> Ins

Populate Line Attribute Values:

- Select the report group and report from the drop-down list in the top region of the screen.
- Select the appropriate attribute case.
- Double-click on the line in the appropriate attribute column in order to enter values for that line.
- Save the data.

In the example below, values for *FERC Account* and *Line Number* have been added in order to creating a FERC Form 1 style report.

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Line Attributes | Posting - by Case

Attributes for lines - by Case

Select Case: Base Attribute Case (Base)

Line	FERC Account	Line Number
A:[Entity Description - Balance Sheet]		
B:[]		
C:[Assets]		1
D:[]		2
E:[Property, Plant & Equipment:]		3
F:[Utility Plant In Service]	101-106, 114	4
G:[Accumulated Depreciation & Amortization]	108, 111, 115	5
H:[Utility Plant In Service, Net]		6
I:[]		7
J:[Construction Work In Progress]	107	8
K:[]		9
L:[Total Property, Plant & Equipment Net]		10
M:[]		11
N:[Other Property and Investments:]		12
O:[Investments in Subsidiaries]	123.1	13
P:[Other Investments]	124	14

Once a line attribute has been added, a custom column set has been created for that attribute, and the line attribute values have been populated, a report can be run displaying the new information.

Below is an example of a report format that includes the *Line Number* and *FERC Account* attributes and the appropriate column set:

Detail Model 2009-2013 Base Plan	Line Number	FERC Account	Year 2008	Year 2009	Year 2010	Year 2011
Chicago Electric						
B:[]						
C:[Assets]						
D:[]						
E:[Property, Plant & Equipment:]						
F:[Utility Plant In Service]	4	101-106, 114	17,600,000	18,137,292	18,829,272	19,938,374
G:[Accumulated Depreciation & Amortization]	5	108, 111, 115	-7,240,000	-7,727,701	-8,234,912	-8,764,531
H:[Utility Plant In Service, Net]	6		10,360,000	10,409,592	10,594,360	11,173,843
I:[]						
J:[Construction Work In Progress]	8	107	140,496	228,995	327,923	215,238
K:[]						
L:[Total Property, Plant & Equipment Net]	10		10,500,496	10,638,587	10,922,283	11,389,075
M:[]						
N:[Other Property and Investments:]						
O:[Investments in Subsidiaries]	13	123	0	0	0	0
P:[Other Investments]	14	124	0	0	0	0
Q:[Total Other Property and Investments]	15		0	0	0	0
R:[]						
S:[Current and Accrued Assets:]						
T:[Cash and Cash Equivalents]	18	131	4,784	4,784	4,784	4,784
U:[Temporary Cash Investments]	19	136	0	0	0	0
V:[Accounts Receivable, Net]	20	142	250,448	551,400	565,396	579,498

{ XE "Managing Postings" * MERGEFORMAT }{ XE "Line Attribute Editor" * MERGEFORMAT }Managing Postings

The Manage Postings tab in the LINE ATTRIBUTES EDITOR screen displays those lines that are tagged to post across all attribute cases. To view and/or edit postings across cases, follow these steps:

- Select the *Posting – by Case* tab and the report/report group. The screen below appears allowing you to review what differences in postings exists between the attribute cases. This screen allows you to review in detail, or add or modify defaults to the postings.

Note: In this example, an overlay case called *Alternate Posting* has been created for demonstration purposes.

Line	Base Attribute Case	Alternate Posting
AQ:[]	<input type="checkbox"/>	<input type="checkbox"/>
AR:[Current Period Activity:]	<input type="checkbox"/>	<input type="checkbox"/>
AS:[If]	<input type="checkbox"/>	<input type="checkbox"/>
AT:[New Issue - Principal]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AU:[New Issue - Issue Cost]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AV:[New Issue - Discount (Premium)]	<input type="checkbox"/>	<input type="checkbox"/>
AW:[end if]	<input type="checkbox"/>	<input type="checkbox"/>
AX:[If]	<input type="checkbox"/>	<input type="checkbox"/>
AY:[Retirement]	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
AZ:[else]	<input type="checkbox"/>	<input type="checkbox"/>
BA:[Sinking Fund]	<input type="checkbox"/>	<input type="checkbox"/>

You may select or clear the check boxes as required to configure the postings.

- A check box that is selected tags those lines for postings.
 - A shaded check box indicates that there is no effect on postings in subordinate cases.
 - An empty (white) check box is equivalent to no posting. It overrides previous postings, i.e. turns them “off.”
- Click **ASSIGN POSTING** and the **DEFINE POSTINGS - BY CASE** screen will open. By default it opens to the base attribute case. You can use the Case drop-down list to put a posting in a different case.

Define Postings - by Case

Show Lag Patterns Show all lines Show All Postings Show this report Postings Case: Base Attribute Case

Post using Association: Post by Entity Entity: Default

If you post using an association, the code will look first for entity-specific posting, then association posting, then default posting. Only 1 association can be used for each report. If you change the association to use, posting using other associations will not be read. Also, posting defined by association does not change over time. So, if you change a bond from 'FMB' to 'Debenture' at some future date, the posting will stay as defined by the FMB.

Lines

P:[Federal Current Income Tax]

Lag Pattern: Association: Not Inter-company

Cash Flow Acct (Optional): Click Me << Remove Cash Flow Acct Copy Posting to Other Lines IFRS

Transaction

Orig Transaction/Lagged Cash	Debit (increases expense or asset)	Credit (increases revenue or liability)
Accrual	409.1 -- 409.1 Federal Income Tax Expense Above	236.0 -- 236.0 Income Taxes Accrued.

W:[Total Federal Deferred Income Tax]

Lag Pattern: Association: Not Inter-company

ACCOUNTING

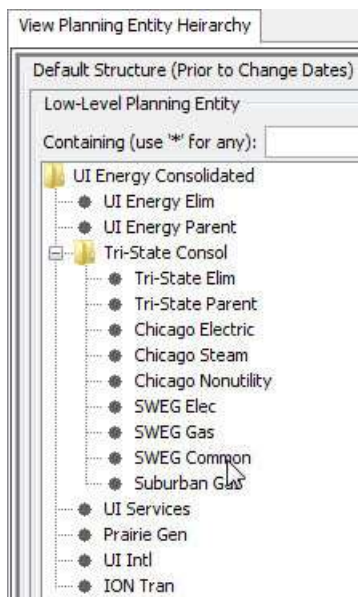
View Planning Entity Hierarchy

```
{ XE "Planning Entity Heirarchy" \* MERGEFORMAT }{  
XE "View Planning Entity Heirarchy" \* MERGEFORMAT  
}{ XE "Entities" \* MERGEFORMAT }{ XE "Screen" \*  
MERGEFORMAT }View Planning Entity Hierarchy Screen
```

This menu option displays the Low Level Planning Entity hierarchy in tree format. The hierarchy is based on LLPE rollup attributes.

Screen layout:

The screen displays the LLPE tree structure shown below, based on its rollup attributes.



Containing (use "*" for any): Search the hierarchy tree. Type in the box provided to delimit the tree.

Making Changes to the LLPE Hierarchy

The example below shows the hierarchy displayed on this screen, as well as the LLPE hierarchy definition from the **ONE PARAMETER EDITOR** screen for the LLPE.

Hierarchy changes must be made to the rollup attribute, not on this screen.

Entity Hierarchy

Rollup Attributes for LLPE

Super Group: Consolidation Entity/Report Group

Assign Values for Selected Attribute [Right Click to Copy, Fill]

Object	Rollup - Business Hierarchy
UI Energy Consolidated	
UI Energy Elim	UI Energy Consolidated
UI Energy Parent	UI Energy Consolidated
Tri-State Consol	UI Energy Consolidated
Tri-State Elim	Tri-State Consol
Tri-State Parent	Tri-State Consol
Chicago Electric	Tri-State Consol
Chicago Steam	Tri-State Consol
Chicago Nonutility	Tri-State Consol
SWEG Elec	Tri-State Consol
SWEG Gas	Tri-State Consol
SWEG Common	Tri-State Consol
Suburban Gas	Tri-State Consol
UI Services	UI Energy Consolidated
Prairie Gen	UI Energy Consolidated
UI Intl	UI Energy Consolidated
ION Tran	UI Energy Consolidated

Manage Ledger

{ XE "Monthly_Closing" * MERGEFORMAT }{ XE "Planning Ledger" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Planning Ledger

The best way to understand the *Planning ledger* is to compare it to a General Ledger. The planning ledger is a depository of postings from selected report lines.

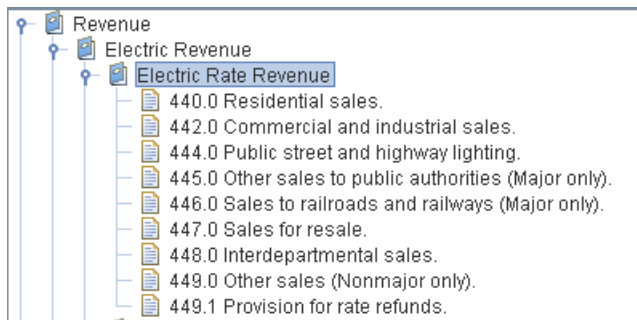
The Planning ledger contains accounts and rollup nodes, which can be accessed for use in reporting.

Planning Ledger Account Structure

A rollup structure can be defined for the Planning Ledger. Rollup Nodes can be assigned to rollup up any number of accounts or other nodes. In the example below, Revenue, Electric Revenue, and Electric Rate Revenue are rollup nodes. Accounts 440 Residential sales - 499.1 Provision for rate

refunds are also shown. Report nodes and accounts can be easily added, deleted and moved within the planning ledger structure.

Notes: Selected report lines can be posted to accounts. Report lines cannot be posted to a report node. Accounts generally begin with a number, but this is not required.



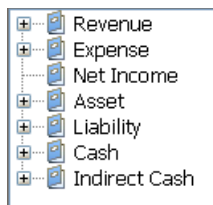
Secondary Account Structures

Secondary account structures can be created for the planning ledger. Typically one structure is defined for external reporting, and one for FERC reporting. Only one set of accounts are set up, with a default account structure. Any number of secondary account structures is allowed.

Secondary account structures are a new set of rollup nodes for all accounts. Root level rollup nodes must be the same as the default account structure, but any configuration of rollup nodes can be created.

Required Root Level Rollup Nodes

While the Planning Ledger structure can have any number of accounts and rollup nodes, it requires a specific structure and specific relationships at the highest rollup node. The Planning Ledger has a set of logic used to close the ledger as well as promote consistency in cash reporting. The minimum structure necessary in UIPlanner is depicted in the example below.



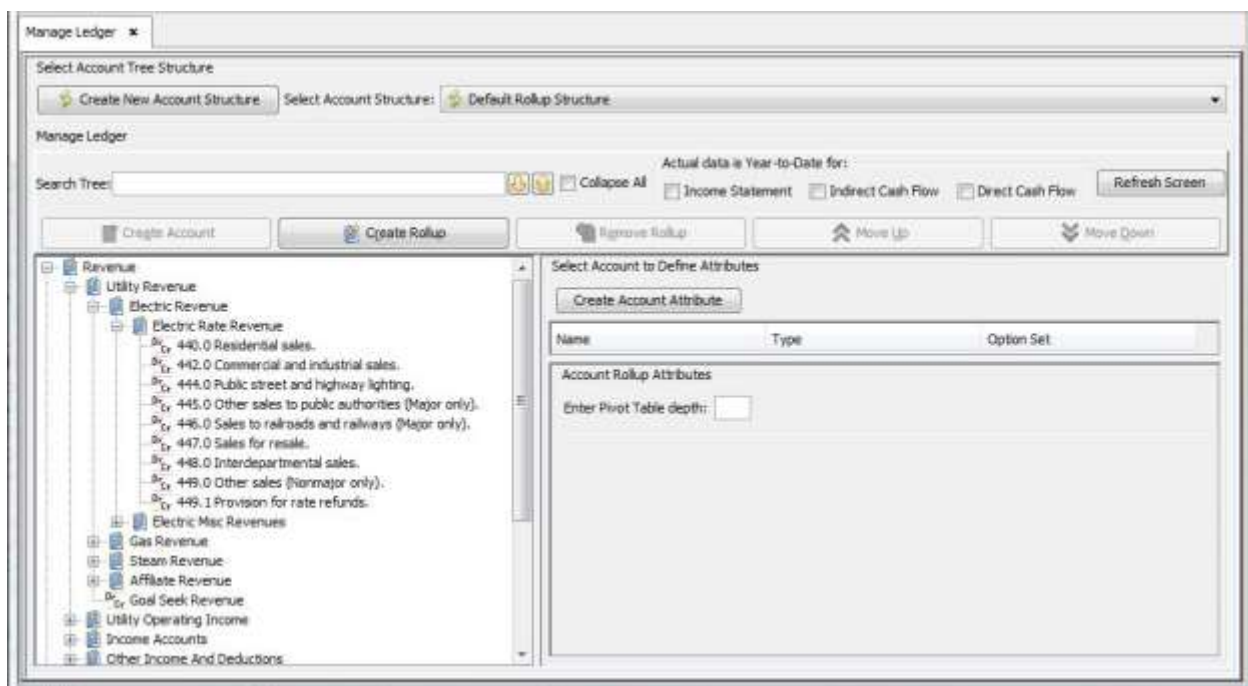
Monthly closing

There are four system generated transactions at monthly closing:

1. Net Income (revenue + expenses)
 - Debit Retained Earnings, Credit none
2. The system also posts Net Income (Income statement) to the Net Income (indirect cash flow)
 - Debit none, Credit Cash Flow Net Income
- Items 1 and 2 above are executed as a single posting: debit retained earnings, credit cash flow net income
3. Cash (sum of all transactions posted to direct-cash sub-ledger)
 - Debit Cash on Balance Sheet, Credit - none
4. Income for subsidiaries
 - Debit (for sub) none, Credit (for sub) none

Debit (for corporate Parent) B/S Investment in subs Credit (for parent) I/S Equity earnings. The parent transaction also creates eliminations, opposite of parent posting (credit B/S, debit I/S). Income for subsidiaries accounts are not required if the client prefers to post subsidiary income manually.

{ XE "Ledger" * MERGEFORMAT }{ XE "Manage Ledger" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Manage Ledger Screen



The planning ledger is managed from **MANAGE LEDGER** screen. Accounts and rollup nodes can be created, edited, and moved from this screen. Account attributes can also be assigned.

Screen Layout:

The active account structure is displayed along the left of the screen, with action buttons near the top. Accounts attributes are created and displayed on the right side of the screen.

List Of tasks Or Operations That Are Performed With This Screen:

Create New Account Structure: Opens a dialog box to create a *secondary account structure*.

Select Account Structure: Displays the default account structure and any secondary account structures. Upon selecting a structure, it will become active, and display along the left of the screen.

Search Tree: Input text and select the up or down buttons to search the active account structure.

Collapse All: Collapses or displays all accounts and rollup nodes in the active account structure.

Actual Date is Year to Date for: These options are selected if actual data is imported or entered with year-to-date values rather than the net change each month.

Create Account: Opens the **Add Object Dialog Box** for creating an account in the planning ledger.

Create Rollup: Opens the **ADD OBJECT** Dialog Box for creating a rollup node in the planning ledger.

Edit: Allows editing of the highlighted rollup node or account.

Move Up or Move Down: Moves the highlighted rollup node or account up or down in the account structure tree.

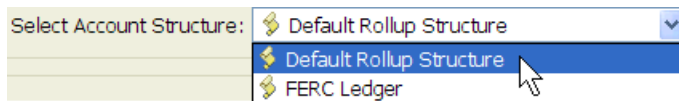
Attributes can be assigned to accounts. One of four attributes can be assigned.

- Accounts number
- Actuals Only: (Y/N)
- Statistical Account; (Y/N)
- Use Statistical Account for Interface calc of retained earnings: (Y/N)

The *Define Accounts* section is active when an account is highlighted in the account structure tree.

{ XE "Account:Add" * MERGEFORMAT }{ XE "Account" * MERGEFORMAT }{ XE "Add:Account" * MERGEFORMAT }{ XE "Add" * MERGEFORMAT }Add Accounts to the Planning Ledger

- Open the [Manage Ledger](#) screen.
- Open the desired account structure from the *Select Account Structure* drop-down list (shown below). The selected account structure will be displayed along the left side of the screen.



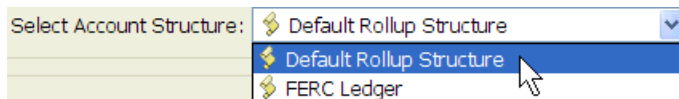
- Highlight the rollup node for the new account(s), and click **CREATE ACCOUNT** to open the [Add Objects dialog box](#).
- Add the new account or accounts.

When the dialog closes, the new account(s) will appear on the account tree. The new account(s) will be created below the highlighted rollup node

{ XE "Rollup" * MERGEFORMAT }{ XE "Add:Rollup Node" * MERGEFORMAT }{ XE "Add" * MERGEFORMAT }{ XE "Rollup Node:Add" * MERGEFORMAT }{ XE "Rollup Node" * MERGEFORMAT }Create a Rollup Node in the Planning Ledger

Rollup nodes can be modified to meet any business need. Secondary account structures can also be created in the same way.

- Open the [Manage Ledger](#) screen.
- Open the desired account structure from the *Select Account Structure* drop-down list. The selected account structure will be displayed along the left side of the screen.



- Highlight a rollup node and click **CREATE ROLLUP** to open the [Add Objects dialog box](#).
- Add the new rollup node.

When the dialog closes, the new rollup node will appear on the screen.

Note: A rollup node will be created in the planning ledger.

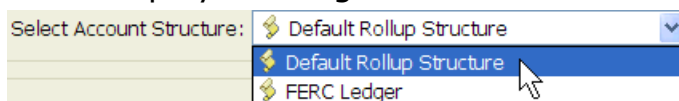
{ XE "Create" * MERGEFORMAT }{ XE "Create Secondary Account Structure" * MERGEFORMAT }Create a Secondary Account Structure

- Open the *MANAGE LEDGER* screen.
- Click **CREATE NEW ACCOUNT STRUCTURE** in the *Select Account Tree Structure* region of the screen. The dialog box *INPUT* (shown below) will open.
- Enter the name of the secondary account structure you are creating in the space provided.
- Click **OK**. A new secondary account structure will be created. The new secondary structure will be a copy of the default structure.



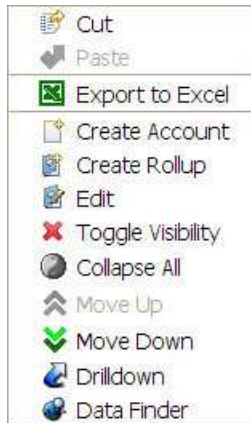
{ XE "Account" * MERGEFORMAT }{ XE "Move Accounts" * MERGEFORMAT }{ XE "Rollup" * MERGEFORMAT }{ XE "Rollup Node" * MERGEFORMAT }Move Accounts or Rollup Nodes in the Planning Ledger

- Open the [Manage Ledger](#) screen.
- Open the desired account structure from the *Select Account Structure* drop-down list (shown below). The selected account structure will be displayed along the left side of the screen.



- Highlight the rollup node or account to be moved.
- Right click to display the menu below.

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- Select **Cut** from the menu to cut the desired account or rollup node.
- Highlight the desired rollup node to place the cut item.
- Right click to display the popup menu. Select **Paste**.
- The selected rollup node or account will be moved to the new rollup node.

{ XE "Define Postings" * MERGEFORMAT }{ XE "Sub Screen" * MERGEFORMAT }Screen - Define Postings

The **DEFINE POSTINGS** screen defines the accounting entries posted to the *Planning Ledger* for report lines. Access to this screen is available from the **CALCULATION EDITOR** screen, as well as the **LINE ATTRIBUTE EDITOR** screen (*Posting – By Case* tab). An example of the **DEFINE POSTINGS** screen for a bond report is shown above.

Occasionally

Screen Layout

The **DEFINE POSTINGS** screen has two regions:

The top region of the screen contains overall rules for defining the postings for that report (e.g., whether the posting is a default for all entities or a specific entity, the attribute case for these postings), and buttons that launch various informational dialog boxes.

The main body of the screen is where you assign the actual postings (debits, credits) for specific lines. You can only assign postings for lines that have been tagged as posted on either the **CALCULATION EDITOR** or the **LINE ATTRIBUTE EDITOR** screens.

-

List Of Operations Or tasks that Are Performed With This Screen:

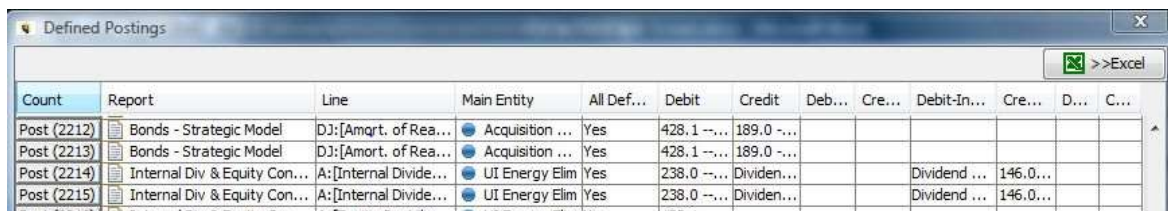
Define Control Settings

Display options

- **Show all lines:** This check box toggles the display to show all report lines, or only those report lines with postings.

Informational Dialogs

- **Show Lag Patterns:** This button brings up a dialog box showing the defined lag patterns in the active scenario.
- **Show All Postings:** This button opens a dialog box listing all postings defined for all reports in the active scenario. This listing can be exported to Excel.



Count	Report	Line	Main Entity	All Def...	Debit	Credit	Deb...	Cre...	Debit-In...	Cre...	D...	C...
Post (2212)	Bonds - Strategic Model	DJ:[Amort. of Rea...	Acquisition ...	Yes	428.1 --...	189.0 --...						
Post (2213)	Bonds - Strategic Model	DJ:[Amort. of Rea...	Acquisition ...	Yes	428.1 --...	189.0 --...						
Post (2214)	Internal Div & Equity Con...	A:[Internal Divide...	UI Energy Elim	Yes	238.0 --...	Dividen...			Dividend ...	146.0...		
Post (2215)	Internal Div & Equity Con...	A:[Internal Divide...	UI Energy Elim	Yes	238.0 --...	Dividen...			Dividend ...	146.0...		

- **Show this Report Postings:** This button opens a dialog box listing all postings for the report currently selected.

Posting Rules

The next selections allow you to customize the postings so that only certain entities or groups of entities behave differently than the report as a whole.

- **Post using Association:** The first option in the Post using Association drop-down list will always be *Post by Entity*. If associations exist for the report entity group, they will be displayed next in the list. In the bond example shown above, there are two associations to the report entity group, *Planning Entity* and *Issue Type* (e.g., FMB).
- **Entity:** Drop-down list of entities. This list will change depending on the selection made in the *Post using Associations* drop-down list described above. In all cases, *Default* is the first item on the list.

Define Postings

The main body of the screen is where you define postings for various lines for the entity selected in the *Entity* drop-down list. Select *Default* to apply posting definition to all entities. If you want to define unique postings for specific entities, select each entity in turn and define the appropriate posting. Some examples follow:

- If you want to have every entity in the report to be posted the same, select *Post by Entity* and *Default*.
- If you want to have a specific entity post differently, you select *Post by Entity* and that entity in the right *Entity* drop-down list.
- If you want to have the override applied to all entities based on an association that they have, e.g., all FMB's, select post by association: bond type in the left drop-down list and the association (e.g., FMB) on the right.

Note: These overrides do not have to be done for every line in the report, i.e., you can select only one line to be posted differently.

If you post using an association, the code will look first for entity-specific posting, then association posting, then default posting. Only one association can be used for each report. Also, posting defined by association does not change over time. Thus, if you change a bond from "FMB" to "Debenture" at some future date, the posting will stay as defined by the FMB.

A screen section, such as that shown below, will appear for all report lines tagged as posted. See the example below for a bond, specifically line "CO: Total Interest Accrual" line on a bond report.

Orig Transaction/Lagged Cash	Debit (increases expense or asset)	Credit (increases revenue or liability)
Accrual	427.0 -- 427.0 Interest on LTD	237.0 -- 237.0 Interest accrued.

Lag Patterns: Select a lag pattern if desired. Options presented in this drop-down list will list all lag patterns defined. See [Create or Edit a Lag Pattern](#). If a lag pattern is selected, e.g., *Quarterly Payment*, the transaction screen section will add a second line for the cash portion of the entry as shown below.

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CO:[Total Interest Accrual]

Lag Pattern: Quarterly Payment Association: Not Inter-company

Cash Flow Acct (Optional): Click Me << Remove Cash Flow Acct Copy Posting to Other Lines IFRS

Transaction

Orig Transaction/Lagged Cash	Debit (increases expense or asset)	Credit (increases revenue or liability)
Accrual	427.0 -- 427.0 Interest on LTD	237.0 -- 237.0 Interest accrued.
Cash		

If you are assigning postings on a line and have it designated as “lagged”, when you assign one side (debit or credit) to an account on the Balance Sheet, the posting screen will automatically populate that same account for the cash reversal.

Association: Select the planning entity association for intercompany transactions. Options presented in this drop-down list will be all associations to the planning entity, and all associations to the special type entity group for the planning entity. If any intercompany association is selected, the transaction screen section will expand to accommodate posting definitions for intercompany transactions as shown in the example below.

CO:[Total Interest Accrual]

Lag Pattern: Association: Bonds - Detailed Model Association: Planning Entity

Cash Flow Acct (Optional): Click Me << Remove Cash Flow Acct Copy Posting to Other Lines IFRS

Transaction

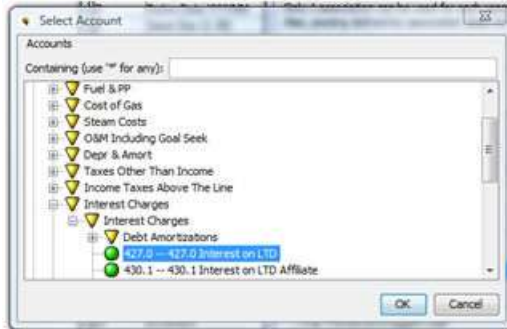
Orig Transaction/Lagged Cash	Debit (increases expense or asset)	Credit (increases revenue or liability)
Accrual	427.0 -- 427.0 Interest on LTD	237.0 -- 237.0 Interest accrued.

Intercompany Transaction

Orig Transaction/Lagged Cash	Debit (increases expense or asset)	Credit (increases revenue or liability)
Accrual		

Assign accounts:

Select the appropriate account from the Planning Ledger to post transactions. Right click the appropriate debit or credit input cell to open the Select Account dialog box with quick search capability. This dialog contains all planning ledger accounts. Select the desired account and it will be placed in the active account cell. An example of this dialog box for a bond interest accrual line is shown below.



Assign Cash Flow Account (Optional): Clicking on the *Cash Flow Account* space will open the **SELECT ACCOUNT** dialog box which will contain indirect cash accounts only.

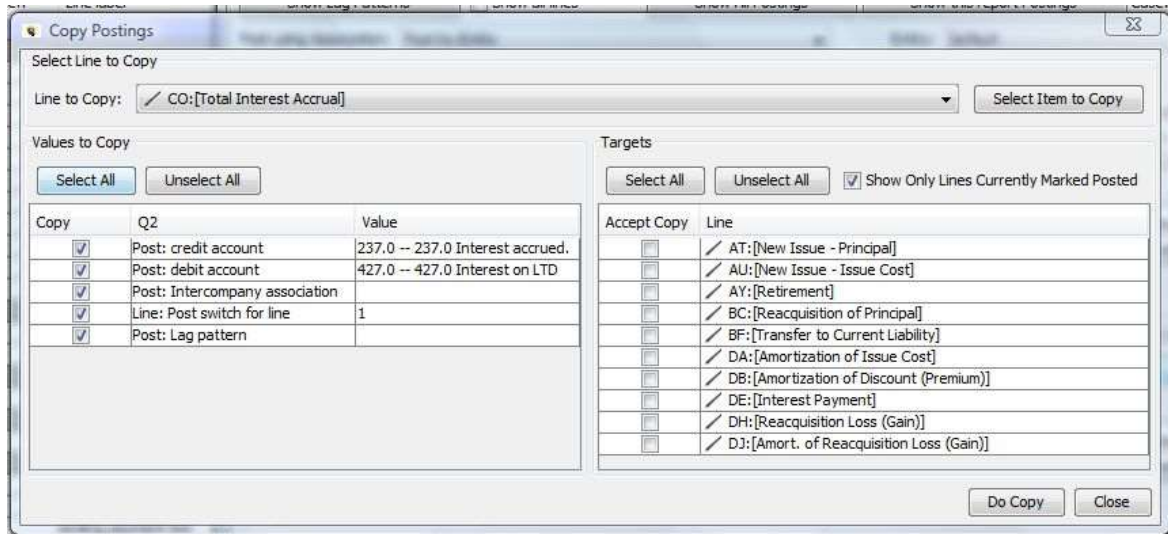


Click **REMOVE CASH ACCOUNT** to remove cash flow account assignments.

COPY POSTINGS TO OTHER LINES: This button opens the **COPY POSTINGS** dialog box, which enables you to copy posting-related data from one line on a report to another line on that same report.

- **Show Only Lines Currently Marked Posted:** Check to limit the target (destination) lines to ones already designated as posted.
- **Select a line:** Select the line to copy postings for via the drop-down list or using the **SELECT ITEM TO COPY** button which opens a dialog box with text search capability.
- **Select values to copy:** Select all or some of the posting values to copy via check box selections in the *Values to Copy* area on the left.
- **Select a target line(s):** Select a destination line(s) via check box selections in the *Targets* area on the right.
- **Do COPY:** Click to perform the copy operation.

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IFRS: Check to implement IFRS (International Financial Reporting Standards) postings. This allows you to define IFRS-compliant accounts for items that require redirection or reclassification. See [IFRS Postings](#) for details.

{ XE "IFRS Postings" * MERGEFORMAT }{ XE "Postings" * MERGEFORMAT }Implement IFRS Postings

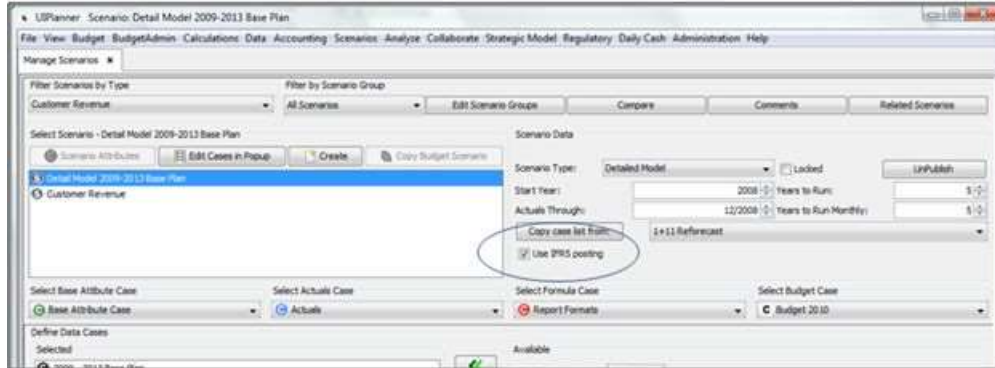
UIPlanner has the ability to turn on automatic reclassifications/re-postings for specific items in order to produce IFRS-compliant financial statements. At run-time, UIPlanner will automatically make the required reclassifications to allow you to produce IFRS-compliant financial statements.

An example of this concept is that some Assets (in particular some Regulatory Assets) may not be considered Assets under IFRS standards. Thus, you can define an IFRS account, most likely an expense, and re-direct the Regulatory Asset to that Expense Account. UIPlanner will transfer any beginning balance and subsequent postings to the new IFRS account, in effect a write-off of the asset in the first period, and reversal of amortization expenses that would have been posted to the Balance Sheet.

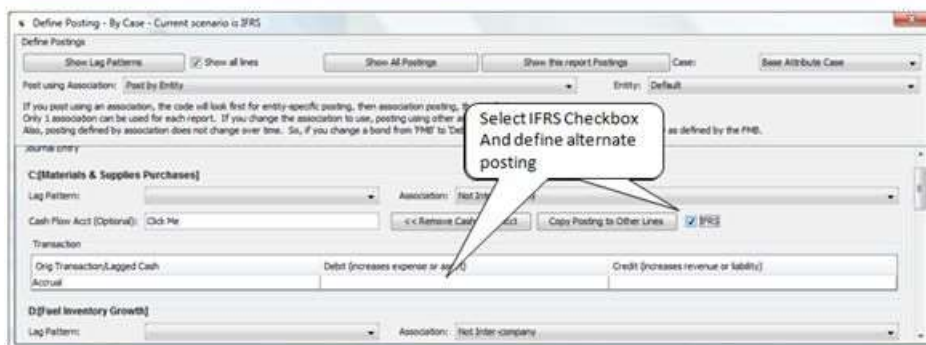
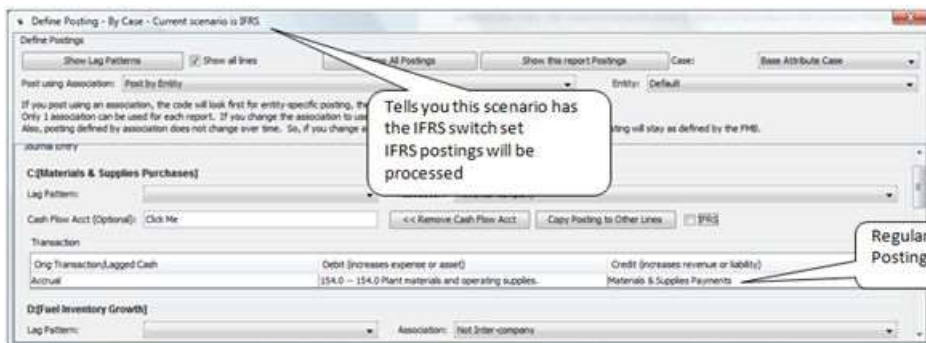
UIPlanner has two options for implementing IFRS.

Option 1 - IFRS Posting

This feature is enabled by a *Use IFRS Posting* check box (see below) on the top region of the **MANAGE SCENARIOS** screen. It is operational only if the scenario has the *IFRS Posting* option selected.



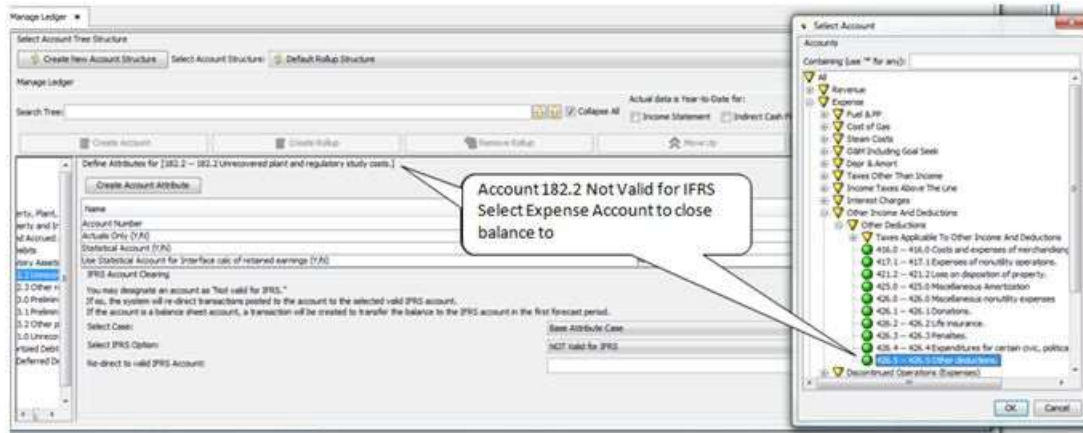
Under this option, you specifically designate an IFRS Posting transaction using the **DEFINE POSTING** screen (see below).



Option 2 – Tag Accounts Not Valid for IFRS

Under this option, you can designate an account as *Not Valid for IFRS* on the **MANAGE LEDGER** screen. If an account is so tagged, you must pick another account that is cleared to. For Balance Sheet accounts, a system-defined transaction association will be created to wipe out the beginning balance, if any. Any amounts posted to the Accounts designated as *Not Valid for IFRS* accounts will be re-directed to the assigned *Clear-To Account*. See the example below.

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Map Accounts to Indirect Cash Flow

{ XE "Indirect Cash Flow" * MERGEFORMAT }{ XE "Map Accounts to Indirect Cash Flow" * MERGEFORMAT }{ XE "Screen - Map Accounts to Indirect Cash Flow" * MERGEFORMAT }Map Accounts to Indirect Cash Flow Screen

Account	Winner	Base Attribute Case
252.0 Customer Advances for Construction		
254.0 Other regulatory liabilities		
257.0 Unamortized gain on reacquired debt		
255.0 Accumulated Deferred ITC		
227.0 Obligations under capital leases-noncurrent	Change in Non-Current Liabilities	Change in Non-Current Liabilities
228.1 Accumulated provision for property insurance	Change in Other Current Liabilities	Change in Other Current Liabilities
228.2 Accumulated provision for injuries and damages	Change in Other Current Liabilities	Change in Other Current Liabilities
228.3 Accumulated provision for pensions and benefits	Change in Other Current Liabilities	Change in Other Current Liabilities
228.4 Accumulated miscellaneous operating provisions	Change in Accrued Income Taxes	Change in Accrued Income Taxes
229.0 Accumulated provision for rate refunds	Change in Other Current Liabilities	Change in Other Current Liabilities
230.0 Asset Retirement Obligation - Noncurrent		
253.0 Other deferred credits		
253.3 Long-Term Post Retirement Benefits (FAS 106)		
253.8 Accrued Pension Liability		
256.0 Deferred gains from disposition of utility plant		
Electric Revenue		
Wholesale and Trading		
Gas Revenue		
Intercompany Revenues		
Interest Income		
Money Pool Interest Income		
Other Operating Receipts		
Service Co Payments		
Insurance Payments		
OGM Labor		
OGM Nonlabor		
Benefit Payments		
Income Tax Payments		
Taxes Other Than Income Tax Payments	Change in Other Current Liabilities	Change in Other Current Liabilities
Interest Payments	Change in Accrued Interest	Change in Accrued Interest
SWAPS		
Purchased Power Payments	Change in Accounts Payable	Change in Accounts Payable
Fuel (Gas) Payments	Change in Accounts Payable	Change in Accounts Payable
Fuel (Coal) Payments	Change in Accounts Payable	Change in Accounts Payable
Materials & Supplies Payments	Change in Inventories	Change in Inventories
Property Tax Payments	Change in Other Current Liabilities	Change in Other Current Liabilities

The **MAP ACCOUNTS TO INDIRECT CASH FLOW** screen allows you to build out an Indirect Cash Flow statement in UIPlanner that will be populated automatically from the results of the model run.

Typically, in actuals periods, the reports in actuals are built manually from the Income Statement, Balance Sheet and analysis of monthly transactions. UIPlanner's planning ledger and approach to capturing the cash impact of individual transaction account structures allows us to build this report dynamically for the forecast. Transactions are not posted to the Indirect Cash Flow ledger accounts. The amounts are derived from the I/S, B/S and Receipts and Disbursement accounts mapped to the account. This report will be automatically balanced. Any unmapped transactions are automatically placed on a line of your choosing (you select which account to use using the **ASSIGN SPECIAL TYPES** screen. Contact your system administrator for more information).

Once you have mapped the relevant accounts, UIPlanner derives the amounts to show on the account by the following logic stream:

1. Is it an Indirect Cash Flow transaction?
 - a. It affects the I/S and B/S, or
 - b. It affects CASH and the B/S.

2. If so, what account should it be mapped to?
 - a. It is directly mapped via the **POSTING** Screen.
 - b. It is mapped using the source Receipts and Disbursements account (on this screen).
 - c. It is mapped via change in a Balance Sheet account (on this screen).
 - d. If none of the above, it is mapped to the *Default for Unmapped Transactions* account.

One final note. This dynamic functionality is available only in the forecast period, where UIPlanner knows all the underlying transactions. Additional information is needed to build an indirect cash flow in the actuals period.

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Screen Layout:

The **MAP ACCOUNTS TO INDIRECT CASH FLOW** screen is essentially a grid view listing of all of the Income Statement, Balance Sheet and Direct Cash Flow accounts. Within the grid, if you click on an account, it brings up a dialog box listing the accounts in the Indirect Cash Ledger. Once you select an account, the dialog box will close and that account will be listed in the grid. In action, UIPlanner will trap all transactions to that source account and will put it to that Indirect Cash Flow account. They will then show up on the Indirect Cash Flow report, if you use the **ACCOUNT** function in the **CALCULATION EDITOR**.

As the account mappings are attribute data, the screen shows the active attribute cases as columns, with the Winner in the first column.

At the top of the screen are a series of radio buttons that allow you to choose the sort order for the accounts. You can show the accounts

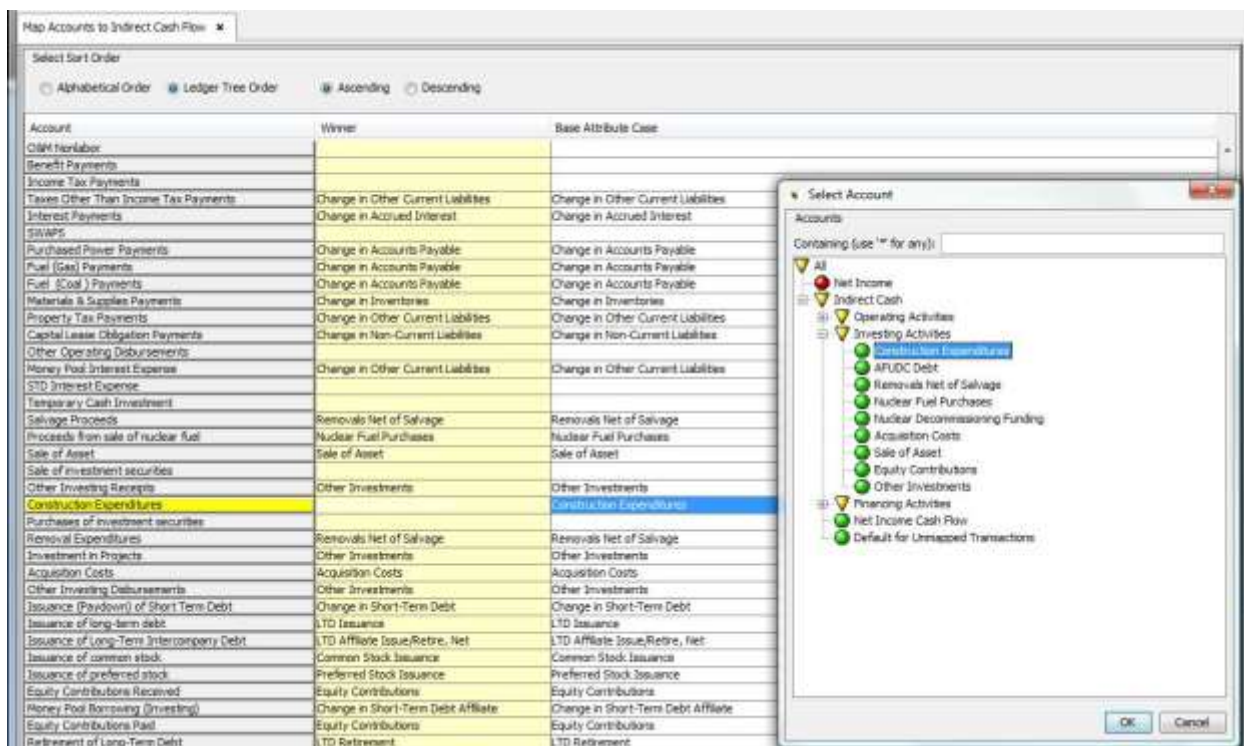
- In alphabetical order, or
- In ledger order (Income Statement, then Balance Sheet, then Receipts and Disbursements).

Within each of these you can elect to sort either ascending or descending.

List of Tasks or Operations that are performed with this Screen:**Mapping Accounts**

Below are the steps to take to map accounts to the Indirect Cash flow:

- Choose the account (I/S, B/S or Direct Cash Flow) you want to map from, and click in the grid under the Base Attribute case.
- When the Indirect Cash Flow Ledger dialog window comes up, expand the nodes until you find the account you want to map to. Highlight that account and click **OK**.
- The window will close and the selected account will be added to the grid. See below.



Below is an example of an Indirect Cash Flow report with the drilldown back to the mapping.

Define Report Properties | Browse Report: Cash Flow | Graph Data

YOUNGQUIST-Financial Statements-Cash Flow

Format Report | Search Table | Drilldown on Data | Action Panel

Drilldown K:[Deferred Income Taxes, Net] - Chicago Electric (Nov/2009)

Account(Deferred Income Taxes, Net)

Transaction	From report	From line	From Entity	From Sub-Entity	Type	Value
Debit	Income Tax - State	State Deferred Income Tax	CHI Elec Illinois		Orig/Indirect CF	-1,582
Debit	Income Tax - State	State Deferred Income Tax	CHI Elec Michigan		Orig/Indirect CF	-164
Debit	Income Tax - Federal	Total Federal Deferred In	Chicago Electric		Orig/Indirect CF	-7,674
	Total					-9,420

Detail Model 2009-2013 Base Plan	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Year 2009	Year 2010	Year 2011	Year 2012
Net Income	97,493,970	43,349,778	6,180,106	44,722,138	67,670,603	614,231,498	706,942,894	794,043,004	885,803,661
Items Not Requiring (Providing) Cash:									
Subsidiary Equity Earnings	0	0	0	0	0	0	0	0	0
Cumulative Effect of Change in Acc...	0	0	0	0	0	0	0	0	0
Depreciation, Decommissioning, & A...	40,834,662	40,944,297	41,074,905	41,222,050	41,344,169	487,700,687	507,211,068	529,621,686	554,803,809
Nuclear Fuel Amortization	0	0	0	0	0	0	0	0	0
Deferred Income Taxes, Net	-8,927,282	-9,085,085	-9,245,636	-9,420,413	-9,784,670	-106,947,529	-116,578,984	-98,053,713	-78,426,945
Investment Tax Credit, Net	-40,000	-40,000	-40,000	-40,000	-40,000	-480,000	-480,000	-480,000	-480,000
Debt Amortizations, Net	0	0	0	0	0	0	0	0	0
Total Items Not Requiring Cash	31,867,381	31,819,212	31,789,269	31,761,638	31,519,500	380,273,158	390,152,084	431,087,972	475,896,864
Changes in Assets & Liabilities:									
Accounts Receivable	3,846,017	75,757,379	15,127,103	-8,420,138	-35,915,511	-300,952,385	-13,995,450	-14,102,133	-14,783,014
Accrued Revenues	0	0	0	0	0	0	0	0	0
Inventories	0	0	0	0	0	0	0	0	0
Other Current Assets	0	0	0	0	0	0	0	0	0

Notes:

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Mapping accounts to the Indirect Cash Flow is essentially a configuration process. You will do it when you first implement UIPlanner. Once you have set up your planning ledger (with Income Statement, Balance Sheet and Direct and Indirect Cash Flow ledgers) and done the mapping, you should only need to visit this screen if you set up new accounts that need to be mapped.

Posting Associations

{ XE "Association" * MERGEFORMAT }{ XE "Posting Associations" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Posting Associations

In order to post report lines to the planning ledger, several structural elements must be set up. For each entity group used in a report that will involve posting to the planning ledger, there needs to be an association defined with a low level planning entity (LLPE). For each of these entity groups, the **POSTING ASSOCIATIONS** screen is used to indicate the name of the appropriate association to LLPE to use for posting.

Posting Association Rules

- Any entity group used in a report with lines posted to the planning ledger must have an association established with the low level planning entity (LLPE) entity group. The low level planning entity (LLPE) entity group is a special entity group as defined during installation on the **ASSIGN SPECIAL TYPES** screen under the tab *Define Entity Groups*.

The example below is of the LLPE entity group defined on the **ASSIGN SPECIAL TYPES** screen

Low Level Business Units/Planning Entities LLPE:	Low-Level Planning Entity
--	---------------------------

If you attempt to post transactions to the planning ledger without a posting association assigned, the following error message will be generated.

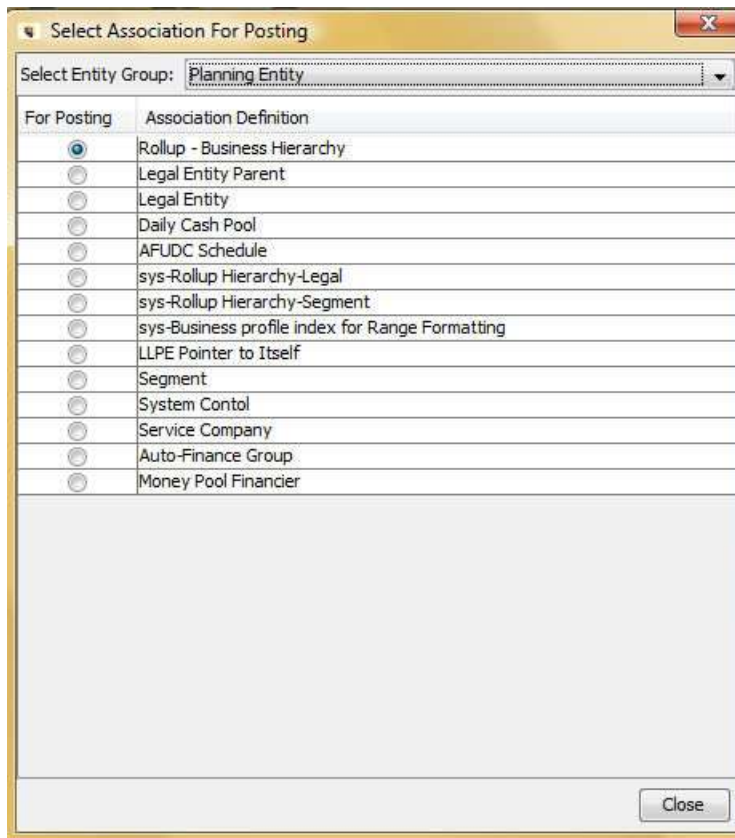
	A	B	C	D
1	2 errors found:			
2	Error: 1	Post Error	No valid Low-level Planning Entity for transaction	AccrualFrom Report: Fuel Burn Line: Fuel Unit Price Entity: French 1
3	Error: 2	Post Error	No valid Low-level Planning Entity for transaction	AccrualFrom Report: Fuel Burn Line: Fuel Costs Entity: French 1

{ XE "Association" * MERGEFORMAT }{ XE "Posting Associations" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Posting Associations Screen

This screen defines the association to be used when posting entries to the planning ledger.

Screen Layout:

As you can see from the example below, entity groups are listed in a drop box. Associations are listed for the entity group selected.



List Of Tasks And Operations That Are Performed With This Screen"

Select Entity Group: Select the desired entity group from the drop-down list of all entity groups in the active scenario. Upon making a selection, the body of the dialog will show all associations.

Select Association: Check the box next to an association to select that association for postings.

Lag Patterns

{ XE "Lag Patterns" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Lag Patterns

In order to accurately model cash flow, UIPlanner includes the ability to apply Lag Patterns to the cash portion of an accrual transaction posted to the *Planning Ledger*. *Lag Factors* are user defined monthly percents that represent various cash payment or receipt patterns.

The screen example below shows several lag patterns along the left. Lag factors are displayed in the grid for the lag pattern *Retail Revenue*. Multiple lag patterns, each containing lag factors for every month, can be created with patterns extending for up to 12 monthly periods. The *Lag 0* column below represents the percent cash receipt recorded in the current month, *Lag 1* represents the following month, *Lag 2* the second month, etc.

Example:

Electric Revenue is recorded in the planning ledger on an accrual basis. However, cash receipts are collected over subsequent months. January revenue is expect to be collected 30% in January (Lag 0), 65% in February (Lag 1), and 5% collected in March (Lag 2).

Select Lag Pattern	Define Pattern					
	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	
Retail Revenue						
Insurance Premiums	Jan	30	65	5		
Quarterly Payment	Feb	30	65	5		
Wholesale Revenue	Mar	30	60	8	2	
7-Month Revenue Curve	Apr	30	65	5		
One month Lag	May	30	65	5		
	Jun	30	65	5		
	Jul	30	65	5		
	Aug	30	60	8	2	
	Sep	30	65	5		
	Oct	30	65	5		
	Nov	30	65	5		
	Dec	30	65	5		

Continuing with the *Retail Revenue* example above, the chart below shows accrual and cash postings to the planning ledger assuming \$1,000 revenue in January, \$2,000 in February, and \$3,000 in March. Note how the lag pattern above is used to post cash and accounts receivable entries for each month.

Entries to the Planning Ledger	Debit (Credit)					
	Jan	Feb	Mar	Apr	May	Jun
January Revenue Entries						
Revenue	(1000)					
Accounts Receivable	1000					
Accounts Receivable	(300)	(650)	(50)			
Cash	300	650	50			
February Revenue Entries						
Revenue		(2000)				
Accounts Receivable		2000				
Accounts Receivable		(600)	(1300)	(100)		
Cash		600	1300	100		
March Revenue Entries						
Revenue			(3000)			
Accounts Receivable			3000			
Accounts Receivable			(900)	(1800)	(240)	(60)
Cash			900	1800	240	60
Total						
Revenue	(1000)	(2000)	(3000)			
Accounts Receivable	1000	2000	3000			
Accounts Receivable	(300)	(1250)	(2250)	(1900)	(240)	(60)
Cash	300	1250	2250	1900	240	60

Lag patterns are a *special type entity group*. The "Lag Pattern" entity group is set up just like any other entity group, but is designated as a special type. Once designated, lag patterns you create will be listed on the drop-down menu for lagged transactions on the [Define Postings](#) screen.

{ XE "Edit Lag Factors" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Edit Lag Factors Screen

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	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	Lag 5	Lag 6	Lag 7	Lag 8	Lag 9	Lag 10	Lag 11	Lag 12
Jan	30	70											
Feb	30	70											
Mar	30	70											
Apr	30	70											
May	30	70											
Jun	30	70											
Jul	30	70											
Aug	30	70											
Sep	30	70											
Oct	30	70											
Nov	30	70											
Dec	30	70											

Lag factors are added or edited for each lag pattern on the **LAG FACTORS** screen.

Screen Layout:

The left side of the screen lists lag patterns. The *special type entity group* for lag patterns contains the listed entities. The body of this screen contains monthly lag factors for each lag pattern.

	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4
Jan	30	65	5		
Feb	30	65	5		
Mar	30	60	8	2	
Apr	30	65	5		
May	30	65	5		
Jun	30	65	5		
Jul	30	65	5		
Aug	30	60	8	2	
Sep	30	65	5		
Oct	30	65	5		
Nov	30	65	5		
Dec	30	65	5		

List Of Operations Or Tasks That Are Performed With This Screen:

Data entry of lag factors (percents) is the only action on this screen. Lag factors input here are used in the calculation of lagged cash entries posted to the planning ledger.

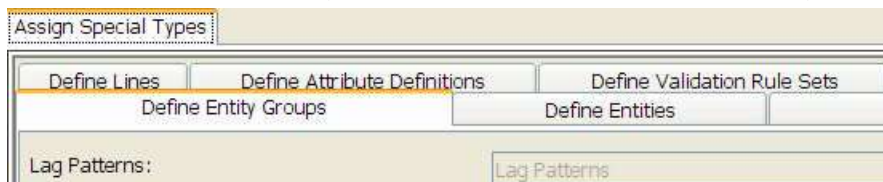
Lag factors should always total 100 percent for each month, although not required.

{ XE "Edit" * MERGEFORMAT }{ XE "Lag Pattern Description:Edit" * MERGEFORMAT }{ XE "Lag Pattern Description" * MERGEFORMAT }{ XE "Create" * MERGEFORMAT }{ XE "Editing:Lag Pattern Description" * MERGEFORMAT }{ XE "Editing" * MERGEFORMAT }{ XE "Lag Patterns" * MERGEFORMAT }Create or Edit a Lag Pattern Description

Lag patterns are located in the *special type entity group* "Lag Patterns." Each lag pattern is an entity in this special entity group. Lag factors are assigned to each lag pattern on the **EDIT LAG FACTORS** screen.

- Open the **ASSIGN SPECIAL TYPES** screen.

A set of sub tabs will open (shown below). Identify the entity group designated as the special type entity group for *Lag Patterns*. The example below shows the *Lag Pattern* special type is the *Lag Patterns* entity group.



- Open the **EDIT ATTRIBUTES** screen.
- Select the entity group designated for lag patterns. (In this example the entity group is *Lag Patterns*).
- Create a new entity for the new lag pattern. Each entity in the group will be the lag pattern description, i.e. Retail Revenue, One Month Lag, etc. Attributes are not needed. See [Create Entities](#).

Entities created in this special type will appear on any list or drop down menu containing lag patterns.

Lag factors can be assigned to each lag pattern description. See [Edit Lag Factors](#).

{ XE "Lag Factors" * MERGEFORMAT }{ XE "Edit Lag Factors" * MERGEFORMAT }Edit Lag Factors

- Open the **EDIT LAG FACTORS** screen.
- Highlight the lag pattern you want to edit listed along the left side of the screen.
- Enter lag factors in the *Define Pattern* region of the screen.

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Select Lag Pattern	Define Pattern					
	Lag 0	Lag 1	Lag 2	Lag 3	Lag 4	
Retail Revenue						
Insurance Premiums	Jan	30	65	5		
Quarterly Payment	Feb	30	65	5		
Wholesale Revenue	Mar	30	60	8	2	
7-Month Revenue Curve	Apr	30	65	5		
One month Lag	May	30	65	5		
	Jun	30	65	5		
	Jul	30	65	5		
	Aug	30	60	8	2	
	Sep	30	65	5		
	Oct	30	65	5		
	Nov	30	65	5		
	Dec	30	65	5		

Edit Range Formats

Edit Range Formats Screen

The **EDIT RANGE FORMATS** screen allows you to define text values tied to certain ranges of numbers. You can then use the results in a report by formatting the line to call the custom formatting function. This will display the text value defined here rather than the actual numerical value. This functionality is most commonly used to build reports to display rating agency ratings, such as S&P or Moody's.

Screen Layout:

The **EDIT RANGE FORMATS** screen has two main regions. At the top is a selection area where you select a range format from a drop-down list. You can set up multiple *Business Profiles*, which are sets of ranges.

Below that region is the data area, where the actual ranges are input and displayed. For each profile selected there are two columns. The first one is

for the range. This is where you put in the numeric ranges. The second column is for the text value you want to display.

List Of Operations Or Tasks That Are Performed With This screen:

Create Range Formats:

- Add the new range format using the **EDIT ATTRIBUTES** screen. Range formats are a predefined entity group.
- The new range format will appear in the *Select Range Format* drop-down list.
- Select it from the drop-down list, and populate the data range and the desired text to be displayed. Repeat these steps for each business profile.

Input Actuals

{ XE "Actuals" * MERGEFORMAT }{ XE "Input Actuals" * MERGEFORMAT }{ XE "Input" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Input Actuals Screen

Select Cases to Edit

All None Order: Case-Entity-Account Cases w/ Data For Cur Ents For Cur Acts

Selected	Case
<input type="checkbox"/>	2009 - 2013 Base Plan
<input type="checkbox"/>	Demonstrate Model Concepts
<input type="checkbox"/>	TRAINING Temp Data
<input checked="" type="checkbox"/>	Actuals

Select Time Period

Start Year: 2009
 Years By Month: 1
 One period:
 Excel format: General

Revenue Expense
 Asset Liability
 Cash-Direct Cash-Indirect

Select Entities to Edit

All Edit Group: Ents w/ Data For Cur Cases For Cur Acts
 None -- None --

Selected	Planning Entity
<input checked="" type="checkbox"/>	UI Energy Elim
<input checked="" type="checkbox"/>	UI Energy Parent
<input checked="" type="checkbox"/>	Tri-State Elim
<input checked="" type="checkbox"/>	Tri-State Parent
<input checked="" type="checkbox"/>	Chicago Electric
<input checked="" type="checkbox"/>	SWEGCO Electric
<input checked="" type="checkbox"/>	SWEGCO Gas
<input checked="" type="checkbox"/>	Suburban Gas
<input checked="" type="checkbox"/>	Acquisition Co

Select Accounts to Edit

All Show In Alpha Order Acts w/ Data For Cur Cases For Cur Ents
 None

Selected	Account
<input checked="" type="checkbox"/>	489.1 -- 489.1 Revenues from transportation of gas of others through
<input checked="" type="checkbox"/>	489.2 -- 489.2 Revenues from transportation of gas of others through
<input checked="" type="checkbox"/>	489.3 -- 489.3 Revenues from transportation of gas of others through
<input checked="" type="checkbox"/>	489.4 -- 489.4 Revenues from storing gas of others.
<input checked="" type="checkbox"/>	490.0 -- 490.0 Sales of products extracted from natural gas.
<input checked="" type="checkbox"/>	491.0 -- 491.0 Revenues from natural gas processed by others.
<input checked="" type="checkbox"/>	492.0 -- 492.0 Incidental gasoline and oil sales.
<input checked="" type="checkbox"/>	493.0 -- 493.0 Rent from gas property.
<input checked="" type="checkbox"/>	494.0 -- 494.0 Interdepartmental rents.

Delete TRAINING Temp Data Delete Data View Existing Data Edit & Return Edit & Close Close

Typically, actual time data is imported each month via the import functionality, however actuals data can be input manually or edited after loading from the INPUT ACTUALS screen. Information on this screen is used to format the Excel template for displaying and editing actuals data. This screen's functionality is virtually identical to the *TIME DATA EDITOR*, except that it is used to edit time data for accounts as opposed to time data associated with lines.

Screen Layout:

This screen contains several sections. Each section collects format data to display the *Excel Input Template* for data entry. This screen does not include the *Select Report to Edit* region found on the Time Data Editor in that it is account versus report line oriented. The two regions that differ from the *TIME DATA EDITOR* are described below. See the *TIME DATA EDITOR* screen for detailed information on the functionality for this screen

Select Time Period

This region defines the number of actual months to be edited in the same way that the *TIME DATA EDITOR* region does. In addition, it limits the "Selects Accounts to Edit" region display to specific account series based on the account series (Revenue, Expenses, Asset, Liabilities, etc.) that you select.

Select Accounts to Edit

Whereas the *TIME DATA EDITOR* region contains lines for which you want to edit time data, this region contains accounts for the series you select as noted above.

Browse Ledger Results

```
{ XE "Strategic Model" \* MERGEFORMAT }{ XE "Model"
\* MERGEFORMAT }{ XE "Tactical Model" \*
MERGEFORMAT }{ XE "Browse" \* MERGEFORMAT }{ XE
"Ledger" \* MERGEFORMAT }Browse Ledger Results
Screen
```

Account Name	Value
Revenue	-171,965
Other Income And Deductions	-104,467
Other Income	-104,467
418.1 -- 418.1 Equity in earnings of subsidiary companies (Major only)	96,635
Credits	96,635
Eln Intercompany Net Income UI Services	-1,775
Eln Intercompany Net Income Tri-State Parent	100,673
Eln Intercompany Net Income Prairie Gen	-2,263
419.2 -- 419.2 Interest Income Affiliate	-7,822
Debits	7,822
Eln Intercompany Orig Report: Short-term Rollover & Interest Line: STD Interest Expense - Money Pool Entity: UI Services	19
Eln Orig Report: Short-term Rollover & Interest Line: TCI Interest Income - Money Pool Entity: Tri-State Parent	3,698
Eln Intercompany Orig Report: Short-term Rollover & Interest Line: STD Interest Expense - Money Pool Entity: Tri-State Parent	3,686
Eln Intercompany Orig Report: Short-term Rollover & Interest Line: STD Interest Expense - Money Pool Entity: Prairie Gen	19
Utility Revenue	-17,108
Affiliate Revenue:	-17,108
xxx.d13 -- Service Co Revenue From Affiliates	-17,108
Debits	17,108
Eln Intercompany Orig Report: O&M Line: Insurance - Service Company (Input At Target LLP) Entity: SWEGCO Gas	14
Eln Intercompany Orig Report: O&M Line: Indirect - Service Company (Input At Target LLP) Entity: SWEGCO Gas	525
Eln Intercompany Orig Report: O&M Line: Insurance - Service Company (Input At Target LLP) Entity: SWEGCO Electric	-67
Eln Intercompany Orig Report: O&M Line: Indirect - Service Company (Input At Target LLP) Entity: SWEGCO Electric	2,269
Eln Intercompany Orig Report: O&M Line: Insurance - Service Company (Input At Target LLP) Entity: SWEGCO Common	1
Eln Intercompany Orig Report: O&M Line: Indirect - Service Company (Input At Target LLP) Entity: SWEGCO Common	298
Eln Intercompany Orig Report: O&M Line: Insurance - Service Company (Input At Target LLP) Entity: Suburban Gas	306
Eln Intercompany Orig Report: O&M Line: Indirect - Service Company (Input At Target LLP) Entity: Suburban Gas	1,488
Eln Intercompany Orig Report: O&M Line: Insurance - Service Company (Input At Target LLP) Entity: Chicago Steam	3
Eln Intercompany Orig Report: O&M Line: Indirect - Service Company (Input At Target LLP) Entity: Chicago Steam	106
Eln Intercompany Orig Report: O&M Line: Insurance - Service Company (Input At Target LLP) Entity: Chicago Electric	1,815
Eln Intercompany Orig Report: O&M Line: Indirect - Service Company (Input At Target LLP) Entity: Chicago Electric	8,620
Eln Intercompany Orig Report: O&M Line: Insurance - Service Company (Input At Target LLP) Entity: Prairie Gen	-168
Eln Intercompany Orig Report: O&M Line: Indirect - Service Company (Input At Target LLP) Entity: Prairie Gen	818
Expense	-34,247
Income Taxes Above The Line	5,017
Total Current Income Taxes Above	5,017
409.1 -- 409.1 Federal Income Tax Expense Above	5,017
Debits	5,017
Orig Report: Income Tax - Federal Line: Federal Current Income Tax Entity: UI Energy Eln	5,017
Interest Charges	-7,822
Interest Charges	-7,822
431.1 -- 431.1 Interest on STD Affiliate	-7,822
Debits	7,822

The **BROWSE LEDGER RESULTS** screen gives you the ability to view the planning ledger tree structure and drill into the tree to an account and then see all postings to that account. You must first select a planning entity and a month (in the form MMYYYY), and can then expand or collapse the various rollup nodes. This gives you the ability to view the planning ledger tree structure and drill into the tree to an account and then see all postings to that account.

Browse Transactions

{ XE "Transactions" * MERGEFORMAT } { XE "Screen
Browse Transactions" * MERGEFORMAT } Browse
Transactions Screen

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Count	Report	Line	Main Entity	Sub-Entity	Transaction	Post to LPFE	Debit	Debit Type	Credit	Credit Type	Date	Amount
Post (70)	Bonds - Details...	CO: Total Interest Accrued	SG 5.20% Deben...		Orig/Indirect CF	Suburban Gas	Change in Accrued Interest/Indirect Cash				1/2011	86,667
Post (71)	Bonds - Details...	CO: Total Interest Accrued	SG 6.25% Deben...		Orig	Suburban Gas	427.0 -- 427.0 Interest o... Expense		237.0 -- 237.0 In...	Liability	1/2011	268,333
Post (72)	Bonds - Details...	CO: Total Interest Accrued	SG 6.25% Deben...		Orig/Indirect CF	Suburban Gas	Change in Accrued Interest/Indirect Cash				1/2011	268,333
Post (73)	Bonds - Details...	CO: Total Interest Accrued	SG 6.375% Note...		Orig	Suburban Gas	427.0 -- 427.0 Interest o... Expense		237.0 -- 237.0 In...	Liability	1/2011	318.75
Post (74)	Bonds - Details...	CO: Total Interest Accrued	SG 6.375% Note...		Orig/Indirect CF	Suburban Gas	Change in Accrued Interest/Indirect Cash				1/2011	318.75
Post (75)	Bonds - Details...	CO: Total Interest Accrued	SWEG 5.5% Deb...		Orig	SWEGCO Elec...	427.0 -- 427.0 Interest o... Expense		237.0 -- 237.0 In...	Liability	1/2011	2,062.5
Post (76)	Bonds - Details...	CO: Total Interest Accrued	SWEG 5.5% Deb...		Orig/Indirect CF	SWEGCO Elec...	Change in Accrued Interest/Indirect Cash				1/2011	2,062.5
Post (77)	Bonds - Details...	CO: Total Interest Accrued	SWEG 6.60% FM...		Orig	SWEGCO Elec...	427.0 -- 427.0 Interest o... Expense		237.0 -- 237.0 In...	Liability	1/2011	1,500
Post (78)	Bonds - Details...	CO: Total Interest Accrued	SWEG 6.60% FM...		Orig/Indirect CF	SWEGCO Elec...	Change in Accrued Interest/Indirect Cash				1/2011	1,500
Post (79)	Bonds - Details...	CO: Total Interest Accrued	SWEG 6.25% FM...		Orig	SWEGCO Elec...	427.0 -- 427.0 Interest o... Expense		237.0 -- 237.0 In...	Liability	1/2011	1,041,667
Post (80)	Bonds - Details...	CO: Total Interest Accrued	SWEG 6.25% FM...		Orig/Indirect CF	SWEGCO Elec...	Change in Accrued Interest/Indirect Cash				1/2011	1,041,667
Post (81)	Bonds - Details...	CO: Total Interest Accrued	SWEG 6.36% DL...		Orig	SWEGCO Elec...	427.0 -- 427.0 Interest o... Expense		237.0 -- 237.0 In...	Liability	1/2011	795
Post (82)	Bonds - Details...	CO: Total Interest Accrued	SWEG 6.36% DL...		Orig/Indirect CF	SWEGCO Elec...	Change in Accrued Interest/Indirect Cash				1/2011	795
Post (83)	Bonds - Details...	CO: Total Interest Accrued	SWEG 9.30% FM...		Orig	SWEGCO Gas	427.0 -- 427.0 Interest o... Expense		237.0 -- 237.0 In...	Liability	1/2011	406.25
Post (84)	Bonds - Details...	CO: Total Interest Accrued	SWEG 9.30% FM...		Orig/Indirect CF	SWEGCO Gas	Change in Accrued Interest/Indirect Cash				1/2011	406.25
Post (85)	Bonds - Details...	DA: Amortization of Issue C...	CHI 4.50% FMB...		Orig	Chicago Electric	428.0 -- 428.0 Amortizat... Expense		181.0 -- 181.0 U...	Asset	1/2011	140,351
Post (86)	Bonds - Details...	DA: Amortization of Issue C...	CHI 4.50% FMB...		Orig/Indirect CF	Chicago Electric	Change in Non-Current A... Indirect Cash				1/2011	140,351
Post (87)	Bonds - Details...	DA: Amortization of Issue C...	CHI 5.5% FMB 4...		Orig	Chicago Electric	428.0 -- 428.0 Amortizat... Expense		181.0 -- 181.0 U...	Asset	1/2011	2,517
Post (88)	Bonds - Details...	DA: Amortization of Issue C...	CHI 5.5% FMB 4...		Orig/Indirect CF	Chicago Electric	Change in Non-Current A... Indirect Cash				1/2011	2,517
Post (89)	Bonds - Details...	DA: Amortization of Issue C...	CHI 5.5% Sensor...		Orig	Chicago Electric	428.0 -- 428.0 Amortizat... Expense		181.0 -- 181.0 U...	Asset	1/2011	13,725
Post (90)	Bonds - Details...	DA: Amortization of Issue C...	CHI 5.5% Sensor...		Orig/Indirect CF	Chicago Electric	Change in Non-Current A... Indirect Cash				1/2011	13,725
Post (91)	Bonds - Details...	DA: Amortization of Issue C...	CHI 6.625% PCB...		Orig	Chicago Electric	428.0 -- 428.0 Amortizat... Expense		181.0 -- 181.0 U...	Asset	1/2011	3,724
Post (92)	Bonds - Details...	DA: Amortization of Issue C...	CHI 6.625% PCB...		Orig/Indirect CF	Chicago Electric	Change in Non-Current A... Indirect Cash				1/2011	3,724

The **BROWSE TRANSACTIONS** screen gives you the ability to view all posted transactions for a selected month and year. Data will be displayed after you select your month and year, and then click **REFRESH DATA**. This data can be exported to Excel or searched by right-clicking on a column header and selecting Export to Excel or Search Table, respectively.

Edit Allocations

{ XE "Allocations" * MERGEFORMAT }{ XE "Regulatory" * MERGEFORMAT }Concept - Edit Allocations

The Allocations functionality in UIPlanner is what provides the ability to create regulatory reports from the base UIPlanner Financial Model results. This allows the user to:

- Define allocation "schemes" and "paths" – the underlying rules governing the allocations.
- Take selected elements from financial reports and map them to the jurisdictional reports
- Define how elements are mapped - what scheme/path to use, and what averaging method to use

Once these elements are in place and you run the Jurisdictional reports, UIPlanner will use the rules set in the **EDIT ALLOCATIONS** screen and will take the financial report data and allocate it to Jurisdictions.

{ XE "Edit Allocations" * MERGEFORMAT }{ XE "Regulatory" * MERGEFORMAT }{ XE "RegSmart" * MERGEFORMAT }Edit Allocations Screen

From Report	From Line	From Entity	To Report	To Line	To Entity	Path	Path set via
Balance Sheet	AB:Inventories	Chicago Electric	Rate Base	H:Fuel Inventory	CHI - Elec FERC	CHI Elec Demand	S D
Balance Sheet	AB:Inventories	Chicago Electric	Rate Base	H:Fuel Inventory	CHI - Elec Retail - Bldgs	CHI Elec Demand	S D
Balance Sheet	AB:Inventories	Chicago Electric	Rate Base	H:Fuel Inventory	CHI - Elec Retail - Mch...	CHI Elec Demand	S D
Balance Sheet	AB:Inventories	SWEGCO Electric	Rate Base	H:Fuel Inventory	SWEG - Elec FERC	SWEG Elec Demand	S D
Balance Sheet	AB:Inventories	SWEGCO Electric	Rate Base	H:Fuel Inventory	SWEG - Elec Retail - ...	SWEG Elec Demand	S D
Balance Sheet	AB:Inventories	SWEGCO Gas	Rate Base	H:Fuel Inventory	SWEG - Elec FERC	Electric Energy	O D
Balance Sheet	AB:Inventories	SWEGCO Gas	Rate Base	H:Fuel Inventory	SWEG - Elec Retail - ...	Electric Energy	O D
Balance Sheet	AB:Inventories	SWEGCO Gas	Rate Base	H:Fuel Inventory	SWEG - Gas FERC	Electric Energy	O D
Balance Sheet	AB:Inventories	SWEGCO Gas	Rate Base	H:Fuel Inventory	SWEG - Gas Retail - W...	Electric Energy	O D
Balance Sheet	AB:Inventories	Suburban Gas	Rate Base	H:Fuel Inventory	SG - Gas FERC	Electric Energy	O D
Balance Sheet	AB:Inventories	Suburban Gas	Rate Base	H:Fuel Inventory	SG - Gas Retail - Bldgs	Electric Energy	O D

All Edit Allocations functionality resides in the **EDIT ALLOCATIONS** screen. This screen contains several tabs, each of which is used to build an element of the allocations engine. The tabs are:

- **Display All Paths** – Tab that displays the final allocation results.
- **Map Lines to Be Allocated** – Tab where you select a line on a financial report and specify which line on the jurisdictional report it should go to (e.g., Total O&M on the O&M Report to Total O&M on the Jurisdictional Earnings report).
- **Define Line Allocation** - Tab where you take the lines from financial reports that you have chosen to map (via the previous screen) and identify the specific factor(s) to use to allocate the values.
- **Average Method** - Tab where you indicate what averaging method (12 month sum, 13 month average, etc.) will be used to translate the financial reports to the jurisdictional reports.
- **Average - Shared Reports** - Tab where you can override the average option for reports using Line is Target of allocations.
- **Define Allocation Schemes** – Tab where you set up the allocation schemes, high level structure, generally linking LLPE (low-level planning entity) to Utility to Jurisdiction. There will generally be only a few schemes needed to link each of the major planning dimensions.
- **Define Allocation Paths** – Tab where you set up the allocation paths that are used in the allocation process. An allocation path is a combination of allocation factors or direct pointers that takes data from one entity to another, along an Allocation Scheme.

Display All Paths

The first tab on the **EDIT ALLOCATIONS** set of screens displays the final results of the allocation configuration as set up on the remaining screens in the **EDIT ALLOCATIONS** set. Note that these are not the actual allocated amounts. They are instead the underlying pointers and allocators. The actual allocated results are viewed in **BROWSE ALLOCATED DATA** screen.

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To view the allocation settings, select the “from” report and the “to” report. The display above is an example of the configuration for allocations from the O&M Report to the Jurisdictional Earnings Report.

Below are the allocations from the Balance Sheet to Rate Base.

From Report	From Line	From Entity	To Report	To Line	To Entity	Path	Path set via
Balance Sheet	AB:[Inventories]	Chicago Electric	Rate Base	H:[Fuel Inventory]	CHI - Elec FERC	CHI Elec Demand	S D
Balance Sheet	AB:[Inventories]	Chicago Electric	Rate Base	H:[Fuel Inventory]	CHI - Elec Retail - Illinois	CHI Elec Demand	S D
Balance Sheet	AB:[Inventories]	Chicago Electric	Rate Base	H:[Fuel Inventory]	CHI - Elec Retail - Mich...	CHI Elec Demand	S D
Balance Sheet	AB:[Inventories]	SWEGCO Electric	Rate Base	H:[Fuel Inventory]	SWEG - Elec FERC	SWEG Elec Demand	S D
Balance Sheet	AB:[Inventories]	SWEGCO Electric	Rate Base	H:[Fuel Inventory]	SWEG - Elec Retail - ...	SWEG Elec Demand	S D
Balance Sheet	AB:[Inventories]	SWEGCO Gas	Rate Base	H:[Fuel Inventory]	SWEG - Elec FERC	Electric Energy	O D
Balance Sheet	AB:[Inventories]	SWEGCO Gas	Rate Base	H:[Fuel Inventory]	SWEG - Elec Retail - ...	Electric Energy	O D
Balance Sheet	AB:[Inventories]	SWEGCO Gas	Rate Base	H:[Fuel Inventory]	SWEG - Gas FERC	Electric Energy	O D
Balance Sheet	AB:[Inventories]	SWEGCO Gas	Rate Base	H:[Fuel Inventory]	SWEG - Gas Retail - W...	Electric Energy	O D
Balance Sheet	AB:[Inventories]	Suburban Gas	Rate Base	H:[Fuel Inventory]	SG - Gas FERC	Electric Energy	O D
Balance Sheet	AB:[Inventories]	Suburban Gas	Rate Base	H:[Fuel Inventory]	SG - Gas Retail - Illinois	Electric Energy	O D

Map Lines to be Allocated

This tab is where you select lines from financial reports and map them to the appropriate lines on the Jurisdictional reports. The example below shows that the Total O&M Expense line on the O&M Report is mapped to the Operation & Maintenance line on the Jurisdictional Earnings report. You first pick the source and destination reports and the allocation scheme to use. Then, when you touch on the line to map, you will get a screen showing all the lines from the destination report. After you click **OK**, the source and target line will show up on this screen.

Source Entity	Winner Target Line	Case: Base Attribute Case
G:[Benefits - Pension]		
H:[Insurance - Service Company (Input At Target LLPE)]		
I:[Indirect - Service Company (Input At Target LLPE)]		
J:[Total O&M Expense (Before Target Adjustment)]		
K:[]		
L:[O&M Target]		
M:[if]		
N:[O&M Target Adjustment]		
O:[end if]		
P:[Total O&M Expense (After Target Adjustment)]	N:[Operation & maintenance]	N:[Operation & maintenance]
Q:[]		
R:[Insurance Expense Accrue & Pay (External)]		
S:[]		

Note that you can define the line mappings to act on all entities (default) or you can specify different mappings by entity.

Define Line Allocation

This tab is where you take the lines from financial reports that you have chosen to map (via the previous screen) and you identify the specific factor(s) to use to allocate the values. Note that you can define the line mappings to act on all entities (default) or you can specify different mappings by entity. The example below shows that for *Chicago Electric*, UIPlanner will allocate using the *Electric Demand* allocator.

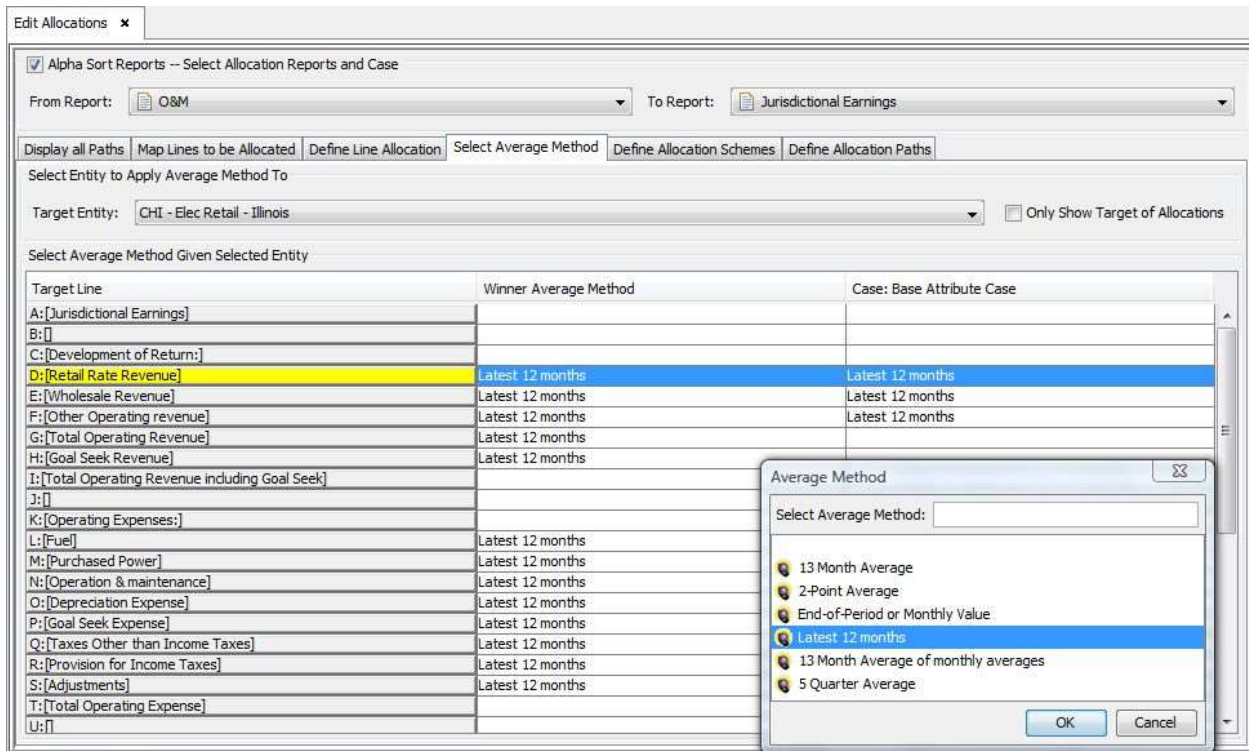
Source Line	Winner Allocation Path	Case: Base Attribute Case
L:[O&M Target]		
M:[if]		
N:[O&M Target Adjustment]		
O:[end if]		
P:[Total O&M Expense (After Target Adjustment)]	CHI Elec Demand	CHI Elec Demand
Q:[]		
R:[Insurance Expense Accrue & Pay (External)]		
S:[]		

Select Average Method

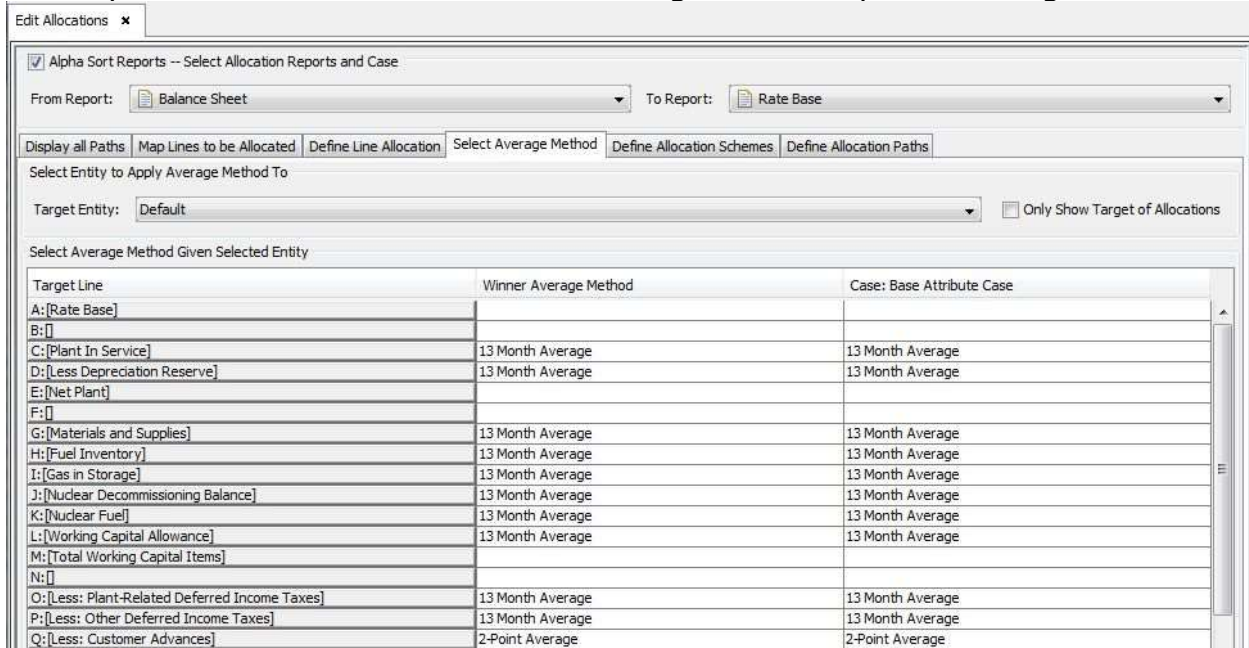
This tab is where you indicate what averaging method (12 month sum, 13 month average, etc.) will be used to translate the financial reports to the jurisdictional reports.

When you select a jurisdictional report, the screen will show all of the lines of the report. Clicking a line will open a dialog box that lists the available jurisdictional averaging methods. Note that you can define the line mappings to act on all entities (default) or you can specify different mappings by entity. The example below shows that for *Chicago Electric Retail, IL*, UIPlanner will allocate using the *Retail Rate Revenue* allocator.

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Below are the averaging methods set for the Rate Base Report. Note that this report uses a mix of 13 month average and two point average.



Define Allocation Schemes

This tab is where you set up the allocation schemes to be used in the jurisdictional reports. Note that the allocation scheme is a high level structure, generally linking LLPE to Utility to Jurisdiction. There will

generally be only a few schemes needed to link each of the major planning dimensions.

Per the example in the screen example below, there are only three schemes needed.

- Legal Entity -> Jurisdiction
- Legal Entity -> Utility – Jurisdiction
- Planning Entity -> Jurisdiction

Allocation Path Node	Winner Path Type	Case: Base Attribute Case
Target Entity Group	Jurisdiction	Jurisdiction
Allocation Factors Minus 0	Jurisdictional Allocators	Jurisdictional Allocators
Filter Association Minus 0	Legal Entity	Legal Entity
Allocation Factors Minus 1		
Filter Association Minus 1		
Allocation Factor Minus 2		
Filter Association Minus 2		

Once you have created an allocation scheme, you define the method to get from the starting entity to the final entity. This is accomplished using a series of associations and allocators. The link between entities needs both an association and set of allocators.

- Association – you need to have defined an association between the two entities.
- Allocators – you need to have allocators from one to the other. This is data, and will thus be from a UIPlanner report. This allows for them to be either input or calculated elsewhere.

Define Allocation Paths

This tab is where you set up the allocation paths that are used in the allocation process. As indicated above, an allocation path is a combination of allocation factors or direct pointers that takes data from one entity to another.

In the screen print below, some of the allocation paths (for LE -> Utility -> JUR) are:

- CHI Elec Demand – Direct Assignment to Chi Electric Utility, and then to Jurisdiction using the Demand Allocator

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- SWEG Elec Demand – Direct Assignment to SWEGCO Electric Utility, and then to Jurisdiction using the Demand Allocator

Alpha Sort Reports -- Select Allocation Reports and Case

From Report: Balance Sheet To Report: Rate Base

Display all Paths | Map Lines to be Allocated | Define Line Allocation | Select Average Method | Define Allocation Schemes | Define Allocation Paths

Select Allocation Scheme to Define Paths - List is limited by the Entity Group of the 'To Report' above

Legal Entity -> Utility -> Jur. Create Allocation Path

Path	Jurisdiction or Line of Jurisdictional Allocators	Utility or Line of Utility Allocators
CHI Elec Demand	✓ E:[Demand Allocator]	● CHI Electric
CHI Elec Energy	✓ D:[Energy Allocator]	● CHI Electric
CHI Elec FERC 100%	✓ I:[CHI Elec FERC All]	● CHI Electric
CHI Elec IL Demand	✓ K:[CHI Elec IL Demand Allocator]	● CHI Electric
CHI Elec IL Retail 100%	✓ G:[CHI Elec Retail IL All]	● CHI Electric
CHI Elec MI Demand	✓ L:[CHI Elec MI Demand Allocator]	● CHI Electric
CHI Elec MI Retail 100%	✓ H:[CHI Elec Retail MI All]	● CHI Electric
CHI Elec Static Plant	✓ J:[CHI Plant Static Allocator]	● CHI Electric
CHI Nonregulated 100%	✓ N:[CHI Nonregulated All]	● CHI Nonutility
CHI Steam IL Retail 100%	✓ M:[CHI Steam Retail IL All]	● CHI Steam
Electric Energy	✓ D:[Energy Allocator]	✓ H:[SWEG Common to E&G]
PG Elec FERC 100%	✓ U:[PG Elec FERC All]	● PG Electric
SWEG Elec Demand	✓ E:[Demand Allocator]	● SWEGCO Electric
SWEG Elec Energy	✓ D:[Energy Allocator]	● SWEGCO Electric
SWEG Elec FERC 100%	✓ P:[SWEG Elec FERC All]	● SWEGCO Electric
SWEG Elec WI Retail 100%	✓ O:[SWEG Elec Retail WI All]	● SWEGCO Electric

Note that the allocation paths require only as many dimensions as there are steps in the scheme. A one step scheme (such as Legal Entity -> JUR) needs only one set of pointers/allocators.

Alpha Sort Reports -- Select Allocation Reports and Case

From Report: Balance Sheet To Report: Rate Base

Display all Paths | Map Lines to be Allocated | Define Line Allocation | Select Average Method | Define Allocation Schemes | Define Allocation Paths

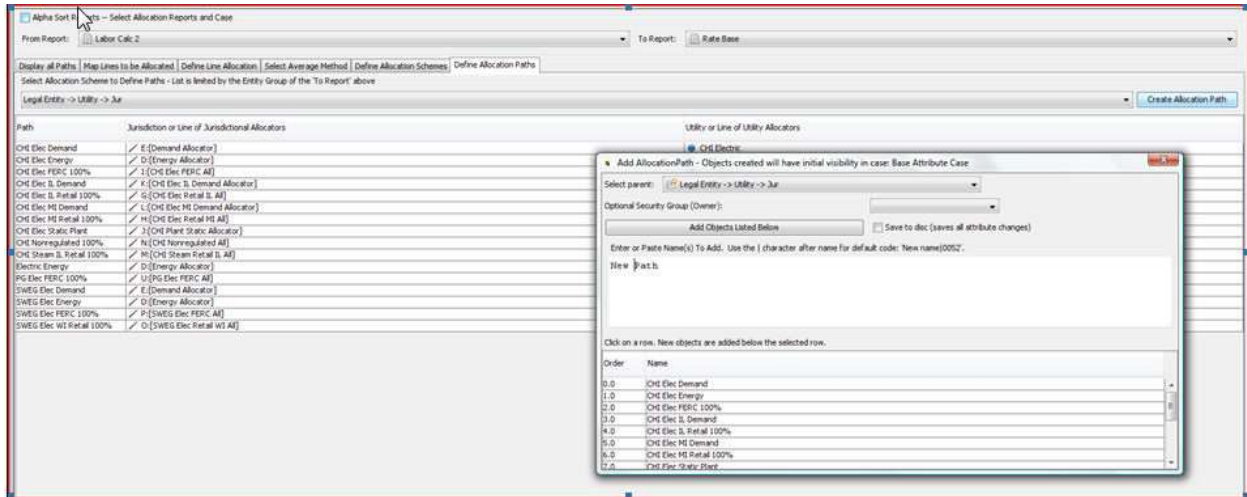
Select Allocation Scheme to Define Paths - List is limited by the Entity Group of the 'To Report' above

Legal Entity -> Jur. Create Allocation Path

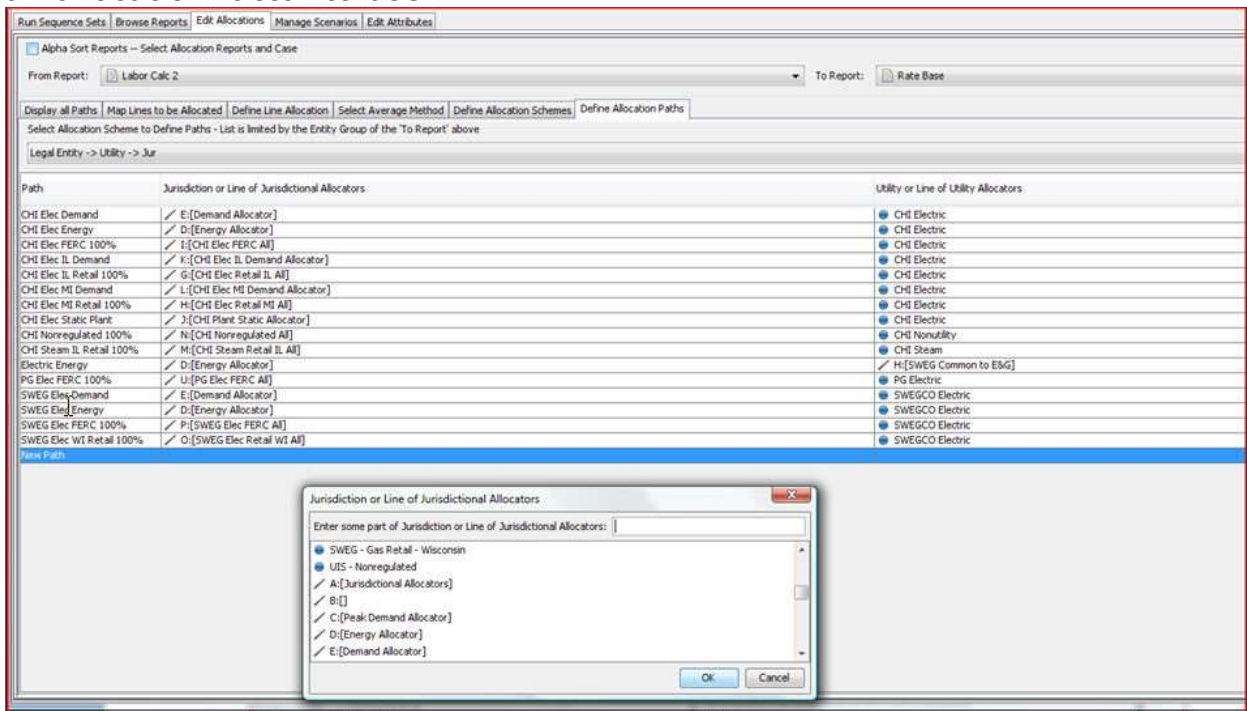
Path	Jurisdiction or Line of Jurisdictional Allocators
Demand Allocator	✓ E:[Demand Allocator]
Energy Allocator	✓ D:[Energy Allocator]
Peak Demand Allocator	✓ C:[Peak Demand Allocator]

You can create the allocation paths and give them simple and understandable names. Then, on the **DEFINE LINE ALLOCATION** tab you merely need to pick the name, and the allocation engine uses that path. See the example below for setup steps.

- Create the allocation path – Click **CREATE ALLOCATION PATH** to open the **ADD OBJECT** dialog box.



Define each step in the path. Click in the blank area on that line, under the steps. Then, in the dialog box select either a direct pointer to the entity or an allocation factor to use.



Browse Allocated Data

{ XE "Browse Allocated Data" * MERGEFORMAT }{ XE "Allocated Data" * MERGEFORMAT }{ XE "Regulatory" * MERGEFORMAT }{ XE "RegSmart" * MERGEFORMAT }Browse Allocated Data Screen

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From Report	From Line	From Entity	To Report	To Line	Allocation Method	Step 0 Allocated A.	Step 0 Target Entry	Step 0 Factor %	Step 0 Factor name	Step 1 Allocated A.	Step 1 Entry	Step 1 Factor %	Step 1 Factor name
Balance Sheet	AB	Illinois Electric	Chicago Electric	10 Fuel Inventory	12 month Average	1,021,024	Dec Retail - R	4.0000%	Dec Demand Allocator	29,117,024	Electric	100.0000%	Direct to Entry
Balance Sheet	AB	Illinois Electric	Chicago Electric	10 Fuel Inventory	12 month Average	18,311,024	Dec Retail - R	84.0000%	Dec Demand Allocator	29,117,024	Electric	100.0000%	Direct to Entry
Balance Sheet	AB	Illinois Electric	Chicago Electric	10 Fuel Inventory	12 month Average	20,011,024	Dec Retail - R	31.0000%	Dec Demand Allocator	29,117,024	Electric	100.0000%	Direct to Entry
Balance Sheet	AB	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	1,276,300	Dec Retail - R	28.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Balance Sheet	AB	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	4,129,000	Dec Retail - R	78.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Balance Sheet	AB	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	1,000	Dec Retail - R	31.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Balance Sheet	AC	Illinois Electric	Illinois Electric	10 Materials and Fuels	12 month Average	121,000	Dec Retail - R	28.0000%	Dec Energy Allocator	8,100,000	Electric	75.0000%	Direct to Entry
Balance Sheet	AC	Illinois Electric	Illinois Electric	10 Materials and Fuels	12 month Average	500,000	Dec Retail - R	31.0000%	Dec Energy Allocator	8,100,000	Electric	75.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	1,276,300	Dec Retail - R	4.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	42,000,000	Dec Retail - R	84.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	21,041,024	Dec Retail - R	31.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	17,182,024	Dec Retail - R	8.0000%	Dec Dec. & Dem.	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	238,479,024	Dec Retail - R	81.0000%	Dec Dec. & Dem.	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	382,024	Dec Retail - R	1.0000%	Dec Dec. & Dem.	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	48,122,024	Dec Retail - R	88.0000%	Dec Dec. & Dem.	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	200,000,024	Dec Retail - R	8.0000%	Dec Dec. & Dem.	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	4,768,284,024	Dec Retail - R	90.0000%	Dec Dec. & Dem.	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	38,136,024	Dec Retail - R	2.0000%	Dec Dec. & Dem.	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	1,208,270,024	Dec Retail - R	88.0000%	Dec Dec. & Dem.	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	14,826,024	Dec Retail - R	4.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	238,117,024	Dec Retail - R	84.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	118,000,024	Dec Retail - R	31.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	280,024	Dec Retail - R	4.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	11,878,024	Dec Retail - R	84.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	1,289,024	Dec Retail - R	31.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	21,121,024	Dec Retail - R	4.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	4,121,874,024	Dec Retail - R	84.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry
Plant Account Detail	BL	Illinois Electric	Illinois Electric	10 Fuel Inventory	12 month Average	7,111,000,024	Dec Retail - R	71.0000%	Dec Demand Allocator	8,100,000	Electric	100.0000%	Direct to Entry

The **BROWSE ALLOCATED DATA** screen takes the data from the source report and traces it. It is a thus a perfect complement to **BROWSE REPORTS**, where you can drill down from the final report back to the source data.

Shown above is an example of the functionality on the **BROWSE ALLOCATED DATA** screen. This shows all of the data from reports allocated to the Jurisdiction Earnings Report. See the allocation of O&M data, starting with the total for Chicago Electric and ending with the final amount as split by Jurisdiction.

List Of Operations Or Tasks That Are Performed With This Screen:

Select Report and Time Period

To use the **BROWSE ALLOCATIONS** screen, you need to first run the Detailed Model sequence set. Then, on the **BROWSE ALLOCATIONS**, screen select the following items:

- 1) Choose the report for which you want to view the allocated data (it must be a report that utilizes the allocation paths).
- 2) Select the month/year
- 3) Choose whether you want to see the final amount first and then the buildup, or start with the source amount and see the path through to the final amount.

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The screenshot displays the UIPlanner software interface. On the left is a navigation tree with categories like 'Financial Report Package' and 'Financial Statements'. The main area shows a detailed financial model with a table of data. A callout labeled 'Allocation path and process' points to the navigation tree. Another callout labeled 'Value from O&M Report' points to a cell in the summary table. A third callout labeled 'Final allocated value' points to a cell in the main data table.

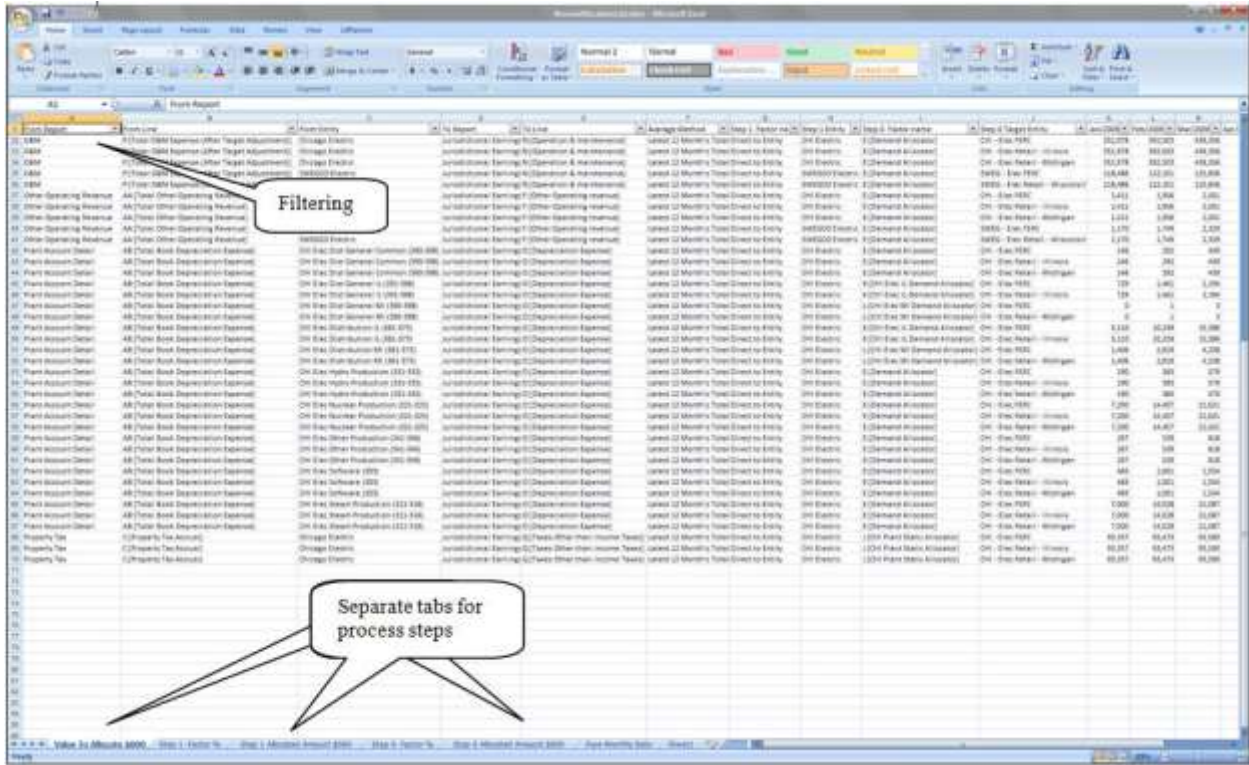
Export To Excel

A key feature of the **BROWSE ALLOCATED DATA** screen is the ability to export the data to Excel. You can select the time span to export, and choose whether to export all months or only a specific one (e.g., if you are viewing allocated balance sheet data).

The screenshot shows the 'Select Dates for Export to Excel' dialog box. It contains the following fields and controls:

- First year: 2009
- Last year: 2009
- Month: All
- Export to Excel button (with a green checkmark icon)

When you click **EXPORT TO EXCEL**, the data will be shipped to MS Excel, pre-formatted with the filtering set on for easy analysis. The Excel file contains multiple tabs, each one showing all of the data for that particular step in the allocation process.



Export Code Block

{ XE "Code Block" * MERGEFORMAT }{ XE "Export Code Block" * MERGEFORMAT }Export Code Block Screen

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Export Code Block

Export Model Results in Code Block Format

Select Interface Mapping Case: Export Mapping Copy Paste

Run Export Show Combos Map Entities Map Lines Map Accounts Map Lines x Entity Map Accounts x Entity Define Code Block

Setup and Run Export

Start date for Export: 1/2008 End date for Export: 1/2008 Export all-zero records?

Define Output

Save to DB Export to File Select Output File Location: C:\0UI\0_Training_2010\Export

Run Export

Usage:

A Line / Account must have at least one code block field defined. Also, an entity must have at least one code block field defined. If both line/account and entity combinations have code block data, the data will be exported.

Code Block fields may be mapped by entity, by line/account or both

Fields may also be defined as a constant (number) - for these there is no mapping, the constant is exported.

Process Steps for defining the line/account and entity combinations that will be output:

1. Build a list of all data that is mapped by both Entity and Line/Account
2. Attach data that is mapped by line-only, account-only and entity-only to the list in step 1
3. For mappings that were not used in step 2, build a cartesian set of entities by line/account:
 - 3a. Build a list of Entities that are mapped entity-only
 - 3b. For remaining mappings that are line-only or account-only, and that match the entity group of the entity list, add the line/account and entity combinations.

Process steps for saving data (the scenario results must have been processed and be in memory):

1. Find the first constant in the definition, if any, and delete any data from prior exports for the scenario
2. For each line/account and entity combinations that has data, add records in the time periods selected.
3. Display the data that could be saved (same display as the generic interface or time-data editor).

User can save at this point, or export the data on the screen to Excel for further analysis.

The **EXPORT CODE BLOCK** functionality allows you to export UIPlanner results while adding additional columns of lookup information to match code block structures in a client's accounting systems. UIPlanner generally does not carry code block level of detail – it generally processes information at the planning entity and line/account level. Client code blocks often include additional fields, such as Department, Resource, Project, etc. Using the **EXPORT CODE BLOCK** screen, you can put in rules to define values for these fields if there is information in UIPlanner, or you can put in a default value.

Screen Layout:

The **EXPORT CODE BLOCK** screen consists of a series of tabs.

RUN EXPORT – this is where you define the time frame and destination location for the export. You also initiate the export from here.

The other tabs are for configuring the column set for the export and the rules for populating lookup values for each column.

CASES AND SCENARIOS

Manage Scenarios

{ XE "Scenarios" * MERGEFORMAT }{ XE "DMOdel" * MERGEFORMAT }{ XE "Case" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Cases and Scenarios

All data in UIPlanner is maintained in a structure of scenarios and cases. A scenario is a collection of cases. Cases are specific data sets, each with a defined purpose and set of information. Taken together, they build a scenario used to perform financial planning and forecasting. Two specific capabilities in UIPlanner give it powerful scenario and what-if functionality.

- 1) Cases can be shared among scenarios
- 2) Within a scenario, cases are processed using 'winner logic'

As an example, you can use a single Base Data case, and share this between two scenarios. Then each scenario could contain a different 'what-if' case with only the items you want to change. Note that this structure also makes for efficient data storage, since you do not have to have the same data in UIPlanner more than once.

Cases are the building blocks of UIPlanner scenarios. Cases are used to hold monthly numerical data, entity lists (i.e. bonds), attributes of entities (i.e. bond issue date), associations (i.e. for a bond, what legal entity issued it), calculation logic, and interface mapping information, among others.

Each scenario is made up of four types of cases (Case Type is described in a section below):

- One Actuals case
- One Logic case
- One or more Data cases
- One or more Attribute cases

It is important to manage scenarios and cases in an efficient manner. This involves several facets:

- Establishing a naming convention
- Establishing a structured process for creating and using cases and scenarios, especially doing what-if analysis

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- Establishing rules and guidance for what data is stored in what case
- Practicing case and scenario management - archiving where needed, and otherwise deleting unused or obsolete cases/scenarios

UIPlanner provides the ability to merge several cases into one. You may want to merge cases at the end of a budget cycle or to combine several cases into one for ease of administration

Case Types

UIPlanner cases come in several different types, depending upon the type of data they contain. Each case type is described below.

Time Data Cases – there are three kinds of cases that hold time dependent data, which is data that is stored by year and months across.

- **Overlay:** The data in a time data overlay case will supersede the identical lines of data in other data cases before it in the case list. A special type of time data overlay case is the User Temp Data Case. This case contains data specific to the active scenario and is visible to you only. For more information, see [Using a Temp User Data Case](#).
- **Incremental:** The data in a time data incremental case will add to or subtract from data that is contained in other cases before it in the case list. See below for more information on Case Order. A scenario can contain multiple incremental time data cases
- **Actuals:** This time data case type holds actual (historical) data, as opposed to Overlay or Incremental data cases which generally contain forecasted data. The Actuals case is always processed last in the order of precedence and data contained in it supersedes all data up to the actuals through date (see below) for the active scenario. Each scenario contains only one actuals case.

The other case types are:

- **Attribute Cases:** Attribute cases store all data not listed above in other cases: attributes of entities (names, parameter values, associations, order, etc.), attributes of reports (line formats and postings, etc.) and other data that does not change over time. Each scenario contains at least one Attribute case, tagged as the Base Attribute case. The following types of attribute data are stored in the Base Attribute case:
 - **Entities:** Name and Order

- **Reports:** Report groups and the report order within the groups. Also hold report definition items, such as actuals date, iterations and tolerance. Finally, report line definitions, such as annual-to-month, month-to-annual, line usage, and format.

All other attribute data is by default placed in that case, but users can put it in another attribute case instead. Additional cases will be processed in case list order, with the Base Attribute case first. In screens and for other data elements where a user may want to use overlay attribute cases, those screens will include a *Case Selector* drop-down list.

- **Logic Cases:** Logic cases store Calculation Grid lines for all reports. Only one logic case can be assigned to a scenario. You can have more than one logic case in the system (i.e., copies of calculation logic as of points in time), but you only select the active one for the current scenario. Keeping snapshots of your report logic allows you to easily recreate old scenarios.
- **Interface Mapping Cases:** Interface mapping cases contain information used to relate UIPlanner data to external data sources. An example of mapping information would be how general ledger accounts relate to UIPlanner planning ledger accounts, for use in the G/L actuals upload. You can create multiple Interface Mapping cases, to meet specific needs, such as the GL import or export to an external system. Note that unlike the other cases types, Interface Mapping cases are not associated with one specific scenario. Interface Mapping cases are used on the Import and Export screens and are available to any scenario at run time.

Case Order/Winner Logic

Case order is critical to the processing of data within UIPlanner. As indicated above, a scenario can contain several data cases, and these cases can have many overlapping pieces of information. You decide the order of the cases, and therefore how you intend the final amounts to be determined. For example, if you have the capital budget in the Base case, but you want to change spending for several projects, you could insert a second case with just those projects changed. This second case should be processed after the first, and thus use these new amounts. In order for UIPlanner to utilize the correct data, it must apply case winner logic. Case winner logic is applied to cases of the same type (i.e., data or attribute) in a scenario. The winner logic is applied as UIPlanner loads the data.

Data Case Winner Logic:

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- Data cases are processed in order from top to bottom according to the list shown on the [Manage Scenarios](#) screen.
- Data in an Overlay case supersedes (“wins over”) data in previous cases (higher in the list). If no data existed before, the new value is used. If the Overlay case contains nothing (null), there is no data to overlay, the previous data is used. Finally, if the overlay case contains a zero in a field, zero is used (zero is a valid value, as opposed to null).
- Incremental data cases are added to or subtracted from previous case winners depending on their sign. Positive numbers will be added, negative numbers will be subtracted.
- Actual cases always win over all other data cases in months on or before the actuals close month.
- The User Temp Data case should generally be the last case in the list. It may generally be empty, but if you do use it, it is assumed that you want the data in it to be the ‘winner’.

Below is an example of winner logic for time data cases. Note the evolution of the ‘winner’ amount as each case is processed, paying attention to overlay vs. incremental. Also, remember that the winner logic is calculated sequentially, so the amount changes with each succeeding case. Once a value has been overridden or changed, it is not evaluated further.

Example of Data Case datum for the same line

Case Type	Jan	Feb	Mar	Apr	May
Overlay	10	23	49	33	49
Overlay	11	22	49	35	50
Winner	11	22	49	35	50
Incremental	null	0	4	(7)	5
Winner	11	22	53	28	55
Actual	14	21			
Winner	14	21	53	28	55

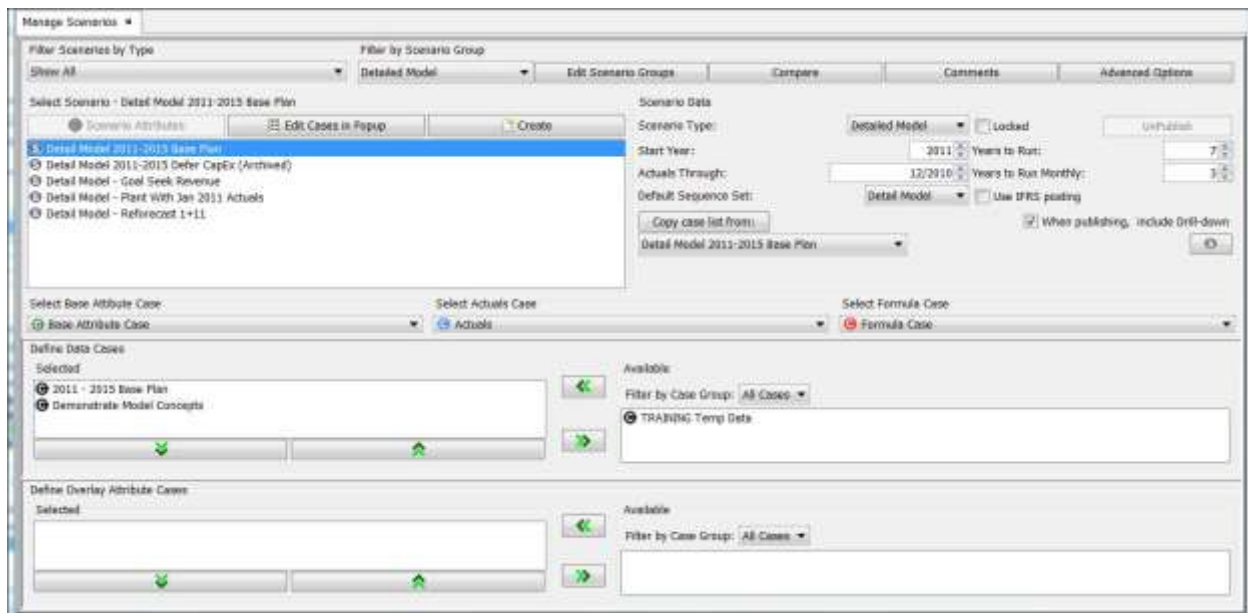
Attribute Case Winner Logic:

- Attribute cases are processed in order from top to bottom according to the list shown on the **MANAGE SCENARIOS** screen.
- Data in an overlay case supersedes (“wins over”) data in previous cases (higher in the list). If no data existed before, the new value is used. If the Overlay case contains nothing (null), there is no data to overlay, the previous data is used. Finally, if the overlay case contains a zero in a field, zero is used (zero is a valid value, as opposed to null).

Interface Case Winner Logic:

Interface cases can also be processed using winner logic. While you will generally use a specific interface case when importing or exporting data, UIPlanner does give you the ability to use a special 'on the fly' interface case built from all existing interface cases, processed using winner logic.

{ XE "Manage Scenarios" * MERGEFORMAT }{ XE "Scenarios" * MERGEFORMAT }Manage Scenarios Screen



The **MANAGE SCENARIOS** screen is used to configure scenarios in UIPlanner. Since scenarios are essentially collections of cases, management of scenarios is primarily involves managing cases within each scenario, i.e., which cases make up the scenario, and their order.

This screen is also used to configure other settings for each scenario, such as how many years to process and how many months of actuals have been loaded.

Screen Layout:

Across the top region of the **MANAGE SCENARIOS** screen, there is a row of filtering options and action buttons. Below this region, the remainder of the screen is divided into three major sections. The *Select Scenario* section controls what appears in the remaining sections. The *Scenario Data* section allows you to control various settings for the scenario and the four blocks in

the lower half of the screen are for selecting and sorting the cases that will be in the scenario.

List Of Tasks Or Operations That Are Performed With This Screen:

Filtering and Action buttons

Across the top of the Manage Scenarios screen, there are two filtering options and four action buttons.

Filter by Scenario Type: Use this drop-down list to filter the scenarios on the screen to show only a specific scenario type (e.g., Budget, Model, Customer Revenue, etc.).

Filter by Scenario Group: Use drop-down list to filter the scenarios to only those in a user-defined scenario group (see below).

Edit Scenario Groups: Click the button to create or edit a scenario group to be used in filtering. See the topic [Scenario Groups](#) for more information.

Compare: Click this button to open a screen in which you can view the attributes and cases of two scenarios side-by-side. This allows you to quickly identify differences between the scenarios. See the [Compare Scenario Packages](#) for more information.

Comments: Click this button to add, edit or view user comments for the highlighted scenario. See [Scenario Comments](#) for more information

Advanced Options: Click this button to access various optional scenario options, such as designating related scenarios and transfer options. See [Advanced Scenario Options](#) for more information.

Actions in the Select Scenario Region:

The *Select Scenario* region allows you to select the scenario whose cases and/or settings you wish to view or edit. The list of available scenarios is displayed in this window. Note that the scenarios listed will be determined by any filtering options you have selected. As each scenario is highlighted, the rest of the screen displays information about the scenario, such as such as its cases or settings. Above the scenario list there are the following action buttons:

Scenario Attributes: (available for Budget scenarios only): Opens a screen where you can define specific scenario budget-related attributes.

Edit Cases in Popup: Opens the *Define Cases* region in a popup window. This gives you more screen real estate for choosing and ordering Data and Attribute cases. This is especially helpful if you have a large number of cases to choose from. See [Edit Cases in a Popup](#) for more information.

Create Scenario button: Opens the **ADD OBJECT** dialog box which will allow you to create a new scenario. Note the new scenario will initially be an exact copy of whatever scenario you have highlighted in the scenario list. See [Create a Scenario](#) for more information.

Copy Budget Scenario: Available for Budget Scenarios only. See [Copying a Budget Scenario](#) for more information.

Actions in the Scenario Data Section:

This area of the screen is where you view or configure various settings for the scenario that is selected in the Scenario list. Settings are as follows:

Scenario Type: Use this drop-down list to select the type for the highlighted scenario. Note that the type selected may determine the availability of other options on the **MANAGE SCENARIOS** screen.

Start Date: Set the calendar/fiscal year that UIPlanner will begin processing calculations.

Actuals Through: Select the most recent period for which actuals have been loaded into the system. See [Change Actuals Date on a Scenario](#) for more information.

Years to run: Total number of year for the model run. Years in excess of the monthly setting below will be run annually.

Years to run Monthly: Number of years that reports will be run by month.

Default Sequence Set: Use this drop-down list to select which Sequence Set is the default for this scenario (used by the Run From Excel option). Note that users can always select different Sequence Sets to run.

When Publishing, include Drilldown: If checked, when this scenario is published, it will not include drill down detail, which uses a lot of memory. This option is intended for use with transfers between scenarios, where drilldown is not needed.

Copy Case List from: This button and the accompanying drop-down list allow you take the selected scenario (in the scenario list) and make its case list and order match that of the scenario selected in the drop-down list. This is a quick way of synching up two scenarios. Note that this feature is not available for Budget scenarios.

Locked: Check this box to lock the selected scenario from any changes in cases, ordering or settings. Note, however, that this does NOT lock the

cases themselves (because a case may be used in other scenarios). Note also that a locked Budget scenario is not available for reporting.

Use IFRS Postings: Check this box to enable the IFRS option on the Posting screen. It will also enable any postings defined as IFRS to over-ride the original posting. See [IFRS Postings](#) for more information. This box is not visible for Budget scenarios.

Include in the next CG Export (visible for Budget scenarios only): When this box is checked, that scenario's data will be included when the next Budget export is performed.

Unpublish: Click this button to un-publish a scenario.

Actions in the Select Cases Region:

The bottom region of the screen is devoted to selecting and ordering cases used in the selected scenario.

Select Base Attribute Case: Use the drop-down list to select the Base Attribute case.

In screens and for other data elements where a user may want to use overlay attribute cases, those screens will include a *Case Selector* drop-down list.

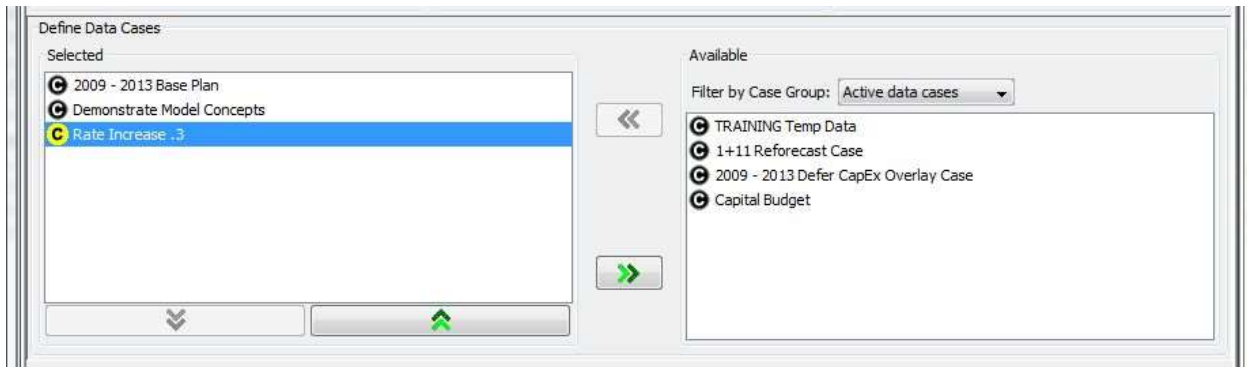
Select Actuals Case: Use the drop-down list to select the Actuals case.

Select Formulas Case: Use the drop-down list to select the Logic case.

Below these drop-down lists, there are two areas in which you can select additional data and attribute cases, and place them in the appropriate order.

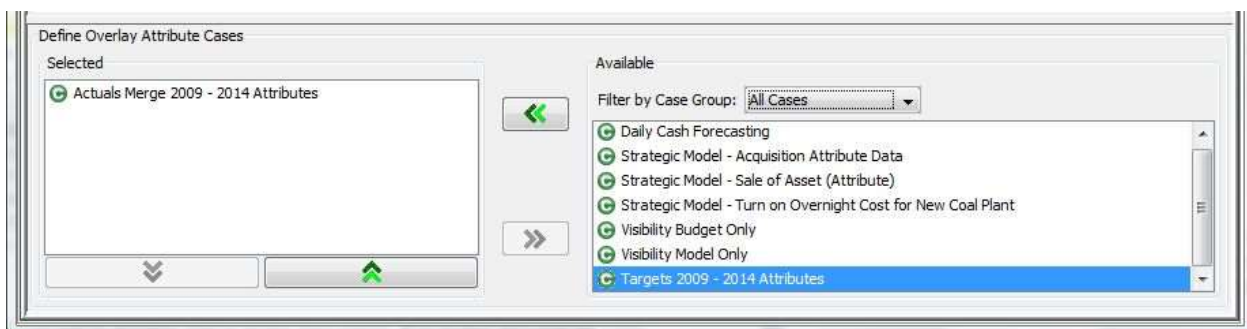
Define Data Cases: This section is used to select data cases for the selected scenario. Available data cases are listed in the box to the right and cases currently used are in the box on the left. You can use the drop-down list to filter the list by Case Group. Highlight a case in either box and use the arrow buttons to move it in or out of the *Selected* list. Note that one of the available selections is always your User Temp Data case. See [Using a User Temp Data Case](#) for more information.

Use the arrow buttons below the *Selected* box to define the order of the selected data cases. See below:



The same actions apply when you select [Edit Cases in Popup](#) to view this area in a separate window.

Define Attribute Cases: This section is used to select attribute cases for the selected scenario. Available cases are listed in the box to the right and cases currently used in the box on the left. Highlight a case in either box and use the arrow buttons to move it in or out of the *Selected* list. Use the arrow buttons below the *Selected* box to define the order of the selected attribute cases. See below:



The same actions apply when you select [Edit Cases in Popup](#) to view this area in a separate window.

Note: For more information on the importance of case order, see Case Order/Winner Logic in [Concept - Cases And Scenarios](#).

What to Do If You Encounter Problems:

If there are scenarios that you know exist but you do not see them on the *Scenario* drop-down list on the **MANAGE SCENARIOS** screen, this may indicate that you do not have security rights to view these scenarios. You need to contact the System Administrator to modify your security rights, as appropriate. See [Troubleshooting - Visibility/Security](#) for more information.

{ XE "Scenarios:Create" * MERGEFORMAT }{ XE "Scenarios" * MERGEFORMAT }{ XE "Create:Scenario" * MERGEFORMAT }{ XE "Create" * MERGEFORMAT }Create a Scenario

You use the **MANAGE SCENARIOS** screen to create a new scenario. First, note that whenever you create a new scenario you start by making a clone of an existing scenario. The reason is that most times when you want a new scenario there is an existing one that you want to build upon. You can then modify case selection or settings as you wish. Below are the steps to take in creating a scenario.

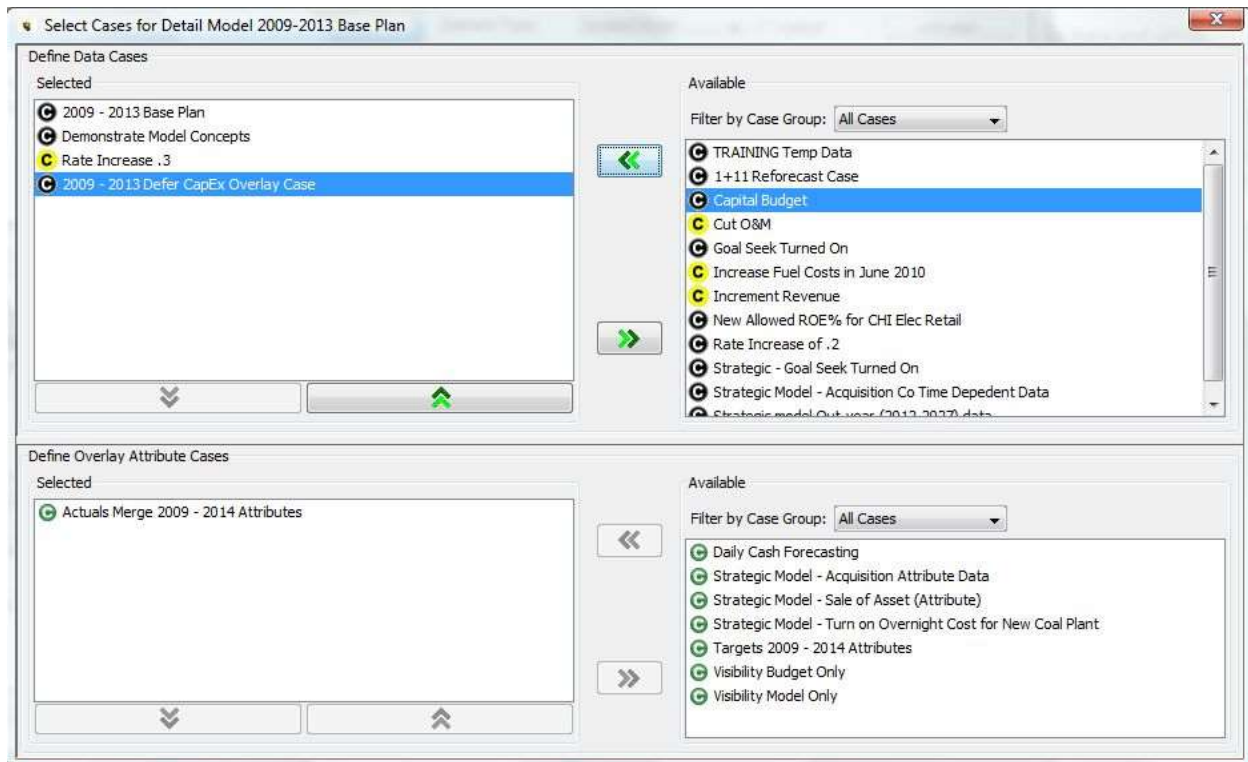
- In the **SELECT SCENARIO** window, choose the scenario you wish to use as the basis for the new scenario.
- Click **CREATE** to bring up the **ADD OBJECT** dialog box. Name the scenario and add it.
- This will add the new scenario to the list. It will initially be an exact copy of the base scenario. See below:

Scenario: Detail Model 2009-2013 Base Plan		Scenario: Copy of Base Plan	
Scenario Type	Detailed Model	Scenario Type	Detailed Model
Start Date:	2009	Start Date:	2009
Actual Date:	200812	Actual Date:	200812
Years to Run:	5	Years to Run:	5
Years to Run Monthly:	1	Years to Run Monthly:	1
Actuals Case:	Actuals	Actuals Case:	Actuals
Formula Case:	Formula Case	Formula Case:	Formula Case
Time Data Cases		Time Data Cases	
2009 - 2013 Base Plan		2009 - 2013 Base Plan	
Demonstrate Model Concepts		Demonstrate Model Concepts	
Rate Increase .3		Rate Increase .3	
TRAINING Temp Data		TRAINING Temp Data	
Attribute Cases		Attribute Cases	
Base Attribute Case		Base Attribute Case	
Actuals Merge 2009 - 2014 Attributes		Actuals Merge 2009 - 2014 Attributes	

- Add or delete cases or modify the scenario settings as needed.
- Select **File, Save** from the UIPlanner menu.

Edit Cases in Popup

To make adding, deleting and reordering data and attribute cases easier (especially if you have a large number of cases), UIPlanner allows you to open up just these two selection boxes in a separate resizable popup window via the **MANAGE SCENARIOS** screen. Below is an example.



Note that in this window all of the same functionality is used as on the full **MANAGE SCENARIOS** screen (e.g., you can select a case and use the arrows to move it in or out).

{ XE "Scenario Definition:Edit" * MERGEFORMAT }{ XE "Scenario Definition" * MERGEFORMAT }{ XE "Scenarios" * MERGEFORMAT }{ XE "Editing:Scenario Definition" * MERGEFORMAT }{ XE "Editing" * MERGEFORMAT }Edit a Scenario Definition

A scenario can be modified after it is created (as long as it is not locked). This is done directly in the **MANAGE SCENARIOS** screen. The most common changes are:

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- Adding, deleting or reordering cases.
- Changing the Actuals date to reflect an additional month of G/L information loaded into the model.
- Resetting the Case list to copy another scenario.

Note that if you would like to change the name, order or visibility of a scenario, or if you would like to delete a scenario, you should use the **CORE OBJECT EDITOR** screen.

Below are the steps to take for each of these common actions.

Add, Delete or Reorder Cases

You can always change the case structure of an unlocked scenario.

- In the Scenario list, select the scenario you wish to modify
- You can use the drop-down list to filter the list by Case Group.
- Highlight a case in either box and use the arrow buttons to move it in or out of the Selected list.
- Use the arrow buttons below the *Selected* box to define the order of the selected data cases. See below:



Change Actuals Date

The "Actuals Through" date, sets the most recent period for which actuals have been loaded into the system. For all months prior to and including this date, the Actuals case will be the winner. Also, this date will impact the processing of all calculations where there are differences in the Forecast and Actuals columns. In particular, the Income Statement and Balance Sheet will show the loaded Planning Ledger Actuals for the actuals months. To set the Actuals date:

- Open the **MANAGE SCENARIOS** screen.
- Select the appropriate *Actuals Through* scenario in the box on the left of the screen.
- Use the drop-down list to select the appropriate month-year.

Reset Case List

You can always take a scenario and set its case structure to be identical to another one. For example, you might want to do an alternative view of a scenario and want to make sure that the case lists are identical. The steps to take follow.

- Select the scenario you wish to modify (the one you want to change).
- In the *Copy Case List* from the drop-down list, select the scenario you want to use as the source.
- Click **COPY CASE LIST FROM**.
- Select **File, Save** from the UIPlanner menu and the destination case structure will now be identical to the source.

**{ XE "Scenario Options" * MERGEFORMAT }{ XE
"Advanced Scenario Options" * MERGEFORMAT
}Advanced Scenario Options**

THE **ADVANCE OPTIONS** button on the **MANAGE SCENARIOS** screen, allows you to access various optional advanced settings (some of which are relevant only to scenarios of a certain type). It will open up a popup window with three sets of tabs. Click on one of the three tabs to access the following features:

- Transfer Options
- Related Scenarios
- Transfer Scenarios

Transfer Options

Select Scenario: Detail Model 2009-2013 Defer CapEx Close

Transfer Options Related Scenarios Transfer Scenarios

Strategic Scenario Options

Imports to S2 Strategic Model. Does not apply if you are NOT using the S2 Strategic Model

Data is exported by the Tactical model for the S2 Strategic model.
This data may be exported by Account or by Account-rollup and by Description suppressed by security. S2 Select & Map

Use this option select the Tactical scenario and to map Accounts and Entities to Import.

Select Tactical Scenario and End Year. Does not apply if you are using the S2 Strategic Model

Select tactical scenario: End Year: 2013

Tactical Scenario Options

Exports to S2 Strategic Model

Ledger data is exported to the S2 Strategic model.
This data may be exported by Account or by Account-rollup.
Use this option to select Account Rollups for Export. Select Accounts

T2 Text Transfers

Text data may be exported and imported within the Tactical Model.
For example, a subsidiary may have their own version of the model.
Use this option to map Entities to import with the T2 Transfer: Import Line function.
The import function reads data exported with the T2 Transfer: Export Line function. Map Entities

Select Budget Scenario and End Year:

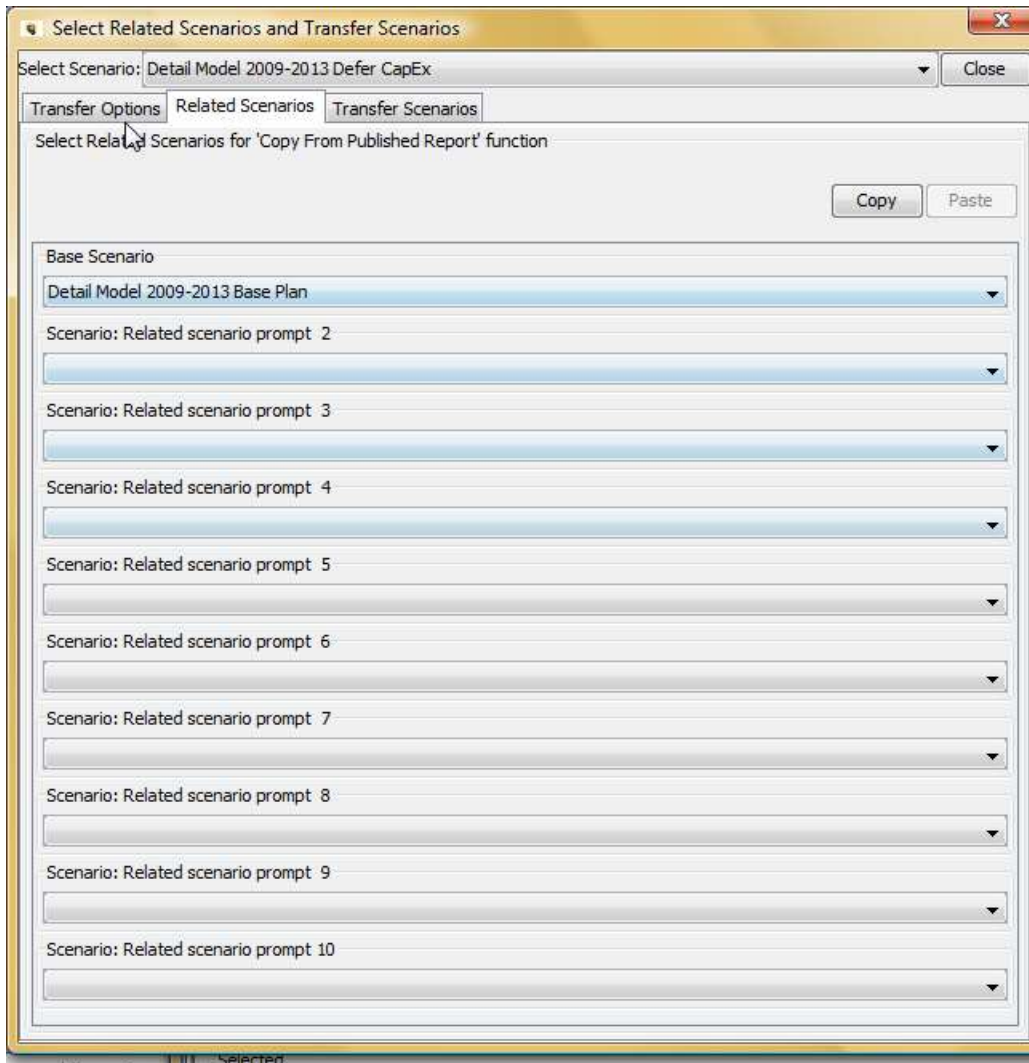
Select budget scenario: End Year: 2013

This tab is used to set various options if you are using UIPlanner's transfer feature to send data:

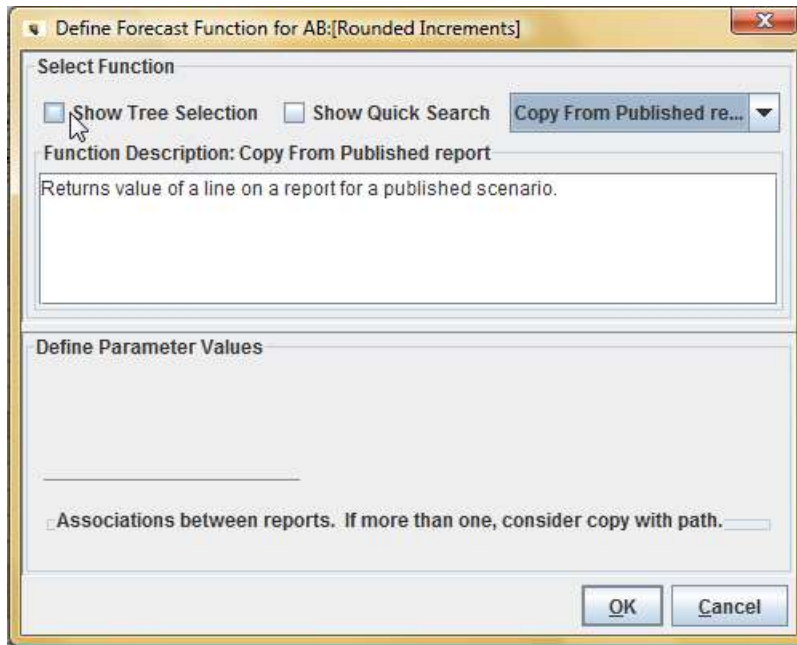
- From the Tactical Model to the Strategic Model
- Within the Tactical Model
- From the Budget to the Tactical Model

Related Scenarios

A scenario might have two related scenarios, such as *Budget Scenario* and *Prior Month Forecast*. The related scenarios are attached to the scenario rather than defined in an attribute case, since attribute cases may be shared across scenarios. Related scenario categories can be renamed by changing the name of the Q2s on the Core Object Editor. Related scenarios are attached to scenarios via a pop-up on the scenario editor screen, as shown below.



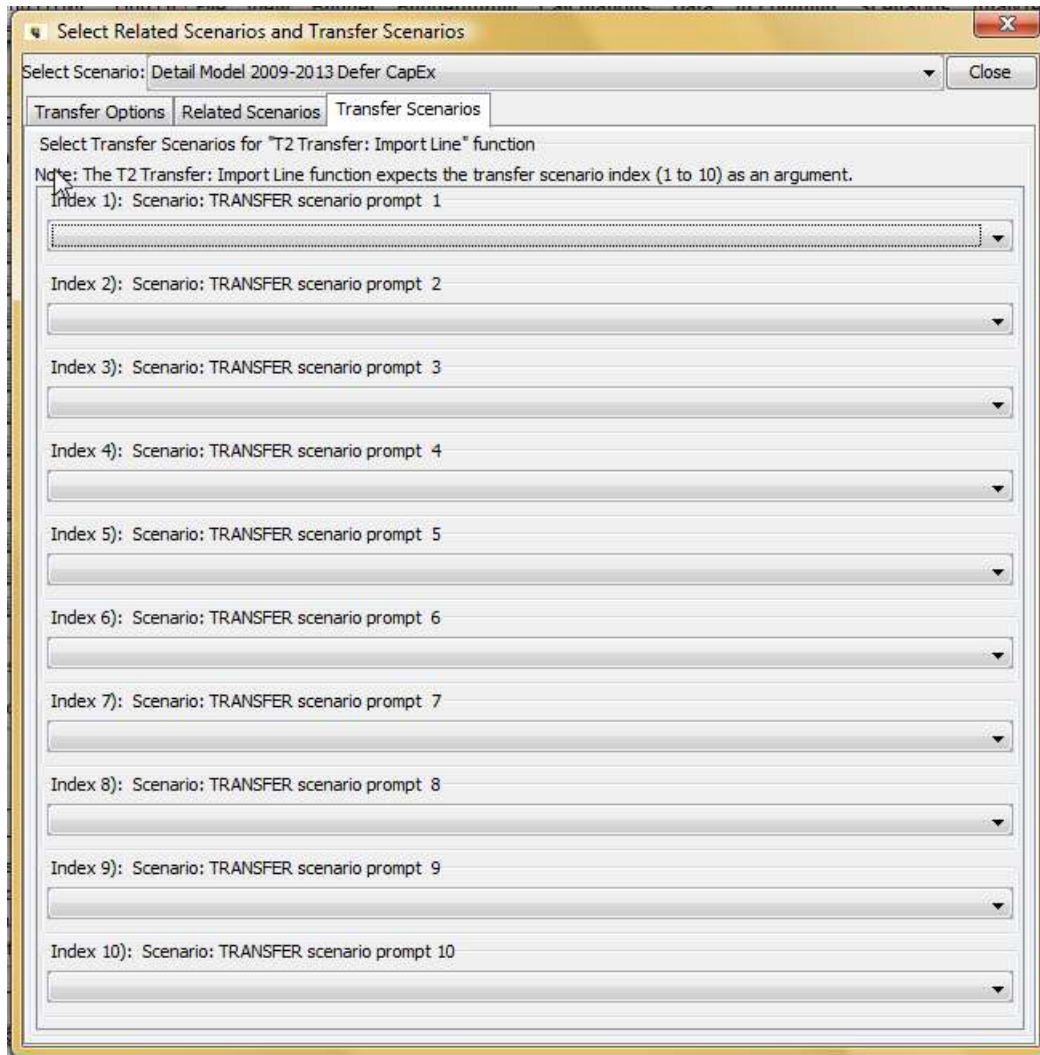
UIPlanner contains a [Copy From Published Report](#) function. This function brings in results from other scenarios. It uses the related scenario concept.



There is an additional function ([Related Scenario](#)) that gets the Object ID of a related scenario. The line containing the Object ID can be formatted in the report to display the scenario name of the related scenario.

Transfer Scenario

This tab is where you identify the Transfer Scenario for the Import lines.



{ XE "Business Drivers" * MERGEFORMAT }{ XE "Comparison" * MERGEFORMAT }{ XE "Cases" * MERGEFORMAT }{ XE "Analytics" * MERGEFORMAT }{ XE "Scenarios" * MERGEFORMAT }Cross Scenario and Case Analysis

Perform Calculations Across Scenarios

Using traditional UIPlanner scenario comparison functions, there are two options for comparing scenarios:

- **Scenario Comparisons:** Use the Scenario Compare functionality in Browse Reports to compare the dollar and percent differences between scenarios side by side, by report and line item.

- **Pull Reports:** Use your own spreadsheet to pull data from multiple scenarios and perform comparison calculations.

UIPlanner has additional functionality that allows you to create calculations across scenarios using the **CALCULATION EDITOR** in order to compare scenarios.

Defining Related Scenarios

Up to ten related scenarios may be defined for a scenario. See [Advanced Scenario Options](#) from more information.

Analyzing Business Drivers

A primary reason for reason for constructing calculations across scenarios is to measure the impact of business drivers. Below are a few examples of business driver calculations that could be performed either across scenarios (e.g. Q1 Actual versus Forecast) or across time (e.g. 2009 versus 2010).

- **Earnings per Share:** How much was attributable to a change in the number of shares versus the after-tax effects of items such as O&M spending, margins on energy, depreciation, etc.?
- **Labor Costs:** How much of a change in O&M labor costs was associated with each of the following factors:
 - o Headcount
 - o Overtime
 - o Average Pay
 - o Benefits
 - o Taxes
 - o Percent of labor charged to capital
- **Unit Costing:** How much did each of the following factors contribute to the change in expenditures for installing new services?
 - o Number of services installed
 - o Productivity (hours / install)
 - o Pay rate per hour
 - o Material costs per service
 - o Overheads
- **Revenue Requirements:** By how much did each of the following factors impact a change in revenue requirements?
 - o Rate Base
 - ♣ Net Plant
 - ♣ Deferred Taxes

- ♣ Working Capital
- ♣ Etc.
- o Return on Rate Base
 - ♣ Cost of Debt
 - ♣ Return on Equity
 - ♣ Equity Ratio
- o O&M Costs

Linking to Waterfall Graphs

You can link calculations of business drivers to waterfall graphs in UIPlanner, as shown below.



Other Uses – Managing Detail

Another use of **COPY FROM PUBLISHED REPORT** function is to enable you to create different sequence sets for the purposes of managing detail. For example, one sequence set could perform detailed calculations of AFUDC on budget projects while the second sequence set could be a model run. Using this approach a model run could be done without recalculating AFUDC on budget projects.

```
{ XE "Change Actuals Date:Scenario" \* MERGEFORMAT
}{ XE "Change Actuals Date" \* MERGEFORMAT }{ XE
"Date" \* MERGEFORMAT }{ XE "Scenarios:Change
Actuals Date" \* MERGEFORMAT }{ XE "Scenarios" \*
MERGEFORMAT }Scenario - Change Actuals Date
```

Setting the *Actuals Through* date, sets the most recent period for which actuals have been loaded into the system. Some UIPlanner calculations are

dependent on the actuals. This information is also used by the Actuals case which will override all other data up to the actuals date.

- Open the **MANAGE SCENARIOS** screen.
- Select the appropriate scenario in the box on the left of the screen.
- Enter the *Actuals Through* date from the on the *Scenario Data* section of the screen (shown below).

The screenshot shows the 'Scenario Data' form with the following fields and values:

- Scenario Type: Detailed Model
- Start Year: 2009
- Actuals Through: 12/2008
- Years to Run: 5
- Years to Run Monthly: 5
- Locked:
- UnPublish: [Button]
- Copy case list from: Actuals Merge 2009 - 2014
- Use IFRS posting:

{ XE "Scenarios:Lock" * MERGEFORMAT }{ XE "Scenarios" * MERGEFORMAT }{ XE "Lock:Scenario" * MERGEFORMAT }{ XE "Lock" * MERGEFORMAT }Lock a Scenario

Locking a scenario will prevent any changes in cases, ordering or settings. Note, however, that this does NOT lock the cases themselves because a case may be used in other scenarios. To lock or unlock a scenario:

- Open the **MANAGE SCENARIOS** screen.
- Select the appropriate scenario from the list on the left side of the screen.
- Check or un-check the *Locked* check box in the *Scenario Data* region.

If a scenario is locked, the case lists and all settings will be disabled. See below:

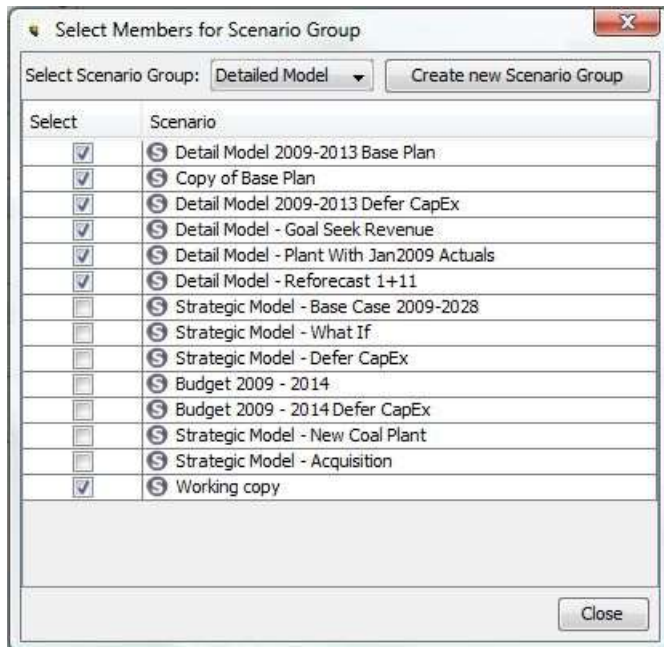
Scenario Groups

Users can create Scenario Groups to aid in filtering on the **MANAGE SCENARIOS** screen. You decide which scenarios are in each group (a scenario can be in more than one group). Then when you are in the **MANAGE SCENARIOS** screen, you can filter by the scenario group and the list will show only those scenarios. Below are steps in managing scenario groups.

Add or Delete Scenarios from a Scenario Group

- Select the scenario group from the drop-down list.
- Place or remove checks in the boxes next to the list of scenarios to include or remove them from the scenario group.

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- Close the **SCENARIO GROUP** window and Select **File, Save** from the UIPlanner menu.

Create a New Scenario Group

To create a new group, follow these steps:

- Click **CREATE NEW SCENARIO GROUP** and add it using the **ADD OBJECT** dialog box.
- After you create the group, select which scenarios you want to include in the group. See above.
- Close the *Scenario Group* window and select **File, Save** from the UIPlanner menu. The new group will be available for filtering in the **MANAGE SCENARIOS** screen.

Delete a Scenario Group

Scenario Groups are deleted using the [Core Object Editor](#).

{ XE "Compare Scenarios" * MERGEFORMAT }{ XE "Scenarios" * MERGEFORMAT }Compare Scenario Packages

Another capability in UIPlanner to facilitate analyzing differences between scenarios is a popup window on the **MANAGE SCENARIOS** screen that lets you

compare the elements that define two different scenario packages. Click **COMPARE** to open the popup window shown below:

Scenario: Detail Model 2009-2013 Base Plan		Scenario: Detail Model 2009-2013 Defer CapEx	
Scenario Type	Detailed Model	Scenario Type	Detailed Model
Start Date:	2009	Start Date:	2009
Actual Date:	200812	Actual Date:	200904
Years to Run:	5	Years to Run:	10
Years to Run Monthly:	1	Years to Run Monthly:	5
Actuals Case:	Actuals	Actuals Case:	Actuals
Formula Case:	Formula Case	Formula Case:	Formula Case
Time Data Cases		Time Data Cases	
2009 - 2013 Base Plan		2009 - 2013 Base Plan	
Demonstrate Model Concepts		Demonstrate Model Concepts	
TRAINING Temp Data		Increase Fuel Costs in June 2010	
		2009 - 2013 Defer CapEx Overlay Case	
		TRAINING Temp Data	
Attribute Cases		Attribute Cases	
Base Attribute Case		Base Attribute Case	
		Targets 2009 - 2014 Attributes	

You cannot make changes to the scenarios from here, but it is a quick way to see any differences.

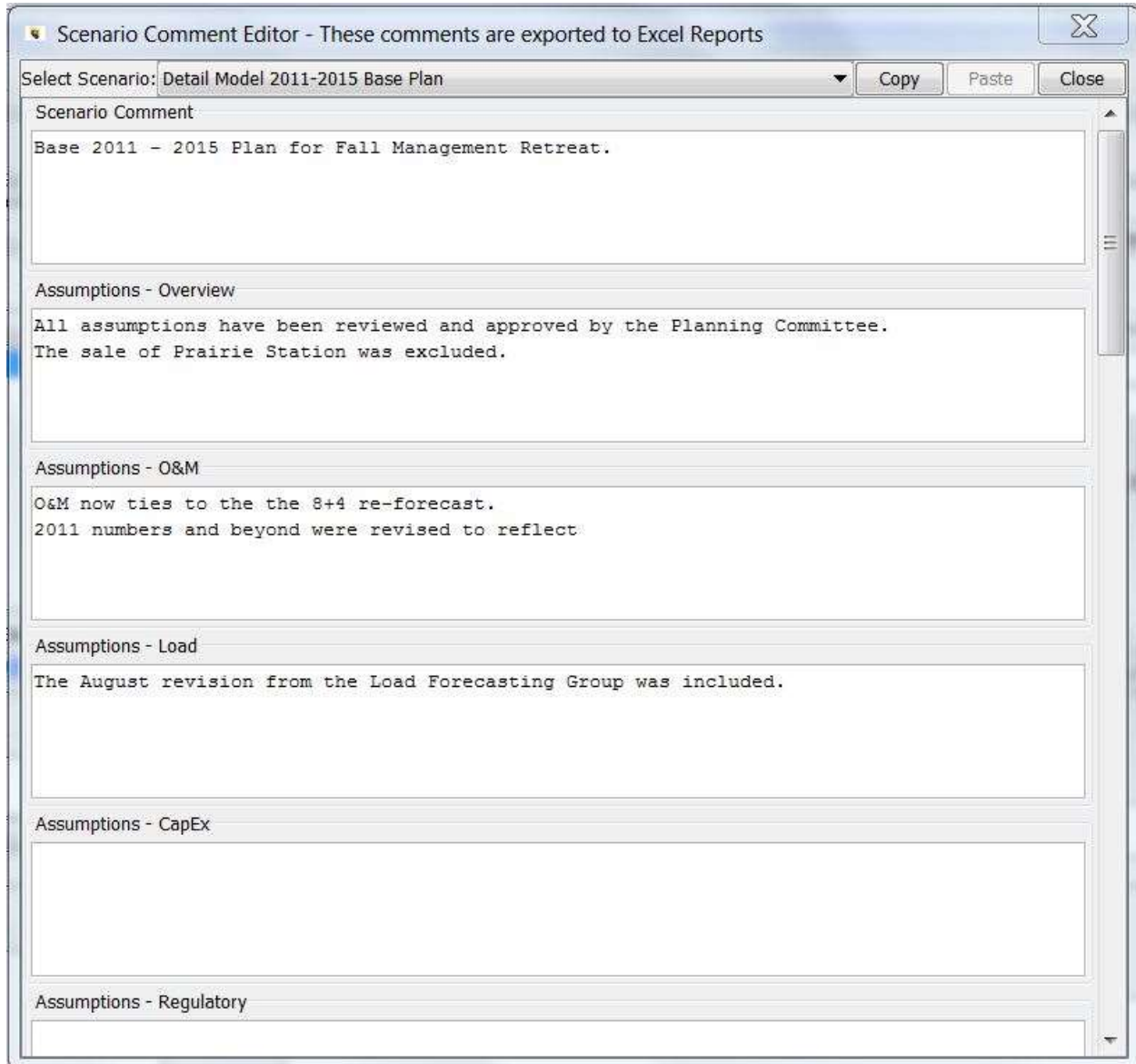
Note: The functionality to create scenario comparison reports is provided on the **BROWSE REPORTS** screen (**SCENARIO COMPARE TAB**).

```
{ XE "Comments" \* MERGEFORMAT }{ XE "Analytics"
\* MERGEFORMAT }{ XE "Scenarios" \* MERGEFORMAT
}Scenario Comments
```

UIPlanner includes the capability of creating structured scenario comments. You can have up to 20 structured comments per scenario. You can give each comment a name, such as "Interest Rate Assumptions" or "Fuel Price Assumptions." These names are assigned using the **CORE OBJECT EDITOR** (Q2 - Scenario: Comment Description x).

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Comments are edited on a pop-up screen from the **MANAGE SCENARIOS** screen as shown below.



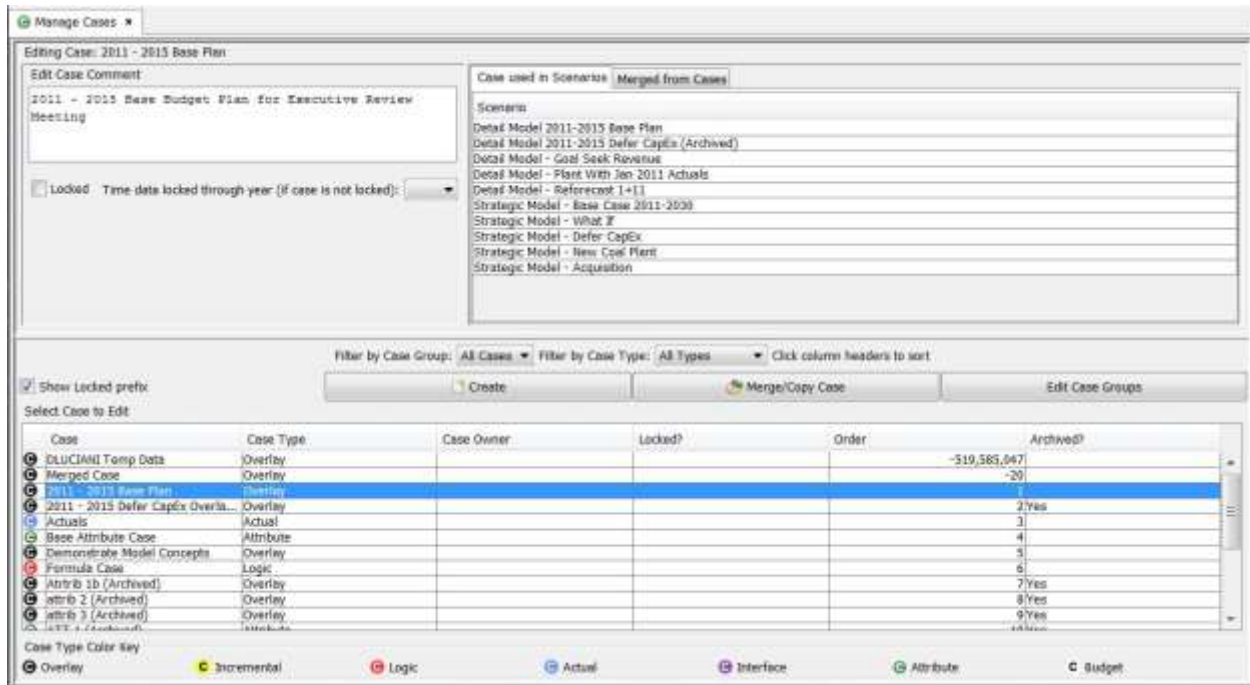
Scenario comments are included on the Scenario Tab in Excel reports. Comments support embedded carriage returns, as shown below.

	A	B
1	Scenario	Detail Model 2011-2015 Base Plan
2	Scenario Comments:	
3	Scenario Comment	Base 2011 - 2015 Plan for Fall Management Retreat.
4	Assumptions - Overview	All assumptions have been reviewed and approved by the Planning Committee. The sale of Prairie Station was excluded.
5	Assumptions - O&M	O&M now ties to the the 8+4 re-forecast.
6	Assumptions - Load	2011 numbers and beyond were revised to reflect The August revision from the Load Forecasting Group was included.
7		
8	Scenario Run Date/Time:	January 03, 2012 08:19:41
9	Report Sequence Set:	Detail Model
10	Version ID: 1	Executable version: 6.00
11	Base Year: 201101.0	Years run monthly: 3
12	Scenario Actuals Date: 201012.0	
13		
14	Updated 2011.09.12-07:02 Attribute	Base Attribute Case
15	Updated 0 Attribute	test
16		
17	Updated 2011.12.23-15:53 Formula	Formula Case
18		
19	Updated 2011.04.15-10:57 Overlay	2011 - 2015 Base Plan
20	Updated 2009.09.24-09:36 Overlay	Demonstrate Model Concepts
21	Updated 0 Overlay	TRAINING Temp Data
22	Updated 2011.04.15-10:37 Actuals	Actuals
23		
24	Reports with Actuals Date::	
25	Bonds - Detailed Model	201012
26		
27	Related Scenarios:	Detail Model 2011-2015 Defer CapEx (Archived)
28		

Manage Cases

```
{ XE "Manage Cases" \* MERGEFORMAT }{ XE "Case" \*
MERGEFORMAT }{ XE "Screen" \* MERGEFORMAT
}Manage Cases Screen
```


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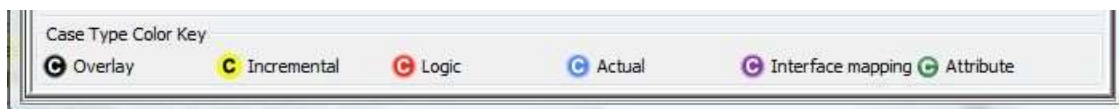


UIPlanner scenarios are essentially collections of cases. The **MANAGE CASES** screen is the core screen where you:

- **Create** new cases, either blank new ones or by merging/copying other cases.
- Create **Case Groups** to make it easier to manage large numbers of cases.
- **Lock** cases so that the underlying data cannot be accidentally changed.
- Enter comments and options for cases.

This screen is also where you can see all cases in the current version and see their locked/unlocked status.

Note that case names are color coded, as indicated at the bottom of the screen.



Screen Layout:

The **MANAGE CASES** screen is divided into two main regions.

Edit Case

The *Edit Case* region is the top region of the screen. It contains a check box labeled *Locked*. Select this box to lock the highlighted case. Data in locked cases cannot be changed. An additional option, *Time Data locked through year (if case is not locked)*, provides a drop-down list for you to select a year through which to lock that case

The top portion of this region of the screen contains a text box for entering comments for the highlighted case. These comments will be included in the Scenario tab whenever you send a report to MS Excel. See the topic Case Comments for more information.

The top portion also includes a listings of:

- Which scenarios each case is used in. When you select a case in the case list, this window lists all scenarios (including archived scenarios) where that case is used. This can be very helpful in scenario/case/data management
- Which cases were merged to create a new merged case – When you select a case in the case list, this window lists case names not case ids, because the cases that formed the merge could later be deleted.

The bottom region of the screen, labeled *Select Case to Edit* contains a list of cases in a grid format and includes filtering and viewing options. It also contains action buttons, which are described below.

List Of Tasks Or Operations That Are Performed With This Screen:

The list of all cases in the current version is displayed in a grid. When you highlight a case by clicking on it, that case becomes the "active" case, and all information displayed or actions performed here, such as locking or adding comments will apply to that case. The grid also indicates its owner group (if applicable) or if the case has previously been archived.

There are three filtering/sorting features and several action buttons in the bottom region of the screen:

Filter by Case Group: Use the drop-down list to filter the cases on the screen to show only those in a specific user-defined case group.

Filter by Case Type: Use the drop-down list to filter the case list to only those of a specific type (e.g., Attribute or Overlay).

Sorting: You can sort this grid by any of the columns in the grid, either ascending or descending. To do so, click on the column label at the top of the column you wish to sort by.

Create Case: Opens the **ADD OBJECT** dialog box to allow you to [Create a Case](#).

Merge/Copy Case: Opens a dialog box that allows you to merge the data in several cases into one new case, or copy a single case into a new case. See [Merge or Copy Cases](#) for more information.

Edit Case Group: Add, edit or delete case groups used for filtering and reporting purposes. See [Case Groups](#) for more information.

Show Locked Prefix: If you select this check box, the case name in the grid for all locked cases will be preceded by the word "Locked." You can then click on the Case column label to sort by that field and all of the locked cases would be grouped together.

What to Do if You Encounter Problems

If there are cases that you know exist but you do not see them on the case drop-down list on the **MANAGE CASES** screen, this may indicate that you do not have security rights to view these cases. You need to contact the System Administrator to modify your security rights, as appropriate. See [Troubleshooting - Visibility/Security](#) for more information.

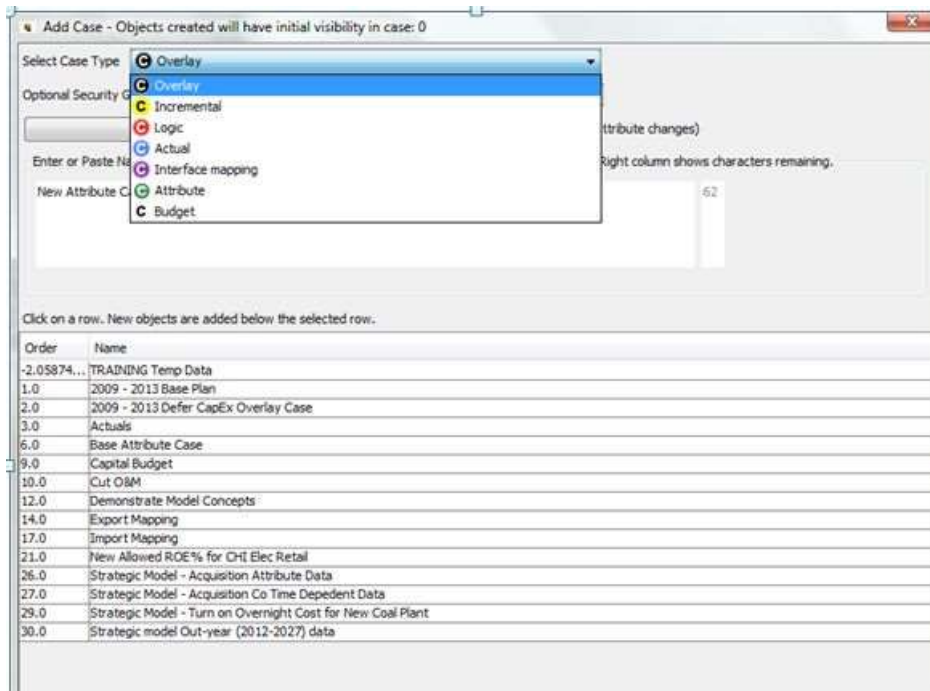
{ XE "Create:Case" * MERGEFORMAT }{ XE "Create" * MERGEFORMAT }{ XE "Case:Create" * MERGEFORMAT }{ XE "Case" * MERGEFORMAT }Create a Case

To create a new case:

- Open the **MANAGE CASES** screen.
- Click **CREATE** located in the middle of the screen.
- This will open the **ADD OBJECTS** dialog box. You need to select the case type (Overlay is the default) as well as enter the name of the new case before adding it. If applicable, also select the Security Owner Group. See [Concept - Cases and Scenarios](#) for detailed information on the various types of cases.

- When you close the window, your new case will appear in the list on the **MANAGE CASES** screen in the order you specified.

See below:



Note that you cannot change a case's type once it is created. However, on the **CORE OBJECT EDITOR**, you can:

- Change a case's name.
- Change the overall order of cases.
- Hide a case.
- Delete a case (Note: You cannot delete a case that is in the active scenario).

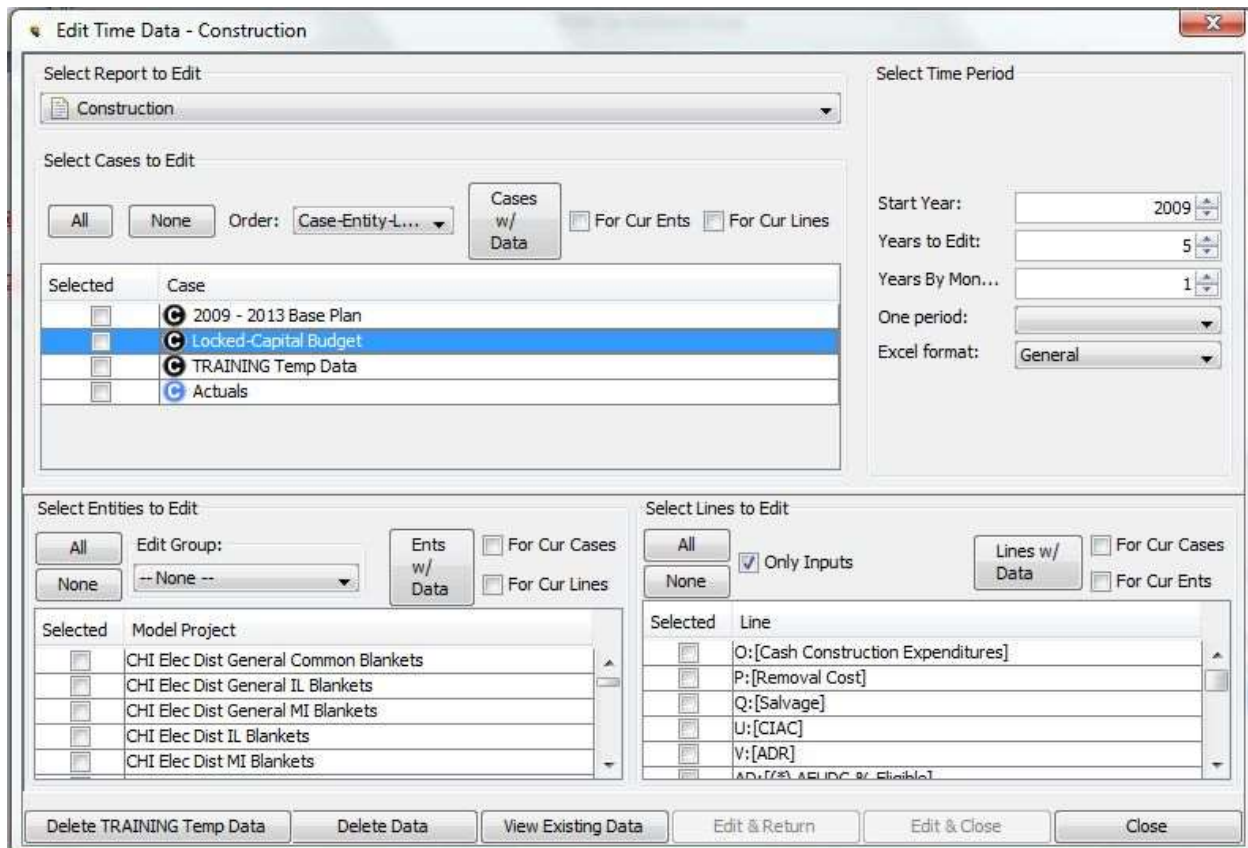
{ XE "Case:Lock" * MERGEFORMAT }{ XE "Case" * MERGEFORMAT }{ XE "Lock:Case" * MERGEFORMAT }{ XE "Lock" * MERGEFORMAT }Lock a Case

Cases can be locked either completely, so that no additional changes can be made, or locked through a specific year. To lock a case:

- Open the **MANAGE CASES** screen.
- Select a case from the list.
- Select the *Locked* check box.
- If you like to lock the time data of the case only through a specific month, select that year from the *Time data locked through year* drop-down list.

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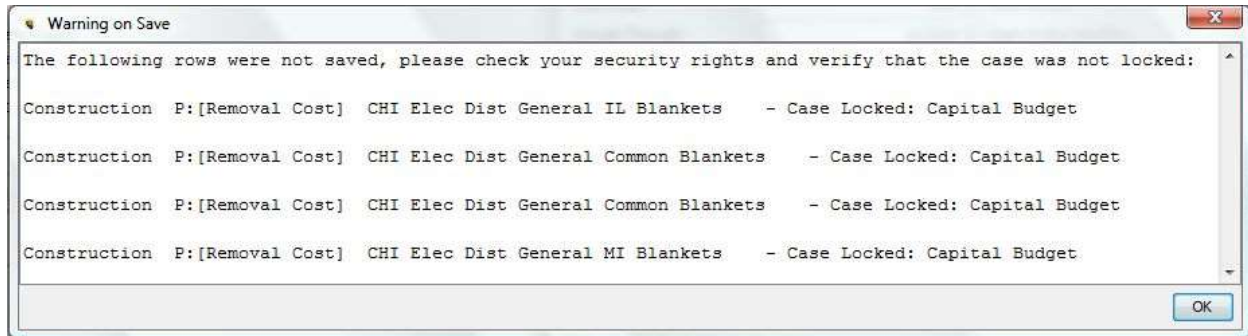
Once a case is locked, you can use the check box to have the word *Locked* either before or at the end of the name (a User Preference set on the **PREFERENCE MANAGER** screen). See below.



Note that this applies to all references to that case throughout UIPlanner. See the example below from the **TIME DATA EDITOR**:

Case	Case Type	Case Owner	Locked?	Order	Archived?
Locked-Capital Budget	Overlay		Yes		
Locked-Strategic Model - Acquisitio...	Attribute		Yes		30
TRAINING Temp Data	Overlay				-2,058,746,074
2009 - 2013 Base Plan	Overlay			1	
2009 - 2013 Defer CapEx Overlay ...	Overlay			2	
Actuals	Actual			3	
Base Attribute Case	Attribute			4	
Full Plan	Strategic			5	

Data in a locked case cannot be changed, regardless of the user's security. If a user tries to change data in a locked case, the model will provide an error message indicating that the case is locked. See below.



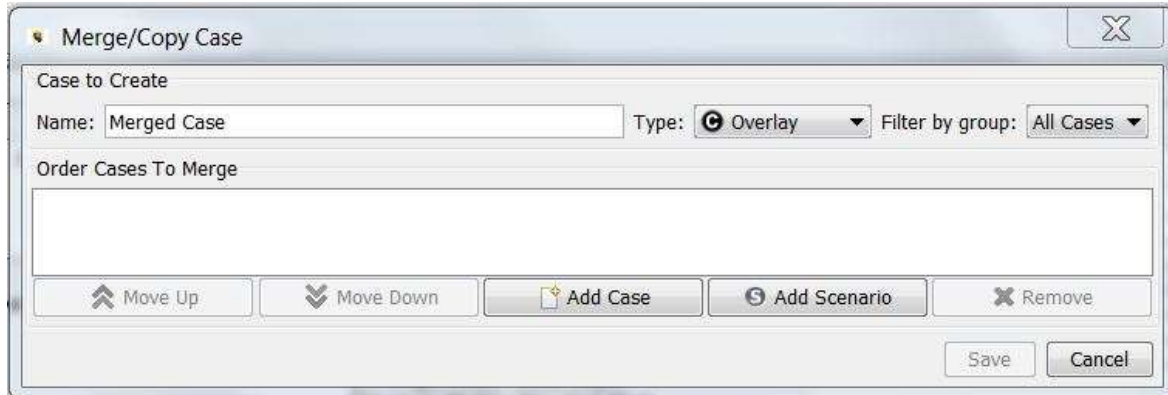
{ XE "Merging" * MERGEFORMAT }{ XE "Copy" * MERGEFORMAT }{ XE "Copy Cases" * MERGEFORMAT }{ XE "Case" * MERGEFORMAT }Merge or Copy Cases

UIPlanner allows you to copy cases or to merge multiple cases into one new case. This is a valuable capability to assist you in data management. For example:

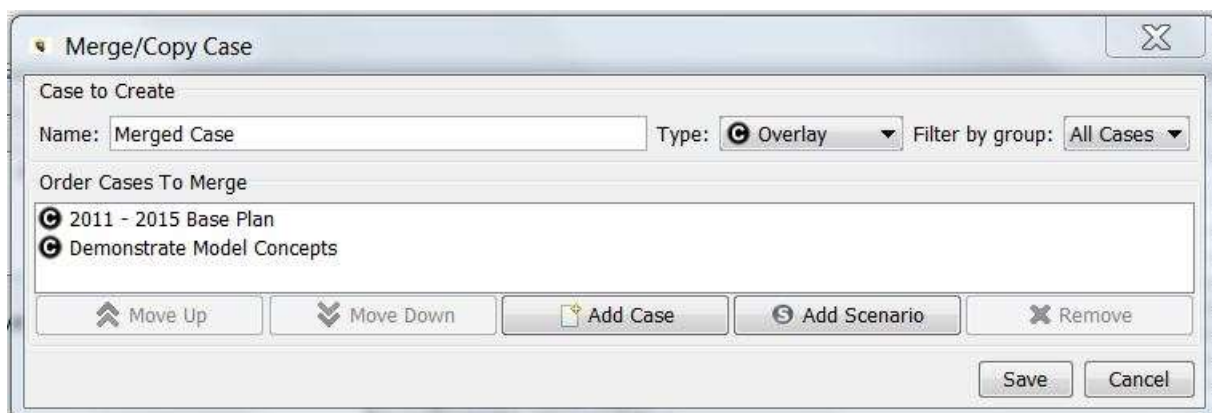
- Once you have completed an approved forecast (possibly containing many cases) you can merge all time data into one case, and then lock it, thus creating a simple locked archive.
- If you want to fully freeze a scenario at a point in time, you can also make a copy of the formula case and use THAT in the scenario. That preserves the report logic at that point in time. You would continue using the current formula case going forward.
- If you want to do a what-if where you change various data in a specific case you can make a copy of that case and then make your changes there.

Note that you can only merge cases of the same type. To merge cases, follow these steps.

- Open the **MANAGE CASES** screen.
- Click **MERGE/COPY CASE**. The dialog box shown below will open.
- Name the merged case in the space provided.
- Select the *Case type* from the drop-down list.

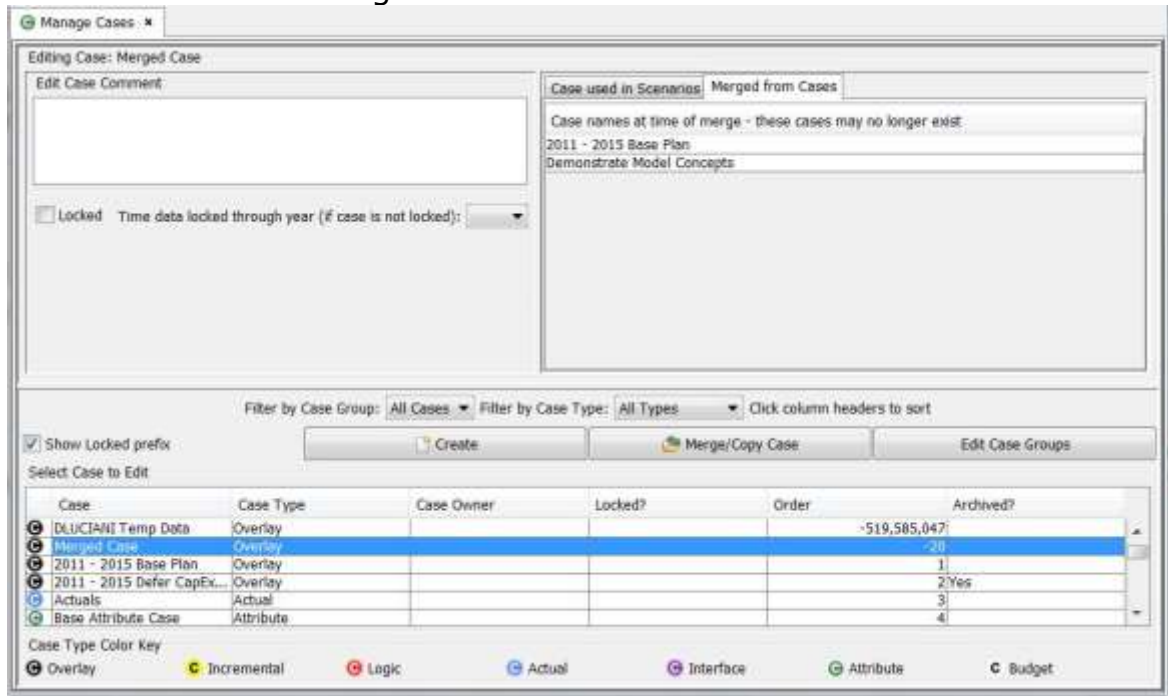


- Select the Cases to merge. Note that there are two ways to merge cases
 1. *Manually select the cases to merge* - Open the **SELECT CASE** dialog box (shown below) with all available case by clicking ADD CASE. Each case must be selected one at a time. Repeat this step to add additional cases:
 2. *Select all cases from a specific scenario* - Open the **SELECT SCENARIO** dialog box (shown below) by clicking **ADD SCENARIO**, and select a scenario from the drop-down list. Click **OK** and all cases in the selected scenario will be added, in the same order as in the source scenario (excluding the User Temp data case – this case cannot be merged). If you want to include its data, you need to create a standard overlay case and copy the data there. Also, you can add more than one scenario to the list, and you can also manually add other cases.
- After all appropriate cases have been selected put them in the proper order by using the "Move up" and "Move Down" buttons. Remember that case order is important.



- Click **SAVE** and the cases selected will be merged and shown in the case list on the **MANAGE CASES** screen.

- Notes:
 - The cases selected will be merged and shown in the case list at the bottom of the **MANAGE CASES** screen. (See example below.)
 - The *Merged from Cases* tab (top right region of the **MANAGE CASES** screen) will list the cases that were merged to create the new case. Case names not case ids are listed because the cases that formed the merge could later be deleted.



Some information on Case merges:

- The Case Group membership of the new case is inherited from the first case in the merge/copy list.
- When you copy a single time-data case from the **MANAGE CASES** tab the last-updated information is retained from the original case. If you merge multiple cases, however, then new last-updated information will continue to be generated.
- If the first case in the merge/copy list has a Security Group, the new case will inherit it.

{ XE "Case Groups" * MERGEFORMAT }Case Groups

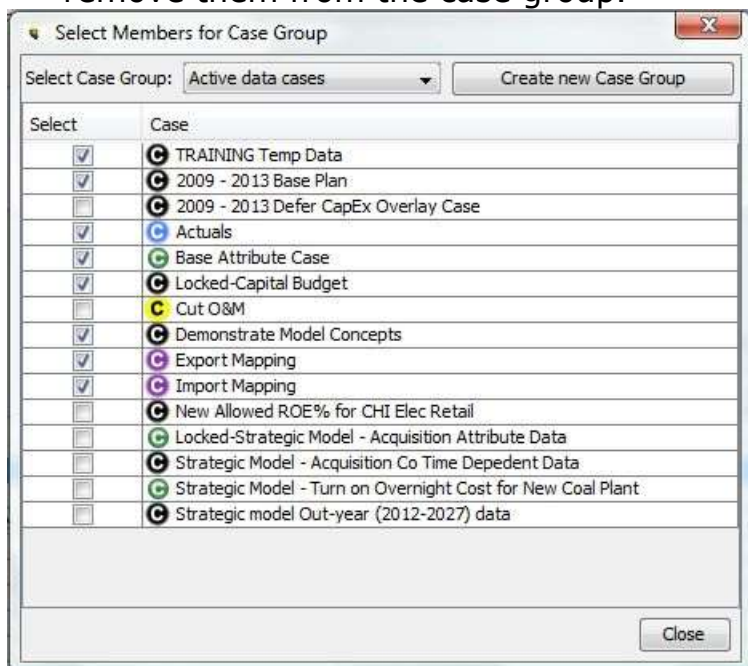
Users can create Case Groups to aid in filtering on the **MANAGE CASES** screen and **CORE OBJECT EDITOR**. You decide which cases are in each group (a case can be in more than one group). Then when you are in the **MANAGE CASES**

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screen, you can filter by the case group, and the list will show only those cases. Below are steps in managing case groups:

Add or Delete Cases from a Case Group

- Click **EDIT CASE GROUPS** on the **MANAGE CASES** screen. This will open the **CASE GROUP** window (see below).
- Select the case group from the drop-down list.
- Place or remove checks in the boxes next to the list of cases to include or remove them from the case group.



Create a New Case Group

- To create a new group, click **CREATE NEW CASE GROUP** and add it using the **ADD OBJECTS** dialog box.
- After you create the group, select which cases you want to include in the group. See above.
- Close the **CASE GROUP** window and select **File, Save** from the UIPlanner menu. The new group will be available for filtering in the **MANAGE CASES** screen.

Delete a Case Group

Case Groups are deleted using the **CORE OBJECT EDITOR**.

User Temp Data Case

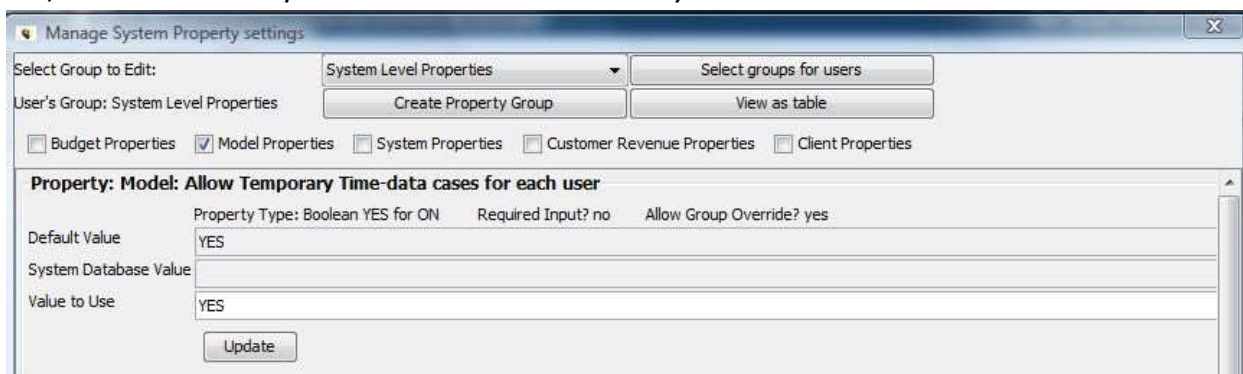
```
{ XE "Temp Data Case" \* MERGEFORMAT }{ XE "User  
Temp Data Case" \* MERGEFORMAT }{ XE "Data Cases"  
\* MERGEFORMAT }Using a User Temp Data Case
```

Quick ad hoc “what-ifs” can be performed using the user-specific temporary time data case that is available in every scenario. When you put data into this *User Temp Data Case* and run the model, it produces results that include your data, but that data is specific to that scenario and you only. Each user has their own *User Temp Data Case* and one user cannot see or use the data from another user’s case. Your *User Temp Data Case* does not affect other users. Thus, you can run what-ifs without needing to create a separate scenario and time data case, which you would otherwise need to do to prevent affecting the current scenario.

Note: UIPlanner prohibits you from publishing a scenario that includes your temp data case. (An error message will appear if you try to do this.) That data is intended to be local for you only to view. If you want to include your user temp data and publish, put it in a regular overlay case and bring it into the scenario. See [Publishing Reports – Concept](#) for more details. Tasks applicable to the *User Temp Data Case* follow.

How to Make User Temp Data Case Available

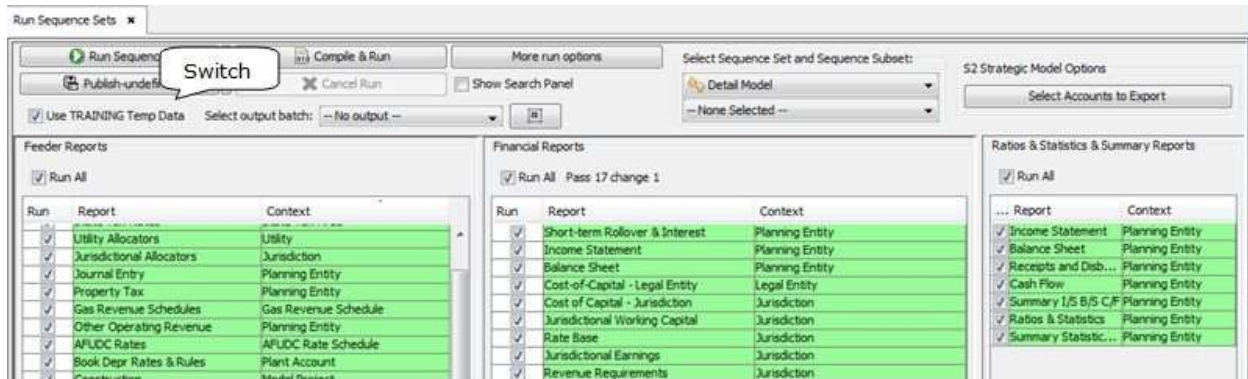
Whether your UIPlanner installation has the user specific temporary time data case available is controlled by a Planner property. Once this is turned on, the *User Temp Data Case* functionality is available to all users.



How to Use User Temp Data Case in a Sequence

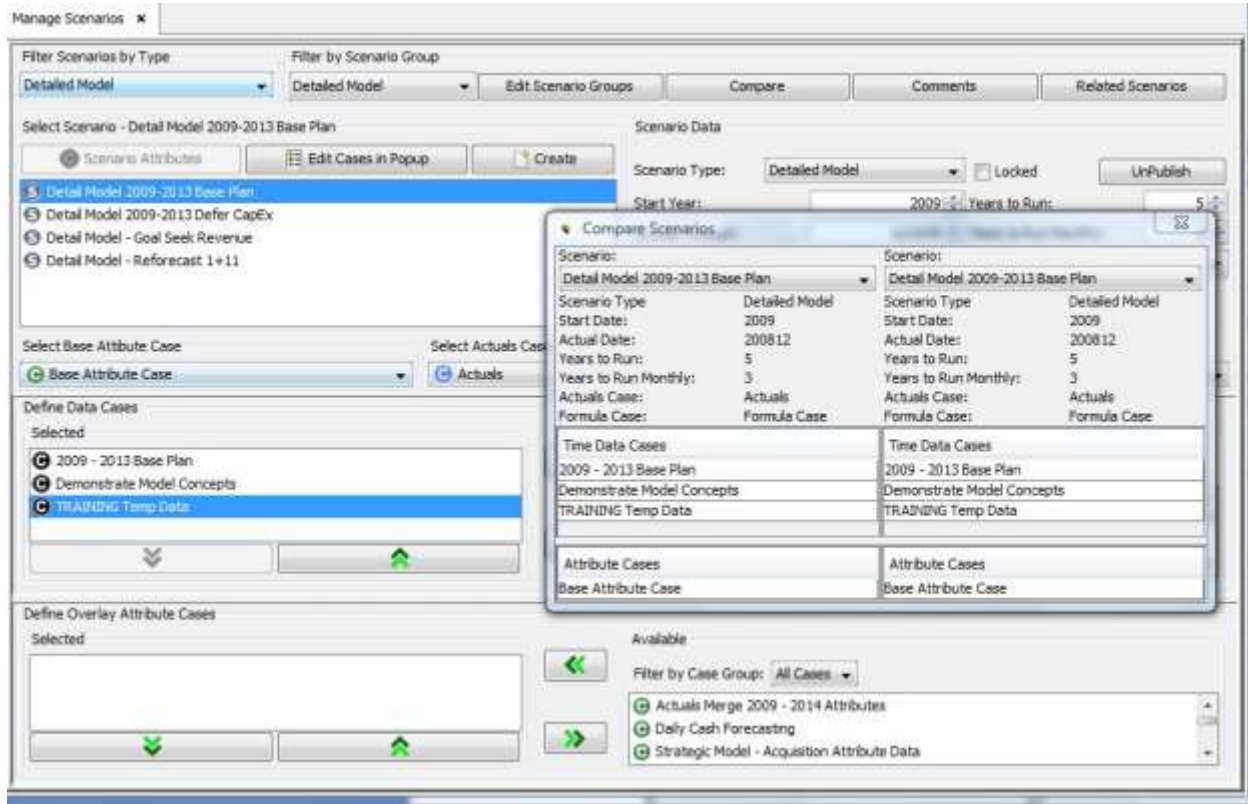
The **RUN SEQUENCES** screen has a check box (see below) where you elect whether to use the *User Temp Data Case* during the run. This switch is not remembered as a user preference. It must be selected each time you open the model.

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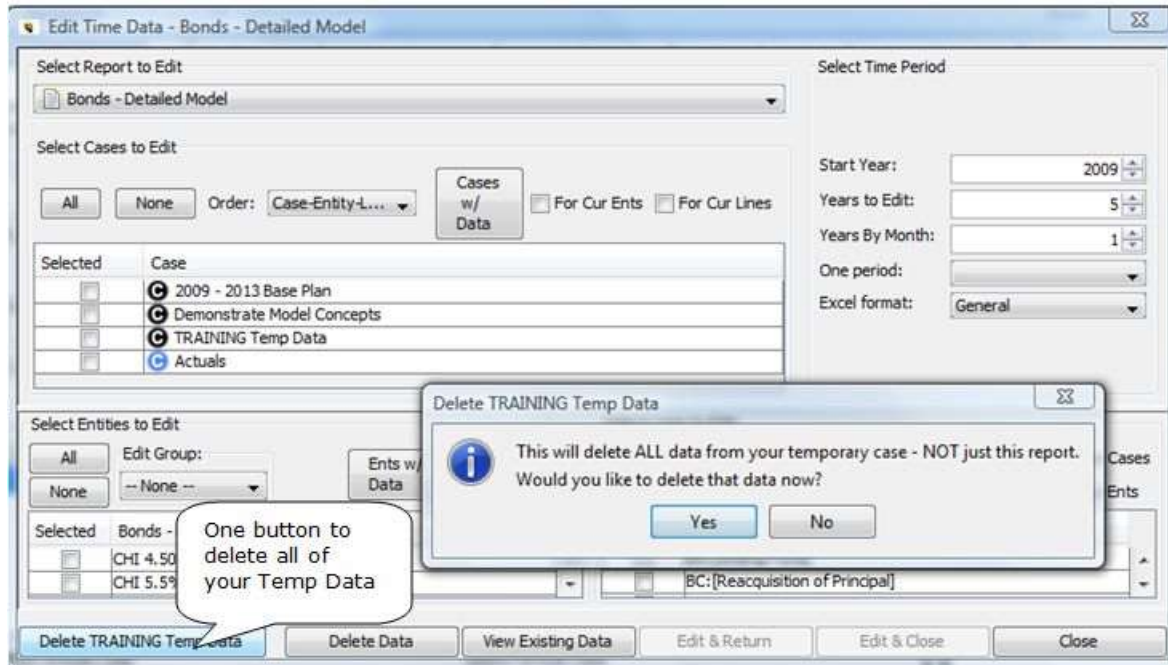
How User Temp Data is used in Scenarios

The *User Temp Data Case* defaults to the last one in the list on the **MANAGE SCENARIOS** screen and **COMPARE SCENARIOS** window (see below). It is assumed that if you put data here that you want it to be the 'winner'.



How to Delete Data from User Temp Data Case

You can delete data from your *User Temp Data Case* report by report, or via a check box on the **TIME DATA EDITOR** screen which deletes **ALL** data from the user-specific temporary time data case.



How Actuals is Used Data in User Temp Data Case

The *User Temp Data Case* is a regular overlay case. If you put actuals data into this case, it will be read only by those lines defined as *Dollars without Actuals*.

How to Save Data in User Temp Data Case for Others

If after running the model using your *User Temp Data Case* you decide you want to save the data for others to use, you will need to move it to one of the regular time data cases in the scenario.

How to Data in User Temp Data Case is Used for Future Session

The *User Temp Data Case* is saved to the database for use in a future session until you delete it.

What To Do If You Encounter Problems

Description of Issue or Problem:

I do not see the *User Temp Data Case* in the case listing for my current scenario.

Why It Happens and What To Do About It:

The switch to enable the *User Temp Data Case* is not set in **PLANNER PROPERTIES**. You should contact your system administrator.

Description of Issue or Problem:

I populated data in my *User Temp Data Case* but I do not see it reflected in the report results.

See [Troubleshooting – User Temp Data Case](#) for assistance with these issues.

Archive/Resurrect Versions, Cases, Scenarios

Archive/Resurrect Screen

Select Data Sets to Archive. Note: Cases in the active scenario cannot be archived.

Select Object Type To Archive: Case

Select All Unselect All Archive

Case	Archive
1+11 Reforecast Case	
2009 - 2013 Defer CapEx Overlay Case	
Actual Merge 2009 - 2014 Attributes	
Capital Budget	
Cut O&M	
Daily Cash Forecasting	
Export Mapping	
Goal Seek Turned On	

Select Archived Data to Resurrect

Select Only the Cases in Scenario: None Selected

Select All Unselect All Resurrect

Case	Version	Archived By	Archived On	Resurrect
Increase Fuel Costs in June 2010 (Archived)	1	TRAINING	08/25/10 16:30:23	
Increment Revenue (Archived)	1	TRAINING	08/25/10 16:30:23	

The archive/resurrect screen is an administrator screen that allows you to manage cases and scenarios by removing them from the active screens. You can always bring them back (resurrect them), if and when you want to run them in the future. When you archive a version, scenario or case, all of the data related to it is removed from the active database tables and copied into a parallel set of archive tables. This reduces the amount of data in the active tables and improves performance.

You can choose to archive or resurrect:

- An entire version – the process will archive all scenarios and cases in that version

- A specific scenario – the archive process will preselect all cases associated with that scenario
- Specific cases - you can select from a list of all cases, and archive one or many individual cases.

Notes:

- You cannot run a scenario that has one or more of its constituent cases archived. Archived scenarios do not appear in the list of scenarios to select.
- Archived scenarios (or scenarios for which one or more cases have been archived) will still appear in the Manage Cases screen, with their settings, but will be denoted as having been archived.
- You cannot archive the active scenario, nor can you archive any cases in the active scenario.
- You cannot delete archived versions or cases. If you want to permanently delete a version or a case, you can only do that if it is in the active list. See **MANAGE VERSIONS** for information on deleting a version, and see the [CORE OBJECT EDITOR](#) for information on deleting Cases
- Archived scenarios and cases are not available to copy to a Local Access copy. You can only make local copies of active scenarios.

If you have archived a large number of cases or scenarios, you should consider using scenario and case groups to display only active scenarios and cases.

The ability to archive/resurrect scenarios, cases or versions is an administrator-level security item. If you do not have the security rights to archive, this screen will be blank, with a message indicating that you lack the rights. Contact your system administrator.

Screen Layout:

The **ARCHIVE/RESURRECT** screen is divided into two regions.

The top region is for the Archive process. It contains drop down boxes that you use to select whether you are archiving/resurrecting versions, or by case or scenario. Next to these are select all/unselect all buttons, and finally an action button that launches the Archive process. Under those drop-down lists and action buttons is a window that fills in appropriately with your available choices to archive. Each item has a checkbox to select it for Archiving. If you select "Version", the grid shows all versions – you can choose the one(s) to archive from this list. If you select case or scenario, the grid fills in with cases you can archive.

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The bottom region is for the Resurrect process. It contains a similar drop down list, action button and window format. The droplist allows you to repopulate the grid with all cases in a specific scenario, or to display all archived cases. In this case, the action button is to resurrect the selected cases. The grid below shows all data that has been archived, along with the ID of who performed the archive and the date. There are checkboxes for each item to select for the Resurrect process.

List Of Operations Or Tasks That Are Performed With This Screen:

As indicated above, the two functions of this screen are to archive or resurrect cases, scenarios or versions.

ARCHIVE CASES, SCENARIOS OR VERSIONS

[RESURRECT CASES, SCENARIOS OR VERSIONS](#)

{ XE "Archive" * MERGEFORMAT }Archive Cases, Scenarios Or tasks

To perform the archiving process, you first select which structure you want to archive (Case, Scenario, or Version), using the drop-down list. Then follow the steps below for the structure you selected.

Cases

- When you select *Cases*, the grid will display all active cases in the current version. Cases in the active scenario will not appear in the list, as they are not eligible for archiving. Also, cases already archived will not appear in the list; they should appear in the bottom grid of already archived data.
- Use the check boxes to select the case(s) you want to archive and select the **ARCHIVE** button.

Archive-Resurrect Case Version

Select Data Sets to Archive. Note: Cases in the active scenario cannot be archived.

Select Object Type To Archive: Case

Select All Unselect All Archive

Case	Archive
Actuals Merge 2009 - 2014 Attributes	<input checked="" type="checkbox"/>
Capital Budget	<input checked="" type="checkbox"/>
Cut O&M	<input checked="" type="checkbox"/>
Daily Cash Forecasting	<input type="checkbox"/>
Export Mapping	<input type="checkbox"/>
Goal Seek Turned On	<input type="checkbox"/>
Import Demo	<input type="checkbox"/>

Select Archived Data to Resurrect

Select Only the Cases in Scenario: -- None Selected --

Select All Unselect All Resurrect

Case	Version	Archived By	Archived On	Resurrect
1+11 Reforecast Case (Archived)	1	TRAINING	01/20/11 07:44:13	<input type="checkbox"/>
2009 - 2013 Defer CapEx Overlay Case ...	1	TRAINING	01/20/11 07:44:14	<input type="checkbox"/>

- UIPlanner will begin the archive process and will echo back in a window like the one below.

Archiving Data

Preparing to Archive Cases: 1+11 Reforecast Case, 2009 - 2013 Defer CapEx Overlay Case, Actuals Merge 2009 - 2014 Attributes, Increase Fuel Costs in June 2010...

0 Time-data rows inserted into archive for case '1+11 Reforecast Case (Archived)' and version '1', in 81ms

0 Attribute rows inserted into archive for case '1+11 Reforecast Case (Archived)' and version '1', in 317ms

OK

- When the process is complete, the case(s) you chose will be removed from the top window and will now appear in the list of archived cases in the bottom window.

Archive-Resurrect Case Version

Select Data Sets to Archive. Note: Cases in the active scenario cannot be archived.

Select Object Type To Archive: Case

Select All Unselect All Archive

Case	Archive
Daily Cash Forecasting	<input type="checkbox"/>
Export Mapping	<input type="checkbox"/>
Goal Seek Turned On	<input type="checkbox"/>
Import Demo	<input type="checkbox"/>
Import Mapping	<input type="checkbox"/>
Increase Fuel Costs in June 2010	<input type="checkbox"/>
Increment Revenue	<input type="checkbox"/>

Select Archived Data to Resurrect

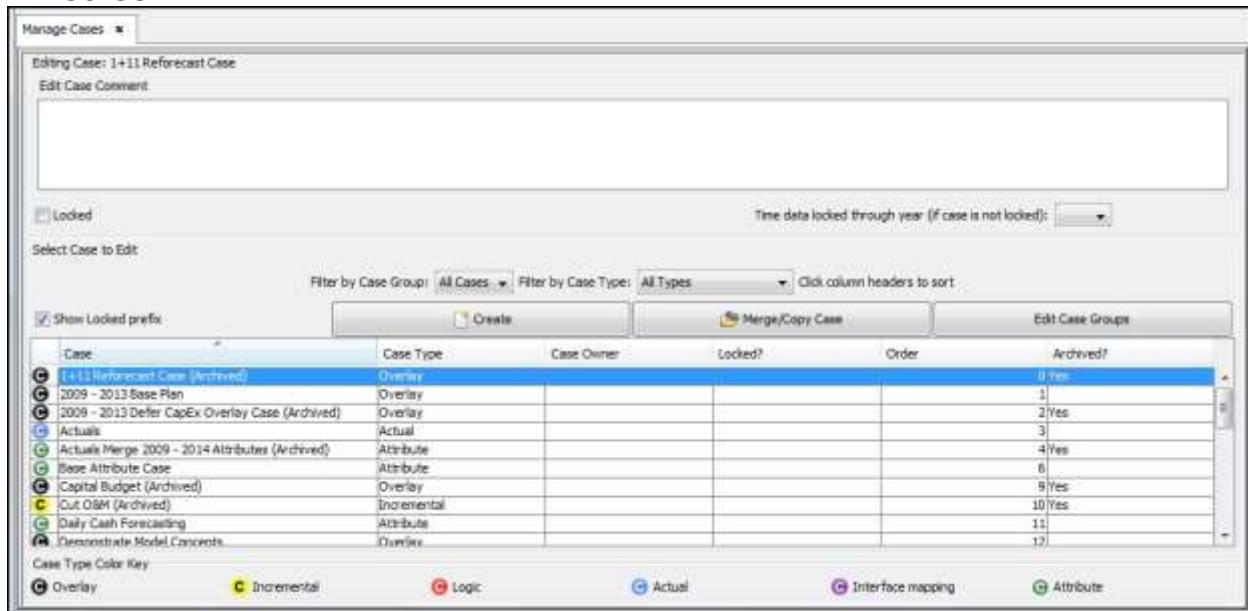
Select Only the Cases in Scenario: -- None Selected --

Select All Unselect All Resurrect

Case	Version	Archived By	Archived On	Resurrect
1+11 Reforecast Case (Archived)	1	TRAINING	01/20/11 07:44:13	<input type="checkbox"/>
2009 - 2013 Defer CapEx Overlay Case ...	1	TRAINING	01/20/11 07:44:14	<input type="checkbox"/>
Actuals Merge 2009 - 2014 Attributes (...)	1	TRAINING	01/20/11 07:46:26	<input type="checkbox"/>
Capital Budget (Archived)	1	TRAINING	01/20/11 07:46:27	<input type="checkbox"/>
Cut O&M (Archived)	1	TRAINING	01/20/11 07:46:29	<input type="checkbox"/>

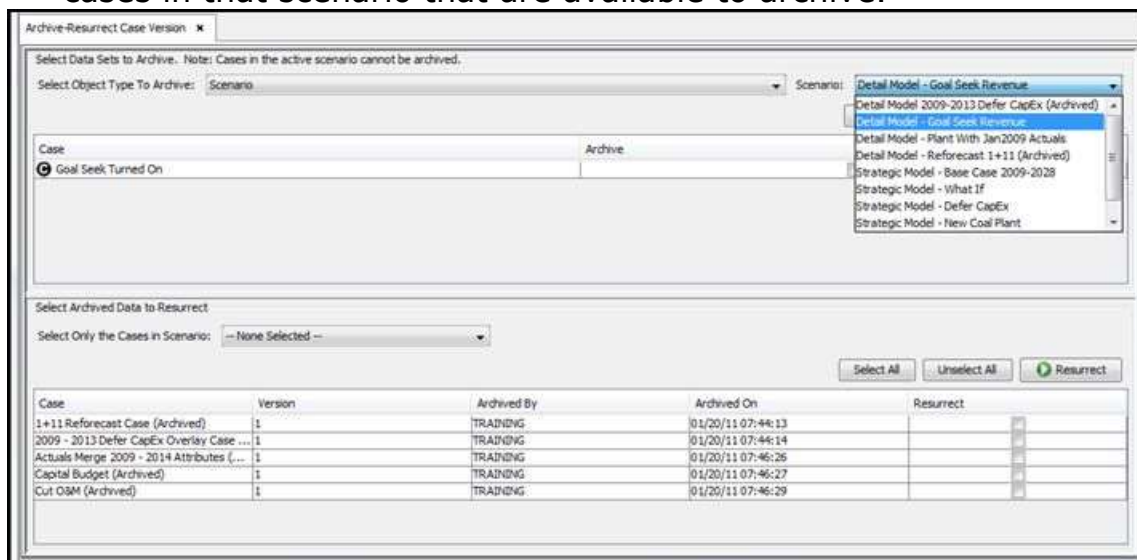
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- The cases just archived will be denoted as such in the Manage Cases screen.



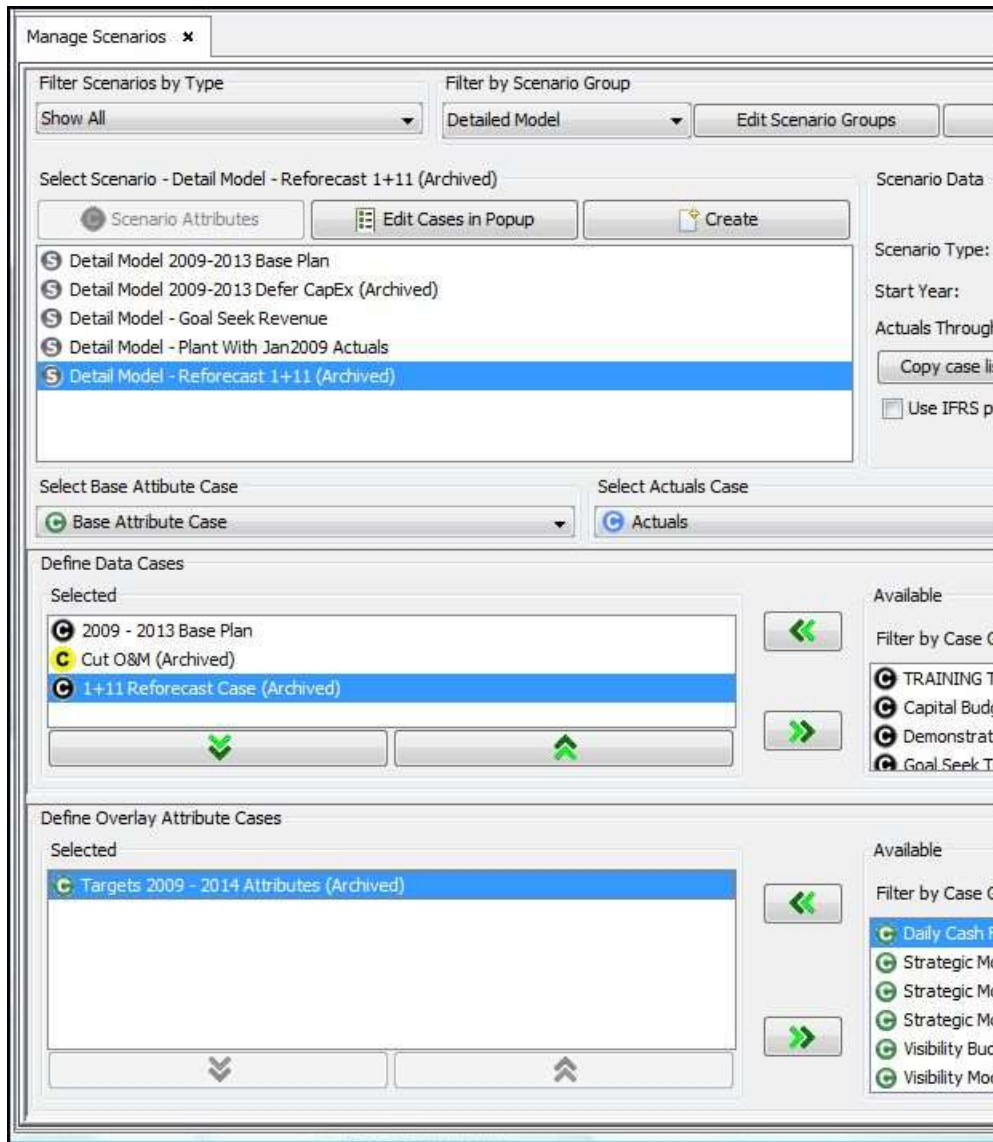
Scenarios

- When you select **Scenarios**, there will be a drop-down list to the right in the top region that will list all of the active scenarios.
- Select a scenario from the drop down list and the grid will display all cases in that scenario that are available to archive.



- Note that any cases that are also in the active scenario cannot be archived and will NOT appear in the list. Also, cases previously archived will not appear in the list.
- Use the check boxes to select the case(s) you want to archive and select the ARCHIVE button.

- UIPlanner will begin the archive process and will echo back in a window (see above)
- When the process is complete, the case(s) you chose will be removed from the top window and will now appear in the list of archived cases in the bottom window.
- The scenario just archived will be denoted as such in the **MANAGE SCENARIOS** screen, and its cases will be identified as such in **MANAGE CASES**.



Versions

- When you select *Versions*, the screen will show you all versions in the active data tables.
- Use the checkboxes to select the version(s) you wish to archive and select **ARCHIVE**.

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- The Archive process will then remove that entire version and place it in the archive tables. The bottom window will then list that version as having been archived.

Case	Version	Archived By	Archived On	Resurrect
2009 - 2013 Refinecast Case (Archived)	1	TRAINING	01/20/11 07:44:13	<input type="checkbox"/>
2009 - 2013 Defer CapEx Overlay Case ...	1	TRAINING	01/20/11 07:44:14	<input type="checkbox"/>
Actuals Merge 2009 - 2014 Attributes (...)	1	TRAINING	01/20/11 07:46:26	<input type="checkbox"/>
Capital Budget (Archived)	1	TRAINING	01/20/11 07:46:27	<input type="checkbox"/>
Out O&M (Archived)	1	TRAINING	01/20/11 07:46:29	<input type="checkbox"/>

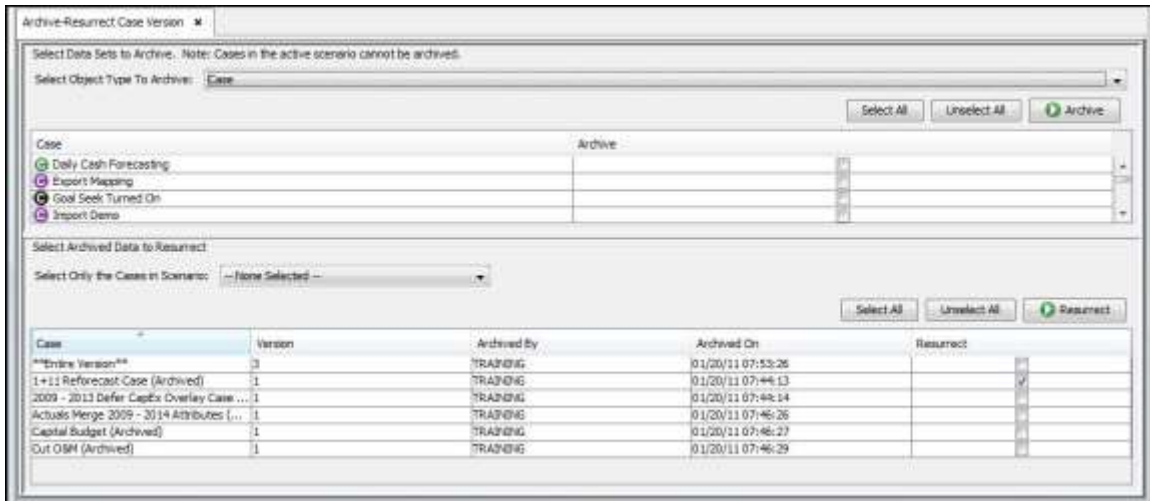
Note – you CAN archive the current version. This is not recommended, as any changes you make after archiving will not be saved. When you next enter the model, that version will no longer appear in the login screen.

Resurrect Cases, Scenarios, or Versions

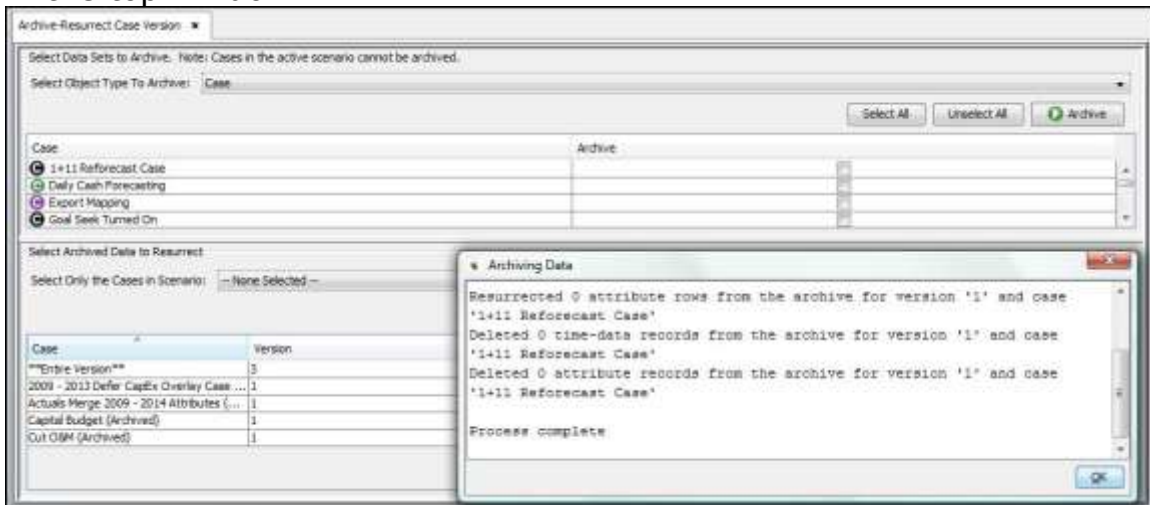
To perform the process of resurrecting cases, scenarios or versions, you first select which structure you want to resurrect (Case, Scenario, or Version), using the drop-down list. Then follow the steps below for the structure you selected.

Cases

- When you select **Cases**, the grid will display all archived cases.
- Use the check boxes to select the case(s) you want to archive and select the **RESURRECT** button.



- UIPlanner will begin the resurrect process and will echo back in a window.
- When the process is complete, the case(s) you chose will be removed from the bottom window and will now appear in the list of active cases in the top window.



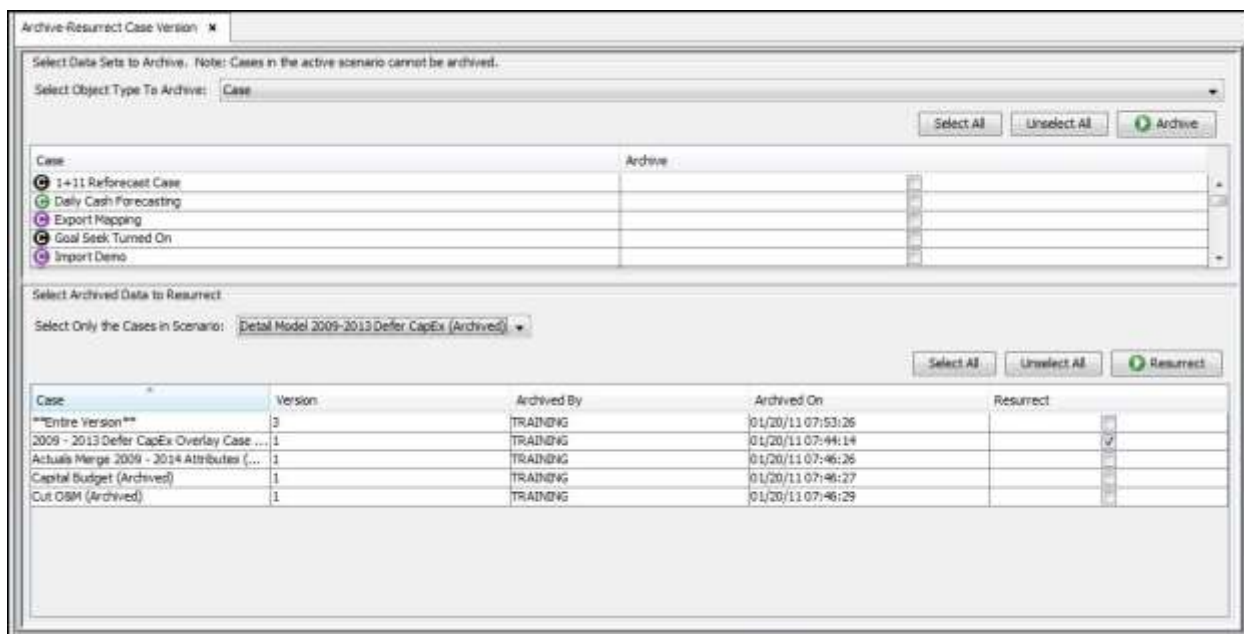
- The Manage Cases screen will no longer list these cases as "Archived".

Scenarios

When you select *Scenarios*, there will be a drop-down list to the right in the top region that will list all of the archived scenarios.

Select a scenario from the drop down list and the grid will pre-select all archived cases for that scenario.

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Select the **RESURRECT** button. UIPlanner will begin the resurrect process and will echo back in a window

- When the process is complete, the case(s) you chose will be removed from the top window and will now appear in the list of archived cases in the bottom window. The Manage Cases screen will no longer identify that scenario as "Archived," and it will now be available to load and run.

Versions

- When you select *Versions*, the screen will show you all versions in the active data tables.
- Use the checkboxes to select the version(s) you wish to resurrect and select **RESURRECT**.

The Resurrect process will then restore that entire version to the active tables. That version will now be available for you to log into and run.

ANALYZE

Browse Reports

{ XE "Browse Reports" * MERGEFORMAT } { XE "Report" * MERGEFORMAT } { XE "Screen" * MERGEFORMAT } Browse Reports Screen

The screenshot shows the 'Browse Reports' application window. On the left is a tree view under 'TRAINING' with categories like Financial Statements, O&M, Energy Costs & Revenue, Plant, Financing, Tax, Jurisdictional, Measure, Strategic Model, and Plant by LLEU. The 'Income Statement' is selected. The main area displays 'Report: Income Statement' for 'Detail Model 2011-2015 Base Plan' and 'UI Energy Consolidated'. The table below shows revenue and expense data from 2011 to 2015.

Detail Model 2011-2015 Base Plan	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
UI Energy Consolidated					
Operating Revenue:					
Electric Revenue	7,032,168,479	7,220,598,878	7,384,757,191	7,384,913,594	7,385,071,560
Gas Revenue	1,183,890,318	1,208,286,954	1,232,314,083	1,256,821,755	1,494,102,208
Steam Revenue	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0
Total Operating Revenue	8,216,058,796	8,428,885,832	8,617,071,275	8,641,735,349	8,879,173,768
Operating Expenses:					
Fuel	2,978,410,331	3,061,196,966	3,146,341,883	3,260,614,674	3,350,803,351
Purchased Power	324,299,917	332,333,691	340,574,574	169,129,617	174,203,505
Cost of Gas Sold	512,006,330	522,246,456	532,691,386	527,916,788	538,475,124
Steam Costs	0	0	0	0	0
Operations and Maintenance	1,358,624,437	1,399,442,946	1,432,621,693	1,461,002,727	1,489,951,381
Depreciation, Decommissioning & ...	10,873,307	36,244,529	66,882,609	98,471,444	132,923,205

The **BROWSE REPORTS** screen is the heart of the reporting engine for UIPlanner. Some key points about this screen:

- When UIPlanner runs the Detailed Model sequence (i.e., "runs" the model), it runs all reports (**RUN SEQUENCES** screen) for all entities for the entire planning horizon for the current scenario. When you open the **BROWSE REPORTS** screen, all of those results are stored in memory. Note: For each new session of UIPlanner, you must run the sequence sets first before any report data will be available for viewing in the **BROWSE REPORTS** screen.
- In **BROWSE REPORTS** you choose a report, time setting and what entities you want to see. UIPlanner pulls that back from memory and displays it in **BROWSE REPORTS**. As long as you stay in the current session of UIPlanner, you can switch reports, change columns you want to see, etc., without rerunning.
- **BROWSE REPORTS** also has scenario comparison functionality that allows you to run the current scenario and pull in results from other

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scenario(s). Every report in the model will show the differences between scenarios.

- Within **BROWSE REPORTS** you can drill down from report to report by merely clicking on a data point.
- You can format line settings for the output of a report right on the screen.
- **BROWSE REPORTS** has a powerful graphing engine which is accessed from the individual report display.
- You can build batches to set up preset groups of reports and output all at once.

Screen Layout:

The **BROWSE REPORTS** screen is divided into three regions:

- A. Report Tree (left)
- B. Report Tree and Output Options (top), and
- C. Working (center/right)

The top of the screen contains several check boxes and control buttons that control the screen display or modify the report tree. The left side of the screen always displays the Report Tree. The body of the screen display on the right (series of tabs and sub tabs) will change depending on the level selected on the tree and the buttons checked on the individual tabs/sub tabs.

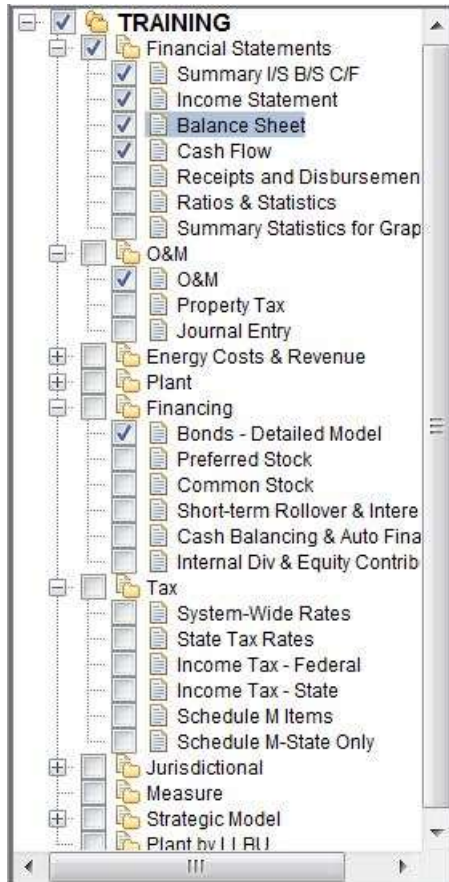
List Of Tasks Or Operations That Are Performed With This Screen:**Report Tree Region Operations and Tasks**

The Report Tree always displays three levels:

1. Batch
2. Report Group
3. Report

This is an important distinction as the tabs that appear in the working region on the right side of the screen are dependent upon the level selected in the tree. In the example shown below, *Training* is the user batch, *Financial Statements*, *O&M*, etc. are the report groups, and under each of those are the individual reports.

Select (highlight) individual reports in order to browse them. (See [Browse Reports Tab](#) for details). Check reports, their associated report groups and batch, in order to output them. (See **Report Tree and Output Options Region** below for details.)



Report Tree and Output Reports Region Operations and Tasks

Report Tree and Output Report Actions

- *One Batch on Tree*: Select this box to limit the tree to a single report batch. Select the specific batch from the drop-down list to the right. This is very helpful if you want to show only your user batch and make the display less complicated.

Note: Toggle this check box if you want to refresh the screen, such as when you have added a new report column set and want to view it without rerunning the model (it will show up in the list box if you do a refresh). Alternatively, you might need to refresh if your display is incomplete. See Troubleshooting – Refresh Browse Reports.

- *Select All*: This check box checks the selection box for the currently selected tree node and all nodes under it.
- *Collapse All*: This check box collapses or expands the report tree below the selected node.

- *Search Tree*: Enter text and search the report names in the tree for that text. Up and Down arrows can be used to direct the search.
- *Output Reports*: This button outputs report results as specified in the [Define Output](#) and *More Batch Options* tabs. Also see View UIPlanner Reports and Scenario Info in Excel for more information.

Batch Reports Region Operations and Tasks

1. Report Batch Level:

When the Report Batch Level is active, i.e., when a report batch is selected on the tree, the working region will display [Report Batch Options](#).

2. Report Group Level:

When the **Report Group Level** is active, i.e., when a report group is selected on the tree, the working region will display [Report Group Options](#).

3. Report Level Options:

When the Report Level is active, i.e., when a specific report is selected on the tree, the working region will display [Report Options](#).

What To Do If You Encounter Problems

Monthly-Annual Columns - If you are trying to view model results in **BROWSE REPORTS** and you do not see any data in the UIPlanner reports in monthly time periods, you may be trying to view those in a time frame when the scenario is set to run annually. See [Troubleshooting - Monthly-Annual Columns](#) for more information.

Actuals Data - You have run calculations and do not see the anticipated values in the actuals periods, you might have a mismatch between the case in which the actuals data is located and the Annual to Month setting of that line. See [Troubleshooting - Actuals Data](#) for more information.

No Excel Output - You have run the model and click **OUTPUT REPORTS**, but you do not see any Excel output. One of several things might have happened: a) you may not have checked "*Display in Excel*" under the Batch header, or b) you may not have checked all levels (including the

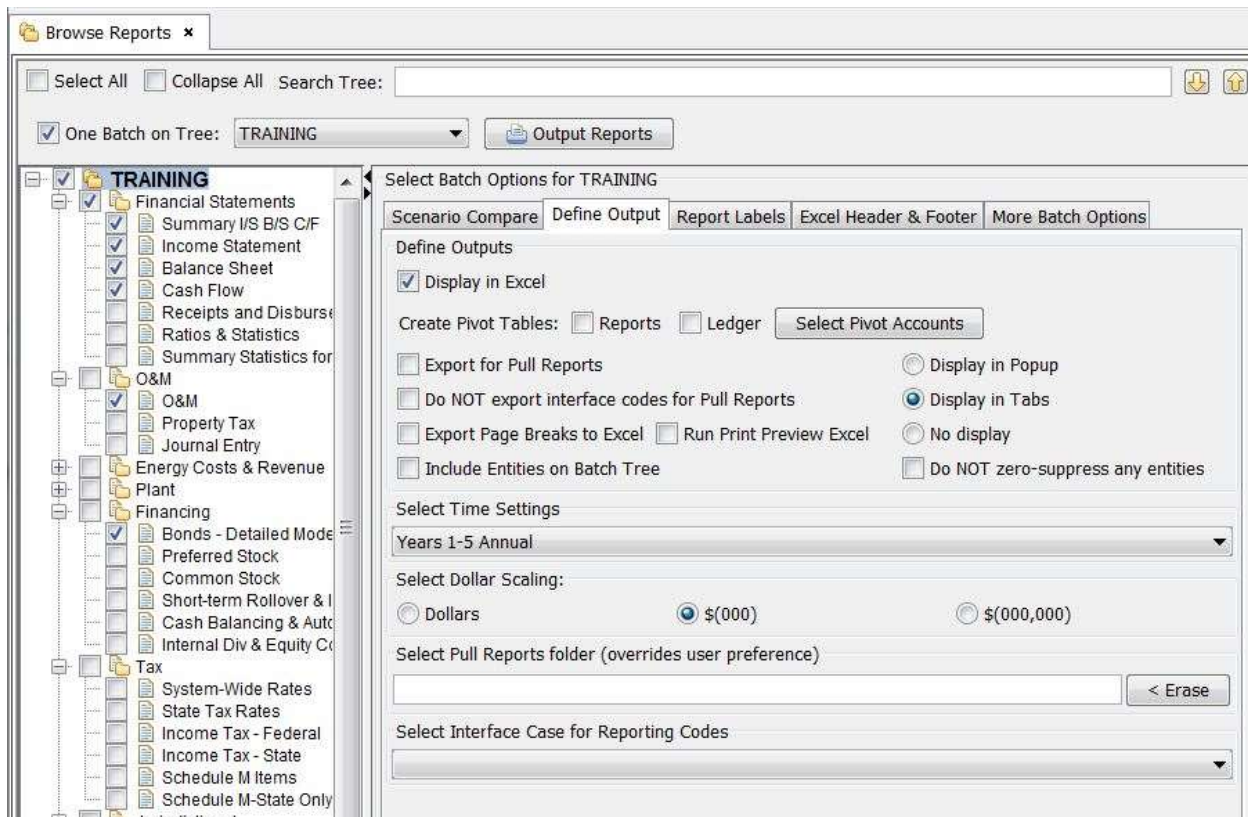
batch), or c) you may have accidentally checked the *Close Excel Sessions* checkbox. See Troubleshooting – Excel Output for more information.

Screen Display Issues – The **BROWSE REPORTS** screen does not fully repaint, or is incomplete. You may need to refresh the screen. You do this by selecting the *One Batch on Tree* checkbox and unselecting it. This will “refresh” the screen. See Troubleshooting – Refresh Browse Reports for more information.

No Results for 2D Reports - You have run the model and get no results for a 2-Dimensional Report, or incomplete results (there are entity pairs you expect to see but do not.) See Troubleshooting - Browse Reports: No Results for 2D Reports for more information.

Report Batch Options

{ XE "Report Batch Settings" * MERGEFORMAT } { XE "Report" * MERGEFORMAT } Report Batch Options - Browse Reports Screen



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All settings made at the batch level will be applied to all reports in the batch. Settings, in some cases, can be overridden at the report level.

When a report batch is selected in the tree, such as the *TRAINING* user batch above, you will have access to five tabs:

- [Define Output Tab](#) (shown above)
- [Scenario Compare Tab](#)
- [Report Labels Tab](#)
- [Excel Header & Footer Tab](#)
- More Batch Options Tab

{ XE "Define Ouptut Options Tab" * MERGEFORMAT }{ XE "Browse Reports" * MERGEFORMAT }Define Output Tab

Select Batch Options for TRAINING

Scenario Compare Define Output Report Labels Excel Header & Footer More Batch Options

Define Outputs

Display in Excel

Create Pivot Tables: Reports Ledger

Export for Pull Reports Display in Popup

Do NOT export interface codes for Pull Reports Display in Tabs

Export Page Breaks to Excel Run Print Preview Excel No display

Include Entities on Batch Tree Do NOT zero-suppress any entities

Select Time Settings

Years 1-5 Annual

Select Dollar Scaling:

Dollars \$(000) \$(000,000)

Select Pull Reports folder (overrides user preference)

Select Interface Case for Reporting Codes

When UIPlanner sequences are run, the results of all reports run are stored in memory. You can view individual report results on **BROWSE REPORTS**, but if you want to send report results outside of UIPlanner, you use the **OUTPUT REPORTS** button (in the top region of the **BROWSE REPORTS** screen). The **OUTPUT REPORTS** functionality allows you to send reports to a number of different formats – Excel reports, pivot tables, or formatted for pull

reports. This sends out report results according to the options set in the *Define Output* tab. Some points to note about outputting reports:

- When you initiate Output Reports, the check boxes on the report tree determine which reports to send out. In addition to checking the report itself, you need to check its group and the batch.
- You can send multiple reports out by selecting a number of reports.
- The check boxes at the batch level allow you to easily turn on and off the reports in that batch without un-checking all of them. You just need to uncheck the batch, and none of the reports in it will be output.
- Use the **MODEL EXPORT** screen if you want to send reports to text files.

As an alternative to using the **OUTPUT REPORTS** button on **BROWSE REPORTS**, you can initiate the output reports action from other places within UIPlanner:

- **Run Sequences** – there is a drop-down list on **RUN SEQUENCES** that allows you to automatically output a specific batch whenever you run the model.
- **Model Overview** – when you click the **RUN** button on **MODEL OVERVIEW**, it outputs the chosen batch.

The *Define Output Options* tab has several regions:

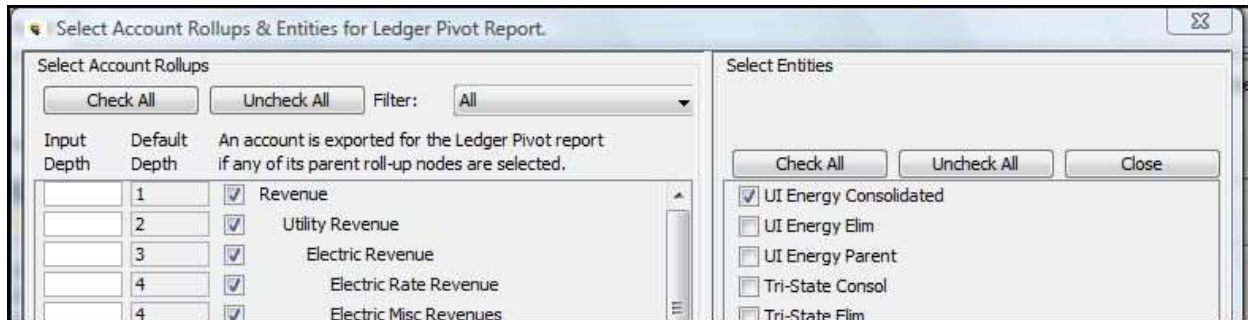
- Define Outputs – Excel, pull report, UIPlanner display settings.
- Time Settings and Dollar Scaling.
- Other Settings – Pull report folder, interface case, selection, etc.

Define Outputs region:

- **Display in Excel:** All batches/reports checked in the Report Tree will be output to Excel when you click on **OUTPUT REPORTS**.
- **Export Page Breaks to Excel:** Page breaks (defined in report calculations) are sent to Excel.
- **Run Print Preview Excel:** This check box enables print preview capabilities of the UIPlanner add-in. It must be checked to use the custom MS-Excel headers/footers.
- **Create Pivot Tables - Reports:** When this box is checked, if any checked reports have lines tagged for pivot table, they will be output as pivot tables.
- **Create Pivot Tables – Ledger:** When this box is checked, an Excel pivot table will be generated for the UIPlanner ledger results.

Note: You will need to select account rollups and entities to appear on the ledger pivot report by clicking **SELECT PIVOT ACCOUNTS** which opens the **SELECT ACCOUNT ROLLUPS & ENTITIES FOR LEDGER PIVOT REPORT** window (see below).

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- **Export for Pull Reports:** When this box is checked, data for all reports checked in the Report tree will be exported to a specified folder for use in pull reporting. See [Pull Reporting](#) for more details on this feature.
- **Do NOT export interface codes for Pull Reports:** Because interface codes might cause issues with pull reports, you can choose not to export them by checking this box.
- **Display in Popup or Display in Tabs or No Display:** This option controls results for reports in UIPlanner (that are checked in the report tree) in a pop up dialog box, in tabs on the UIPlanner model screen, or not at all. Thus, if you only want to send to Excel when output, click "None".
- **Do NOT zero-suppress any entities:** This option will include all entities in the report, including those with values of \$0. Note: This is typically used in entities across reports.
- **Include Entities on Batch Tree:** If checked, the batch tree to the left will show all of the entities under each report name

Time Settings and Dollar Scaling region:

- **Select Time Settings:** Select a desired column set from the drop list. The column set that you choose will be applied to all reports in that batch. The first entry in the list is always *Default – All Time* which shows the time periods as set for that scenario. Note that even though this setting is batch specific it can also be changed on the individual report options.



- **Dollars or \$(000) or \$(000,000):** These radio buttons will enable you to display report results in dollars, dollars rounded to thousands, or dollars rounded to millions. This setting will apply to all report

displays and all exports to Excel for printing unless overridden at the Report level.

Other region:

- **Select Pull Reports folder:** Click on this to specify where data exported to pull reports will be stored. This allows you to send pull report data to different locations for different batches. Note that there is a user preference for where you send batch reports. This selection takes precedence over that setting.
- **Select Interface Case for Reporting Codes:** If you are exporting interface codes use this drop-down list to select which case to use.

{ XE "Footer" * MERGEFORMAT }{ XE "Excel Header and Footer" * MERGEFORMAT }{ XE "Custom Excel Header and Footer" * MERGEFORMAT }{ XE "Header" * MERGEFORMAT }{ XE "Browse Reports" * MERGEFORMAT }Excel Header & Footer

The **EXCEL HEADER & FOOTER** tab is used to build and modify headers and footers that UIPlanner can apply to reports when they are sent to Excel. It also enables you to define Excel print formatting and print margins. This tab is one of the *Report Batch Options* on the **BROWSE REPORTS** screen.

This tab is comprised of three regions:

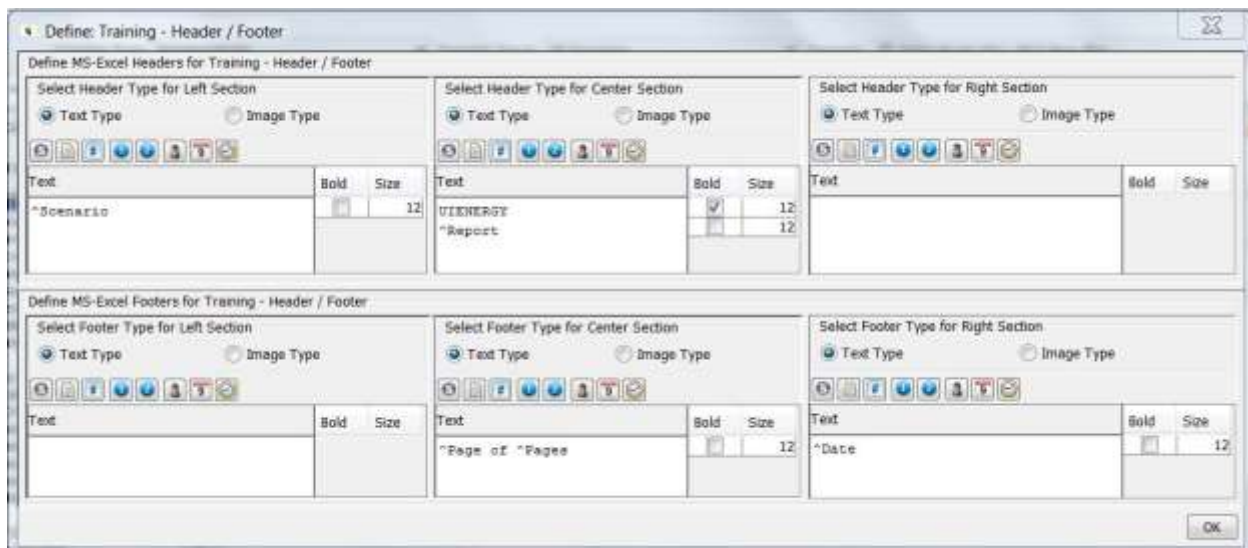
- *Define MS-Excel Header & Footer*
- *Define Excel Print Formatting Options*
- *Define Print Margins*

Define MS-Excel Header & Footer Region

You define the left, center and right sections of both the header and footer in this region. You can enter text to use or you can specify standard items, such as date, page number, report name, etc. Additionally, you can choose to include a graphics file, such as a company logo. Some points to note about the UIPlanner Excel headers and footers:

- You can set up a number of different header/footer combinations.
- Headers and footers are batch-specific. This allows you to set up and specify which header/footer setting to use for different report batches.
- Once a header/footer has been defined, it is available to all users
- If you do not choose to use a predefined header/footer, UIPlanner will use the default header and footer setting.
- You need to select the *Run Print Preview in Excel* option on the batch setting on Browse Reports to invoke a custom MS Excel header/footer.
- The report will use the selected header/footer when you print the report or run Print Preview in MS Excel.

Below is an example of a custom header/footer along with the resulting report in Excel.



Detail Model 2011-2015 Base Plan		UIENERGY Balance Sheet	
Detail Model 2011-2015 Base Plan		9/1/2012	
UI Energy Consolidated Assets			
Property, Plant & Equipment:			
Utility Plant in Service	88,145,799		
Accumulated Depreciation & Amortization	(12,870,213)		
Utility Plant in Service, Net	75,275,586		
Construction Work in Progress	302,786		
Total Property, Plant & Equipment Net	75,578,372		
Other Property and Investments			
Investments in Subsidiaries:			
Bankroll			
Other Investments			
Total Other Property and Investments	0		
Current and Accrued Assets			
Cash and Cash Equivalents	7,867		
Temporary Cash Investments	22,6213		
Accounts Receivable, Net	1,550,546		
Accounts Receivable Associated			
Notes Receivable			
Notes Receivable Associated	215,539		
Accrued Utility Revenue	1,090,221		
Inventory	189,797		
Materials & Supplies	116,328		
Other Current Assets	3,881,849		
Total Current and Accrued Assets	3,881,849		
Deferred Debts:			
Regulatory Assets	90,000		
Unamortized Debt Costs	(10,340)		
Other Deferred Debts	601,364		
Total Deferred Debts	550,964		
Total Assets	24,891,330		

1 of 15

1/7/2012

This screen has six regions. They are in two rows of three, with the top row for configuring the header and the bottom row for the Footer. Each region is identical:

Select Header Type for Center Section

Text Type
 Image Type

Text	Bold	Size

- Use the radio buttons to select whether you are inserting text or an image.
- For text, you can either type text directly in the text area or use the icons to choose among some predefined header/footer choices:
 - Scenario - current scenario name

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- Report Name – report name
- Units – the scaling option you selected for the batch (or that report if you did an override)
- Page Number & Number of Pages
- User – your user name
- Date – the current date (in mm/dd/yyyy format)
- Once you have inserted text (either typed or a standard selection) you can use the formatting area on the right to make it bold, and to set the font size.
- You can use images by selecting the “IMAGE TYPE” radio button. This will bring up a window where you can browse to find an image file to use.
- If you leave a region blank, UIPlanner will not populate anything in that area of the header or footer.

Operations that you can perform in this region are:

Create a new Excel Header/Footer:

- Click **CREATE** on the *Excel Header & Footer* tab on the **BROWSE REPORTS** screen, when at the batch level, to open the **ADD OBJECT** dialog. Once you have entered a name and created the new header/footer entity, it will appear in the drop-down list.
- Select the newly created header/footer from the drop-down list and click **EDIT**. This will bring up an empty header/footer definition screen, with the name of your new item across the top of the screen.
- Within each region, you can either directly type in text or select from the predefined types.
 - Select *Scenario* to insert the current scenario name.
 - Select *Report* to insert the report name.
 - Select *Units* to put in text that tells the scaling (e.g., \$ in 000’s).
 - Use the *Page Number & Number of Pages* icons to insert these. You can put in intervening text (e.g., page xx of xxx pages).
 - Select *User* to insert your user name.
 - Select *Date* to insert the current date.
- The chosen text will appear in the text window. In the area to the right there is a button for turning text bold. You can also enter the font size.
- You can insert more than one text field in a region by hitting return and putting in the next field.
- If you want to insert an image, select the *Image* radio button.
 - Browse to find the image you want to insert.
 - Most standard graphics files are acceptable (bmp, jpg, gif). Note that the image should be appropriately sized.

- Note that all users who use this header/footer need to have the image file available in the same location. You should place it in a folder common to all users.
- Once you are finished, click **OK** to save the settings.

Edit an existing Excel Header/Footer:

- From the *Select MS Excel Header & Footer* drop-down list, choose the header/footer you want to edit, and click **EDIT**.
- The header/footer definition dialog will then open, with all settings of the header/footer as it is currently defined.
- Make the desired changes and click **OK**.

Copy an existing Excel Header/Footer:

- From the *Select MS Excel Header & Footer* drop-down list, choose the header/footer you want to make a copy of, and click **COPY**.
- This will bring up a dialog box. Enter the name for the new header/footer. This new header/footer definition will inherit all settings of the one you copied it from.
- You can now edit this new header/footer by selecting it from the *Select MS Excel Header & Footer* drop-down list and clicking **EDIT**.
- Make the desired changes and click **OK**.

Define Excel Print Formatting Options Region

Operations that you can perform in this region include:

Define Scale and Zoom:

- **Scale \$**: Provides options to display results as dollars, \$(000) rounded to thousands, and \$(000,000) rounded to millions. This setting will override the scale setting at the report batch level.
- **Zoom**: Sets the zoom percent in Excel.
- **AutoFit**: Auto-fits the column widths to fit one page

Define Print Margins Region

Operations that you can perform in this region include:

Define Print Margins:

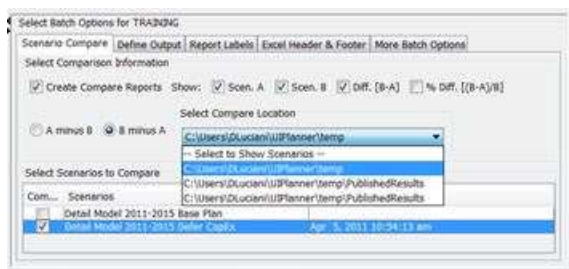
- **Margin Settings**: Provides the following options to set margins for the report: top, bottom, left, right, header and footer.
- **Set to Default**: Click to reset print margins to those default values specified next to the individual settings.
- **Clear Values**: Click to clear values entered for all settings.

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- **Print Orientation:** Options to display as Portrait, Landscape or None.

Note: Excel formatting and print margins can be overridden at the report level using the Excel Options tab (Report Option).

{ XE "Scenario Compare Options" * MERGEFORMAT }{ XE "Browse Reports" * MERGEFORMAT }Scenario Compare Tab



The *Scenario Compare* tab on the **BROWSE REPORTS** screen provides options for creating comparison reports.

This tab has two regions:

- *Select Comparison Information*
- *Select Scenarios to Compare*

Select Comparison Information region:

- **Create Compare Reports:** Check this box to enable the compare report. This selection will create a comparison report for every report in the model (for display or exporting to Excel). Note: You can keep the other settings (below) and turn this one off when you do not want to show compare.
- **Show Absolute Difference A-B:** Displays a difference column in the comparison report.
- **Show Percent Difference [A-B)/B]:** Displays a percent difference column in the comparison report.
- **A minus B or B minus A:** This selection defines whether the difference is calculated A-B or B-A.
- **Scenario Compare Location:** This drop-down list includes those locations to which scenarios have been published. This replaces the former user preference for selecting the compare location. See [Run Sequences](#) for more details on the scenario compare location options.

Select Scenarios to Compare region:

Select Scenarios to Compare: Displays all scenarios in a list (both the active scenario and all published scenarios). Select the one to be compared to the active scenario. If you select more than one scenario to compare to

the active scenario, UIPlanner will display additional columns in the scenario comparison report.

An example of a scenario comparison report run with the above selections follows.

The screenshot shows a software interface for a balance sheet report. At the top, there are tabs for 'Define Report Properties', 'Browse Report: Balance Sheet', and 'Graph Data'. Below this, there are sub-tabs for 'Format Report', 'Search Table', 'Drilldown on Data', and 'Action Panel'. The main area contains two formatting toolbars: 'Format Label' and 'Format Data', each with icons for bold, italic, underline, text color, background color, and copy. The report title is 'TRAINING-Financial Statements-Balance Sheet'. Below the toolbars, there is a report header: 'Report: Balance Sheet Scenario A: Detail Model 2011-2015 Base Plan Scenario B: Detail Model 2011-2015 Defer CapEx'. The main data table compares two scenarios (Scen A and Scen B) for January and February 2012, showing differences (Dif (B-A)).

A: Detail Model 2011-2015 Base Plan B: Detail Model 2011-2015 Defer CapEx	Jan 2012			Feb 2012		
	Scen A	Scen B	Dif (B-A)	Scen A	Scen B	Dif (B-A)
UI Energy Consolidated						
Assets						
<i>Property, Plant & Equipment:</i>						
Utility Plant In Service	32,160,470	32,128,370	-32,100	32,240,911	32,206,804	-34,106
Accumulated Depreciation & Amortization	-12,843,929	-13,817,650	-973,721	-12,846,058	-13,894,670	-1,048,612
Utility Plant In Service, Net	19,316,541	18,310,720	-1,005,821	19,394,852	18,312,134	-1,082,718
Construction Work In Progress	357,534	357,534	0	361,352	361,352	0
Total Property, Plant & Equipment Net	19,674,075	18,668,254	-1,005,821	19,756,204	18,673,486	-1,082,718

Note – You can drill-down into compare (published) scenarios as well as into the active scenario.

{ XE "Report Label Options" * MERGEFORMAT }{ XE "Browse Reports" * MERGEFORMAT }Report Labels Tab

Select Batch Options for TRAINING

Scenario Compare Define Output **Report Labels** Excel Header & Footer More Batch Options

Select Report Label Options

Excel Label Cell Width: 30 Display Line Labels: Show Line Label Only

Excel Data Cell Width: 10 Display Grid Lines: Show Vertical & Horizontal Grid Lines

Excel Font Size: 9 Default Data Format: #,##0_);[Red](#,##0);" " (Scalable)

Browse Data Cell Width: 10

Browse Font Size: 11

Line Visibility Rules (Overrides individual line definitions)

Show ALL lines. Overrides options below.

Override Logic Lines (e.g.- if, else) visibilit	Override Comment Lines Visibility?	Override Label Lines Visibility?
<input checked="" type="radio"/> Hide all	<input type="radio"/> Hide all	<input type="radio"/> Hide all
<input type="radio"/> Show all	<input checked="" type="radio"/> Show all	<input type="radio"/> Show all
<input type="radio"/> No override	<input type="radio"/> No Override	<input checked="" type="radio"/> No override

The *Report Labels* tab on **BROWSE REPORTS** has two regions:

- *Select Report Label Options*
- *Line Visibility Rules*

Select Report Label Options region:

Options available for setting cell widths and font size include:

- **Excel Label Cell Width:** This will set the column width in Excel report for the line description.
- **Excel Data Cell Width:** This will set the column width for all the data columns in the Excel report.
- **Excel Font Size:** This will set the font size for the Excel report.
- **Browse Data Cell Width:** This will set the column width for all data columns on the Browse Reports screen display.
- **Browse Font Size:** This will set the font size on the screen display

Note: You can also manually adjust Label and Data cell column widths on the screen as desired when viewing reports.

Options applied when reports are exported to Excel include:

- **Display Line Labels:** Drop-down list options for displaying line labels.
- **Display Grid Lines:** Drop-down list option to show line label only or the line label with the internal line reference.

- **Default Data Format:** Drop-down list options settings the default format for data on reports. This format will be overridden by settings made on the **EDIT CALCULATIONS** screen and in individual reports display options.

Line Visibility Rules region:

This region enables you to override visibility settings made for report lines in the **EDIT CALCULATIONS** screen. Generally, "If"-statements, comments, and labels will be hidden so that the final report will be clean and readable. However, you may occasionally want to show these lines on a report during testing.

Show All Lines: When checked, shows all lines in the reports. This setting will override the settings in the three override options below.

Note: These settings below all have the same three options:

Hide all - Do not display any lines

Show all - Display all lines

No override - Do not override the settings made on the Calculation Editor.

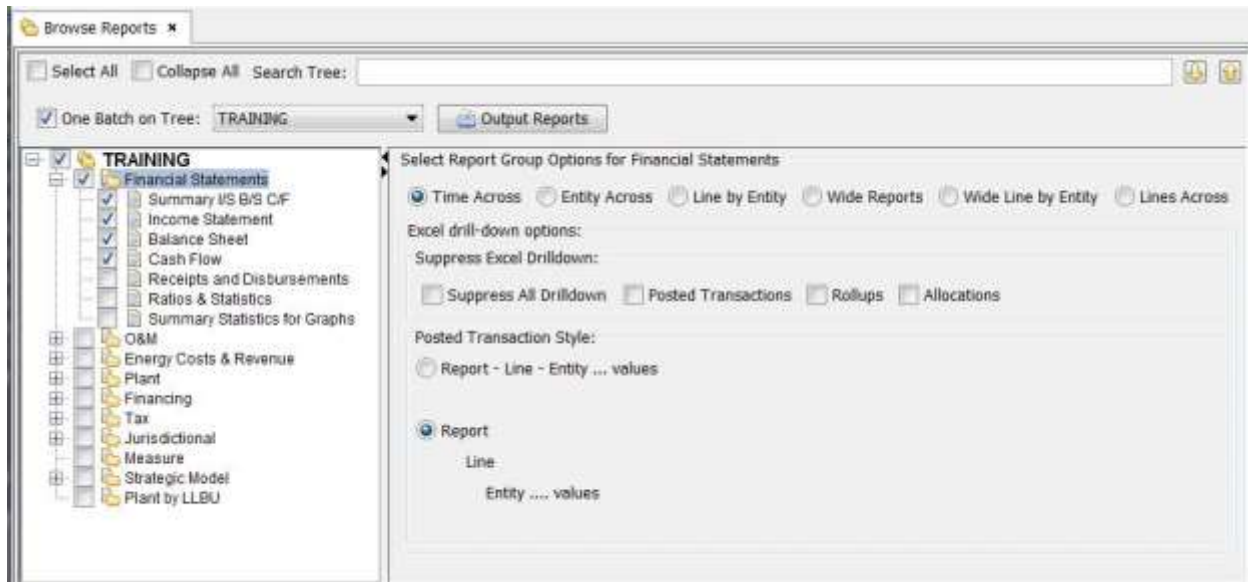
Override logic lines (e.g., -if, else) visibility?:

Override comment lines visibility?:

Override label lines visibility?:

Report Group Options

{ XE "Report" * MERGEFORMAT }{ XE "Report Group Settings" * MERGEFORMAT }Report Group Options - Browse Reports Screen



Report Group Options controls two items:

- Organization and Display – how the reports will appear in **BROWSE REPORTS**, i.e., whether time is across the columns and entities down as lines, or entities across the top and time down, etc.
- Excel Drill-down – whether or not supporting detail for lines in the reports are sent to Excel when they are output.

These settings apply to the reports within a report group. Thus, within a batch you can apply different settings to different groups of reports, e.g., a Financial Statements report group may be entities across while other report groups may be time across.

Organization and Display Options:

- **Time Across** – displays monthly or annual data across the report in columns, which is the most common output style.
- **Entity Across** – displays each entity across the report in columns.
- **Line by Entity** - displays each line in the report followed by entities, with time across the report in columns. If there is only one entity selected, the report automatically switches to the “time across” format.
- **Wide Line by Entity** – displays each line in the report followed by entities, with reports (in a “wide” report
- **Wide Report** – links reports that are related and displays those reports (that are in a “wide” report group) across as columns (see **CONCEPT – WIDE REPORTS** for an example).

- **Lines Across** – displays report lines across the top in columns.

Excel Drill-down Options:

UIPlanner always has drilldown information which can be seen within **BROWSE REPORTS** when a report is selected on the report tree. (See [Report Options \(Browse Reports Screen\)](#) for more information.) This drilldown detail will be sent to Excel along with the report results, unless you choose to suppress it.

- **Suppress All Drilldown** – sends only the final result to Excel with no drill down detail.

Alternatively, you can choose to suppress only certain aspects of drill down information using the options below.

- **Posted Transactions** – suppresses drilldown on postings (e.g., details on postings to the ledger which would show up on the Income Statement and the Balance Sheet).
- **Rollups** – suppresses information on summary reports which are rollups across an entity group (e.g., on a Plant Account Detail report, the rollup information suppressed would be the amounts by individual plant accounts).
- **Allocations** – suppresses the source information on amounts which are allocated from one report to another using the **EDIT ALLOCATIONS** screen.

An example of a report with posting details is below:

1	2	A	B	C	D	E	F	G
	1							
	2	Detail Model 2011-2015 Base Plan	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015	
	3							
	4	Chicago Electric						
	5	C:[Operating Revenue:]						
	6	Credits						
	7	Post from Report: Electric Revenue Schedules (Electric Revenue Schedule)						
	8	Line: AD:[Total Revenue]						
	9	Entity: Chicago Electric - Residential IL [Or	2,074,848	2,124,901	2,161,987	2,161,987	2,161,987	2,161,987
	10	Entity: Chicago Electric - Commercial IL [C	892,838	915,051	928,731	928,731	928,731	928,731
	11	Entity: Chicago Electric - Industrial IL [Orig	247,902	255,889	264,128	264,128	264,128	264,128
	12	Entity: Chicago Electric - Street Lighting IL	9,363	9,601	9,845	9,845	9,845	9,845
	13	Entity: Chicago Electric - Residential MI [C	1,024,793	1,049,801	1,069,288	1,069,288	1,069,288	1,069,288
	14	Entity: Chicago Electric - Commercial MI [596,754	613,732	631,021	631,021	631,021	631,021
	15	Entity: Chicago Electric - Industrial MI [Or	269,746	278,648	287,880	287,880	287,880	287,880
	16	Entity: Chicago Electric - Street Lighting M	8,123	8,344	8,572	8,572	8,572	8,572
	17	Entity: Chicago Electric - Wholesale [Orig	10,399	10,585	10,775	10,775	10,775	10,775
	18	Post from Report: Other Operating Revenue (Planning Entity)						
	19	Line: E:[Total 450 Account]						
	20	Entity: Chicago Electric [Orig]	464	469	472	477	481	486
	21	Line: I:[Total 451 Account]						
	22	Entity: Chicago Electric [Orig]	1,157	1,171	1,178	1,190	1,201	1,213
	23	Line: N:[Total 454 Account]						
	24	Entity: Chicago Electric [Orig]	1,430	1,447	1,455	1,470	1,484	1,499
	25	Line: Y:[Total 456 Account]						
	26	Entity: Chicago Electric [Orig]	4,562	4,617	4,642	4,689	4,736	4,783
	27	D:[Electric Revenue]	5,142,379	5,274,255	5,379,973	5,380,050	5,380,129	

The same report appears as follows when *Posted Transactions* suppression is selected:

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	A	B	C	D	E	F
1						
2	Detail Model 2011-2015 Base Plan	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
3						
4	<i>Chicago Electric</i>					
5	C:[Operating Revenue:]					
6	D:[Electric Revenue]	5,142,379	5,274,255	5,379,973	5,380,050	5,380,129
7	E:[Gas Revenue]					
8	F:[Steam Revenue]					
9	G:[Affiliate Revenue]					
10	I:[Total Operating Revenue]	5,142,379	5,274,255	5,379,973	5,380,050	5,380,129

Report Options

{ XE "Report Settings" * MERGEFORMAT }{ XE "Report" * MERGEFORMAT }Report Settings - Browse Reports Screen

Report Options are the nucleus of the **BROWSE REPORTS** screen. They enable you to actually view the results of the report you select in the tree. You can choose which entities to view for a given report, and you can choose to see them in various rollup configurations.

When a report is selected in the tree, you will have access to three tabs:

- **Define Report Properties Tab**

- **Browse Reports Tab** (shown above) which is comprised of four sub tabs
- [Graph Data Tab](#)
- Excel Options Tab

{ XE "Report Properties" * MERGEFORMAT }{ XE "Define Report Properties" * MERGEFORMAT }{ XE "Browse Reports" * MERGEFORMAT }Define Report Properties Tab - Browse reports

The screenshot shows the 'Define Report Properties' dialog box with the 'Browse Report' tab selected. The 'Select Entities' dropdown is set to 'by Entity Group'. The 'Change Batch Time Settings' dropdown is set to 'Years 1-5 Annual'. The 'Totaling' dropdown is set to 'No Total'. The 'Select Entities to Report' section has several radio buttons: 'Planning Entity' (selected), 'Tier 1 Legal Entities', 'Legal Entity', 'Daily Cash Pool', 'AFUDC Rate Schedule', 'Tax Depreciation Rate Schedule', 'Segment', 'System Control', 'Auto-Finance Group', and 'sys-Foreign Exchange'. There are also checkboxes for 'Top-level Eliminations' and 'Consolidated'. Below these are radio buttons for 'Show Parents', 'Show Children', and 'Show Both'. The main table has three columns, each with a 'Select:' header. The first column has 'UI Energy Consolidated', 'UI Energy Elim', 'UI Energy Parent', 'Tri-State Consol', 'Tri-State Elim' (highlighted), 'Tri-State Parent', and 'Chicago Electric' (checked). The second column has 'SWEGCO Electric' (checked), 'SWEGCO Gas' (checked), 'Suburban Gas' (checked), 'Acquisition Co' (checked), 'Prairie Gen' (checked), 'Top-Level Segment Elim', and 'Electric Segment Consol'. The third column has 'Electric Segment Elim', 'Gas Segment Consol', 'Gas Segment Elim', 'Other Segment Consol', and 'Other Segment Elim'.

Individual report results are displayed according to the options set in the *Define Report Properties* tab on the **BROWSE REPORTS** screen. In some cases, these may override options set at the Batch Level (e.g., dollar scaling).

This tab has three regions:

- Select Entities and Totaling (upper left)
- Change Batch Settings (upper right)
- Select Entities to Report (main) - which changes depending on the selection made in *Select Entities* drop-down list.

Select Entities and Totaling region:

- **Select Entities:** Provides the options to report by: *Tree*, *Rollup*, *Entity Group*, *n-level Tree*, or *Association*. Reporting by *Entity Group* is the most commonly selected option.

Note: This selection determine those options available in the *Main* region of this tab.

- **Totaling:** Provides the options to report as follows:
 - *With Total*, which will display summation totals at the end of the report.
 - *Only Total*, which will display the totals with no entity details.
 - *No Total*, which will not display any summation totals at the end of the report.

Select Entities to Report Region:

Note: As noted above, this region changes based on your selection in the *Select Entities* drop-down list in the *Select Entities and Totaling* region of this tab. Additionally, the entity selections you make will apply to all reports in the batch that run over that entity group.

Entity Selection

This region will be described assuming that you have elected to report *by Entity Group*.

When you elect to report *by Entity Group*, the region will be titled *Select Entities to Report*. It will display options to summarize reports by any associated entity group.

See the example above where *Planning Entity* was selected. Individual planning entities were then available for selection.

The screenshot shows the 'Define Report Properties' dialog box with the 'Legal Entity' radio button selected. The 'Select Entities to Report' section includes several radio buttons, with 'Legal Entity' being the active one. Below this, there are checkboxes for 'Top-level Eliminations' and 'Consolidated', and radio buttons for 'Show Parents', 'Show Children', and 'Show Both'. A table below lists selected entities with checkboxes.

Select:	Select:	Select:
<input checked="" type="checkbox"/> UI Energy Consolidated	<input checked="" type="checkbox"/> SWEGCO Electric	<input checked="" type="checkbox"/> Electric Segment Elim
<input checked="" type="checkbox"/> UI Energy Elim	<input checked="" type="checkbox"/> SWEGCO Gas	<input checked="" type="checkbox"/> Gas Segment Consol
<input checked="" type="checkbox"/> UI Energy Parent	<input checked="" type="checkbox"/> Suburban Gas	<input checked="" type="checkbox"/> Gas Segment Elim
<input checked="" type="checkbox"/> Tri-State Consol	<input checked="" type="checkbox"/> Acquisition Co	<input checked="" type="checkbox"/> Other Segment Consol
<input checked="" type="checkbox"/> Tri-State Elim	<input checked="" type="checkbox"/> Prairie Gen	<input checked="" type="checkbox"/> Other Segment Elim
<input checked="" type="checkbox"/> Tri-State Parent	<input checked="" type="checkbox"/> Top-Level Segment Elim	<input type="checkbox"/>
<input checked="" type="checkbox"/> Chicago Electric	<input checked="" type="checkbox"/> Electric Segment Consol	<input type="checkbox"/>

Note the changes in this region when *Legal Entity* is selected. Three radio buttons and two check boxes become active as described below.

The screenshot shows the 'Define Report Properties' dialog box with the 'Tier 1 Legal Entities' radio button selected. The 'Show Both' radio button is also selected. The 'Select Entities to Report' section shows 'Tier 1 Legal Entities' as the active option. Below this, there are checkboxes for 'Top-level Eliminations' and 'Consolidated', and radio buttons for 'Show Parents', 'Show Children', and 'Show Both'. A table below lists selected entities with checkboxes.

Select:	Select:	Select:
<input checked="" type="checkbox"/> Prairie Generation	<input checked="" type="checkbox"/> UI Energy	<input type="checkbox"/>
<input checked="" type="checkbox"/> Tri-State Utilities	<input checked="" type="checkbox"/> UI Services	<input type="checkbox"/>

UIPlanner Detailed Model User Guide

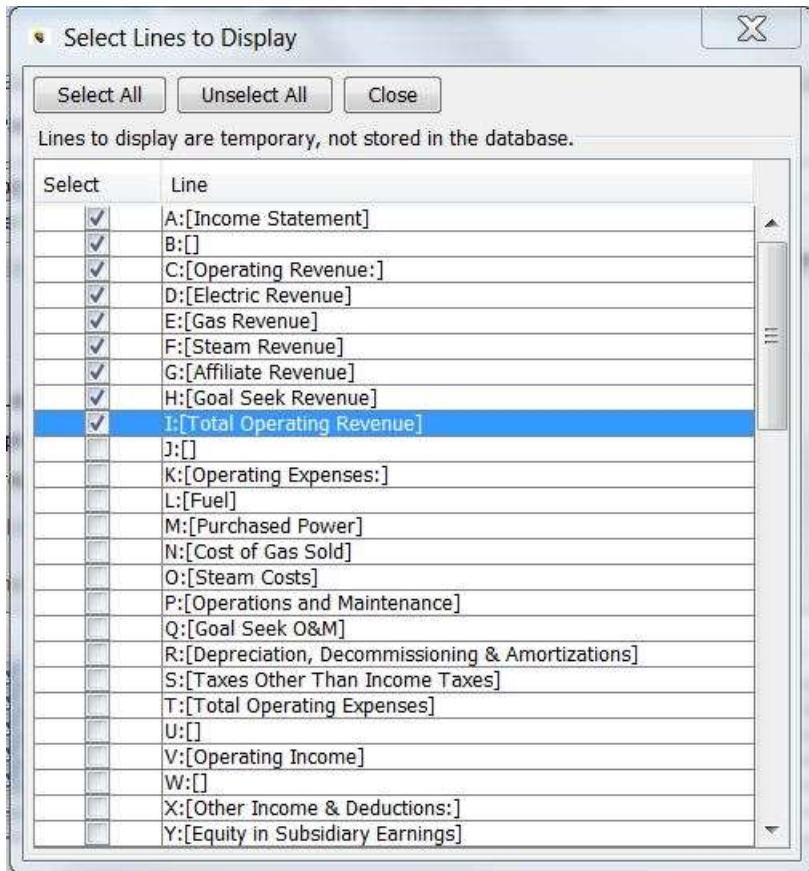
- **Show Parents or Show Children or Show Both:** When you have a rollup relevant to the selected Entity Group and you choose to report by that rollup, e.g., Legal Entity, you will have the option to see the parents and children separately or together. If you elect to show parents only, results for children are always available via drill-down.
- **Top-level Eliminations:** When checked, top-level eliminations are displayed on the selected report.
- **Consolidated:** When checked, consolidated results are displayed on the selected report.

See the example below where the *Top-level Eliminations* and *Consolidated* check boxes are selected. Note that details on the report displayed are found under [Browse Report Tab - Browse Reports](#).

1	2	A	B	C	D	E	F	G
	1							
	2	Detail Model 2011-2015 Base Plan	Chicago Electric	SWEGCO Electric	SWEGCO Gas	Suburban Gas	Prairie Gen	Planning Entity Total
	3							
+	38	D:[Electric Revenue]	5,142,379	1,096,033			793,756	7,032,168
+	50	E:[Gas Revenue]			66,420	1,117,470		1,183,890
	51	F:[Steam Revenue]						
	52	G:[Affiliate Revenue]						
	53	I:[Total Operating Revenue]	5,142,379	1,096,033	66,420	1,117,470	793,756	8,216,059
	54	J:[]						
	55	K:[Operating Expenses:]						
+	66	L:[Fuel]	2,285,693	245,418			447,299	2,978,410
+	73	M:[Purchased Power]	154,778	169,522				324,300
+	87	N:[Cost of Gas Sold]			28,971	483,035		512,006
	88	O:[Steam Costs]						
+	137	P:[Operations and Maintenance]	1,147,834	182,223	10,267	150,015	62,861	1,553,200
+	167	R:[Depreciation, Decommissioning & Amorti]	7,159	2,459	66	698	491	10,873
+	177	S:[Taxes Other Than Income Taxes]	154,451	27,606	9,859	25,444	22,899	240,259
	178	T:[Total Operating Expenses]	3,749,915	627,229	49,163	659,191	533,550	5,619,049
	179	U:[]						
	180	V:[Operating Income]	1,392,464	468,804	17,257	458,279	260,206	2,597,010

Exclude Lines

This button allows you to see/print just selected lines of any report. Once you have selected the report to view, selecting the **EXCLUDE LINES** button will open up a dialog box (shown below) listing all of the lines of the report. You can check only the lines you want to see, and when you run the report, only those lines will be displayed.



Below is the report as displayed.

UIPlanner Detailed Model User Guide

Define Report Properties | Browse Report | Graph Data | Excel Options

DLUCIANI-Financial Statements-Income Statement

Format Report | Search Table | Drilldown on Data | Action Panel

Output to Excel Fill Screen

Select Range of Cells to See Summary Information

Average: Count: Sum: Max: Min:

Report: Income Statement

Detail Model 2011-2015 Base Plan	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
Chicago Electric					
Operating Revenue:					
Electric Revenue	5,142,379	5,274,255	5,379,973	5,380,050	5,380,129
Gas Revenue	0	0	0	0	0
Steam Revenue	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0
Total Operating Revenue	5,142,379	5,274,255	5,379,973	5,380,050	5,380,129
SWEGCO Electric					
Operating Revenue:					
Electric Revenue	1,096,033	1,128,775	1,162,586	1,162,665	1,162,745
Gas Revenue	0	0	0	0	0
Steam Revenue	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0
Total Operating Revenue	1,096,033	1,128,775	1,162,586	1,162,665	1,162,745
SWEGCO Gas					
Operating Revenue:					
Gas Revenue	66,420	68,524	69,895	71,292	285,517
Steam Revenue	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0
Total Operating Revenue	66,420	68,524	69,895	71,292	285,517
Suburban Gas					
Operating Revenue:					
Gas Revenue	1,147,178	1,128,775	1,162,586	1,162,665	1,162,745

Note that this selection is session-specific. The next time you log in, the checkmarks will be reset to all lines. Our reasoning was that this selection is not readily apparent on the **BROWSE REPORTS** screen, and we did not want a user to log out and come back into the model later and not remember that they had filtered the lines to show. Also, it is user-specific, no matter what the report batch. We did not want one user to filter the lines on a key batch and then not remember to reset to all lines- this would affect all users one report in

Browse Reports Tab - Browse Reports Screen

Define Report Properties | Browse Report | Graph Data | Excel Options

TRAINING-Financial Statements-Income Statement

Format Report | Search Table | Drilldown on Data | Action Panel

Output to Excel Fill Screen

Select Range of Cells to See Summary Information

Average: 362,511.439 Count: 12 Sum: 4,350,137.263 Max: 638,414.882 Min: 37,495.308

Report: Income Statement

Detail Model 2011-2015 Base Plan	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012	S
UI Energy Consolidated									
Operating Revenue:									
Electric Revenue	638,415	581,178	572,310	519,898	547,078	625,007	703,974	698,011	
Gas Revenue	301,699	226,551	170,879	76,926	52,701	37,495	35,192	34,427	
Steam Revenue	0	0	0	0	0	0	0	0	
Affiliate Revenue	0	0	0	0	0	0	0	0	
Total Operating Revenue	940,113	807,730	743,189	596,824	599,779	662,503	739,166	732,438	
Operating Expenses:									
Fuel	256,782	254,269	254,109	252,156	253,187	255,684	258,375	257,466	
Purchased Power	29,230	27,264	27,146	25,725	26,345	28,161	30,117	29,295	
Cost of Gas Sold	43,521	43,521	43,521	43,521	43,521	43,521	43,521	43,521	
Steam Costs	0	0	0	0	0	0	0	0	
Operations and Maintenance	117,523	118,547	115,810	115,667	116,057	117,582	115,845	116,202	
Depreciation, Decommissioning & ...	1,956	2,129	2,308	2,485	2,660	2,962	3,168	3,346	
Taxes Other Than Income Taxes	20,362	20,362	20,362	20,362	20,362	20,362	20,362	20,362	
Total Operating Expenses	469,373	466,091	463,256	459,915	462,131	468,271	471,388	470,192	
Operating Income	470,740	341,638	279,933	136,908	137,647	194,232	267,779	262,246	
Other Income & Deductions:									

The *Browse Reports* tab on the **BROWSE REPORTS** screen is the core of the UIPlanner reporting engine. You are able to format reports, search reports, drill-down on data and perform other actions such as export results to Excel, compile and run the model, etc. This tab is available when a report is selected on the Report Tree. It consists of four sub tabs:

- Format Report
- Search Table
- Drill-down on Data
- Action Panel

Note: See Browsing 2-Dimensional Reports for details on additional settings required to browse 2-D reports.

Format Report Sub Tab:

UIPlanner Detailed Model User Guide

TRAINING-Financial Statements-Income Statement

Format Report Search Table Drilldown on Data Action Panel

Format Label

Format Data

Report: Income Statement

Detail Model 2011-2015 Base Plan	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012
UI Energy Consolidated						
Operating Revenue:						
Electric Revenue	638,415	581,178	572,310	519,898	547,078	625,007
Gas Revenue	301,699	226,551	170,879	76,926	52,701	37,495
Steam Revenue	0	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0	0
Total Operating Revenue	940,113	807,730	743,189	596,824	599,779	662,503
Operating Expenses:						
Fuel	256,782	254,269	254,109	252,156	253,187	255,684
Purchased Power	29,230	27,264	27,146	25,725	26,345	28,161
Cost of Gas Sold	43,521	43,521	43,521	43,521	43,521	43,521
Steam Costs	0	0	0	0	0	0
Operations and Maintenance	117,523	118,547	115,810	115,667	116,057	117,582
Depreciation, Decommissioning & ...	1,956	2,129	2,308	2,485	2,660	2,962
Taxes Other Than Income Taxes	20,362	20,362	20,362	20,362	20,362	20,362
Total Operating Expenses	469,373	466,091	463,256	459,915	462,131	468,271

When the *Format Report* sub tab is selected, an active report is displayed at the bottom. Two formatting panels are displayed at the top:

- *Format Label and Format Data*. Each panel consists of:
 - Bold-face, italics and underline buttons
 - Drop-down list for formatting cell borders
 - Left align, center align and right align buttons
 - Indent left and right buttons (arrows)
 - Color options
 - Copy checkbox

Features of the *Format Report* sub tab include the following:

- As you move your cursor from cell to cell on the active report, the cell border format will be displayed in the drop-down list.
- To change the cell format for either a label or data cell, highlight the cell and select a different format from the drop-down list. This formatting will be displayed when you output the report to Excel.
- To change the display as well as the Excel report formatting, highlight a report line and select a button. Note that all data cells are assigned the same format for the entire line.
- You can copy line formats. Choose the line you want to copy and check *Copy*. Then select another line. The format will be copied to that line. Be certain to unselect *Copy* when you are done.

Search Table Sub Tab:

Define Report Properties | Browse Report | Graph Data | Excel Options

TRAINING-Financial Statements-Balance Sheet

Format Report | Search Table | Drilldown on Data | Action Panel

Select Item to Jump To: Chicago Electric

Search Report for Content ("*" for Wildcard): Accrued

Report: Balance Sheet

Detail Model 2011-2015 Base Plan	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012	Jul 2012	Aug 2012
Current and Accrued Assets:								
Cash and Cash Equivalents	4,784	4,784	4,784	4,784	4,784	4,784	4,784	
Temporary Cash Investments	0	0	0	0	0	0	0	
Accounts Receivable, Net	983,752	943,686	937,478	900,789	919,814	974,365	1,029,640	1,029,640
Accounts Receivable Associated	0	0	0	0	0	0	0	
Notes Receivable	0	0	0	0	0	0	0	
Notes Receivable Associated	0	0	0	0	0	0	0	
Accrued Utility Revenue	261,328	261,328	261,328	261,328	261,328	261,328	261,328	261,328
Inventories	558,254	586,637	614,544	638,815	665,708	700,557	741,509	741,509
Materials & Supplies	254,668	254,668	254,668	254,668	254,668	254,668	254,668	254,668
Other Current Assets	108,480	108,480	108,480	108,480	108,480	108,480	108,480	108,480
Total Current and Accrued ...	2,171,266	2,159,583	2,181,281	2,168,864	2,214,782	2,304,181	2,400,409	2,400,409
Deferred Debits:								
Regulatory Assets	0	0	0	0	0	0	0	
Unamortized Debt Costs	-3,062	-3,266	-3,471	-3,676	-3,881	-4,085	-4,290	
Other Deferred Debits	330,756	330,756	330,756	330,756	330,756	330,756	330,756	330,756
Total Deferred Debits	327,694	327,490	327,285	327,080	326,875	326,671	326,466	326,466

When the *Search Table* sub tab is selected, the selected report is displayed at the bottom, and two regions appear across the top to allow you to search the report:

- *Select Item to Jump To*: Select an entity from the drop-down list and the report display will move to that entity. The arrows to the right will move the report display to the next entity up or down in the list.
- *Search Report for Content ('*' for Wildcard)*: Enter text into the box provided. Select the up and down arrows to search the report for this text string. This feature will work for text in line labels as well as formatted numbers.

Drilldown on Data Sub Tab:

UIPlanner Detailed Model User Guide

TRAINING-Financial Statements-Balance Sheet

Format Report Search Table Drilldown on Data Action Panel

Drilldown F:[Utility Plant In Service] - Chicago Electric (Feb/2012)

Account(Utility Plant In Service)

Transa...	From report	From line	From Entity	Amount
	Beginning Balance			18,198,311
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Hydro Production Land (330)	3,228
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Steam Production (311-316)	28,646
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Software (303)	418
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Distribution MI (361-373)	5,016
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Hydro Production (331-335)	502
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Distribution IL (361-373)	6,688
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Dist General IL (391-398)	532
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Dist General MI (390-398)	266
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Dist General Common (390-399)	133
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Nuclear Production (321-325)	4,180
Debit/Oriq	Plant Account Detail	BB:[Book Closings - Model Projects]	CHI Elec Other Production (341-346)	2,066
	Ending Balance			18,249,985

Report: Balance Sheet

Detail Model 2011-2015 Base Plan	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun 2012
Chicago Electric						
Assets						
Property, Plant & Equipment:						
Utility Plant In Service	18,198,311	18,249,985	18,300,329	18,350,397	18,456,875	18,520,434
Accumulated Depreciation & Amo...	-7,248,430	-7,249,812	-7,251,312	-7,252,927	-7,254,656	-7,256,625
Utility Plant In Service, Net	10,949,881	11,000,172	11,049,016	11,097,469	11,202,219	11,263,809
Construction Work In Progress	184,797	187,582	190,384	193,203	140,496	140,496

When the *Drilldown on Data* sub tab is selected, an active report is displayed at the bottom. The panel displayed at the top of the sub tab displays the drilldown data. Data drill down is available for every data cell in the report.

Features of the *Drill-down on Data* sub tab include the following:

- Move to any data cell on the active report and the drill down panel will display the underlying source data for that cell. Click on the highlighted number to drill to its source (formula, account, or another report). Drill down will continue from report to report.
- When the drill-down ends at an input number, it will show the user id and time/date. It will also show any cases and the final winner amount.
- When the month-to-annual value (see [EDIT CALCULATIONS Screen](#)) is set to 'ending balance', drilling down on an annual report switches to the last month of the year. For the balance sheet example above, the

report would switch to Dec 2011 when continuing to drilldown into the CHI Elec Distribution IL Book Closings transaction as shown below.

Detail Model 2011-2015 Base Plan	2011	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	Jun
Total Book Close	1,562	5,851,562	5,851,562	6,687,500	6,687,500	6,687,500	6,687,500	6,687,500	6,6
Total Tax Close	5,417	5,935,417	5,935,417	6,783,333	6,783,333	6,783,333	6,783,333	6,783,333	6,7

- Use the left most arrow buttons to return to the original report data selected.
- Use the other arrows (left and right) to navigate back and forward on a drill-down path.

Action Panel Sub Tab:

Detail Model 2011-2015 Base Plan	Jul 2012	Aug 2012	Sep 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb
Operating Expenses:								
Fuel	24,166,177	23,257,086	20,020,410	19,123,378	20,725,167	22,464,390	23,043,496	20,4
Purchased Power	16,831,811	16,010,242	13,656,296	13,003,910	13,993,443	15,256,833	16,263,407	14,2
Cost of Gas Sold	0	0	0	0	0	0	0	0
Steam Costs	0	0	0	0	0	0	0	0
Operations and Maintenance	16,297,560	16,518,126	16,518,126	16,518,126	16,759,306	16,761,367	16,697,437	16,8
Depreciation, Decommissioning & ...	679,527	718,233	756,963	795,720	834,482	873,206	1,088,150	1,1
Taxes Other Than Income Taxes	2,339,635	2,339,635	2,339,635	2,339,635	2,339,635	2,339,635	2,400,465	2,4
Total Operating Expenses	60,314,7...	58,843,3...	53,291,4...	51,780,7...	54,652,0...	57,695,4...	59,492,9...	55,1
Operating Income	33,750,200	35,222,242	40,774,789	42,286,106	39,415,498	36,372,758	37,389,221	41,7

Action Buttons:

- **OUTPUT TO EXCEL** – Exports the active report to Excel. See View UIPlanner Reports and Scenario Info in Excel.
- **FILL SCREEN** – Removes the frame around the report and displays the report across your full screen.
- **EDIT TIME DATA** – Opens the *EDIT TIME DATA* screen.

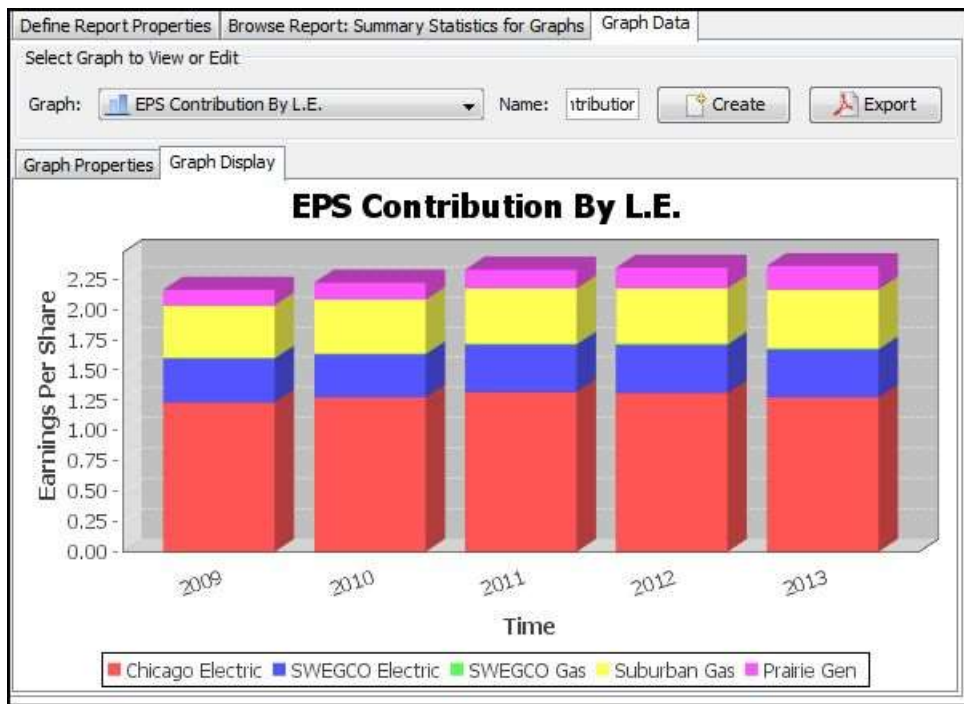
Summary Information

UIPlanner Detailed Model User Guide

Select a range of cells in the active report to see:

- Average value
- Sum of the values
- Count of values
- Maximum value
- Minimum value

{ XE "Graph Data Tab" * MERGEFORMAT }{ XE "Browse Reports" * MERGEFORMAT }Graph Data Tab - Browse Reports Screen



The *Graph Data* tab on the **BROWSE REPORTS** screen is a powerful graphing engine that links graphs with reports. You can graph the lines and entities on a selected report (over any time dimension) and build multiple graphs from any report. The graphing engine supports drilldown from graphs into the supporting detail reports.

This *Graph Data* tab consists of top region *Select Graph to View or Edit* and two sub tabs in the main region:

- *Graph Properties* – Once a graph is defined, it is straight forward to change the entities or aggregate them or to change the time ranges.
- *Graph Display* – Shows the completed graph.

Select Graph to View or Edit region:

- *Graph* drop-down list – Select a graph. Note that the name of the graph is displayed to the right.

- **CREATE** – Click to open the **ADD GRAPH** dialog box.
- **EXPORT** – Click to output the graph in .pdf format.

Graph Properties sub tab:

The *Graph Properties* sub tab is divided into three regions:

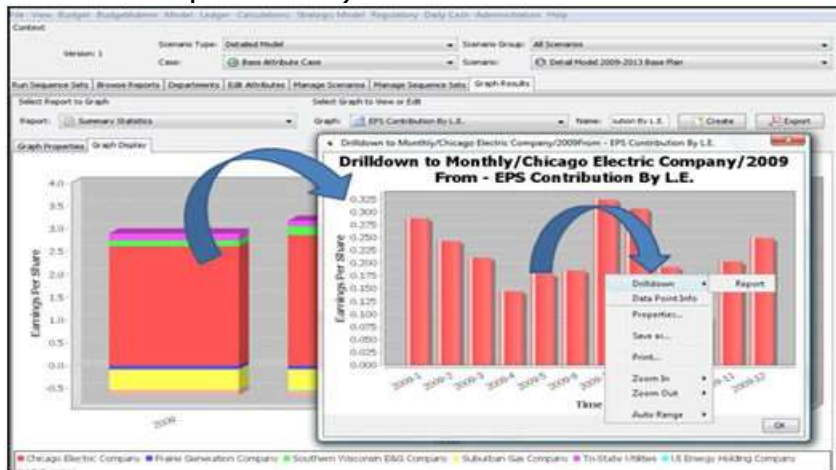
- Series of drop-down lists
 - *Graph Type* – select type of graph.
 - *Primary Independent Variable* – select Entity (or Edit Group), Line, Time or Scenario.
 - *Secondary Independent Variable* – select Entity (or Edit Group), Line, Time or Scenario.
 - *Hold Line Constant As* – select a line.
 - *Hold Scenario Constant As* – select a scenario.
- *Define an Entity (or Edit Group) to Graph*
 - **ADD** – click to add an Entity (or Edit Group). Select from the list.
 - **REPLACE SET** – click to replace a set of entities (or edit groups).
 - **REMOVE** – click to remove an Entity (or Edit Group).
- *Define a Time Set to Graph*
 - **REPLACE SET** – click to replace a time range.
 - **REMOVE** – click to remove a time range.

Graph Display sub tab functionality:

- Click the sub tab to run the graph.
- Right-click on the graph to select one of the following options:
 - Drilldown – monthly or quarterly

UIPlanner Detailed Model User Guide

- Data Point Info – view the data value along with associated items elected in the top region of the tab, e.g., scenario, Entity (or Edit Group), time, etc.
- Properties – view chart properties such as font, color, etc.
- Save as.. – save to a graphics file.
- Print
- Zoom In
- Zoom Out
- Auto range – automatically set the range, domain or both axes.
- Right-click on a data point on the graph to launch drilldown (see example below).



{ XE "Publish Reports" * MERGEFORMAT } { XE "Concept - Publish Reports" * MERGEFORMAT } Concept - Publish Reports

Publishing model results (see [RUN SEQUENCES Screen](#)) allows you store the results of model runs. There are two main functions of **PUBLISH REPORTS**.

- Comparisons – if you have published the results of Scenario A, you can later run Scenario B, and pull in the stored results of A and see these in a Scenario Compare. The location needs to be defined on the [BROWSE REPORTS – SCENARIO COMPARE tab](#) and configured in **PLANNER PROPERTIES** (See Published Reports Configuration – Scenario Compares). When you publish a scenario, all data, reports and entities are sent out, so that you have full drill-down in scenario compares.
- Transfers – you can use the publish functionality to link tactical databases, or to send tactical model results out for use in a strategic model. (See Published Reports Configuration - Transfers). Note: Transfers send out only certain data that you specify.
 - Tactical to Tactical - You might have a Revenue user who wants to maintain his/her own report logic, and not be constrained by the corporate structures or requirements for editing logic

cases. As long as both groups agree on a set of transfer values (reports and lines), the relevant results would be exported from the Revenue model and imported into the Corporate model. The exports and imports are put into reports using the T2-Transfer Export and T2-Transfer Import functions.

- Transfers – Tactical to Strategic - The exports and imports are put into reports using the S2-Transfer Export and S2-Transfer Import functions

When you run the destination model (whether Tactical or Strategic), the model pulls the results in from the defined location.

Note – Publish Reports is different from the reports that you output using Batch settings. Reports that are sent out from Browse reports are actually the final MS Excel reports, and only the reports and entities selected in the batch. Publishing sends out the underlying data, rather than finished reports. When you publish a scenario, it sends out all data, allowing you to drill down when using that scenario again (as in a scenario compare). Likewise, when you publish for Transfer purposes (either T2 Tactical or S2 Strategic), the process sends out raw data for use in another scenario.

Publish Reports Configuration – Transfers

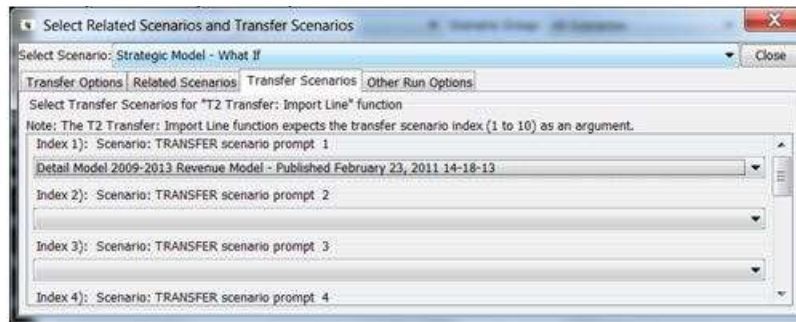
For Transfers, you must use the network drive setting. Also, both the source and destination scenarios (or databases) need to point to the same location.

- Network drive – users should open **USER PREFERENCES** (see above), and set the option to Transfer – from Planner Properties. Then the System Administrator should open **PLANNER PROPERTIES** and set up this folder location (see above).

The remainder of the setup for the Transfer functionality is found on the MANAGE SCENARIOS screen, using the **ADVANCED OPTIONS** button.

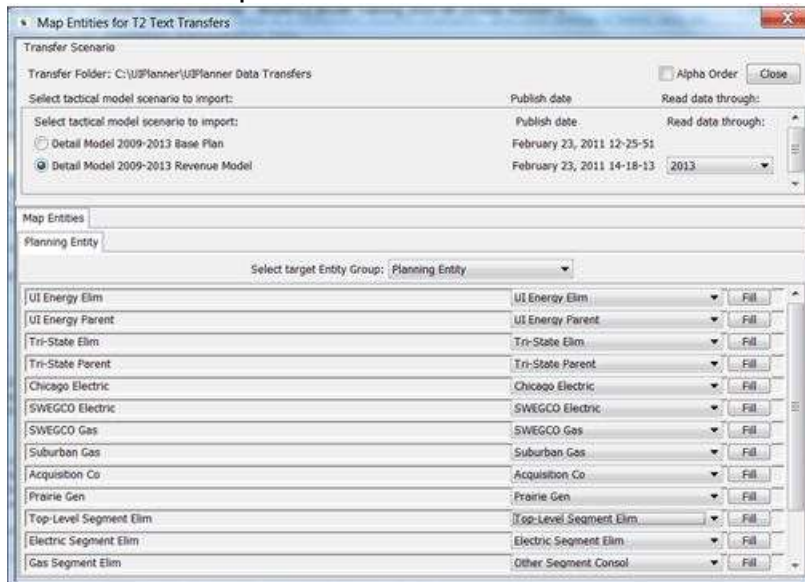
- T2 Scenarios - You need to identify what scenario(s) the T2 Import Function will expect (the scenario you exported from the source model). You assign each scenario an "Index" number – this is referenced in the report that reads in the data. That way, if there is a different source scenario, you just remap it here; you do not need to modify the import report.

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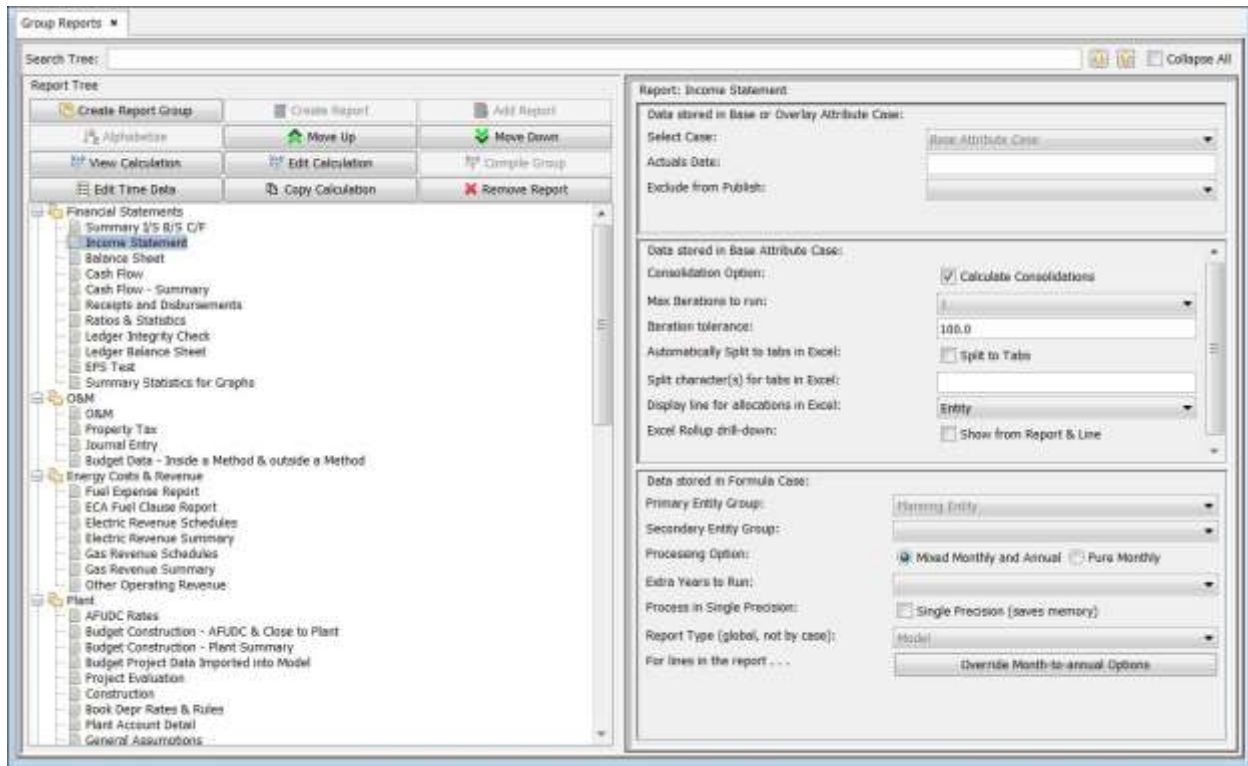
Other Settings – End Date and Mapping of Entities

- o You need to tell the import what year to read the data through.
- o You also need to map the exported entities with their corresponding entities in the destination scenario. This ensures that the data comes into the proper entities. Mappings can be one-to-one (e.g. Planning Entity) or can be many to one, for rollups.



Group Reports

```
{ XE "Group Reports" \* MERGEFORMAT }{ XE "Report"
\* MERGEFORMAT }{ XE "Screen" \* MERGEFORMAT
}Group Reports Screen
```

The **GROUP REPORTS** screen is the screen from which you create reports and configure their settings and configure how they are grouped for display in **BROWSE REPORTS**. Note that the detail line-by-line build out of reports is handled in the **CALCULATION EDITOR**.

This screen is where you create a report, by which is meant you create the report entity and decide what entity group it will run over. You can either create a blank report, ready to build out, or you can make an exact copy of an existing report. The ability to copy a report is a very helpful feature, because it facilitates testing alternative report designs. Remember that once you have copied the report, it will not be processed until it is put into a report sequence.

This screen is also where you manage the settings and top-level configuration for UIPlanner reports. These direct such things as what entity group(s) the report runs over, whether it runs pure monthly or mixed annual/monthly, and whether the report has its own actuals date. The **GROUP REPORTS** screen also allows you to set certain global output options for a report, such as whether it is automatically split to separate tabs when output to Excel.

Finally, the **GROUP REPORTS** screen is where you manage Report Groups, which are the structure that shows up in all batches on the **BROWSE**

REPORTS screen. These are a key structural facet of a UIPlanner implementation, as every time users go to Browse Reports, this is the structure they see. You can create new report groups, reorder the existing groups, and order the reports within groups. Note that a report can exist in more than one report group.

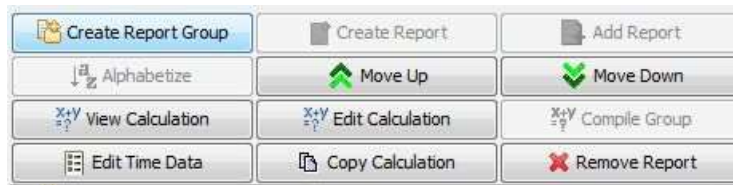
Screen Layout:

The **GROUP REPORTS** screen is split into two regions:

- Report Group Definition
- Report Settings

Report Group Definition

The top of this region includes a number of control buttons and the bottom section consists of the Group Report Tree.



There are three categories of control buttons:

- **Report Group actions**
 - Create Report Group
 - Create Report
 - Add Report
 - Remove Report
 - Compile Group
- **Reordering actions**
 - Alphabetize
 - Move Up
 - Move Down
- **Calculation actions**
 - Copy Calculation
 - View Calculation
 - Edit Calculation

There is also a button which enables you to go to the **TIME DATA EDITOR**.

Report Definition

The *Report Definition* region is where you set various report settings and configuration options. It also allows you to define certain global Excel output options. Note that a report needs to be in a report group for its settings to be available to you.

- **Report Level Options**

- These are various settings and switches which apply to each report. For example, what entity group it runs over or whether it iterates. Once set, these are almost never changed, except occasionally the report actuals date. Note that there are three subpanels based upon what case the data is stored in, e.g., the actuals date is stored in an attribute case, whereas the entity group is stored in the formula case.
- **Excel Output Options**
- The output options available on this screen enable you to define MS Excel output characteristics for the selected report for all users. You can elect settings at the user batch level using the **BROWSE REPORTS** screen.

List Of Tasks or Operations That Are Performed With This Screen:

See [Report Group Definition](#) and [Report Definition](#) for detailed information.

Updated June, 2011, v5.05 - Utilities International, Inc.

{ XE "Group Reports" * MERGEFORMAT }Report Group Definition - Group Reports Screen

You can perform the following actions on the Report Group section of the **GROUP REPORTS** screen. Note that these actions apply to the report tree as seen by all users

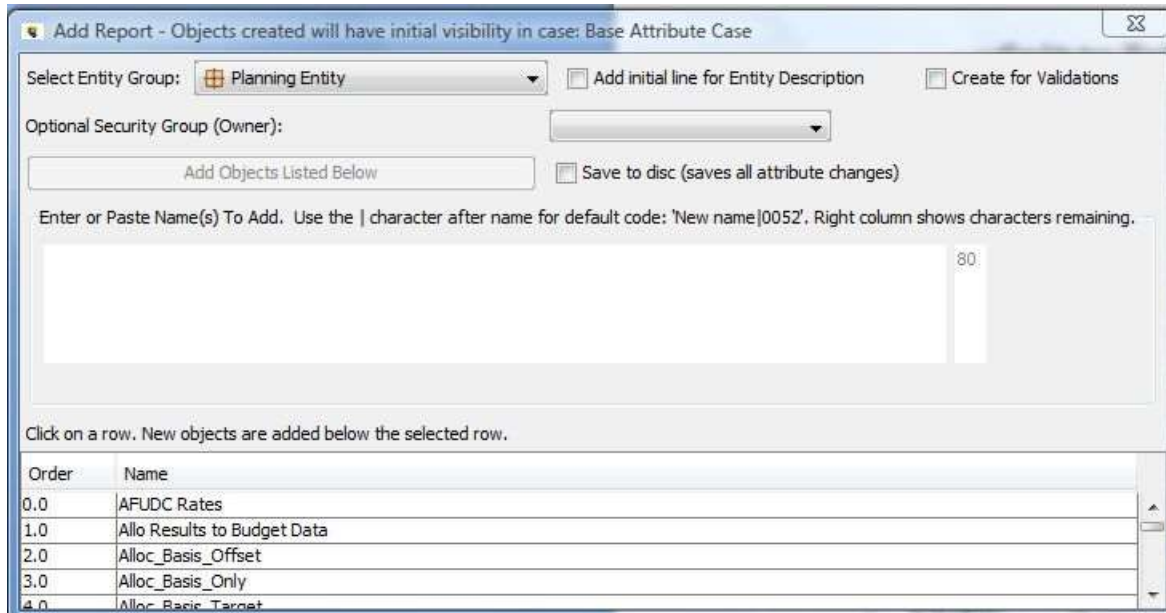
Create a New Report Group

- Click **CREATE REPORT GROUP** to open the **ADD OBJECTS** Dialog Box.
- Add the new report group.
Note: The new report group will be added to the bottom of the report tree.

Create a New Report

- Select the appropriate report group on the report tree.
- Note: When you create a new report it must be placed in a report group.
- Click **CREATE REPORT** to open the **ADD OBJECT** Dialog Box shown below.

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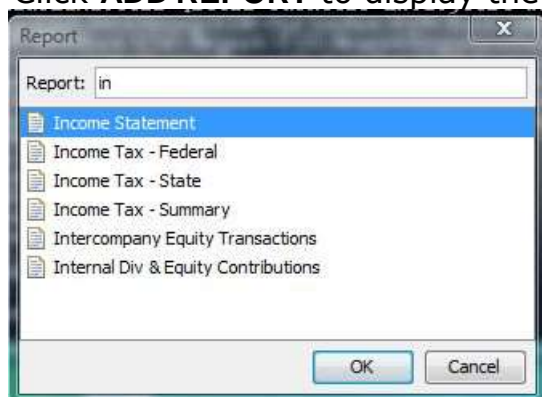


- Select an entity group from the drop-down list.
- If you want to add an initial line for entity description, select the check box.
- Note: For model users, do not check the *Create for Validations* check box. This option is only applicable to Budget reports.
- Add the new report name.
- Notes: The new report will be added to the bottom of the list of reports for that report group. These will be empty reports. If, however, you prefer to begin with another report, you can copy a report (see below, **Copy Calculation**) and create the report at the same time.
-

Add an Existing Report to a Report Group

Note that reports can exist in more than one report group.

- Select the desired report group on the report tree.
- Click **ADD REPORT** to display the **REPORT** dialog box.



- Select the desired report from the list displayed and click **OK**.

Remove Report from Report Group

- Select the desired report on the report tree.
- Click **REMOVE REPORT**.

Compile Report Group

- Select the desired report group on the report tree.
- Click **COMPILE GROUP**. This saves changes to the report group and compiles.

Alphabetize Reports in Report Group

- Select the desired report group on the report tree.
- Click **ALPHABETIZE**. This will put the reports in alpha order.

Move Reports in Report Group

- Select the desired report on the report tree.
- Click **MOVE UP** or **MOVE DOWN** to order reports as desired in the report group.

View Calculation

- Select the desired report in the report tree.
- Click **VIEW CALCULATION** to open the **CALCULATION EDITOR**.
Note that most control buttons on this screen will be disabled as you are in view mode. You cannot change any lines on the reports, however postings and edit time data are still available.
-

Edit Calculation

- Select the desired report in the report tree.
- Click **EDIT CALCULATION**. This will open that report the **CALCULATION EDITOR**.
- Note: If there are pending attribute changes, a dialog will open asking if you want to save attributes changes prior to editing a report. Typically, you should save these attributes prior to editing a report.

Copy Calculation

- Select the report that you want to copy.
- Click **COPY CALCULATION** which opens the *ADD REPORT* dialog box.
- Add the new report into which you want to copy the report lines.
- Select the entity group to run over (most likely the same as the source report)

Note: This will make an exact copy of the selected report (lines, formulas, formats and postings). It does not copy the *Report Definition* region settings.

- Select the new report and configure the *Report Definition* settings as desired (most likely the same as the source report).

{ XE "Report Definition" * MERGEFORMAT }{ XE "Group Reports" * MERGEFORMAT }Report Definition - Group Reports

When you select a report on the report tree, the *Report Definition* region of the **GROUP REPORTS** screen shows the current configuration settings for that report. Below is an example. Note that typically these are not changed once a report is built.

Report: Income Statement	
Data stored in Base or Overlay Attribute Case:	
Select Case:	Base Attribute Case
Actuals Date:	
Exclude from Publish:	
Data stored in Base Attribute Case:	
Consolidation Option:	<input checked="" type="checkbox"/> Calculate Consolidations
Max Iterations to run:	1
Iteration tolerance:	100.0
Automatically Split to tabs in Excel:	<input type="checkbox"/> Split to Tabs
Split character(s) for tabs in Excel:	
Display line for allocations in Excel:	Entity
Excel Rollup drill-down:	<input type="checkbox"/> Show from Report & Line
Data stored in Formula Case:	
Primary Entity Group:	Planning Entity
Secondary Entity Group:	
Processing Option:	<input checked="" type="radio"/> Mixed Monthly and Annual <input type="radio"/> Pure Monthly
Extra Years to Run:	
Process in Single Precision:	<input type="checkbox"/> Single Precision (saves memory)
Report Type (global, not by case):	Model
For lines in the report . . .	Override Month-to-annual Options

REPORT LEVEL OPTIONS

Note that the controls in this region are grouped by the case in which the data is stored. Most of these settings are ones that are not changed once the reports are built.

Attribute Case (Base Attribute case or another overlay attribute case)

Select Case – select the case in which to store the below values

Enter Actuals Date: Enter the actuals date for this report. The actuals date set here overrides the actuals date (for the selected report only) set on the **MANAGE SCENARIOS** screen. This setting is stored by

case, because users may want to have the actuals date in an overlay case.

Exclude Report from Publish: If this flag is set to Yes, this report will NOT be included when this scenario is published. This option is helpful when you are publishing scenarios for transfer. A feeder system may have many large reports, but the downstream model only needs a few selected reports. This setting is stored by case, to allow you to have a separate case to flag reports to exclude.

Base Attribute case

Consolidation Option: Check this box to calculate consolidations for the selected report.

Max Iterations to run: Select the maximum number of iterations to run for the selected report.

Iteration tolerance: Enter the tolerance to be used for the selected report.

Automatically Split to tabs in Excel: If the box Split to Tabs is checked, the report will always be split to tabs. (Note that Split to Tabs is always an option for users once they are in Excel should this selection not be made.)

Split character(s) for tabs in Excel: Enter what character(s) for MS Excel to use to prefix the different tabs.

Display line for allocations in Excel: You can set the final display line for Excel drilldown for allocations to be Entity, Line, Line/Entity, Report/Line, or Report/Line/Entity.

Excel Rollup drill-down: If checked, Excel rollup drill-down will be available on the selected report. Leave this box unchecked to generate an Excel report with no drill-down.

Note – These settings are global in that they apply to all users and not to a specific user. (See Browse Reports screen for details on user batch settings.)

Formula case

Primary Entity Group: Select the primary entity group. This is the entity group that the report will run over.

Secondary Entity Group: Select the secondary entity group. This is used for 2-D reports.

Processing Option: Select *Mixed Monthly and Annual* or *Pure Monthly*

- **Mixed Monthly and Annual:** If checked, the report will be run monthly and then annually as per the scenario settings.
- **Pure Monthly:** If checked, the report will run monthly for the entire planning horizon.

Extra Years to Run: Enter additional years to run this report. Years entered here will be added to *Years to Run* set in the **MANAGE SCENARIOS** screen. For example, bond reports are typically run for one more year, so we can calculate transfer to current in the last year (needs maturities in last year +1).

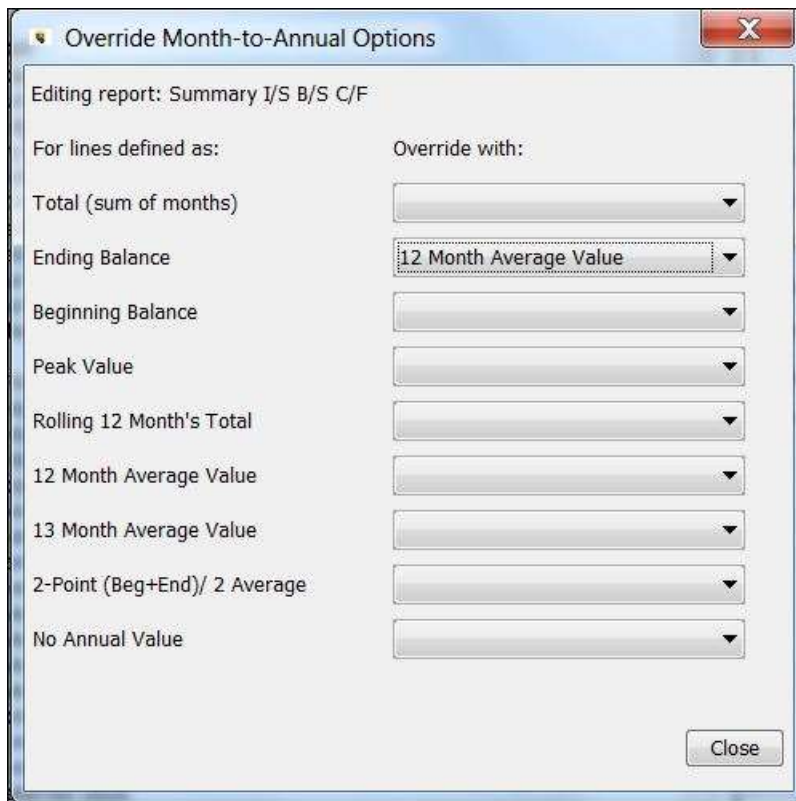
Process in Single Precision: Enables you to have the report processed in single precision (the default is double) which can save memory usage, especially if applied to reports with a large number of lines and/or entities.

Report Type (global, not by case): Identifies what report type the report belongs to, e.g., model for model users. Other report types are used to enable specific processing options for budget, customer revenue, etc.

Override Month-to-Annual Options – Allows you to now override the Annual-to-Month options for a specific report. This is needed, for example, where a regulatory income report is created using latest-12 months, and a shared report makes the same report end-of-period. The normal option is ending-balance, i.e. report the last fiscal month as the annual total, but the shared report needs to do totals. This option could also be used for Balance

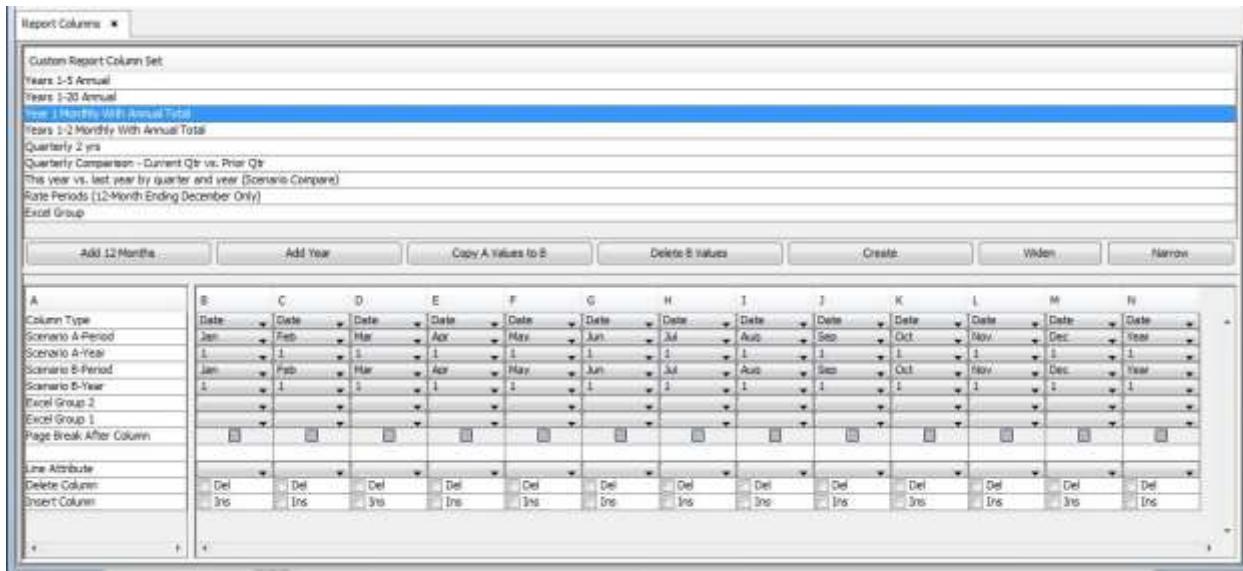
Sheet reports, to change the default sum to ending balance. When you select the button, it opens a dialog box listing all Month-to-Annual options. You choose which to override, and how. See below:

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Report Columns

{ XE "Report Columns" * MERGEFORMAT }{ XE "Reports" * MERGEFORMAT }Report Columns Screen



The UIPlanner reporting engine (see [Browse Reports](#)) gives you a very flexible approach to viewing results. When the model runs, it runs all months and years according to the scenario setting. Then you can simply select the view in Browse Reports. Note that this is done on the fly, so you can pick any view. Just change it on Browse Reports (top tab or report view), and the display will change to the new view. Note that the first one in the list is *Default – All Time*. This is a system-generated set that corresponds to the run settings for the current scenario. Also note that these column sets are all built by year, indexed off of the scenario year. So as you roll the model over, you do not need to rebuild any column sets. They will move with the new start year.

The **REPORT COLUMNS** screen is where you can create these column sets. These column sets support monthly, annual, quarterly, YTD, rolling 12, and several others (note that the amounts shown for years automatically adjust for fiscal year clients). Below are examples of a number of column sets (all of which can be built by users).

Monthly and Annual - Monthly values, with an annual total.

Detail Model 2009-2013 Bas...	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Year 2009
UI Energy Consolidated													
Operating Revenue:													
Electric Revenue	590,089	537,271	529,045	490,589	505,636	577,359	850,295	844,801	530,577	814,968	526,997	578,306	6,671,932
Gas Revenue	284,096	213,305	160,872	72,214	49,532	35,225	33,037	32,306	28,286	32,279	67,673	127,572	1,136,368
Clean Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Operating Revenue	874,185	750,576	689,917	562,803	555,168	612,584	883,332	877,108	558,863	847,247	594,670	705,878	7,808,330

Quarterly - Quarterly, with an annual total

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Detail Model 2009-2013 Bas...	Qtr-1 2010	Qtr-2 2010	Qtr-3 2010	Qtr-4 2010	Year 2010	Qtr-1 2011	Qtr-2 2011	Qtr-3 2011	Qtr-4 2011
UI Energy Consolidated									
Operating Revenue:									
Electric Revenue	1,700,227	1,605,109	1,880,533	1,663,474	6,849,343	1,745,378	1,647,894	1,930,898	1,707,999
Gas Revenue	671,633	160,304	95,642	232,357	1,159,937	685,250	163,681	97,688	237,271
Steam Revenue	0	0	0	0	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0	0	0	0	0
Total Operating Revenue	2,371,861	1,765,413	1,976,175	1,895,831	8,009,280	2,430,628	1,811,575	2,028,586	1,945,270

Re-Forecasts - Total columns for a 4 and 8 reforecast:

Detail Model 2009-2013 Bas...	Jan:Apr 2010	May:Dec 2010	Year 2010
UI Energy Consolidated			
Operating Revenue:			
Electric Revenue	2,193,534	4,655,810	6,849,343
Gas Revenue	745,398	414,539	1,159,937
Steam Revenue	0	0	0
Affiliate Revenue	0	0	0
Total Operating Revenue	2,938,932	5,070,348	8,009,280

Some advanced capabilities of the UIPlanner reporting engine follow.

Comparison

Used in conjunction with [Scenario Compare](#) on **BROWSE REPORTS**, this setting compares current quarter to the prior one:

Income Statement Scenario A: Detail Model 2009-2013 Base Plan Scenario B: Detail Model 2009-2013 Base Plan												
A: Detail Model 2009-2013 ...	A: Qtr-1 2010 vs. B: Qtr-4 2009			A: Qtr-2 2010 vs. B: Qtr-1 2010			A: Qtr-3 2010 vs. B: Qtr-2 2010			A: Qtr-4 2010 vs. B: Qtr-3 2010		
	Scen A	Scen B	Df (B-A)	Scen A	Scen B	Df (B-A)	Scen A	Scen B	Df (B-A)	Scen A	Scen B	Df (B-A)
UI Energy Consolidated												
Operating Revenue:												
Electric Revenue	1,700,227	1,620,270	-79,957	1,605,109	1,700,227	95,118	1,880,533	1,605,109	-275,423	1,663,474	1,880,533	217,058
Gas Revenue	671,633	227,525	-444,108	160,304	671,633	511,329	95,642	160,304	64,662	232,357	95,642	-136,715
Steam Revenue	0	0	0	0	0	0	0	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0	0	0	0	0	0	0	0
Total Operating Revenue	2,371,861	1,847,795	-524,066	1,765,413	2,371,861	606,447	1,976,175	1,765,413	-210,762	1,895,831	1,976,175	80,344

Excel Column Groupings

You can create groupings of the columns (for Excel export) to any custom column report set. In the example below, Level 1 groups to Year, Level 2 groups to Quarters, and Level 3 shows the individual months.

	A	B	C	D	E	I	M	Q	R
1									
2	Detail Model 2009-2013 Base Plan	Jan 2010	Feb 2010	Mar 2010	Qtr-1 2010	Qtr-2 2010	Qtr-3 2010	Qtr-4 2010	Year 2010
3									
4	UI Energy Consolidated								
5									
6	Operating Revenue:								
7	Electric Revenue	605,716	551,473	543,039	1,700,227	1,605,109	1,880,533	1,663,474	6,849,343
8	Gas Revenue	289,951	217,637	164,145	671,633	160,304	95,642	232,357	1,159,937
9	Steam Revenue								
10	Affiliate Revenue								
11	Total Operating Revenue	895,567	769,109	707,184	2,371,861	1,765,413	1,976,175	1,895,831	8,009,280

Text Values in Columns

You can also add text values in columns.

Detail Model 2009-2013 Base Plan	Formula-Forecast	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012
UI Energy Consolidated						
Operating Revenue:						
Electric Revenue	Account(Electric Revenue)	0	5,773	6,057	6,342	6,643
Gas Revenue	Account(Gas Revenue)	0	614	632	649	667
Steam Revenue	Account(Steam Revenue)	0	0	0	0	0
Affiliate Revenue	Account(Affiliate Revenue)	0	0	0	0	0
Goal Seek Revenue	Account(xxx.012 -- Goal Seek Revenue)	0	0	0	0	0
Total Operating Revenue	Sum Down(C:[Operating Revenue:])	0	6,387	6,689	6,992	7,310

Screen Layout:

The top region of the **REPORT COLUMNS** screen lists all of the existing column sets.

The bottom region is used to build new column sets and to display the settings for existing columns. This bottom region has several action buttons, and a grid below those showing the settings for each column. It shows the settings for whatever column set is selected in the list in the top region.



The action buttons are:

CREATE – opens the Add Object dialog box, where you add a new Column Set.

ADD 12 MONTHS – adds 12 months to the columns in the grid, and populates the month and year settings.

ADD YEAR – adds another year column to the grid and populates the year setting.

COPY A VALUES TO B – takes all of the period/year settings for Scenario A and copies these to the Scenario B rows.

DELETE B VALUES – clears out all of the Scenario B settings.

WIDEN/NARROW – these buttons do step-wise adjustments to the widths of the columns in the grid. This helps in building column sets, so you can see either the full labels or all columns across. Note that these column widths are only for the create grid – they do not affect the report output.

The report column grid itself shows all of the columns in the selected report (as you add columns to a report, they show up in the grid). For each column there are several settings, shown down the left hand side of the grid.

Column Type – choose the type of data that will show up in that column. Most of the time, you will want time data (Date). However, you can also have attribute data, including a user defined attribute, the line formula, or an interface code.

Scenario A - Period – use this drop-down list to select the period that will populate that column. Choices include individual months, quarters, full years, YTD amounts (through a month), and rolling 12 (ending with a month).

Scenario A - Year – use this drop-down list to select the fiscal year for that column. Year 1 is the first year of the scenario.

Scenario B - Period – this is the same concept as for Scenario A above, except that this is the period that will show when you are doing a scenario compare. These two are usually the same. Make them different if you want to do cross-period comparisons.

Scenario B - Year - this is the same concept as for Scenario A above, except that this is the year that will show when you are doing a scenario compare.

Excel Group 1 – use this drop-down list to set the start or end of an excel grouping involving that column. Group 1 is the top grouping (see the example above).

Excel Group 2 – use this drop-down list to set the start or end of an excel grouping involving that column. Group 2 is a second level grouping, if you have nested groups.

Page Break after Column – use this flag to force a page break after that column (helpful if you have very wide reports).

Line Attribute – If you selected Attribute for the column type, use this drop-down list to select the attribute to display.

Insert – when building a report, if you check this box it will insert a column.

Delete – when building a report, if you check this box the current column will be deleted.

Create a Custom Column Set

All column sets in UIPlanner are user-configurable. They are built using the **REPORT COLUMNS** screen. To reorder, change visibility or delete Custom Column Sets, use the **CORE OBJECT EDITOR**.

To create a new Custom Column Set

- 1) Open the **REPORT COLUMNS** screen
- 2) Click **CREATE**. This will open the **ADD OBJECT** dialog box. Add the new column set and place it in the proper order. Note that you do not

need to assign a parent or security to a column set. When you close the dialog, the new column set will appear in the list.

3) Select the new column set. It will show up with one column in the grid. See below:

4) Add columns as needed, using the appropriate buttons. You can either insert columns one by one, or use the **ADD** buttons to add common choices. Using these buttons you can very quickly build a multi-month, multi-year report.

a. **ADD 12 MONTHS** – this adds 12 months, with the months pre-populated. It defaults to Year 1 the first time. If you add a second time, the Year is set to Year 2, and so on.

b. **ADD YEAR** – adds just one year, defaults to Year 1 the first time and then adds a year each time.

The example below shows 12 months added, and then a year added.

5) You cannot move columns. Use the **INSERT/DELETE** buttons as needed.

6) In each column, set the column type and period in the Scenario A row. Note that Date is the default – this is used for virtually all

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reports. This is the view for the current run. The row B settings are for Scenario Comparisons.

a. *DATE* - Column types – Date, Attribute, Formula, etc.

b. *PERIOD* – these are years, indexed off of the scenario settings. Year 1 is the first year of the forecast. Year 0 is the prior year actuals.

7) Note - You can use the **WIDEN** and **NARROW** buttons to change the view on the screen for easier editing.

8) When you are done, select **COPY A VALUES TO B**. This will populate the column settings in Scenario B. In most cases, these will be the same. You can make them different, for inter-period comparison reports (see below)

9) Select **File, Save** from the UIPlanner menu. Your new custom column set will be available immediately for reporting. If you have run the model, open **BROWSE REPORTS** and refresh it by toggling the *One Batch on Tree* box. Your new column set will show up in the list.

The Report Column builder has the flexibility to build some very sophisticated report structures. Listed below are steps to take for two examples:

Intra-period comparisons

To produce a report that can automatically compare different time periods, you should select different Periods or different Years in Scenario A as in Scenario B. The example below produces a report that compares each quarter to the prior quarter.

Quarterly Comparison - Current Qtr vs. Prior Qtr				
This year vs. last year by quarter and year (Scenario Compare)				
Rate Periods (12-Month Ending December Only)				
Excel Group				
Reforecast				
Add 12 Months		Add Year		
A	B	C	D	E
Column Type	Date	Date	Date	Date
Scenario A-Period	Qtr-1	Qtr-2	Qtr-3	Qtr-4
Scenario A-Year	2	2	2	2
Scenario B-Period	Qtr-4	Qtr-1	Qtr-2	Qtr-3
Scenario B-Year	1	2	2	2
Excel Group 2				
Excel Group 1				
Page Break After Column	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Line Attribute				
Delete Column	<input type="checkbox"/> Del	<input type="checkbox"/> Del	<input type="checkbox"/> Del	<input type="checkbox"/> Del
Insert Column	<input type="checkbox"/> Ins	<input type="checkbox"/> Ins	<input type="checkbox"/> Ins	<input type="checkbox"/> Ins

Note that this report can only be run as a scenario compare report, because it needs both Scenario A and Scenario B. To run this report, you should show compare scenarios and compare the current scenario to itself. Below is the report as run.

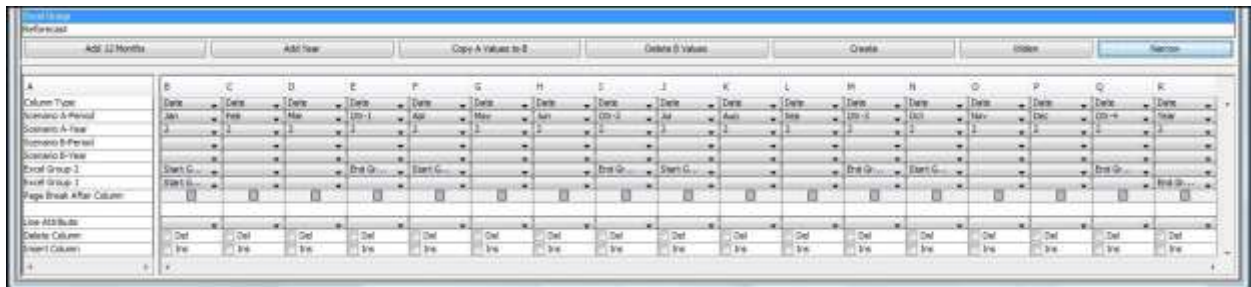
	A	B	C	D	E	I	M	Q	R
1									
2	Detail Model 2009-2013 Base Plan	Jan 2010	Feb 2010	Mar 2010	Qtr-1 2010	Qtr-2 2010	Qtr-3 2010	Qtr-4 2010	Year 2010
3									
4	UI Energy Consolidated								
5									
6	Operating Revenue:								
7	Electric Revenue	605,716	551,473	543,039	1,700,227	1,605,109	1,880,533	1,663,474	6,849,343
8	Gas Revenue	289,851	217,637	164,145	671,633	160,304	95,642	232,357	1,159,937
9	Steam Revenue								
10	Affiliate Revenue								
11	Total Operating Revenue	895,567	769,109	707,184	2,371,861	1,765,413	1,976,175	1,895,831	8,009,280

Excel Groupings

To build a report that shows up in MS Excel with grouped columns, you use the Excel Group drop-down lists.

- 1) Decide the start and end period for the groupings.
- 2) Use the drop-down lists to tag the start and end groups.
- 3) If you are building a nested group, Excel Group 1 is the major group.

The example below produces a quarterly report, with the quarters grouped.



The report as produced is shown below.

	A	B	C	D	E	I	M	Q	R
1									
2	Detail Model 2009-2013 Base Plan	Jan 2010	Feb 2010	Mar 2010	Qtr-1 2010	Qtr-2 2010	Qtr-3 2010	Qtr-4 2010	Year 2010
3									
4	UI Energy Consolidated								
5									
6	Operating Revenue:								
7	Electric Revenue	605,716	551,473	543,039	1,700,227	1,605,109	1,880,533	1,663,474	6,849,343
8	Gas Revenue	289,851	217,637	164,145	671,633	160,304	95,642	232,357	1,159,937
9	Steam Revenue								
10	Affiliate Revenue								
11	Total Operating Revenue	895,567	769,109	707,184	2,371,861	1,765,413	1,976,175	1,895,831	8,009,280

What to Do If You Encounter Problems:

There may be a situation where you are trying to view data in **BROWSE REPORTS** and you have selected a custom column set with monthly or

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quarterly columns. Yet, you do not see any data in the UIPlanner reports for the monthly columns but you DO see it for the year. See below for an example:

Detail Model 2009-2013 Base Plan	Oct 2010	Nov 2010	Dec 2010	Year 2010	Year 2011	Year 2012	Year 2013
Chicago Electric Company							
Operating Revenue:							
Electric Revenue	0	0	0	5,014,463	5,142,379	5,274,255	5,379,973
Gas Revenue	0	0	0	0	0	0	0
Steam Revenue	0	0	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0	0	0
Total Operating Revenue	0	0	0	5,014,463	5,142,379	5,274,255	5,379,973
Operating Expenses:							
Fuel	0	0	0	2,219,119	2,285,693	2,354,264	2,424,892
Purchased Power	0	0	0	150,269	154,778	159,421	164,204
Cost of Gas Sold	0	0	0	0	0	0	0
Steam Costs	0	0	0	0	0	0	0
Operations and Maintenance	0	0	0	1,125,328	1,147,834	1,170,791	1,194,207
Depreciation, Decommissioning & Amortizations	0	0	0	496,946	502,753	518,907	536,943
Taxes Other Than Income Taxes	0	0	0	150,978	154,451	157,076	161,160
Total Operating Expenses	0	0	0	4,142,641	4,245,509	4,360,459	4,481,405
Operating Income	0	0	0	871,822	896,871	913,796	898,568

This may indicate that you are trying to run a Monthly column set for a year when the model is set to run Annual. See [Troubleshooting - Monthly/Annual](#) for more information.

Analytics

{ XE "Sequences" * MERGEFORMAT }{ XE "Cross Scenario Analysis" * MERGEFORMAT }{ XE "Graphing" * MERGEFORMAT }{ XE "Analytics" * MERGEFORMAT }Analytics Overview

UIPlanner contains several analytical tools, in order to provide comprehensive performance management capabilities tailored to the complexities of the utilities industries including the following:

[Custom Graphing and Analysis](#)

[Dashboard Analysis](#)

[Color-Coded Highlighting of Report Results](#)

[Cross Scenario Analysis, Scenario Comments, and Case Comparisons](#)

{ XE "DrillDown" * MERGEFORMAT }{ XE "Reports" * MERGEFORMAT }{ XE "Graphing" * MERGEFORMAT }{

XE "Analytics" * MERGEFORMAT }Custom Graphing and Analysis

The graphing engine in UIPlanner accomplishes the following goals

- **Instant results** – Graph data immediately upon completing a new model run.
- **Drill into graphs** – Drill into an item on the graph into reports and other graphs.
- **Manage detail** - Isolate specific items, while grouping others.
- **Compare across scenarios** – Compare trends or results from multiple scenarios.

Graphs Linked to Reports

You can link one or more graphs to any report and view these graphs from the **BROWSE REPORTS** screen, as shown in the example below.



Choose Type of Graph

Several types of graphs are available:

- **Bar Chart – Single Independent Variable:** The independent variable determines the values on the X axis.
- **Bar Chart – Two Independent Variables:** The X axis is sorted by the first independent variable, then the second.
- **Line Chart – Two Independent Variables:** One independent variable determines the items that become lines on the graph. The second independent variable determines the values on the X axis.
- **Pie Chart – Single Independent Variable:** The independent variable determines the values that are slices of the pie
- **Stacked Bar Chart – Two Independent Variables:** One independent variable determines the items that are stacked on the graph. The second independent variable determines the values on the X axis.

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- **Waterfall Chart – One Independent Variable:** The independent variable is typically selected to be lines on a report. These lines become the items on the X axis of the waterfall graph.

Graph Dimensions

UIPlanner's calculation results are by report/line, entity(s), time, and scenario as depicted below.



If we take an example of a two dimensional (i.e., two entity group) report (e.g. labor costs by department and resource), then there are five available dimensions:

1. Report Lines (e.g., FTEs, Average Pay, Total Paid, etc.)
2. Entity Group 1 (e.g., Department)
3. Entity Group 2 (e.g., Salaried Labor, Hourly Labor, etc.)
4. Scenario (e.g., Budget, 3+9 Re-Forecast, 6+6 Re-Forecast, etc.)
5. Time (e.g., monthly calculation for five years).

Based on the graph type chosen (from the options listed in the previous section), any one or two of the five dimensions listed above can become independent variables, with the remaining dimensions held constant as selected by the user.

Aggregating Dimensions

You can aggregate data within an entity group by setting a threshold amount (e.g., separately include all projects > \$2 million and lump other projects into "All Other"). Individual entities can be added or removed. A predefined [Edit Group](#) can also be used to aggregate entities.

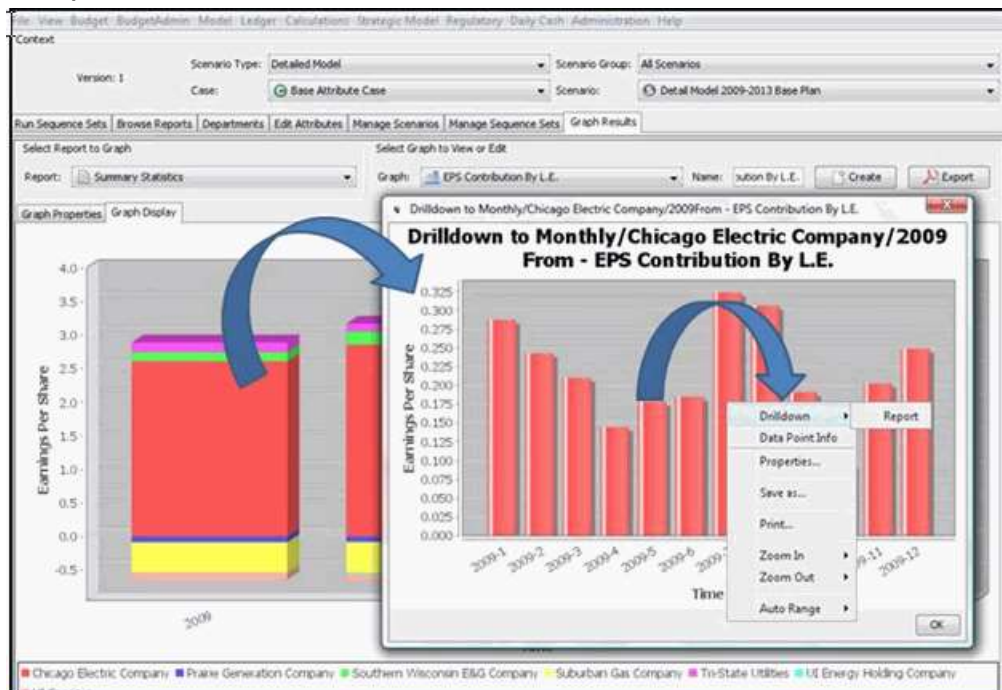
Time can be shown as months, quarters or years. For example, choosing 2009 through 2012 would result in four years. Choosing 2009-Q3 to 2010-Q1 would result in three quarterly numbers. 2009-01 through 2010-12 would result in twenty-four monthly numbers.

Drill into Graphs

If you right click on a data point on the graph (or on the *Data Point Info* box), you begin a drill down process. For example, assume you produced a pie chart of Capital Spending for 2011 by showing all projects over \$10 million and then aggregated the remainder into "All Other Projects". Now, assume you drilled into "All Other Projects" on the Pie Chart. The order in which you could elect to see result could be:

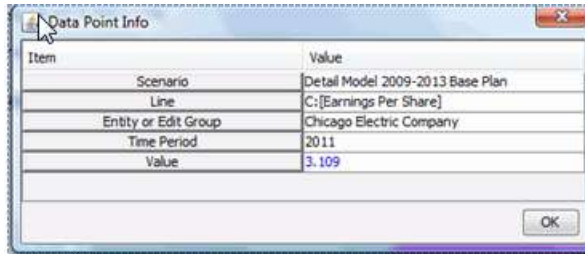
1. Drill into monthly detail, by viewing a bar chart by month.
2. Drill into detail of "All Other" for a month and see a bar chart for spending on each of the individual projects.
3. Drill into a specific project and see the underlying report.
4. Drill into the underlying report and see time data for that project.
5. If capital spending came from the budget system, drill into the underlying budget report.
6. Drill into the underlying budget system report by any code block dimension (activity, department, resource, etc.).

Below is an example of drilldown from one graph into another, and then into a report.



Additionally, if you right click on any data point on a graph, you see the *Data Point Info* dialog box, as shown in the example below. This shows all dimensions of the graph as well as the value for that data point.

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Item	Value
Scenario	Detail Model 2009-2013 Base Plan
Line	C:[Earnings Per Share]
Entity or Edit Group	Chicago Electric Company
Time Period	2011
Value	3.109

The ability to drill into other graphs and reports, and then drill into formulas and yet more detail in the reports is unique to UIPlanner. This was a primary reason for incorporating graphs into UIPlanner.

Other Graph Options

You can right click on a graph and print it. You can also export it into a .PDF file. You can also save it as an image file in order to copy it into a presentation, Excel file, etc.

Right clicking on the graph also gives you options to change aspects of the format of the graph prior to printing. Another right-click option lets you zoom into the graph.

Graph Results Screen

Graphs can also be viewed on their own stand-alone tab that allows more screen area to be devoted to the graph. To view this new tab your administrator needs to add a new menu item (named *Graph Results* by default) using the [Manage Menus](#) screen.

{ XE "Dashboard" * MERGEFORMAT }{ XE "Analytics" * MERGEFORMAT }Analysis Using Dashboards

Testing for Conditions

Below are a few examples of tests you can perform with UIPlanner.

- **Performance:** Did a planning entity meet its earnings objective?
- **Compliance:** Does the planned workforce balance to planned work?
- **Reasonableness:** Is more than x% of capital spending occurring after the expected in-service date?
- **Accuracy:** Does the opening balance sheet imported from the General Ledger balance?

By using conditional logic in a UIPlanner calculation you can compare items and determine a condition. For example, if you test compliance of actual spending versus budget you might want to determine whether a department is:

1. **On budget (green):** if actual spending \leq budget.

2. **Near budget (yellow)**: if actual spending is within both 2% and \$100,000 of budget.
3. **Over budget (red)**: if actual spending is either more 2% or \$100,000 over budget.

Using a Sequence as a Dashboard

There is a calculation editor function called **HIGHLIGHT REPORT**. When you call this function, you are prompted to select a color. When this function is executed during a model run, the report will be colored the specified color on the Run Sequences screen. The **HIGHLIGHT REPORT** function will likely be used with conditional logic, so that the report is only set the color in certain conditions. If the report iterates more than once, the report will only be colored if the function was executed in the final iteration. For example, you can color a report red if a test condition is not met and green if it is met.

An option in **PREFERENCE MANAGER** allows you to choose the "color after run" and "color while running" to appear while running calculations on the on the **RUN SEQUENCES** screen.

Below is an example that uses the coloring option. The last report, "Financials in Balance?" performed verification of the financials by cross checking key totals in various statements. The *Highlight Report* function was used within "If Then Else" logic to color the report green if everything was in balance. A similar method could have used to check against a performance metric.

Run	Report	Context
<input checked="" type="checkbox"/>	Receipts and Disbursements	Planning Entity
<input checked="" type="checkbox"/>	Cash Flow	Planning Entity
<input checked="" type="checkbox"/>	Summary (US - US)	Planning Entity
<input checked="" type="checkbox"/>	Delta Cash Opening Actuals	Planning Entity
<input checked="" type="checkbox"/>	Jurisdictional Summary	Jurisdiction
<input checked="" type="checkbox"/>	Summary Statistics	Legal Entity
<input checked="" type="checkbox"/>	Rates & Statistics	Planning Entity
<input checked="" type="checkbox"/>	Revenue Requirement Analysis	Jurisdiction
<input checked="" type="checkbox"/>	Ledger Balance Sheet	Planning Entity
<input checked="" type="checkbox"/>	Revenue Growth	Planning Entity
<input checked="" type="checkbox"/>	Change Reasonable?	Planning Entity
<input checked="" type="checkbox"/>	Financials in Balance?	Planning Entity

{ XE "Color-Coding" * MERGEFORMAT }{ XE "Reports" * MERGEFORMAT }{ XE "Analytics" * MERGEFORMAT }Report Color Coding

Highlighting Anomalies in Reports

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There is a calculation editor function called **HIGHLIGHT CELL** that allows you to specify a line item on a report to highlight and choose a color. On the **BROWSE REPORTS** screen, the cells for the specified line item will be highlighted for any context (i.e., period, entity, sub-entity) where this function was executed. For any contexts where this function was not executed those cells will not be affected. The function should be used in conditional logic, otherwise standard formatting would accomplish the objective. The cell highlighting will only reflect the last report iteration.

The example below shows a report using the **HIGHLIGHT CELL** function to analyze earnings. The conditional logic in the calculation tests earnings growth. Earnings growth over 5% per year is highlighted in green, 5-10% in yellow, and below 5% in red.

Detail Model 2009-2013 Base Plan				
	Year 2010	Year 2011	Year 2012	Year 2013
Year over Year % change in net income:				
Prairie Gen	-3.7%	7.1%	-3.3%	2.8%
Chicago Electric	9.8%	8.7%	8.4%	3.4%
Chicago Steam	7.9%	8.0%	7.9%	4.1%
Suburban Gas	2.7%	3.1%	3.1%	-1.3%
SWEGCO Common	-2.9%	2.3%	-0.8%	-2.6%
SWEGCO Electric	195.9%	158.7%	42.6%	14.8%
SWEGCO Gas	7.8%	7.5%	6.9%	-116.1%
Net Income				
Prairie Gen	-30,976	-30,116	-29,136	-29,962
Chicago Electric	1,088,561	1,183,359	1,282,362	1,326,394
Chicago Steam	-6,139	-6,632	-7,158	-7,453
Suburban Gas	-175,345	-180,795	-186,448	-184,110
SWEGCO Common	-71,788	-73,465	-72,908	-71,024
SWEGCO Electric	18,137	46,913	66,889	76,797
SWEGCO Gas	129,120	138,779	148,360	-23,816

Below is a more detailed example of using highlight color for performance analysis:

The screenshot shows a software interface with a detailed report. A red oval highlights a specific cell in the report, and a yellow callout box explains the highlighting logic. The callout box contains the following text:

Example Equip. Avail. Factor:
 GREEN: >= 85
 YELLOW: between 80 and 85
 RED: < 80

Another yellow callout box points to a specific cell in the report with the text: "Drill into details from KPI".

Pull Reporting

{ XE "Report" * MERGEFORMAT }{ XE "Pull Reporting" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Pull Reporting

Pull reporting is a feature in UIPlanner that allows for "pulling" report results data into an external Excel spreadsheet. UIPlanner has its own powerful reporting engine, but often users have specific spreadsheets that might incorporate elements from multiple reports in UIPlanner.

Some of the uses of Pull Reporting include:

- Analyst presentations
- Regulatory filings
- Financial reporting packages for upper management

Below is an example that illustrates Pull Reporting in action.

		2009	2010	2011	2012
Line	19168741 Net Plant	\$1,827,975	\$1,843,429	\$1,855,787	
Line	13703 Total Utility Rate Base	\$1,590,757	\$1,601,991	\$1,607,482	\$1,606,735
Line	13263 Jurisdictional Earnings				
Line	13329 Total Operating Revenue	\$1,030,510	\$1,061,324	\$1,093,060	\$1,125,748
Line	13434 Operating Income	\$ 394,313	\$ 405,805	\$ 433,109	\$ 442,200
	Key Ratios				
	Operating Income As % of Total Revenue	38.3%	38.2%	39.6%	39.3%
	Return on Rate Base	24.8%	25.3%	26.9%	27.5%

Pull reporting allows great flexibility in reporting and report formats as well as reliable links. It allows a much more flexible presentation. You can export not only UIPlanner report results, but also:

- Names of UIPlanner Objects - scenarios, entities, reports, lines, etc.
- Attributes of Objects - e.g., attributes of a project (plant account, in service date, etc.)

You can combine multiple reports, build complex graphs, etc. If the UIPlanner results change, just run the model and re-export the Pull report

data. When you open the spreadsheet, just hit refresh, and all data will be updated.

Some other features of **Pull Reporting**:

- You can send the spreadsheet to any other MS Excel user. Note: You need to save a copy without the UIGet() function in it – because the person you send it to may not have the add-in.
- You can drill from the spreadsheet back into the UIPlanner data. Just leave the model open.

Pull Reporting Configuration

In order to properly use Pull Reporting, you need to configure UIPlanner to

- 1) Export the data you need in the receiving spreadsheet (which reports, and whether you need months or annual numbers).
- 2) Send the desired data out to a location you can then link to from the receiving spreadsheet.

If multiple users are going to share pull reports, you should set up conventions to maintain control over the reports and the exported data. Some suggestions:

- 1) Decide where the exported data and the pull report spreadsheets are stored, e.g. in a specific folder on a shared server.
 - a. Note that the pull reporting destination is a user preference, but this can be overridden in [Browse Reports - Report Batch Options](#).
 - b. If you are going to use a shared network folder for the Pull Report data, you should enable the "Zip" option in **PLANNER PROPERTIES**. See below under configuration.
- 2) Establish a process for ensuring that the appropriate scenario is exported to refresh the pull reports (scenario ID is one of the parameters in UIGet())
 - a. You should have scenario as a global setting on the pull report itself. That makes it easy to change it to a different scenario. See [Tips for Building a Pull Report](#).
- 3) Once the pull reports are built, establish a process for ensuring that all the required reports/entities are exported each time you need to.
 - a. You might set up a special report batch containing the data to be exported.
 - b. All users should set their User Preferences related to Pull reports the same (text, months/years, etc.). See below.
- 4) If users are going to share pull reports, they should all have the UIPlanner.xla and UIPlannerMenu.xla in the same directory.

Note regarding exporting Wide Reports to Pull Reports: You cannot export to a Pull Report from the report group tagged as 'Wide'. You need to have a separate group NOT tagged as 'Wide'.

There are three places in UIPlanner where Pull Reporting settings are maintained.

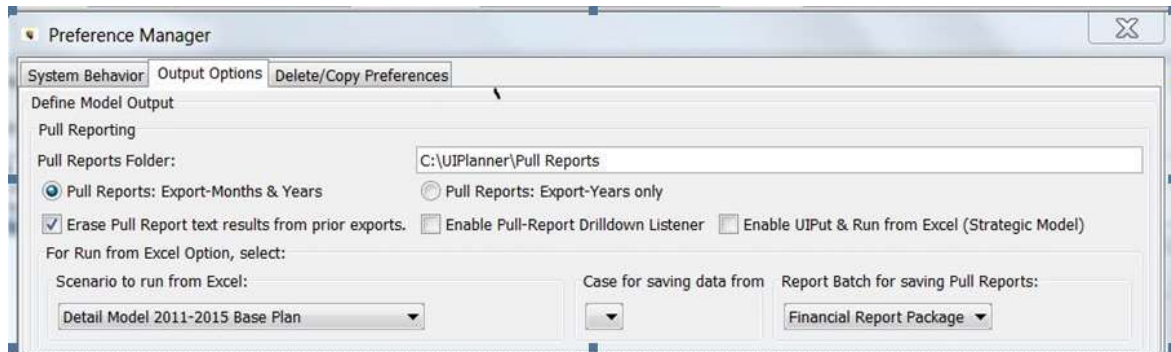
PREFERENCE MANAGER – set the destination folder for the data, and the year/month settings. These are user preferences, but the year/month settings should be the same for all users, as the pull reports may be expecting monthly data.

BROWSE REPORTS – select which reports to send out, and turn on the Export To Pull reports flag. In your personal batch, these are user preferences. In other report batches they are global settings. This is helpful, as some clients will set up a batch specifically for pull reports. Note that the Pull Report location can be set by batch.

PLANNER PROPERTIES: – there is an option that uses a zip file behind the scenes for exporting the data. The primary reason for this feature is speed. Most clients store pull report results on a network drive, so they are available to multiple users. We found that writing the many small pull reporting text files to a network can be quite slow as compared to a local drive (in one test, the network write took half an hour, while the local drive took only 30 seconds). The new process writes the data locally, and Zips it. The Zip file is then copied to the network and unzipped. This adds only seconds to the process. If you use the Zip option, the entire scenario is replaced. This avoids a potential issue where you could accidentally make incremental exports, e.g., export the income statement, then make some data changes, and later export the balance sheet. This option is enabled using a Planner Property; it is a global option, not a user preference. The zip and unzipping is handled by a new jar file (uizip.jar); it should be in the same folder as your planner.jar.

My Preferences

Below is an example of the relevant section of the **PREFERENCE MANAGER OUTPUT OPTIONS TAB:**



- Years/months – select whether to export just annual data or both years and months. If your destination spreadsheet needs only years, this reduces the amount of data.
- Pull Reporting Data location – set the folder where the pull report data will be exported to. Note: This can be overridden for all users in the report batch settings – see below under **BROWSE REPORTS**.
- Erase Pull Report text results from prior exports – if this is checked, each time a scenario is exported for pull reports it will erase all prior exports. Note: In Versions 4.52 and later, this is not needed, as prior exports are automatically deleted.

As indicated above, you should have all users set these the same. See [Output Options Tab – User Preferences](#) for more details

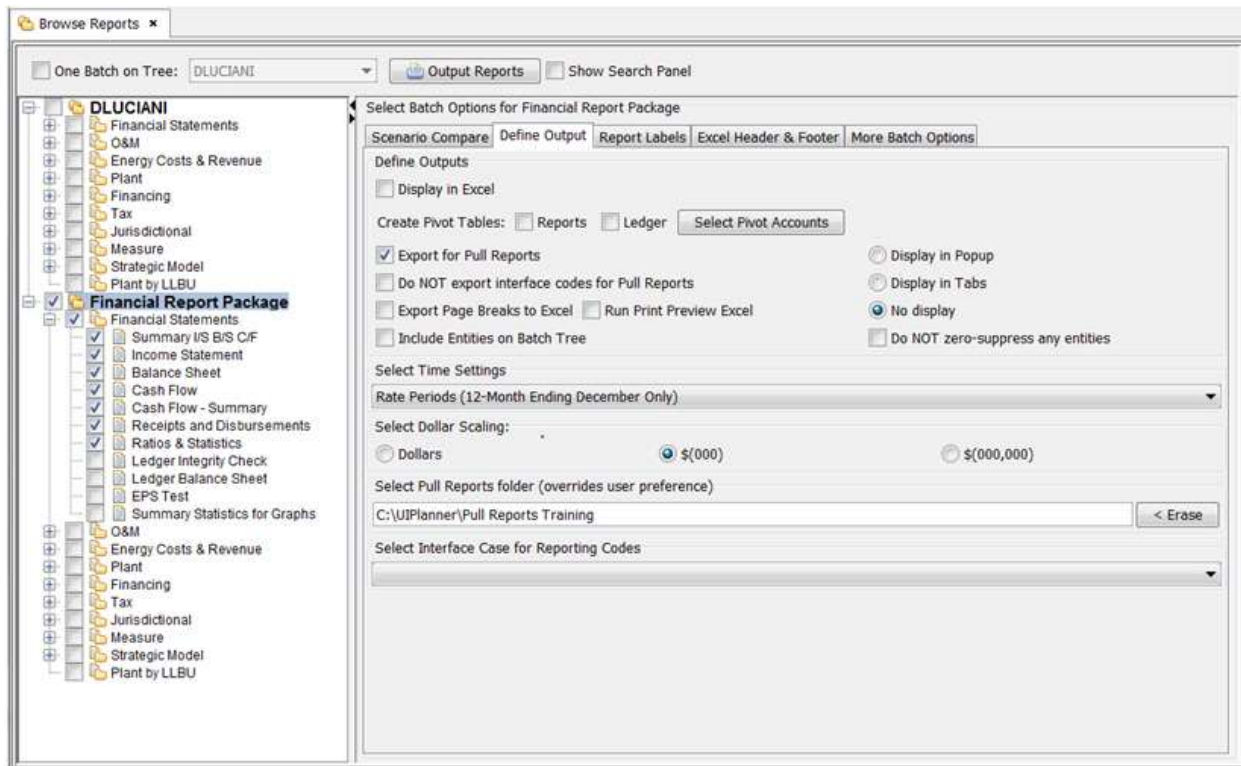
Note: The *Store in MS-Access MDB* option is no longer supported.

Browse Reports

The **BROWSE REPORTS** screen is where you decide which reports / entities to actually export to the pull reports. In order to make it easier to export pull report information consistently, setting up a specific batch for pull reports can save time.

- Export for Pull Reports – on the [DEFINE OUTPUT TAB](#), you need to check this box in order to export information to the Pull Reports folder.
- Pull Reports location – if desired, you can specify a destination location (overrides the user preference)
- Reports and Report Groups – remember that the Output Reports action only sends reports that have been checked at all levels.
- Entities – remember to check all of the entities you want for the various reports.

Below is an example of the relevant tab of **BROWSE REPORTS** showing the above settings.



Please see the following topics for more information on UIPlanner Pull Reporting Features:

[How Pull Reporting Works](#)

[Tips For Building a Pull Report](#)

[Use the UIGet\(\) Function to Link Pull Report Data](#)

[Refresh an Existing Pull Report](#)

[Pull Report - Copy Line](#)

[Drill Down Into UIPlanner from a Pull Report](#)

[Send a Pull Report to Another User](#)

What to Do If You Encounter Problems

Below are some common error messages and issues users might encounter when building or using Pull Reports.

UIGet Argument not Found

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If you are using the `UIGet()` function and it returns an error called **“UIGet Argument xxx not Found”**, this means that within the data, that value was not found. See below.

	A	B	C	D	E
1	Scenario	192	Detail Model 2009-2013 SWEGCO Rate Increase		
2	Jurisdiction	2194	SWEG - Elec Retail - Wisconsin		
3	Month	0			
4					
5				2009	2010
6					
7		13588	Rate Base		
8		19168741	Net Plant	\$ 1,809,463	\$1,827,975
9		13704	Total Utility Rate Base	UIGet argument 5: '13704' not Found.	UIGet argun
10					
11		13263	Jurisdictional Earnings		
12		13329	Total Operating Revenue	\$ 1,030,510	\$1,061,324
13		13434	Operating Income	\$ 394,313	\$ 405,805
14					

You may have mis-typed the Object ID, that Object ID was not actually exported or you have not browsed to the proper location. See [Troubleshooting - Pull Reporting - UIGet Argument Not Found](#) for more information.

UIGet Usage Error

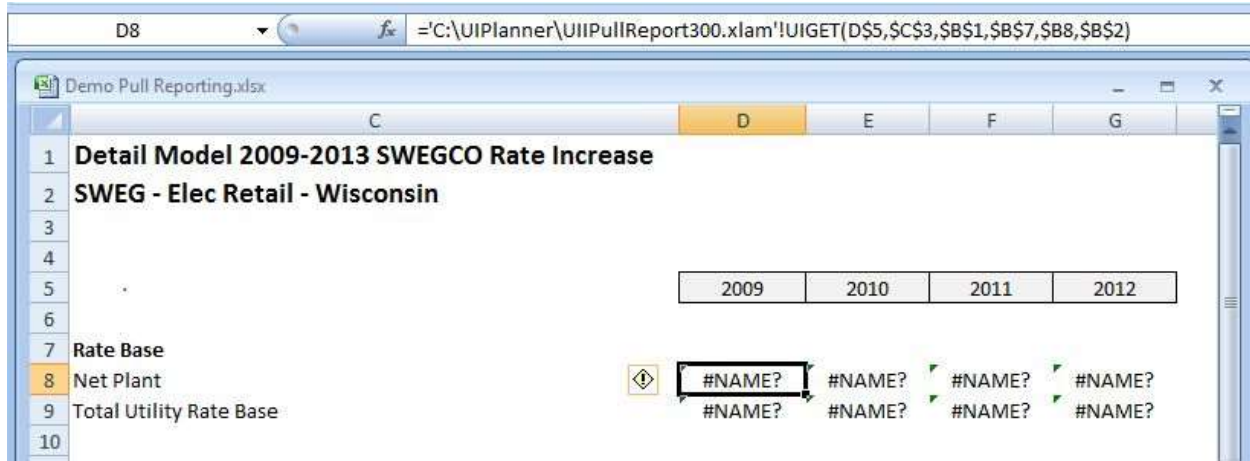
You are using the `UIGet()` function, and it returns an error listing the `UIGet()` Arguments. See below.

	A	B	C	D
1	Scenario	192	Detail Model 2009-2013 SWEGCO Rate Increase	
2	Jurisdiction	2194	SWEG - Elec Retail - Wisconsin	
3	Month	0		
4				
5				2009
6				
7		13588	Rate Base	
8		19168741	Net Plant	\$ 1,809,463
9		13703	Total Utility Rate Base	Usage: UIGet(YYYY, MM, Scenario, Report, Line, Entity, [SubEntity])
10				
11		13263	Jurisdictional Earnings	
12		13329	Total Operating Revenue	\$ 1,030,510
13		13434	Operating Income	\$ 394,313
14				

This may indicate that you have not provided the right number of arguments. See [Troubleshooting - Pull Reporting - UIGet Usage Error](#) for more information.

UIGet Functions with Prefixed Path

If you open the spreadsheet and the UIGet() functions all have some path have path prefixed to them. See below.



t

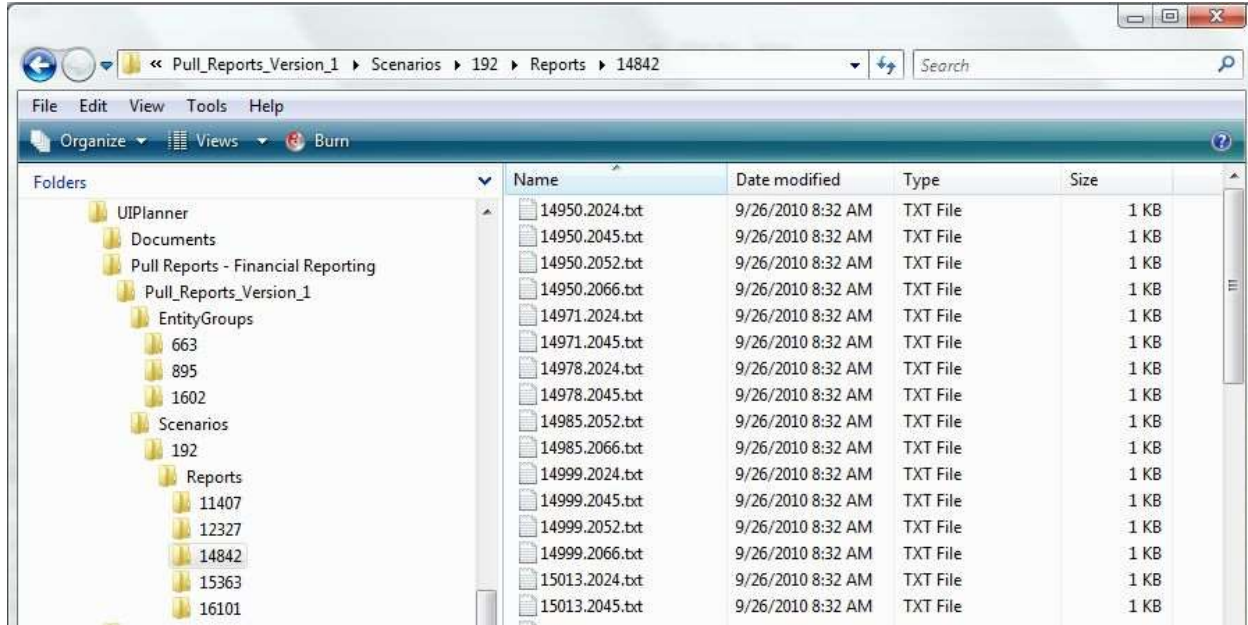
This may indicate that the person who sent you the spreadsheet had the UIPlanner.xls in a different folder. You need to delete the prefixed text. See [Troubleshooting - Pull Reporting - UIGet Functions With Prefixed Path](#) for more information.

{ XE "Pull Report Data into Excel" * MERGEFORMAT }How Pull Reporting Works

When you choose to export UIPlanner report results as pull report data, UIPlanner exports text files for each report/entity/line and puts them in a single folder with the scenario ID. In the example below,

Scenario 192 - Detail Model 2009-2013 Base Plan
 Report 14842 – Income Statement
 Line 14950 – Total Operating Revenue
 Entity 2024 – Chicago Electric

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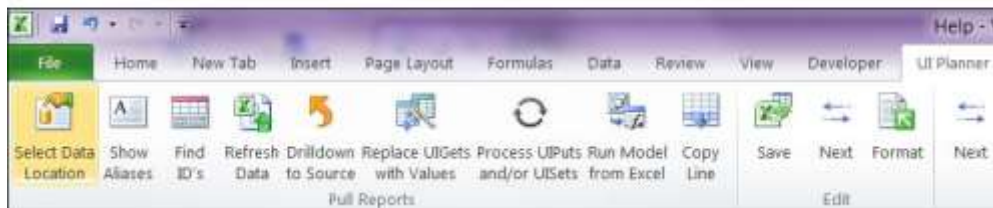
The underlying text file is shown below. Note the monthly amounts for 2009 and annual for the following years. These are the settings for that scenario.

The screenshot shows an Excel spreadsheet with columns A through L and rows 1 through 5. The data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L
1	2005	4,890,363	441,628	388,809	380,583	332,127	357,173	428,895	501,831	496,336	388,111	366,501
2	2010	5,014,463										
3	2011	5,142,379										
4	2012	5,274,255										
5	2013	5,379,973										

The UIPlanner.xla addin adds the UIPlanner toolbar/ribbon to MS Excel. This toolbar allows you to link the exported data location and to link specific cells in the spreadsheet to that data. For Excel 2007, you also need to register the UIPlannerMenu.xlam add-in. Below are the UIPlanner ribbon/toolbars for Excel 2007 and 2003:

UIPlanner Ribbon (Excel 2007).

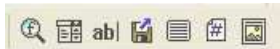


The items on the Excel 2007 ribbon are:

- 1) **Select Data Location** – Allows you to browse to link the spreadsheet to the exported data.
- 2) **Show Alias (optional)** – If you select this button, it will build a separate tab on the spreadsheet that lists all object IDs and their names. You can use this if you want to dynamically refresh names in the spreadsheet using VLookup().
- 3) **Find IDs** - Launches UIP mapping widget for finding IDs or Objects associated with given IDs. .
- 4) **Refresh Data**– Queries all the UIGet() functions and refreshes their values from the exported data.
- 5) **Drilldown to Source** – If you select a cell with UIGet() and click this button, it will allow you to drill back to the UIPlanner report. See [Drill Down Into UIPlanner From A Pull Report](#)
- 6) **Replace UIGETS With Values** – Allows you to save a copy of the spreadsheet with all UIGets converted to values. This will enable you to send the spreadsheet to another user who may not have the UIIPlanner add-in. See [Send a Pull report To Another User](#)
- 7) **Process UIPuts and/or UISets()** – UIPut allows you to take information from a spreadsheet and load it back into UIPlanner (used in the Strategic Model). UISet allows you to process an upload excel file that includes multiple cases or reports. See [USING UISET TO LOAD DATA](#) for more information.
- 8.) **Rerun Model from Excel** - After processing UIPuts.
9. **Copy Line** - UIPlanner has a function that allows you to copy a given line multiple times. Also, it builds the UIGets for you.

-

UIPlanner Toolbar (Excel 2003)



From the left, the buttons on the Excel 2003 toolbar are:

- 1) **Select Pull Reports Data Folder & Version**
- 2) **Find IDs**
- 3) **Read Names from Disc; Create Alias Sheet**
- 4) **Refresh Data – Re-read from Disc**
- 5) **Change UIGets to Values**
- 6) **Drill down into Source**
- 7) **Process UIPuts & Run Model and/or Process UIGets**

8.)rerun Model from Excel**9.) Copy Line**

When you build or refresh a pull report, you tell it where the source data is (using **SELECT DATA LOCATION** on the UIPlanner toolbar). Given that information, the UIGet function looks at that folder and the arguments in each UIGet() pull in the specific data. Remember that UIGet() function has a number of arguments:

UIGet(YYYY,MM,Scenario,Report,Line,Entity,[SubEntity]).

UIGet() uses these arguments to find the proper scenario/report/entity/line text file and pulls in the proper period.

There is a planner property that enables an updated extract/storage mechanism using zipped files. If this is enabled, when UIPlanner exports the data, it writes the data locally, zips it, and copies the zip to the network. Unzipping is done on the network in a separate process, so users can keep working.

Note: In prior versions of UIPlanner, you could export Pull Report data to an MS-Access MDB or store it directly in the Oracle/SQL Server database. These options are no longer supported in UIPlanner Version 4 and after.

{ XE "Report" * MERGEFORMAT }{ XE "Pull Reporting:Output Report Data" * MERGEFORMAT }{ XE "Pull Reporting" * MERGEFORMAT }{ XE "Output Report Data:Pull Reporting" * MERGEFORMAT }{ XE "Output Report Data" * MERGEFORMAT }
Tips for Building a Pull Report

To build a pull report, you can either build it from scratch or take an existing spreadsheet and convert the key cells to UIGet().

- If you are building it from scratch, select cells and populate them to UIGet() functions.
- If you are converting an existing spreadsheet, select the key cells you want, change them to UIGet() Summary tab for scenario and data ranges.

Whichever option you choose, you need to:

- 1) Export the required data (reports and entities) from UIPlanner.
- 2) Open the destination spreadsheet (either a new spreadsheet or an existing one).
- 3) Choose **SELECT DATA LOCATION** from the UIPlanner toolbar/ribbon, and browse to where you exported it.
- 4) Choose **REFRESH DATA** from the UIPlanner toolbar/ribbon.

Some tips for building a pull report:

- 1) Pasting the object id itself into a cell allows you to use UIGet() in more than one cell and just reference that one cell. This approach facilitates easy changes to key parameters values. Formulas use a combination of relative and absolute references (\$), so that formula cells can be copied to all lines in the body of the report without modification. Finally, print ranges can be set to omit ObjectIds for a clean looking report when printed. See below.

		2009	2010	2011	2012	
1	Scenario	192	Detail Model 2009-2013 SWEGCO Rate Increase			
2	Jurisdiction	2194	SWEG - Elec Retail - Wisconsin			
3	Month	0				
7	Report	13588	Rate Base			
8	Line	19168741	Net Plant			
9	Line	13703	Total Utility Rate Base			
11	Line	13263	Jurisdictional Earnings			
12	Line	13329	Total Operating Revenue			
13	Line	13434	Operating Income			
15	Key Ratios					
16	Operating Income As % of Total Revenue		38.3%	38.2%	39.6%	39.3%
17	Return on Rate Base		24.8%	25.3%	26.9%	27.5%

- 2) Have a separate worksheet for global assumptions, such as Scenario or Year. This will allow you to change these on only one place and have all UIGet() cells updated at once.
- 3) For tabs that have multiple lines and/or entities, use hidden rows/columns. This way you have the embedded UIGets() logically related to the data rows/columns, but not impact the look of the spreadsheet or the print ranges.
- 4) For pulling monthly data, use the month number (1-12); for annual amounts use 0.
- 5) Excel's VLOOKUP() function can also be used to retrieve descriptions from the ID Sorted portion of the *Alias* tab based on the ID Number.

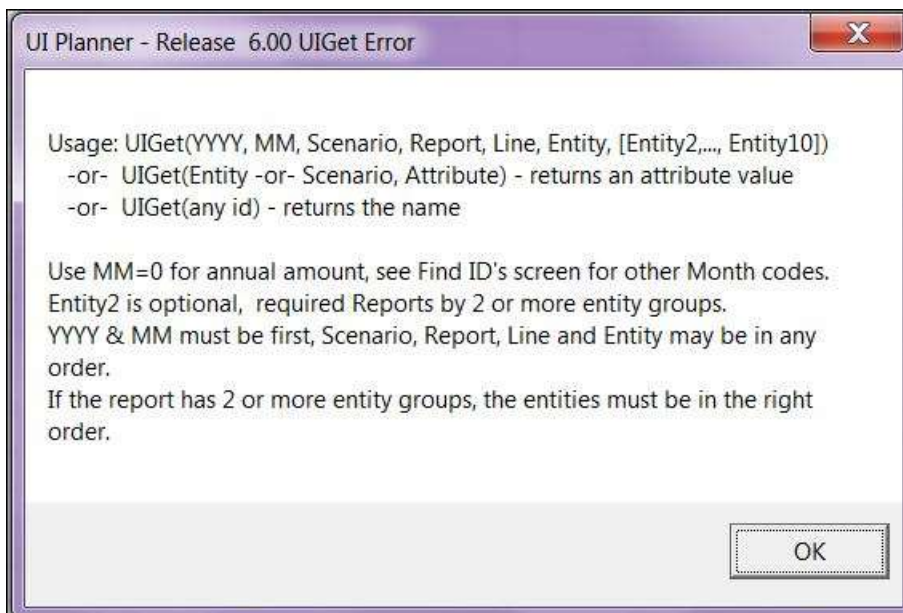
{ XE "uiget" * MERGEFORMAT }{ XE "Excel Add-in:Pull Reporting" * MERGEFORMAT }{ XE "Excel Add-in" * MERGEFORMAT }{ XE "Report" * MERGEFORMAT }{ XE "Pull Reporting:Excel Add-in" * MERGEFORMAT }{ XE "Pull Reporting" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }{ XE "Excel" * MERGEFORMAT }Use UIGet() to Link Pull Report Data

Pull Reporting uses a family of functions called UIGet() to pull results from UIPlanner (Model and Budget) into Excel spreadsheets. Depending upon the number of parameters you provide, you can pull in and display:

•□□□□□□

- *Amounts from UIPlanner reports* – the most common usage
- *Entity/Scenario names* – e.g., Bond names, or the scenario name
- *Entity/Scenario attribute values* – e.g. a bond's Issue Date, or the actuals date for a scenario

See below:



Below are examples of UIGet() used to pull different types of information.

UIGet() for Amounts – to display amounts, you need to provide all parameters (see above).

VLOOKUP =UIGET(D\$5,\$B\$3,\$B\$1,\$B\$7,\$B8,\$B\$2)

Demo Pull Reporting.xlsx

	A	B	C	D	E	F	G
1	Scenario	192	Detail Model 2009-2013 SWEGCO Rate Increase				
2	Jurisdiction	2194	SWEG - Elec Retail - Wisconsin				
3	Month	0					
4							
5				2009	2010	2011	2012
6							
7	Report	13588	Rate Base				
8	Line	19168741	Net Plant	=UIGET(D\$5,\$	\$1,827,975	\$1,843,429	\$1,855,787
9	Line	13703	Total Utility Rate Base	\$1,590,757	\$1,601,991	\$1,607,482	\$1,606,735
10							
11	Line	13263	Jurisdictional Earnings				
12	Line	13329	Total Operating Revenue	\$1,030,510	\$1,061,324	\$1,093,060	\$1,125,748
13	Line	13434	Operating Income	\$ 394,313	\$ 405,805	\$ 433,109	\$ 442,200
14							
15			Key Ratios				
16			Operating Income As % of Total Revenue	38.3%	38.2%	39.6%	39.3%
17			Return on Rate Base	24.8%	25.3%	26.9%	27.5%

The UIGet function can also pull data from multidimensional Budget reports. In the example below, the source report is by 3 dimensions. The Grouped columns have scenario Id, Report Id, Line Id, Ent 1 Id, Ent 2 Id, Ent 3 Id. Note that the UIGet formula is using \$ references such that copying the row will result in valid formulas. Theoretically, we can support up to 16 entity qualifiers.

Microsoft Excel - pull template example2.xls

Q7 =uiget(\$P\$2,\$Q\$4,\$A7,\$B7,\$C7,\$D7,\$E7,\$F7)

	H	I	J	K	L	M	N	O	P	Q
1										
2									2011	
3									Year	Jan
4									0	1
5										
6	Project	Resource	Department	In Service Date						
7	10010631: Replace Ash Basin Function	AD: AFUDC Debt	188: Jameson Generating Station	201112					21,852	100
8										

UIGet() for Names – UIGet with 1 argument will show the object name. This works for Entities, Lines, Reports, Scenarios, Attribute Definitions, and Entity Groups. See below – cell L7 returns the department name.

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	H	I	J	K	L
1					
2					
3					
4					
5					
6	Project		Resource		Department
7	10010631: Replace Ash Basin Function		AD: AFUDC Debt		188: Jameson Generating Station
8					
9					

UIGet() for Attributes – UIGet with 2 arguments (Entity ID, Attribute ID) shows an attribute value. See below. Cell N7 returns the In Service date of the project, using only these two parameters.

	H	I	J	K	L	M	N	O
1								
2								
3								
4								
5								
6	Project		Resource		Department		In Service Date	
7	10010631: Replace Ash Basin Function		AD: AFUDC Debt		188: Jameson Generating Station		201112	
8								
9								

In order for the UIGet() function to find a value, all arguments need to be populated. There are three ways to do this.

First, note that each of these methods only create a single UIGet() function with parameters – as numbers - from one cell in a report. In order to populate multiple cells and make the Pull Report more dynamic, more sophisticated methods are recommended.

Also, before starting to use `UIGet()`, you must already have exported the data from which you want to build the pull report, and you must have used **SELECT DATA LOCATION** from the Excel UIPlanner toolbar to identify the folder where the data resides. If you do not do both of these, `UIGet()` will return an error.

1) Find IDs

The UIPlanner toolbar in Excel includes a Mapping widget that makes populating the `UIGet()` functions both easy and intuitive.

Select **FIND IDS** from the UIPlanner Menu. This will bring up the mapping widget. It will list all of the items you exported to Pull Reports.

In most cases, you will want to find an Object ID for a give item, e.g., Report/Lines, Entity Groups/Entities, and Scenarios/Cases.

In some cases, however, you may have an Excel spreadsheet (or a given `UIGet()` function – See How UI Pull Reporting Works) populated with numerous Object IDs and you will want to find the given items associated with those Object IDs.

Case A Find Object ID

You use the selection buttons to choose what you want to populate. For example, select *Report*, highlight the one you want, and click *Line*. All lines will be listed. Then when you have found the item you want, it will list the Object ID, and you can copy it into the active cell on the spreadsheet. (You can put the name next to it, for future reference. If no name is included, see Case B where you can later find the object associated with that ID.)

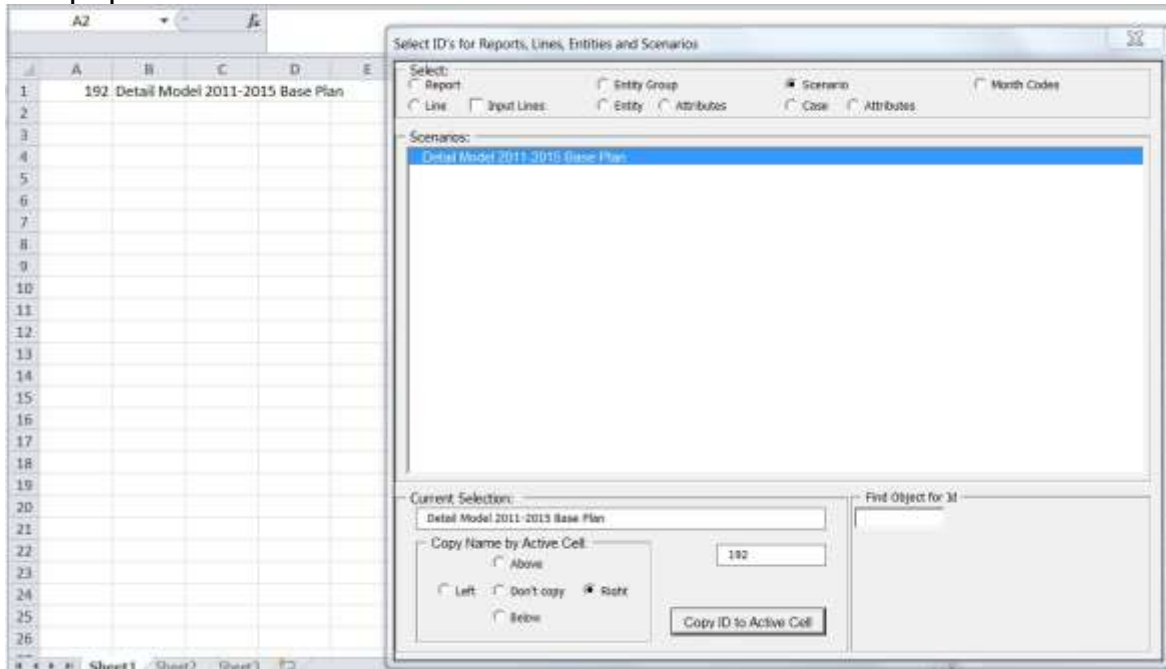
See the steps required in the example below:

1. Select the cell that you would like to populate with the ID, e.g., cell A1.
2. Select *Scenario*.
 - a. Choose Detail Model – 2011-2015 Base Plan.
 - b. Select an option under *Copy Name by Active Cell*, e.g., *Right*, then click **COPY ID TO ACTIVE CELL**.

Note: The Find ID's widget will copy the object ID into the active cell, along with the name where you wanted it. It will then move to the next cell, depending upon where you chose to copy the name (left/right - it will move down, above/below - it will move right). This makes it easy

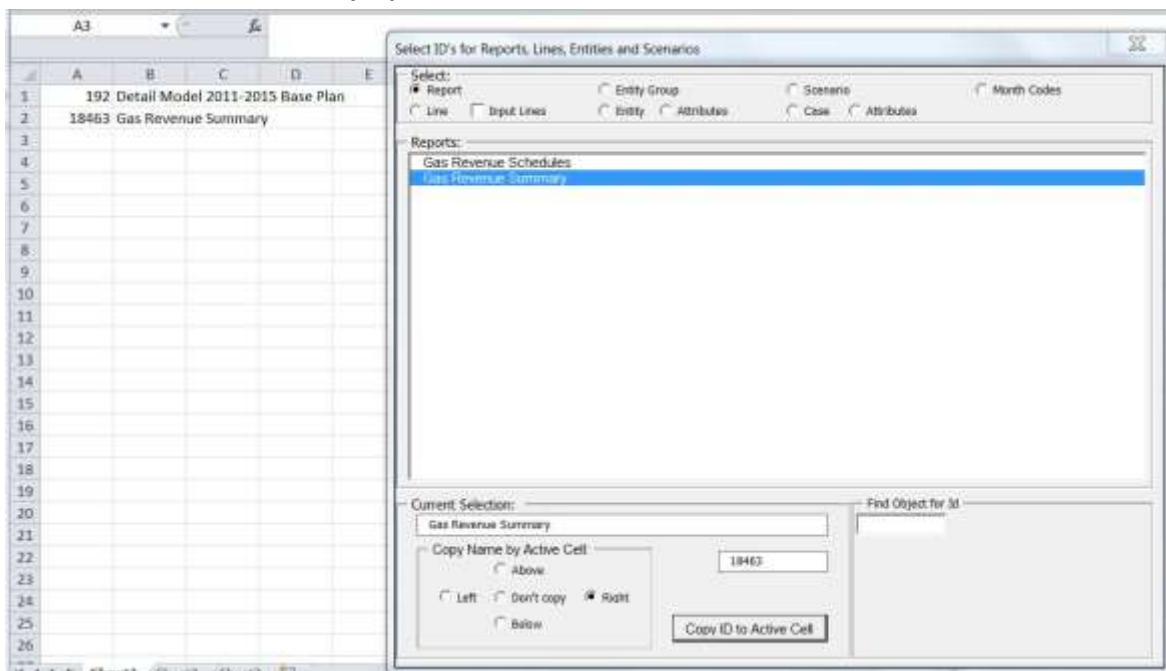
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to populate a series of lines/objects. In this example, Cells A1 and B1 are populated as shown below.

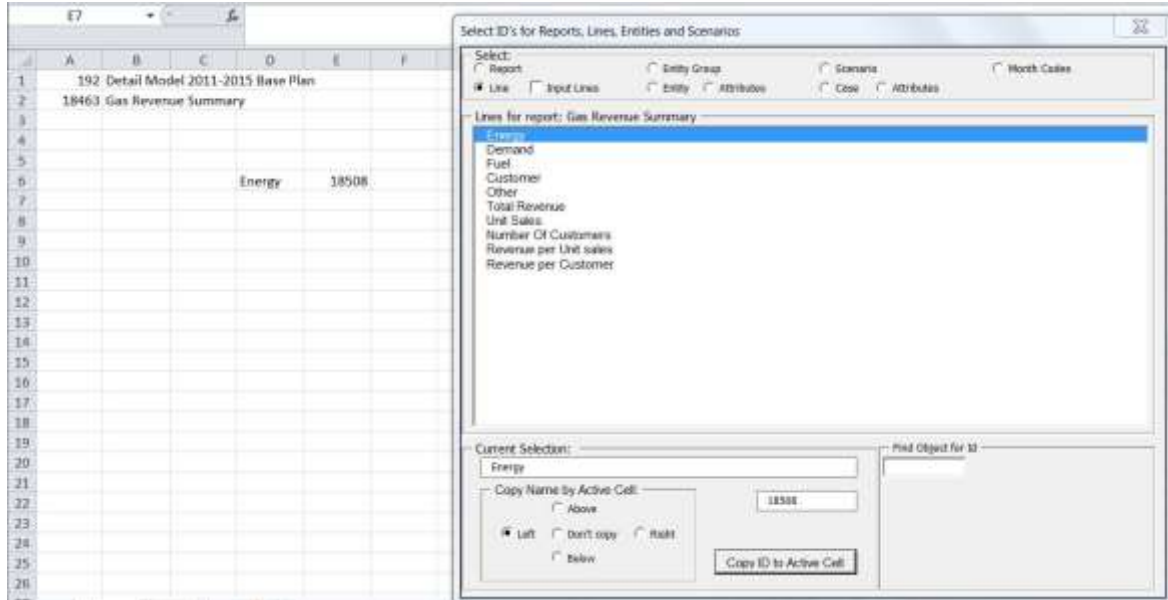


3. Select *Report*.

- Choose *Gas Revenue Summary*.
- Click **COPY ID TO ACTIVE CELL**.
- Cells A2 and B2 are populated as shown below.



4. Select Line when on cell E6.
 - a. Choose *Energy*.
 - b. Click **COPY ID TO ACTIVE CELL**
 - c. Cells **D6** and **E6** are populated as shown below.

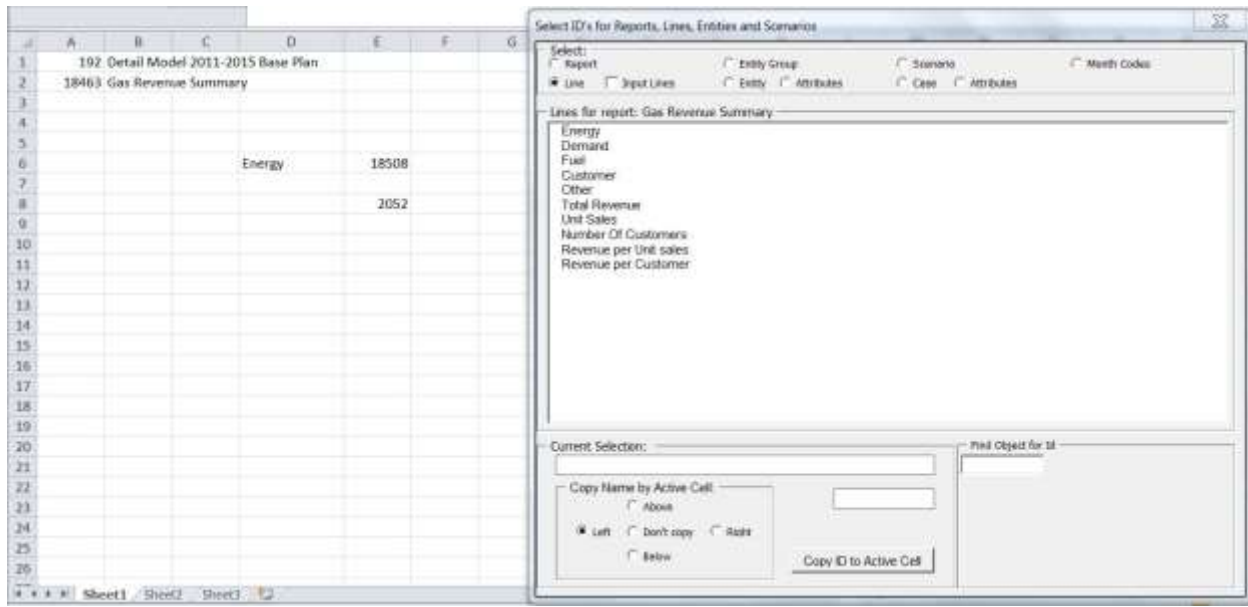


5. Continue to select lines, as needed.

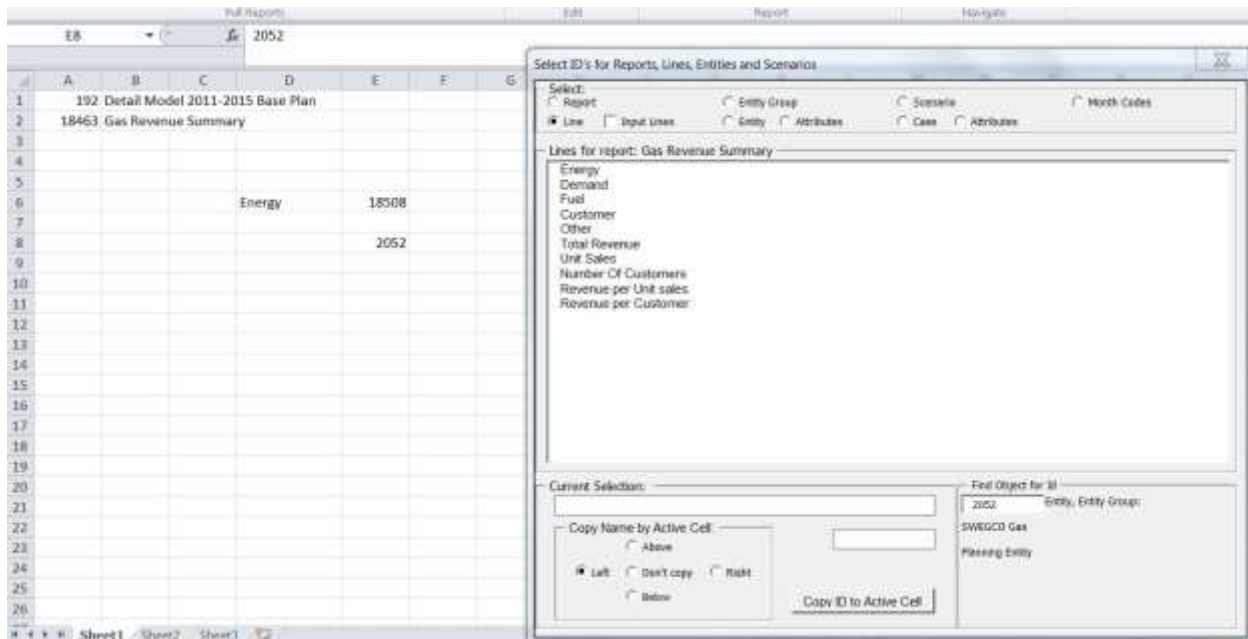
Case B – Find Object for ID

You also have the option of finding an item with a given Object ID, as discussed above. Assume that an Object ID appears on the sheet or in a UIGet() function, and it is unclear whether it is a report/line, entity/entity group, etc., or what the specific value represents. See example below, where 2052 appears in cell E8.

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1. Select the cell, e.g., E8. Note that the associated object for ID 2052, e.g., SWEGCO Gas planning entity, appears in the Find Object for ID region at the bottom right of the widget (see below – bottom right region of widget)
2. Or, enter a given ID into the space in this region, and the object will be likewise identified.



2) Copy Paste

From UIPlanner **BROWSE REPORTS** screen, you can copy the UIGet() parameters directly from report results on that screen. Note that you will not see the results until you actually export the pull report data and tie the spreadsheet to it.

- Go to any line in a report (that you have exported) on the **BROWSE REPORTS** screen.
- Highlight a cell, right click, and the small dialog box will open (see below).

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	Ma
Chicago Electric					
B:[]					
C:[Operating Revenue:]					
D:[Electric Revenue]	441,628	388,809	380,583	332,127	
E:[Gas Revenue]	0	0	0	0	
F:[Steam Revenue]	0	0	0	0	
G:[Affiliate Revenue]	0	0	0	0	
I:[Total Operating Revenue]	441,628	388,809	380,583	332,127	
J:[]					
K:[Operating Expenses:]					
L:[Fuel]	17,200	17,200	17,200	17,984	
M:[Purchased Power]	9,131	8,341	8,261	10,710	
N:[Cost of Gas Sold]	0	0	0	0	
O:[Other Costs]	0	0	0	0	

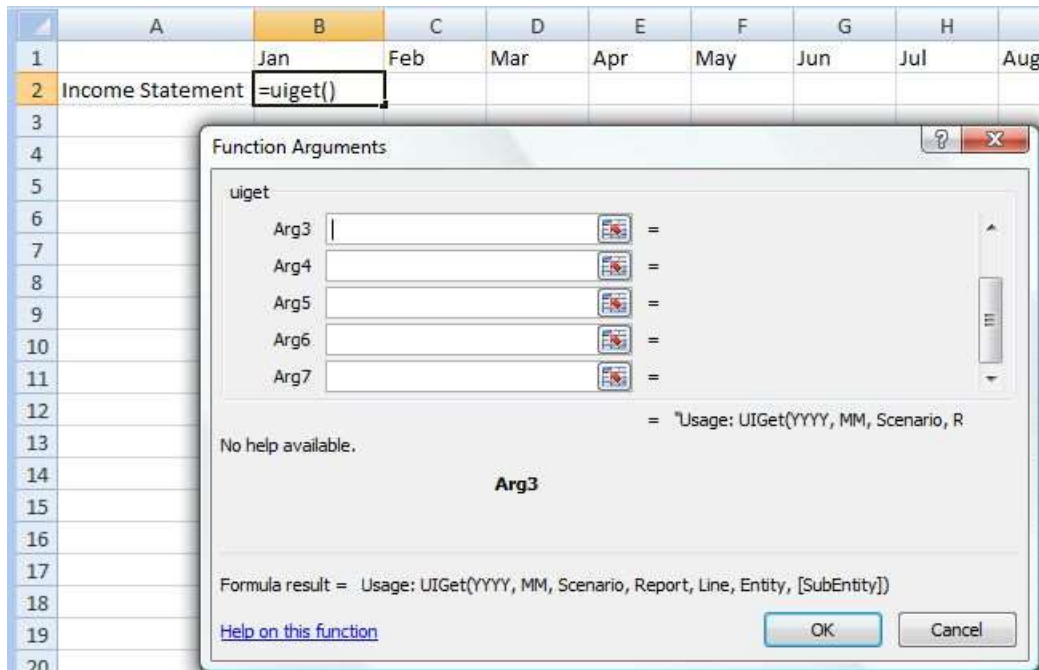
- If you then go to the Excel spreadsheet and click *Paste*, it will create the uiget() function and populate all of the parameters (as numbers).

B2		=uiget(2009,1,192,14842,14950,2024)					
	A	B	C	D	E	F	G
1		Jan	Feb	Mar	Apr	May	Jun
2	Income Statement	441,628					
3							

3) Type UIGet() Directly

Because UIGet() is a working function in Excel, you can always just type the function and manually enter the parameters, as you can with any Excel function.

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Refresh an Existing Pull Report

If you have already built a Pull Report and want to update the data in that report to what is currently shown in UIPlanner, follow these steps:

- 1) Run UIPlanner for the proper scenario.
 - 2) Verify that *Export to Pull Reports* is selected for the report batch. (See **BROWSE REPORTS**).
 - 3) Verify that all the relevant reports and entities are selected.
 - 4) Click **OUTPUT REPORTS**. Note that the dialog window should indicate that the data is being exported to Pull Reports.
 - 5) Open the Pull Report.
 - 6) Select **Refresh Data** from the UIPlanner ribbon/toolbar.
- This will update the pull report to the current model results.

The screenshot shows an Excel spreadsheet with a pull report. The report data is as follows:

	2009	2010	2011	2012
13588 Rate Base				
19168741 Net Plant	\$1,809,463	\$1,827,975	\$1,846,487	\$1,865,000
13703 Total Utility Rate Base	\$1,590,757	\$1,601,991	\$1,613,225	\$1,624,459
23263 Jurisdictional Earnings				
13329 Total Operating Revenue	\$1,030,310	\$1,061,324	\$1,092,338	\$1,123,352
13434 Operating Income	\$ 394,111	\$ 405,805	\$ 417,500	\$ 429,194
Key Ratios				
Operating Income As % of Total Revenue	38.3%	38.2%	38.1%	38.0%
Return on Rate Base	24.8%	25.3%	25.8%	26.3%

The 'Pull report initialization progress' dialog box shows the following steps:

- 10:52:08 Starting to read names
- 10:52:09 Starting sort
- 10:52:09 Finished sort by Object ID
- 10:52:09 Finished sort by Model Order
- 10:52:09 Finished sort by Interface Code
- 10:52:09 Finished Sort

Note: If you have changed scenarios and want to link the Pull Report to the current scenario, you can just change the Scenario ID number in the pull report. If you have put that ID in only one cell and used hard cell references in all UIGets(), you only need to change it in one place. See cell B1 above.

{ XE "Pull Reporting" * MERGEFORMAT }Drill Down Into UIPlanner From a Pull Report

You can drill from a Pull Report back into UIPlanner using the UIGet() function. If you click the **DRILLDOWN TO SOURCE** button on the Pull-Reporting ribbon/toolbar when you have a 'UIGet' formula cell selected in your worksheet, a pop-up dialog will appear with the associated UIPlanner report, line, entity(s), and time period from the UIGet function selected. The drilldown panel on the report will be visible, and you can then use the drilldown panel to drill through other reports in UIPlanner. See below:

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The screenshot displays the UIPlanner software interface. On the left, a spreadsheet titled "Detail Model 2009-2013 SWEGCO Rate Increase" is visible, showing financial data for the years 2009, 2010, 2011, and 2012. On the right, a dialog box titled "Rate Base [Detail Model 2009-2013 Base Plan]" is open, showing a hierarchical breakdown of the rate base components for the year 2009.

	2009	2010	2011	2012
Rate Base				
Net Plant	\$1,809,473	\$1,828,005	\$1,843,459	\$1,855,818
Total Utility Rate Base	\$1,996,786	\$1,862,022	\$1,607,512	\$1,606,767
Jurisdictional Earnings				
Total Operating Revenue	\$1,040,310	\$1,061,324	\$1,090,000	\$1,125,788
Operating Income	\$ -394,313	\$ -405,805	\$ -433,108	\$ -462,200
Key Ratios				
Operating Income As % of Total Revenue	38.2%	38.2%	33.6%	39.3%
Return on Rate Base	24.8%	23.3%	26.9%	27.5%

Item	Year 2009
Net Plant	1,809,473
Plant in Service	1,181,126
Less Depreciation Reserve	-371,653
Net Plant	809,473
Materials and supplies	2,352
Fuel Inventory	26,871
Working Capital Allowance	0
Total Working Capital Items	30,123
Less: Plant-Related Deferred Income	-248,320
Total Deductions	-248,320
Total Utility Rate Base	1,996,786
Cost of Power Excluding IPOC	0
Other Jurisdictional Adjustments	0
Total Utility Rate Base Plus CWP & AF	1,996,786

Some notes:

- The dialog will only appear if the UIPlanner Model is open to the proper scenario and the report in question has been run in RUN SEQUENCES.
- You need check the **ENABLE PULL-REPORT DRILLDOWN LISTENER** box on the *PREFERENCE MANAGER* that alerts UIPlanner to look for this request.
- The request to UIPlanner to float a drill-down dialog above Excel is passed via text file. The file handoff occurs in a sub-directory of the pull report folder. Users need to have the pull report folder on their local drive.

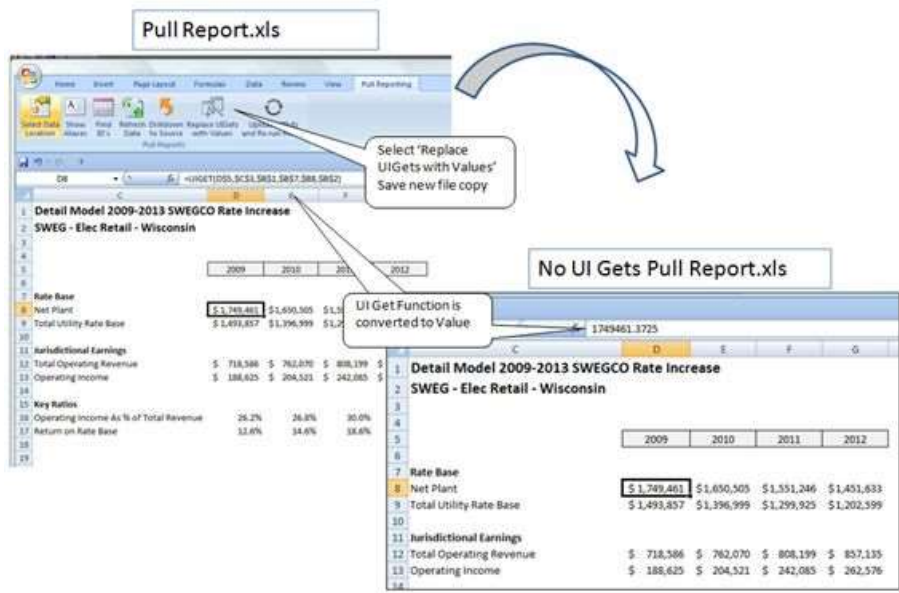
Send a Pull Report to Another User

To enable users to share Pull Reports with people who do not have UIPlanner (and thus may not have the required add-in), you have the ability to save the file and convert all UIGet() functions to values. Note: If a user without the UIPlanner.xla add-in opens a Pull Report, they will get formula errors wherever UIGet was used.

To save a pull report in the appropriate format, click on the **REPLACE UIGETS WITH VALUES** in the UIPlanner toolbar (2003) or ribbon (2007+). You will be prompted to execute a Save-As. Enter a new file name and click **OK**. This will create a new workbook in which all of the UIGet functions will be replaced with values. All other Excel functions will remain as formulas. If you click **CANCEL** and do not execute the Save As, the

operation will be canceled. Note that this process enforces a Save As, to prevent you accidentally overwriting the base spreadsheet that has all the UIGets() with the one with them converted to values.

See the before and after examples below. Note that the cell with the UIGet function was changed to a value. All other formulas remain unchanged.

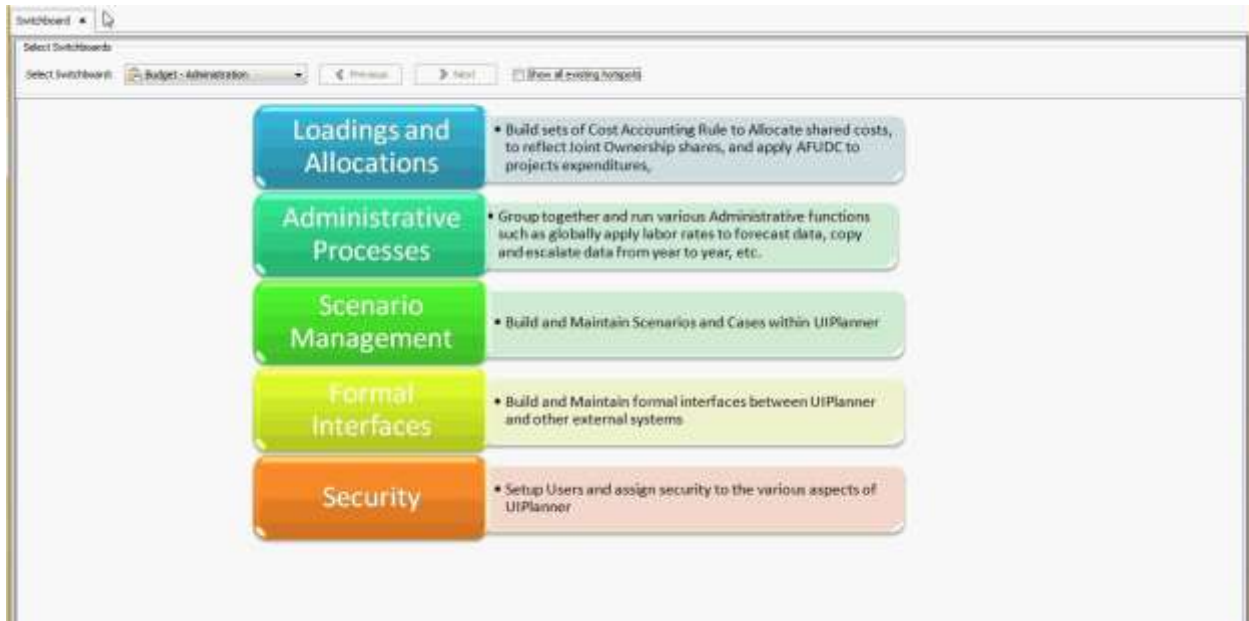


You can now send this spreadsheet to other users. They do not need to have the UIPlanner.xla add-in installed on their machine.

COLLABORATE

Switchboards

Using Switchboards



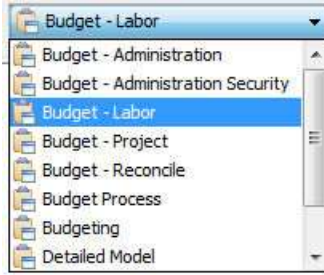
UIPlanner's switchboard functionality allows the user to map processes and features to a diagram created in Power Point or Visio. Hot-spotted areas on a switchboard can open menu items, run reports, open files, and open other switchboards.

You can create diagrams in UIPlanner for:

- Process maps
- Consolidation hierarchy
- Functional breakdowns
- Other purposes, as needed.

Use the drop-down list at the top of the screen to select from a list of available switchboards.

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To locate all hot-spots, place a check in the box marked *Show all existing hotspots*.

To create a new switchboard, please see [Designing a Switchboard](#).

List Of Tasks Or Operations That Are Performed With This Screen:

Linking a Diagram to a Switchboard

The first step in creating a Switchboard is to construct an image. You can create image (.jpg/.png) files in PowerPoint and Visio. You can also use other image files such as company logos, pictures of power plants, etc. The next step is to use the **CREATE** button on the **DESIGN SWITCHBOARD** screen to add a new Switchboard. Click **ASSIGN IMAGE FILE** to attach the file to the new Switchboard.

Linking Switchboards to UIPlanner Actions

As shown below, you can link hotspots to various types of objects discussed in the section on the **DESIGN SWITCHBOARD** screen.

Creating a Hierarchy of Switchboards

You can create a hierarchy of switchboards by linking switchboards together and using the forward/back buttons, as detailed in the section on the **DESIGN SWITCHBOARD** screen. Then you could link the budget hotspot to a budget switchboard.

Launch Documents from UIPlanner

You can also link switchboard hotspots to menu items that can launch files such as Word or Excel documents, described in the section on the **DESIGN SWITCHBOARD** screen

{ XE "Designing a Switchboard" * MERGEFORMAT }{ XE "Switchboard" * MERGEFORMAT }Designing a Switchboard



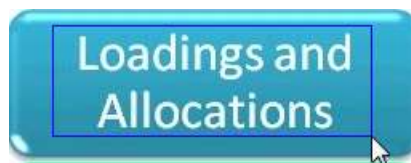
List of Tasks Or Tasks That Are Performed With This Screen:

Creating a New Switchboard and Linking a Diagram/Image to the New Switchboard

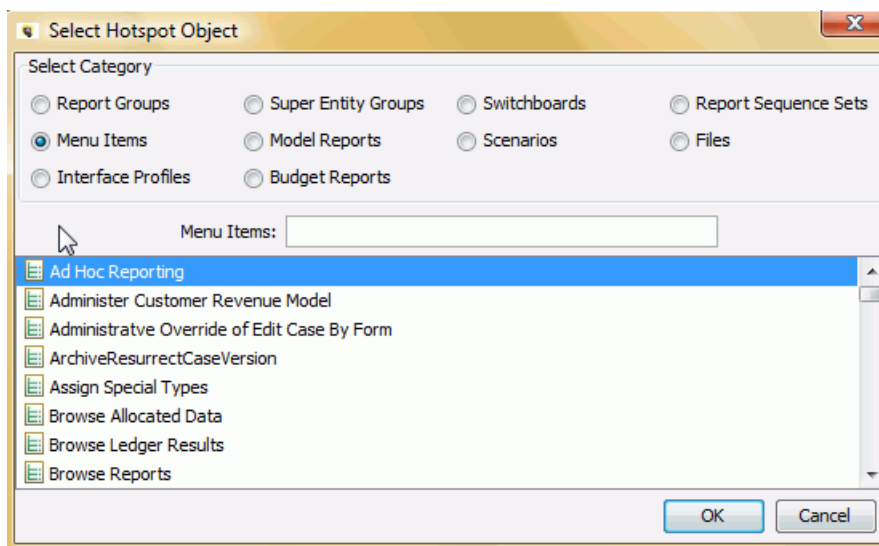
You can create image (.jpg/.png) files in PowerPoint and Visio. You can also use other image files such as company logos, pictures of power plants, etc. Click **Create** in the **DESIGN SWITCHBOARD** screen to create and name your new switchboard. Next, select the switchboard from the drop-down list. Click **ASSIGN IMAGE FILE** to assign a file to the new switchboard.

Assigning Switchboard Hotspots to UIPlanner Actions

Create a hotspot by clicking the mouse in the top left corner of the area on the graphic you wish to use as a hotspot. Next, hold the mouse button down and drag down and to the right until the desired hotspot area is outlined.



Click **ASSIGN OBJECT** which will open the screen below:



You can link hotspots to various types of objects, discussed below.

Report Groups: Display action buttons for all reports in the specified report group.

Super Entity Groups: Display action buttons for all reports that process over the entity groups assigned to the super entity group.

Switchboards: Create hierarchies of switchboards.

Report Sequence Sets: View and run a sequence set below the Switchboard.

Menu Items: Trigger any item in the Menu Structure of UIPlanner.

Model Reports: Open a Model report from the **BROWSE REPORTS** screen.

Budget Reports: Run a Budget report.

Scenarios: Select a scenario to change to when the hotspot is launched.

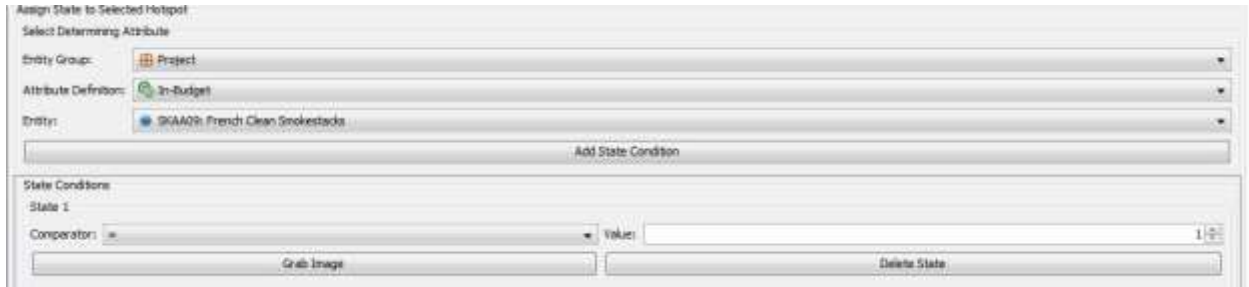
Files: Open external files. All files stored in the UIP_Files can be selected. Use the [Work Plan Management](#) screen to add files to the available selections.

Assigning Arguments

Assigning an argument to an existing hotspot allows you to launch more complex actions. For example, a menu-item may take an argument to define the context of the launched screen.

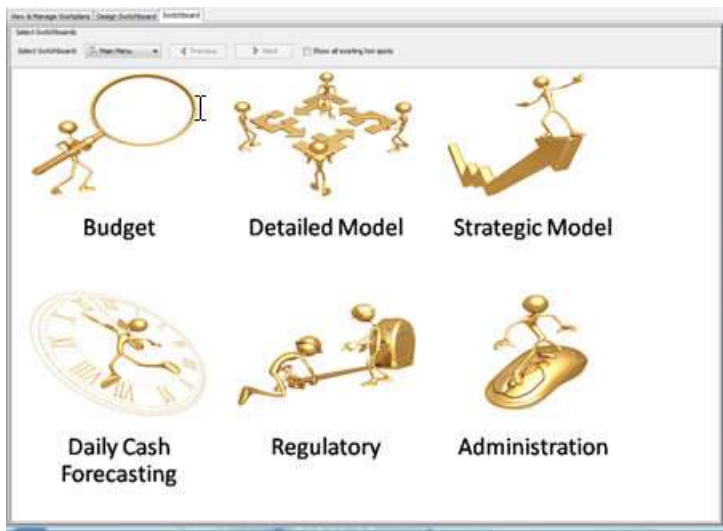
Assigning States

Click on the *Assign States* checkbox to allow the hotspot to render differently based on system state of the current scenario lines.



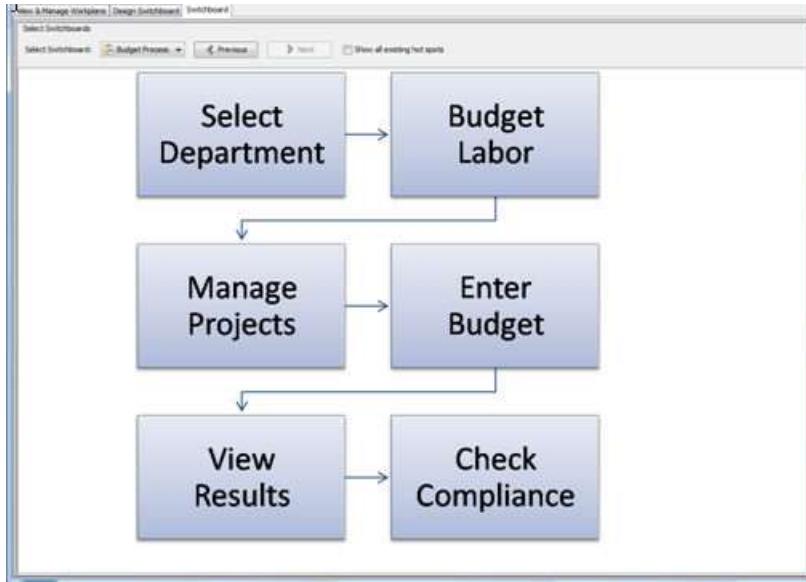
Creating a Hierarchy of Switchboards

You can create a hierarchy of Switchboards by linking Switchboards together and using the forward/back buttons. For example, you could create a main menu such as the one below.



Then you could link the Budget hotspot to a Budget switchboard such as the one shown below.

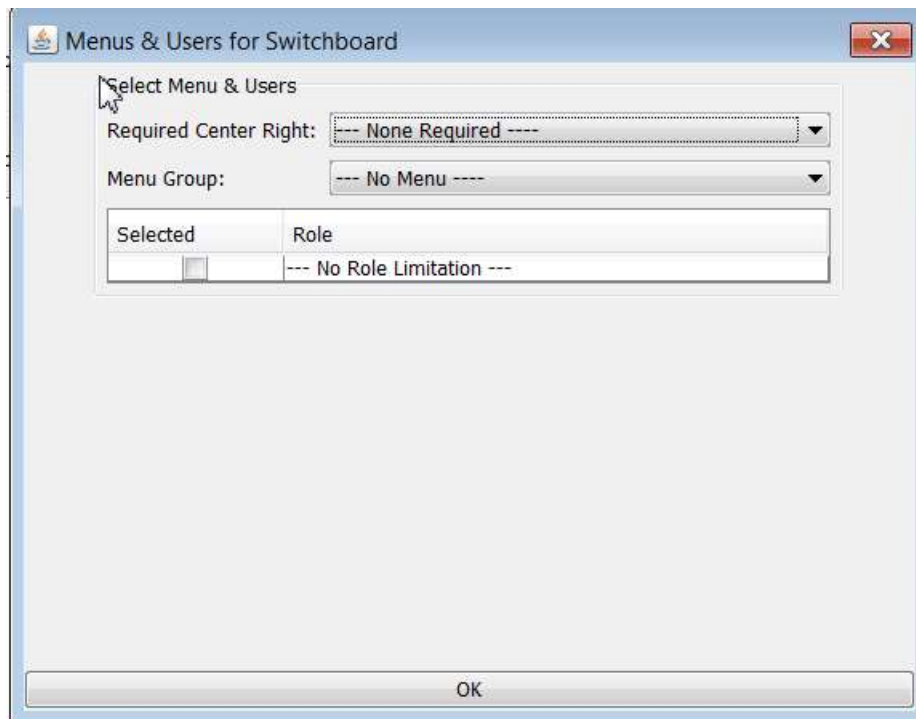
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Launch Documents from UIPlanner

You can also link switchboard hotspots to menu items (found under the **Help** menu) that can launch files such as Word or Excel documents.

Switchboard Security



Workplans

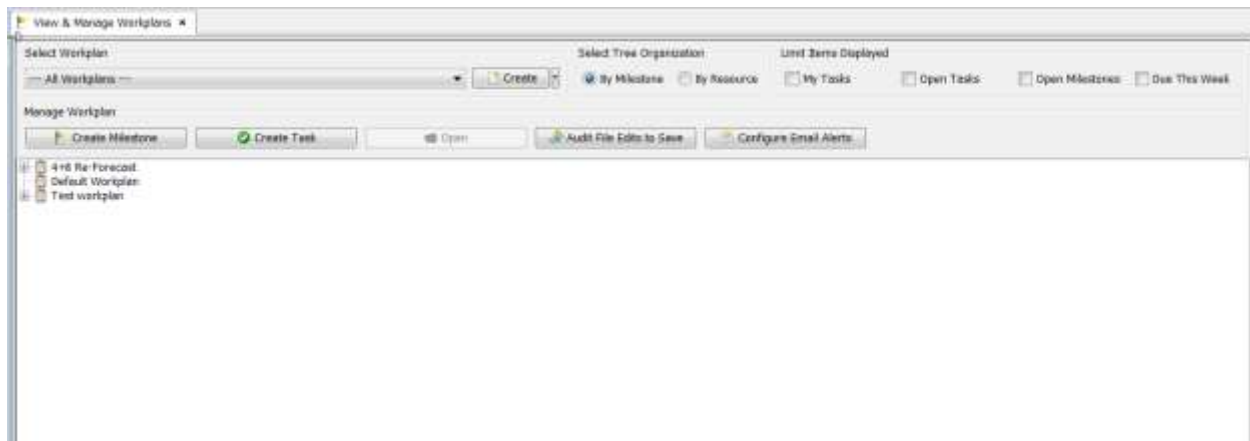
{ XE "Work Plans" * MERGEFORMAT }View and Manage Work Plans Screen

The complexity of work involved in the following projects make them candidates for formally tracking in a work plan:

- **Software Implementation:** An implementation of UIPlanner involves a complex set of tasks.
- **Forecast Assembly:** Preparing a budget or a financial plan usually has a schedule, assignments, due dates, etc.
- **Analysis Process:** Analyzing a new set of monthly or quarterly results may involve several resources and interim steps.
- **Rate Case Preparation:** Preparing for rate cases involves assembly of actual (and, sometimes forward-looking) data.

UIPlanner includes the functionality for managing work plans.

To illustrate the capabilities of the **VIEW AND MANAGE WORKPLANS** screen, below is an example of a work plan for a mid-year reforecast. Note that milestones and tasks are indicated as open or completed.



You can view the work plan tree either by milestone (as depicted above) or by resource. You can also filter the tree by task or by due date.

Milestones

Within the overall plan you can set up any number of milestones and assign each one a due date. The milestones are displayed by due date. You also assign each milestone a Delivery Owner (the responsible resource.) The resource list is drawn from UIPlanner's internal user list.

Tasks

Under each milestone you can set up any number of tasks and assign resources and estimated time requirements. You can assign multiple resources to a task.

Link to UIPlanner Objects

Any task can be linked to a file (e.g., an assumptions document), a report in UIPlanner (e.g. the final income statement) or to a switchboard object (e.g., a detailed process map). The Task Manager also facilitates controls over files containing items such as design documents, summary spreadsheets, etc.

Launch Documents

Launching Documents

This feature in UIPlanner allows you to designate documents that can be opened from the UIPlanner menu. These documents can contain information such as Budget Guidelines, Executive Overviews, or Best Practices.

Up to five documents can be specified by your system administrator. They will appear under the **Help** menu item. Select the desired document to open it.

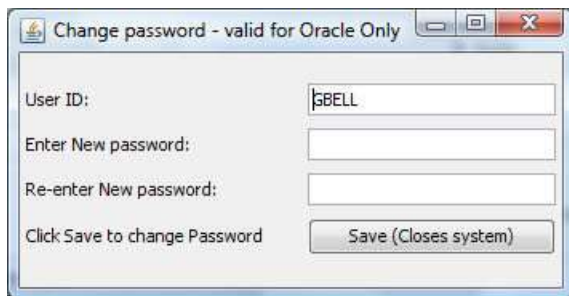
ADMINISTRATION

{ XE "Security" * MERGEFORMAT }{ XE "Users" * MERGEFORMAT }Show Current Users Screen

The menu item *Show Current Users* allows you to view users currently logged in. As system administrator, you can remotely force these users to exit the system (e.g., if you were planning to upgrade the UIPlanner executable but were not able to as a result of its being in use). If you choose to end these users' sessions, they will see a message on their screen that says "The administrator has forced your UIPlanner session to end." Note: This feature is available only in Oracle/SQL Server; it is not supported in MS-Access.

{ XE "Change Database Password" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Change Database Password Screen

This screen will change the password for various administrator functions in UIPlanner. Note that it is only available in Oracle/SQL Server; it is not supported in MS-Access.



UIPlanner Security

{ XE "UIPlanner Security Overview" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }UIPlanner Security - Concept

Concept

Effective security in any financial planning and budgeting software is critical. Among the considerations are:

- **Confidentiality** – The data and reports produced in the financial planning process are by definition confidential information. You absolutely need to limit access to the financial model to the approved users. However, even within the user group you may need to have additional security, such as security over scenarios that should be

restricted to only a select few users. Budget data should likewise be limited to the approved users.

- **Complexity** - By its very nature, the financial planning process is complex because of the need for multiple scenarios with multiple variations of similar data as well as the number of users who provide specific inputs. You can use the security framework to control access to the various scenarios and cases.
- **Data Integrity** - The administrators of UIPlanner need to be able to maintain control over the underlying reports and processing logic (report logic, report sequencing, tolerances and iterations).
- **Process Flow** - Because of the dynamic nature of the planning process, you need to assure that any changes are made within the overall context of your planning organization and process. For this purpose, control of data is critical from the standpoint of who is putting in information at what point in time, and what specifically are they allowed to contribute to the process. For example, you may want to limit access to tax data, or control who can upload actuals and roll the model month over.

The overall goals of security are:

- To control who inputs and has access to data
- To control who creates and modifies UIPlanner entities and attributes
- To control the data to which they have specific rights, and
- To understand the relationship of the data to any given point in time within the planning process.

The key to effective security management is setting up a security framework that is

- Simple and easy to manage
- Secures the data and structures in UIPlanner the way you want

Note that UIPlanner's Budget Module has an additional security layer which is described in a separate section. Budget users are given access to UIPlanner through the general security layer, but are tagged as "Budget Users". The additional budget security then comes into play.

This section will cover overall application security.

Security Layers

Below are the layers in UIPlanner's security structure.

- **Client Network security** - The initial layer resides with the client. UIPlanner users first need to be authenticated on the network.
- **Database login (optional)** - In most instances, UIPlanner itself logs into the shared database using a single login/password. However, clients can choose to have each user log into the database. This adds an additional security layer.

- **UIPlanner Security (by User ID)** –UIPlanner has its own security setup based on the network ID. If the user's network ID is registered in UIPlanner as an authorized application user, they can open UIPlanner. Once allowed into UIPlanner, the user's rights are determined by the various security settings. Note that the user list and settings are maintained by the system administrator and are password protected.
- **Budget Security** – If a user is a Budget User, they are subject to the additional budget security settings.

How Data is Stored in UIPlanner

An overall concept that can help in configuring security within UIPlanner is to consider how the data is stored. This understanding will greatly simplify how you might go about setting up security. Here is how data is stored in UIPlanner:

	Time Dependent Data	Attributes and Associations
Case	X	X
Entity	X	X
Sub-entity	X	
Report	X	
Line	X	
Attribute ID		X

As you can see, you can generally secure all data within the model by securing access to entities and cases. And, security can be applied over several components of each structure. It only takes one component to restrict access. Users need write access to all qualifiers used to store data. So, for instance, if you have security applied to cases AND entities AND reports, and if a user has rights to two of those but not the third, they will not be able to edit the data.

Note: You still may want to put security over the Report Formats case, to secure the core reports and calculations.

Security Objects and Settings

Security within UIPlanner is administered through a central security setting screen (**MODEL SECURITY**), which is password protected. Overall, security is managed using several key structures/settings:

- **User ID** – All security is administered by user id. When the user logs in, UIPlanner is passed the User's network UserId. Security rights and privileges are stored and set by this UserId.
- **Security Roles** – You can create Security Roles (Administrator, Power User, etc), and then assign each user to a role. A role is simply a collection of rights that are granted to each user that is assigned that

role. This makes administering security easier, because you do not need to configure each user individually by assigning all of the individual rights.

- **Create Options** – These are a series of check boxes on the Security Screen, by UserId. They control the user’s ability to create new structures in the model, such as new entities, or new cases/scenarios.
- **Administrative Options** – These are a series of check boxes on the Security Screen, by UserId. They control the user’s ability access various administrative functions of the application and should only be granted to application administrators.
- **Security Groups** – These are a special entity group within UIPlanner. A number of core structures can be "owned" by a Security Group, such as scenarios/cases, entities or reports.
 - Users can have rights related to the security groups: a) No Rights b) View Only or c) View and Edit.
 - Their rights to those objects are defined by the combination of the security group ownership AND their role within that group.
 - Examples:
 - If a Case is owned by Security Group A, and a user has View Only rights to that security group, he/she can only view the data, not change it.
 - If another user has View and Edit rights to Security Group A, they can change any data within that case.

Core Object Editor

More complex security can also be applied and administered through the **CORE OBJECT EDITOR**. This screen allows you to designate owner groups for many structures and configuration items. These include reports, entities, and attributes (by entity group). This screen also allows you to assign security over fields and options on the various screens throughout the model (maintained through a special attribute designated Q2).

Configuring and maintaining security is a combination of the above.

Finally, you should be aware of when security is checked and invoked.

- **Security is checked upon login** - An overall concept that should be kept in mind is that security is set at the time a user logs into the model and are good for that session. If the system administrator deletes a user or changes their security settings, these will not take effect until the next time the user enters the model.
- **Security Controls upon Save** – A number of security settings are checked and implemented when UIPlanner goes to save data to the database, especially those controlled through Q2/owner groups. An example is control over report sequences. If a user does not have the ability to add reports to a sequence, they will be able to add a report

on the screen (which looks like they have this right), but will not be able to save this change.

For more information on UIPlanner Security, see the following topics:

[UIPlanner Overall Security Guidance](#)

[Security Screen Login](#)

[Security Screen](#)

[Managing Users](#)

[Security Roles](#)

[Security Groups](#)

[Security for Cases/Scenarios, Entities and Reports](#)

[Advanced Security](#)

{ XE "UIPlanner Overall Security Guidance" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }Overall Security Guidance

UIPlanner allows the security administrator to establish security over virtually all structures and screens/fields in UIPlanner. It is important that the security model chosen is robust enough to provide the needed control yet simple enough to avoid confusion.

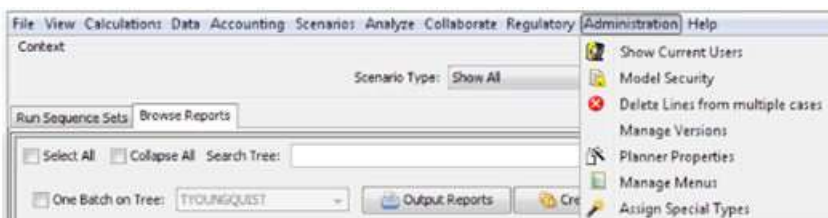
- **Security is across all components** - As indicated above, security can be applied over several components of each structure. It only takes one to restrict access. Users need write access to all qualifiers used to store data. So if you have security over cases AND entities AND reports, if a user has rights to two of those but not the third, they will not be able to edit the data. For example, if you have a state income tax report by company, the data is stored by case, report, line, company & state. If the user has no rights or view-only rights to any of these qualifiers, he can't save the data.
- **Security is implemented at Save** - A number of security settings are checked and implemented at save time, especially those controlled through Q2/owner groups. Some items may be changed on the screens and used for a run without being saved. Security is only related to changing data on the disk. So if a user attempts to add a report to a sequence but does not have appropriate security rights, they can still run. However, they may get bad results. Also, they will not be able to save this change to disk.
- **Security is not inherited** - If a user has write access to the entity group Plant Accounts, he does not by definition get write access to

individual plant accounts. However, this is not generally a major issue. If you are managing security by entities, while you do need to set up ownership for each one. This is a one-time task. You only need to add security when you add a new entity.

- **Security is set at login** - An overall concept that should be kept in mind is that security is checked at the time a user logs into the model and good for that session. If the system administrator deletes a user or changes his/her security settings, these will not take effect until the next time the user enters the model.

{ XE "UIPlanner Security Screen Login" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }Security Screen Login

To access the security settings screens, select **Model Security** from the **Administration** drop-down on the UIPlanner menu. (Note that the number and order (and even the naming) of the options on your Menu drop-down will probably be different, as the menus are now user-customizable.) Below is a sample **Administration Menu**:



Once you select the **Model Security** item, you will open the login screen.



As indicated above, access to the security screens is password controlled, and should be limited to system administrators. Type the password in the **Enter Password** field and then click **ENTER** to access the Security module. Note that you can change the **MODEL SECURITY** screen password by typing in the current password and then clicking **CHANGE PASSWORD**. Type in the new password and click **OK**.



This will bring you back to the login screen. You will then need to type in the new password in order to access the main screen of the [Security Module](#).

{ XE "UIPlanner Security Screen" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }UIPlanner Model Security Screen

Following is the **MODEL SECURITY** screen, opened to the *Assign Security* tab. The *Assign Roles* tab is covered under [Security Roles](#).

The drop-down list *Select Role or User ID* lists all active users and roles. When you select a user from the list, their first/last name and security settings will display.

The *Assign Security* tab is divided into three regions.

- [Manage Users](#) – This region is where you add and delete users, and delete a user's preferences, if needed. It is where you set the user's view/edit codes. You can also It also has the check box to define a user as *Budget User* only in this region, or print security reports.

- **Start-up Options** – This region includes the option to select a planner-property profile and menu profile for users.
- *Copy User Preferences* – This region enables you to copy user preferences.
- [Create Security Options](#) – This region enables you to define the user's ability to create certain key UIPlanner objects, such as entities or reports.
- [Administrative Options](#) – This region enables you to grant the user the right to perform certain system-wide administrator tasks. These rights should be limited to a few administrators and not given to regular users.

{ XE "Creating Security Options" * MERGEFORMAT }{ XE "UIPlanner Security" * MERGEFORMAT }Grant UIPlanner Security Options

This region of the Assign Security tab allows you to define the user's ability to create certain key UIPlanner objects, such as entities or reports.

First, select the user ID or Role from the drop-down list. The check boxes will fill according to the user's or user role's current rights. Below is an example of the *Assign Security* tab (see [MODEL SECURITY](#) screen):

The screenshot shows the 'Manage Model Security' window with the 'Assign Roles' tab selected. The user 'Model User' is selected in the 'Select Role or User ID' dropdown. The 'Email Address' field is empty. Below the email field are buttons for 'Add User', 'Delete User', 'Delete User Preferences', 'Run from Excel', and 'Print Security Report'. The 'Options' section includes 'Budget User Only' (unchecked), 'View Consolidated Reports?' (checked), and a 'Set View/Edit Codes' button. The 'Start-up Options' section includes 'Menu Profile' (sys-Default menu Profile), 'Planner Property Group' (System Level Properties), and 'Change users' Menu/Planner Property by Role' (unchecked). The 'Copy User Preferences' section includes a dropdown for 'Copy preferences to DLUCIANI from: DLUCIANI Diane Luciani' and a 'Copy' button. The 'Create Options' section includes checkboxes for 'Report Batch' (checked), 'Attribute' (unchecked), 'Entity' (unchecked), 'Case & Scenario' (checked), 'Allocation Scheme' (unchecked), 'Super Entity Group' (unchecked), 'Report Column Set' (checked), 'Calculation Sequence' (unchecked), 'Entity Group' (unchecked), 'Report' (checked), 'Account' (unchecked), 'Allocation Path' (unchecked), and 'Edit Group' (unchecked). The 'Administrative Options' section includes checkboxes for 'Manage Versions' (unchecked), 'Delete Case' (checked), 'Set Order' (unchecked), 'Edit Instance Row-Name/Code/Order' (unchecked), 'Manage Menus' (unchecked), 'Set Alerts' (unchecked), 'Set Password' (unchecked), 'Delete Other Objects' (unchecked), 'Set Visibility' (unchecked), 'Manage Planner Properties' (checked), 'Archive Cases/Versions' (unchecked), and 'Hard-Delete Lines' (unchecked).

Use the check boxes to set the user's rights for each of the items. Checking the box gives the right. If a box is unchecked, the user does not have that right.

- **Create Report Batch** – determines whether the user can create report batches on the **BROWSE REPORTS** screen. If unchecked, the **CREATE** button is disabled on that screen.
- **Create Attribute** – determines whether the user can create new attributes for entities. If unchecked, the **CREATE NEW ATTRIBUTE** button is disabled on the *Define Attributes* region of the **EDIT ATTRIBUTES** screen.
- **Create Entity** - determines whether the user can create entities in the model, such as Bonds, Plant Accounts, etc. If unchecked, the **CREATE** and **CREATE AND EDIT** buttons are disabled on the **EDIT ATTRIBUTES** screen.
- **Create Case & Scenario** – determines whether the user can create cases and scenarios. Users can still modify existing scenarios. If unchecked, the **CREATE** button is disabled on the **MANAGE CASES** and **MANAGE SCENARIOS** screens.
- **Create Allocation Scheme** – determines whether the user can create new allocation schemes in the Allocations module. If unchecked, the **CREATE** button is disabled on the **DEFINE ALLOCATION SCHEMES** tab of the **EDIT ALLOCATIONS** screen.

- **Create Super Entity Group** – determines whether the user can create new super entity groups. If unchecked, the **CREATE SUPER ENTITY GROUP** button is disabled on the **GROUP ENTITIES** screen.
- **Create Report Column Set** - determines whether the user can create new report column sets, which are global across all users. If unchecked, the **CREATE** button is disabled on the **REPORT COLUMNS** screen.
- **Create Calculation Sequence** – determines whether the user can create a new sequence on the **MANAGE SEQUENCES** screen. If unchecked, the **CREATE** button is disabled on that screen.
- **Create Entity Group** - determines whether the user can create new entity groups. If unchecked, the **CREATE** button under *All Entity Groups* is disabled on the **EDIT ATTRIBUTES** screen.
- **Create Report** - determines whether the user can create new reports or report groups. If unchecked, the **CREATE REPORT** and **CREATE REPORT GROUPS** buttons are disabled on the **GROUP REPORT** screen.
- **Create Account** – determines whether the user can create new accounts and account rollups on the **MANAGE LEDGER** screen. If unchecked, the **CREATE** button is disabled on that screen.
- **Create Allocation Path** – determines whether the user can create new allocation paths in the **ALLOCATIONS** module. If unchecked, the **CREATE** button is disabled on the *Define Allocation Path* tab of the **EDIT ALLOCATIONS** screen.
- **Create Edit Group** - determines whether the user can create new edit groups. If unchecked, the **CREATE** button is disabled on the **DEFINE EDIT GROUPS** screen.

As indicated above, if a user or role does not have specific *Create* right, the **CREATE** button is disabled/grayed out on the appropriate UIPlanner screen. Below is an example of the Edit Attributes screen where the user does not have *Create Entity* rights.



Note: Most of the rights listed above just control the user's ability to create new items or entities. The ability to read (see) or change existing objects is enabled through the security settings by assigning owner groups in the **CORE OBJECT EDITOR**. For example, the *Create Sequences* setting determines whether a user can create a new sequence. However, the control over whether a user can modify existing sequences (add reports to a sequence, reorder reports within a sequence, etc) is controlled by the Owner Group over these properties in the ***CORE OBJECT EDITOR***.

{ XE "Administrative Security Options" * MERGEFORMAT }{ XE "UIPlanner Security Administrative Options" * MERGEFORMAT }Administrative Options

The bottom region of the ***MODEL SECURITY*** screen is used to give users access to various administrative functions in UIPlanner. These include data and structure type functions, such as the ability to delete cases or change visibility of objects as well as overall model configuration functions, such as changing the menu structure or accessing the Planner Properties screen. See the example below:

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Administrative Options:

<input type="checkbox"/> Manage Versions	<input type="checkbox"/> Set Password
<input checked="" type="checkbox"/> Delete Case	<input type="checkbox"/> Delete Other Objects
<input type="checkbox"/> Set Order	<input type="checkbox"/> Set Visibility
<input type="checkbox"/> Edit Instance Row-Name/Code/Order	<input checked="" type="checkbox"/> Manage Planner Properties
<input type="checkbox"/> Manage Menus	<input type="checkbox"/> Archive Cases/Versions
<input type="checkbox"/> Set Alerts	<input type="checkbox"/> Hard-Delete Lines

Use the check boxes to set the user's various administrative rights. Checking the box gives the right. If a box is unchecked, the user does not have that right. The various administrative rights are listed below:

- **Manage Versions** determines whether the user can create or delete new versions. If the user has this right, the **CREATE VERSION** and **DELETE VERSION** buttons are enabled on the **MANAGE VERSIONS** screen.
- **Delete Cases** - determines whether the user can delete cases. If unchecked, the **DELETE** tab is disabled on the **CORE OBJECT EDITOR** when cases are selected.
- **Set Order** - determines whether the user can change the order of various objects in UIPlanner. If the user does not have this right, the **ORDER** tab is disabled on the **CORE OBJECT EDITOR**.
- **Edit Instance Row-Name/Code/Order** - determines whether the user can edit the information on the Instance table. If the user does not have this right, the **EDIT INSTANCE-NAME/CODE/ORDER** tab is disabled on the **CORE OBJECT EDITOR**.
- **Manage Menus** - determines whether the user has the right to add, delete or modify the various menu tabs and drop-down lists. If the user does not have this right, the **MANAGE MENUS** screen is disabled and a message indicates the user does not have the necessary rights.
- **Set Alerts** - determines whether the user can create or delete Alerts. If the user does not have this right, a message on the **ALERTS** tab of the **CORE OBJECT EDITOR** indicates this fact.
- **Set Password** - determines whether the user can change the database password. If unchecked, that menu item is disabled, and the user cannot open the **CHANGE DATABASE PASSWORD** screen.
- **Delete Other Objects** - determines whether the user can delete objects other than cases (see above). If unchecked, the **DELETE** tab is disabled on the **CORE OBJECT EDITOR** when other objects are selected. Cases are handled as a separate right, because of their importance.

- **Set Visibility** - determines whether the user can turn visibility of objects on or off. If the user does not have this right, the **VISIBILITY** tab is disabled on the **CORE OBJECT EDITOR**.
- **Manage Planner Properties** - determines whether the user can modify the Planner Properties. If unchecked, that menu item is disabled, and the user cannot open the **PLANNER PROPERTIES** screen.
- **Archive/Resurrect Cases/Versions** - determines whether the user has the right to archive or resurrect cases or versions. If the user does not have this right, the **ARCHIVE/RESURRECT CASE/VERSION** screen is disabled and a message indicates that the user does not have the necessary rights.
- **Hard-Delete Lines** - determines whether the user can run the process to hard delete orphaned report lines. If unchecked, that menu item is disabled, and a message indicates the user does not have the necessary rights.

When you are done, click **OK** and the user settings will be saved to the database.

{ XE "Managing Users" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }Manage Users

In the top region of the **MODEL SECURITY** screen, you can perform the following tasks for UIPlanner User Security:

Add a User

To add a new user to the system, click **ADD USER**. The box below will open. Enter the user's network ID. This ID should follow proper convention – no spaces, etc. When you click **OK**, you will get a message indicating that the user has been created.



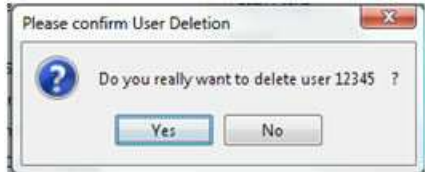
Next, you should put in their full name, so that they can be easily identified in the system. Select the new user from the Select User ID drop-down list, and type their first and last name into the text box. Finally, you should configure the user's security settings, either by assigning them a Role (see below) or by setting them individually.

Click **CLOSE** to exit the Security module. Then select **File-Save** on the UIPlanner menu to save to the database.

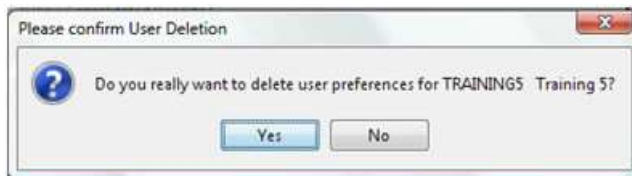
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Delete a User

To delete a user, select the user from the drop-down list and click **DELETE USER**. You will get a popup asking you to confirm the deletion. If you respond **YES**, the user will be deleted.

**Delete User Preferences**

While users can delete their user preferences themselves, from the **PREFERENCE MANAGER** screen, there may be occasions where an administrator may need to delete a user's preferences. Select the user from the drop-down list and click **DELETE USER PREFERENCES**. You will get a popup asking you to confirm the deletion. If you respond **YES**, the user's preferences will be deleted. Note that this will be effective the next time the user logs in.

**Budget User Only**

This check box indicates that the user currently being displayed has access to the Budget module only. It will turn off many model-only features.

Set View/Edit Codes

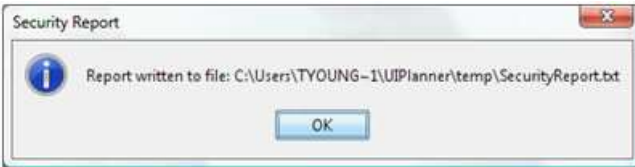
When you click this button, it will bring up the View/Edit codes screen (for the user currently being displayed). See [Security Groups](#) for more information on **VIEW/EDIT** codes.

View Consolidated Reports

This controls whether the user can see consolidated reports. This option may be used to block confidential information during the planning process, such as the status of consolidated earnings per share.

Print Security Report

Click **PRINT SECURITY REPORT** to print out a text file that lists all users and their security settings. The model will display a window that confirms the security report and the path where it is stored. See below:



Below is a sample extract from a Security Report (opened via MS Excel):

	A	B	C	D	E
1	Security Settings: ID	First	Last	Category	Setting
2	TRAINING1	Training		1 View Consolidated Reports?	Yes
3	TRAINING1	Training		1 Create Accounts?	Yes
4	TRAINING1	Training		1 Create Allocation Paths?	Yes
5	TRAINING1	Training		1 Create Allocation Schemes?	Yes
6	TRAINING1	Training		1 Create Attributes?	Yes
7	TRAINING1	Training		1 Create Report Batches?	Yes
8	TRAINING1	Training		1 Create Cases and Scenarios?	Yes
9	TRAINING1	Training		1 Create Edit Groups?	Yes
10	TRAINING1	Training		1 Create Entities?	Yes
11	TRAINING1	Training		1 Create Entity Groups?	Yes
12	TRAINING1	Training		1 Create Reports?	Yes
13	TRAINING1	Training		1 Create Report Column Sets?	Yes
14	TRAINING1	Training		1 Budget User Only?	No
15	TRAINING1	Training		1 Create Report Sequences?	Yes
16	TRAINING1	Training		1 Create Super Entity Groups?	Yes
17	TRAINING1	Training		1 Budget Administrators	View & Edit
18	TRAINING1	Training		1 Budget Dept	View & Edit
19	TRAINING1	Training		1 Daily Cash Team	View & Edit
20	TRAINING1	Training		1 Daily Cash Team Administrators	View & Edit
21	TRAINING1	Training		1 Finance Dept	View & Edit

{ XE "Security Groups" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }Security Groups

As noted in **MODEL SECURITY**, security groups are a core concept in UIPlanner in controlling security. A number of core structures can be "Owned" by a security group, such as cases and scenarios. Users can have rights related to the security groups

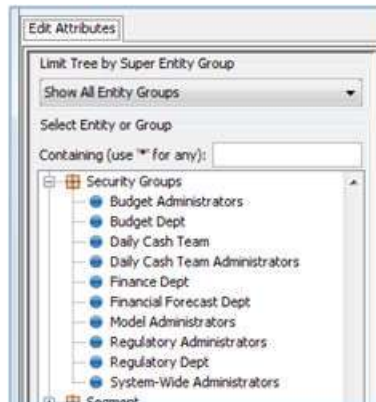
- a) No Rights
- b) View Only
- c) View and Edit.

Their rights to those objects are defined by the combination of the security group ownership AND their role within that group. Examples:

- If a case is owned by Security Group A and a user has View Only rights to that Security Group, he/she can only view the data, not change it.
- If another user has View and Edit rights to Security Group A, he/she can change any data within that case.

Thus, maintaining security groups is just like maintaining any other entity in the model (as long as the user has the security rights to add Entities). Security Groups are maintained in the **EDIT ATTRIBUTES** screen:

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To add a new security group, click **CREATE**. When you next go into the Security settings screen, this new security group will appear in the list of security groups under *Set View and Edit Rights*.

User View/Edit Codes

You can set up a user's View/Edit rights across the various security groups. Click **SET VIEW/EDIT CODES** and the window below will open. It lists each of the security groups within the model.

You need to define their rights within the various security groups. Certain key categories of items within the model are owned by security group (cases, scenarios and reports are three examples). If a user is a member of that group, they have rights to view/edit data owned by that group.



For each group, use the following drop list to define what the user's rights are for that group.

The options are:

- **No Rights** – The user cannot even view data owned by that security group. Cases and scenarios belonging to the specified group will display a name of *Description suppressed by security*.
- **View Only** – the user can see all data owned by that security group but cannot change it. This includes time dependent and attribute data stored in cases.
- **View and Edit** – The user has full rights to items owned by that security group. He/she can modify data in objects owned by that group.

When you are done, click **OK** to save the changes. When you are finished editing security, click **OK** to ensure that all user settings have been saved, and then close the form. The security settings will take effect the next time the user logs into the database (user view/edit settings are set at the time of login).

{ XE "UIPlanner Security Roles" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }Security Roles

The concept of security roles allows you to define specific roles (Administrator, Power User, User, etc.) and to assign security rights to those roles. You can then assign each user to a role and they will inherit the rights of that role. Often times, the same basket of rights assigned to a role will need to be given to multiple users. This is a way to assign that basket of rights to these users without having to set them individually. When you add a new user, decide what role they have, and their security will be fully set. If a user's security rights are assigned via role, the options will be grayed out. See below:

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The ***MODEL SECURITY*** screen has two tabs: *Assign Security* and *Assign Roles*. If you select a security-role you can edit it and the edits will be applied to any user currently in that role. Some user-specific functionality is disabled when a role is selected (e.g., delete user preferences and delete user). You can still select any user in the drop-down list. However, if a user is assigned to a role, that user's security related options will be displayed, but disabled. (Note: Options not related to security, like those mentioned above, are still enabled.) On the *Assign Roles* tab, you can optionally assign existing users to security roles. When you do this, those users will get the security rights currently associated with that role, and will get any changes made to that role as long as they remain assigned. You can also remove users from their role on the second tab and return to editing their rights as an individual or assign them to a different role.

Create Roles

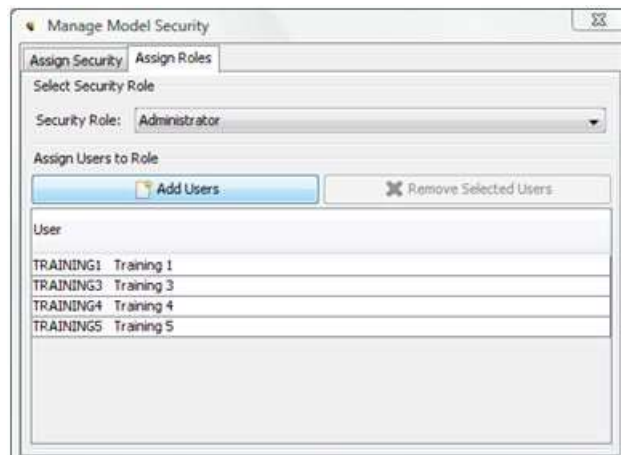
The first step in applying role-based security is to create the roles you want and configure them. Model security roles are a system-defined special entity group.

Administrators can create their own roles by adding entities to the *sys-Model Security Roles* entity group. When you add an entity here, it automatically shows up in the list of roles in the Security Module. See below:



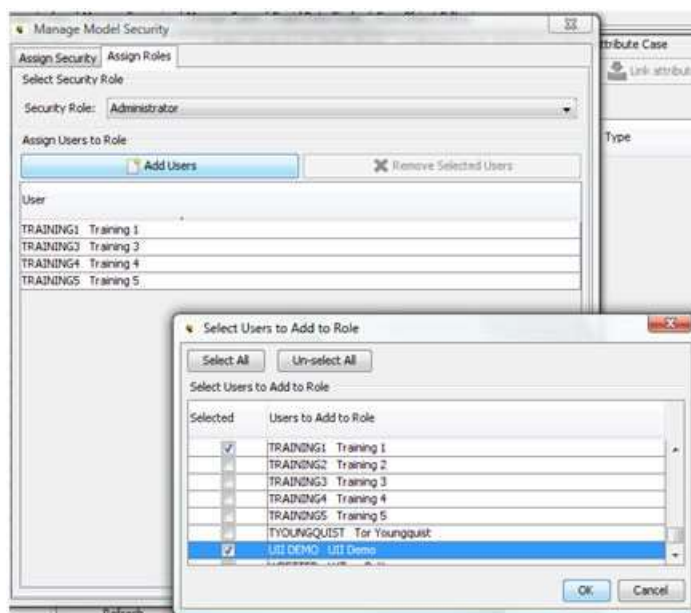
Assign Roles

Once the roles have been created and configured, you can assign the various users to their roles, as appropriate. This is done via the *Assign Roles* tab on the Security module. When you select a role from the drop-down list, the screen will display all users assigned to that role, as shown below.



To assign that role to a user not on the list, click **ADD USERS**. This will bring up a list of all users. See below:

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Check the user(s) you want to assign. When you click **OK**, they will be added to the user list for that role, and their security will be set to that role.

Notes:

- Users can be assigned only one role at a time. If a user is assigned one role and you assign them another role, the prior role will be removed.
- You can also remove users from their role on the second tab and return to editing their rights as an individual.
- Finally, you do not have to assign all users to roles. You can configure some users individually.

Modifying Roles

Security roles are like any other user. If you change the settings for a security role, those changes will be applied to any user currently in that role. Note that some user-specific functionality is not applicable and is disabled when a role is selected (e.g., delete user preferences and delete user).

{ XE "Owner Groups" * MERGEFORMAT }{ XE "UIPlanner Security for Cases/Scenarios, Entities and Reports" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }{ XE "Calculations" * MERGEFORMAT }{ XE "Cases" * MERGEFORMAT }{ XE "Reports" *

MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }Security for Cases, Entities, Reports And Calculations

The final core structure for implementing security within UIPlanner is handled through the **CORE OBJECT EDITOR**. It should be noted that this is both powerful and complex, and should be used only for specific security needs. The majority of security needs should be able to be met through the settings by UserId on the **MODEL SECURITY** screen, and by assigning owner groups to the main structures:

- Cases and Scenarios
- Entities
- Reports and Calculations

The **CORE OBJECT EDITOR** allows you to assign owner groups to various objects and attributes. This is attached to a number of configuration entities in UIPlanner, primarily fields and abilities on various screens. From the **CORE OBJECT EDITOR**, you can assign owner groups to a wide variety of items and structures.

- Open the **CORE OBJECT EDITOR**.
- When the **CORE OBJECT EDITOR** opens, select owner group.
- On the Owner Group tab, select the object type you wish to put security over.

Below are the three most common areas where clients have established security.

Cases and Scenarios

The most common security implementation is putting security over various cases and scenarios. This is accessed by selecting *Case* from the *Object Type* drop-down list. Below is an example of case level security:

The screenshot shows the 'Core Object Editor' window with 'Object Type' set to 'Case'. The table below lists various objects and their corresponding owner groups.

Object	Owner Group
1+11 Reforecast Case	Budget Dept
2011 - 2015 Base Plan	Finance Dept
2011 - 2015 Refer CapEx Ostrdy Case	Finance Dept
Actuals	Budget Dept
Actuals Merge 2011 - 2015 Attributes	Budget Administrators
Actuals Merge 2011 - 2015 Data	Budget Administrators
Base Attribute Case	Finance Dept
Budget 2011	Budget Administrators
Budget 2011 Attributes	Budget Administrators
Budget 2011 Data	Budget Administrators
Budget 2011 Q1 Reforecast Attributes	Budget Administrators
Budget 2011 Q1 Reforecast Data	Budget Administrators
Budget Actuals Attributes	Budget Administrators
Budget Actuals Case	Budget Administrators
Budget Actuals Data	Budget Dept
Budget Common Attributes	Budget Dept
Capital Budget	Budget Dept
Cap OBM	Financial Forecast Dept
Daily Cash Forecasting	Daily Cash Team
Demonstrate Model Concepts	Model Administrators

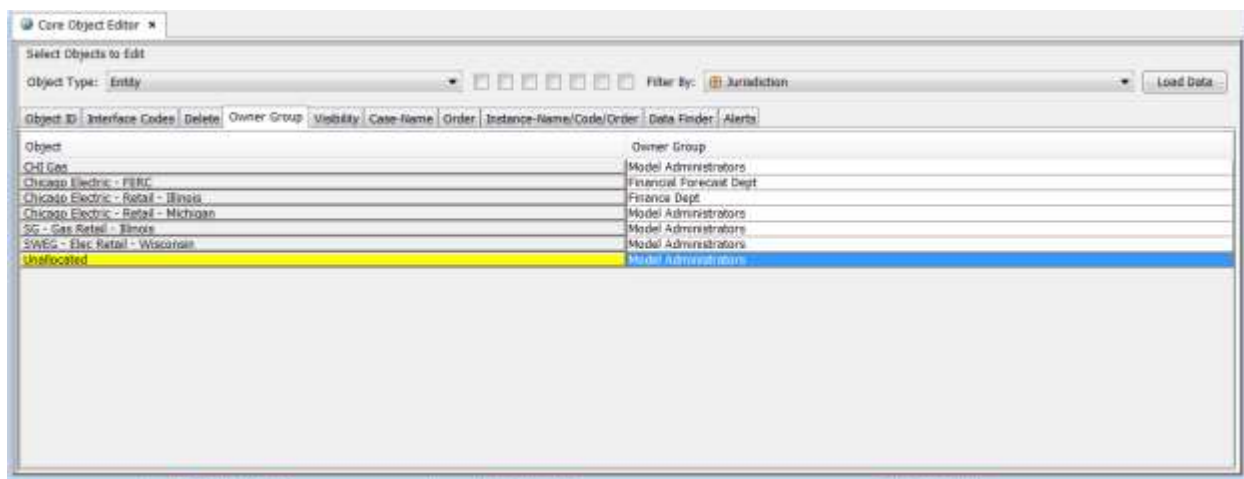
UIPlanner Detailed Model User Guide

The above settings do the following:

- Case Owners – various cases are assigned to different security groups. Only users who have *Edit and View* rights to those groups would be able to do add data to the cases controlled by those Groups. Ownership of cases works as follows for the various types of cases:
- Time Dependent Data Cases (Overlay, Incremental, and Actuals) – security over these is pretty straightforward. Only users who are members of the owning owner group can add data to the case or edit existing data in the case.
- Attribute Cases – same as for time-dependent data cases. Only users who are members of the owning owner group can add data to the case or edit existing data in the case. Several kinds of data are held in attribute cases:
 - Association and attribute data for entities
 - Line formats
 Thus securing the attribute case will also secure this other data.
- Logic (report format) cases – this case primarily contains the calculation logic for the reports and calculations in the model. Securing this case will secure ALL report calculations.

Entities

Another common security implementation is putting security over specific entities. This is accessed by selecting *Entity* from the *Object Type* drop-down list, and using the filter to select the appropriate entity group. Then assign security as desired to each of the entities in the group. Below is an example of security over entities.



It is important to note that security does not inherit downward. Assigning security over an entity group (e.g., Bonds) does not enable security over the individual bonds.

Reports and Calculations

UIPlanner also allows you to put security over reports and/or calculations.

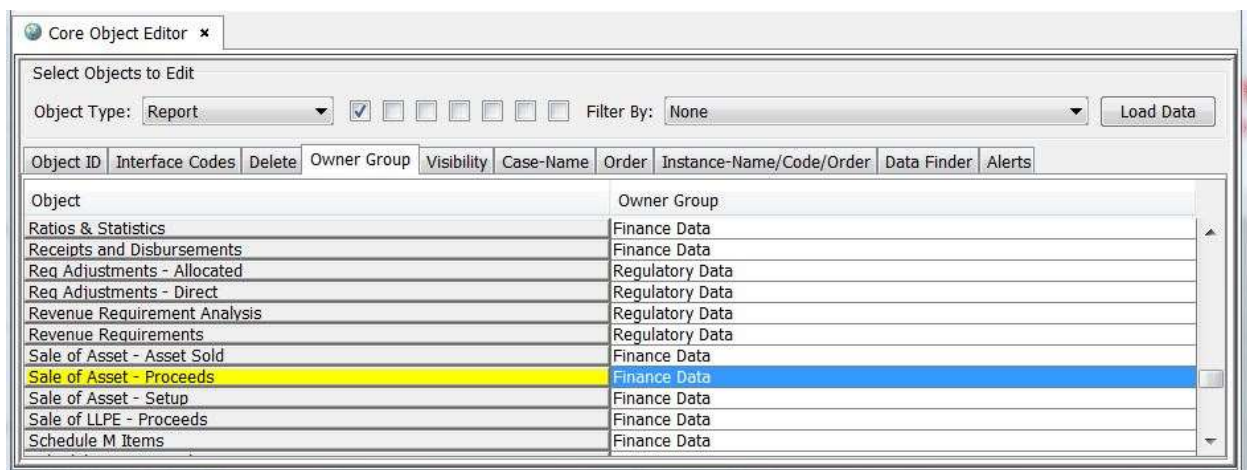
The difference between the two is as follows:

- If you want to prevent a user from being able to change logic, you need to put the security on the calculation.
- If you want to prevent users from changing any other data (time data, attributes of lines such as formatting, etc.), you need to put the security on the report.

Setting security on a report is done from the **CORE OBJECT EDITOR** as follows:

- When the **CORE OBJECT EDITOR** opens, select the *Owner Group* tab.
- On the *Owner Group* tab, select *Report* from the *Object Type* drop-down list.
- Assign owner groups to reports, as desired:
 - Click on the space next to the report in the *Owner Group* column.
 - Select an owner group from the drop-down list.

See example below

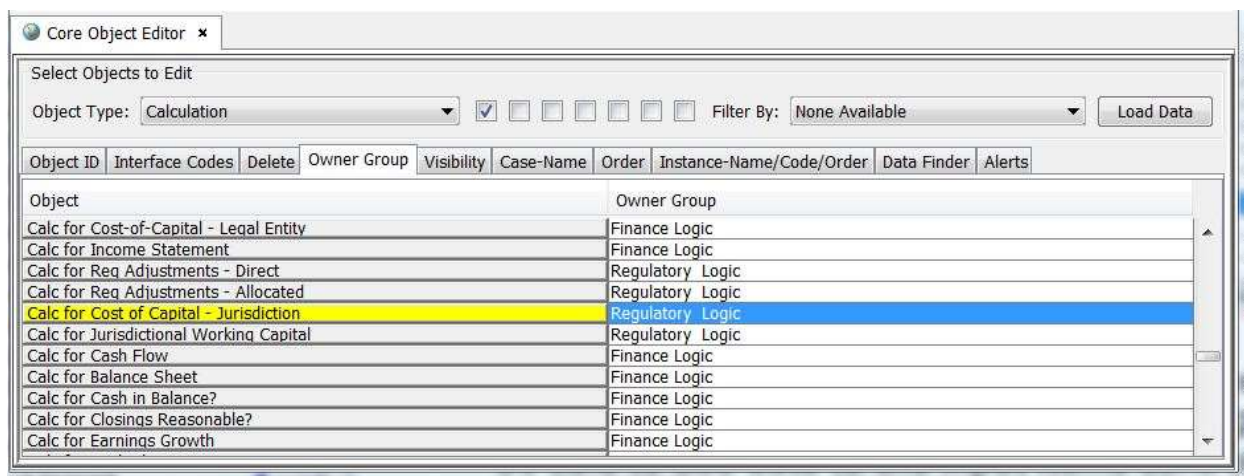


The above settings do the following:

- Report Owners – various reports are assigned to different security groups. Only users who have *Edit and View* rights to those groups would be able to add data to the input items controlled by those reports. This adds another measure of control over data – by report as well as by case.

Setting security on a calculation (as opposed to report itself) is also done in the **CORE OBJECT EDITOR** as is done for reports. Except, the *Object Type* selected is *Calculation* and not *Report*.

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Only users who have *Edit and View* rights to the groups above would be able to revise logic for the associated calculation.

{ XE "Advanced Security" * MERGEFORMAT }{ XE "UIPlanner Advanced Security" * MERGEFORMAT }{ XE "Security" * MERGEFORMAT }Advanced Security

The **CORE OBJECT EDITOR** also allows putting Owner Groups on several other structures within UIPlanner. It should be noted that this capability is both powerful and complex, and should be used a) with care and b) only if it is truly necessary to secure the model in a specific way.

The Q2 items are actions and settings on various screens within UIPlanner. UIPlanner allows you to put security over these, if desired. Below is a screen print of a selection from the Q2 settings. This is accessed by choosing Q2 from the *Object Type* drop-down list.

Object	Owner Group
Report Sequence Set: Number of overall iterations	
Report Sequence: First overall iteration to run	
Report Sequence: Iterations for calculation	Model Administrators
Report Sequence: Last overall iteration to run	Model Administrators
Report Sequence: Process sequence down (all reports for period) or Across (each report across all reports)	Model Administrators
Report Sequence: Sequenced report	Model Administrators
Report Sequence: Tolerance	Model Administrators
Report Tree Child Group	
Report Tree Parent Group	
Report code	
Report column Excel Group	
Report column Line Attribute	
Report column Type: Date, Attribute, etc.	
Report column scenarios A Year	
Report column scenarios A month	
Report column scenarios B Year	
Report column scenarios B month	
Report sequences in a sequence set	
Report title	
Report: Actuals date for report	Model Administrators
Report: Add Line Numbers in Excel report	Model Administrators
Report: Calculate consolidated entities	Model Administrators
Report: Calculation for report	Model Administrators
Report: Entry group for report	Model Administrators
Report: ND-Coars combinations to run from another report	

The above settings do the following:

- Report Sequences Items – These actions are all assigned to the *Model Administrators* security group. Only users who have *Edit and View* rights in that group would then be able to perform these actions on the **REPORT SEQUENCE** screen. This would ensure control over adding reports to a sequence, changing iterations and changing tolerances
- Report Items – Likewise, these actions are all assigned to the *Model Administrators* security group. Only users who have *Edit and View rights* in that group would then be able to perform these actions on the *Edit Calculations* screen.

Delete Obsolete Data

{ XE "Obsolete Data" * MERGEFORMAT }{ XE "Deleting Obsolete Data" * MERGEFORMAT }Delete Obsolete Data Screen

Screen Layout:

The **DELETE OBSOLETE DATA** screen allows system administrator to perform two different kinds of mass deletes from the database. The screen consists of two separate tabs:

Obsolete Data – UIPlanner defines default values for a number of commonly used Line-related attributes, including annual-to-month, month-to-annual, line usage, function type, format, pointer to prior line, and consolidation sum code. When you add a line to a calculation UIPlanner will only assign values for these items if you specify something other than the default. This significantly reduces the number of attribute records needed. Attribute records for lines created before this capability was added are no longer needed. This screen allows you to delete these records.

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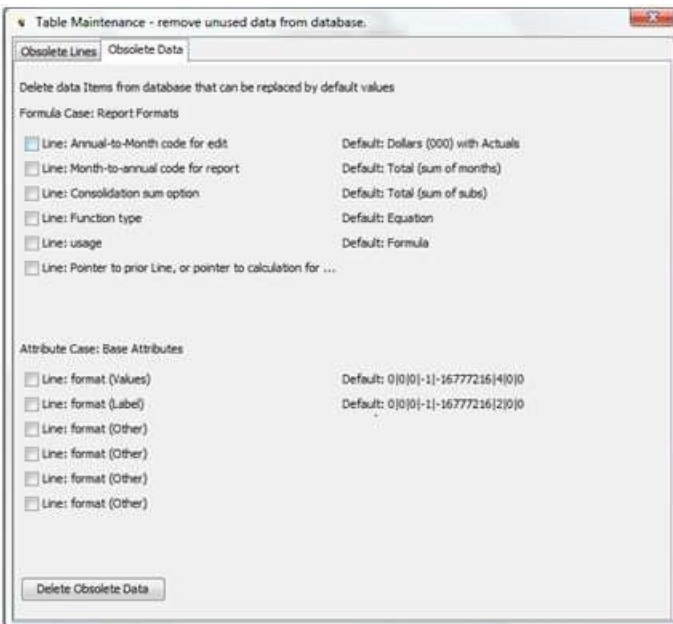
Obsolete Lines – When you delete a line from a report, it is only marked as ‘deleted’ behind the scenes, so that it does not show up in the **CALCULATION EDITOR**; it is not ‘hard-deleted’ from the database. The reason is that the line may be used in other formula cases, so that deleting it entirely might jeopardize those other cases. The **DELETE OBSOLETE LINES** function will first check to ensure that the lines are not used in any Logic Case in the database. Only then will the lines be ‘hard deleted’.

The ability to perform these two delete functions is controlled by a separate administrative security setting. **As this is a mass delete, you should back up the database before performing this function.**

List Of Operations Or Tasks That Are Performed With This Screen:

Delete Obsolete Data

The *Obsolete Data* tab is shown below. Note that the screen tells you what the system default is for each data item. These are system settings, and are not user configurable.



Use the check boxes to select which data items to delete, and click **DELETE OBSOLETE DATA**. The screen will refresh and echo back with the number of records of each type that were deleted. You should restart the system to complete the delete process.



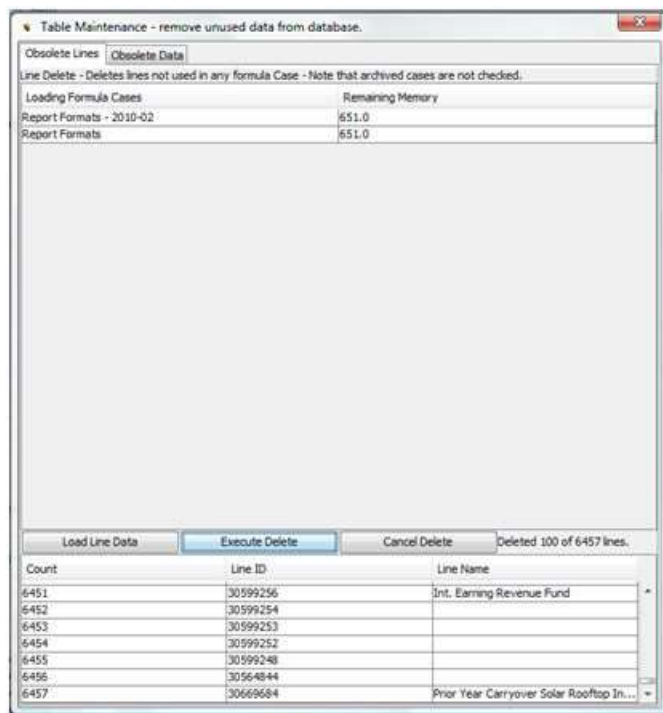
This is a one-time process. Once you have deleted these unneeded records, UIPlanner will not add any more of these redundant attributes.

Delete Obsolete Lines

The *Obsolete Lines* tab is shown below. When you first open the tab it will list all Formula cases in the database, along with an indication of available memory. When you click **LOAD LINE DATA**, the bottom region of the screen will list all of the lines that are marked as deleted and are not used in any of the listed formula cases. You can export the list of lines to Excel by right clicking on the top bar of the lines window.

When you are ready to delete the lines, click **DELETE OBSOLETE LINES**. The system will perform the deletes 20 lines at a time. This small batch size is necessary because the system needs to check all formula cases. Note: The delete process can take some time – maybe 5 seconds for each 20 records.

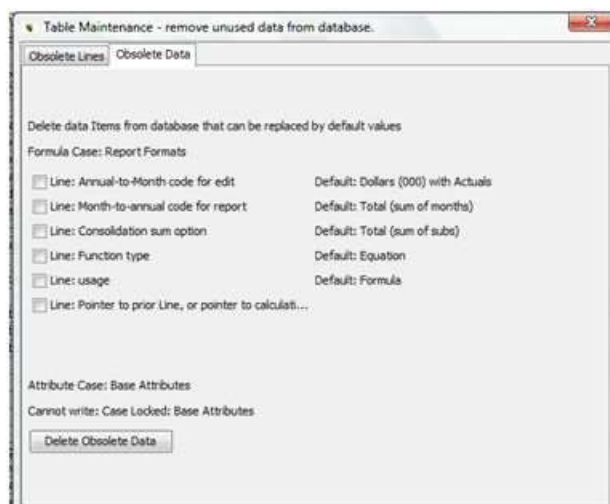
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You should probably do this delete annually or every other year. The number of 'tagged as deleted' lines will slowly grow again.

Locked Cases

If any of the Formula cases or Attribute cases are locked, the process will not be able to delete from those cases. An appropriate warning will be displayed. See below where the Base Attribute case is locked.



You will need to temporarily unlock those cases. Once the deletes are done you should go back and relock these cases.

Archived Cases

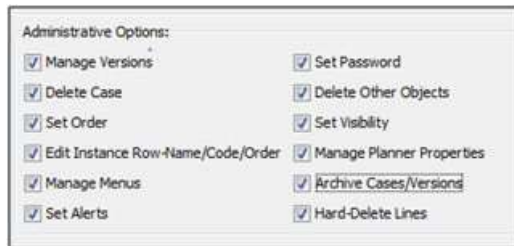
As indicated on the *Delete Lines* tab, the delete process only checks active formula cases. It does not check archived cases. To delete from an archived case(s), you first need to un-archive those cases.

Versions

The delete process only deletes from the current active version. To delete from a different version, you need to exit and log into that version.

Security

As indicated above, the ability to perform these mass deletes is controlled by a separate Administrative Security setting:

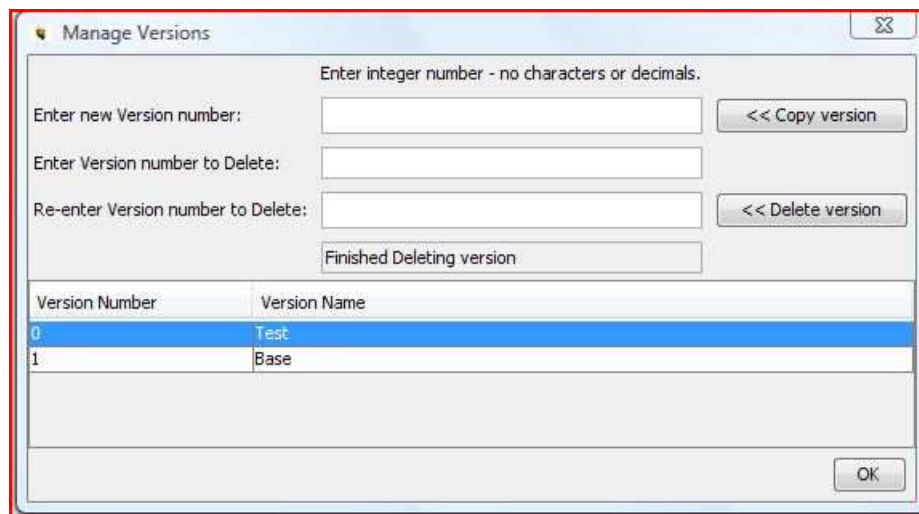


Manage Versions

{ XE "Manage Versions" * MERGEFORMAT }{ XE "Versions" * MERGEFORMAT }Manage Versions Screen

The **MANAGE VERSIONS** screen is an administrative screen that allows you to make a complete copy of the current version of the model. It also allows you rename or delete existing versions.

Note that when you log in to UIPlanner, you log in to a specific version. Therefore, copying a version is a way of archiving the entire database.



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Screen Layout:

The **MANAGE VERSIONS** screen has two regions.

The top region is where you initiate the *Copy Version* or *Delete Version* actions. There is a button for copying a version, along with an associated area to enter the new version number. There is also a button for deleting a version, along with areas to enter and then confirm the version number you wish to delete.

The bottom region of the screen is a grid that lists all version numbers and their names. This is where you rename a version. Also, by clicking the small arrow in the column headers you can toggle the ordering, either by version number or by name.

List Of tasks Or Operations That Are Performed With This Screen:

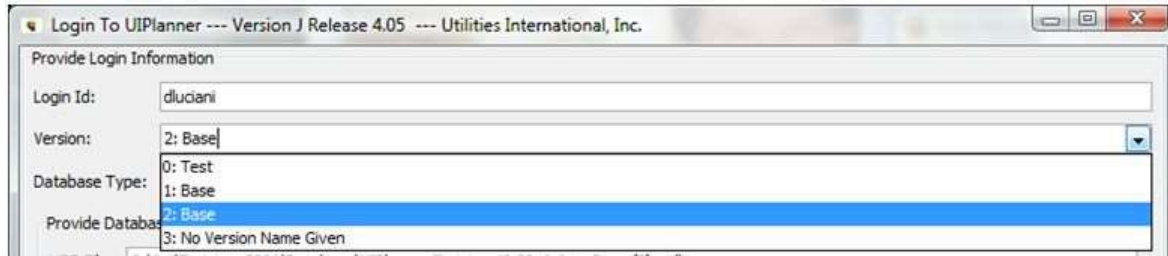
Copy Version:

- Enter a new version number in the box. This must be an integer between 1 and 16347, and cannot be an existing version number.
- Click **COPY VERSION**.

Note: This action copies the active version along with its name and gives it the number you entered. In the example below, we were in Version 1 (Base), thus our copy (Version 2) is a copy of Version 1.

Version Number	Version Name
0	Test
1	Base
2	Base

Note: When you next log in, this new version will appear in the login screen's drop-down list, as shown below.



Rename Version:

- Double-click on a line under the *Version Name* column and enter the desired version name.

See the example below where Version 2 was renamed.

Version Number	Version Name
0	Test
1	Base
2	2010-2015 Forecast

Delete Version:

- Enter a version number to delete and then enter it again in the confirmation field.
- Click **DELETE VERSION**.

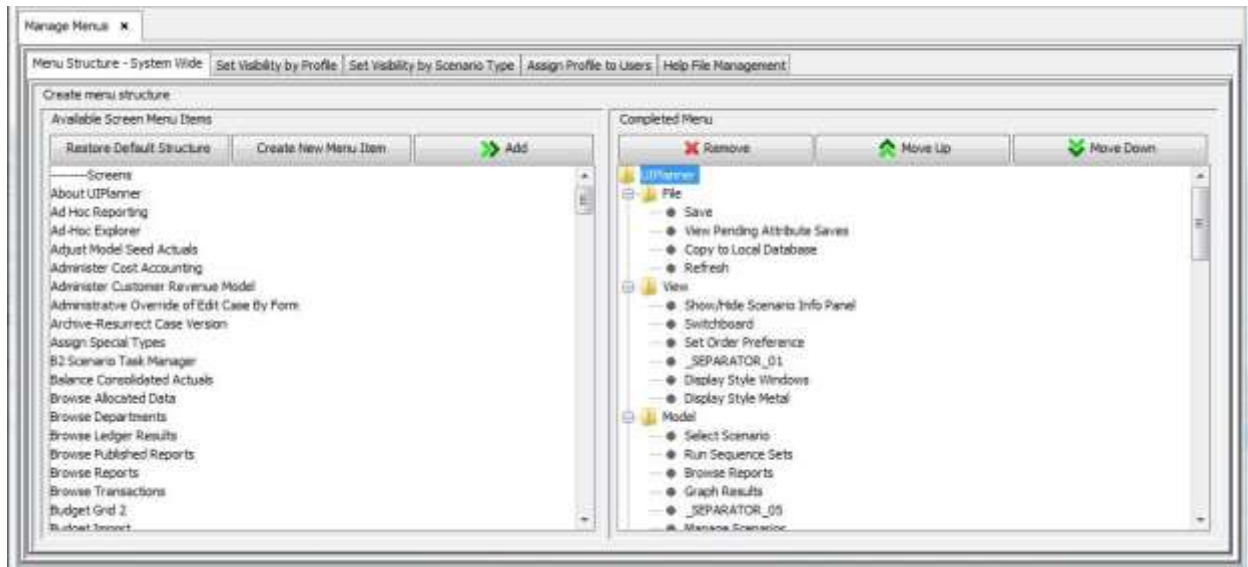
That version number will be deleted from the database. The progress window will echo the data being deleted. The deleted version will no longer appear in the drop-down list on the login screen.

Note: You cannot delete the version you are currently in, i.e., the active version.

Manage Menus

Manage Menus Screen

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The **MANAGE MENUS** screen allows the system administrator to design the layout and content of the drop-down menu at the top of the UIPlanner application screen. The drop-down menu structure is vital element of the overall user interface, as it is the means by which users access various screens. A clean and logically laid out menu structure can greatly enhance the user's experience in the model. Likewise, a disorganized and unwieldy menu structure can make it more difficult for casual users to navigate the system.

This screen has tools to configure the structure, visibility, and access to the screens and functions available to users of UIPlanner. In addition, it contains a feature that allows your system administrator to customize access to the online help system.

Two key concepts determining the look and feel of the UIPlanner menus are the underlying structure, i.e., which menu items exist and how they are organized, and which menu items will be visible to users. The overall menu structure is determined in the first (default) tab, **MENU STRUCTURE - SYSTEM WIDE**. The visibility aspect can be defined either on the basis of which menu profile is assigned to each user (**MANAGE MENUS** tabs 2 and 4) or by which scenario type the user has chosen for the current user session (**MANAGE MENUS** tab 3). It is important to note that only one of the two approaches to Menu visibility, either by *Scenario Type* or *Menu Profile*, should be used. Attempting to utilize both at the same time could cause system conflicts which result in menu items being rendered invisible inadvertently.

Screen Layout:

The **MANAGE MENUS** screen is organized into five tabs.

- Menu Structure: System-Wide
- [Set Visibility by Menu Profile](#)
- [Set Visibility by Scenario Type](#)
- [Assign Profile to Users](#)
- [Help File Management](#)

For more information on how to customize and manage the menus for your UIPlanner installation, please follow the above links to view details on each tab of the **MANAGE MENUS** screen.

Menu Item Names

The names that are displayed for each menu item can be customized in the Core Object Editor.

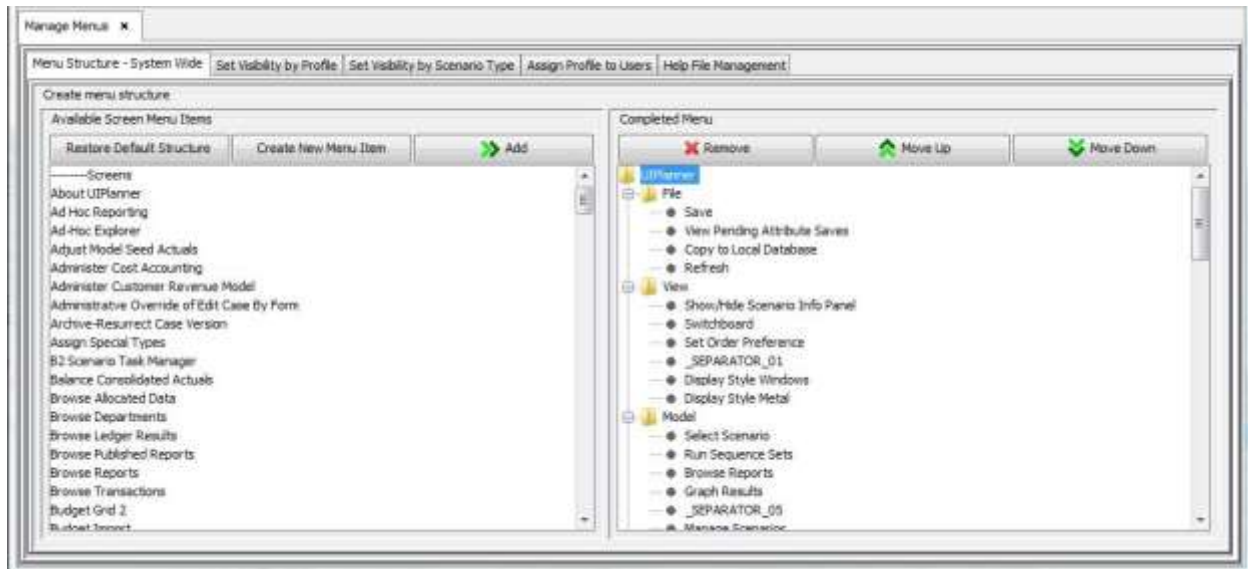
- Open the **CORE OBJECT EDITOR**.
- Open the *Case-Name* tab
- Select the *Object Type UiMenuItem*.

Object ID	Instance Default Name	Name
SP1		_SEPARATOR_
Switchboard		Switchboard
DisplayStyleWindows		Display Style Windows
Design Switchboard		Design Switchboard
DisplayStyleMetal		Display Style Metal
Center		Departments
File		File
Budget		Budget User
AdminExplorer		Reporting
Project		Projects
Labor		Labor
ReferenceScenario		Reference Scenario
ResourceTimeData		Cluster Group Time Data Editor
DataFinderTwo		Data Finder
ClusterEditor		Cluster Editor
SecurityApplication		Budget Security
SP1		_SEPARATOR_
TreeEditor		Tree Editor
SP1		_SEPARATOR_
SP2		_SEPARATOR_
BudgetImport		Budget Import
FilterManager		Manage Filters
SP1		_SEPARATOR_
ValidationRulesEntry		Validation Rules Entry
View		View
SP1		_SEPARATOR_

- Locate the menu item whose name you wish to change.
- Type a new name into the right column (*Name*).
- Select **File, Save** from the UIPlanner menu.
- It will be necessary to exit and re-start UIPlanner to view your changes to the menu.

Menu Structure - System Wide Tab

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The *Menu Structure - System Wide* tab of the **MANAGE MENUS** screen is used to set the positioning and content of menu items in UIPlanner.

Screen Layout:

The left side of this tab contains a list of the screens that are available as menu items. The right region displays the current menu structure. This information is arranged in a tree structure. The folder icons depict the menu items that will appear across the top of the UIPlanner window. Items below each folder will appear as a drop-down list of selections when you click a menu item. The items indicated as *_Separator_xx* show up as faint lines to separate groups of items within one drop-down menu.

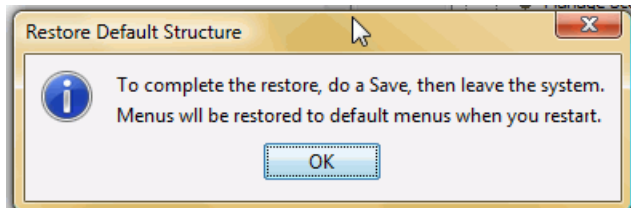
List Of Tasks Or Operations That Are Performed With This Screen:

Buttons on each side of this tab allow you to do the following things.

Restore Default Structure

Click **RESTORE DEFAULT MENU STRUCTURE** in the **MENU STRUCTURE - SYSTEM WIDE** tab will remove all customizations you have made to the menu structure and take it back to a default menu structure. You only need to use this option if you want to remove all customizations to the menu structure.

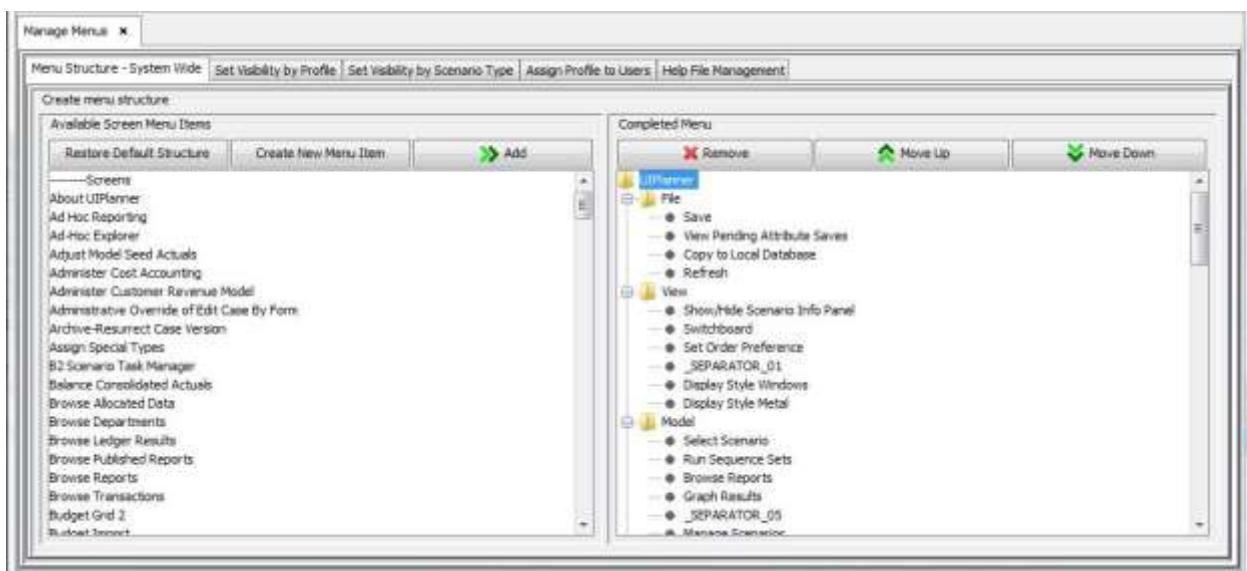
When you click **RESTORE DEFAULT STRUCTURE**, you will see this message:



Click on **OK** to close this message. As indicated, after a **File, Save**, the default menu structure will be restored once you have exited and re-entered UIPlanner.

Add, Remove, or Reposition Menu Items

You can customize the UIPlanner menu in terms of items included and their location on the menu. Note that the menu structure is built when you first enter the system. Changes you make here in the menu structure or visibility will not take effect until you select **File, Save** from the UIPlanner menu and exit/re-enter the system.



Adding Items

- To add an item from the available list (left side) to the completed menu, highlight the item to select it.
- Click on the item in the completed menu (right side) under which you would like to add it.
- Click on the double-green right arrow (Add) underneath the available items list to move that menu item over to the completed section. Note that a single menu item may be added to more than one section on the completed menu. It will then show up under several drop-down lists.

Removing Items From the Completed Menu

- To remove an item from the completed menu, highlight that item.
- Click on the button marked with a red "X." The item will be removed from that section of the completed menu.
- If there is more than one instance of the item on the completed menu, those other instances must be removed separately.

Re-Ordering Menu Items or Menu Categories

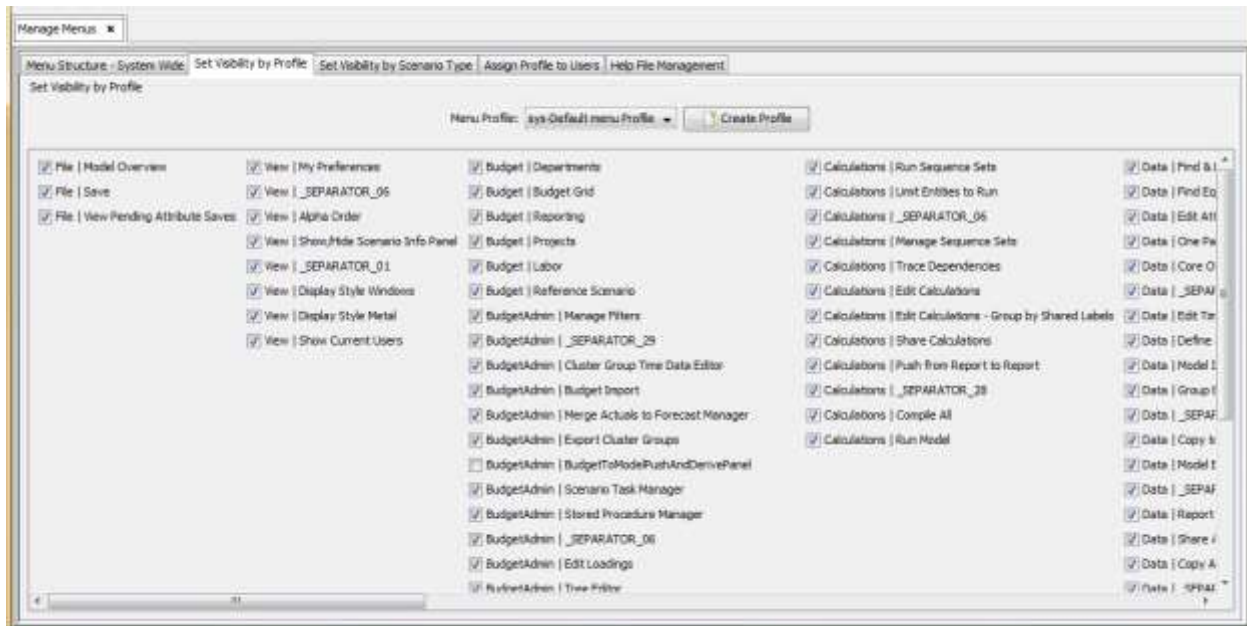
- To reorder menu items within a menu category, highlight that item.
- Use the up or down arrows to move that item to the desired position.
- Note that you cannot use the arrows to move items between categories. In that case, you would add the item to the desired category and remove it from the current one.
- You can reorder menu categories as well, by highlighting the folder and using the up or down arrows. Note that reordering the categories will change the order of the menus across the top of the UIPlanner application.

After any menu changes, select **File, Save** from the UIPlanner menu.

{ XE "User Profile" * MERGEFORMAT }{ XE "Set Menu Visibility By Profile" * MERGEFORMAT }{ XE "Manage Menus" * MERGEFORMAT }Set Menu Visibility by Profile

The *Set Menu Visibility by Profile* tab on the **MANAGE MENUS** screen enables you to set which menu items will be visible for different user profiles. For each profile, you designate which menu items (screens) are visible and which are hidden. While access to some screens can be limited using the **MODEL SECURITY** screen, those items will still appear but might be grayed out. Using the *Menu Profile* approach on the **MANAGE MENUS** screen will remove those items from the UIPlanner menu entirely for those users. You can thus have two or more menu profile structures – full menus for the System Administrators and limited menus for other users.

Open the **MANAGE MENU** screen and click on the *Set Visibility by Profile* tab (see below). Note: You can set up multiple profiles that reflect different user roles, e.g., System Administrator, Super User, Budget User, etc. These profiles can be assigned to users in the [Assign Profiles to Users](#) tab.



- Select a profile using the *Menu Profile* drop-down list. The visibility status of all menu items in that profile will be displayed.
- Check or uncheck the box next to an item to make that menu item visible or invisible.

Note: If you un-check the first (top) menu item of a category, e.g., "*Budget / Departments*" in the ***Budget*** menu category shown above, that entire category of menu items will be invisible when in the selected scenario type. This feature can be useful when you would like to hide an entire menu category, such as the ***Budget*** category for all *Detailed Model* scenarios. If you wish to hide a particular menu item that is at the top of a category, but do not wish to hide that entire category, you should move that menu item further down the list in the *Menu Structure - System Wide* tab. Then, you can hide that item for the selected scenario type without rendering the rest of that category of menu items invisible.

Creating a New Menu Profile

To create a new menu profile, follow these steps:

- In the *Menu Visibility* tab, click **CREATE PROFILE** to open the **ADD OBJECT** dialog box.
- Add the profile. The new profile will be available in the drop-down list in the *Menu Visibility* tab.
- The new menu profile will default to displaying all menu items. Un-select (remove checks from) menu items as needed to configure its visibility.
- After you have finished configuring the visibility for the selected profile, select **File, Save** from the UIPlanner menu.

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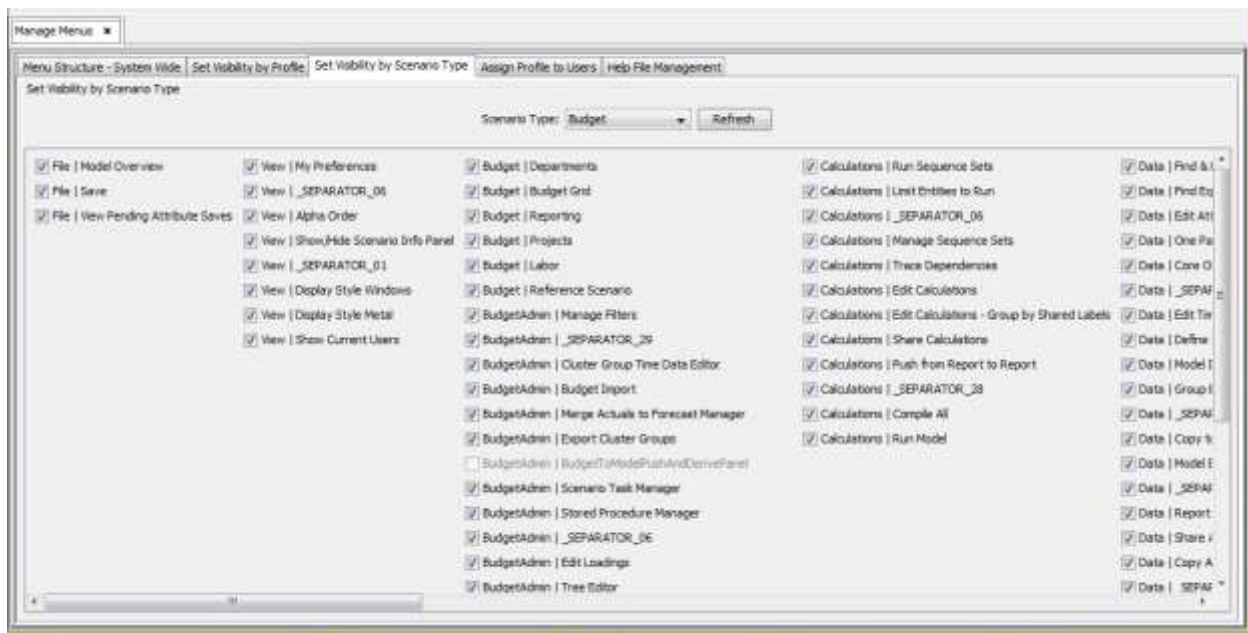
- To assign this new menu profiles to users, click on the [Assign Profiles to Users](#) tab.

Note:

Setting menu visibility by a custom menu profile is an alternative to setting menu visibility by *Scenario Type*. It is not recommended that you use them together, for the following reason. If an item is hidden in a scenario type, that designation "wins" over a visible designation in a selected custom menu profile. Therefore, if you wish to control menu visibility by profile, as described above, you need to make sure that for all scenario types in the [Set Visibility by Scenario Type](#) tab, all menu items are checked (visible).

{ XE "Scenario Type" * MERGEFORMAT }{ XE "Manage Menus" * MERGEFORMAT }{ XE "Set Visibility by Scenario Type" * MERGEFORMAT }Set Menu Visibility by Scenario Type

The *Set Menu Visibility by Scenario Type* tab on the **MANAGE MENUS** screen is used to control menu item visibility by scenario type. In other words, what menu items a user sees in the UIPlanner menu will be determined by the type of the scenario they have selected in the context section of the UIPlanner screen, e.g., Budget, Model, etc. While this tab can be used to control visibility, the overall structure and organization of your installation's menu is determined on the *Menu Structure - System Wide* tab of the **MANAGE MENUS** screen.



Screen Layout:

The top region of the tab contains a drop-down list from which you select a scenario type. Scenarios can be assigned types in the **MANAGE SCENARIOS** screen. A **REFRESH** button is located next to the *Scenario Type* selection box. Clicking this button will refresh the display after a new scenario type is selected.

The main region of the tab displays each main menu header and the menu items that are available for each one. Use the scrollbars on the right side and at the bottom of the screen to view the entire menu structure. The organization of this list is maintained in the *Menu Structure - System Wide* tab of the **MANAGE MENUS** screen.

A check in the box next to a menu item indicates that the item is visible when the user is in a scenario of the selected type. To restrict menu visibility for a scenario type:

- Select the *Scenario Type*.
- Click on the box next to menu items you wish to hide to remove the check.
- When you are finished, select **File, Save** from the UIPlanner menu.
- The new visibility configuration will be loaded the next time you (and other users) re-start UIPlanner.

Note: the same functionality for turning off visibility of an entire category (described in the [Set Menu Visibility by Profile](#) topic) also applies here. If you un-check the first (top) menu item of a category, e.g., "**Budget / Departments**" in the **Budget** menu category shown above), that entire category of menu items will be invisible when in the selected scenario type.

Assign Menu Profiles to Users

If you have created additional menu profiles, use the Assign Menu Profiles to Users tab on the **MANAGE MENUS** screen to assign users the appropriate profile.

- Open the **MANAGE MENUS** Screen.

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- Click on the *Assign Profile to Users* tab:

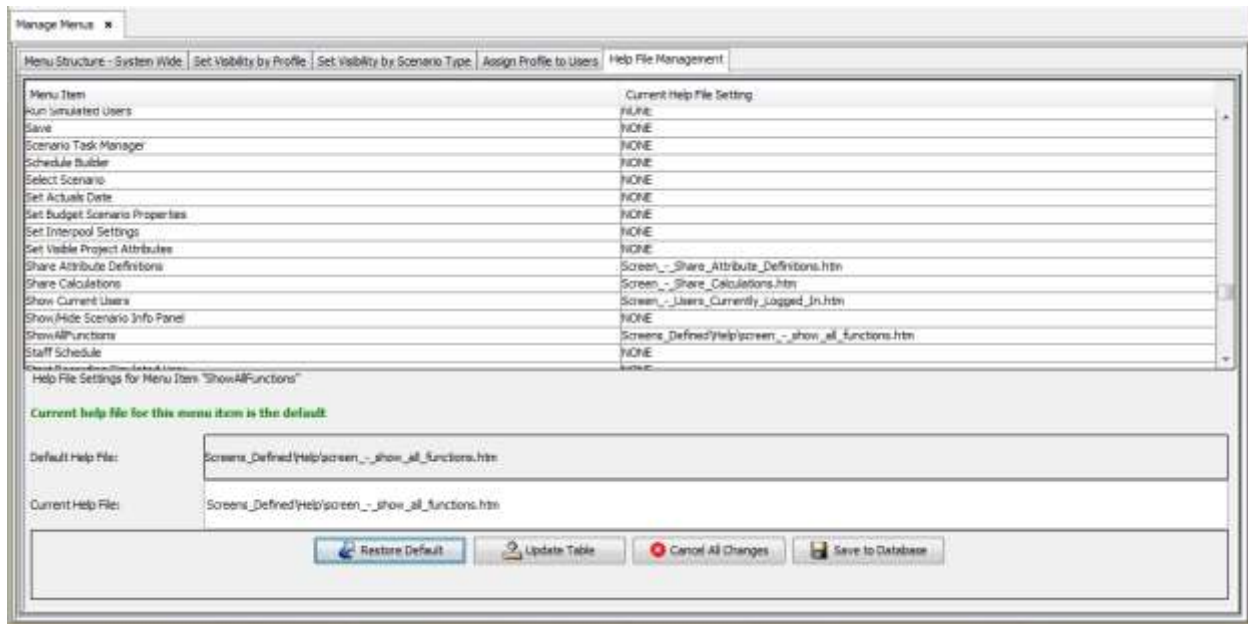
User ID	First Name	Last Name	User Type	Menu Profile
ACLAYPOOL	Alan	Claypool	Model	Super User
BBAILEY	Brandon	Bailey	Model	Budget Admin
BQUALLS	Bill	Qualls	Model	Budget User
BSIMPSON	Bruce	Simpson	Model	Model World
CJACOBS	Corey	Jacobs	Model	Budget User
CJARBOE	Chris	Jarboe	Model	Customer Revenue
CMM5210			Model	Model World
DLUCIANI	Diane	Luciani	Model	Super User
DPAYNE	Diane	Payne	Model	Budget Admin
DPREG	David	Preg	Model	Model World
EJOHNSON	Eleanor	Johnson	Model	Model World
EMPALMIERI	ELIZABETH	PALMIERI	Model	Super User
FGSMITH	Fred	Smith	Model	Super User
FSMITH	Fred	Smith	Model	Customer Revenue
GGETZ	Gary	Getz	Model	Budget Admin
GJUNGMAN	Greg	Jungman	Model	Super User
JCLARK	Joe	Clark	Model	Customer Revenue
JDURNING	John	Durning	Model	Super User
JMCCART	Jonathan	McCart	Model	Model World
JPALMER	John	Palmer	Model	Super User

- Highlight the user to which you wish to assign a specific profile.
- Click on the value in the *Menu Profile* field for that user to open the list of available profiles:

User ID	First Name	Last Name	User Type	Menu Profile
DPAYNE	Diane	Payne	Model	Budget Admin
DPREG	David	Preg	Model	
EJOHNSON	Eleanor	Johnson	Model	Model World
EMPALMIERI	ELIZABETH	PALMIERI	Model	sys-Default menu Pr
FGSMITH	Fred	Smith	Model	Test Menu Profile
FSMITH	Fred	Smith	Model	Budget User
GGETZ	Gary	Getz	Model	Budget Admin
GJUNGMAN	Greg	Jungman	Model	Super User
JCLARK	Joe	Clark	Model	Customer Revenue

- Click on your choice to select it.
- From the UIPlanner menu, select **File, Save** to complete the process.

{ XE "Context Sensitive Help" * MERGEFORMAT }{ XE "Help System Files" * MERGEFORMAT }{ XE "Manage Menus - Help System File Management" * MERGEFORMAT }{ XE "Manage Menus" * MERGEFORMAT }Help File Management



Your installation of UIPlanner should include this UIPlanner online help system. The help system is accessed by selecting **Help** from the UIPlanner menu. The location and file name of this help system are set in the **PLANNER PROPERTIES** screen. For many screens of UIPlanner, the help system includes an additional context-sensitive feature. When you are in a screen in UIPlanner, such as the **BROWSE REPORTS** screen, and press F1 on your keyboard, the help system will open to a topic (htm file) describing the operation of that particular screen.

These screen-to-help topic htm file mappings have been included in UIPlanner code as default file locations.

If you have developed custom help documentation for your particular installation of UIPlanner and have converted that to an html-based document, you can link it as an online help system along with the base UIPlanner system. You can use the *Help File Management* tab on the **MANAGE MENUS** screen to designate a different htm file to launch when F1 is pressed in a particular screen. You can thus hook up your custom htm files to the appropriate UIPlanner screens. Note that this linking functionality does not remove any of the core online help – it allows you to more directly link screen to help topic.

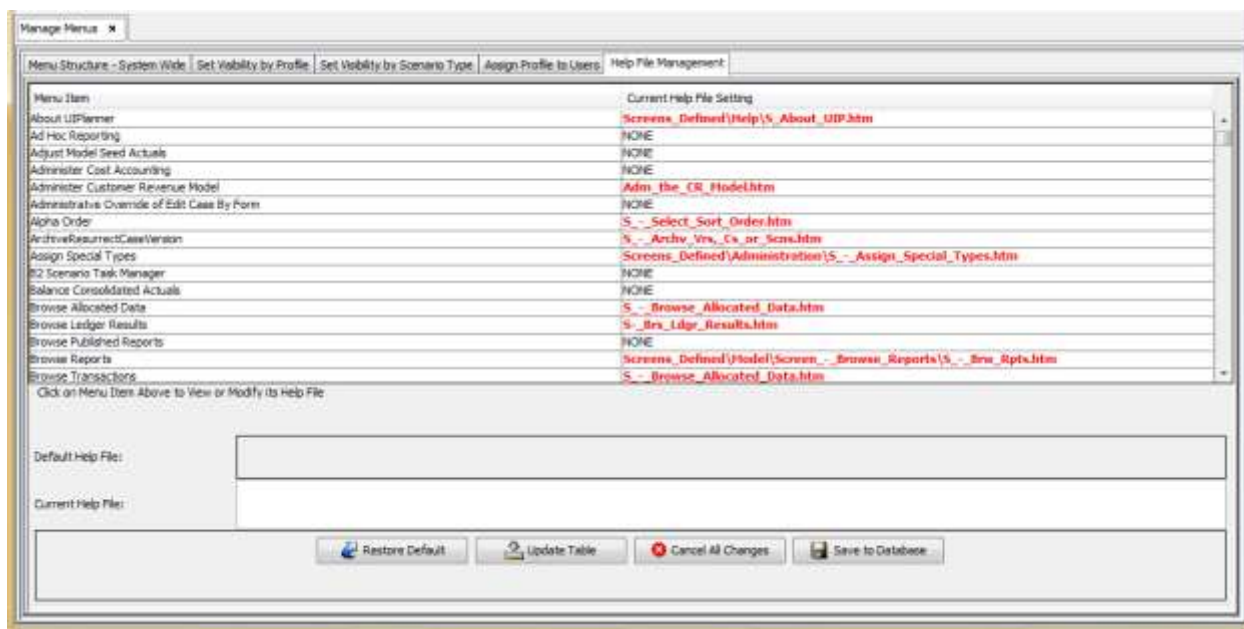
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Screen Layout:

The main region of this tab contains the list of screens in UIPlanner, and the location and name of the htm file that launch when F1 is pressed. The bottom region contains a field displaying the default file name, and a field in which you can enter a new file name and location. Note that the base directory of the help system is entered in Planner Properties and does not need to be included, only any subdirectories and the actual htm file name. For example, in the screen print above, the Help System Location property is set as **c:\Help\Detailed Model 4.0x**. This part of the path does not need to be included when designating a custom file name.

To enter a custom help file name and location for a screen, follow these steps:

- Select the screen for which you wish to change the help file name.
- Highlight the contents in the *Current Help File* field and replace them with the new path and file name.
- Click **UPDATE TABLE** after each custom entry. When you do so, the file name in the grid will be highlighted in red, indicating your custom entry.



- When you are done, click **SAVE TO DATABASE**. You will be prompted with a message indicating how many changes were saved.
- If you would like to cancel your changes without saving, click **CANCEL ALL CHANGES**. Note that this will cancel all changes since your last save to the data base.

- To restore the help file location to the default included in UIPlanner code, select that screen and click on Restore Default. Again, you must click **SAVE TO DATABASE** for the restoration to be complete.
- You will be able to access the new context-sensitive help locations in your current user session. However, other users must exit UIPlanner and start a new session in order to access the new help files.
-

Planner Properties

{ XE "Planner Properties" * MERGEFORMAT }Planner Properties Screen

The screenshot shows the 'Manage System Property settings' window. At the top, it displays 'System Level Properties' as the selected group. Below this, there are checkboxes for 'Budget Properties', 'Model Properties', 'System Properties' (which is checked), 'Customer Revenue Properties', and 'Client Properties'. The main area lists four properties:

Property Name	Property Type	Required Input?	Allow Group Override?
System: Directory: UI Planner - contains planner.jar, Excel Macros, ExcelOLELink.exe, external jars	Directory	yes	yes
System: License key	String	yes	no
System: Browse Reports: maximum cells (rows x columns) for a report	Integer	no	yes
System: Browse Reports: maximum columns for a report	Integer	no	yes

For each property, the 'Default Value', 'System Database Value', and 'Value to Use' are shown. The 'Value to Use' field includes an 'Update' button. The 'System Database Value' field includes a 'Select' button.

UIPlanner uses the **PLANNER PROPERTIES** screen to set system-wide properties. These property settings have a profound effect on the operation

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of the application. They will be customized and set during the installation of UIPlanner.

Screen Layout:

The main body of the screen contains a list of planner properties, their current values and other information, such as *Required Input*, and *Property Type*. Use the scrollbar to move down the list of properties.

An **UPDATE** button is placed under each planner property. To change a value, select or type in the new value and click the **UPDATE** button. For Directory property types a **SELECT** button is provided to allow you to choose a location from Windows Explorer.

Directly above the property list are a series of check boxes for the various property categories, i.e., Budget, Model, System, Customer Revenue, and Client. Remove checks to limit the list of properties displayed.

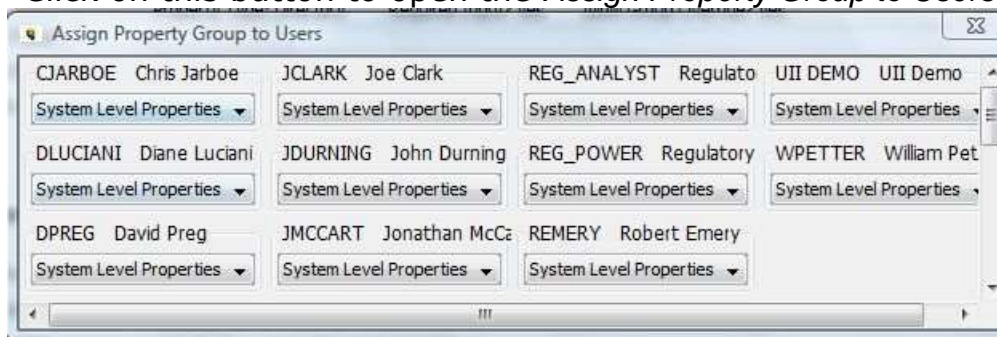
The buttons at the top of the screen enable you to:

Select the Group of Properties to Edit

- If your installation has more than one group defined, you can use this drop-down list to display the groups available and select one. In the above example, System Level Properties is the selected group.

Select Groups for Users

- Click on this button to open the *Assign Property Group to Users* dialog:



- Click on the down arrow under a user and select the desired group. Click on the "X" in the top right corner of the window to close it.
- Select **File, Save** from the UIPlanner menu to complete the operation.

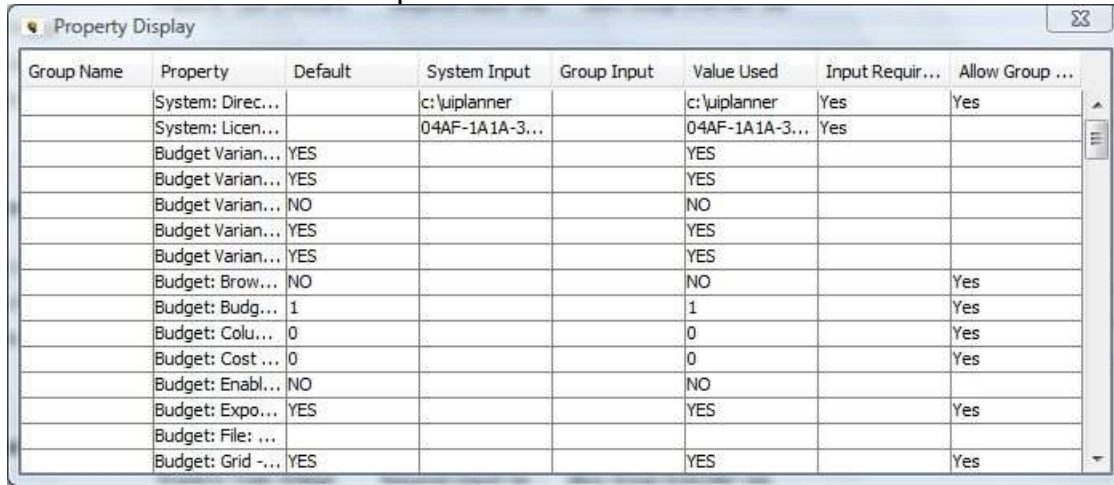
Create Property Group

- Click on this button to open the **ADD OBJECT** dialog box.
- Add the new Property Group.
- Select **File, Save** from the UIPlanner menu to complete the operation.

View as Table

The information in the Planner Properties screen can be viewed in table form and can be exported to Excel.

- Click **VIEW AS TABLE** to open this window:

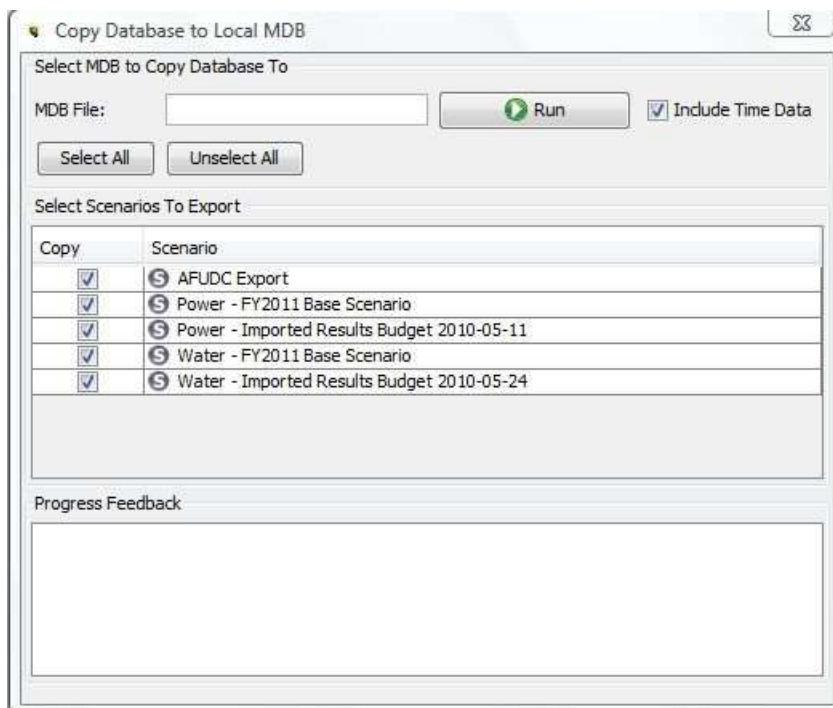


Group Name	Property	Default	System Input	Group Input	Value Used	Input Requir...	Allow Group ...
	System: Direc...		c:\uiplanner		c:\uiplanner	Yes	Yes
	System: Licen...		04AF-1A1A-3...		04AF-1A1A-3...	Yes	
	Budget Varian...	YES			YES		
	Budget Varian...	YES			YES		
	Budget Varian...	NO			NO		
	Budget Varian...	YES			YES		
	Budget Varian...	YES			YES		
	Budget: Brow...	NO			NO		Yes
	Budget: Budg...	1			1		Yes
	Budget: Colu...	0			0		Yes
	Budget: Cost ...	0			0		Yes
	Budget: Enabl...	NO			NO		
	Budget: Expo...	YES			YES		Yes
	Budget: File: ...						
	Budget: Grid -...	YES			YES		Yes

From this window, right click on a column label and select **Export to Excel** from the menu.

Copy to Local Database

{ XE "Local Database" * MERGEFORMAT }{ XE "Screen - Copy to Local Database" * MERGEFORMAT }Copy to Local Database Screen



Copy Database to Local MDB

Select MDB to Copy Database To

MDB File: Include Time Data

Select Scenarios To Export

Copy	Scenario
<input checked="" type="checkbox"/>	AFUDC Export
<input checked="" type="checkbox"/>	Power - FY2011 Base Scenario
<input checked="" type="checkbox"/>	Power - Imported Results Budget 2010-05-11
<input checked="" type="checkbox"/>	Water - FY2011 Base Scenario
<input checked="" type="checkbox"/>	Water - Imported Results Budget 2010-05-24

Progress Feedback

In production, UIPlanner is run in an Oracle or SQL Server environment. The **COPY TO LOCAL DATABASE** screen allows you to make a local copy of the UIPlanner database in MS Access. You may do this for several reasons: a) to take the model offsite to an analyst meeting, b) to make a local copy to test some major changes you do not want to test in production, or c) for backup or archiving purposes.

This screen launches a process that copies all of the UIPlanner tables along with their indexes into a local MS Access MDB. If you run the model from this local database, you will get the exact same results.

Screen Layout:

The **COPY TO LOCAL DATABASE** screen has three major regions:

At the top of the screen is a dialog box where you click to browse and select the destination database.

The center region of the screen *Select Scenarios to Export* lists all active scenarios in the current version.

The bottom of the screen *Progress Feedback* is a text window which indicates the progress of the copy process.

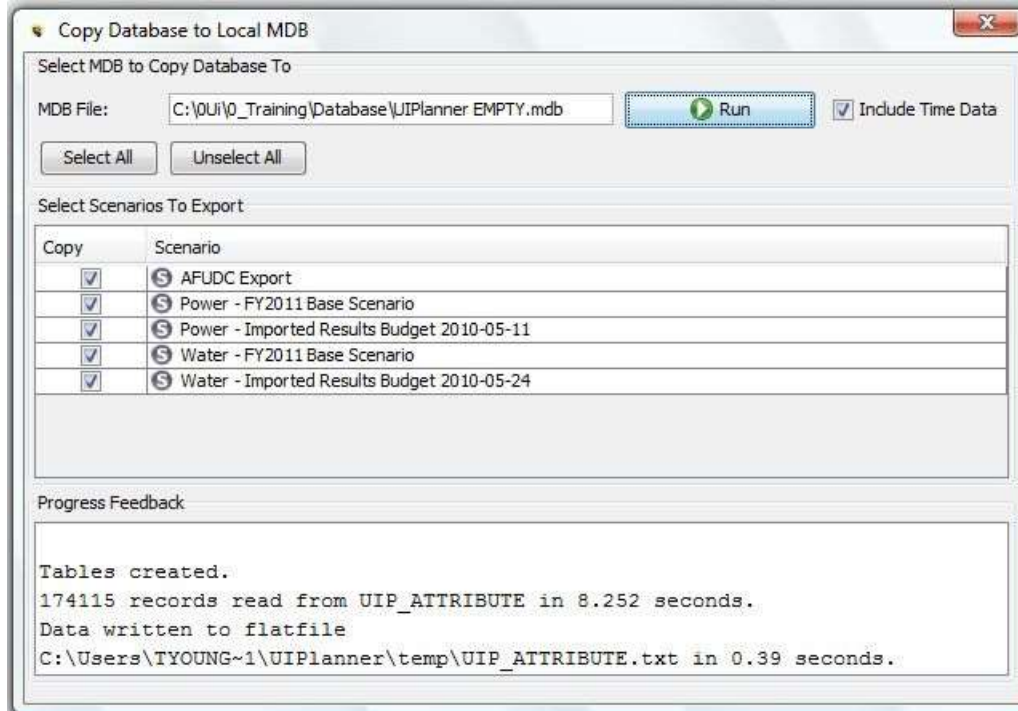
List Of Tasks Or Operations That Are Performed With This Screen:

Copying Data to a Local Database:

- Click in the *MDB File* box to bring up the browse window. Browse to find the destination database. The destination file needs to be an .mdb file. If you use Access 2007, you must first save the database as an .mdb file, not .accdb (the Access 2007 format).
- Use the check boxes to select which scenarios to copy. Note that this process copies all data required to run the selected scenarios, i.e., the formula case, the actuals case, and whatever time data and attribute cases are required.
- The *Include Time Data* check box should be left selected since you almost always will want to include the time data.

- Click **RUN**. First, the process will extract all of the tables in the UIPlanner database and copy them out to text files. It will then create empty tables in MS Access to receive the data. Finally it will launch a session of MS Excel that will spin through these files and copy them into MS Access. This process will be logged in the *Process Feedback* region and in the MS Excel session. See below.

Progress Feedback



Excel Session:

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The screenshot shows a Microsoft Excel spreadsheet titled 'ExportToAccess.txt'. The spreadsheet contains a table with 7 rows of data. The first row is a header row with the text 'DOWNLOAD' in cell A1. The subsequent rows list file paths and their corresponding sizes and timestamps.

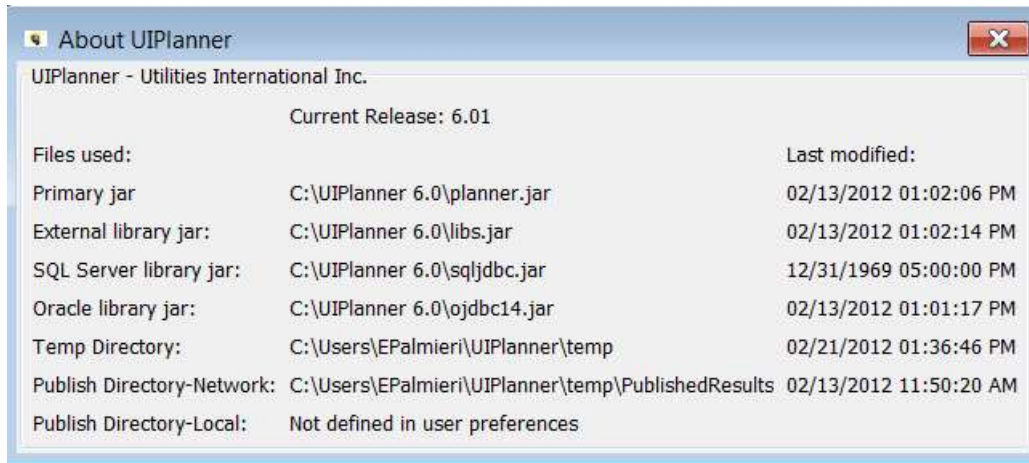
	A	B	C	D	E	F	G	H	I	J	K	L
1	DOWNLOAD											
2	C:\0Ui\0_Training\Database\UIPlanner EMPTY.mdb											
3	C:\Users\TYOUNG~1\UIPlanner\temp\UIP_ATTRIBUTE.txt						7000					
4	C:\Users\TYOUNG~1\UIPlanner\temp\UIP_TIME_DATA.txt						91850	10:56:48				
5	C:\Users\TYOUNG~1\UIPlanner\temp\UI_ID.txt						12	10:54:42				
6	C:\Users\TYOUNG~1\UIPlanner\temp\UIP_INSTANCE.txt						13479	10:54:54				
7	C:\Users\TYOUNG~1\UIPlanner\temp\UI_USER_PREFERENCES.txt											
8												
9												
10												
11												

Notes

- **Archived Data** - This process will not copy archived cases or scenarios. If you want to include archived data in the backup you need to un-archive this data.
- **Active Version** - The Copy to Local Database process only runs against the current active version. If you want local copies from a different version, you need to exit and reopen the model using that version.

HELP

{ XE "About UIPlanner" * MERGEFORMAT }{ XE "UIPlanner" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }About UIPlanner Dialog Box



UIPlanner features are listed by release number. This screen is designed to give users a listing of program files and the dates of their most recent modifications. Click the "X" in the top right corner to close the box.

{ XE "Help System" * MERGEFORMAT }{ XE "Help" * MERGEFORMAT }{ XE "Concept" * MERGEFORMAT }Concept - Help System

The UIPlanner Help System provides a systematic method to locate information about UIPlanner. Each help topic is presented in one of the four topic formats (described below). Topic type can be easily identified in the header on each topic. This topic is a UIPlanner Concept Topic as indicated in the header at the top right of this page.

Help Version

This help file is intended for use with UIPlanner Version 6.0x

How to Topics

How-to topics are designed to guide you through the necessary screens and steps to accomplish specific tasks. Each How-to topic is generally limited to a single task, providing quick answers to your questions. Links are provided in How-to topics to other relevant help topics.

Screen Definition Topics

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Screen Definition topics are focused on a single screen, describing each screen section, and all buttons and menu options. Screen definition topics generally follow the format below.

- Introduction paragraph explains what the screen is designed to accomplish.
- The screen location is given relative to the UIPlanner menu structure.
- General layout of the screen is explained, indicating where screen regions are located.
- Each control or input is explained. Depending on the complexity of the screen, additional topics may be used.
- Related topics button which will lead you to other related topics of interest of interest

Concept Topics

Concept topics will describe high level concepts relevant to an area of interest in UIPlanner. Generally concept topics will be located at the top of the list after a "Book" is opened on the table of contents.

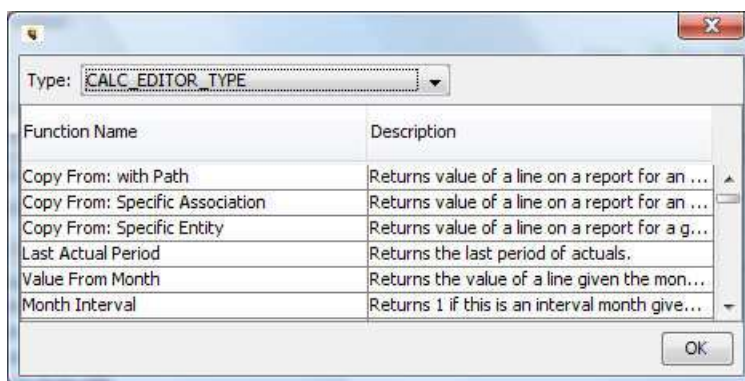
Function Topics

Functions topics are specific to the Edit Calculation screen and creating reports. Function topic format will guide you through the use of each function.

List Topics

List topics simply contain a list of other help topics.

{ XE "Show All Functions" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }{ XE "Screen" * MERGEFORMAT }Show all Functions Screen

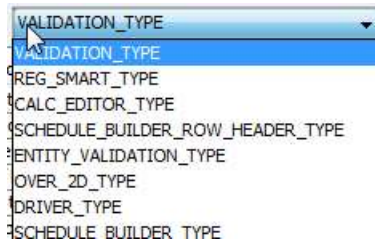


The **SHOW ALL FUNCTIONS** dialog box displays a list of all calculation functions valid for a calculation type.

Screen Layout:

This dialog box has a single control drop-down list near the top and a list of functions, as shown above.

Type: Select the desired function list by type. Type refers to the calculation type (shown below) that each function is valid for. In many cases, a particular function will be valid for more than one calculation type.



When you select a calculation type, a short description of each function for that type appears in the grid

If you would like to view this information in Excel, right click on either the function or the description column header, then select **Export to Excel** to view this information in a spreadsheet. You can also elect to *Export to HTML* or *Search* for a specific function by right-clicking on the headers.

TROUBLESHOOTING

{ XE "Errors" * MERGEFORMAT }{ XE "Troubleshooting Overview" * MERGEFORMAT }Troubleshooting Overview

The purpose of this section is to outline some common errors and issues faced by users and to lay out processes for addressing them. Note: The issues and solutions presented here are merely examples. All possible errors are not covered. In almost all situations, you will need to contact your system administrator to address the problem. These topics will help you provide more detailed information to your system administrator so that he/she may resolve the issue.

Please see the following topics for more information:

- [Running Low on Memory](#)
- [Compile Errors](#)
- [Model Run Errors](#)
- [Stack Trace/DOS Prompt](#)
- [Report Editing](#)
- [Data Editing](#)
- [Visibility/Security](#)
- [Monthly/Annual Reports](#)
- [User Temp Data Case](#)
- [Model Import - UnMappedItems](#)
- [Model Import - Duplicate Interface Codes](#)
- [Actuals Data](#)
- [Pull Reporting - UIGet Argument Not Found](#)
- [Pull Reporting - UIGet Usage Error](#)
- [Pull Reporting - UIGet Functions with Prefixed Paths](#)
- [Refresh Browse Reports](#)
- [Excel Output - **BROWSE REPORTS** Screen](#)
- [Browse Reports - No results for 2D Reports](#)
- [Duplicate Interface Codes, Only One Mapped Line](#)

{ XE "Troubleshooting - Running Low on Memory" * MERGEFORMAT }{ XE "Low Memory" * MERGEFORMAT }{ XE "Error" * MERGEFORMAT }{ XE "Memory" * MERGEFORMAT }Troubleshooting - Running Low on Memory

Description Of Issue Or Problem:

UIPlanner application suddenly becomes unresponsive.

Screens or Operations Where This Error Might Occur:

This can happen in any screen in UIPlanner, running any operation.

Why It Happens And What To Do About It:

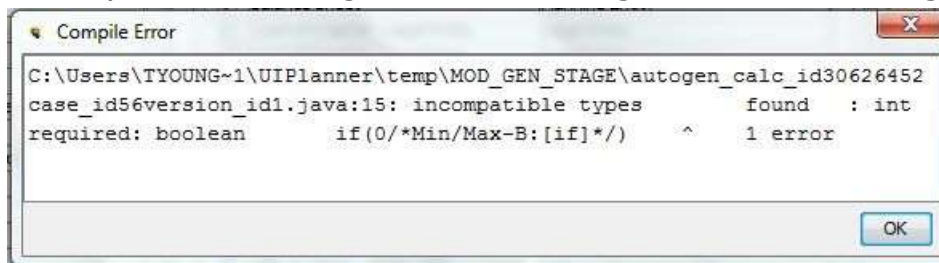
You may be running out of memory. For users with a 32 bit operating system the most memory available to an application must be less than 2 GB, usually around 1.2 GB. You need to see how much memory UIPlanner is using. To do this:

- Open the *WINDOWS TASK MANAGER*.
- Select the *Processes* tab.
- Sort the table on that tab by the *Memory* column, descending.
- If you have a process named Java that is around **1,200,000 K** you are exceeding the RAM limits of a 32 bit operating system.
- You should contact your system administrator to discuss options.

{ XE "Compile Errors" * MERGEFORMAT } { XE "Troubleshooting - Compile Errors" * MERGEFORMAT } { XE "Errors" * MERGEFORMAT } Troubleshooting - Compile Errors

Description Of Issue Or Problem:

You are building a report, and when you click **SAVE AND COMPILE**, you get a *Compile Error* message box. Another instance where this might happen is when you are running the model and get an error message box.

**Screens Or Operations Where This Error Might Occur:**

[Run Sequences](#)

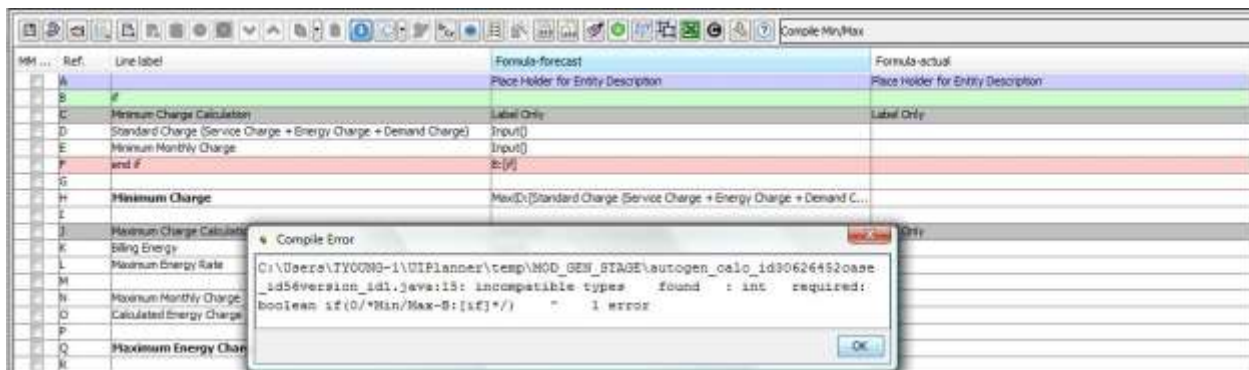
[Manage Sequences](#)

[Calculation Editor](#)

Why It Happens And What To Do About It:

This message indicates that there is an error in a report calculation. It can be a number of things, for example: a) you have not supplied all required arguments for a function, or b) you have put in illegal syntax.

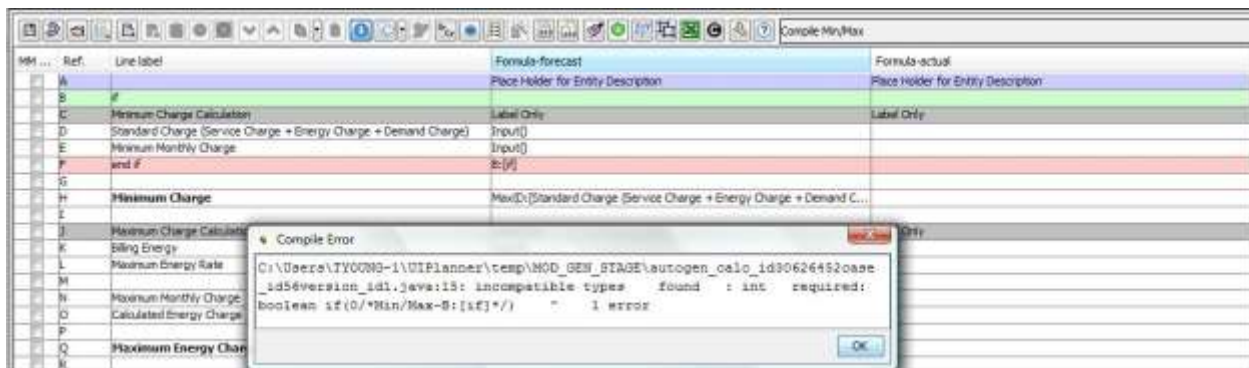
The *Compile Error* message box gives you information to find the source of the error. It gives you report (its object ID), the line, and the reason for the error. See below.



The error is on report ID 30626452 (Min/Max), line B, and Boolean requires int to evaluate.

Two of the most common compile errors are shown below:

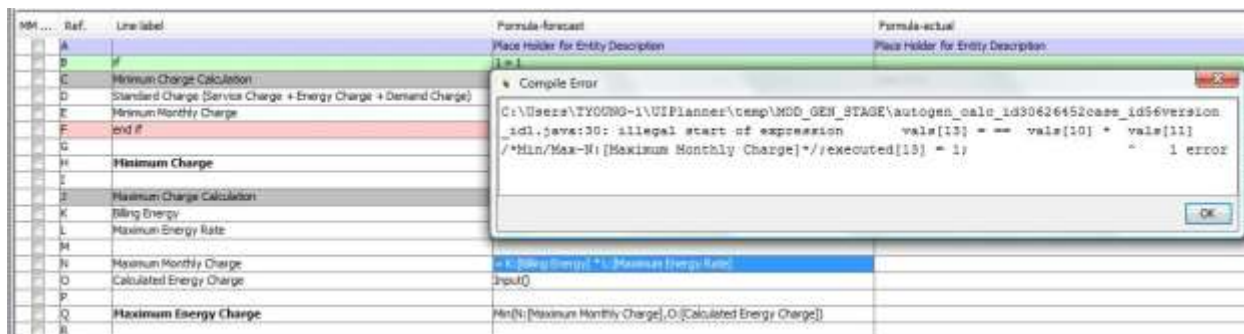
1) If-test without a check – when you build an "if" test, you need to put in what the calculation editor is to evaluate for processing the if-test. This goes on the line with the "if" (or the else-if, as needed). If you do not, you get the following compile error.



To fix the error, put in something on line B for the "if" test to evaluate. Note that in testing, you can put in $1=1$. This is a valid expression.

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2) Starting a formula with "=" – The "=" symbol is used to invoke the function editor, and is not used in mathematical calculations like in Excel. If you do accidentally preface a formula with =, you will get the error below. You need to put in what the calculation editor is to evaluate for processing the "if" test. This goes on the line with the If (or the else-if, as needed).

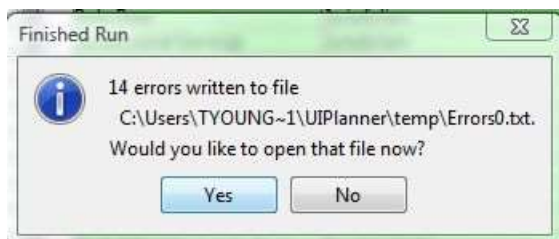


To fix the error, remove the "=" from the equation.

{ XE "Model Run Errors" * MERGEFORMAT }{ XE "Troubleshooting - Model Run Errors" * MERGEFORMAT }{ XE "Errors" * MERGEFORMAT }Troubleshooting - Model Run Errors

Description Of Issue Or Problem:

You are running a report sequence, and you get a text message saying that there were errors. See below for an example.



screens Or Operations Where This Error Might Occur:

[Run Sequences](#)

[Manage Sequences](#)

[Calculation Editor](#)

Why It Happens And What To Do About It:

This error message is generated by UIPlanner when it encounters missing or invalid relationships or missing data that is needed for posting results or for

consolidating results. Note that UIPlanner will still finish running and will use all information that it can. If there are errors, some report results may be incorrect, but the model will still run.

UIPlanner sends the errors out to a text file. This is noted in the dialog box. Click **YES** to open the text file. Below is an example of an error file.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	14 errors found:																
2	Error: 1	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Total Interest Accrual Entity: Bonds - Detailed Model.CH 4.50% FMB due May 15, 2033														
3	Error: 2	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Amortization of Issue Cost Entity: Bonds - Detailed Model.CH 4.50% FMB due May 15, 2033														
4	Error: 3	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Interest Payment Entity: Bonds - Detailed Model.CH 4.50% FMB due May 15, 2033														
5	Error: 4	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Total Interest Accrual Entity: Bonds - Detailed Model.CH 5.5% FMB due Nov 1, 2035														
6	Error: 5	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Amortization of Issue Cost Entity: Bonds - Detailed Model.CH 5.5% FMB due Nov 1, 2035														
7	Error: 6	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Amortization of Discount (Premium) Entity: Bonds - Detailed Model.CH 4.50% FMB due May 15, 2033														
8	Error: 7	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Amortization of Discount (Premium) Entity: Bonds - Detailed Model.CH 5.5% FMB due Nov 1, 2035														
9	Error: 8	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: New Issue - Principal Entity: Bonds - Detailed Model.CH 5.5% FMB due Nov 1, 2035														
10	Error: 9	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Interest Payment Entity: Bonds - Detailed Model.CH 5.5% FMB due Nov 1, 2035														
11	Error: 10	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Retirement Entity: Bonds - Detailed Model.CH 4.50% FMB due May 15, 2033														
12	Error: 11	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Detailed Model Line: Transfer to Current Liability Entity: Bonds - Detailed Model.CH 4.50% FMB due May 15, 2033														
13	Error: 12	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Secondary Report Line: New Issue - Principal Entity: Bonds - Detailed Model.CH 5.5% FMB due Nov 1, 2035														
14	Error: 13	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Secondary Report Line: Total Interest Accrual Entity: Bonds - Detailed Model.CH 5.5% FMB due Nov 1, 2035														
15	Error: 14	Post Error No valid Low-level Planning Entity for transaction	Orig Report: Bonds - Secondary Report Line: Interest Payment Entity: Bonds - Detailed Model.CH 5.5% FMB due Nov 1, 2035														

The text file will indicate the cause of the errors. It will list specific reports and entities.

Some of the most common model run errors are described below:

- No valid Low Level Planning Entity for transaction. This arises when one or more entities in the report do not have a path to get to a low level planning entity. They are most likely missing an association value.
- No relation between reports. This arises when you try to copy or rollup between reports where the entity groups do not have a relationship to support it. Either create one, or use another variant of the function.
- Cannot copy from mixed monthly/annual to monthly. You have tried to copy from a report that is run monthly/annual to one run monthly report. This is OK during the monthly portion of the horizon, but does not work in the annual periods. Either redefine the report, or use the *ATTEMPT APPROXIMATION* option on the function.
- No postings occur because there is a problem with the consolidating hierarchy. Something in the base consolidation structure has changed and is causing a fatal error in the posting logic. When this occurs, the postings are turned off.
- Code is out of synch. One or more of the reports have been changed since you last recompiled. Go back to **RUN SEQUENCES** and click **COMPILE AND RUN**.
- A scenario does not run because certain report(s) in the iterative report sequence are not set to "mixed period." Check the reports in the sequence.

{ XE "Troubleshooting - Stack Trace/DOS Prompt" * MERGEFORMAT }{ XE "Stack Trace/DOS Prompt" * MERGEFORMAT }{ XE "Errors" * MERGEFORMAT }Troubleshooting - Stack Trace/DOS Prompt

Description Of Issue Or Problem:

UIPlanner has the ability to echo key processing information to a DOS prompt running simultaneously with the application (usually called the Stack Trace). This provides key debugging information for your system administrator or UII if you encounter a serious error. Note that there is a [Planner Property](#) that alternatively allows you to not have the DOS box visible, but instead to send errors and information to a text file.

Whichever option you choose, the text the messages are generally left-justified. An error will be indented. See below.

```

r
Java Version: 1.6.0_18
Login time 8814ms
reloadAttribute returned=> 96531
Found a slow spot at SpecialType.java line 356 which took 31 ms
funcType1
.itemStateChanged() after-120070
.itemStateChanged() after-120030
!!!!DISPOSE!!!!
call: cmd.exe /c C:\PROGRAM~1\Java\JDK16~1.0.1\bin\javac.exe -classpath .;C:\PROG
RA~1\UIPLAN~1\planner.jar C:\Users\TYOUNG~1\UIPlanner\temp\MOD_GEN_STAGE\*.java
java.lang.RuntimeException: C:\Users\TYOUNG~1\UIPlanner\temp\MOD_GEN_STAGE\autog
en_calc_id30626452case_id56version_id1.java:15: incompatible types found
: int required: boolean if(<0/*Min/Max-B:[if]*/> ^ 1 error
76) at com.utilinc.planner.domain.Calculation.compileAll(Calculation.java:13
at com.utilinc.planner.ui.reporting.calculator.CalculationEditor.compile
All(CalculationEditor.java:4831)
at com.utilinc.planner.ui.reporting.ManageSequenceEditor.compileReports(C
ManageSequenceEditor.java:500)
at com.utilinc.planner.ui.reporting.ReportSequenceEditor$ContextPanel$9.
doWork(ReportSequenceEditor.java:1011)
at com.utilinc.resource.ui.CursorActionListener$1.run(CursorActionListen
er.java:110)
at java.lang.Thread.run(Unknown Source)
java.lang.RuntimeException: java.lang.RuntimeException: C:\Users\TYOUNG~1\UIPlan
ner\temp\MOD_GEN_STAGE\autogen_calc_id30626452case_id56version_id1.java:15: inco
mpatible types found : int required: boolean if(<0/*Min/Max-B:[if]*/>
^
1 error
91) at com.utilinc.planner.domain.Calculation.compileAll(Calculation.java:13
at com.utilinc.planner.ui.reporting.calculator.CalculationEditor.compile

```

As indicated above, this is key debugging information on a technical level.

Why It Happens And What To Do About It:

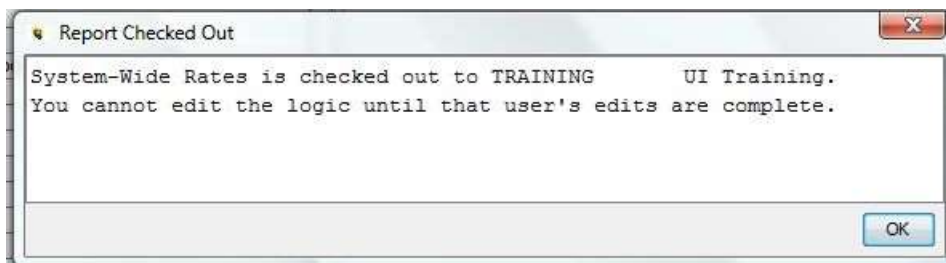
If you encounter a serious error, open the stack trace and look at the latest entries. You may want to send that information to your system Administrator or UII.

- If your *Stack Trace* is sent to a text file, you can just send the file itself.
- If you have a parallel DOS window, below are the instructions.
 - a. Right click on the top of the window
 - b. In the right click options, scroll down and choose *Edit, Select All*
 - c. Right click again and choose *Copy*
 - d. Open a text editor (e.g., Notepad) and choose *Paste*
 - e. Send that file

{ XE "Troubleshooting - Report Editing" * MERGEFORMAT }{ XE "Report Editing" * MERGEFORMAT }{ XE "Errors" * MERGEFORMAT }{ XE "Editing" * MERGEFORMAT }Troubleshooting - Report Editing

Description Of Issue Or Problem:

You open the [Calculation Editor](#) to edit a certain report and get a message saying: "*Report is checked out to . . . username.*" See below.



Why It Happens And What To Do About It:

TA report can be edited by only one user at a time. Click **OK** to open the calculation editor. Note that you will be in view mode.

If you need to edit the report, you can have that user close their session or you can have the system administrator go to their preferences and delete the User Lock.

{ XE "Troubleshooting - Data Editing" * MERGEFORMAT }{ XE "Errors" * MERGEFORMAT }{ XE "Data Editing" * MERGEFORMAT }{ XE "Editing" * MERGEFORMAT }Troubleshooting - Data Editing

Description Of Issue Or Problem:

- **Attribute data** - you change attribute data but it does not change on the screen.
- **Time Data** - you make time data changes and when you click **SAVE** you get the following message box:

**Why It happens And What To Do About It:**

This probably indicates that the case is locked or you do not have security rights to edit the data. You need to contact the system administrator to unlock the case or modify your security rights, as appropriate.

{ XE "Security Errors" * MERGEFORMAT }{ XE "Visibility Errors" * MERGEFORMAT }{ XE "Troubleshooting - Visibility/Security" * MERGEFORMAT }{ XE "Visibility/Security" * MERGEFORMAT }{ XE "Errors" * MERGEFORMAT }Troubleshooting - Visibility/Security

Description Of Issue Or Problem:

- **Entities** - There are entities or entity groups that you know exist but you do not see them on the Edit Attributes screen
- **Scenarios** - There are scenarios that you know exist but you do not see them on the scenario drop-down list or on the **MANAGE SCENARIOS** screen
- **Reports** - The **RUN SEQUENCES** screen shows *Description Suppressed by Security* instead of the report names.

Why It Happens And What To Do About It:

These errors indicate that you do not have security rights to view these entities, reports or scenarios. You need to contact the system administrator to modify your security rights, as appropriate.

{ XE "Annual Reports" * MERGEFORMAT }{ XE "Troubleshooting - Monthly/Annual Reports" * MERGEFORMAT }{ XE "Monthly/Annual Reports" * MERGEFORMAT }{ XE "Errors" * MERGEFORMAT }Troubleshooting - Monthly/Annual Reports

Description Of Issue Or Problem:

You are trying to view data in **BROWSE REPORTS** and you have selected a custom column set with monthly or quarterly columns. You do NOT see any data in the UIPlanner reports for the monthly columns, but you DO see data for the year. See below for an example:

Detail Model 2009-2013 Base Plan	Oct 2010	Nov 2010	Dec 2010	Year 2010	Year 2011	Year 2012	Year 2013
Chicago Electric Company							
Operating Revenue:							
Electric Revenue	0	0	0	5,014,463	5,142,379	5,274,255	5,379,973
Gas Revenue	0	0	0	0	0	0	0
Steam Revenue	0	0	0	0	0	0	0
Affiliate Revenue	0	0	0	0	0	0	0
Total Operating Revenue	0	0	0	5,014,463	5,142,379	5,274,255	5,379,973
Operating Expenses:							
Fuel	0	0	0	2,219,119	2,285,693	2,354,264	2,424,892
Purchased Power	0	0	0	150,269	154,778	159,421	164,204
Cost of Gas Sold	0	0	0	0	0	0	0
Steam Costs	0	0	0	0	0	0	0
Operations and Maintenance	0	0	0	1,125,328	1,147,834	1,170,791	1,194,207
Depreciation, Decommissioning & Amortizations	0	0	0	496,946	502,753	518,907	536,943
Taxes Other Than Income Taxes	0	0	0	150,978	154,451	157,076	161,160
Total Operating Expenses	0	0	0	4,142,641	4,245,509	4,360,459	4,481,405
Operating Income	0	0	0	871,822	896,871	913,796	898,568

Why It Happens And What To Do About It:

This may indicate that you are trying to run a monthly column set for a year when the model is set to run annual. For example, assume that your model is set to run 3 years monthly and 2 years annual. If you selected a column set that was 5 years monthly, you would not see monthly data in the last two years.

You have two choices:

- 1) Select a different column set, one with yearly columns rather than monthly ones for the years in question.
- 2) A more radical option would be to change the monthly setting on the scenario (see **MANAGE SCENARIOS**). Note that this should be done only after careful consideration, because it impacts the scenario processing.

{ XE "Troubleshooting - User Temp Data Case" * MERGEFORMAT } { XE "User Temp Data Case" * MERGEFORMAT } { XE "Data Cases" * MERGEFORMAT } Troubleshooting - User Temp Data Case

Two common errors or issues related to the *User Temp Data Case* are described below.

Description Of Issue Or Problem:

You do not see the Temporary Time Data case in the case listing for your current scenario.

Why It Happens And What To Do About It:

The switch to enable the *User Temp Data Case* is not set in **PLANNER PROPERTIES**. You should contact your system administrator.

Description Of Issue Or Problem:

You populated data in my *User Temp Data* case but you do not see it reflected in the report results.

Why It Happens And What To Do About It:

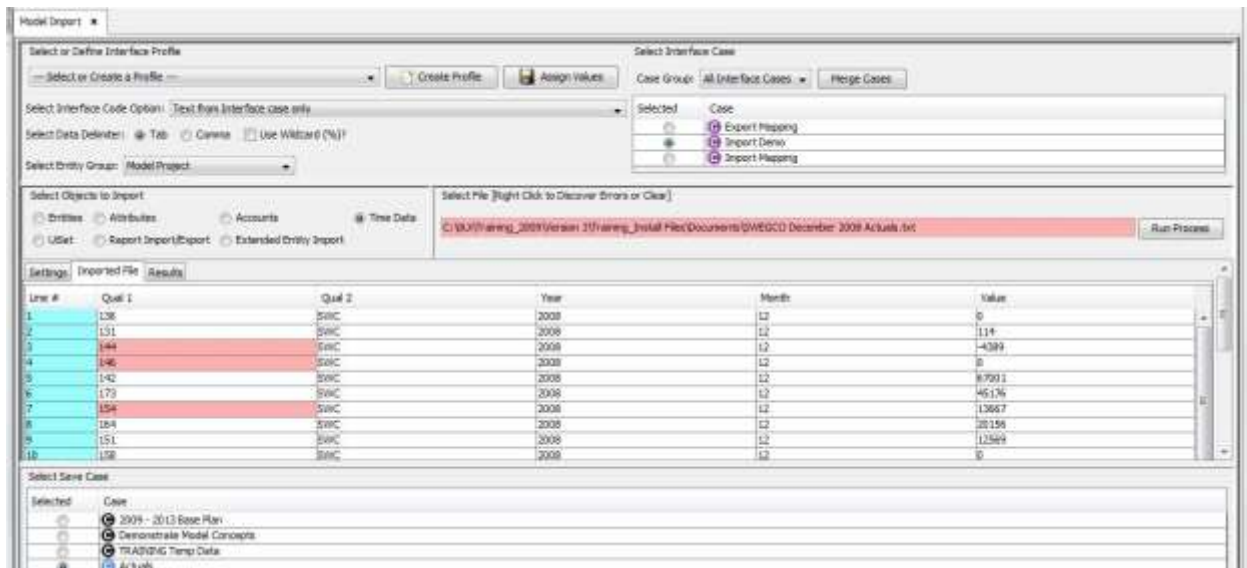
Assuming that you put the data in the correct entity and time period, there are two likely reasons for your data not impacting results.

- 1) You did not click the *Use <Username> Temp Data* switch on the **RUN SEQUENCES** screen. Go back to **RUN SEQUENCES** and check this switch. Note that this needs to be set each time you enter the model or change scenarios.
- 2) Another data case is overriding your *User Temp Data Case*. Check the case ordering on **MANAGE SCENARIOS**.

{ XE "Mapping" * MERGEFORMAT } { XE "Troubleshooting - Model Import - Unmapped Items" * MERGEFORMAT } { XE "Model Import" * MERGEFORMAT } Troubleshooting - Model Import - Un-Mapped Items

Description Of Issue Or Problem:

You are importing a file using the **MODEL IMPORT** screen and the file being imported indicates one or more errors (highlighted in pink). See below.



Why It Happens And What To Do About It:

To fix the errors, you need to match the field names and interface codes. Note that this may not necessarily be missing interface codes in UIPlanner. If all columns show errors, and you believe that the codes are populated, there may be a quick fix.

- 1) If an item is highlighted in pink, that means that UIPlanner does not know how to map it to anything in the model. These mappings are directed by the rules you set on the **MODEL IMPORT** screen. Typically imports will be translated using interface codes contained in the chosen interface case. The pink indicates that that line and field of the import does not correspond to an interface code in the model (if you have elected to use field names, there is not a matching name in the model).
- 2) Select a different Interface case. If you have more than one interface case, you may have selected the wrong interface case. Select a different one, and all the errors may go away, i.e., they will no longer be pink.
- 3) Check the import settings. An incorrect number of qualifiers or incorrect column definition could cause an entire column to be misinterpreted.

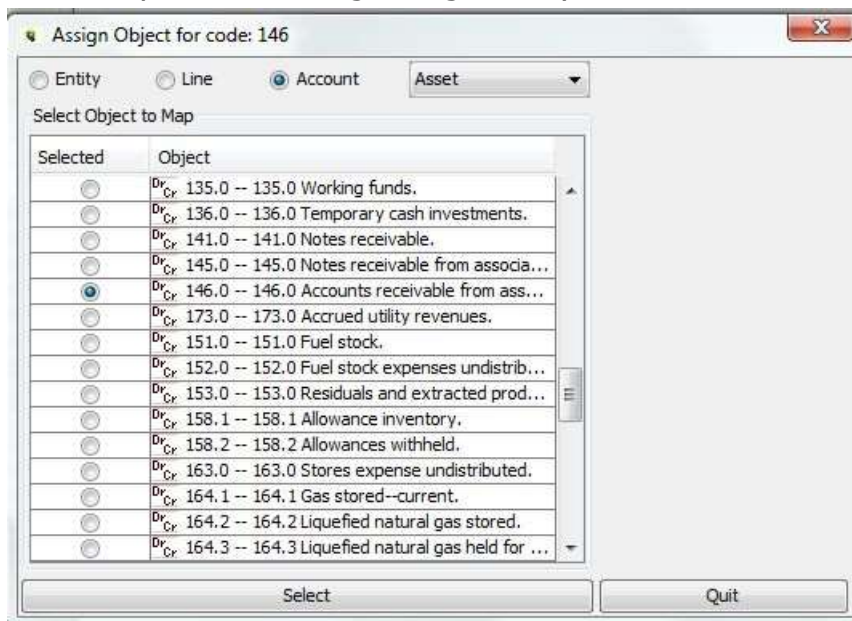
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4) Check the file itself. There might have been an error in how the file was created.

To fix unmapped items you have two choices:

1) Populate required interface codes directly. Open the **CORE OBJECT EDITOR** screen and select the account/entity, report or line. Select the **INTERFACE CODE** tab, and populate the required interface code(s). Make sure to put them in the proper Interface case. Note that the pink error flag goes away immediately.

2) Map the unmatched items using the mapping widget on the **MODEL IMPORT** screen. Right click on an item that is generating an error. This will bring up a mapping widget. Select the type of item and then the specific one to map to. When you have found it, click **OK**, and note that the pink error flag will go away for that item.



If you have more items to map, when you right click on the item the mapping widget will remember the last one you mapped. This is handy if you have a sequence of items to map. Note that you can only map entities, lines or accounts this way. For reports or attribute definitions you need to use the **CORE OBJECT EDITOR**.

{ XE "Actuals Data" * MERGEFORMAT } { XE "Trouble-shooting - Actuals Data" * MERGEFORMAT }Troubleshooting - Actuals Data

Description Of Issue Or Problem:

You have run calculations and do not see the anticipated values in the actuals periods in the **BROWSE REPORTS** screen. In other words, you believe you have time data in the actuals periods, but you do not see any values.

Why It Happens And What To Do About It:

You might have a mismatch between the case in which the actuals data is located and the *Annual to Month* setting of that line. For example, you might have the line defined as *Dollars (with Actuals)*, but the data is stored in a regular time data case, or the line is defined as *Dollars (without Actuals)*, but the data is in the Actuals case. If this is the case, you can either:

- 1) Move the data to the correct case, or
- 2) Change the line attribute.

Troubleshooting - Pull Reporting - UIGet Usage Error**Description Of Issue Or Problem:**

You are using the UIGet() function, and it returns an error listing the UIGet() Arguments. See below.

	A	B	C	D
1	Scenario	192	Detail Model 2009-2013 SWEGCO Rate Increase	
2	Jurisdiction	2194	SWEG - Elec Retail - Wisconsin	
3	Month	0		
4				2009
7		13588	Rate Base	
8		19168741	Net Plant	\$ 1,809,463
9		13703	Total Utility Rate Base	Usage: UIGet[YYYY, MM, Scenario, Report, Line, Entity, {SubEntity}]
11		13263	Jurisdictional Earnings	
12		13329	Total Operating Revenue	\$ 1,030,510
13		13434	Operating Income	\$ 394,313
14			New Ratios	

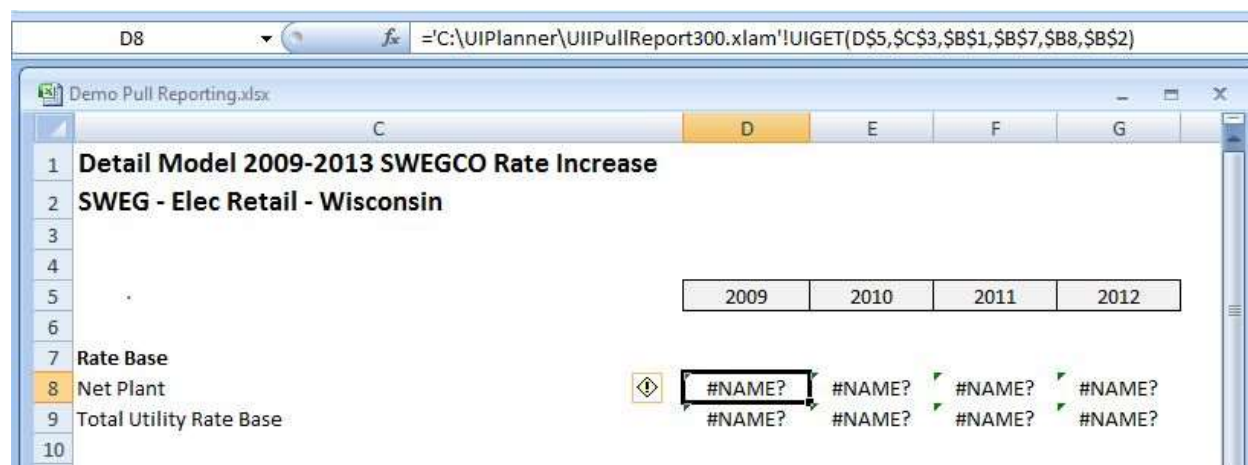
Why It Happens And What To Do About It:

This may indicate that you have not provided the right number of arguments. Check your *UIGet* function and confirm the number and order of the arguments.

Troubleshooting - Pull reporting - UIGet Functions With PreFixed Paths

Description Of Issue Or Problem:

If you open the spreadsheet and the *UIGet()* functions all have some path have path prefixed to them.



Why It Happens And What To Do About It:

This may indicate that the person who sent you the spreadsheet had the *UIPlanner.xls* in a different folder. You need to delete the prefixed text. The easiest way to do this is to edit a cell, and select the prefixed text. Then select *Find/Replace* and replace this text with blanks.

APPENDIX: FUNCTIONS

{ XE "Function Overview" * MERGEFORMAT }Function Overview

Functions used in the Financial Model are organized into the following categories:

- **Across Time**
- **Averages**
- **Copy and Rollups**
- **Dates**
- **Financial**
- **IDs**
- **Input**
- **Interface Only**
- **Math and Statistics**
- **Process**
- **Other - No Parent Assigned**
-

Across Entities

{ XE "Function - Line is Target of Allocations" * MERGEFORMAT }{ XE "Allocations" * MERGEFORMAT }{ XE "Line" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Line is Target of Allocations

Function Description:

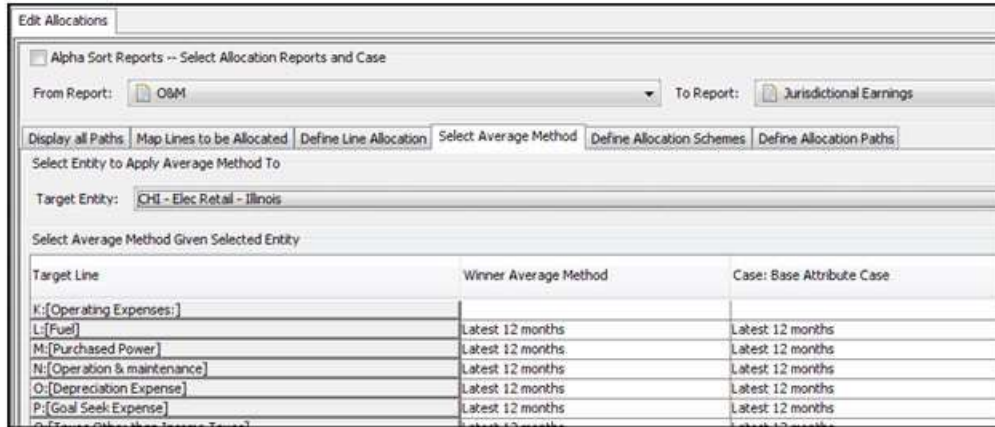
This function returns the sum of all allocated values. You use this function with the UIPlanner Allocations engine. Note: The function returns 0 if the current line is not a target of allocations.

Example:

Definition of lines that are allocated

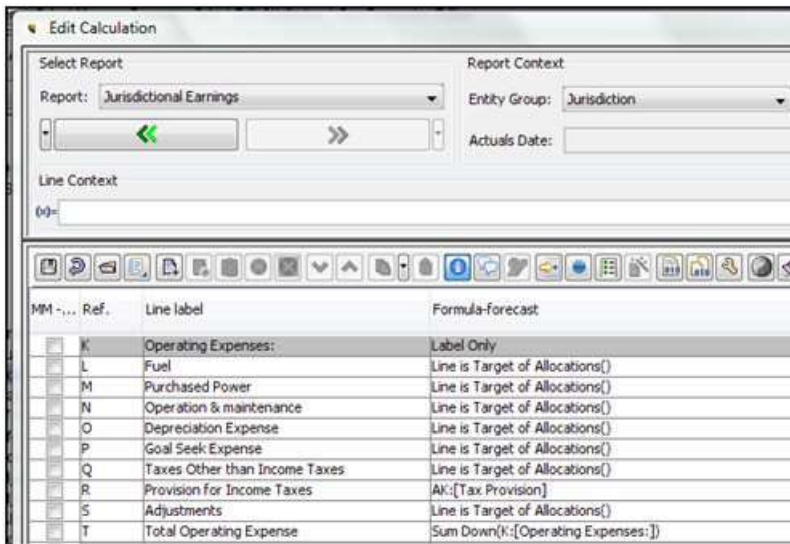
From Re...	From Line	From Entity	To Report	To Line	To Entity	Path	Path set via
OSM	P-[Total OSM Expense (After Target Adjust...	Chicago Electric	Jurisdictional Earnings	N-[Operation & maintenance]	CHI - Elec PERC	CHI Elec Demand	S D
OSM	P-[Total OSM Expense (After Target Adjust...	Chicago Electric	Jurisdictional Earnings	N-[Operation & maintenance]	CHI - Elec Retail - Illinois	CHI Elec Demand	S D
OSM	P-[Total OSM Expense (After Target Adjust...	Chicago Electric	Jurisdictional Earnings	N-[Operation & maintenance]	CHI - Elec Retail - Michigan	CHI Elec Demand	S D
OSM	P-[Total OSM Expense (After Target Adjust...	SWEGCO Electric	Jurisdictional Earnings	N-[Operation & maintenance]	SWEG - Elec PERC	SWEG Elec Demand	S D
OSM	P-[Total OSM Expense (After Target Adjust...	SWEGCO Electric	Jurisdictional Earnings	N-[Operation & maintenance]	SWEG - Elec Retail - Wisconsin	SWEG Elec Demand	S D

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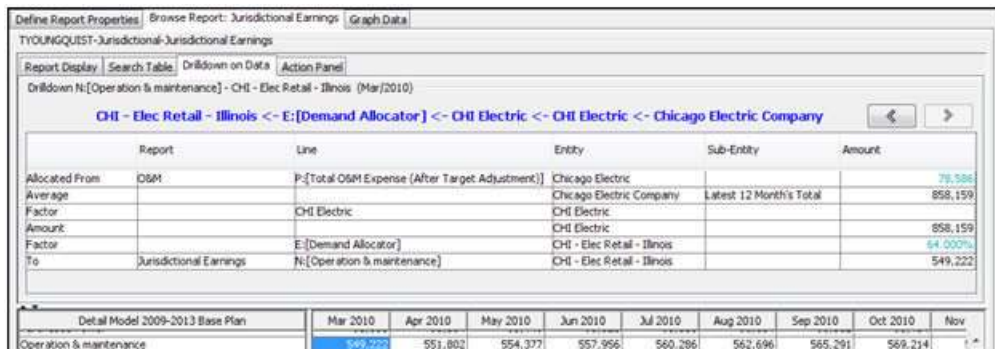
The screens below show the **TARGET OF ALLOCATIONS** function. The allocation paths have already been set up.

Report Calculation



Report Results

Report results are shown below. Note that the drilldown panel provides detailed information on the calculation of the allocated results.



{ XE "Pushh from Report to Report" * MERGEFORMAT }{ XE "Line is a Target of Push" * MERGEFORMAT }{ XE "Function - Line is a Target of Push From Report/Line/Entity" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Line is a Target of Push From Report/Line/Entity

Function Description:

This function returns the sum of all lines pushed to this line. You use this function with the *PUSH FROM REPORT TO REPORT* screen. Note: The function returns 0 if the current line is not a target of a push.

Example:

The screen prints below show the *PUSH FROM REPORT TO REPORT* screen. The pushes have already been set up.

From/To	Report	Line	Entity	Sub-Entity		
From	Income Statement	BN:[Earnings Applic...	Chicago Steam		Copy	Paste
Push To 1	Line is Target of Push	C:[Net Income for Ill...	Chicago Electric		Copy	Paste
Push To 2	Line is Target of Push	C:[Net Income for Ill...	Chicago Steam		Copy	Paste
Push To 3	Line is Target of Push	C:[Net Income for Ill...	Suburban Gas		Copy	Paste
Push To 4					Copy	Paste
Push To 5					Copy	Paste
Push To 6					Copy	Paste
Push To 7					Copy	Paste
Push To 8					Copy	Paste
Push To 9					Copy	Paste

All pushes in Case:	Report	Line	Entity	Sub-Entity
Edit (1)	Income Statement	BN:[Earnings Applicable to Common]	Chicago Electric	
Edit (2)	Income Statement	BN:[Earnings Applicable to Common]	Chicago Steam	
Edit (3)	Bonds	CO:[Total Interest Accrual]	CHI 4.50% FMB due May 15, 20...	

Report Calculation

Select Report: Report: Line is Target of Push

Report Context: Entity Group: Planning Entity

Line Context - C:[Net Income for Illinois entities]

(*)= Line is Target of Push from report/line/entity()

MM ... Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Interest on Bond FMB 4.5	Line is Target of Push from report/line/entity()
C	Net Income for Illinois entities	Line is Target of Push from report/line/entity()

Report Results

Note that the drilldown panel identifies the source of the push. Note also that you can push multiple items to a single line.

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Define Report Properties					
Browse Report: Line is Target of Push		Graph Data			
TYOUNGQUIST-Help-Line is Target of Push					
Report Display Search Table Drilldown on Data Action Panel					
Drilldown C:[Net Income for Illinois entities] - Chicago Electric (Jan/2009)					
Pushed From					
From Report	From Line	From Entity	From Sub-Entity	Value	
Income Statement	BN:[Earnings Applicable to Common]	Chicago Electric		107,724	
Income Statement	BN:[Earnings Applicable to Common]	Chicago Steam		-430	
				107,294	
Detail Model 2009-2013 Base Plan					
	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009
Chicago Electric					
Interest on Bond FMB 4.5	262	262	262	262	262
Net Income for Illinois entities	107,294	85,279	78,720	54,202	66,912
Chicago Steam					
Interest on Bond FMB 4.5	262	262	262	262	262
Net Income for Illinois entities	107,294	85,279	78,720	54,202	66,912

{ XE "Spread to Group" * MERGEFORMAT }{ XE "Function - Spread to Group" * MERGEFORMAT }Function - Spread to Group

Function Description:

This function allows you to take a total amount and spread it among members of a group. Note that this function does NOT do a pro rata spreading or allocation. It does the spreading in a defined order, assigning as much as it can to the first, then any remainder to the second, and so on. Depending upon various settings, it can:

- Spread an amount to the members - the group start total is 250, we want to spread 500. The function will spread an additional 500 among the members in rank order.
- Reallocate among the members to hit a target amount - the group total is 250. Thus function can reallocate among the members in rank order so that they still total 250.
- Just reallocate among the members - the group start total is 250. The function will increase and decrease the individual member amounts so that the 250 is assigned in order.

A common application of this function is to do a simple dispatch of generating units to meet a load, sorted by least cost unit, subject to the units' capacity.

Parameters:

- **Line for Limit** - Select the report line containing the maximum to allocate to this member of the group (minimum is assumed to be zero)

- **Line for Start Amount** - Select the report line containing the initial amount that can be adjusted up or down by the spread
- **Line for Sort** - Select the report line that has the value for the sort
- **Line for Amount to Spread** - Select the report line that has the amount you want to spread. This line is summed across the group to develop the total to spread
- **Association to define Group** – Use the drop-down list to select the association used to determine members of the group.
- **Force net Spread to Zero** – If Yes, the amount to spread is first spread as an increase to group members, then in reverse sort order, spread as decreases. The default is No.
- **If Net to Zero**, allow un-spread amount – if Yes, the reverse spread includes members that may have been allocated increases. The default is No.

Example:

The screen prints below show the **SPREAD TO GROUP** function. There are three examples:

- Example 1 - the group start total is 250, amount to spread is 500. The function will spread an additional 500 among the members in rank order. Setting - Net Spread to Zero = NO
- Example 2 – the group start total is 250, amount to spread is 500. The function will increase and decrease the individual member amounts in rank order so that they total 500. Settings - Net Spread to Zero = YES, Unspread Amount = NO
- Example 3 – the group start total is 250. The function will increase and decrease the individual member amounts so that the 250 is assigned in order. Settings - Net Spread to Zero = YES, Unspread Amount = YES

The chart below show the application of the **SPREAD TO GROUP** function for the above three examples:

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	Alpha 1	Alpha 2	Alpha 3	Alpha 4	Alpha 5	Alpha 6	Alpha 7	Total
EXAMPLE 1								
Net Spread to zero = NO								
Limit	500	500	500	500	500	500	500	3,500
Start Amount	20	10	5	10	95	100	10	250
Sort	1	2	3	4	5	6	7	28
Amount to Spread	50	100	100	50	50	75	75	500
Process								
Spread Down	480	20						500
Final	480	20						500
EXAMPLE 2								
Net Spread to zero = YES; Unspread amount=NO								
Limit	500	500	500	500	500	500	500	3,500
Start Amount	20	10	5	10	95	100	10	250
Sort	1	2	3	4	5	6	7	28
Amount to Spread	50	100	100	50	50	75	75	500
Process								
Spread down	480	20						500
Reverse spread	(20)	(10)	(5)	(10)	(95)	(100)	(10)	(250)
Final	460	10	(5)	(10)	(95)	(100)	(10)	250
EXAMPLE 2								
Net Spread to zero = YES; Unspread amount=YES								
Limit	500	500	500	500	500	500	500	3,500
Start Amount	20	10	5	10	95	100	10	250
Sort	1	2	3	4	5	6	7	28
Amount to Spread	50	100	100	50	50	75	75	500
Process								
Spread down	480	20						500
Reverse spread	(250)	(30)	(5)	(10)	(95)	(100)	(10)	(500)
Final	230	(10)	(5)	(10)	(95)	(100)	(10)	

Report Calculation

Below is the report calculation. Note the final two parameters (these are set for Example 1)

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Limit	Input()
C	Start Amount	Input()
D	Sort	Input()
E	Amount to Spread	Input()
F	Spread to Group - Alpha Entities	Spread to Group(B:[Limit],C:[Start Amount],D:[Sort],E:[Amount to Spread],Pointer to System Control,No, Yes)

Report Results

Below are the results for the three examples. Results are best viewed using entities across, with totals turned on. Note that drilldown is not available for this function.

Example 1

Detail Model 2009-2013 Base Plan	Alpha 1	Alpha 2	Alpha 3	Alpha 4	Alpha 5	Alpha 6	Alpha 7	Alpha Total
Jan 2009								
Limit	500	500	500	500	500	500	500	3,500
Start Amount	20	10	5	10	95	100	10	250
Sort	1	2	3	4	5	6	7	28
Amount to Spread	50	100	100	50	50	75	75	500
Spread to Group - Alpha Entities	480	20	0	0	0	0	0	500

Example 2

Detail Model 2009-2013 Base Plan	Alpha 1	Alpha 2	Alpha 3	Alpha 4	Alpha 5	Alpha 6	Alpha 7	Alpha Total
Jan 2009								
Limit	500	500	500	500	500	500	500	3,500
Start Amount	20	10	5	10	95	100	10	250
Sort	1	2	3	4	5	6	7	28
Amount to Spread	50	100	100	50	50	75	75	500
Spread to Group - Alpha Entities	460	10	-5	-10	-95	-100	-10	250

Example 3

Detail Model 2009-2013 Base Plan	Alpha 1	Alpha 2	Alpha 3	Alpha 4	Alpha 5	Alpha 6	Alpha 7	Alpha Total
Jan 2009								
Limit	500	500	500	500	500	500	500	3,500
Start Amount	20	10	5	10	95	100	10	250
Sort	1	2	3	4	5	6	7	28
Amount to Spread	50	100	100	50	50	75	75	500
Spread to Group - Alpha Entities	230	-10	-5	-10	-95	-100	-10	0

{ XE "Sum Across Entities" * MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Sum Across Entities

Function Description:

This function sums across the primary entity of the current report, using an association. For example, sums rate schedules to summary class, given an association to summary class. This function returns the sum of entity values in the Report entity group according to a selected association.

Parameters:

- **Sum line** - Select the report line you want to sum
- **Calculate total using Association** - Select the appropriate association to group by.

Example:

The chart and screen prints below illustrate this function. **Entity Group Alpha** has an association to **Entity Group Bravo** (see chart). The function uses this association to sum (rollup) **Alpha** entities according to the association to **Entity Group Bravo**.

When the report is running over the first three **alpha** entities, this function will return 600 which is the total of the **alpha** entities that have a common association to **Bravo**. Likewise, when the report ran over **Alpha 4, 5** and **6** the function will return 1,500 which is the sum of alpha entities that have a common association with **Entity Group Bravo**.

Multiple report iterations are required for this function.

Association between Alpha and Bravo

Alpha	Bravo
Alpha 1	Bravo 1
Alpha 2	Bravo 2
Alpha 3	Bravo 3
Alpha 4	Bravo 4
Alpha 5	Bravo 5
Alpha 6	
Alpha 7	

Object	Association
Alpha 1	Bravo 1
Alpha 2	Bravo 1
Alpha 3	Bravo 1
Alpha 4	Bravo 3
Alpha 5	Bravo 3
Alpha 6	Bravo 3
Alpha 7	Bravo 5

Report Calculation

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Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha	Input()
C	Sum Across Entities function	Sum Across Entities([B:Input Alpha],Association)

Report Results

2006-2010 Base Scenario	
	Jan
Alpha 1	
Input Alpha	100
Sum Across Entities function	600
Alpha 2	
Input Alpha	200
Sum Across Entities function	600
Alpha 3	
Input Alpha	300
Sum Across Entities function	600
Alpha 4	
Input Alpha	400
Sum Across Entities function	1,500
Alpha 5	
Input Alpha	500
Sum Across Entities function	1,500
Alpha 6	
Input Alpha	600
Sum Across Entities function	1,500
Alpha 7	
Input Alpha	700
Sum Across Entities function	700
Totals	
Input Alpha	2,800
Sum Across Entities function	7,000

{ XE "Wide Report Group" * MERGEFORMAT }{ XE "Within a Method" * MERGEFORMAT }{ XE "Function - Sum Across Entities Inside a Method" * MERGEFORMAT }{ XE "Sum" * MERGEFORMAT }Function - Sum Across Entities Inside a Method

Function Description:

This function is similar to the [Sum Across](#) function in that it sums the primary entity of the current report. However, this variant is for use within a method. It returns the value of that same line from a related (shared) report summed across all entities.

Parameters:

- **From Report** - Select the report to be summed. The report must be one of the Wide Report group.

Example:

Note that there are four reports in the Wide Report Group, one for inputting amounts, one for inputting factors, a third for calculating the allocated amount and a final one that sums the allocated amounts.

Report Calculation

Ref.	Line Name	Inside a Method - Allocated Amounts	Inside a Method - Factors	Inside a Method - Input Amounts	Inside a Method - Sum across Allocated Amounts
A	Placeholder for Entry Description	Placeholder for Entry Description	Placeholder for Entry Description	Placeholder for Entry Description	Placeholder for Entry Description
B	Startmethod				
C	Input Amount/Factors		Input()	Input()	
D	Copy Amounts	Copy From Inside a Method(Inside a Method - Input Amounts, A, {})			
E	Copy Factors	Copy From Inside a Method(Inside a Method - Factors, A, {})			
F	MethodReturns	D[Copy Amounts] * E[Copy Factors]	C[Input Amount/Factors]	C[Input Amount/Factors]	Sum Across Entries: Inside a Method(Inside a Method - Allocated Amounts)
G	Labor				
H	NonLabor				
I	Other				
J	EndMethodCalls				

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009
Alpha I								
Startmethod								
Input Amount/Factors	0	0	0	0	0	0	0	0
Copy Amounts	0	0	0	0	0	0	0	0
Copy Factors	0	0	0	0	0	0	0	0
MethodReturns								
Labor	800	800	800	800	800	800	800	800
NonLabor	567	567	567	567	567	567	567	567
Other	138	138	138	138	138	138	138	138
EndMethodCalls								

Across Time

{ XE "Annual Total" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Annual Total

Function Description:

This function calculates the annual total value for a given line in a report, and returns that value for each period of the report. The annual total is a pure sum – the function adds the values whether they are balances, rates, or monthly expenses. The annual total for fiscal clients is the sum of the months in the fiscal year. When the report is processing annually, the annual value is returned.

This function uses the current iteration value for the current month.

Parameters:

- **From Line** - Select the line in the current report that you want to calculate the annual total of.

Example:

The screen prints below show this function applied to line A of the report. Note the Annual total appears in each period.

Report Calculation

Ref.	Line Name	Formula/Source
A	Sample numbers Input	Input()
B	Annual Total Function	Annual Total([A:Sample numbers Input])

Report Results

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2006-2010 Base Scen...	2006														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Sample numbers Input	10	20	30	40	50	60	70	80	90	100	110	120	4	8	12
Annual Total Function	780	780	780	780	780	780	780	780	780	780	780	780	300	300	300

{ XE "Annual Value for Year Ended YYYYMM" * MERGEFORMAT }{ XE "Function - Annual Value for Year Ended (YYYYMM)" * MERGEFORMAT }Function - Annual Value for Year Ended (YYYYMM)

Function Description:

This function calculates the annual value for a given line in a report, where the year to choose is given by a line in the report, and returns that value for each period of the report. If the month-to-annual option on the source line is beginning balance or ending balance, the value from the beginning/ending month is returned. All other month-to-annual options return the sum of the months.

This function uses the current iteration value for the current month.

Parameters:

- **Line for Value** - Select the line in the current report that you want to calculate the annual total of.
- **Line for Date** - Select the line in the current report that contains the year ended.

Example:

The screen prints below show this function applied to line A of the report, where line B has the **YYYYMM** as an input. Note the Annual total appears in each period.

Report Calculation

Ref.	Line label	Formula-forecast
A		Label Only
B	Input Alpha Data	Input()
C	Year Ended YYYYMM	Input()
D	Annual Total for Year Ended YYYYMM	Annual Value for Year Ended (YYYYMM)(B:[Input Alpha Data],C:[Year Ended YYYYMM])

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010
A[]															
B:[Input Alpha Data]	100	100	100	100	100	100	100	100	100	100	100	100	200	200	200
C:[Year Ended YYYYMM]	200,912	200,912	200,912	200,912	200,912	200,912	200,912	200,912	200,912	200,912	200,912	200,912	201,012	201,012	201,012
D:[Annual Total for Year Ended YYYYMM]	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	2,400	2,400	2,400

{ XE "Balance" * MERGEFORMAT }{ XE "Function - Balance" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Balance

Function Description

This function calculates a balance, given a line for additions and a line for deductions using the formula: balance = balance (prior period) plus additions minus deductions.

Parameters

- **Line for Additions** - Select the line in the current report that you want to add to the balance.
- **Line for Reductions**- Select the line in the current report that you want to subtract from the balance.

Example

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Additions to balance	Input()
C	Deductions to Balance	Input()
D	Balance	Balance(B:[Additions to balance],C:[Deductions to Balance])
E		Label Only

Detail model Scenari...	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011
Corporate Parent					
Additions to balance	100	110	120	130	140
Deductions to Balance	50	45	40	35	30
Balance	50	115	195	290	400

{ XE "Latest 12 Month Total" * MERGEFORMAT }{ XE "Function - Latest 12 Month Total" * MERGEFORMAT }Function - Latest 12 Month Total

Function Description:

This function calculates the latest 12 month total value for a chosen line in a report. This function is also known as the "Rolling 12 month total." Note that the report may need to be iterated more than once. Note that this function always returns a total, regardless of the month-to-annual code on the line being summed.

This function uses the current iteration value for the current month.

Parameters:

- **Line for Value** - Select the line in the current report that you want to calculate the latest 12-month total of.

Example:

The screen prints below show this function applied to line A of the report. Note the rolling 12-month total (including the current month) appears in each period.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Input Data	Input()
C	Latest 12 Months Total	Latest 12-month Total(B:[Input Data])

Report Results

Drilldown C:[Latest 12 Months Total] - Alpha 1 (Jun/2010)							
Latest 12-month Total for 'B:[Input Data]'							
Period	Value						
Jul 2009							100
Aug 2009							100
Sep 2009							100
Oct 2009							100
Nov 2009							100
Dec 2009							100
Jan 2010							200
Feb 2010							200
Mar 2010							200
Apr 2010							200
May 2010							200
Jun 2010							200
Value							1,800

Detail Model 2009-2013 Base Plan	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010
Alpha 1							
B:[Input Data]	200	200	200	200	200	200	200
C:[Latest 12 Months Total]	1,400	1,500	1,600	1,700	1,800	1,900	2,000

{ XE "Maximum Across Time" * MERGEFORMAT }{ XE "Function - Maximum Across Time" * MERGEFORMAT }Function - Maximum Across Time

Function Description:

This function returns the maximum value of a selected line in a report, within a date range drawn from two other report lines. Note that the report must be iterated more than once.

Parameters:

- **Line to Search for Maximum** - Select the line in the current report that you want to find the maximum of.

- **Line for Start Date (YYYYMM)** - Select the line in the current report that has the start of the date range you want to search in.
- **Line for End Date (YYYYMM)** - Select the line in the current report that has the end of the date range you want to search in.

Example:

The screen prints below show this function applied to Line B of the report, with the date ranges in Lines C and D. Note that line E returns the maximum of line B within this range.

Report Calculation

MM - ...	Ref.	Line label	Formula-forecast
	A		Place Holder for Entity Description
	B	Input Data	Input()
	C	Line for Start Date (YYYYMM)	Input()
	D	Line for End Date (YYYYMM)	Input()
	E	Maximum Across Time	Maximum-Across Time[B:[Input Data],C:[Line for Start Date (YYYYMM)],D:[Line for End Date (YYYYMM)]]

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010
Alpha 1																
B:[Input Data]		1	50	1	1	100	1	1	1	1	1	1	1	1	1	1
C:[Line for Start Date (YYYYMM)]	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901
D:[Line for End Date (YYYYMM)]	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903
E:[Maximum Across Time]		50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
F:[]		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alpha 2																
B:[Input Data]		1	1	200	1	500	1	1	1	1	1	1	1	1	1	600
C:[Line for Start Date (YYYYMM)]	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901
D:[Line for End Date (YYYYMM)]	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003
E:[Maximum Across Time]		600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
F:[]		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alpha 3																
B:[Input Data]		1	50	200	1,000	1	1	1	1	1	1	1	1	1	1	800
C:[Line for Start Date (YYYYMM)]	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901
D:[Line for End Date (YYYYMM)]	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003	201,003
E:[Maximum Across Time]		1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
F:[]		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

{ XE "Next Period Value" * MERGEFORMAT }{ XE "Function - Next Period Value" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Next Period Value

Function Description

This function returns the selected line's value in the next period. It is functionally equivalent to Value From Period, with period set to +1. Since the function looks forward, the report must be iterated at least twice.

Parameter

- Line for next period value.

{ XE "Peak Value" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Peak Value

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Function Description:

This function returns the peak value of a selected report line, using parameters of relative period offset (number of periods forward, and how many periods back to scan). The number of periods to include and offset from the current month are parameters obtained from line references.

Parameters:

- **Line** – Select the line in the current report that you want to calculate the peak value of.
- **Relative Period (0 for current)** – Select the line containing the relative period - how many periods forward (see chart above) or backwards if negative. Any integer positive or negative is valid. Non integer values will be truncated.
- **Periods to Scan** - Select the line containing how many periods to scan. Periods to scan will be counted back in time from the relative period parameter. Note: A zero or negative number in this parameter will cause this function to return zero.

Example:

The chart below shows 3 examples. The first is when the report is running over April with parameter of 4 for relative period and 7 periods to scan. As you can see, the relative period is August (4 periods from April). Periods to scan are counted back from August (February to August). The peak value in the scan period is 83 for March. Two additional examples are shown in the chart for May and June.

	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Target Report Line	45	90	45	83	27	56	74	24	54	89	29	77	30	97	43	32	12
Relative Period					4												
Periods to Scan					7												
Function Results				83													
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Target Report Line	45	90	45	83	27	56	74	24	54	89	29	77	29	97	43	32	12
Relative Period						7											
Periods to Scan						12											
Function Results						90											
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Target Report Line	45	90	45	83	27	56	74	24	54	89	29	77	29	97	43	32	12
Relative Period							0										
Periods to Scan							3										
Function Results							74										

The screen prints below show the actual calculation results for the chart above as well as additional parameter examples.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input values	Input()
B	Relative Period (Input)	Input()
C	Periods to Scan (Input)	Input()
D	Two Point Annual Average function	Peak Value(A,B,C)

Report Results

2006-2010 Base Scenario	2006															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Input values	90	45	83	27	56	74	24	54	89	29	77	30	97	43	32	12
Relative Period (Input)	12	9	7	4	7	0	9	8	-5	0	-4	4	3	2	1	0
Periods to Scan (Input)	7	-3	8	7	12	3	7	8	3	10	2	3	2	-4	0	4
Two Point Annual Average function	97	0	89	83	90	74	97	97	83	90	74	43	32	0	0	97

{ XE "Previous" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Previous

Function Description:

This function returns the previous period's value for a given line in the current. In mixed monthly/annual reports it will return the previous annual value in annual periods.

Parameters:

- **From Line** - Select the report line that you want to calculate the previous value of.

Example:

In the screen print below, Line Y uses the *PREVIOUS* function with Line X as the parameter.

Note the value returned in Line Y the prior period's value for Line X.

This function can be used to return the previous period's value for simple or complex calculations.

2006-2010 Base Scenario	Jan	Feb	Mar	Apr	May
French 1					
MWH Generation	74,400	67,200	74,400	72,000	74,400
Heat Rate	10	10	10	10	10
MMBtu Requirements	744,000	672,000	744,000	720,000	744,000
Heat Content of Fuel (MMBtu)	25	25	25	25	25
Fuel Units Required	29,760	26,880	29,760	28,800	29,760
Fuel Unit Price	37	37	37	37	37
Fuel Costs	1,101,120	994,560	1,101,120	1,065,600	1,101,120
Ownership Percent	100.00%	100.00%	100.00%	100.00%	100.00%
Line X Total Fuel Costs	1,101,120	994,560	1,101,120	1,065,600	1,101,120
Line Y Previous Total Fuel costs	0	1,101,120	994,560	1,101,120	1,065,600

{ XE "Running Total" * MERGEFORMAT }{ XE "Run" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Running Total

Function Description:

This function calculates the accumulated total value for a given line in a report, over all time. Note the function results accumulate for all the periods of the report.

Parameters:

- **From Line** - Select the line in the current report that you want to calculate the running total of.

Example:

The screen prints below show this function applied to line A of the report. Note the function results accumulate for all the periods of the report.

Report Calculation

Ref.	Line Name	Formula/Source
A	Sample numbers Input	Input()
B	Running Total Function	Running Total([A:Sample numbers Input])
C		

Report Results

2006-2010 Base Scen...	2006														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Sample numbers Input	10	20	30	40	50	60	70	80	90	100	110	120	4	8	12
Running Total Function	10	30	60	100	150	210	280	360	450	550	660	780	784	792	803

{ XE "Function - Sum Values Between Dates" * MERGEFORMAT }{ XE "Sum Values" * MERGEFORMAT }Function - Sum Values Between Dates

Function Description:

This function calculates the accumulated value for a given line in a report, within a date range drawn from two other report lines. Note that the report must be iterated more than once.

Parameters:

- **Line for Value** - Select the line in the current report that you want to accumulate.

- **Start Period Line (YYYYMM)** - Select the line in the current report that has the start of the date range you want to accumulate over.
- **End Period Line (YYYYMM)** - Select the line in the current report that has the end of the date range you want to accumulate over.

Example:

The screen prints below show this function applied to Line B of the report, with the date ranges in Lines C and D.

Report Calculation

A		Place Holder for Entry Description
B	Input Data	Input()
C	Start Period Line YYYYMM	Input()
D	End Period Line YYYYMM	Input()
E	Sum Values Between Dates	Sum Values Between Dates(B:[Input Data],C:[Start Period Line YYYYMM],D:[End Period Line YYYYMM])
F		

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010
Alpha 1																
B (Input Data)	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
C (Start Period Line YYYYMM)	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	201.001	201.001	201.001	201.001
D (End Period Line YYYYMM)	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	201.001	201.001	201.001	201.001
E (Sum Values Between Dates)	10	10	10	10	10	10	10	10	10	10	10	10	130	130	130	130
F []	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alpha 2																
B (Input Data)	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
C (Start Period Line YYYYMM)	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	201.001	201.001	201.001	201.001
D (End Period Line YYYYMM)	200.906	200.906	200.906	200.906	200.906	200.906	200.906	200.906	200.906	200.906	200.906	200.906	201.002	201.002	201.002	201.002
E (Sum Values Between Dates)	270	270	270	270	270	270	270	270	270	270	270	270	290	290	290	290
F []	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alpha 3																
B (Input Data)	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
C (Start Period Line YYYYMM)	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	200.901	201.001	201.001	201.001	201.001
D (End Period Line YYYYMM)	200.912	200.912	200.912	200.912	200.912	200.912	200.912	200.912	200.912	200.912	200.912	200.912	201.003	201.003	201.003	201.003
E (Sum Values Between Dates)	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	480	480	480	480
F []	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

{ XE "Function - Sum Values From History" * MERGEFORMAT }{ XE "Sum Values" * MERGEFORMAT }Function - Sum Values From History

Function Description:

This function returns the sum of values of a given line across a historical range of months. The line for the value must be either Input () or Account (). The maximum historical range is 5 years. The sum for a given month, say May 2010 with a 4 year history is the sum from June 2006 through May 2010. The function continues to work into the forecast. When processing mixed monthly-annual, the value is converted to an annual value using the month-to-annual option of the source data line.

Parameters:

- **Line for Value** - Select the line in the current report that you want to accumulate.
- **Number of Years** - Select the number of years you want to accumulate for (1 to 5).

Example:

The screen prints below show this function applied to Line B of the report, with 2 as the number of years.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Input Data	Input()
C	Sum Values from History	Sum Values from History(B:[Input Data],2)

Report Results

Detail Model 2009-2013 Base Plan	a-Jan 2008	a-Feb 2008	a-Mar 2008	a-Apr 2008	a-May 2008	a-Jun 2008	a-Jul 2008	a-Aug 2008	a-Sep 2008	a-Oct 2008	a-Nov 2008	a-Dec 2008	Jan 2009	Feb 2009	Mar 2009	Apr 2009
Alpha 1																
B [Input Data]	1	1	1	1	1	1	1	1	1	1	1	1	10	10	10	10
C [Sum Values from History]	1	2	3	4	5	6	7	8	9	10	11	12	22	32	42	52
Alpha 2																
B [Input Data]	2	2	2	2	2	2	2	2	2	2	2	2	20	20	20	20
C [Sum Values from History]	2	4	6	8	10	12	14	16	18	20	22	24	44	64	84	104
Alpha 3																
B [Input Data]	3	3	3	3	3	3	3	3	3	3	3	3	30	30	30	30
C [Sum Values from History]	3	6	9	12	15	18	21	24	27	30	33	36	66	96	126	156
Alpha 4																
B [Input Data]	4	4	4	4	4	4	4	4	4	4	4	4	40	40	40	40
C [Sum Values from History]	4	8	12	16	20	24	28	32	36	40	44	48	88	128	168	208

{ XE "Sum Values" * MERGEFORMAT }{ XE "Period" * MERGEFORMAT }{ XE "Value" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Sum Value from Period

Function Description:

This function sums the value of a given line across time, given a relative month offset to the current period in time. The month offset is an input parameter, and therefore fixed for the report. Use a negative value to sum backwards in time, positive to sum forward in time.

Note: This function does not pay attention to mixed monthly/annual processing. If used on a mixed monthly/annual calculation, the value from period minus one will sometimes be monthly, sometimes annual.

You should use **SUM VALUES FROM YYYYMM** for mixed monthly annual reports.

Parameter:

- **Line** – Select the line in the current report that you want to sum.
- **Months (Minus = Past, Plus = Future)** - Select the value of months forward or backward to sum. The options are from - 100 to + 100.

Example:

The chart below illustrates this function. June returns a value of 80 given a months parameter of negative 4. This function will total June and the prior 4 months values. The chart also shows additional examples.

	2006												2007			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Target Report Line	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Months Equals - 4						80										
Months Equals - 2	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Months Equals 0	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Months Equals 2	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Months Equals 4	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
						100										

The screen prints below show additional examples of this function.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input values	Input()
B		
C	Sum Value from Period function -4	Sum Values from Period([A:Input values],-4)
D	Sum Value from Period function -2	Sum Values from Period([A:Input values],-2)
E	Sum Value from Period function 0	Sum Values from Period([A:Input values],0)
F	Sum Value from Period function 2	Sum Values from Period([A:Input values],2)
G	Sum Value from Period function 4	Sum Values from Period([A:Input values],4)

Report Results

Graph	2006-2010 Base Scenario	2006															
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
	Input values	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Sum Value from Period function -4	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
	Sum Value from Period function -2	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81
	Sum Value from Period function 0	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	Sum Value from Period function 2	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87
	Sum Value from Period function 4	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150

{ XE "Argument" * MERGEFORMAT }{ XE "Line" * MERGEFORMAT }{ XE "Sum Values" * MERGEFORMAT }{ XE "Period" * MERGEFORMAT }{ XE "Value" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Sum Value from Period - Line as Argument

Function Description:

This function sums the value of a given line across time, given a relative month offset to the current period in time. The month offset is a value referenced from a line in the report, and can thus change over time. Use a negative value to sum backwards in time, positive to sum forward in time.

Note: This function does not pay attention to mixed monthly/annual processing. If used on a mixed monthly/annual calculation, the value from period minus one will sometimes be monthly, sometimes annual.

You should use **SUM VALUES FROM YYYYMM** for mixed monthly annual reports.

Parameters:

- **Line** – Select the line in the current report that you want to sum.
- **Offset Line in Months (Minus = Past Months (Minus = Past, Plus = Future)** – Select the line in the current report that contains the offset number of months.

Example:

The chart below illustrates this function. April returns a value of 90 which is the total of April - August values given the offset line value of 4.

	2006												2007			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Target Report Line	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Offset line in Months				4												
Function Results				90												
Target Report Line	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Offset line in Months								-3								
Function Results								74								
Target Report Line	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Offset line in Months												4				
Function Results												130				

The screen prints below show additional examples of this function.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input values	Input()
B	Month offset Input	Input()
C		
D	Sum Values from Period - Line as Argument function	Sum Values from Period - Line as Argument([A:Input values],[B:Month offset Input])

Report Results

2006-2010 Base Scenario	2006															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Input values	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Month offset Input	0	2	3	4	0	-1	-2	-3	-4	2	3	4	0	0	0	0
Sum Values from Period - Line as Argument function	13	45	66	90	17	35	54	74	95	69	98	130	25	26	27	28

{ XE "Function - Sum Values from YYYYMM" * MERGEFORMAT }{ XE "Sum Values" * MERGEFORMAT }Function - Sum Values from YYYYMM

Function Description:

This function sums the value of a given line across time, given a start date.

Parameter:

- **Line** – Select the line in the current report that you want to sum.
- **Line for Date (YYYYMM)** - Select the line in the current report that has the date you want to begin summing from.

Example:

The chart below illustrates this function.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entry Description
B	Input Data	Input()
C	Date to sum from (YYYYMM)	Input()
D	Sum Values from YYYYMM	Sum Values from YYYYMM(B:[Input Data],C:[Date to sum from (YYYYMM)])

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010
Alpha 1															
B:[Input Data]	10	10	10	10	10	10	10	10	10	10	10	10	20	20	20
C:[Date to sum from (YYYYMM)]	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	200,901	201,001	201,001	201,001
D:[Sum Values from YYYYMM]	10	20	30	40	50	60	70	80	90	100	110	120	20	40	60
Alpha 2															
B:[Input Data]	20	20	20	20	20	20	20	20	20	20	20	20	40	40	40
C:[Date to sum from (YYYYMM)]	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	200,903	201,003	201,003	201,003
D:[Sum Values from YYYYMM]	20	20	20	40	60	80	100	120	140	160	180	200	40	40	40
Alpha 3															
B:[Input Data]	30	30	30	30	30	30	30	30	30	30	30	30	60	60	60
C:[Date to sum from (YYYYMM)]	200,906	200,906	200,906	200,906	200,906	200,906	200,906	200,906	200,906	200,906	200,906	200,906	201,006	201,006	201,006
D:[Sum Values from YYYYMM]	30	30	30	30	30	30	60	90	120	150	180	210	60	60	60

{ XE "Value From Month" * MERGEFORMAT }{ XE "Value" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Value From Month

Function Description:

This function returns the value of a report line for any month in the current calendar year. The month to choose is specified in another report line.

Note that this function is for the calendar year. If you use a fiscal year, you may need to use other functions to achieve the result.

This function uses the current iteration value for the current month.

Parameters:

- **Line for value** – Select the line in the current report that you want to get the value of.
- **Line for Month** – Select the line in the current report that contains the value for the Month. Valid numbers must be integers between 1 and 12, non-integers will be truncated, values outside this range will return 0 (zero).

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Example:

The value of a report line in August is 80. The Value 80 will be returned with a parameter line of 8. The two screen prints below illustrate this example, as well as other values.

Valid numbers must be integers between 1 and 12, non integers will be truncated, values outside this range will return 0 (zero).

Report Calculation

Ref.	Line Name	Formula/Source
A	Input values	Input()
B	Input Months	Input()
C		
D	Results	Value From Month([A:Input values],[B:Input Months])

Report Results

2006-2010 B...	2006											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Input values	10.00	20.00	30.00	40.00	50.00	60.00	70.00	80.00	90.00	100.00	110.00	120.00
Input Months	9.00	1.00	6.00	8.00	3.00	12.00	2.00	13.00	0.00	-7.00	5.20	4.30
Results	90.00	10.00	60.00	80.00	30.00	120.00	20.00	0.00	0.00	0.00	50.00	40.00

{ XE "History" * MERGEFORMAT }{ XE "Function - Value From History" * MERGEFORMAT }{ XE "Value" * MERGEFORMAT }Function - Value From History

Function Description:

This function returns the value of a given line from a historical period. The line for the value must be either Input() or Account(). The maximum historical range is 5 years. The value for a given month, say May 2010 with a 4 year history is the same month from 4 years prior, e.g. May 2006. The function continues to work into the forecast. When processing mixed monthly-annual, the value is converted to an annual value using the month-to-annual option of the source data line.

Parameters:

- **Line for Value** - Select the line in the current report that you return the historical value of.
- **Number of Years** - Select the number of years back you want to go (1 to 5).

Example:

The screen prints below show this function applied to Line B of the report, with 2 as the number of years.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Input Data	Input()
C	Value from History - 1 year back	Value from History(B:[Input Data],1)
D	Value from History - 2 years back	Value from History(B:[Input Data],2)

Report Results

Detail Model 2009-2013 Base Plan	Dec 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011
Alpha 1															
B:[Input Data]	200,912	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C:[Value from History - 1 year back]	200,812	200,901	200,902	200,903	200,904	200,905	200,906	200,907	200,908	200,909	200,910	200,911	200,912	0	0
D:[Value from History - 2 years back]	0	200,801	200,802	200,803	200,804	200,805	200,806	200,807	200,808	200,809	200,810	200,811	200,812	200,901	200,902
E:[]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alpha 2															
B:[Input Data]	200,912	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C:[Value from History - 1 year back]	200,812	200,901	200,902	200,903	200,904	200,905	200,906	200,907	200,908	200,909	200,910	200,911	200,912	0	0
D:[Value from History - 2 years back]	0	200,801	200,802	200,803	200,804	200,805	200,806	200,807	200,808	200,809	200,810	200,811	200,812	200,901	200,902
E:[]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alpha 3															
B:[Input Data]	200,912	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C:[Value from History - 1 year back]	200,812	200,901	200,902	200,903	200,904	200,905	200,906	200,907	200,908	200,909	200,910	200,911	200,912	0	0
D:[Value from History - 2 years back]	0	200,801	200,802	200,803	200,804	200,805	200,806	200,807	200,808	200,809	200,810	200,811	200,812	200,901	200,902
E:[]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

{ XE "Period" * MERGEFORMAT }{ XE "Value" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Value from Period

Function Description:

This function returns the value of the given line in a report, offset by a specified number of periods. An offset of -2 would give the value from 2 months prior, and an offset of +2 would give the value from 2 months in the future.

Note: This function does not pay attention to mixed monthly/annual processing. If used on a mixed monthly/annual calculation, the value from period minus one will sometimes be monthly, sometimes annual.

You should use *VALUE FROM YYYYMM* for mixed monthly annual reports.

Parameters:

- **Line** – Select the line in the current report that you want to get the value of.
- **Months (Minus = Past, Plus = future)** - Select the number of offset months from the drop down list. The list contains values from -12 to +12.

Example:

The screen prints below illustrate this function. Five sample functions are given, with parameters of -4, -2, 0, 2, and 4. Each function will return the value of the input line with the appropriate offset months. Note: input

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values for 2006 are 1 - 12 for January - December, and Input values for 2008 are 25 - 36.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input Values	Input()
B		
C	Value From Period function with Parameter -4	Value from Period([A:Input Values], -4)
D	Value From Period function with parameter -2	Value from Period([A:Input Values], -2)
E	Value From Period function with Parameter 0	Value from Period([A:Input Values], 0)
F	Value From Period function with Parameter 2	Value from Period([A:Input Values], 2)
G	Value From Period function with Parameter 4	Value from Period([A:Input Values], 4)

Report Results

2006-2010 Base Scenario	2007															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Input Values	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Value From Period function with Parameter -4	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Value From Period function with parameter -2	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Value From Period function with Parameter 0	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Value From Period function with Parameter 2	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Value From Period function with Parameter 4	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

{ XE "Value" * MERGEFORMAT }{ XE "YYYYMM" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Value from YYYYMM

Function Description:

This function returns the value of a period for a specified date. It returns a value from a given year, month and line. The first argument is the line whose value you are looking for. The second argument is the line whose value is the period in the form YYYYMM (e.g. - 200912).

Parameters:

- **Line for Value** – Select the line in the current report that you want to get the value of.
- **Line for YYYYMM** - Select line from the current report that contains the date desired. The report line must contain a validly formatted YYYYMM date (example, 200903 = March 2009).

Example:

The screen prints below illustrate this function. The result for March 2007 is 20 given the parameter date of August 2007. Note: The date input line on the reports results screen print is in proper YYYYMM date format.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input Values	Input()
B	Date input	Input()
C		
D	Value From YYYYMM function	Value from YYYYMM([A:Input Values],[B:Date input])

Report Results

2006-2010 Base Scenario	2007											
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Input Values	15	16	17	18	19	20	21	22	23	24	25	26
Date input	Aug 2007	Nov 2007	Feb 2008	Aug 2007	Nov 2007	Jan 2007	Aug 2007	Feb 2008	Aug 2007	Nov 2007	Feb 2008	Aug 2007
Value From YYYYMM function	20	23	26	20	23	13	20	26	20	23	26	20

{ XE "Function - Year Over Year Changes" * MERGEFORMAT }{ XE "Year" * MERGEFORMAT }Function - Year Over Year Changes

Function Description:

This function returns the change: **Current Year minus Prior Year**. The Year values are latest 12 months during monthly processing, and annual totals during annual processing. Note: This function returns 0 until the last month of the base year. It p

ays attention to the month-to-annual code of the source line – Beginning Balance, Ending Balance are treated appropriately, all others use the annual sum.

Parameters:

- **Select Line** - Select the line in the current report you want to calculate year over year change of.

Example:

The screen prints below show this function applied to line B of the report.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Input Data	Input()
C	Year over Year Change	Year over Year Change(B:[Input Data])

Report Results

Detail Model 2009-2013 Base Plan	Oct 2009	Nov 2009	Dec 2009	Year 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Year 2010	Year 2011	Year 2012
Alpha 1																			
B [Input Data]	100	100	100	1,200	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	12,000	120,000	0
C [Year over Year Change]	0	0	1,080	1,080	1,890	2,700	3,510	4,320	5,130	5,940	6,750	7,560	8,370	9,180	9,990	10,800	10,800	108,000	-120,000
D []	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alpha 2																			
B [Input Data]	200	200	300	2,400	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	24,000	240,000	0
C [Year over Year Change]	0	0	2,160	2,160	3,780	5,400	7,020	8,640	10,260	11,880	13,500	15,120	16,740	18,360	19,980	21,600	21,600	216,000	-240,000
D []	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Alpha 3																			
B [Input Data]	300	300	300	3,600	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	36,000	360,000	0
C [Year over Year Change]	0	0	3,240	3,240	5,670	8,100	10,530	12,960	15,390	17,820	20,250	22,680	25,110	27,540	29,970	32,400	32,400	324,000	-360,000
D []	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

{ XE "Year Over Year Change Percent" * MERGEFORMAT }{ XE "Function - Year Over Year Change Percent" * MERGEFORMAT }Function - Year Over Year Change Percent

Function Description:

Similar to the Year over Year Change function. It returns the percent change over the prior year (Current Year minus Prior Year) / Prior Year. The year values are latest-12 months during monthly processing, and annual totals during annual processing. Note: like Year over Year Change, it returns 0 until the last month of the base year.

Parameter

- **Year Over Year Change Percent for Line** - Select the report line that you want to calculate the change percent of.

Example:

The screen prints below show the Year Over Year Change Percent applied to Line B of the report.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Revenues	Copy From(Electric Revenue Summary,Q:[Revenue - Total])
C		
D	Year over Year Change Percent	Year over Year Change Percent(B:[Revenues])

Report Results

Detail Model - Revenues	Year 2010	Year 2011	Year 2012	Year 2013
Chicago Electric				
B:[Revenues]	5,006,941	5,134,767	5,266,551	5,372,226
C:[]	0	0	0	0
D:[Year over Year Change Percent]	2.54%	2.55%	2.57%	2.01%

{ XE "Year:Date" * MERGEFORMAT }{ XE "Year" * MERGEFORMAT }{ XE "Date:Year" * MERGEFORMAT }{ XE "Date" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Year to Date

Function Description:

This function returns the running value across time for the selected line. The value resets to zero at the start of each new year. This function calculates the year to date value for any line in a report. This function pays attention to fiscal processing, but does not pay attention to the month-to-annual code of the source line, i.e. it always calculates a sum.

This function checks to see if the calculation was processing annually, and if so, returns the annual value.

In previous releases, it checked first whether values for the line had been calculated (in a prior iteration), and if not returned a zero.

Parameters:

- **Select Line** - Select the line in the current report you want to calculate year to date totals on.

Example:

The screen prints below show this function applied to line A of the report. Note the **YEAR TO DATE** function results accumulate year to date totals for the sample input data.

Report Calculation

Ref.	Line Name	Formula/Source
A	Sample numbers Input	Input()
B	Year to date Function	Year to Date([A:Sample numbers Input])

Report Results

2006-2010 Base Scen...	2006														
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Sample numbers Input	10	20	30	40	50	60	70	80	90	100	110	120	4	8	12
Year to date Function	10	30	60	100	150	210	280	360	450	550	660	780	4	12	23

{ XE "Escalate Input" * MERGEFORMAT }{ XE "Function - Escalate Input" * MERGEFORMAT }Function - Escalate Input

Function Description:

Returns the escalated value of a line beginning at a specified date. Prior to the escalation start date, the line is defined as Input. This function is similar to Escalate Line, except that there the source is copied from another line. The escalation is calculated by multiplying the prior year/same month

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by $(1 + \text{rate})$. Escalation rates are assumed to be decimals, like 0.05. If defined as Input, the escalation rate line should be defined as 'Percent NOT divided by 12.' The function works with pure monthly and mixed monthly-annual reports. Note: the report must be iterated at least 2 times.

Parameters :

- **Line for Escalation Start Date (YYYYMM)** - Select the report line that contains the Year/Month when you want to begin escalating
- **Line for Escalation Rate** - Select the report line that contains the escalation rate to use.

Example:

The screen prints below show the Escalate Input function in use

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Date to begin Escalating	201101
C	Escalation Rate	.05
D		
E	Escalate Input	Escalate Input(B:[Date to begin Escalating],C:[Escalation Rate])
F		

Report Results

Format Report		Search Table		Drilldown on Data		Action Panel																																																																
Drilldown E:[Escalate Input] - Chicago Electric (Jan/2011)																																																																						
Escalate Input(B:[Date to begin Escalating],C:[Escalation Rate])																																																																						
Description				Value																																																																		
Current Date				1/2011																																																																		
Escalation Date				1/2011																																																																		
Do Escalation?				Yes																																																																		
Date for Value to Escalate				1/2010																																																																		
Value to Escalate				1,000																																																																		
Escalation Rate				0																																																																		
Original or Escalated value				1,050																																																																		
<table border="1"> <thead> <tr> <th>Detail Model - Revenues</th> <th>Oct 2010</th> <th>Nov 2010</th> <th>Dec 2010</th> <th>Jan 2011</th> <th>Feb 2011</th> <th>Mar 2011</th> <th>Apr 2011</th> <th>May 2011</th> </tr> </thead> <tbody> <tr> <td>Chicago Electric</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Date to begin Escalating</td> <td>201,101</td> <td>201,101</td> <td>201,101</td> <td>201,101</td> <td>201,101</td> <td>201,101</td> <td>201,101</td> <td>201,101</td> </tr> <tr> <td>Escalation Rate</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Escalate Input</td> <td>1,000</td> <td>1,000</td> <td>1,000</td> <td>1,050</td> <td>1,050</td> <td>1,050</td> <td>1,050</td> <td>1,050</td> </tr> <tr> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table>								Detail Model - Revenues	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Chicago Electric									Date to begin Escalating	201,101	201,101	201,101	201,101	201,101	201,101	201,101	201,101	Escalation Rate	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	Escalate Input	1,000	1,000	1,000	1,050	1,050	1,050	1,050	1,050		0	0	0	0	0	0	0	0
Detail Model - Revenues	Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011																																																														
Chicago Electric																																																																						
Date to begin Escalating	201,101	201,101	201,101	201,101	201,101	201,101	201,101	201,101																																																														
Escalation Rate	0	0	0	0	0	0	0	0																																																														
	0	0	0	0	0	0	0	0																																																														
Escalate Input	1,000	1,000	1,000	1,050	1,050	1,050	1,050	1,050																																																														
	0	0	0	0	0	0	0	0																																																														

{ XE "Escalate Line" * MERGEFORMAT }{ XE "Function - Escalate Line" * MERGEFORMAT }Function -Escalate Line

Function Description:

Returns the escalated value of a line beginning at a specified date. Prior to the escalation start date, the value of the line is copied from a specified source line. This function is similar to Escalate Input, except that the source is copied to this line. The escalation is calculated by multiplying the prior year/same month by (1 + rate). Escalation rates are assumed to be decimals, like 0.05. If defined as Input, the escalation rate line should be defined as 'Percent NOT divided by 12.' The function works with pure monthly and mixed monthly-annual reports. Note: the report must be iterated at least 2 times.

Parameters:

- **Line for Escalation Start Date (YYYYMM)** - Select the report line that contains the Year/Month when you want to begin escalating
- **Line for Escalation Rate** - Select the report line that contains the escalation rate to use
- **Line for Values to Escalate** - Select the report line that contains the values you want to pull in and then escalate.

Example:

The screen prints below show the Escalate Line function in use.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Date to begin Escalating	201101
C	Escalation Rate	.05
D	Source Data	Copy From(O&M,D:[Nonlabor])
E		
F	Escalate Line	Escalate Line(B:[Date to begin Escalating],C:[Escalation Rate],D:[Source Data])

Report Results

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Format Report		Search Table		Drilldown on Data		Action Panel			
Drilldown F:[Escalate Line] - Chicago Electric (Jan/2011)									
Escalate Line(B:[Date to begin Escalating],C:[Escalation Rate],D:[Source Data])									
Description		Value							
Current Date		1/2011							
Escalation Date		1/2011							
Do Escalation?		Yes							
Date for Value to Escalate		1/2010							
Value to Escalate		29,788							
Escalation Rate		0							
Original or Escalated value		31,277							
Detail Model - Revenues									
		Oct 2010	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Apr 2011	Ma
Chicago Electric									
Date to begin Escalating	01	201,101	201,101	201,101	201,101	201,101	201,101	201,101	201,101
Escalation Rate	0	0	0	0	0	0	0	0	0
Source Data	88	29,788	29,788	29,788	30,384	30,384	30,384	30,384	30,384
	0	0	0	0	0	0	0	0	0
Escalate Line	88	29,788	29,788	29,788	31,277	31,277	31,277	31,277	31,277

Averages

{ XE "Average 13 Month" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - 13 Month Average

Function Description:

Returns average of a line for 13 months through the current month. For example, a 13-month average in May is the sum of May (prior year) through May (current year) divided by 13. When processing annually, this average is (prior Year ending + current Year) / 2. Note that this function is different from the 13-point average of monthly averages.

Parameters:

- **Average: 13-Month of Line** - Select the line from the current report that you want to calculate the 13 month average of.

Example:

The chart below shows monthly values and the Average 13 month calculation beginning in January of 2007. If periods in the 13 month average are null (no data) these months will be used with a value of zero in the calculation. Values shown below are rounded to the nearest dollar.

Year	Month	Input Value	13 Month Total	Number of Months	13 Month Average
2005	December	50			
2006	January	70			
	February	30			
	March	50			
	April	45			
	May	60			
	June	40			
	July	60			
	August	30			
	September	20			
	October	60			
	November	70			
	December	50			
2007	January	30	605	13	47
	February	50	585	13	45
	March	60	615	13	47
	April	45	610	13	47
	May	90	655	13	50
	June	30	625	13	48
	July	20	605	13	47
	August	50	595	13	46
	September	70	635	13	49
	October	20	635	13	49
	November	70	645	13	50
	December	30	605	13	47
2008	January	30	595	13	46
	February	50	615	13	47
	March	60	625	13	48

Report Calculation

Ref.	Line Name	Formula/Source
A	Input data	Input()
B	Average: 13 Month Function	Average: 13 Month([A:Input data])

Report Results

Graph	2006-2010 Base Scenario	2007														
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
	Input data	30	50	60	45	90	30	20	50	70	20	70	30	30	50	60
	Average: 13 Month Function	47	45	47	47	50	48	47	46	49	49	50	47	46	47	48

{ XE "13 Point Average:Monthly Average" * MERGEFORMAT }{ XE "13 Point Average" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }{ XE "Monthly Average:13 Point Average" * MERGEFORMAT }{ XE "Monthly Average" * MERGEFORMAT }Function - 13 Point Average of Monthly Averages

Function Description:

This function returns the 13 Point AMA of the selected line. It uses 1/2 of the 12-months-ago balance, 1/2 of the current balance, summed with all of the intervening 11 months, then divided by 12.

Parameters:

- **13-point AMA Average of Line** - Select the line from the current report that you want to use as the basis for the 13 point average function.

Example:

The chart below illustrates this function calculation. January 2007 is calculated as follows:

$$\text{January 2006} / 2 = 70 / 2 = 35$$

$$\text{January 2007} / 2 = 30 / 2 = 15$$

$$\text{Total of Feb 2006 to Dec 2007} = 505$$

$$(35 + 15 + 505) / 12 = 46.25$$

Year	Month	Input Value	First Month	First Month / 2	Last Month	Last Month / 2	11 Monhs Total	Total	Divide by 12	13 Month Average of Average
2006	January	70								
	February	30								
	March	50								
	April	45								
	May	60								
	June	40								
	July	60								
	August	30								
	September	20								
	October	60								
	November	70								
	December	40								
2007	January	30	70	35	30	15	505	555	12	46.25
	February	50	30	15	50	25	505	545	12	45.42
	March	60	50	25	60	30	505	560	12	46.67
	April	45	45	22.5	45	22.5	520	565	12	47.08
	May	90	60	30	90	45	505	580	12	48.33
	June	30	40	20	30	15	555	590	12	49.17
	July	20	60	30	20	10	525	565	12	47.08
	August	50	30	15	50	25	515	555	12	46.25
	September	70	20	10	70	35	545	590	12	49.17
	October	20	60	30	20	10	555	595	12	49.58
	November	70	70	35	70	35	505	575	12	47.92
	December	30	40	20	30	15	535	570	12	47.50
2008	January	25	30	15	25	12.5	535	562.5	12	46.88
	February	75	50	25	75	37.5	510	572.5	12	47.71
	March	85	60	30	85	42.5	525	597.5	12	49.79

The screen prints below illustrate the results from the chart above.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input data	Input()
B	13-point Average of Monthly Averages Function	13-point Average of Monthly Averages([A:Input data])

Report Results

2006-2010 Base Scenario	2007													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Input data	30	50	60	45	90	30	20	50	70	20	70	30	25	75
13-point Average of Monthly Averages Function	46.25	45.42	46.67	47.08	48.33	49.17	47.08	46.25	49.17	49.58	47.92	47.50	46.88	47.71

{ XE "Average" * MERGEFORMAT }{ XE "Function - 5 - Quarter Average" * MERGEFORMAT }Function - 5 Quarter Average

Function Description:

This function returns the average of a line for 5 quarters through the current month. For example, a 5-quarter average in May is the sum of May (prior year), Aug, Nov, Feb and May (current year) divided by 5. Note: When processing annually, this average is (Prior Year ending + current Year) / 2.

Parameters:

- **Average: 5 Quarter of Line** - Select the line from the current report that you want to calculate the 5 Quarter Average of.

Example:

The chart below shows monthly values and the **5 QUARTER AVERAGE** function calculation beginning in January of 2009. If periods in the range are null (no data) these months will be used with a value of zero in the calculation.

2009	January	100	140	28
	February	100	140	28
	March	100	140	28
	April	100	230	46
	May	100	230	46
	June	100	230	46
	July	100	320	64
	August	100	320	64
	September	100	320	64
	October	100	410	82
	November	100	410	82
	December	100	410	82
2010	January	200	600	120
	February	200	600	120
	March	200	600	120
	April	200	700	140
	May	200	700	140
	June	200	700	140
	July	200	800	160
	August	200	800	160
	September	200	800	160
	October	200	900	180
	November	200	900	180
	December	200	900	180

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Input Data	Input()
C	5 Quarter Average	5 Quarter Average(B:[Input Data])
D		

Report Results

Detail Model 2009-2013 Base Plan	Nov 2009	Dec 2009	Year 2009	Jan 2010	Feb 2010	Mar 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Year 2010
Alpha I																
B.[Input Data]	100	100	1,200	200	200	200	200	200	200	200	200	200	200	200	200	2,400
C.[5 Quarter Average]	82	82	82	120	120	120	140	140	140	160	160	160	180	180	180	180
D.[]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

{ XE "Function - Average" * MERGEFORMAT }{ XE "Average" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Average

Function Description

This function is a combination of a simple copy-from function and a generic average function that uses the other average functions. The copy-from component is simple in that the dimensions of the source report must match the destination report exactly.

The function supports the different type of averages by having the average type to use on a line. The purpose of the generic average function is to be able create a report that can create many averages quickly. For example, suppose you have a report that has balances by plant account (301-399) and one jurisdiction specifies 13-month averages while another specifies 5-quarter averages. You could create an averaging report that checked the jurisdiction at the top, setting the correct average option for the jurisdiction (on a line). Then the hundreds of average functions could all reference that line.

Note: End-of-period and Lates-12-months total are supported by this function. While not technically averages, they are both useful for jurisdictional reporting.

Parameter:

- **From Report** - Select the Report you want to copy from. This could be the same report you are editing.
- **From Line** - Select the Line you want to average.
- **Line for Average Option** - Select the Line on the current report that has the average option.

{ XE "Multi-Year Average" * MERGEFORMAT }{ XE "Function - Multi Year Average" * MERGEFORMAT }{ XE "Average" * MERGEFORMAT }Function - Multi Year Average

Function Description:

This function returns the monthly average of values of a given line across a historical range of years. The line for the value must be either Input() or Account(). For example, a 3-year average for May 2011 is the average of values from May 2008, May 2009 and May 2010. The maximum historical range is 5 years. The function continues to work into the forecast. When processing mixed monthly-annual, the value is converted to an annual value using the month-to-annual option of the source data line.

Parameters:

- **Line for Value** - Select the line from the current report that you want to calculate the Multi-Year Average of.
- **Number of Years** - Select the number of years back you want to go (1 to 5).

Example:

The chart below shows monthly values and the multi year (set at 3 in the report) average. Note that if periods in the range are null (have no data) these months will be used with a value of zero in the calculation.

Year	Month	Input Value	3 Year Average
2008	January	10	0.00
	February	10	0.00
	March	10	0.00
	April	10	0.00
	May	10	0.00
	June	10	0.00
2009	January	100	3.33
	February	100	3.33
	March	100	3.33
	April	100	3.33
	May	100	3.33
	June	100	3.33
2010	January	200	36.67
	February	200	36.67
	March	200	36.67
	April	200	36.67
	May	200	36.67
	June	200	36.67
2011	January	200	103.33
	February	200	103.33
	March	200	103.33
	April	200	103.33
	May	200	103.33
	June	200	103.33

Report Calculation

A	Plant Account ID	Place Holder for Entity Description
B	Input Data	Input()
C	Multi Year Average	Multi-Year Average(B:[Input Data],3)

Report Results

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Line for Average	Date	Value from Date
B:[Input Data]	May/2010	200
B:[Input Data]	May/2009	100
B:[Input Data]	May/2008	10
Total		310
Average	/ 3 =	103.33

Detail Model 2009-2013 Base Plan	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov
Alpha 1										
B:[Input Data]										
C:[Multi Year Average]	103.33	103.33	103.33	103.33	103.33	103.33	103.33	103.33	103.33	
D:[]	0	0	0	0	0	0	0	0	0	0

{ XE "Quarterly Average" * MERGEFORMAT }{ XE "Function - Quarterly Average" * MERGEFORMAT }{ XE "Average" * MERGEFORMAT }Function - Quarterly Average

Function Description:

This function calculates the quarterly average of a given line, using 4 months ending balances divided by 4. For example, a year-to-date average in May is the sum of February through May divided by 4. When processing annually, this function returns zero.

Parameters:

- **Average: Quarterly of Line** - Select a line in the current report to calculate quarterly average.

Example:

The chart below illustrates the calculation of this function. As you can see each month's quarterly average is the summation of 4 months divided by 4.

Year	Month	Input Value	4		Average Quarterly
			Month Total	Divide by 4	
	October	60			
	November	70			
	December	40			
2007	January	30	200	4	50.00
	February	50	190	4	47.50
	March	60	180	4	45.00
	April	45	185	4	46.25
	May	90	245	4	61.25
	June	30	225	4	56.25
	July	20	185	4	46.25
	August	50	190	4	47.50
	September	70	170	4	42.50
	October	20	160	4	40.00
	November	70	210	4	52.50
	December	30	190	4	47.50
2008	January	25	145	4	36.25
	February	75	200	4	50.00

The screen prints below show the average quarterly function in a report and results.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input data	Input()
B	Average: Quarterly Function	Average: Quarterly([A:Input data])

Report Results

2006-2010 Base Scenario	2007													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Input data	30	50	60	45	90	30	20	50	70	20	70	30	25	75
Average: Quarterly Function	50.00	47.50	45.00	46.25	61.25	56.25	46.25	47.50	42.50	40.00	52.50	47.50	36.25	50.00

{ XE "Average" * MERGEFORMAT }{ XE "Two Point Annual Average" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Two Point Annual Average

Function Description:

This function returns the average of the selected line between the current period and the same period 12 months ago. If running annually, compares against last year for the average.

Parameter:

- **2-Point Annual Average of line** - Select the line in the current report that you want to calculate the two point average of.

Example:

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The schedule below shows an example of the Two Point Annual Average function calculation. January 2007 is $(40 + 50) / 2 = 45$. February 2007 is $(50 + 30) / 2 = 40$. Screen prints of the report calculation and report results are shown as well. Null data fields are considered zero in the calculation.

Year	Month	Input Value	Last Year Value	2 Point Average
2005	December	50		25
2006	January	70		35
	February	30		15
	March	50		25
	April	45		23
	May	60		30
	June	40		20
	July	60		30
	August	30		15
	September	20		10
	October	60		30
	November	70		35
	December	40	50	45
2007	January	30	70	50
	February	50	30	40
	March	60	50	55
	April	45	45	45
	May	90	60	75
	June	30	40	35
	July	20	60	40
	August	50	30	40
	September	70	20	45
	October	20	60	40
	November	70	70	70
	December	30	40	35

Report Calculation

Ref.	Line Name	Formula/Source
A	Input values	Input()
B	Two Point Annual Average function	Two Point Annual Average([A:Input values])

{ XE "Year to Date Average" * MERGEFORMAT }{ XE "Function - Year to Date Average" * MERGEFORMAT }{ XE "Average" * MERGEFORMAT }Function - Year to Date Average

Function Description:

This function calculates the year-to-date average for a line in a report and returns the average of a line, including last month of the prior year. For example, a year-to-date average in May is the sum of December through May divided by 6.

Parameters:

- **Average: Year-to-date of Line** - Select a line in the current report to calculate year to date totals.

Example:

The schedule below shows the an example of the **YEAR TO DATE AVERAGE** function calculation. January 2006 is $(50 + 70) / 2 = 60$, February is $(50 + 70 + 30) / 3 = 50$, and June is $345 / 7 = 49$.

Screen prints of the report calculation and report results are shown as well.

		Sample Number Input	Annual Cumulative Total	Months	Function Results
2005	December	50			
2006	January	70	120	2	60
2006	February	30	150	3	50
2006	March	50	200	4	50
2006	April	45	245	5	49
2006	May	60	305	6	51
2006	June	40	345	7	49
2006	July	60	405	8	51
2006	August	30	435	9	48
2006	September	20	455	10	46
2006	October	60	515	11	47
2006	November	70	585	12	49
2006	December	40	625	13	48
2007	January	30	70	2	35
2007	February	50	120	3	40
2007	March	60	180	4	45

Report Calculation

Ref.	Line Name	Formula/Source
A	Sample numbers Input	Input()
B	Average Year to Date Function	Average: Year-to-Date([A:Sample numbers Input])

Copy and Rollups

{ XE "Copy From Functions - Overview" * MERGEFORMAT }{ XE "Functions" * MERGEFORMAT }Copy From Functions - Overview

All copy from functions follow a few basic rules. Reports may have one or two dimensions (Entity Groups). Copy from a two-dimensional report to a one-dimensional report is not allowed. All other combinations are allowed.

Copy from functions that do not specify association(s) look for associations. If more than one set of associations is found, an error is generated. For example, suppose you have a project report that copies an **AFUDC** rate from a legal entity report. You expect the **COPY-FROM** function to use a path **Project->Plant Account->Planning Entity->Legal Entity**. If another path (**Project->Plant Account->Jurisdiction->Legal Entity**)

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also exists, an error is generated and you will need to update the function to use ***COPY-FROM-WITH-PATH***.

The screen below shows an example where there are multiple paths. The **SHOW ASSOCIATIONS** button populates the text box below it. If there are two paths, you need to switch to a more specific ***COPY-FROM*** function.

Note that these error messages may appear over time. For example, when the report was first created, there was only one path. As time goes by, someone adds an association from **Plant Account to Jurisdiction**. While neither projects nor legal entity was touched, a new possible path was created. For this reason, you should consider using ***COPY-FROM-WITH-PATHS*** instead of the simple copy-from for any copy-from that uses an association. (***COPY-FROM'S*** in the same entity group, for example copy taxable income from the income statement to a tax calculation do not use associations so there will not be a problem).

Define Forecast Function for B:[AFUDC debt Rate ffrom Legal Entity]

Select Function

Show Tree Selection Show Quick Search Copy From

Function Description: Copy From

Returns the value of a given line on a given report. Note that the report copied may be the same entity group, or a different entity group (as long as there is an association between the entity groups).

Define Parameter Values

From Report: AFUDC Rates

From Line: B:[AFUDC Equity Rate]

Optional inherit association from:

Show Associations

Associations between reports. If more than one, consider copy with path.

1 Project ->Rolls up to Plant Account ->Pointer to Planning Entity ->PE pointer to Legal Entity ->Legal Entity
 1 Project ->Rolls up to Plant Account ->Pointer to Jurisdiction ->Jur pointer to Legal Entity ->Legal Entity <<<Alternate Path

Attempt Approximation When Copy From Annual to Monthly:

Sign?

OK Cancel

The **COPY** function in all its forms allows for copying data from one report to another. This is the basic version.

{ XE "Copy From" * MERGEFORMAT }{ XE "Copy" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Copy From

Function Description:

This function returns the value of a given line on a given report. Note that the report copied may be the same entity group or a different entity group (as long as there is an association between the entity groups).

Parameters:

- **From Report** - Select the report to be copied from.
- **From Line** - Select a line in the *From Report*. The drop-down list will display all report lines in the *From Report* selected in the previous parameter.
- **Optional Inherit Association From** – If the current entity group is linked that to another entity group, you can choose to 'inherit' the association.
- **Attempt Approximation When Copy From Annual to Monthly** - When this check box is selected, any reports run on an annual basis copied to reports run on a monthly basis. UIPlanner will attempt to approximate the resulting monthly values. If the source report is processing annually, the annual values are spread evenly over the months.

Example 1:

In its simplest form, the **COPY FROM** function can be used to copy values from one report to another, when both reports are run over the same entity group. The screen prints below show the copy function used to copy values from Report 1 to Report 2 when both are run over the "Alpha" entity group. No association is necessary in this simple example.

Report 1

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

Report 2

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Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Copy from Report 1	Copy From(Report 1,[B: Input Alpha Data])

Report 1 lines copied to Report 2

Values in report 1 are copied to report 2 for each entity in the Alpha entity group.

Report 1			Report 2		
Graph	2007-2011 Detail ...	2007 Jan	Graph	2007-2011 Detail Model	2007 Jan
<input type="checkbox"/>	Alpha 1		<input type="checkbox"/>	Alpha 1	
<input checked="" type="checkbox"/>	Input Alpha Data	100	<input checked="" type="checkbox"/>	Copy from Report 1	100
<input type="checkbox"/>	Alpha 2		<input type="checkbox"/>	Alpha 2	
<input checked="" type="checkbox"/>	Input Alpha Data	200	<input checked="" type="checkbox"/>	Copy from Report 1	200
<input type="checkbox"/>	Alpha 3		<input type="checkbox"/>	Alpha 3	
<input checked="" type="checkbox"/>	Input Alpha Data	300	<input checked="" type="checkbox"/>	Copy from Report 1	300
<input type="checkbox"/>	Alpha 4		<input type="checkbox"/>	Alpha 4	
<input checked="" type="checkbox"/>	Input Alpha Data	400	<input checked="" type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Alpha 5		<input type="checkbox"/>	Alpha 5	
<input checked="" type="checkbox"/>	Input Alpha Data	500	<input checked="" type="checkbox"/>	Copy from Report 1	500
<input type="checkbox"/>	Alpha 6		<input type="checkbox"/>	Alpha 6	
<input checked="" type="checkbox"/>	Input Alpha Data	600	<input checked="" type="checkbox"/>	Copy from Report 1	600
<input type="checkbox"/>	Alpha 7		<input type="checkbox"/>	Alpha 7	
<input checked="" type="checkbox"/>	Input Alpha Data	700	<input checked="" type="checkbox"/>	Copy from Report 1	700

Example 2:

In the example below, Report 1 is unchanged from the previous example. However, Report 2 is run over the Bravo entity group, and an association has been created between entity group Bravo and Alpha. The association screen print below is from the **ONE PARAMETER EDITOR** screen indicating Bravo 1 is associated to Alpha 1, Bravo 2 and 3 is associated to Alpha 2, Bravo 4 to Alpha 4, and Bravo 5 to Alpha 6.

Report 2 results, shown below, have the appropriate values according to the association.

Association between Bravo and Alpha Entity Groups

Object	Association 2
Bravo 1	Alpha 1
Bravo 2	Alpha 2
Bravo 3	Alpha 2
Bravo 4	Alpha 4
Bravo 5	Alpha 6

Report 1 lines copied to report 2 according to an association

Report 1			Report 2		
Graph	2007-2011 Detail ...	2007 Jan	Graph	2007-2011 Detail Model	2007 Jan
<input type="checkbox"/>	Alpha 1		<input type="checkbox"/>	Bravo 1	
<input checked="" type="checkbox"/>	Input Alpha Data	100	<input checked="" type="checkbox"/>	Copy from Report 1	100
<input type="checkbox"/>	Alpha 2		<input type="checkbox"/>	Bravo 2	
<input type="checkbox"/>	Input Alpha Data	200	<input type="checkbox"/>	Copy from Report 1	200
<input type="checkbox"/>	Alpha 3		<input type="checkbox"/>	Bravo 3	
<input type="checkbox"/>	Input Alpha Data	300	<input type="checkbox"/>	Copy from Report 1	200
<input type="checkbox"/>	Alpha 4		<input type="checkbox"/>	Bravo 4	
<input type="checkbox"/>	Input Alpha Data	400	<input type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Alpha 5		<input type="checkbox"/>	Bravo 5	
<input type="checkbox"/>	Input Alpha Data	500	<input type="checkbox"/>	Copy from Report 1	600
<input type="checkbox"/>	Alpha 6		<input type="checkbox"/>	Bravo 5	
<input type="checkbox"/>	Input Alpha Data	600	<input type="checkbox"/>	Copy from Report 1	600
<input type="checkbox"/>	Alpha 7				
<input type="checkbox"/>	Input Alpha Data	700			

Drill down shows the copy path

The copy path can be seen by using the drill down feature on the **BROWSE REPORTS** screen. The print below shows to and from reports as well as the association used.

From	Path Step 1	To:
Report: Report 1		Report: Report 2
Line: [B: Input Alpha Data]		Line: [B: Copy from Report 1]
Entity: Alpha 2	Association 2	Entity: Bravo 2
Path:	<- Alpha 2	<- Bravo 2
Value (not scaled)		200

Report 2						
Graph	2007-2011 Detail Model	2007 Jan	2007 Feb	2007 Mar	2007 Apr	2007 May
<input type="checkbox"/>	Bravo 1					
<input type="checkbox"/>	Copy from Report 1	100	100	100	100	
<input type="checkbox"/>	Bravo 2					
<input checked="" type="checkbox"/>	Copy from Report 1	200	200	200	200	
<input type="checkbox"/>	Bravo 3					
<input type="checkbox"/>	Copy from Report 1	200	200	200	200	
<input type="checkbox"/>	Bravo 4					
<input type="checkbox"/>	Copy from Report 1	400	400	400	400	
<input type="checkbox"/>	Bravo 5					
<input type="checkbox"/>	Copy from Report 1	600	600	600	600	

Important notes about the Copy function:

- This function will return data using the first association found. Association order is determined by the order code shown on the **CORE OBJECTS EDITOR** screen on the *Order* sub tab. In cases where there are multiple associations between entity groups, you may need to use the **FUNCTION - COPY WITH PATH** which allows you to specify the association "path" to use.
- Entities that do not have an association (a null association) will not be copied. For example, if Bravo 1 were not associated to any entity in the entity group Alpha, the resulting report line for Bravo 1 would not appear.

- The Association used by the **COPY** function is a one way street. In the example above Entity Group Bravo has an association "to" entity group Alpha. However, this does not work backwards. There is no association from entity group Alpha to entity group Bravo.

{ XE "Copy From" * MERGEFORMAT }{ XE "Copy" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }{ XE "Export Report" * MERGEFORMAT }Function - Copy From Exported Report

The **COPY** function in all its forms allows for copying data from one report to another. This variant is used to transfer data from **Budget** to **Model** or from **Model** to **Strategic Model**.

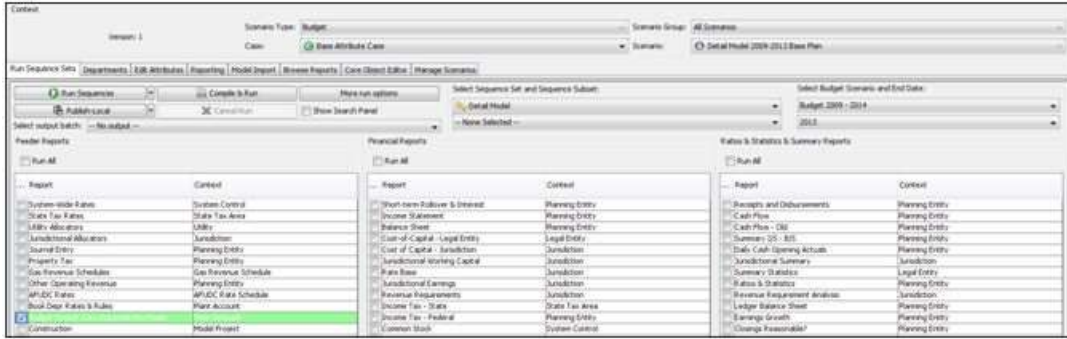
The distinction between **COPY FROM PUBLISHED REPORT** and **COPY FROM EXPORTED REPORT** is:

- **Copy From Exported Report** – takes the data from the feeder scenario that is referenced on the **RUN SEQUENCES** screen. For **Detailed Model**, it is by definition a **Budget** scenario, and for **Strategic Model** it is by definition a **Detailed Model** scenario.
- **Copy From Published Report** – allows you to define (by use of the related scenario screen) which scenario the data will be sourced from. This allows you to take data from one **Detailed Model** scenario to another, as well as **Budget** to **Detailed Model** or **Detailed Model** to **Strategic Model**.
- **Copy From Published Report – Scenario on a Line** – allows you to define (on a line) which scenario the data will be sourced from. This allows you to take data from one **Detailed Model** scenario to another, as well as **Budget** to **Detailed Model** or **Detailed Model** to **Strategic Model**.

Function Description:

This function is identical to the [Function - Copy From](#), except it copies lines from reports that have been exported. It is used primarily for copying report lines from an exported Budget report to the Detailed Model or from a Detailed Model report to a report in the Strategic Model.

Note that you need to have run and published the source reports from the Budget scenario that is referenced in the Model **RUN SEQUENCES** screen.



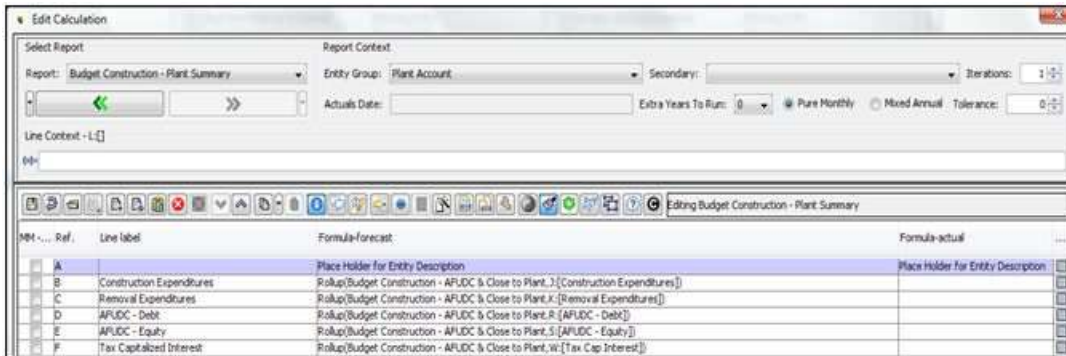
Parameters:

- **From Report** - Select the report to be copied from.
- **From Line** - Select a line in the *From Report*. The drop-down list will display all report lines in the *From Report* selected in the previous parameter.
- **Optional Inherit Association From** – If the current entity group is linked to another entity group, you can choose to 'inherit' the association.

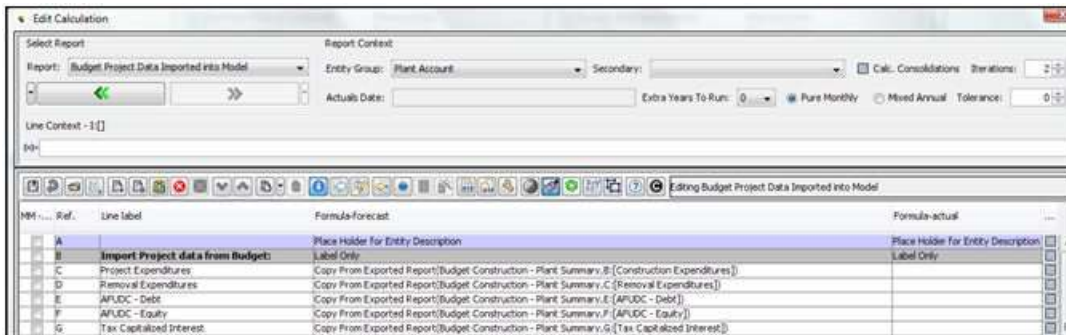
Example 1:

Report Calculation

This is the *From Report* (in the Budget scenario). It is by Plant Account.



This is the *calling* report. It is also by Plant Account



Report Results

Below are the report results. Note the drilldown indicates that the data is sourced from the Budget scenario and report.

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The screenshot shows a software window titled 'Drilldown D (Projects Expenditures) - CHI Elec Dist General II, (391-396) (Jan 2009)'. It features a 'Copy From Exported Report' dialog box with fields for 'From' and 'To' reports. Below the dialog is a data table for 'Detail Model 2009-2013 Base Plan' for 'CHI Elec Dist General II, (391-396)'. The table has columns for months from Jan 2009 to Dec 2009 and rows for 'Import Project data from Budget:', 'Projects Expenditures', 'Projects Expenditures', and 'Removal Expenditures'.

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009
CHI Elec Dist General II, (391-396)												
Import Project data from Budget:	0	0	0	0	0	0	0	0	0	0	0	0
Projects Expenditures	49,001	53,750	58,500	64,772	69,522	74,272	74,272	69,522	64,772	60,022	55,272	50,001
Projects Expenditures	49	54	58	65	70	74	74	70	65	60	55	50
Removal Expenditures	0	0	0	0	0	0	0	0	0	0	0	0

{ XE "Method" * MERGEFORMAT }{ XE "Copy From Inside a Method" * MERGEFORMAT }{ XE "Function - Copy From Inside a Method" * MERGEFORMAT }Function - Copy From Inside a Method

The **COPY** function in all its forms allows for copying data from one report to another. This variant is used when you want to copy data from another report, inside a method call. Since lines are shared, the function copies for THAT line and THAT entity, from the related report. This function can also copy from a higher-level entity, for example a jurisdiction could copy from a legal entity report. Further, the copy-from may be used on a two-dimensional report to copy from a one-dimensional report.

Function Description:

This function is used inside of a **Method** call, and it returns the value of that same line from a related report also running inside a method.

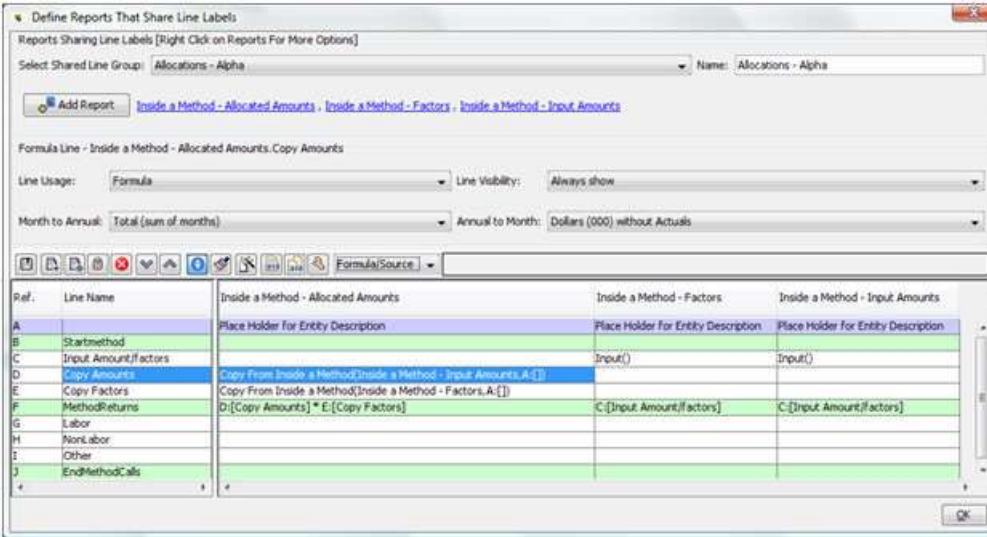
Parameters:

- **From Report** - Select the report to be copied from. The report must be one of the **Shared Label** group.
- **Line for Date (YYYYMM) or offset month (+/- 12)** - This is used to allow you to pull a value for a specific data or offsetting month. Select a line in the current report that contains either a data or an offset factor. The default is to pull from the same month.

Example:

Note that there are three reports in the **Shared Label Group**, one for inputting amounts, one for inputting factors, and the third for calculating the allocated amount. This third report uses **COPY FROM INSIDE A METHOD** to pull from the first two.

Report Calculation



Report Results

Note from the drilldown that the calculated amount is the product of the **Copy Amounts** and **Copy Factors** lines.

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009
Alpha 1									
Startmethod									
Input Amount	0	0	0	0	0	0	0	0	0
Copy Factor	0	0	0	0	0	0	0	0	0
Input Factor	0	0	0	0	0	0	0	0	0
MethodReturns									
Labor	50	50	50	50	50	50	50	50	50
NonLabor	67	67	67	67	67	67	67	67	67
Other	12	12	12	12	12	12	12	12	12
EndMethodCalls									

{ XE "Published Reports" * MERGEFORMAT }{ XE "Copy from Published Reports" * MERGEFORMAT }{ XE "Functions" * MERGEFORMAT }{ XE "Report" * MERGEFORMAT }Function - Copy from Published Report

The **COPY** function in all its forms allows for copying data from one report to another. This variant is used to transfer data from one scenario to another, using the related scenario concept. Related scenarios can be **Budget to Model, Model to Strategic Model**, or from one Model scenario to another – they are defined in the **RELATED SCENARIOS** dialog.

The distinction between **COPY FROM PUBLISHED REPORT** and **COPY FROM EXPORTED REPORT** is:

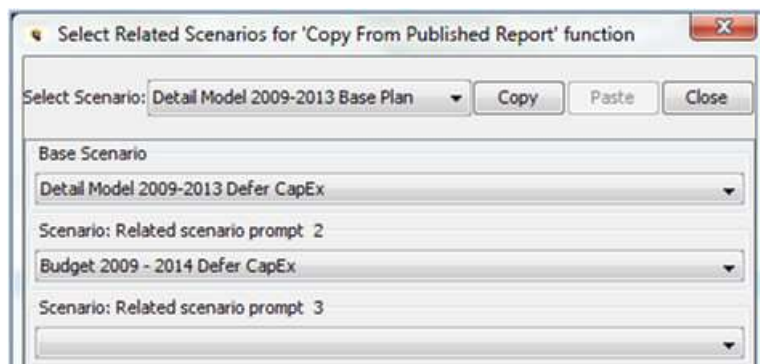
- **Copy From Exported Report** – takes the data from the feeder scenario that is referenced on the **RUN SEQUENCES** screen. For Detailed Model, it is by definition a Budget scenario, and for Strategic Model it is by definition a Detailed Model scenario
- **Copy From Published Report** – allows you to define (by use of the related scenario screen) which scenario the data will be sourced from. This allows you to take data from one Detailed Model scenario to another, as well as Budget to Detailed Model or Detailed Model to Strategic Model.

Another use of the **COPY FROM PUBLISHED REPORT** function is to enable you to create different sequence sets for the purposes of managing detail. For example, one sequence set could perform detailed calculations of AFUDC on budget projects while the second sequence set could be a model run. Using this approach a model run could be done without recalculating AFUDC on budget projects.

Function Description:

This function is identical to the **FUNCTION - COPY FROM**, except it copies lines from reports that have been published from a specified scenario. It is used primarily for copying report lines from a published Budget report to the Detailed Model or from a Detailed Model report to a report in the Strategic Model.

Note that you need to have run and published the source reports from the scenario that is referenced in **RELATED SCENARIOS** dialog.



Parameters:

- **From Report** - Select the report to be copied from.
- **From Line** - Select a line in the *From Report*. The drop-down list will display all report lines in the *From Report* selected in the previous parameter.

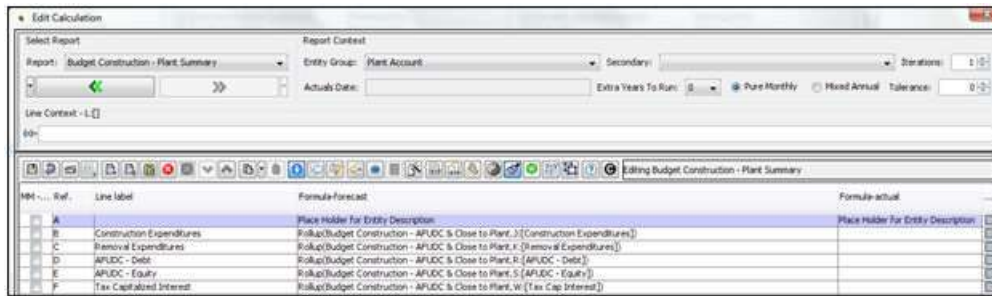
- **Related Scenario** - Select scenario from the drop-down list. Note that only scenarios already defined as related scenarios will appear in the drop-down list.
- **Optional Inherit Association From** – If the current entity group is linked to another entity group, you can choose to 'inherit' the association.

Example 1:

This example shows copying from a published Budget scenario

Report Calculation

This is the *From Report* (in the Budget Scenario). It is by Plant Account.



This is the *calling* report. It is also by Plant Account. Note the scenario reference.

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Import Project data from Budget:	Label Only
C		
D	Projects Expenditures	Copy From Published report(Budget Construction - Plant Summary.B.(Construction Expenditures),Scenario: Related scenario prompt 2)
E		

Report Results

Below are the report results. Note the drilldown indicates that the data is sourced from the specific Budget scenario and report.

	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009
Projects Expenditures	0	0	0	0	0	0	0	0	0	0	0	0
	64,001	53,750	58,500	64,732	69,522	74,272	74,272	69,522	64,772	60,022	55,272	50,522

Example 2:

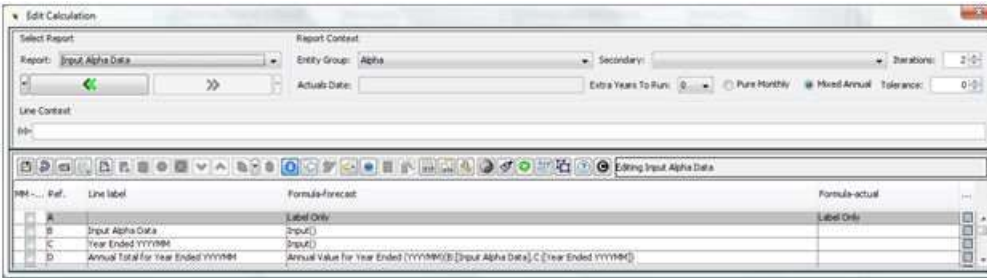
This example shows how to copy from a report from one sequence to another, in the same scenario.

First, create another scenario that is a close of the current one. Then define the clone as a related scenario

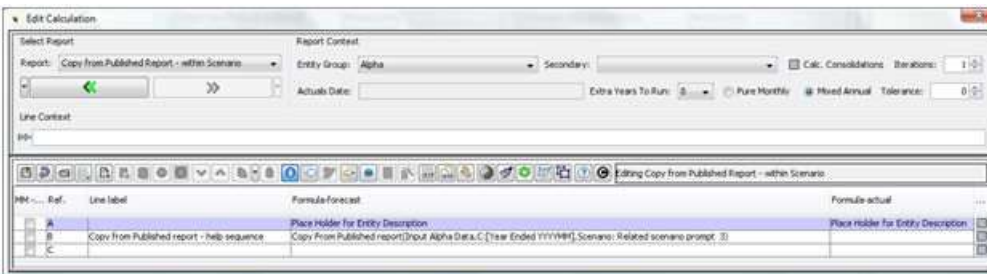
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Report Calculation

This is the *From Report* (Help Sequence).



This is the *calling* report. It is in the Detailed Model sequence. Note the scenario reference.

**Report Results**

The steps are:

- Run the Help Sequence in the cloned scenario.
- Publish the reports.
- Switch to the base scenario and run the Detailed Model sequence.

Below are the report results. Note the drilldown indicates that the data is sourced from the cloned scenario and the proper report.

Drilldown B:[Copy from Published report - help sequence] - Alpha 1 (Feb/2009)								
Copy From Published report								
From	To:							
Scenario: Detailed Model - Clone for cross sequence	Report: Copy from Published Report - within Scenario							
Report: Input Alpha Data	Line: B:[Copy from Published report - help sequence]							
Line: C:[Year Ended YYYYMM]	Entity: Alpha 1							
Entity: Alpha 1								
Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009
Alpha 1								
Copy from Published report - help sequence:	200,912	200,912	200,912	200,912	200,912	200,912	200,912	200,912
	0	0	0	0	0	0	0	0

{ XE "Copy from Published Report" * MERGEFORMAT }{ XE "Function - Copy From Published Report: Scenario on Line" * MERGEFORMAT }Function - Copy from Published Report: Scenario on Line

The **COPY** function in all its forms allows for copying data from one report to another. This variant is used to transfer data from one Scenario to another,

using the related scenario concept. Related scenarios can be Budget to Model, Model to Strategic Model, or from one Model Scenario to another. They are defined in the **RELATED SCENARIOS** dialog.

The distinction between **COPY FROM PUBLISHED REPORT** and **COPY FROM EXPORTED REPORT** is:

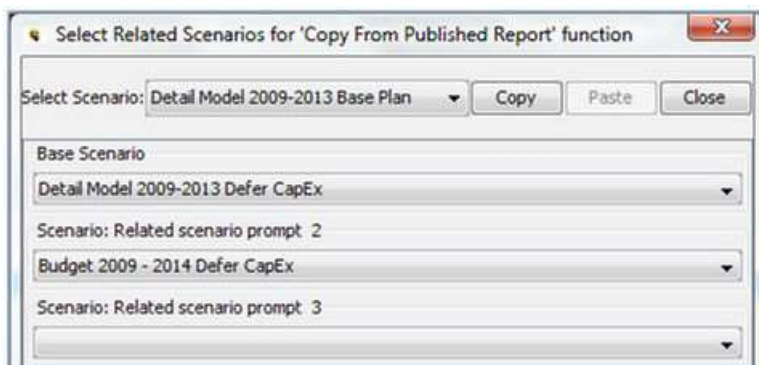
- **Copy From Exported Report** – takes the data from the feeder scenario that is referenced on the Run Sequences Screen. For Detailed Model, it is by definition a Budget Scenario, and for Strategic Model it is by definition a Detailed Model Scenario
- **Copy From Published Report** – allows you to define (by use of the related scenario screen) which scenario the data will be sourced from. This allows you to take data from one Detailed Model scenario to another, as well as Budget to Detailed Model or Detailed Model to Strategic Model.

Another use of **COPY FROM PUBLISHED REPORT** functions is to enable you to create different sequence sets for the purposes of managing detail. For example, one sequence set could perform detailed calculations of AFUDC on budget projects while the second sequence set could be a model run. Using this approach a model run could be done without recalculating AFUDC on budget projects.

Function Description:

This function is identical to the function **COPY FROM PUBLISHED REPORT**, except it gets the scenario from a line in the report rather than the Related Scenario mapping. It is used primarily for copying report lines from a published Budget Report to the Detailed Model or from a Detailed Model Report to a report in the Strategic Model.

Note that you need to have run and published the source reports from the Scenario that is referenced in *Related Scenarios* dialog.



Parameters:

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- **From Report** - Select the report to be copied from.
- **From Line** - Select a line in the *From Report*. The drop list will display all report lines in the *From Report* selected in the previous parameter.
- **Line for Related Scenario** - Select the line that contains the related scenario.
- **Optional Inherit Association From** - If the current entity group is linked to another entity group, you can choose to 'inherit' the association.

Example 1:

This example shows copying from a published Budget scenario.

Report Calculation

This is the *From Report* (in the Budget Scenario). It is by Plant Account.

Ref.	Line label	Formula Forecast	Formula actual
A	Contribution Expenditures	Place Holder for Entity Description	Place Holder for Entity Description
B	Removal Expenditures	PubAp/Budget Construction - AP/DC & Close to Plant, 2 (Construction Expenditures)	
C	AP/DC - Debt	PubAp/Budget Construction - AP/DC & Close to Plant, 2 (Removal Expenditures)	
D	AP/DC - Equity	PubAp/Budget Construction - AP/DC & Close to Plant, 2 (AP/DC - Debt)	
E	Tax Capitalized Interest	PubAp/Budget Construction - AP/DC & Close to Plant, 2 (Tax Cap Interest)	

This is the *calling* report. It is also by Plant Account. Note the scenario reference.

Ref.	Line label	Formula Forecast
A	Import Project data from Budget:	Place Holder for Entity Description
B		Label Only
C	Projects Expenditures	Copy From Published report(Budget Construction - Plant Summary-B (Construction Expenditures) Scenario: Related scenario (prompt, 2)
D		
E		

Report Results

Below are the report results. Note the drilldown indicates that the data is sourced from the specific Budget scenario and report.

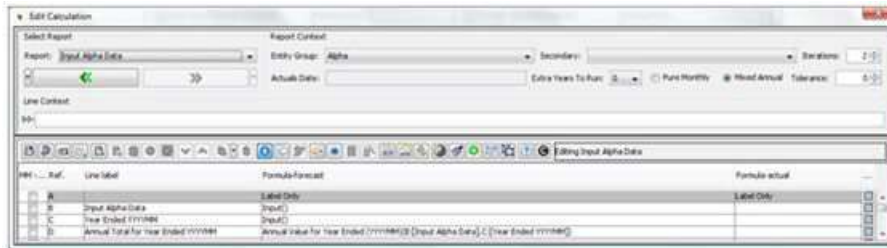
	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009
Projects Expenditures	64,302	53,790	58,520	64,772	68,522	74,272	74,272	68,522	64,772	60,322	68,272	58,522

Example 2:

This example shows how to copy from a report from one sequence to another, in the same scenario.

First, create another scenario that is a clone of the current one. Then define the clone as a related Scenario.

This is the *From Report* (Help Sequence).



This is the *calling* report. It is in the Detailed Model Sequence. Note the scenario reference.

Report Results

The steps are:

- Run the Help Sequence in the Cloned Scenario.
- Publish the reports.
- Switch to the base scenario and run the Detailed Model sequence.

Below are the report results. Note the drilldown indicates that the data is sourced from the cloned scenario and the proper report.

	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009
Alpha 1	200,912	200,912	200,912	200,912	200,912	200,912	200,912	200,912
Copy from Published report - help sequence	0	0	0	0	0	0	0	0

{ XE "Copy From" * MERGEFORMAT }{ XE "Copy" * MERGEFORMAT }{ XE "Association" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Copy From: Specific Association

The **COPY** function in all its forms allows for copying data from one report to another. This variant allows the designation of a specific association.

Note: This function was the early version of copy-from-with-path. In essence, it is a copy-from-with-path where the association path is one association long. You might consider using **COPY-FROM-WITH-PATH** function instead of this function, to reduce the number of functions you need to remember.

Function Description:

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Returns the value of a line on a report for an entity related using the selected association.

Parameters:

- **From Report** - Select the report to be copied from.
- **From Line** - Select a line in the *From Report*. The drop-down list will display all report lines in the *From Report* selected in the previous parameter.
- **Using Association** - Select the association to be used. The drop list will display all associations between the two report's entity groups.
- **Attempt Approximation When Copy From Annual to Monthly** - When this check box is selected, any reports run on an annual basis copied to reports run on a monthly basis. UIPlanner will attempt to approximate the resulting monthly values. If the source report is processing annually, the annual values are spread evenly over the months.

Example 1:

In its simplest form, the copy from function can be used to copy values from one report to another, when both reports are run over the same entity group. The screen prints below show the copy function used to copy values from Report 1 to Report 2 when both are run over the Alpha entity group. No association is necessary in this simple example.

Report 1

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

Report 2

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Copy from Report 1	Copy From: Specific Association(Report 1,[B: Input Alpha Data], Association 2)

Report 1 lines copied to Report 2

Values in report 1 are copied to report 2 for each entity in the Alpha entity group.

Report 1			Report 2		
Graph	2007-2011 Detail ...	2007 Jan	Graph	2007-2011 Detail Model	2007 Jan
<input type="checkbox"/>	Alpha 1		<input type="checkbox"/>	Alpha 1	
<input checked="" type="checkbox"/>	Input Alpha Data	100	<input checked="" type="checkbox"/>	Copy from Report 1	100
<input type="checkbox"/>	Alpha 2		<input type="checkbox"/>	Alpha 2	
<input type="checkbox"/>	Input Alpha Data	200	<input type="checkbox"/>	Copy from Report 1	200
<input type="checkbox"/>	Alpha 3		<input type="checkbox"/>	Alpha 3	
<input type="checkbox"/>	Input Alpha Data	300	<input type="checkbox"/>	Copy from Report 1	300
<input type="checkbox"/>	Alpha 4		<input type="checkbox"/>	Alpha 4	
<input type="checkbox"/>	Input Alpha Data	400	<input type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Alpha 5		<input type="checkbox"/>	Alpha 5	
<input type="checkbox"/>	Input Alpha Data	500	<input type="checkbox"/>	Copy from Report 1	500
<input type="checkbox"/>	Alpha 6		<input type="checkbox"/>	Alpha 6	
<input type="checkbox"/>	Input Alpha Data	600	<input type="checkbox"/>	Copy from Report 1	600
<input type="checkbox"/>	Alpha 7		<input type="checkbox"/>	Alpha 7	
<input type="checkbox"/>	Input Alpha Data	700	<input type="checkbox"/>	Copy from Report 1	700

Example 2:

The screen prints below show the copy function used to copy values from Report 1 to Report 2 when Report 1 is run over the Alpha entity group and Report 2 is run over the Bravo entity group. An association has been created between entity group Bravo and Alpha. The association screen print below is from the **ONE PARAMETER EDITOR** screen indicating Bravo 1 is associated to Alpha 1, Bravo 2 and 3 is associated to Alpha 2, Bravo 4 to Alpha 4, and Bravo 5 to Alpha 6.

Report 1

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

Report 2

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Copy from Report 1	Copy From: Specific Association(Report 1,[B: Input Alpha Data], Association 2)

Association between Bravo and Alpha Entity Groups

Object	Association 2
Bravo 1	Alpha 1
Bravo 2	Alpha 2
Bravo 3	Alpha 2
Bravo 4	Alpha 4
Bravo 5	Alpha 6

Report 1 lines copied to report 2 according to an association

Report 2 results (shown below) have the appropriate values according to the association.

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Report 1			Report 2		
Graph	2007-2011 Detail ...	2007 Jan	Graph	2007-2011 Detail Model	2007 Jan
<input type="checkbox"/>	Alpha 1		<input type="checkbox"/>	Bravo 1	
<input checked="" type="checkbox"/>	Input Alpha Data	100	<input checked="" type="checkbox"/>	Copy from Report 1	100
<input type="checkbox"/>	Alpha 2		<input type="checkbox"/>	Bravo 2	
<input type="checkbox"/>	Input Alpha Data	200	<input type="checkbox"/>	Copy from Report 1	200
<input type="checkbox"/>	Alpha 3		<input type="checkbox"/>	Bravo 3	
<input type="checkbox"/>	Input Alpha Data	300	<input type="checkbox"/>	Copy from Report 1	200
<input type="checkbox"/>	Alpha 4		<input type="checkbox"/>	Bravo 4	
<input type="checkbox"/>	Input Alpha Data	400	<input type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Alpha 5		<input type="checkbox"/>	Bravo 5	
<input type="checkbox"/>	Input Alpha Data	500	<input type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Alpha 6		<input type="checkbox"/>	Bravo 5	
<input type="checkbox"/>	Input Alpha Data	600	<input type="checkbox"/>	Copy from Report 1	600
<input type="checkbox"/>	Alpha 7				
<input type="checkbox"/>	Input Alpha Data	700			

Drill down shows the copy path

The copy path can be seen by using the drill down feature on the **BROWSE REPORTS** screen. The print below shows to and from reports as well as the association used.

From	Path Step 1	To:
Report: Report 1		Report: Report 2
Line: [B: Input Alpha Data]		Line: [B: Copy from Report 1]
Entity: Alpha 2	Association 2	Entity: Bravo 2
Path:	<- Alpha 2	<- Bravo 2
Value (not scaled)		200

Report 2						
Graph	2007-2011 Detail Model	2007 Jan	2007 Feb	2007 Mar	2007 Apr	2007
<input type="checkbox"/>	Bravo 1					
<input type="checkbox"/>	Copy from Report 1	100	100	100	100	
<input type="checkbox"/>	Bravo 2					
<input checked="" type="checkbox"/>	Copy from Report 1	200	200	200	200	
<input type="checkbox"/>	Bravo 3					
<input type="checkbox"/>	Copy from Report 1	200	200	200	200	
<input type="checkbox"/>	Bravo 4					
<input type="checkbox"/>	Copy from Report 1	400	400	400	400	
<input type="checkbox"/>	Bravo 5					
<input type="checkbox"/>	Copy from Report 1	600	600	600	600	

Important notes about the Copy function:

- Entities that do not have an association (a null association) will not be copied. For example, if Bravo 1 were not associated to any entity in the entity group Alpha, the resulting report line for Bravo 1 would not appear.
- The association used by the **COPY** function is a one way street. In the example above entity group Bravo has an association "to" entity group Alpha. However, this does not work backwards, there is no association from entity group Alpha to entity group Bravo months.

{ XE "Copy From Specific Entity" * MERGEFORMAT }{ XE "Copy From" * MERGEFORMAT }{ XE "Copy" * MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Copy From: Specific Entity

The **COPY** function in all its forms allows for copying data from one report to another. This variant allows the value of a specific entity to be copied from one report to another.

Function Description:

This function returns the value of a line from another report for a given entity.

Parameters:

- **From Report** - Select the report to be copied from.
- **From Line** - Select a line in the *From Report*. The drop-down list will display all report lines in the *From Report* selected in the previous parameter.
- **From Entity** - Select the entity to be shown on the current report. The drop-down list will display all entities in the entity group run in the *From Report*.
- **Attempt Approximation When Copy From Annual to Monthly** - When this check box is selected, any reports run on an annual basis copied to reports run on a monthly basis. UIPlanner will attempt to approximate the resulting monthly values. If the source report is processing annually, the annual values are spread evenly over the months.

Example:

The screen prints below show the copy function used to copy values from Report 1 to Report 2 when Report 1 is run over the Alpha entity group and Report 2 is run over the Bravo Entity group. the Specific entity value of Alpha 4 is copied to all entities in Report 2. No association is needed with this function.

Report 1

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

Report 2

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Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Copy from Report 1	Copy From: Specific Entity(Report 1,[B: Input Alpha Data],Alpha 4)

Report 1 lines for Alpha 4 entity are copied to all lines in report 2

Report 1		
Graph	2007-2011 Detail ...	2007 Jan
<input type="checkbox"/>	Alpha 1	
<input checked="" type="checkbox"/>	Input Alpha Data	100
<input type="checkbox"/>	Alpha 2	
<input type="checkbox"/>	Input Alpha Data	200
<input type="checkbox"/>	Alpha 3	
<input type="checkbox"/>	Input Alpha Data	300
<input type="checkbox"/>	Alpha 4	
<input checked="" type="checkbox"/>	Input Alpha Data	400
<input type="checkbox"/>	Alpha 5	
<input type="checkbox"/>	Input Alpha Data	500
<input type="checkbox"/>	Alpha 6	
<input type="checkbox"/>	Input Alpha Data	600
<input type="checkbox"/>	Alpha 7	
<input type="checkbox"/>	Input Alpha Data	700

Report 2		
Graph	2007-2011 Detail Model	2007 Jan
<input type="checkbox"/>	Bravo 1	
<input checked="" type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Bravo 2	
<input checked="" type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Bravo 3	
<input checked="" type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Bravo 4	
<input checked="" type="checkbox"/>	Copy from Report 1	400
<input type="checkbox"/>	Bravo 5	
<input checked="" type="checkbox"/>	Copy from Report 1	400

Drill down shows the copy path

The copy path can be seen by using the drill down feature on the **BROWSE REPORTS** screen. The print below shows specific entity copied to Report 2.

From	To:
Report: Report 1	Report: Report 2
Line: [B: Input Alpha Data]	Line: [B: Copy from Report 1]
Entity: Alpha 4	Entity: Bravo 1
Path:	<- Bravo 1
Value (not scaled)	400

Report 2					
Graph	2007-2011 Detail Model	2007 Jan	2007 Feb	2007 Mar	2007 Apr
<input type="checkbox"/>	Bravo 1				
<input checked="" type="checkbox"/>	Copy from Report 1	400	400	400	400
<input type="checkbox"/>	Bravo 2				
<input type="checkbox"/>	Copy from Report 1	400	400	400	400
<input type="checkbox"/>	Bravo 3				
<input type="checkbox"/>	Copy from Report 1	400	400	400	400
<input type="checkbox"/>	Bravo 4				
<input type="checkbox"/>	Copy from Report 1	400	400	400	400
<input type="checkbox"/>	Bravo 5				
<input type="checkbox"/>	Copy from Report 1	400	400	400	400

{ XE "Copu Function" * MERGEFORMAT }{ XE "Entity" * MERGEFORMAT }Function - Copy From Specific Entity: Entity On A Line

The **COPY** function in all its forms allows for copying data from one report to another.

This function is a variant of [Copy From Specific Entity](#). Rather than choosing the entity from a drop down list (thus allowing only one choice, hard coded on the line), it pulls the Entity ID from a line in the report. This would allow you to use if-else logic to choose among several entities, with the result on a line that is called by this function

Function Description:

This function returns the value of a line from another report for a given entity where the entity to copy is on a line.

Parameters

- **From Report** - Select the report to be copied from.
- **From Line** - Select a line in the From Report. The drop-down list will display all report lines in the From Report selected in the previous parameter.
- **From Entity** - Select the line from the current report containing the Entity ID of the entity to be copied over to the current report.
- **Attempt Approximation When Copy From Annual to Monthly** - When this check box is selected, any reports run on an annual basis copied to reports run on a monthly basis. UIPlanner will attempt to approximate the resulting monthly values. If the source report is processing annually, the annual values are spread evenly over the months.

Example:

The screen prints below show the copy function used to copy values from Report 1 to Report 2 when Report 1 is run over the Alpha entity group and Report 2 is run over the Bravo Entity group. An if-test is used to determine the Entity in Alpha group to be copied over to Report 2. No association is needed with this function.

Report Calculation

Report 1

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Amount - Alpha	Input()

Report 2

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Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Entity ID - Alpha 1	Entity ID(Alpha,Alpha 1)
C	Entity ID - Alpha 2	Entity ID(Alpha,Alpha 2)
D	Current Entity	Current Entity()
E	Entity ID - Bravo 1	Entity ID(Bravo,Bravo 1)
F	Entity ID - Bravo 2	Entity ID(Bravo,Bravo 2)
G	if	D:[Current Entity] = E:[Entity ID - Bravo 1]
H	IF BRAVO 1	Label Only
I	Use Alpha 1	B:[Entity ID - Alpha 1]
J	else	D:[Current Entity] = F:[Entity ID - Bravo 2]
K	IF BRAVO 2	Label Only
L	Use Alpha 2	C:[Entity ID - Alpha 2]
M	end if	G:[if]
N	Entity to Use	I:[Use Alpha 1] + L:[Use Alpha 2]
O		
P	Amount to Copy	Copy From Specific Entity:Entity on a line(Report 1,B:[Amount - Alpha],N:[Entity to Use])
Q		

Report Results

Note that the If-test determined which Alpha entity to use, and put it on line N. The Copy From pulled the value from Report 1 for the entity listed on this line.

Detail Model - Revenues	Jan 2009	Feb 2009	Mar 2009	Apr 2009
Bravo 1				
B:[Entity ID - Alpha 1]	Alpha 1	Alpha 1	Alpha 1	Alpha 1
C:[Entity ID - Alpha 2]	Alpha 2	Alpha 2	Alpha 2	Alpha 2
D:[Current Entity]	Bravo 1	Bravo 1	Bravo 1	Bravo 1
G:[if]				
H:[IF BRAVO 1]				
I:[Use Alpha 1]	Alpha 1	Alpha 1	Alpha 1	Alpha 1
J:[else]				
K:[IF BRAVO 2]				
L:[Use Alpha 2]				
M:[end if]				
N:[Entity to Use]	Alpha 1	Alpha 1	Alpha 1	Alpha 1
O:[]	0	0	0	0
P:[Amount to Copy]	100	100	100	100
Bravo 2				
B:[Entity ID - Alpha 1]	Alpha 1	Alpha 1	Alpha 1	Alpha 1
C:[Entity ID - Alpha 2]	Alpha 2	Alpha 2	Alpha 2	Alpha 2
D:[Current Entity]	Bravo 2	Bravo 2	Bravo 2	Bravo 2
G:[if]				
H:[IF BRAVO 1]				
I:[Use Alpha 1]				
J:[else]				
K:[IF BRAVO 2]				
L:[Use Alpha 2]	Alpha 2	Alpha 2	Alpha 2	Alpha 2
M:[end if]				
N:[Entity to Use]	Alpha 2	Alpha 2	Alpha 2	Alpha 2
O:[]	0	0	0	0
P:[Amount to Copy]	200	200	200	200

{ XE "Path" * MERGEFORMAT }{ XE "Copy From" * MERGEFORMAT }{ XE "Copy" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Copy From: with Path

The **COPY** function in all its forms allows for copying data from one report to another. The **COPY FROM: WITH PATH** allows the designation of up to three associations which together define a path to the *From Report*.

Function Description:

This function returns the value of a line on a report for another entity related using the selected chain of associations.

Parameters:

- **From Report** - Select the report to be copied from, the drop-down list will display all reports.
- **From Line** - Select a line in the *From Report*. The drop-down list will display all report lines in the *From Report* selected in the previous parameter.
- **Using Association** - Select the association to be used. The drop-down list will display all associations between the two report's entity groups.
- **Then Association** - Select the second association to be used. The drop-down list will display all associations between the two report's entity groups.
- **Then Association** - Select the third association to be used. The drop-down list will display all associations between the two report's entity groups.
- **Attempt Approximation When Copy From Annual to Monthly** - When this check box is selected, any reports run on an annual basis copied to reports run on a monthly basis. UIPlanner will attempt to approximate the resulting monthly values. If the source report is processing annually, the annual values are spread evenly over the months.

Example:

Illustrated below is a simple report which copies data from another report (from report). The path is defined via associations to intermediate entity groups.

Report 1

This report is run over the entity group Alpha

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

Report 2

This report is run over entity group Delta. Using the **COPY FROM: WITH PATH** function, the path is defined by 3 parameters which define the path of associations.

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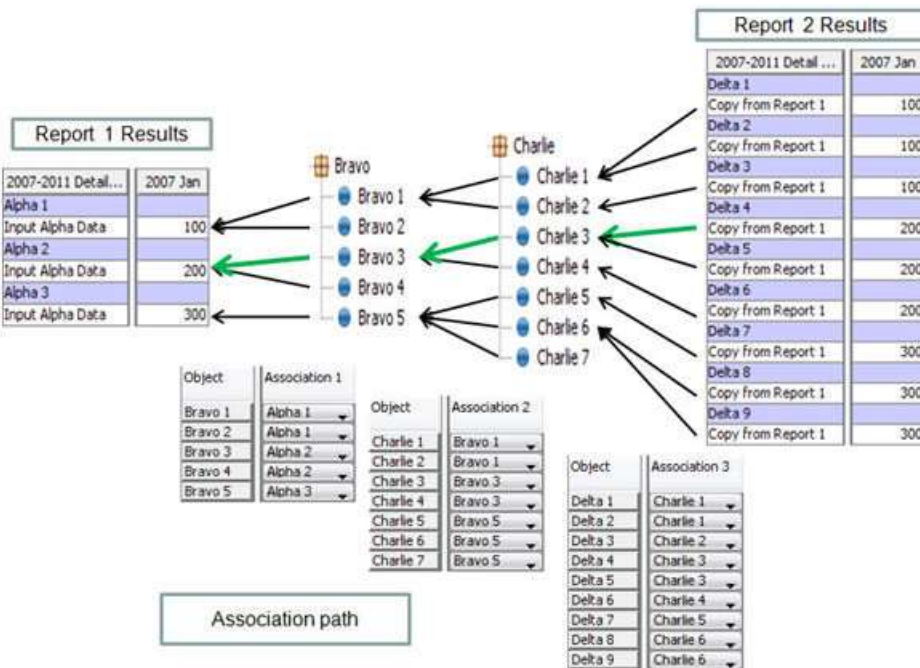
Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Copy from Report 1	Copy From: with Path(Report 1,[B: Input Alpha Data],Association 3,Association 2,Association 1)

Association between Bravo and Alpha Entity Groups

This diagram illustrates the copy from: path function. Report 1 is run over entity group Alpha which contains only 3 entities. Report 2 is run over entity group Delta. There is no association between entity group Alpha and Delta, but data can still be copied from Alpha to Delta through a defined association path.

The association path is illustrated below by arrows. The green arrows show that Delta 4 value of 200 is copied from Report 1, Alpha 2 via a defined path of Delta 4 --> Charlie 3 --> Bravo 3 --> Alpha 2.

Screen prints near the bottom are from the **ONE PARAMETER EDITOR** screen showing each association.



Drill down shows the copy path

The copy path can be seen by using the drill down feature on the **BROWSE REPORTS** screen. The print below shows to and from reports as well as the association path.

From	Path Step 1	Path Step 2	Path Step 3	To:
Report: Report 1				Report: Report 2
Line: Input Alpha Data				Line: Copy from Report 1
Entity: Alpha 2	Association 1	Association 2	Association 3	Entity: Delta 4
Path:	Alpha 2	<- Bravo 3	<- Charlie 3	<- Delta 4
Value (not scaled)				200

Graph	2007-2011 Detail Model	2007 Jan	2007 Feb	2007 Mar	2007 Apr	2007 May	2007 Jun
<input type="checkbox"/>	Delta 1						
<input type="checkbox"/>	Copy from Report 1	100	100	100	100	100	
<input type="checkbox"/>	Delta 2						
<input type="checkbox"/>	Copy from Report 1	100	100	100	100	100	
<input type="checkbox"/>	Delta 3						
<input type="checkbox"/>	Copy from Report 1	100	100	100	100	100	
<input type="checkbox"/>	Delta 4						
<input checked="" type="checkbox"/>	Copy from Report 1	200	200	200	200	200	
<input type="checkbox"/>	Delta 5						
<input type="checkbox"/>	Copy from Report 1	200	200	200	200	200	
<input type="checkbox"/>	Delta 6						
<input type="checkbox"/>	Copy from Report 1	200	200	200	200	200	
<input type="checkbox"/>	Delta 7						
<input type="checkbox"/>	Copy from Report 1	300	300	300	300	300	
<input type="checkbox"/>	Delta 8						
<input type="checkbox"/>	Copy from Report 1	300	300	300	300	300	
<input type="checkbox"/>	Delta 9						
<input type="checkbox"/>	Copy from Report 1	300	300	300	300	300	

Important notes about the Copy function:

- Entities that do not have an association (a null association) will not be copied. For example, if Bravo 1 were not associated to any entity in the entity group Alpha, the resulting report line for Bravo 1 would not appear.
- The association used by the **COPY** function is a one way street. In the example above entity group Bravo has an association "to" entity Group Alpha. However, this does not work backwards. There is no association from entity group Alpha to entity group Bravo.

{ XE "Rollup" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Rollup

The **ROLLUP** function is one of the most powerful and useful in UIPlanner. This function allows you to add up (rollup) data on a line of one report (run by entity group A) and pull it onto a line on another report (run by entity group B), where the rolling up is defined by an a parent child relationship between B and A. Rollup is used when the *receiving report* is run over a different entity group from the *From Report*. There are several variants of the **ROLLUP** function, allowing you to refine the rollup relationship. In general, the **ROLLUP** function requires the following:

- **From Report and From Line** - The rollup function targets a line in a report to retrieve data, the report and report line are defined by rollup function parameters.

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- **Association** - There must be an association defined between the report entity group on the *From Report* and the report entity group in the receiving report. The receiving report contains the rollup function line.

If there is more than one association path between the entity groups on the two reports, an error message is generated, and you will need to replace the *ROLLUP* function with a more specific *ROLLUP* function, most likely *ROLLUP-WITH-PATHS*.

Function Description:

This is the basic Rollup function. It returns the rolled up value of a selected line and report. You do not need to specify an association – UIPlanner will use the first association found.

Parameters:

- **From Report** – Select the report that the entity data will be rolled up from – the From Report.
- **From Line** – Select the desired report line on the *From Report*. The drop-down list will contain all report lines in the *From Report*.

Example:

The screen prints, charts and narrative below illustrate the rollup function. This example shows a rollup function which targets line B in the *From Report* which is run over the entity group Alpha containing 7 entities, each with data for January. The rollup function will return this data to the associated entities in the entity group Bravo.

From Report Calculation - This report is the *From Report* run over the entity group Alpha.

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

From Report Results

2006-2010 Base Scen...	Jan
Alpha 1	
Input Alpha Data	100
Alpha 2	
Input Alpha Data	200
Alpha 3	
Input Alpha Data	300
Alpha 4	
Input Alpha Data	400
Alpha 5	
Input Alpha Data	500
Alpha 6	
Input Alpha Data	600
Alpha 7	
Input Alpha Data	700
Totals	
Input Alpha Data	2,800

An association must exist between the entity group Alpha (used in the from report) and the entity group Bravo (used in the receiving (rollup) report). Note that Alpha entities (Alpha 1 - Alpha 7) are all associated to an entity in entity group Bravo.

- Alpha 1, Alpha 2, and Alpha 3 are associated to Bravo 1
- Alpha 4, Alpha 5, and Alpha 6 are associated to Bravo 3
- Alpha 7 is associated to Bravo 5

The association chart (below left) illustrates the association between Entity Groups Alpha and Bravo. The screen print on the right is from the **ONE PARAMETER EDITOR** screen, which shows the association set up in UIPlanner.

Association

Entity Groups with Association		Object	Association
Alpha	Bravo		
Alpha 1	Bravo 1	Alpha 1	Bravo 1
Alpha 2	Bravo 2	Alpha 2	Bravo 1
Alpha 3	Bravo 3	Alpha 3	Bravo 1
Alpha 4	Bravo 4	Alpha 4	Bravo 3
Alpha 5	Bravo 5	Alpha 5	Bravo 3
Alpha 6		Alpha 6	Bravo 3
Alpha 7		Alpha 7	Bravo 5

The report results shows data in the *From Report* rolled up to the receiving report. Note how Alpha 1 - 3 have been rolled up to Bravo 1, Alpha 3 - 6 have been rolled up to Bravo 3, and Alpha 7 has been rolled up to Bravo 5, all according to the association.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Rollup Alpha	Rollup(Report 1,[B:Input Alpha Data])

Report Results

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From Report
(Same print as above)

2006-2010 Base Scen...	Jan
Alpha 1	
Input Alpha Data	100
Alpha 2	
Input Alpha Data	200
Alpha 3	
Input Alpha Data	300
Alpha 4	
Input Alpha Data	400
Alpha 5	
Input Alpha Data	500
Alpha 6	
Input Alpha Data	600
Alpha 7	
Input Alpha Data	700
Totals	
Input Alpha Data	2,800

Rollup Report Results

2006-2010 Bas...	Jan
Bravo 1	
Rollup Alpha	600
Bravo 3	
Rollup Alpha	1,500
Bravo 5	
Rollup Alpha	700
Totals	
Rollup Alpha	2,800

Important notes about the rollup function:

- This function will return data using the first association found. Association order is determined by the order code shown on the **CORE OBJECTS EDITOR** screen under the *Order* tab. In cases where there are multiple associations between entity groups, you may need to use the [Function - Rollup with Association](#) which contains a parameter to specifically define the appropriate association.
- Entities that do not have an association (a null association) will not be rolled up. For example, if Alpha 1 were not associated to any entity in the Entity Group Bravo, the rollup report for Bravo 1 would return 500, and the report total would be 2,700.
- Entities in the Rollup Report that have no entities in the *From Report* entity group associated to them, will not appear on the rollup report. Note that Bravo 2 and Bravo 4 do not appear on the rollup report results because they have no Alpha entities associated to them.
- The Association used by the rollup function is a one way street. In the example above Entity Group Alpha has an association "to" Entity Group Bravo. However, this does not work backwards. There is no association from Entity Group Bravo to Entity Group Alpha.

{ XE "Rollup Specific Entity" * MERGEFORMAT }{ XE "Rollup" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Rollup Specific Entity

The **ROLLUP** function is one of the most powerful and useful in UIPlanner. This function allows you to add up (Roll Up) data on a line of one report (run by entity group A) and pull it onto a line on another report (run

by entity group B), where the rolling up is defined by an a parent child relationship between B and A. Rollup is used when the *receiving report* is run over a different entity group than the *From Report*. There are several variants of the **ROLLUP** function, allowing you to refine the rollup relationship.

In general, the **ROLLUP FUNCTION** requires the following:

- **From Report and From Line** - This rollup function targets a line in a report to retrieve data, the report and report line are defined by rollup function parameters.
- **Association** - There must be an association defined between the report entity group in the *from report* and the report entity group in the receiving report. The *receiving report* contains the **ROLLUP** function line.

Function Description:

This variant of the **ROLLUP** function allows you to select the entity in the *From Report*. It returns the value for a specific entity of the *From Report*, but only if the *From Report* entity is associated with the entity in the current report.

Parameters

- **From Report** – Select the report that the entity data will be rolled up from – the *From Report*.
- **From Line** – Select the desired report line on the *From Report*. The drop-down list will contain all report lines in the *From Report*.
- **Association** - Defines the association to be used. The drop-down list will contain all associations from the report entity group in the *From Report* to the report entity group in the *Receiving Report*.
- **Entity** – Select the entity you want. The drop-down list will contain all entities in the *From Report* entity group.

Example:

The screen prints, charts and narrative below illustrate this variant of the **ROLLUP** function. This example shows a rollup function which targets line B in the *From Report* which is run over the entity group Alpha containing 7 entities, each with data for January. The **ROLLUP** function will return this data to the associated entities in the Entity Group Bravo.

From Report Calculation - This report is the *From Report* run over the entity group Alpha.

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

From Report Results

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2006-2010 Base Scen...	
Jan	
Alpha 1	
Input Alpha Data	100
Alpha 2	
Input Alpha Data	200
Alpha 3	
Input Alpha Data	300
Alpha 4	
Input Alpha Data	400
Alpha 5	
Input Alpha Data	500
Alpha 6	
Input Alpha Data	600
Alpha 7	
Input Alpha Data	700
Totals	
Input Alpha Data	2,800

An association must exist between the entity group Alpha (used in the *From Report*) and the entity group Bravo (used in the *Receiving (rollup) Report*). Note that Alpha entities (Alpha 1 - Alpha 7) are all associated to an entity in entity group Bravo.

- Alpha 1, Alpha 2, and Alpha 3 are associated to Bravo 1
- Alpha 4, Alpha 5, and Alpha 6 are associated to Bravo 3
- Alpha 7 is associated to Bravo 5

The association chart (below left) illustrates the association between entity groups Alpha and Bravo. The screen print on the right is from the **ONE PARAMETER EDITOR** screen, which shows the association set up in UIPlanner.

Association

Entity Groups with Association	
Alpha	Bravo
Alpha 1	Bravo 1
Alpha 2	Bravo 2
Alpha 3	Bravo 3
Alpha 4	Bravo 4
Alpha 5	Bravo 5
Alpha 6	
Alpha 7	

Object	Association
Alpha 1	Bravo 1
Alpha 2	Bravo 1
Alpha 3	Bravo 1
Alpha 4	Bravo 3
Alpha 5	Bravo 3
Alpha 6	Bravo 3
Alpha 7	Bravo 5

The report results shows data in the *From Report* rolled up to the *Receiving Report*. Note that only Alpha 3 data has been rolled up to the results report.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Rollup Alpha	Rollup Specific Entity(Report 1,[B:Input Alpha Data],Association ,Alpha 3)

Report Results

(Same as above)

2006-2010 Base Scen...	Jan
Alpha 1	
Input Alpha Data	100
Alpha 2	
Input Alpha Data	200
Alpha 3	
Input Alpha Data	300
Alpha 4	
Input Alpha Data	400
Alpha 5	
Input Alpha Data	500
Alpha 6	
Input Alpha Data	600
Alpha 7	
Input Alpha Data	700
Totals	
Input Alpha Data	2,800

Results delimited to Alpha 3

2006-2010 Base Scen...	Jan
Bravo 1	
Rollup Alpha	300
Totals	
Rollup Alpha	300

{ XE "Association" * MERGEFORMAT }{ XE "Rollup" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Rollup with Association

The **ROLLUP** function is one of the most powerful and useful in UIPlanner. This function allows you to add up (rollup) data on a line of one report (run by entity group A) and pull it onto a line on another report (run by entity group B), where the rolling up is defined by a parent child relationship between B and A. Rollup is used when the receiving report is run over a different entity group than the *From Report*. There are several variants of the **ROLLUP** function, allowing you to refine the rollup relationship.

In general, the **ROLLUP FUNCTION** requires the following:

- **From Report and From Line** - The rollup function targets a line in a report to retrieve data. The report and report line are defined by **ROLLUP** function parameters.
- **Association** - There must be an association defined between the report entity group in the *From Report* and the report entity group in the *Receiving Report*. The *Receiving Report* contains the **ROLLUP** function line.

Function Description:

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This variant of the **ROLLUP** function allows you to specify the association to use when doing the rollup. You would use this when there are multiple associations, and you want to use a specific one...Note that the **BASIC ROLLUP** function will use the first association found.

Parameters:

- **From Report** – Select the report that the entity data will be rolled up from – the *From Report*.
- **From Line** – Select the desired report line on the *From Report*. The drop-down list will contain all report lines in the *From Report*.
- **Association** - Defines the association to be used. The drop-down list will contain all associations from the entity group for the *From Report* to the entity group for the *Receiving Report*.

Example:

The screen prints, charts and narrative below illustrate this variant of the rollup function. This example shows a rollup function which targets line B in the *From Report* which is run over the entity group Alpha containing 7 entities, each with data for January. The rollup function will return this data to the associated entities in the entity group Bravo.

From Report Calculation - This report is the *From Report* run over the entity group Alpha.

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

From Report Results

2006-2010 Base Scen...	Jan
Alpha 1	
Input Alpha Data	100
Alpha 2	
Input Alpha Data	200
Alpha 3	
Input Alpha Data	300
Alpha 4	
Input Alpha Data	400
Alpha 5	
Input Alpha Data	500
Alpha 6	
Input Alpha Data	600
Alpha 7	
Input Alpha Data	700
Totals	
Input Alpha Data	2,800

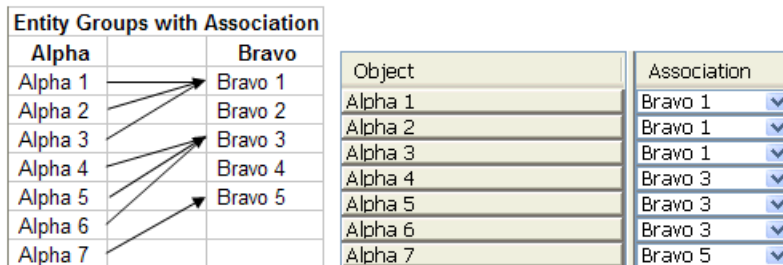
An association must exist between the entity group Alpha (used in the from report) and the entity group Bravo (used in the receiving (rollup) report).

Note that Alpha entities (Alpha 1 - Alpha 7) are all associated to an entity in entity group Bravo.

- Alpha 1, Alpha 2, and Alpha 3 are associated to Bravo 1
- Alpha 4, Alpha 5, and Alpha 6 are associated to Bravo 3
- Alpha 7 is associated to Bravo 5

The association chart (below left) illustrates the association between entity groups Alpha and Bravo. The screen print on the right is from the **ONE PARAMETER EDITOR** screen, which shows the association set up in UIPlanner.

Association



The report results shows data in the *From Report* rolled up to the *receiving report*. Note how Alpha 1 - 3 have been rolled up to Bravo 1, Alpha 3 - 6 have been rolled up to Bravo 3, and Alpha 7 has been rolled up to Bravo 5, all according to the association.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Rollup Alpha	Rollup(Report 1,[B:Input Alpha Data])

Report Results

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Rollup Alpha	Rollup(Report 1,[B:Input Alpha Data])

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From Report
(Same print as above)

2006-2010 Base Scen...	Jan
Alpha 1	
Input Alpha Data	100
Alpha 2	
Input Alpha Data	200
Alpha 3	
Input Alpha Data	300
Alpha 4	
Input Alpha Data	400
Alpha 5	
Input Alpha Data	500
Alpha 6	
Input Alpha Data	600
Alpha 7	
Input Alpha Data	700
Totals	
Input Alpha Data	2,800

Rollup Report Results

2006-2010 Bas...	Jan
Bravo 1	
Rollup Alpha	600
Bravo 3	
Rollup Alpha	1,500
Bravo 5	
Rollup Alpha	700
Totals	
Rollup Alpha	2,800

Important notes about the rollup function:

- Entities that do not have an association (a null association) will not be rolled up. For example, if Alpha 1 were not associated to any entity in the entity group Bravo, the rollup report for Bravo 1 would return 500, and the report total would be 2,700.
- Entities in the rollup report that have no entities in the *From Report* entity group associated to them will not appear on the rollup report. Note that Bravo 2 and Bravo 4 do not appear on the rollup report results because they have no Alpha entities associated to them.
- The association used by the rollup function is a one way street. In the example above, entity group Alpha has an association "to" entity group Bravo. However, this does not work backwards. There is no association from entity group Bravo to entity group Alpha.

{ XE "Association" * MERGEFORMAT }{ XE "Filter" * MERGEFORMAT }{ XE "Rollup" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Rollup with Association and Filter

The **ROLLUP** function is one of the most powerful and useful in UIPlanner. This function allows you to add up (rollup) data on a line of one report (run by entity group A) and pull it onto a line on another report (run by entity group B), where the rolling up is defined by an a parent child relationship between B and A. Rollup is used when the receiving report is run over a different entity group than the *From Report*. There are several variants of the **ROLLUP** function, allowing you to refine the rollup relationship.

In general, the **ROLLUP FUNCTION** requires the following:

- **From Report and From Line** - The *ROLLUP* function targets a line in a report to retrieve data, the report and report line are defined by rollup function parameters.
- **Association** - There must be an association defined between the report entity group in the *From Report* and the report entity group in the receiving report. The receiving report contains the rollup function line.

Function Description:

This variant of the *ROLLUP* function allows you to limit the entities returned in the rollup by using another association. You would use this when you wanted to return only certain of the entities in the *From Report*. For example, if you wanted to report only First-Mortgage Bonds by Low-Level Planning entity, you would specify the secondary association as pointing to the Bond Issue Type, and select First Mortgage Bond as the Entity (from the list in Bond Issue Types) to filter by.

Parameters:

- **From Report** - Select the report that the entity data will be rolled up from - the *From Report*.
- **From Line** - Select the desired report line on the *From Report*. The drop-down list will contain all report lines in the *From Report*.
- **Rollup Association** - Defines the first association to be used. The drop-down list will contain all associations from the entity group for the *From Report* to the entity group for the *Receiving Report*.
- **Filter Association** - Defines the second association to be used. The drop-down list will contain all associations for the entity group for the *From Report*.
- **Filter to Entity** - Once you have selected the secondary association, this list will show all of the entities in that entity group. Select the one you want to roll up by.

Example:

The screen prints, charts and narrative below illustrate this variant of the rollup function. This example shows a *ROLLUP* function which targets line B in the *From Report* which is run over the entity group Alpha containing 7 entities, each with data for January. The entities in entity group Alpha in turn have an association to entity group Charlie, which has 3 entities. The user selected number 2. The *ROLLUP* function will return the rollup of all entities in entity group Alpha that have an association to entity number 2 in entity group Charlie.

From Report Calculation - This report is the *From Report* run over the entity group Alpha.

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Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Alpha Data	Input()

From Report Results

2006-2010 Base Scen...	Jan
Alpha 1	
Input Alpha Data	100
Alpha 2	
Input Alpha Data	200
Alpha 3	
Input Alpha Data	300
Alpha 4	
Input Alpha Data	400
Alpha 5	
Input Alpha Data	500
Alpha 6	
Input Alpha Data	600
Alpha 7	
Input Alpha Data	700
Totals	
Input Alpha Data	2,800

Primary Association

An association must exist between the entity group Alpha (used in the *From Report*) and the entity group Bravo (used in the receiving (rollup) report). Note that Alpha entities (Alpha 1 - Alpha 7) are all associated to an entity in entity group Bravo.

- Alpha 1, Alpha 2, and Alpha 3 are associated to Bravo 1
- Alpha 4, Alpha 5, and Alpha 6 are associated to Bravo 3
- Alpha 7 is associated to Bravo 5

The association chart (below left) illustrates the two primary associations, between entity groups Alpha and Bravo. The screen print on the right is from the **ONE PARAMETER EDITOR** screen, which shows the association set up in UIPlanner.

Entity Groups with Association		Object	Association
Alpha 1	→	Alpha 1	Bravo 1
Alpha 2	→	Alpha 2	Bravo 1
Alpha 3	→	Alpha 3	Bravo 1
Alpha 4	→	Alpha 4	Bravo 3
Alpha 5	→	Alpha 5	Bravo 3
Alpha 6	→	Alpha 6	Bravo 3
Alpha 7	→	Alpha 7	Bravo 5

Secondary Association

An additional association must exist, between the entity group Alpha (used in the *From Report*) and the entity group Charlie (the entity group we want to use as a filter). Note that Alpha entities (Alpha 1 - Alpha 7) are all associated to an entity in entity group Charlie.

- Alpha 1 and Alpha 2 are associated to Charlie 1

- Alpha 3, Alpha 4, Alpha 5, and Alpha 6 are associated to Charlie 2
- Alpha 7 is associated to Charlie 3

The association chart (below left) illustrates the secondary association, between entity groups Alpha and Charlie. The screen print on the right is from the **ONE PARAMETER EDITOR** screen, which shows the association set up in UIPlanner.

Object description	Pointer to Bravo	Pointer to Charlie
Alpha 1	Bravo 1	Charlie 1
Alpha 2	Bravo 1	Charlie 1
Alpha 3	Bravo 1	Charlie 2
Alpha 4	Bravo 3	Charlie 2
Alpha 5	Bravo 3	Charlie 2
Alpha 6	Bravo 3	Charlie 2
Alpha 7	Bravo 5	Charlie 3

The report results shows data in the *From Report* rolled up to the *Receiving Report*. Note that the how Alpha 1 - 3 have been rolled up to Bravo 1, Alpha 3 - 6 have been rolled up to Bravo 3, and Alpha 7 has been rolled up to Bravo 5, all according to the association. Furthermore, the data in the *Receiving Report* is filtered to only those Alpha entities that roll up to Charlie 2 (Alpha 3 – 6).

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Rollup Alpha with Filter on Charlie	Rollup with Association and Filter([Input Alpha Data,B:[Input Alpha Data],Pointer to Bravo,Pointer to Charlie,Charlie 2]

Report Results

FROM REPORT RESULTS		ROLLUP REPORT RESULTS								
Detail Model 2009-2013 Base Plan	Jan 2009	Drilldown B:[Rollup Alpha with Filter on Charlie] - Bravo 3 (Jan/2009)								
A[]		Rollup with Association and Filter								
B:[Input Alpha Data]	100	Rollup From Report	Line	Entity	Sub-entity	Value				
A[]		Input Alpha Data	Input Alpha Data	Alpha 4		400				
B:[Input Alpha Data]	200	Input Alpha Data	Input Alpha Data	Alpha 5		500				
A[]		Input Alpha Data	Input Alpha Data	Alpha 6		500				
B:[Input Alpha Data]	400			Total		1,500				
A[]										
B:[Input Alpha Data]	500									
A[]										
B:[Input Alpha Data]	600									
A[]										
B:[Input Alpha Data]	700									
A[]										
B:[Input Alpha Data]	2,800									
		Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009
		Bravo 1								
		B:[Rollup Alpha with Filter on Charlie]	300	0	0	0	0	0	0	0
		Bravo 3								
		B:[Rollup Alpha with Filter on Charlie]	1,500	0	0	0	0	0	0	0

Important notes about the rollup function:

- Entities that do not have an association (a null association) will not be rolled up. For example, if Alpha 1 were not associated to any entity in the entity group Bravo, the rollup report for Bravo 1 would return 500, and the report total would be 2,700.
- Entities in the rollup report that have no entities in the *From Report* entity group associated to them, will not appear on the rollup report.

Note that Bravo 2 and Bravo 4 do not appear on the rollup report results because they have no Alpha entities associated to them.

- The association used by the **ROLLUP** function is a one way street. In the example above entity group Alpha has an association "to" entity group Bravo. However, this does not work backwards. There is no association from entity group Bravo to entity group Alpha.

{ XE "Paths" * MERGEFORMAT }{ XE "Function - Rollup with Paths" * MERGEFORMAT }{ XE "Rollup" * MERGEFORMAT }Function - Rollup with Paths

Function Description:

You can specify one or two association paths between reports, depending on whether the reports are one-dimensional or two-dimensional. You may also reverse the dimension. For example, suppose you have a report that has **Department by Planning Entity** (Department is **H/R**, expenses exist in all planning entities). You want to roll this up to a report that is **Rating-Agency View by Function**. There is a relationship **Planning Entity->Legal Entity->Rating Agency View**, and another relationship **Department->Function**. To do this rollup, you need to reverse the dimensions (**Department**, dimension one of the detail report, rolls up to **Function**, dimension two of the summary report).

In the **FUNCTION EDITOR**, as you select the path, the next drop-down list is populated. In the above example, under **Planning Entity**, associations from planning entity appear. When you select *Pointer to Legal entity*, associations from legal entity appear in the next drop-down list. When you select *Legal Entity pointer to Rating Agency View*, the next drop-down list will display the word *Match* indicating the path is complete.

This variant of the **ROLLUP** function allows you to specify the association to use when doing the rollup. You would use this when there are multiple associations, and you want to use a specific one. Note that the basic rollup function will use the first association found.

Parameter:

- From Report:select the report you are rolling up from
- From Line:- select the line from that report that you want to roll up:
- Dimensions: Reversed?:select the line from that report that you want to roll up:
-
- Note that for the following Association parameters, you specify them for both Entity groups, if rolling from 2-D to 1-D

- Association 1 select the first association to use:
- Association 2: select the second association to use:
- Association 3: select the third association to use

See the example below:

{ XE "Copu Function" * MERGEFORMAT } { XE "Entity" * MERGEFORMAT } Function - Copy From Specific Entity: Entity On A Line

The **COPY** function in all its forms allows for copying data from one report to another.

This function is a variant of [Copy From Specific Entity](#). Rather than choosing the entity from a drop down list (thus allowing only one choice, hard coded on the line), it pulls the Entity ID from a line in the report. This would allow you to use if-else logic to choose among several entities, with the result on a line that is called by this function

Function Description:

This function returns the value of a line from another report for a given entity where the entity to copy is on a line.

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Parameters

- **From Report** - Select the report to be copied from.
- **From Line** - Select a line in the From Report. The drop-down list will display all report lines in the From Report selected in the previous parameter.
- **From Entity** - Select the line from the current report containing the Entity ID of the entity to be copied over to the current report.
- **Attempt Approximation When Copy From Annual to Monthly** - When this check box is selected, any reports run on an annual basis copied to reports run on a monthly basis. UIPlanner will attempt to approximate the resulting monthly values. If the source report is processing annually, the annual values are spread evenly over the months.

Example:

The screen prints below show the copy function used to copy values from Report 1 to Report 2 when Report 1 is run over the Alpha entity group and Report 2 is run over the Bravo Entity group. An if-test is used to determine the Entity in Alpha group to be copied over to Report 2. No association is needed with this function.

Report Calculation

Report 1

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Amount - Alpha	Input()

Report 2

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Entity ID - Alpha 1	Entity ID(Alpha,Alpha 1)
C	Entity ID - Alpha 2	Entity ID(Alpha,Alpha 2)
D	Current Entity	Current Entity()
E	Entity ID - Bravo 1	Entity ID(Bravo,Bravo 1)
F	Entity ID - Bravo 2	Entity ID(Bravo,Bravo 2)
G	if	D:[Current Entity] = E:[Entity ID - Bravo 1]
H	IF BRAVO 1	Label Only
I	Use Alpha 1	B:[Entity ID - Alpha 1]
J	else	D:[Current Entity] = F:[Entity ID - Bravo 2]
K	IF BRAVO 2	Label Only
L	Use Alpha 2	C:[Entity ID - Alpha 2]
M	end if	G:[if]
N	Entity to Use	I:[Use Alpha 1] + L:[Use Alpha 2]
O		
P	Amount to Copy	Copy From Specific Entity:Entity on a line(Report 1,B:[Amount - Alpha],N:[Entity to Use])
Q		

Report Results

Note that the If-test determined which Alpha entity to use, and put it on line N. The Copy From pulled the value from Report 1 for the entity listed on this line.

Detail Model - Revenues	Jan 2009	Feb 2009	Mar 2009	Apr 2009
Bravo 1				
B:[Entity ID - Alpha 1]	Alpha 1	Alpha 1	Alpha 1	Alpha 1
C:[Entity ID - Alpha 2]	Alpha 2	Alpha 2	Alpha 2	Alpha 2
D:[Current Entity]	Bravo 1	Bravo 1	Bravo 1	Bravo 1
G:[if]				
H:[IF BRAVO 1]				
I:[Use Alpha 1]	Alpha 1	Alpha 1	Alpha 1	Alpha 1
J:[else]				
K:[IF BRAVO 2]				
L:[Use Alpha 2]				
M:[end if]				
N:[Entity to Use]	Alpha 1	Alpha 1	Alpha 1	Alpha 1
O:[]	0	0	0	0
P:[Amount to Copy]	100	100	100	100
Bravo 2				
B:[Entity ID - Alpha 1]	Alpha 1	Alpha 1	Alpha 1	Alpha 1
C:[Entity ID - Alpha 2]	Alpha 2	Alpha 2	Alpha 2	Alpha 2
D:[Current Entity]	Bravo 2	Bravo 2	Bravo 2	Bravo 2
G:[if]				
H:[IF BRAVO 1]				
I:[Use Alpha 1]				
J:[else]				
K:[IF BRAVO 2]				
L:[Use Alpha 2]	Alpha 2	Alpha 2	Alpha 2	Alpha 2
M:[end if]				
N:[Entity to Use]	Alpha 2	Alpha 2	Alpha 2	Alpha 2
O:[]	0	0	0	0
P:[Amount to Copy]	200	200	200	200

Dates

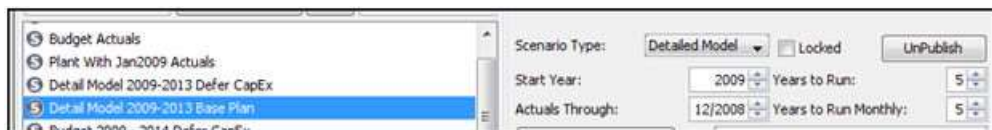
{ XE "Scenario" * MERGEFORMAT }{ XE "Base Year" * MERGEFORMAT }{ XE "Function - Base Year for Active Scenario" * MERGEFORMAT }Function - Base Year for Active Scenario

Function Description:

This function returns the base year for the active scenario.

Example

The screen prints below show the results of this function. The base year for the Active Scenario is 2009.



Note that in order to display correctly in annual periods, you should format the line as average or ending balance.

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Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Base Year for Active Scenario	Base Year for Active Scenario()

Report Results

Detail Model 2009-2013 Base Plan	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Year 2010	Year 2011	Year 2012	Year 2013
Alpha 1								
B:[Base Year for Active Scenario]	2,009	2,009	2,009	2,009	2,009	2,009	2,009	2,009

{ XE "Current Date" * MERGEFORMAT }{ XE "YYYYMM" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Current Date (YYYYMM)

Function Description:

This function returns the current month and year, formatted as YYYYMM (e.g. 200603).

Parameters:

None

Example:

The month and year in a report column is February 2006. This function will return 200602. After applying the default date format, 200602 will be displayed as Feb 2009. See example below.

Report Calculation

Ref.	Line Name	Formula/Source
A	Current Date (YYYYMM) Function	Current Date (YYYYMM)()

Report Results

2006-2010 Base Scenario	2006						
	Jan	Feb	Mar	Apr	May	Jun	Jul
Current Date (YYYYMM) Function	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006

{ XE "Current Month" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Current Month (1-12, 0 if annual)

Function Description:

This function returns the current month (from 1 – 12) in years run monthly, and 0 in annual periods.

Parameters:

None.

Example:

The screen prints below show the results of this function. January returns 1, February returns 2, December returns 12. This example was run with 2007 by month and 2008 and 2009 annual. The result returned for the annual years is 0 (zero).

Report Calculation

Ref.	Line Name	Formula/Source
A	Current Month (1-12, 0 if annual) function	Current Month (1-12, 0 if annual)()

Report Results

2006-2010 Base Scenario	2007												2008	2009
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Dec	Dec
Current Month (1-12, 0 if annual) function	1	2	3	4	5	6	7	8	9	10	11	12	0	0

{ XE "Current Month" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Current Month (1-12, 13 if annual)

Function Description:

This function returns the current month (from 1 – 12) in years run monthly, and 13 in annual periods.

Parameters:

None.

Example:

The screen prints below show the results of this function. January returns 1, February returns 2, December returns 12. This example was run 2007 by month and 2008 and 2009 annual. The result returned for the annual years is 13.

Report Calculation

Ref.	Line Name	Formula/Source
A	Current Month (1-12, 13 if annual) function	Current Month (1-12, 13 if annual)()

Report Results

2006-2010 Base Scenario	2007												2008	2009
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Dec	Dec
Current Month (1-12, 13 if annual) function	1	2	3	4	5	6	7	8	9	10	11	12	0	0

{ XE "Functions" * MERGEFORMAT }{ XE "Current Year" * MERGEFORMAT }Function - Current Year

Function Description:

This function returns the current year of the run.

The screen prints below show the results of this function. Note that in order to display correctly in annual periods, you should format the line as average or ending balance.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Current Year	Current Year()

Report Results

Detail Model 2009-2013 Base Plan	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Alpha 1					
B:[Current Year]	2,009	2,010	2,011	2,012	2,013

{ XE "Current Period" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Current Period

Function Description:

This function returns the current period for the report run, starting 12 months prior to the start date set in the *MANAGE SCENARIOS* screen.

Periods are months or years. If your scenario is 2 years by month, and the report is running mixed monthly/annual, periods are:

- 1-12 Historical Year, processed so that 12 months of history exist
- 13-24 First forecast year
- 25-36 Second forecast year
- 37-39 Annual periods for years 3, 4 and 5

Example:

The screen print below shows results from the current period function with a start date of January 2006 for the scenario.

Report Calculation

Ref.	Line Name	Formula/Source
A	Current Period	Current period()

Report Results

2006-2010 Base ...	2006													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Current Period	13	14	15	16	17	18	19	20	21	22	23	24	25	26

{ XE "Date for End of Year(YYYYMM)" * MERGEFORMAT }{ XE "Function - Date for End of Year(YYYYMM)" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Date for End of Year(YYYYMM)

Function Description:

This function returns a date (in YYYYMM format) which is the last date of the year. If you have a fiscal model, with fiscal year ending March, this could be 201303.

This function is designed to be used with functions like *VALUE FROM YYYYMM₁*, where you may need to know a value from the end of the year; for example you might want to know the cap ratio at the end of the year.

{ XE "Date Plus Months" * MERGEFORMAT }{ XE "Date" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Date Plus Months

Function Description:

This function returns a date (in YYYYMM format) which has been derived from a date on a report line plus a specific number of months

Parameters:

- Line for Date (YYYYMM) - Select the report line for the target date. A drop list will open with the active report lines.
- Line for Months to Add - Select the report line with months to add. A drop list will open with all active report lines.
- Sign? - Select Yes to switch the sign on the result. Default is *No*.

Example:

The screen prints below illustrate this function. Months are added to the current date to which returns a new date.

Report Calculation

Ref.	Line Name	Formula/Source
A	Current Date	Current Date (YYYYMM)()
B	Months to add	Input()
C	Date Plus Months Function)	Date Plus Months([A:Current Date],[B:Months to add])

Report Results

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2006-2010 Base Scenario	2006						
	Jan	Feb	Mar	Apr	May	Jun	Jul
Current Date	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006	Jul 2006
Months to add	3	4	5	12	17	4	4
Date Plus Months Function (results)	Apr 2006	Jun 2006	Aug 2006	Apr 2007	Oct 2007	Oct 2006	Nov 2006

{ XE "Date for Start of Year(YYYYMM)" * MERGEFORMAT }{ XE "Function - Date for Start of Year(YYYYMM)" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Date for Start of Year(YYYYMM)

Function Description:

This function returns a date (in YYYYMM format) which is the last date of the year. If you have a fiscal model, with fiscal year ending March, this could be 201203.

This function is designed to be used with functions like *VALUE FROM YYYYMM*, where you may need to know a value from the beginning of the year.

{ XE "Date:Period" * MERGEFORMAT }{ XE "Date" * MERGEFORMAT }{ XE "Period:Date" * MERGEFORMAT }{ XE "Period" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Date for Period

Function Description:

This function returns the date (in YYYYMM format) for a number on a line starting with the first period of the run. It returns YYYY12 in annual periods.

Parameter:

- **Line for Period** - Select the line from the current report that contains the period number.

Example:

The screen print below shows results from the Date for Period function where the Start date of the run in January 2005 with various input variables.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input	Input()
B	Date for Period Function	Date for Period([A:Input])

Report Results

2006-2010 Base Scen...	2006									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Input	5	7	12	-7	7	0	36	9	42	-4
Date for Period Function	May 2005	Jul 2005	Dec 2005	May 2004	Jul 2005	Dec 2004	Dec 2007	Sep 2005	Jun 2008	Aug 2004

{ XE "Days" * MERGEFORMAT }{ XE "Current Month" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Days in Current Month

Function Description:

This function returns the number of days in the current month. February returns 29 days in a leap year. If running annual this function will return the number of days in the current year.

Parameter:

- **Sign?** – Select Yes to switch the sign on the result. Default is *No*.

Example 1:

In March this function will return a value of 31.

Example 2:

If the report is running over an annual period, this function will return 365.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Days in current month	Days in Current Month()
C	Days in year	Days in Current Year()

Report Results

2006-2010 Base Scen...	2006											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
French 1												
Days in current month	31	28	31	30	31	30	31	31	30	31	30	31
Days in year	365	365	365	365	365	365	365	365	365	365	365	365

{ XE "Current Year" * MERGEFORMAT }{ XE "Days" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Days in Current Year

Function Description:

This function returns the number of days in the current year of the model run. Leap years will return 366 days. All other years will return 365 days.

Example 1:

In 2015 this function will return a value of 365.

Example 2:

In 2016(a leap year) this function will return a value of 366.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Days in current month	Days in Current Month()
C	Days in year	Days in Current Year()

Report Results

2006-2010 Base Scen...	2006											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
French 1												
Days in current month	31	28	31	30	31	30	31	31	30	31	30	31
Days in year	365	365	365	365	365	365	365	365	365	365	365	365

{ XE "End Date" * MERGEFORMAT }{ XE "Function - End Date (YYYYMM) For Feeder Scenario" * MERGEFORMAT }{ XE "Scenario" * MERGEFORMAT }Function - End Date (YYYYMM) For Feeder Scenario

Function Description:

This function returns the end date (YYYYMM format) for the defined feeder scenario (as specified on the **RUN SEQUENCES** screen). For Strategic Model scenarios, the feeder is a Detail Model scenario, and for Detail Model scenarios, the feeder is a Budget scenario.

Example

The screen prints below show the results of this function. Budget 2009-2014 is the defined feeder scenario, and the end date for the **RUN SEQUENCES** screen is 2014.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	End Date for Feeder Scenario	End Date (YYYYMM) For Feeder Scenario()
C		

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009
System Total				
End Date for Feeder Scenario	Dec 2014	Dec 2014	Dec 2014	Dec 2014
	0	0	0	0

{ XE "Function - End Date (YYYYMM) For Report" * MERGEFORMAT }{ XE "End Date" * MERGEFORMAT }Function - End Date (YYYYMM) For Report

Function Description:

This function returns the end date (YYYYMM format) for the current report.

Example

The screen prints below show the results of this function. The current scenario starts in 2009 and runs for 5 years, but note that the report runs for one additional year. Also note that in order to display correctly in annual periods, you should format the line as average or ending balance.

Report Calculation

Report Result

Detail Model 2009-2013 Base Plan	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Year 2009	Jan 2010
Alpha 1							
B:[End Date for Scenario]	Dec 2013	Dec 2013	Dec 2013	Dec 2013	Dec 2013	Dec 2013	Dec 2013
C:[End Date for Report]	Dec 2014	Dec 2014	Dec 2014	Dec 2014	Dec 2014	Dec 2014	Dec 2014

{ XE "Function - End Date for Scenario" * MERGEFORMAT }{ XE "End Date" * MERGEFORMAT }Function - End Date for Scenario

Function Description:

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This function returns the end date (YYYYMM format) for the current scenario.

Example

The screen prints below show the results of this function. The base year for the active scennh5Xario is 2009 and it runs for 5 years. Note that in order to display correctly in annual periods, you should format the line as average or ending balance.



Report Calculation

A		Place Holder for Entity Description	
B	End Date for Scenario	End Date (YYYYMM) for Scenario()	

Report Results

Detail Model 2009-2013 Base Plan	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Year 2009	Jan 2010	Feb 2010
Alpha 1							
B:[End Date for Scenario]	Dec 2013	Dec 2013	Dec 2013	Dec 2013	Dec 2013	Dec 2013	Dec 2013

{ XE "Final Year" * MERGEFORMAT }{ XE "Function - Final Year For Active Scenario" * MERGEFORMAT }Function - Final Year For Active Scenario

Function Description:

This function returns the final year for the active scenario.

Example

The screen prints below show the results of this function. The active scenario begins in 2009 and runs for 5 years, thus the last year is 2013.



Note that in order to display correctly in annual periods, you should format the line as average or ending balance.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Final Year for Active Scenario	Final Year for Active Scenario()

Report Results

Detail Model 2009-2013 Base Plan	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Alpha 1					
B:[Final Year for Active Scenario]	2,013	2,013	2,013	2,013	2,013

{ XE "Last Actual Period" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Last Actual Period

Function Description:

This function returns the last period of actuals, as shown on the *MANAGE SCENARIOS* screen.

Example:

The screen prints below show report results for this function with an actuals date of December 2005. The result for all months is 12.

Report Calculation

Ref.	Line Name	Formula/Source
A	Last Actual Period function	Last Actual Period()

Report Results

2006-2010 Base Scenario	Jan	Feb	Mar
Last Actual Period function	12	12	12

{ XE "Month Interval" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Month Interval

Function Description:

This function is designed for bond payments but can be used for other purposes. Two attributes in the report entity group are required; the month payments start, and the month interval between payments. It returns 1 if this is an interval month given a start month and an integer interval.

Parameters:

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- **Start Month** - Select the entity attribute for the start month of the sequence of payments.
- **Interval** - Select the entity attribute that contains the number of months between payments.

Example:

Screen prints below show an example of this function. The payment interval is every 3 months, and the start date is the bond issue date of January 2005. This function will return a 1 for every interval month. **Note:** This function works with dates that are before the start of the scenario time horizon. For example, if you have a preferred stock issue from June 1940 that pays dividends every 3 months, Month Interval returns 1 every March, June, September and December.

Generally this function is used to trigger a conditional loop to calculate the bond payment. Also note that lines B and C are not necessary for this function to work, they are only shown here to help illustrate the example.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Attribute - Issue Date	Attribute(Issue Date (yyyymm))
C	Attribute - Months between Payments	Attribute(Number of Months Between Payments)
D		
E	Month Interval Function	Month Interval(Issue Date (yyyymm),Number of Months Between Payments)

Report Results

2006-2010 Base Scenario	2006						
	Jan	Feb	Mar	Apr	May	Jun	Jul
Corp 6% FMB Due 8/1/20							
Attribute - Issue Date	Jan 2005	Jan 2005	Jan 2005	Jan 2005	Jan 2005	Jan 2005	Jan 2005
Attribute - Months between Payments	3	3	3	3	3	3	3
Month Interval Function	1	0	0	1	0	0	1

{ XE "Month from YYYYMM" * MERGEFORMAT }{ XE "Function - Month From YYYYMM" * MERGEFORMAT }Function - Month From YYYYMM

Function Description:

This function returns a month (1-12) given a line whose value is in the date format YYYYMM.

Parameters:

- **Line (YYYYMM)** – Select the line from the current report that contains the date, in YYYYMM format.
- **Sign?** – Select Yes to switch the sign on the result. Default is *No*.

Example:

The screen prints below show report results for this function against a line containing the current date. Note that annual cells return 12.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Date in YYYYMM format	Current Date (YYYYMM)()
C	Month from YYYYMM	Month from YYYYMM(B:[Date in YYYYMM format])

Report Results

Detail Model 2009-2013 Base Plan	Oct 2009	Nov 2009	Dec 2009	Year 2009	Jan 2010	Feb 2010	Mar 2010
Alpha 1							
B:[Date in YYYYMM format]	Oct 2009	Nov 2009	Dec 2009	Dec 2009	Jan 2010	Feb 2010	Mar 2010
C:[Month from YYYYMM]	10	11	12	12	1	2	3

{ XE "Annual Factor" * MERGEFORMAT }{ XE "Monthly Factor" * MERGEFORMAT }{ XE "Function - Monthly or Annual Factor" * MERGEFORMAT }Function - Monthly or Annual Factor

Function Description:

This function returns 1/12 if the report is processing monthly, 1 (one) if the report is processing annually.

Example:

The screen prints below show report results for this function against a report running mixed monthly/annual. The scenario settings are 5 years, with 2 years monthly.

1+11 Reforecast	Scenario Type: Detailed Model	Locked	UnPublish
Budget Actuals	Start Year: 2009	Years to Run: 5	
Plant With Jan2009 Actuals	Actuals Through: 12/2008	Years to Run Monthly: 2	
Detail Model 2009-2013 Defer CapEx	Copy case list from: 1+11 Reforecast		
Detail Model 2009-2013 Base Plan			
Budget 2009 - 2014 Defer CapEx			
Strategic - Base Case 2009-2026			
Strategic - Defer CapEx			
B - Base 2009 - 2014			

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Monthly or Annual Factor	Monthly or Annual Factor()

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Report Results

Detail Model 2009-2013 Base Plan	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Year 2010	Year 2011	Year 2012	Year 2013
Alpha 1								
B:[Monthly or Annual Factor]	0.0833	0.0833	0.0833	0.0833	1.0000	1.0000	1.0000	1.0000

{ XE "Time" * MERGEFORMAT }{ XE "Time Difference" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Time Difference

Function Description:

This function returns the number of months between two dates, both of which need to be in YYYYMM format. The date arguments are passed in as lines. 200410 compared to 200410 returns 0, 200411 compared to 200410 returns 1.

Parameters:

- **Line 1 YYYYMM** - Select the line of the current report that contains the first date.
- **Line 2 YYYYMM** - Select the line of the current report that contains the second date.

Example:

Several examples are shown in the screen prints below. January's result of 10 is the number of months between January 2006 and March 2005.

Report Calculation

Ref.	Line Name	Formula/Source
A	Current Date	Current Date (YYYYMM)()
B	Input dates	Input()
C	Time Difference Function	Time Difference([A:Current Date],[B:Input dates])

Report Results

2006-2010 Base Scenario	Jan	Feb	Mar	Apr	May	Jun
Current Date	Jan 2006	Feb 2006	Mar 2006	Apr 2006	May 2006	Jun 2006
Input dates	Mar 2005	Feb 2006	Jul 2007	Jul 2008	Sep 2006	Oct 2006
Time Difference Function	10	0	16	27	4	4

{ XE "Function - Year From YYYYMM" * MERGEFORMAT }{ XE "Year" * MERGEFORMAT }Function - Year From YYYYMM

Function Description:

This function returns a number for the year, given a line whose value is in the date format YYYYMM.

Parameters:

- **Line (YYYYMM)** – Select the line from the current report that contains the date, in YYYYMM format.
- **Sign?** – Select Yes to switch the sign on the result. Default is No.

Example:

The screen prints below show report results for this function against a line containing the current date.

Report Calculation

Ref.	Line label	Formula-forecast	Fo
A		Place Holder for Entity Description	
B	Date in YYYYMM format	Current Date (YYYYMM)()	
C	Year from YYYYMM	Year from YYYYMM(B:[Date in YYYYMM format])	

Report Results

Detail Model 2009-2013 Base Plan	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Year 2009	Jan 2010	Feb 2010
Alpha 1							
B:[Date in YYYYMM format]	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Dec 2009	Jan 2010	Feb 2010
C:[Year from YYYYMM]	2,009	2,009	2,009	2,009	2,009	2,010	2,010

Financial

{ XE "Account" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Account

Function Description:

This function will return the balance of any account or rollup node in the Planning Ledger Default Account Structure. It sums the values of account postings that roll up to a given node in the primary roll up structure. The Account function is generally used to construct summary financial statements from the Planning Ledger.

The Account function only works on reports that process by planning entity.

Parameters:

- **Account** - After clicking in the account selection box, the **SELECT ACCOUNT** dialog will open. Select the desired account or rollup node from the planning ledger default account structure.

Example:

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Screen prints below illustrate several **ACCOUNT** function lines. Lines K and L are account functions, which will return the balances of account 501 and 142. Line J is an account function that returns the rollup node for Electric Revenue. Lines C through G are **ACCOUNT** functions that return the root rollup nodes.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Root level account structure	
C	Revenue (rollup node)	Account(Revenue)
D	Expense (rollup node)	Account(Expense)
E	Net Income (rollup node)	Account(Net Income)
F	Assets (rollup node)	Account(Asset)
G	Liability (rollup node)	Account(Liability)
H		
I	Selected Account function items	
J	Electric Revenue (rollup node)	Account(Electric Revenue)
K	Fuel 501 (account)	Account(501.0 Fuel - Fossil Steam)
L	Customer A/R 142 (account)	Account(142.0 Customer accounts receivable.)

Report Results

2006-2010 Base Scenario	Jan	Feb	Mar
Chicago Electric			
Root level account structure			
Revenue (rollup node)	513,746	453,077	438,883
Expense (rollup node)	313,882	284,832	292,077
Net Income (rollup node)	199,864	168,246	146,805
Assets (rollup node)	5,262,956	5,358,998	5,522,050
Liability (rollup node)	5,262,956	5,358,998	5,522,050
Selected Account function items			
Electric Revenue (rollup node)	513,746	453,077	438,883
Fuel 501 (account)	197,971	169,865	167,013
Customer A/R 142 (account)	356,072	313,603	303,667

The planning ledger contains data in a traditional format where credits are negative, and debts are positive numbers. In order to simplify writing reports, the account function will reverse the sign for any accounts or rollup nodes which are defined as revenues, liabilities, or net income in the account root. In the screen prints above, lines C, E and G are all negative balances in the planning ledger, but their signs are reversed by this function.

{ XE "Account Change" * MERGEFORMAT }{ XE "Function - Account Change" * MERGEFORMAT }Function - Account Change

Function Description:

This function returns the current period change in the selected account (or account rollup):

- Revenue, Expense & Cash – current period value.
- Liabilities - current period minus prior period
- Assets - prior period minus current period

These changes are defined as a Cash Flow Report works – an increase in accounts payable is a source of cash, so the current period minus the prior period is positive. Conversely, an increase in accounts receivable is a use of cash, so the prior period minus the current period is negative.

Parameters:

- **Account** - After clicking in the account selection box, the **SELECT ACCOUNT** dialog will open. Select the desired account or rollup node from the planning default account structure.

Example:

Screen prints below illustrate the **ACCOUNT CHANGE** function operating against several account rollups. Line B is a revenue account, so the **ACCOUNT CHANGE** returns the current period amount. Lines E and H are balance sheet accounts, so the **ACCOUNT CHANGE** function returns the actual change during the periods. Note that in annual periods, the function returns the full year amounts.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Utility Revenue	Account(Electric Revenue)
C	Account Change - Utility Revenue	Account Change(Utility Revenue)
D		
E	Total Assets	Account(Asset)
F	Account Change - Total Assets	Account Change(Asset)
G		
H	Current and Accrued Liabilities	Account(Current And Accrued Liabilities)
I	Account Change - Current and Accrue...	Account Change(Current And Accrued Liabilities)
J		

Report Results

Detail Model 2009-2013 Base Plan	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Year 2010	Year 2011	Year 2012	Year 2013
Chicago Electric								
B:[Utility Revenue]	466,673	438,875	454,970	520,199	5,907,020	6,169,799	6,445,346	6,607,649
C:[Account Change - Utility Revenue]	466,673	438,875	454,970	520,199	5,907,020	6,169,799	6,445,346	6,607,649
D:[]	0	0	0	0	0	0	0	0
E:[Total Assets]	12,600,131	12,628,618	12,680,713	12,773,002	149,892,213	159,726,623	166,730,469	178,547,736
F:[Account Change - Total Assets]	58,737	-26,487	-52,094	-92,289	-666,039	-657,005	-523,413	-1,382,773
G:[]	0	0	0	0	0	0	0	0
H:[Current and Accrued Liabilities]	2,467,439	2,450,156	2,425,260	2,415,221	29,430,164	30,175,811	23,716,554	19,876,825
I:[Account Change - Current and Accrued ...]	-8,153	-17,283	-24,896	-10,039	11,044	-38,623	-699,190	22,728
J:[]	0	0	0	0	0	0	0	0
Chicago Steam								

{ XE "Account" * MERGEFORMAT }{ XE "Account Previous Period" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Account Previous Period

Function Description:

This function will return the balance of any account or rollup node in the planning ledger secondary account structure. The **ACCOUNT** function is generally used to construct summary financial statements from the planning ledger. In all respects this function is identical to the [Function - Account](#) except it will return rollup node balances based on the secondary account structure selected in the parameter first. The function sums the values of account postings that rollup to a given node in a specified secondary account rollup structure.

Parameters:

- **Ledger Structure** - Using the drop down list, select the desired secondary account structure. This selection will be used in the account parameter (next parameter) to display the correct secondary account structure.
- **Account** - After clicking in the account selection box, the **SELECT ACCOUNT** dialog will open displaying the secondary account structure. Select the desired account or rollup node.

Example:

See [Function - Account](#)

{ XE "Account" * MERGEFORMAT }{ XE "Account Secondary Structure" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Account Secondary Structure

This function will return the balance of any account or *rollup node* in the Planning Ledger *secondary account structure*. The **ACCOUNT** function is generally used to construct summary financial statements from the Planning Ledger.

In all respects this function is identical to the [Function - Account](#) except it will return rollup node balances based on the secondary account structure selected in the parameter first.

Example: See [Function - Account](#)

Function Description:

This function sums the values of account postings that rollup to a given node in a specified secondary account rollup structure.

Parameters:

- **Ledger Structure:** Using the drop-down list, select the desired secondary account structure. This selection will be used in the account parameter (next parameter) to display the correct secondary account structure.
- **Account:** After clicking in the account selection box, the **SELECT ACCOUNT** dialog will open displaying the secondary account structure. Select the desired account or rollup node.

{ XE "Acquisition Cost" * MERGEFORMAT }{ XE "Function - Acquisition Cost" * MERGEFORMAT }Function - Acquisition Cost

Function Description:

This function returns the Acquisition cost for a Low-Level Planning Entity, as entered in the **MERGERS AND ACQUISITIONS** screen and is available in the Strategic Model only.

Example:

The spreadsheet and screen prints below show the **ACQUISITION COST** function working within a Strategic Model scenario. Below is the **MERGERS AND ACQUISITIONS** screen from the Strategic Model scenario.

Potential Acquisition Entity	Process	Acquisition Date (if set, only not processed ...)	Acquisition Consolidation Point	Acquisition Cost	Beginning Balances
Praxis Gen					
US Services					
Chicago Electric					
Chicago Steam					
Suburban Gas					
PretGCC Common					
PretGCC Electric					
PretGCC Gas					
Potential Acquisition #1		2015	US Energy Consolidated	100000.0	

Report Calculation

The report below pulls the acquisition cost by planning entity.

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Select Report: Report: Acquisition Cost

Report Context: Entity Group: Planning Entity

Line Context: (A) =

MM ... Ref.	Line label	Formula-Forecast
A		Place Holder for Entity Description
B	Acquisition Cost	Acquisition Cost()

Report Results

Note that the report returns the acquisition cost for the potential acquisition, in the proper year of the scenario. This allows you to change the dollar amounts and timing of potential acquisitions easily, using the **MERGERS AND ACQUISITIONS** screen.

Strategic - Base Case 2009-2026	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014
Potential Acquisition #1						
Acquisition Cost	0	0	100,000,000	0	0	

{ XE "Amortization Factor" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Amortization Factor

Function Description:

The **AMORTIZATION FACTOR** function returns a fractional rate that will, if applied to a balance, fully amortize the balance to zero by the end date parameter. It returns the calculated amortization factor whose End Date and End Day are specified on the selected lines. Typically this function is used in Bond reports or Deferred Recovery Amortization reports. The amortization rate is based on days remaining to the end month and end day of the month. The formula for each month's amortization rate is - Days remaining for amortization/30. The amortization factor is always 1 (one) for the last month i.e. the end date (YYYYMM) parameter. This ensures that any remaining balance is fully amortized in the last month. If the current date is past the end date the function will return 0.00 (zero).

Parameters:

- **Line for End Date (YYYYMM)** - This parameter will be the last month of the amortization period. Typically attribute data will contain the

date, which is called to a report line. The report line is then used in the Amortization Factor function.

- **Line for End Day** - This is the day of the month in the end date parameter in which the amortization will be complete. Typically the day will be in attribute data, which is in turn called to a report line. This report line is then used in the **AMORTIZATION FACTOR** function. Note: If your report always needs a full month's amortization in all months, put 30 on a formula line and use that line for this parameter.

Example 1:

End date parameter is May 2009, End Day parameter is 30, and the current date is March 2009. This function will return an amortization factor of 0.3333.

Parameter - End Date (YYYYMM)	May				
Parameter - End Day	30				
	Jan	Feb	Mar	Apr	May
Months Remaining	5	4	3	2	1
Days in the Month	30	30	30	30	30
Months * 30	150	120	90	60	30
Subtract days from end day	0	0	0	0	0
Days Remaining for Amortization	150	120	90	60	30
Amortization Factor	0.2000	0.2500	0.3333	0.5000	1.0000

Report Calculation

Ref.	Line Name	Formula/Source
A	Retire Date (YYYYMM)	200,705
B	Retire Day of Moth	30
C	Amotization Factor	Amortization Factor([A:Retire Date (YYYYMM)], [B:Retire Day of Moth])

Report Results

2006-2010 Base Scenario	Jan	Feb	Mar	Apr	May
Retire Date (YYYYMM)	May 2007	May 2007	May 2007	May 2007	May 2007
Retire Day of Moth	30	30	30	30	30
Amotization Factor	0.2000	0.2500	0.3333	0.5000	1.0000

Example 2:

End date parameter is May 2009, End Day parameter is 20, and the current date is March 2009. This function will return an amortization factor of 0.3750.

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Parameter - End Date (YYYYMM)	May				
Parameter - End Day	20				
	Jan	Feb	Mar	Apr	May
Months Remaining	5	4	3	2	1
Days in the Month	30	30	30	30	30
Months * 30	150	120	90	60	30
Subtract days from end day	-10	-10	-10	-10	-10
Days Remaining for Amortization	140	110	80	50	20
Amortization Factor	0.2143	0.2727	0.3750	0.6000	1.0000

Report Calculation

Ref.	Line Name	Formula/Source
A	Retire Date (YYYYMM)	200,705
B	Retire Day of Moth	20
C	Amortization Factor	Amortization Factor([A:Retire Date (YYYYMM)], [B:Retire Day of Moth])

Report Results

2006-2010 Base Scen...	Jan	Feb	Mar	Apr	May
Retire Date (YYYYMM)	May 2007	May 2007	May 2007	May 2007	May 2007
Retire Day of Moth	20	20	20	20	20
Amortization Factor	0.2143	0.2727	0.3750	0.6000	1.0000

Example 3:

End date parameter is May 2009, End Day parameter is 12, and the current date is March 2009. This function will return an amortization factor of 0.4167.

Parameter - End Date (YYYYMM)	May				
Parameter - End Day	12				
	Jan	Feb	Mar	Apr	May
Months Remaining	5	4	3	2	1
Days in the Month	30	30	30	30	30
Months * 30	150	120	90	60	30
Subtract days from end day	-18	-18	-18	-18	-18
Days Remaining for Amortization	132	102	72	42	12
Amortization Factor	0.2273	0.2941	0.4167	0.7143	1.0000

Report Calculation

Function - Book Depr Vintage: Removal

Ref.	Line Name	Formula/Source
A	Retire Date (YYYYMM)	200,705
B	Retire Day of Moth	12
C	Amortization Factor	Amortization Factor([A:Retire Date (YYYYMM)], [B:Retire Day of Moth])

Report Results

2006-2010 Base Scen...	2007						
	Jan	Feb	Mar	Apr	May	Jun	Jul
Retire Date (YYYYMM)	May 2007	May 2007	May 2007	May 2007	May 2007	May 2007	May 2007
Retire Day of Moth	12	12	12	12	12	12	12
Amotization Factor	0.2273	0.2941	0.4167	0.7143	1.0000	1.0000	1.0000

{ XE "Book Depreciation Additions" * MERGEFORMAT } { XE "Function" * MERGEFORMAT }Function - Book Depr Additions

Function Description:

This function returns the current period Book Depreciation on Asset Additions. Depreciation stops when Net Plant hits zero. This function has an option for additional depreciation in the first period

Parameters:

- **Line for Depreciable close** - Select the report line that contains Plant Additions to be depreciated.
- **Line for Depreciable Rate** - Select the report line that contains the monthly Depreciation Rate.
- **[Optional] Line for percent Depreciation first month** - Select the report line that contains the first month's Depreciation (if desired). If this option is not needed select Null from the drop-down list.

Example 1:

The chart and screen prints below illustrate this function in two ways,. The first chart columns (a) - (d) and report lines B - D show depreciation calculated with no additional depreciation in the first period.

Column (C) in the chart is the monthly depreciation calculated as column (a) times the monthly depreciation rate in column (b). Column (d) is the accumulated column (c)

This same calculation is performed by the function in the screen print line D where closings are in line B and the depreciation rate is on line C.

Note that total depreciation on additions is the summation of each month.

Example 2 - Additional Depreciation:

The second part of the chart, column (e) through (h) illustrates the additional first year depreciation parameter. The optional parameter for "Line for percent Depreciation first month" represents a line on the report that contains a factor which is multiplied by the first year depreciation rate.

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In our example below the calculation is $.00417 * 0.5 = .00208$ added to the first year depreciation rate.

Column (f) shows the additional first year depreciation rate, and column (g) shows the additional first year depreciation. Column (h) is the additional depreciation plus regular depreciation calculated in column d.

Screen prints below the chart show the report calculation and results. Line D contains the **BOOK DEPR ADDITIONS** function without the additional first year rate parameter. Line G shows the function with the additional first year depreciation rate.

Note that depreciation is calculated on the beginning balance of additions. January closing of 100,000 is the beginning balance for February. Therefore no depreciation is calculated for January in this example.

	Closings		Depr		Book Depreciation				Additional 1st Months Depreciation			
	Monthly	Rate	Vintage	Cumulative	1st Mo	Addl Rate	Addl	Cumulative	1st Mo	Addl Rate	Addl	Cumulative
	(a)	(b)	(a * b = c)	(d)	(e)	(f)	(a * f = g)	(d + g = h)	(e)	(f)	(a * f = g)	(d + g = h)
January	100,000	0.00417			0.5000	0.00208	208	208				
February	200,000	0.00417	417	417	0.5000	0.00208	417	833				
March	300,000	0.00417	833	1,250	0.5000	0.00208	625	1,875				
April	400,000	0.00417	1,250	2,500	0.5000	0.00208	833	3,333				
May	500,000	0.00417	1,667	4,167	0.5000	0.00208	1,042	5,208				
June	600,000	0.00417	2,083	6,250	0.5000	0.00208	1,250	7,500				
July	100,000	0.00417	2,500	8,750	0.5000	0.00208	208	8,958				
August	200,000	0.00417	417	9,167	0.5000	0.00208	417	9,583				
September	300,000	0.00417	833	10,000	0.5000	0.00208	625	10,625				
October	400,000	0.00417	1,250	11,250	0.5000	0.00208	833	12,083				
November	500,000	0.00417	1,667	12,917	0.5000	0.00208	1,042	13,958				
December	600,000	0.00417	2,083	15,000	0.5000	0.00208	1,250	16,250				
January	-	0.00417	2,500	17,500	0.5000	0.00208	-	17,500				
February	-	0.00417	-	17,500	0.5000	0.00208	-	17,500				

(b) Depreciation rate is 5 percent annual or 5% / 12 Monthly

(f) Rate for additional first year depreciation is: Depr Rate * .5 or (5%/12) * 0.5 = .00208

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Closings	Input()
C	Rate	Input()
D	Book Depr Additions Function	Book Depr Additions([B:Closings],[C:Rate],)
E		
F	First Month depr multiplier	Input()
G	Book Depr Additions Functin w/ addl depr 1st year	Book Depr Additions([B:Closings],[C:Rate],[F:First Month depr multiplier])

Report Results

2006-2010 Base Scenario	2006													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Chicago Electric														
Closings	100,000	200,000	300,000	400,000	500,000	600,000	100,000	200,000	300,000	400,000	500,000	600,000	0	0
Rate	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042
Book Depr Additions Function	0	417	1,250	2,500	4,167	6,250	8,750	9,167	10,000	11,250	12,917	15,000	17,500	17,500
First Month depr multiplier	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000
Book Depr Additions Functin w/ addl depr 1st year	208	833	1,875	3,333	5,208	7,500	9,958	9,583	10,625	12,083	13,958	16,250	17,500	17,500

{ XE "Book Depr Additions" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Book Depreciation Additions: Removal

Function Description:

This function returns the current period book depreciation using a removal rate on asset additions. Removal depreciation stops an input number of years after Net Plant hits zero, to simulate Removal Depreciation.

Parameters:

- **Line for Depreciable close** - Select the report line that contains plant additions to be depreciated.
- **Line for Removal Depreciation Rate** - Select the report line that contains the monthly removal depreciation rate
- **Line for Years to Depreciate after Net Plant is zero** - Select the report line which contains the number of years to continue removal depreciation after Net Plant equals zero.
- **[Optional] Line for Percent Depreciation First Month** – Select a line for applying additional depreciation in the first month [optional]

Example:

The screen prints below illustrate this function. Note that removal depreciation stops one year after accumulated depreciation equals plant which is December 2012.

Report Calculation

MM	Ref.	Line label	Formula-forecast
	A		Place Holder for Entity Description
	B	Closings to Plant	{input() }
	C	Depreciation Rate	{input() }
	D	Removal Depreciation Rate	{input() }
	E	Years to Depr after Net Plant = Zero	{input() }
	F		
	G	Book Depreciation Additions	Book Depr Additions(B:{Closings to Plant},C:[Depreciation Rate])
	H	Book Depreciation Additions: Removal	Book Depr Additions: Removal(B:{Closings to Plant},C:[Depreciation Rate],D:[Removal Depreciation Rate],E:[Years to Depr after Net Plant = Zero])
	I	Total Book Depreciation	G:[Book Depreciation Additions] + H:[Book Depreciation Additions: Removal]

Report Results

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Detail Model 2009-2013 Base Plan	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014
CHI Elec Dist General Common (390-398)						
Closings to Plant	1,200,000	0	0	0	0	0
Depreciation Rate	33.33%	33.33%	33.33%	33.33%	33.33%	0.00%
Removal Depreciation Rate	1.00%	1.00%	1.00%	1.00%	1.00%	0.00%
Years to Depr after Net Plant = Zero	12	12	12	12	12	0
	0	0	0	0	0	0
Book Depreciation Additions	183,315	399,960	399,960	216,645	0	0
Book Depreciation Additions: Removal	5,500	12,000	12,000	12,000	6,500	0
total Book Depreciation	188,815	411,960	411,960	228,645	6,500	0
	0	0	0	0	0	0

{ XE "Book Depr Vintage Plant" * MERGEFORMAT }{ XE "Book Depr Vintage" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Book Depr Vintage Plant

Function Description:

This function returns the current period book depreciation on vintage assets. Depreciation stops when net plant hits zero. This function assumes Net Plant = Gross Plant minus Accumulated Depreciation.

Parameters:

- **Line for Beg. Bal. Depreciable Plant** - Select the report line that contains the monthly plant balance.
- **Line for Beg. Bal. Accum. Depreciation** - Select the report line that contains the beginning balance of accumulated depreciation. Note that this parameter must contain the beginning balance of accumulated depreciation not the ending balance.
- **Line Depreciation Rate** - Select the report line that contains the monthly depreciation rate.

Notes:

- This function will return zero when the plant balance less accumulated depreciation equals zero.
- Reports using this function need to have multiple iterations.

Example:

Shown in screen prints below is a plant account with a balance of 1,000,000, accumulated depreciation balance of 956,500 on December 31, 2005, and a depreciation rate of 7.8% (0.65% per month).

This function will return depreciation of 6,500 per month. The last month's depreciation will be adjusted so that accumulated depreciation will not exceed gross plant (4,500 in July). Subsequent month's depreciation will be zero as long as accumulated depreciation is equal to the plant balance.

Report Calculation

Ref.	Line Name	Formula/Source	Actuals Override
A	Plant Balance	Previous([A:Plant Balance])	Input()
B	Beg Accumulated Depr.	Previous([F:End Accumulated Depr.])	Input()
C	Monthly rate (0.0065)	0	
D			
E	Depreciation	Book Depr Vintage Plant([A:Plant Balance],[B:Beg Accumulated Depr.],[C:Monthly rate (0.0065)])	
F	End Accumulated Depr.	[B:Beg Accumulated Depr.] + [E:Depreciation]	
G			

Report Results

2006-2010 Base Scen...	2006								
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Plant Balance	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Beg Accumulated Depr.	956,500	963,000	969,500	976,000	982,500	989,000	995,500	1,000,000	1,000,000
Monthly rate (0.0065)	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%
Depreciation	6,500	6,500	6,500	6,500	6,500	6,500	4,500	0	0
End Accumulated Depr.	963,000	969,500	976,000	982,500	989,000	995,500	1,000,000	1,000,000	1,000,000

{ XE "Book Depr Vintage" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Book Depreciation Vintage: Removal

Function Description:

This function returns the current period book depreciation using a Removal rate on vintage assets. Removal depreciation stops an input number of years after Net Plant hits zero, to simulate removal depreciation.

Parameters:

- **Line for Beg. Bal. Depreciable Plant** - Select the report line that contains the monthly Plant Balance.
- **Line for Beg. Bal. Accum. Depreciation** - Select the report line that contains the beginning balance of accumulated depreciation. Note that this parameter must contain the beginning balance of accumulated depreciation, not the ending balance.
- **Line for Removal Depreciation Rate** - Select the report line that contains the monthly removal depreciation rate.
- **Line for Years to depreciate after Net Plant is zero** - Select the report line which contains the number of years to continue removal depreciation after Net Plant equals zero.

Example:

The example below builds upon the example given in [Function - Book Depr Vintage Plant](#). The last line of the report contains the function **BOOK DEPRECIATION VINTAGE: REMOVAL** using the following parameters:

- Line A - Plant Balance
- Line B - Accumulated Depreciation

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- Line H - Removal Depreciation Rate
- Line I - Additional years for Removal Depreciation

Notes

- Removal depreciation continues beyond August 2006, the month accumulated depreciation equals Gross Plant.
- Removal Depreciation stops one year after accumulated depreciation equals plant which is August 2007.

Report Calculation

Ref.	Line Name	Formula/Source	Actuals Override
A	Plant Balance	Previous([A:Plant Balance])	Input()
B	Beg Accumulated Depr.	Previous([F:End Accumulated Depr.])	Input()
C	Monthly rate (0.0065)	0	
D			
E	Depreciation	Book Depr Vintage Plant([A:Plant Balance],[B: Beg Accumulated Depr.],[C:Monthly rate (0.0065)])	
F	End Accumulated Depr.	[B: Beg Accumulated Depr.] + [E:Depreciation]	
G			
H	Removal Rate (.01)	0	
I	Additional Years	1	
J	Removal Depreciation	Book Depr Vintage: Removal([A:Plant Balance],[B: Beg Accumulated Depr.],[H:Removal Rate (.01)],[I:Additional Years])	

Report Results

2006-2010 Base Scen...	2006								
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Plant Balance	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Beg Accumulated Depr.	956,500	963,000	969,500	976,000	982,500	989,000	995,500	1,000,000	1,000,000
Monthly rate (0.0065)	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%
Depreciation	6,500	6,500	6,500	6,500	6,500	6,500	4,500	0	0
End Accumulated Depr.	963,000	969,500	976,000	982,500	989,000	995,500	1,000,000	1,000,000	1,000,000
Removal Rate (.01)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Additional Years	1	1	1	1	1	1	1	1	1
Removal Depreciation	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000

2006-2010 Base Scen...	2007						
	Apr	May	Jun	Jul	Aug	Sep	Oct
Plant Balance	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Beg Accumulated Depr.	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Monthly rate (0.0065)	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%	0.65%
Depreciation	0	0	0	0	0	0	0
End Accumulated Depr.	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Removal Rate (.01)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Additional Years	1	1	1	1	1	1	1
Removal Depreciation	10,000	10,000	10,000	10,000	10,000	0	0

{ XE "IRR Financial" * MERGEFORMAT }{ XE "Function - IRR Financial" * MERGEFORMAT }Function - IRR Financial

Function Description:

This function returns the IRR (Internal Rate of Return) of cash flows on a line. It is similar to the Excel IRR function. It requires at least one negative and one positive cash flow. Also, this function requires more than one iteration. It is not recommended for mixed monthly/annual reports.

The IRR is calculated by adjusting the rate until the net present value of the stream is less than +/- 0.000001, using the NPV function (below).

Parameters:

- **Line for Cash Flows (-/+)** - Select the report line containing the cash flows.
- **Guess** - Select the report line containing a guess at the IRR. This should be in percent format.

Example:

The screen prints below illustrate the **IRR** function. *Cash Flow* is the series of cash flows, and *Guess* is the percent guess. The IRR is returned for each period of the model run. Note that all series data will be used to calculate IRR for a line in a report. The series will be delimited by the amount of data available for the calculation or the number of periods the report is run for.

Report Calculation

A		Place Holder for Entity Description
B	Cash Flows	Input()
C	Guess	Input()
D		
E	IRR	IRR:Financial(B:[Cash Flows],C:[Guess])

Report Results

Detail Model 200...	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009
Alpha 1											
B:[Cash Flows]	-750	-750	-750	-750	-750	-750	-750	-750	-750	-750	-750
C:[Guess]	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
D:[]	0	0	0	0	0	0	0	0	0	0	0
E:[IRR]	3.73%	4.21%	4.79%	5.47%	6.31%	7.37%	8.76%	10.69%	13.60%	18.56%	29.10%

{ XE "NPV" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - NPV: Financial

Function Description:

This function returns Net Present Value (NPV) by month for a series of values. It is similar to the Excel NPV function. The rate expected is annual in decimal - i.e. 0.06 for 6%. Calculation is: $\text{Flow}(1) * 1/(1+\text{rate}/12) + \text{flow}(2) * (1/(1+\text{rate}/12)^2) + \text{flow}(3) * (1/(1+\text{rate}/12)^3)$. (Calculation switches to $1/(1+\text{rate})$ in annual periods.)

Note: This function requires more than one iteration.

Parameters:

- **Line for Rate** - Select the report line containing the rate. Rate must be an annual decimal (0.06 for 6%).
- **Line for Cash Flows (-/+)** - Select the report line containing the cash flows.
- **Rate is Monthly (Default is Annual)** - Select this checkbox if the rate in the report is monthly data

Example:

The screen prints below illustrate the NPV function. "Value input" is the value series which NPV is calculated. NPV is returned each period of the UIPlanner model run.

Note that all series data will be used to calculate NPV for a line in a report. The series will be delimited by the amount of data available for calculation or the number of periods run.

Report Calculation

Ref.	Line Name	Formula/Source
A	Rate Input	Input()
B	Value Input	Input()
C		
D	NPV: Financial function	NPV:Financial([A:Rate Input],[B:Value Input])

Report Results

2006-2010 Base Scen...	2006																
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Rate Input	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.00
Value Input	100	200	300	400	500	600	500	500	500	500	500	500	500	500	500	500	0
NPV: Financial function	6,315	6,247	6,078	5,808	5,438	4,965	4,390	3,911	3,431	2,948	2,463	1,975	1,485	993	-498		

{ XE "PMT" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - PMT: Financial

Function Description:

This function returns the periodic payment required given an annual rate, end date, and principal amount. This function is similar to the Excel PMT function. The rate expected is annual in decimal - i.e. 0.06 for 6%.

Parameters:

- **Line for Rate** - Select the line from the current report that contains the annual interest rate. This rate will be divided by 12 for monthly periods in the calculation.

- **Line for End Date (YYYYMM)** - Select the line from the current report that contains the ending date. Data in this report line needs to be in YYYYMM format (i.e. March 2007 = 200703).
- **Line for Principal (PV)** - Select the line from the current report containing the Principal amount. Principal amount is the ending balance from the prior month.

Example 1:

The screen prints below show a payment calculation, Rate = 6%, End date = September 2013, and the Principal amount is \$50,000,000. Results returned are the monthly interest and principal payments required to pay down the principal amount to zero by September 2013.

Report Calculation

Ref.	Line Name	Formula/Source
A	Rate	0
B	End Date	201,309
C	Principal Amount	50,000,000
D		
E	PMT: Financial function	PMT:Financial([A:Rate],[B:End Date],[C:Principal Amount])

Report Results

2006-2010 Base Scena...	Jan
Rate	0.06
End Date	Sep 2013
Principal Amount	\$50,000,000
PMT: Financial function	\$673,606.26

Example 2:

The screen prints below show an abbreviated example how this function can be used to calculate interest payments, interest expense and a declining principal balance.

- Principal balance December 31 2005 = \$50,000
- Interest rate = 6 %
- Retirement date = May 31, 2006

Note that this report example below requires more than one iteration.

Report Calculation

Ref.	Line Name	Formula/Source	Actuals Override
A	Retirement Date	200,605	
B	Interest Rate (0.06)	0	
C	Payment	PMT:Financial([B:Interest Rate (0.06)],[A:Retirement Date],[E:Prior Month Principal])	
D			
E	Prior Month Principal	Previous([H:Ending Balance])	
F	Interest Accrual	[B:Interest Rate (0.06)] / 12 * [E:Prior Month Principal]	
G	Principal Portion	[C:Payment] - [F:Interest Accrual]	
H	Ending Balance	[E:Prior Month Principal] - [G:Principal Portion]	Input()

Report Results

2006-2010 Base Scen...	2006							
	a-Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Retirement Date	May 2006	May 2006	May 2006	May 2006	May 2006	May 2006	May 2006	May 2006
Interest Rate (0.06)	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Payment	0.00	10,150.50	10,150.50	10,150.50	10,150.50	10,150.50	0.00	0.00
Prior Month Principal	0.00	50,000.00	40,099.50	30,149.50	20,149.75	10,100.00	-0.00	-0.00
Interest Accrual	0.00	250.00	200.50	150.75	100.75	50.50	-0.00	-0.00
Principal Portion	0.00	9,900.50	9,950.00	9,999.75	10,049.75	10,100.00	0.00	0.00
Ending Balance	50,000.00	40,099.50	30,149.50	20,149.75	10,100.00	-0.00	-0.00	-0.00

{ XE "Tax Depreciation" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Tax Depreciation

Function Description:

This function calculates current period Tax Depreciation expense using the special entity group for Tax Depreciation rates. This function requires the use of the Tax Depreciation entity group and expects associations established between the report entity group and the Tax Depreciation special entity group.

The **TAX DEPRECIATION** function returns Tax Depreciation on expenditures closed to Plant, not on the tax basis balance. Tax Depreciation on actual vintages are known and generally not forecast, but imported into the model forecast. Results of this function are calculated on an annual basis and spread to months evenly, as shown below.

Parameters:

- **Association** - Select the appropriate association to the Tax Depreciation special entity group from the drop-down list of all Associations in the report entity group. Multiple associations are necessary if more than one Tax Depreciation rate exists (i.e., Federal and State).
- **Line for close** - Select the report line from the drop-down list that contains closings to plant.
- **Optional inherit schedule from** - If desired, select the appropriate Association from the drop-down list to apply an optional inherit tax depreciation schedule.
- **Do NOT spread tax depreciation to actual periods** - When this box is checked, Tax Depreciation calculated for the current year will be spread over the remaining forecast actual months. For example, if Actuals are used in a model run through March, Tax Depreciation for the remaining months will be divided by 9 rather than 12.

Example:

Tax Depreciation Vintage Rates are applied to each vintage of annual closings to Plant. As shown, 2008 Tax Depreciation Expense is made up of three vintages:

2006 vintage =	1,000,000	x	25%	=	250,000
2007 vintage =	500,000	x	35%	=	175,000
2008 vintage =	300,000	x	40%	=	120,000
					Total
					545,000

Year	Annual Closing	2006	2007	2008	2009	2010	Total
		40%	35%	25%			100%
2006	1,000,000	400,000	350,000	250,000			1,000,000
			40%	35%	25%		100%
2007	500,000		200,000	175,000	125,000		500,000
				40%	35%	25%	100%
2008	300,000			120,000	105,000	75,000	300,000
Tax Depreciation							
	Annual	400,000	550,000	545,000	230,000	75,000	1,800,000
	Monthly	33,333	45,833	45,417	19,167	6,250	

The screen prints below illustrate the Tax Depreciation function described above.

Report Calculation

Ref.	Line Name	Formula/Source
A	Plant Closing	Input()
B		
C	Tax Depreciation function	Tax Depreciation(Federal Tax Depreciation,[A:Plant Closing])

Report Results (Annual)

2006-2010 Base Scenario	2006	2007	2008	2009	2010
	Year	Year	Year	Year	Year
Plant Closing	1,000,000	500,000	300,000	0	0
Tax Depreciation function	400,000	550,000	545,000	230,000	75,000

Report Results (Monthly)

2006-2010 Base Scenario	2006												Year	Jan	Feb	Mar
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
Plant Closing	97,000	99,000	64,000	76,000	75,000	96,000	68,000	95,000	95,000	80,000	96,000	75,000	1,000,000	43,500	49,500	32,000
Tax Depreciation function	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	33,333	400,000	45,833	45,833	45,833

{ XE "Function - Tax Depreciation Rate" * MERGEFORMAT }{ XE "Tax Depreciation" * MERGEFORMAT }Function - Tax Depreciation Rate

Function Description:

This function returns the tax depreciation rate. The Vintage year is supplied on a line, either YYYY or YYYYMM. In years processed monthly, the rate returned is divided by 12.

Parameters:

- **Association** - Select the appropriate association to the Tax Depreciation special entity group from the drop-down list of all Associations in the report entity group. Multiple associations are necessary if more than one Tax Depreciation rate exists (i.e., Federal and State).
- **Line for Vintage Year** - Select the report line from the drop-down list that contains the Vintage Year (either in YYYY or YYYYMM format).
- **Force rates to sum to 1** – Choose whether the function will force the rates sum to 1. Default is Yes.
- **Optional inherit schedule from** – If desired, select the appropriate association from the drop-down list to apply an optional inherit tax depreciation schedule.

Example:

The screen prints below illustrate the **TAX DEPRECIATION** Rate function. Below are the Tax Depreciation rates in the Tax Depreciation special entity group.

Object description	Tax Depreciation Rate -year 1
MACRS Tax Depr (10yr)	10
MACRS Tax Depr (15 yr)	5
MACRS Tax Depr (20 yr)	3.750
MACRS Tax Depr (3 yr)	33.33
MACRS Tax Depr (31 yr)	3.23
MACRS Tax Depr (5 yr)	20
MACRS Tax Depr (7 yr)	14.29

Note regarding Force Rates to Sum to 1 – if it is expected that the Tax Depreciation rates should sum to 1, this option will adjust as needed. However, if not (i.e., bonus depreciation), make this option *NO*, and the function will pull the rates directly as entered.

Report Calculation

Ref.	Line label	Formula-Forecast
A		Place Holder for Entity Description
B	Vintage	Current Year()
C	Tax Depreciation Schedule	Association To(Tax Depr Schedule Federal)
D		
E	Tax Depreciation Rate	Tax Depreciation Rate(Tax Depr Schedule Federal ,B:[Vintage],Yes)

Report Results (Monthly)

Detail Model 2009-2013 Base Plan	Year 2009	Year 2010
CHI Elec Dist General Common (390-398)		
Vintage	2,009	2,010
Tax Depreciation Schedule	MACRS Tax Depr (7 yr)	MACRS Tax Depr (7 yr)
	0	0
Tax Depreciation Rate	14.29%	14.29%
CHI Elec Distribution IL (361-373)		
Vintage	2,009	2,010
Tax Depreciation Schedule	MACRS Tax Depr (20 yr)	MACRS Tax Depr (20 yr)
	0	0
Tax Depreciation Rate	3.75%	3.75%
CHI Elec Software (303)		
Vintage	2,009	2,010
Tax Depreciation Schedule	MACRS Tax Depr (3 yr)	MACRS Tax Depr (3 yr)
	0	0
Tax Depreciation Rate	33.33%	33.33%

{ XE "Function - Yield: Financial" * MERGEFORMAT }{ XE "Yield" * MERGEFORMAT }Function - Yield: Financial

Function Description:

This function returns the annual yield in percent on an instrument. This function is similar to the Excel YIELD function:

YIELD(settlement,maturity,rate,principal,redemption,frequency,[basis]). Note that basis is not supported (in Excel 30/360 or actual/360, etc.). The formula is: $p = \text{pmt} * (1 - (1/(1+r)^n)) / r + \text{redemption} * (1/(1+r)^n)$, where $n = \text{number of payments}$, $\text{pmt} = \text{redemption} * \text{rate} / \text{frequency}$

Parameters:

- **Line for Issue Date (YYYYMM)** - Select the line from the current report that contains the ending date, in YYYYMM format (i.e. March 2007 = 200703). Days are not supported.
- **Line for Retirement Date (YYYYMM)** - Select the line from the current report that contains the ending date, in YYYYMM format (i.e. March 2007 = 200703). Days are not supported.
- **Line for Annual Interest Rate** - Select the line from the current report that contains the annual coupon rate (.05 = 5%). This rate will be divided by 12 for monthly periods in the calculation.
- **Line for Original Issue Net Proceeds** - Select the line from the current report containing the original issue amount. i.e., par less issue cost - discount (premium).
- **Line for Redemption Amount** - Select the line from the current report containing the par price.
- **Line for payments per year (1, 2, or 4)** - Select the line from the current report containing the number of interest payments per year.

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Example 1:

The screen prints below show a Yield calculation. Note that from the drilldown menu you can export the parameters from a given entity and month to Excel to check the formula.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Issue Date	Attribute(Issue Date)
C	Retire Date	Attribute(Retire Date)
D	Interest Rate	Attribute(Interest Rate)
E	Original Issue Net Proceeds	Attribute(Original Issue Amount)
F	Redemption Amount	Attribute(Redemption Amount)
G	Payments per Year	Attribute(Payments per Year)
H		
I	Yield	YIELD(Financial(B:[Issue Date],C:[Retire Date],D:[Interest Rate],E:[Original Issue Net Proceeds],F:[Redemption Amount],G:[Payments per Year])

Report Results

Report Display Search Table Drilldown on Data Action Panel									
Drilldown I:[Yield] - Alpha 1 (Jan/2009)									
YIELD:Financial									
Issue Date	Retire Date	Interest Rate	Issue Amount	Retire Amount	Payments per Year	Yield			
1/2009	1/2019	5.00000%	105	100	2	4.37725%			
Right-click the column header to export to Excel to check the formula									
=YIELD(DATE(2009,1,1), DATE(2019,1,1), 0.05,105.0, 100, 2)									
Detail Model 2009-2013 Base Plan									
	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009
Alpha 1									
B:[Issue Date]	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009
C:[Retire Date]	Jan 2019	Jan 2019	Jan 2019	Jan 2019	Jan 2019	Jan 2019	Jan 2019	Jan 2019	Jan 2019
D:[Interest Rate]	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
E:[Original Issue Net Proceeds]	105	105	105	105	105	105	105	105	105
F:[Redemption Amount]	100	100	100	100	100	100	100	100	100
G:[Payments per Year]	2	2	2	2	2	2	2	2	2
H:[]	0	0	0	0	0	0	0	0	0
I:[Yield]	4.377245%	4.377245%	4.377245%	4.377245%	4.377245%	4.377245%	4.377245%	4.377245%	4.377245%

IDs

{ XE "Association To" * MERGEFORMAT }{ XE "Association ID" * MERGEFORMAT }{ XE "Association" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Association To

Function Description:

This function returns the ID of the entity group for the specified association.

Parameters:

- **Association** - Select the appropriate association from the drop-down list.

Example:

The entity group *Generation Units* has an association with the entity group *Fuel Type*.

The *French1* entity (in the entity group *Generation Units*) is associated with the entity *Coal* (in the *Fuel Type* entity group) which has an ID number of 21,334,497.

This function will return 21,334,497. If for some reason *French1* were converted to gas, as of the change date on the attribute editor, the function would return the ID of the gas fuel type. See the example below.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Association ID for Fuel Type	Association ID(Fuel Type)

Report Results

Graph		2006-2010 Base Scenario		
		Jan	Feb	Mar
	French 1			
	Association ID for Fuel Type	21,334,497	21,334,497	21,334,497

Note that you can use the 'Object Description' line formatting option to display the entity group name instead of the ID.

{ XE "Function - Association to Second Dimension" * MERGEFORMAT }{ XE "Second Dimension" * MERGEFORMAT }{ XE "Association" * MERGEFORMAT }Function - Association to Second Dimension

Function Description:

The **ASSOCIATION TO SECOND DIMENSION** function has the same behavior as the current **ASSOCIATION To** function except it executes on the second entity group of a 2-Dimensional report. This function returns the ID of the entity group for the specified association for the currently processed entity of the report's second dimension.

Parameters:

- **Association** - Select the appropriate Association from the drop-down list.

Example:

The entity group Alpha has associations with the entity groups "Bravo" and "Charlie". The report in question is a 2-Dimensional report by Bravo and

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Alpha. This function allows you to obtain the associations for Alpha (the second dimension). See the example below.

Report Calculation

Ref	Line label	Formula-forecast				
C	[Association to Second Dimension]	Charlie 1	Charlie 1	Charlie 1	Charlie 1	Charlie 1
A		Place Holder for Entity Description				
B	Alpha 2	Place Holder for Sub-Entity Description				
C	[Association to Second Dimension]	Charlie 1	Charlie 1	Association-To Second Dimension(Pointer to Charlie)	Charlie 1	Charlie 1

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009
Bravo 1					
Alpha 1					
C:[Association to Second Dimension]	Charlie 1	Charlie 1	Charlie 1	Charlie 1	Charlie 1
Alpha 2					
C:[Association to Second Dimension]	Charlie 1	Charlie 1	Charlie 1	Charlie 1	Charlie 1
Alpha 3					
C:[Association to Second Dimension]	Charlie 2	Charlie 2	Charlie 2	Charlie 2	Charlie 2
Alpha 4					
C:[Association to Second Dimension]	Charlie 2	Charlie 2	Charlie 2	Charlie 2	Charlie 2
Alpha 5					
C:[Association to Second Dimension]	Charlie 2	Charlie 2	Charlie 2	Charlie 2	Charlie 2
Alpha 6					
C:[Association to Second Dimension]	Charlie 2	Charlie 2	Charlie 2	Charlie 2	Charlie 2
Alpha 7					
C:[Association to Second Dimension]	Charlie 3	Charlie 3	Charlie 3	Charlie 3	Charlie 3
Bravo 2					
Alpha 1					
C:[Association to Second Dimension]	Charlie 1	Charlie 1	Charlie 1	Charlie 1	Charlie 1

Note how you can use the 'Object Description' line formatting option to display the Entity Group name instead of the ID.

```
{ XE "Current Entity:Run" \* MERGEFORMAT }{ XE
"Current Entity" \* MERGEFORMAT }{ XE "Run:Current
Entity" \* MERGEFORMAT }{ XE "Run" \*
MERGEFORMAT }{ XE "Function" \* MERGEFORMAT
}Function - Current Entity
```

Function Description:

This function returns the Entity ID number of the current entity being processed in the report. This function can be used in conjunction with related functions such as the *ENTITY ID* to do event checking for an entity in a report.

Parameter:

- **Primary or Secondary Entity Group** - Select the primary or secondary entity group for the report.

Example:

The screen prints below illustrate the **CURRENT ENTITY OF RUN** function, with the *Primary Group* parameter. Note the results of the report are:

French 1 21,344,495
French 2 21,322,496
Dunes 21,344,492

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Current Entity of the Run	Current Entity of Run()
C	Entity ID for French 1	Entity ID(Generation Units,French 1)
D	Entity Group ID for Generation Units	Entity Group ID(Generation Units)

Report Results

2000-2010 Base Object ID	Jan	Feb	Mar
French 1			
Current Entity of the Run	21,334,495	21,334,495	21,334,495
Entity ID for French 1	21,334,495	21,334,495	21,334,495
Entity Group ID for Generation Units	21,334,491	21,334,491	21,334,491
French 2			
Current Entity of the Run	21,334,496	21,334,496	21,334,496
Entity ID for French 1	21,334,495	21,334,495	21,334,495
Entity Group ID for Generation Units	21,334,491	21,334,491	21,334,491
Dunes			
Current Entity of the Run	21,334,492	21,334,492	21,334,492
Entity ID for French 1	21,334,495	21,334,495	21,334,495
Entity Group ID for Generation Units	21,334,491	21,334,491	21,334,491

Note that you can use the *Object Description* line formatting option to display the Entity Group name instead of the ID.

{ XE "Current Report ID" * MERGEFORMAT }{ XE "Function - Current Report ID" * MERGEFORMAT }{ XE "Report ID" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Current Report ID

Function Description:

This function returns the object ID for the current report. A related function is **REPORT ID**, which returns the entity ID of a specific report, as opposed to the one being run.

This function is useful when you have shared reports. For example you may have a regulatory report for rate base, two versions with one showing end-

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of-period and another one showing averages. The Average function (with the type of average on a Line) could be used with a test for the report ID, and an if to set the average option.

Note that you can use the *Object Description* line formatting option to display the report name instead of the ID

```
{ XE "Entities" \* MERGEFORMAT }{ XE "Entity Group"
\* MERGEFORMAT }{ XE "Entity Group ID" \*
MERGEFORMAT }{ XE "Function" \* MERGEFORMAT
}Function - Entity Group ID
```

Function Description:

This function returns the ID of the selected entity group.

Parameter:

- **Select Entity Group** - Select an entity group from the drop-down list of all entity groups.

Example:

The example below shows this function for three entity groups. In all three cases the Entity Group ID is returned for all periods of the report.

Report Calculation

Ref.	Line Name	Formula/Source
A	Entity Group ID for Generation Units	Entity Group ID(Generation Units)
B	Entity Group ID for Fuel Type	Entity Group ID(Fuel Type)
C	Entity Group ID for Legal Entity	Entity Group ID(Legal Entity)

Report Results

2006-2010 Base Scenario			
	Jan	Feb	Mar
Entity Group ID for Generation Units	21,334,491	21,334,491	21,334,491
Entity Group ID for Fuel Type	21,334,490	21,334,490	21,334,490
Entity Group ID for Legal Entity	8,517	8,517	8,517

Note that you can use the *Object Description* line formatting option to display the entity Group name instead of the ID.

```
{ XE "Entities" \* MERGEFORMAT }{ XE "Entity Group"
\* MERGEFORMAT }{ XE "Primary Group" \*
MERGEFORMAT }{ XE "Current Report:Entity Group ID"
\* MERGEFORMAT }{ XE "Current Report" \*
MERGEFORMAT }{ XE "Entity Group ID:Current Report"
```


*** MERGEFORMAT }{ XE "Entity Group ID" *
MERGEFORMAT }{ XE "Function" * MERGEFORMAT
}Function - Entity Group ID for Current Report (Primary
Group)**

Function Description:

This function returns the ID of the primary entity group for the current report and is relevant only for reports with secondary entity groups).

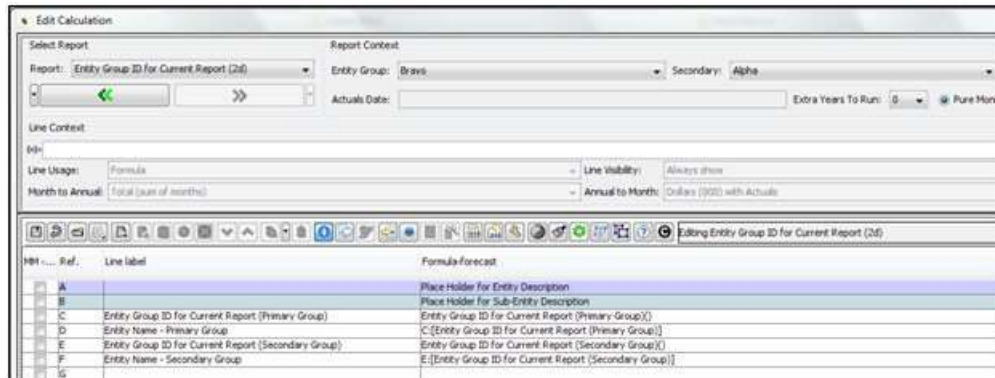
Parameters:

None

Example:

The example below shows this function for a 2-Dimensional Report, run by Bravo/Alpha.

Report Calculation



Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009
Bravo 1						
Alpha 1						
C:[Entity Group ID for Current Report (Primary Group)]	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851
D:[Entity Name - Primary Group]	Bravo	Bravo	Bravo	Bravo	Bravo	Bravo
E:[Entity Group ID for Current Report (Secondary Group)]	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850
F:[Entity Name - Secondary Group]	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
G:[]	0	0	0	0	0	0
Alpha 2						
C:[Entity Group ID for Current Report (Primary Group)]	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851
D:[Entity Name - Primary Group]	Bravo	Bravo	Bravo	Bravo	Bravo	Bravo
E:[Entity Group ID for Current Report (Secondary Group)]	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850
F:[Entity Name - Secondary Group]	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
G:[]	0	0	0	0	0	0
Alpha 3						
C:[Entity Group ID for Current Report (Primary Group)]	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851
D:[Entity Name - Primary Group]	Bravo	Bravo	Bravo	Bravo	Bravo	Bravo
E:[Entity Group ID for Current Report (Secondary Group)]	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850
F:[Entity Name - Secondary Group]	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
G:[]	0	0	0	0	0	0

```
{ XE "Secondary Group" \* MERGEFORMAT }{ XE
"Entities" \* MERGEFORMAT }{ XE "Entity Group" \*
MERGEFORMAT }{ XE "Current Report:Entity Group ID"
\* MERGEFORMAT }{ XE "Current Report" \*
MERGEFORMAT }{ XE "Entity Group ID:Current Report"
\* MERGEFORMAT }{ XE "Entity Group ID" \*
MERGEFORMAT }{ XE "Function" \* MERGEFORMAT
}Function - Entity Group ID for Current Report
(Secondary Group)
```

Function Description:

This function returns the ID of the secondary entity group for the current report, and is relevant only for reports with secondary entity groups).

Parameter:

None

Example:

The example below shows this function for a 2-Dimensional Report, run by Bravo/Alpha.

Report Calculation

Ref.	Line label	Formula-Forecast
A		Place Holder For Entity Description
B		Place Holder For Sub-Entity Description
C	Entity Group ID for Current Report (Primary Group)	Entity Group ID for Current Report (Primary Group){}
D	Entity Name - Primary Group	C.[Entity Group ID for Current Report (Primary Group)]
E	Entity Group ID for Current Report (Secondary Group)	Entity Group ID for Current Report (Secondary Group){}
F	Entity Name - Secondary Group	E.[Entity Group ID for Current Report (Secondary Group)]
G		

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009
Bravo 1						
Alpha 1						
C:[Entity Group ID for Current Report (Primary Group)]	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851
D:[Entity Name - Primary Group]	Bravo	Bravo	Bravo	Bravo	Bravo	Bravo
E:[Entity Group ID for Current Report (Secondary Gr...]	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850
F:[Entity Name - Secondary Group]	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
G:[]	0	0	0	0	0	0
Alpha 2						
C:[Entity Group ID for Current Report (Primary Group)]	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851
D:[Entity Name - Primary Group]	Bravo	Bravo	Bravo	Bravo	Bravo	Bravo
E:[Entity Group ID for Current Report (Secondary Gr...]	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850
F:[Entity Name - Secondary Group]	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
G:[]	0	0	0	0	0	0
Alpha 3						
C:[Entity Group ID for Current Report (Primary Group)]	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851	30,598,851
D:[Entity Name - Primary Group]	Bravo	Bravo	Bravo	Bravo	Bravo	Bravo
E:[Entity Group ID for Current Report (Secondary Gr...]	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850	30,598,850
F:[Entity Name - Secondary Group]	Alpha	Alpha	Alpha	Alpha	Alpha	Alpha
G:[]	0	0	0	0	0	0

{ XE "Entity ID" * MERGEFORMAT }{ XE "Entities" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Entity ID

Function Description:

This function returns the ID of the specified entity within the specified entity group. This function can be used in conjunction with related functions such as **CURRENT ENTITY OF THE RUN** to do event checking for a specific entity in a report.

Parameters:

- **Entity Group** - Select an entity group from the drop-down list of all entity groups.
- **Entity** - Select an entity from the drop-down list. Entities shown in the list are all entities in the entity group selected in the first parameter.

Example:

The screen prints below illustrate the **ENTITY ID** function. Where the parameters are Entity Group = Generation units and the Entity = French1. This function returns the ID number 21,334,495.

Note the first entity in the report is French 1 with an Entity ID number of 213,334,495, which is determined using the function "**Current Entity** of the Run").

Report Calculation

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Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Current Entity of the Run	Current Entity of Run()
C	Entity ID for French 1	Entity ID(Generation Units,French 1)
D	Entity Group ID for Generation Units	Entity Group ID(Generation Units)

Report Results

2000-2010 Base Scenario	Jan	Feb	Mar
French 1			
Current Entity of the Run	21,334,495	21,334,495	21,334,495
Entity ID for French 1	21,334,495	21,334,495	21,334,495
Entity Group ID for Generation Units	21,334,491	21,334,491	21,334,491
French 2			
Current Entity of the Run	21,334,496	21,334,496	21,334,496
Entity ID for French 1	21,334,495	21,334,495	21,334,495
Entity Group ID for Generation Units	21,334,491	21,334,491	21,334,491
Dunes			
Current Entity of the Run	21,334,492	21,334,492	21,334,492
Entity ID for French 1	21,334,495	21,334,495	21,334,495
Entity Group ID for Generation Units	21,334,491	21,334,491	21,334,491

Note that you can use the '*Object Description*' line formatting option to display the entity name instead of the ID.

{ XE "Option ID" * MERGEFORMAT }{ XE "Function - Option ID" * MERGEFORMAT }Function - Option ID

Function Description:

This function returns the ID of the specified option within the specified Option Set. (See below for more information on Option Sets). You might use this function to find out the LLPE type of the current entity.

Parameters:

- **Option Set** - Select an Option Set from the drop-down list.
- **Option** - Select an Option from the drop-down list. Options shown in the list are all options for the Option Set selected in the first parameter.
- **Sign?** - Select Yes to switch the sign on the result. Default is *No*.

Example:

Note regarding option sets and option IDs: Option sets are found in many places in UIPlanner – they are where you are given a choice in a drop-down list that is not generated from another entity group. The drop-down list choices are preset. The option IDs are the possible choices. Two examples:

1. Low Level Planning Entity: Each LLPE has an attribute for Type. The choices here are preset (the Option Set), rather than being selected from a list of entities. You could invoke this Option ID to find out the LLPE type.

Delete	Description	Value
<input type="checkbox"/>	sys-Process as Unconsolidated	
<input type="checkbox"/>	sys-Type (Consol, Elim, Corp, Etc.)	Top-Level Eliminations Entity - Legal Entity View
		Low-Level Eliminations - Segment View
		Low-Level Corporate Parent (Unconsolidated) - Legal View Only
		Regular Sub
		Top-Level Consolidation
		Top-Level Eliminations Entity - Legal Entity View
		Top-Level Eliminations Entity - Segment View
		Top-Level Corporate Parent (Unconsolidated)
		Pure-input Sub

2. Reports: There are a number of option sets in the **EDIT CALCULATION** screen: Line Usage, Month to Annual, Line Visibility, Annual to Month.

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Option ID	Option ID(Low-level Planning Entity Type,Low-Level Eliminations - Legal Entity View)
C	Option ID - Description	Option ID(Low-level Planning Entity Type,Low-Level Eliminations - Legal Entity View)
D	Option ID	Option ID(Low-level Planning Entity Type, Top-Level Eliminations Entity - Legal Entity View)
E	Option ID - Description	Option ID(Low-level Planning Entity Type, Top-Level Eliminations Entity - Legal Entity View)
F		
G	LLPE Type	Attribute(sys-Type (Consol, Elim, Corp, Etc.))
H	LLPE Type - Description	Attribute(sys-Type (Consol, Elim, Corp, Etc.))
I		

The screen prints below illustrate the **OPTION ID** function being used to identify whether the entity being run is an Eliminations company. The report finds the Option IDs for the eliminations companies from the Option Set that specifies LLPE types. You can compare this to the corresponding Attribute value for each LLPE to see if it is an Elimco.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Option ID	Option ID(Low-level Planning Entity Type,Low-Level Eliminations - Legal Entity View)
C	Option ID - Description	Option ID(Low-level Planning Entity Type,Low-Level Eliminations - Legal Entity View)
D	Option ID	Option ID(Low-level Planning Entity Type, Top-Level Eliminations Entity - Legal Entity View)
E	Option ID - Description	Option ID(Low-level Planning Entity Type, Top-Level Eliminations Entity - Legal Entity View)
F		
G	LLPE Type	Attribute(sys-Type (Consol, Elim, Corp, Etc.))
H	LLPE Type - Description	Attribute(sys-Type (Consol, Elim, Corp, Etc.))
I		

Report Results

{ XE "Report ID" * MERGEFORMAT }{ XE "Function - Report ID" * MERGEFORMAT }function - Report ID

Function Description:

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The **REPORT ID** function returns the Entity ID of a specific report, as opposed to the one being run.

{ XE "Function - Scenario Type" * MERGEFORMAT }{ XE "Scenario" * MERGEFORMAT }Function - Scenario Type

Function Description:

This function returns the active scenario type:

1=Budget, 2=Detail Model, 3=Strategic Model, 4=Daily Cash Flow

Parameters:

None

Example:

The screen prints below illustrate the **SCENARIO TYPE** function.

Report Calculation

Line label	Formula-forecast
Scenario Type	Scenario Type()

Report Results

Report Display Search Table Drilldown on Data Action Panel						
Drilldown A:[Scenario Type] - System Total (Jan/2009)						
Scenario Type						
Current Period				Value		
Jan 2009				2-Detail Model		
Detail Model 2009-2013 Base Plan		Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009
A:[Scenario Type]		2	2	2	2	2

{ XE "Function - Scenario: Related Scenario" * MERGEFORMAT }{ XE "Scenario" * MERGEFORMAT }Function - Scenario: Related Scenario

Function Description:

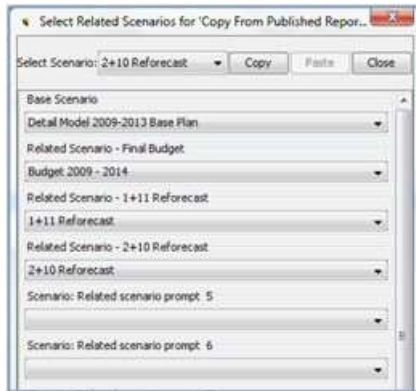
This function returns the Object Id of a related scenario (as defined in the **MANAGE SCENARIOS** screen). You might use this function in a report that always reports how the current scenario varies from a specific scenario (e.g., the approved base forecast). See also **COPY FROM PUBLISHED REPORT**.

Parameters:

- Related Scenario** – Select the desired related scenario from the drop-down list. The drop-down list displays the list of ten possible related scenarios. Note that you choose not the specific scenario, but the related scenario category 1-10. The function will return whatever scenario is defined for that item.

Example:

The screen prints below illustrate the **RELATED SCENARIO** function. Below are the related scenarios as defined for the 2+10 Reforecast Model scenario.



Report Calculation

Ref.	Line label	Formula-forecast	Number Format
A		Place Holder for Entity Description	Default Data Format
B	Related Scenario - Base (ID)	Scenario: Related Scenario(Base Scenario)	Default Data Format
C	Related Scenario - Base (name)	Scenario: Related Scenario(Base Scenario)	Object Description
D			Default Data Format
E	Related Scenario - Final Budget (ID)	Scenario: Related Scenario(Related Scenario - Final Budget)	Default Data Format
F	Related Scenario - Final Budget (name)	Scenario: Related Scenario(Related Scenario - Final Budget)	Object Description
G			Default Data Format
H	Related Scenario - January Reforecast (ID)	Scenario: Related Scenario(Related Scenario - 1+11 Reforecast)	Default Data Format
I	Related Scenario - January Reforecast (name)	Scenario: Related Scenario(Related Scenario - 1+11 Reforecast)	Object Description
J			Default Data Format

Note that the second set of lines was formatted to display the scenario name, rather than the ID.

Report Results

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Ref.	Line label	Formula-forecast	Number Format
A		Place Holder for Entity Description	Default Data Format
B	Related Scenario - Base (ID)	Scenario: Related Scenario(Base Scenario)	Default Data Format
C	Related Scenario - Base (name)	Scenario: Related Scenario(Base Scenario)	Object Description
D			Default Data Format
E	Related Scenario - Final Budget (ID)	Scenario: Related Scenario(Related Scenario - Final Budget)	Default Data Format
F	Related Scenario - Final Budget (name)	Scenario: Related Scenario(Related Scenario - Final Budget)	Object Description
G			Default Data Format
H	Related Scenario - January Reforecast (ID)	Scenario: Related Scenario(Related Scenario - 1+11 Reforecast)	Default Data Format
I	Related Scenario - January Reforecast (name)	Scenario: Related Scenario(Related Scenario - 1+11 Reforecast)	Object Description
J			Default Data Format

Input

{ XE "Attributes" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Attribute

Function Description:

This function returns the attribute value of the current entity during the run, given the selected attribute definition of the report's entity group. You can use an association for the current entity group to inherit an attribute from a related entity group. Also, you can optionally select a line for a default value if the specific attribute is NULL.

Parameter:

- **Attribute** - Select the attribute from the drop-down list. The list will contain all attributes for the report entity group (but not associations).
- **Optional Inherit Attribute From** - If the current entity group has an attribute that is linked to another entity group, you can choose to 'inherit' the value from the association.
- **Optional Default Value from Line** - Select a line in the current report to use as the default value if the specific attribute is null.

Example:

The report shown below is run over the Bond entity group which has several attributes. Two examples are shown in lines B and C of the report. Line B returns the "issue date" and line C returns the "Interest Rate". Attribute data is returned for each month of the report run.

Attributes for the Bond Entity Group

(ONE PARAMETER EDITOR screen)

Object	Issue Date (yyyymm)	Interest Rate (Fixed)
Corp 6% FMB Due 8/1/20	06/2006		6
Corp 5.875% Senior Notes due April 1, 2016	04/1996		5.875
Corp 6.5% Senior Notes due April 1, 2011	04/2001		6.5

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Attribute Function (Issue Date)	Attribute(Issue Date (yyyymm),)
C	Attribute Function (Interest Rate)	Attribute(Interest Rate (Fixed),)

Report Results

2006-2010 Base Scenario	Jan	Feb	Mar
Corp 6% FMB Due 8/1/20			
Attribute Function (Issue Date)	Jun 2006	Jun 2006	Jun 2006
Attribute Function (Interest Rate)	6.00	6.00	6.00
Corp 5.875% Senior Notes due April 1, 2016			
Attribute Function (Issue Date)	Apr 1996	Apr 1996	Apr 1996
Attribute Function (Interest Rate)	5.88	5.88	5.88
Corp 6.5% Senior Notes due April 1, 2011			
Attribute Function (Issue Date)	Apr 2001	Apr 2001	Apr 2001
Attribute Function (Interest Rate)	6.50	6.50	6.50

{ XE "Attribute of Report" * MERGEFORMAT }{ XE "Function - Attribute of Report" * MERGEFORMAT }Function - Attribute of Report

This topic is under construction

{ XE "Second Dimension" * MERGEFORMAT }{ XE "Functions" * MERGEFORMAT }Function - Attribute of Second Dimension

Function Description:

The **ATTRIBUTE OF SECOND DIMENSION** function has the same behavior as the current **ATTRIBUTE** function, except that it allows you to query the attributes of the second Entity Group of a Two-Dimensional report. This function returns the attribute value of the current secondary entity of the run, given the selected Attribute Definition of the Report's Secondary Entity Group. You can use an association for the current entity group to inherit an attribute from a related entity group. Also, you can optionally select a line for a default value if the specific attribute is NULL.

Parameters:

- **Attribute** - Select the attribute from the drop-down list. The drop list will contain all attributes for the report secondary entity group (but not associations).
- **Optional Inherit Attribute From** - If the current entity group has an attribute that is linked to another entity group, you can choose to 'inherit' the value from the association.
- **Optional Default Value from Line** - Select a line in the current report to use as the default value if the specific attribute is null

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Example:

The entity group Alpha has associations with the entity groups Bravo and Charlie. The report in question is a 2-Dimensional report by Bravo and Alpha. This function allows you to obtain the values of the Attributes for Alpha (the second dimension).

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B		Place Holder for Sub-Entity Description
C	Attribute of Second Dimension - Interest Rate	Attribute of Second Dimension(Interest Rate)
D	Attribute of Second Dimension - Issue Date	Attribute of Second Dimension(Issue Date)

Report Calculation**Report Results**

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009
Bravo 1						
Alpha 1						
C:[Attribute of Second Dimension - Interest Rate]	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
D:[Attribute of Second Dimension - Issue Date]	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009

Note that can use the *Object Description* line formatting option to display the Entity Group name instead of the ID.

{ XE "Budget Data" * MERGEFORMAT }{ XE "Function - Budget Data" * MERGEFORMAT }Function - Budget Data

Function Description:

This function allows you to pull data into a *CALCULATION EDITOR* report from a Budget report. The budget entities must either match the entities of the report, or have an association to the entities of the report.

This function can save data that has been mapped to the line/entity by using Publish. A file named 'nnn_Budget_data_values' is created in the report_line_persist folder. This file can then be imported via the generic interface. Then, by using the **MORE OPTIONS** button in the **RUN SEQUENCES** screen, the mapped data can be read from the database as if it were imported. Note that this is a global switch. If you choose this option, all reports using the budget data function will look for imported data.

Other Notes:

- This function is designed to be run in a Budget Scenario. You cannot run it in a Model Scenario.
- You need to have selected the appropriate dept level in Departments in order to get the proper result from the Budget Report.
- If used 'inside a method', the one dimension of the budget report must be a Line or an entity that has a pointer to a line.
- This function is not supported currently for 2-D calculations.

Parameters:

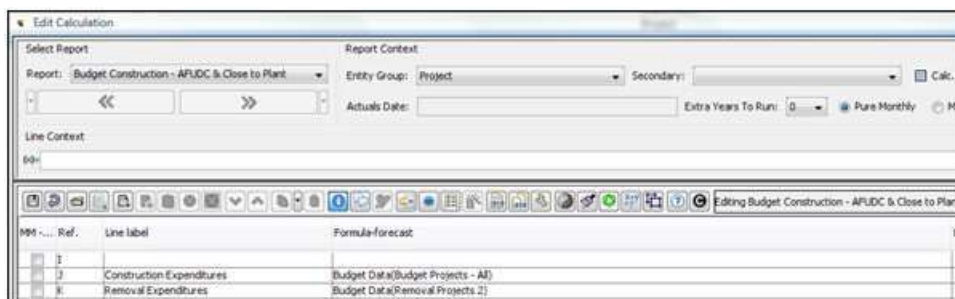
- **Report Definition** –Select a Budget report from the drop-down list.

Examples - Introduction:

There are two ways to use the **BUDGET** Function.

- **Using Live Budget Report** - When run this way, the report will call the underlying Budget report each time the report is run
- **Using Saved Data** - When run this way, the report will look to the database time data for the data. The report must have been run and the data saved first.

Note that the underlying report is the same in both methods. The run reports switch tells the report calculation where to get the data:

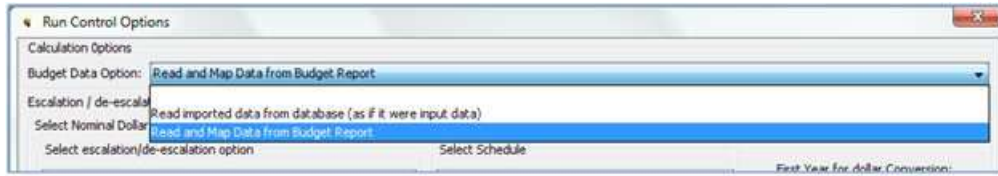


Example 1: Using "Live" Budget Report

Running the Budget Data function this way, the report will call the underlying Budget report each time the report is run.

- Check the setting in the **RUN CONTROL OPTIONS** dialog accessed on **RUN SEQUENCES**:

UIPlanner Detailed Model User Guide



- Verify that you have selected the department at the appropriate level:



- Run the report sequence. With this setting, the report runs the underlying Budget Report on the fly. See the drill down:

TYOUNGQUIST-Plant-Budget Construction - AFUDC & Close to Plant

Report Display Search Table Drilldown on Data Action Panel

Drilldown J:[Construction Expenditures] - SKAA09: French Clean Smokestacks (Jan/2009)

Budget Data (Click Here to View Report)

Project	Value
SKAA09: French Clean Smokestacks	92,464
Total	92,464

Budget 2009 - 2014	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009
Construction Expenditures	92,464	178,424	118,090	103,634	140,420	115,770	107,991	146,883	141,076
Removal Expenditures	0	0	0	0	0	0	0	0	0
Total	92,464	178,424	118,090	103,634	140,420	115,770	107,991	146,883	141,076

- If you click the blue text, you can bring up the underlying Budget report:

BUDPROJ: Budget Projects - All

Output to Excel Budget

Project	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
34765: New Business - Residential	47,500.00	52,250.00	57,000.00	61,750.00	66,500.00	71,250.00	71,250.00	66,500.00	61,750.00
65347: Distribution Transformer Mfce				1,522.11	1,522.11	1,522.11	1,522.11	1,522.11	1,522.11
74653: Distribution Line Mfce	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
8853A: French 1 Boiler Flue Leak/Exhaust							21,189.61	40,888.94	27,062.00
9FA99: French #1 Turbine Outage	49,121.37	94,787.99	62,735.37	55,085.77	74,597.96	61,502.64	57,370.41	78,031.51	74,947.00
ALL: All	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00
P911LL: French Fire Protection	4,815.82	9,292.94	6,150.53	5,397.62	7,313.53	6,029.67	5,624.95	7,650.15	7,347.00
392203: French Restack Ash Pond	108,259.65	208,905.29	138,263.83	121,338.59	164,408.06	135,547.00	126,439.88	171,975.34	165,177.00
31122: French #4 Turbine Outage	16,566.42	31,967.71	21,157.81	18,567.83	25,158.53	20,742.07	19,348.45	26,316.51	25,276.00
3000WC: French Electrostatic Precipitator				21,960.14	42,375.81	28,046.40	24,613.17	33,349.68	27,495.00
3587RA: French Pulverizer Rebuild	8,090.58	15,612.14	10,332.88	9,645.91	13,401.88	10,867.91	10,096.96	13,729.87	13,067.00
RS921: French Uprate (47MW)	13,952.90	26,847.00	17,796.85	15,628.49	21,146.29	17,448.78	16,282.04	22,115.76	21,244.00
RCS9R0: French Total Refurbishment				19,841.18	38,286.91	25,340.17	22,228.21	30,131.73	24,842.00
SKAA09: French Clean Smokestacks	92,463.75	178,424.45	118,090.11	103,634.38	140,419.70	115,769.68	107,991.36	146,882.86	141,076.00
TDB: T&D Blanket	125,332.50	125,332.50	125,332.50	125,332.25	125,332.50	125,332.50	125,332.50	125,332.50	125,332.50

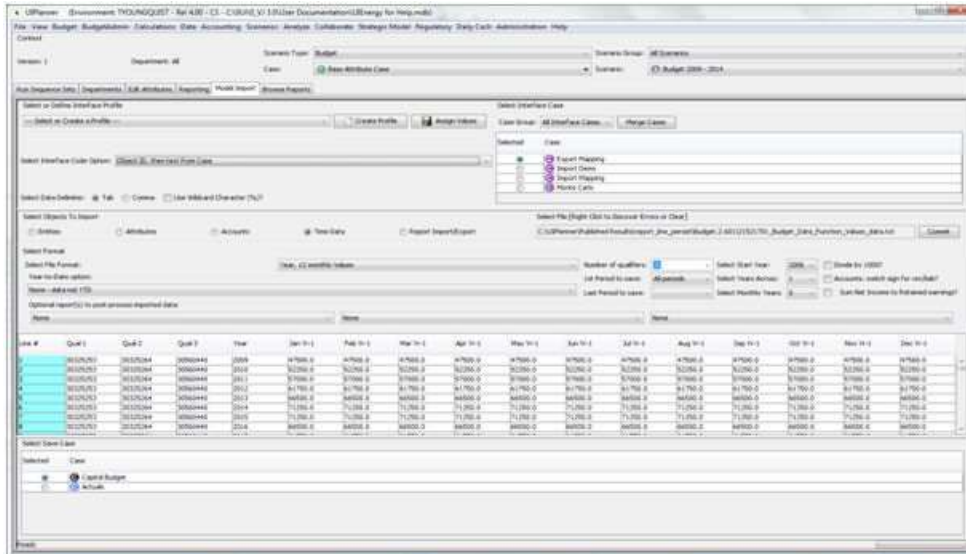
Example 2: Using "Live" Budget Report

In this method, UIPlanner treats the data in the report as input data, saved to the database.

The **BUDGET DATA** function can save data that has been mapped to the line/entity by using Publish. A file named 'nnn_Budget_data_values' is

created in the report_line_persist folder. This file can then be imported via the generic interface. Then, by using the **MORE RUN OPTIONS** button in the **RUN SEQUENCES** screen, the mapped data can be read from the database as if it were imported. Steps:

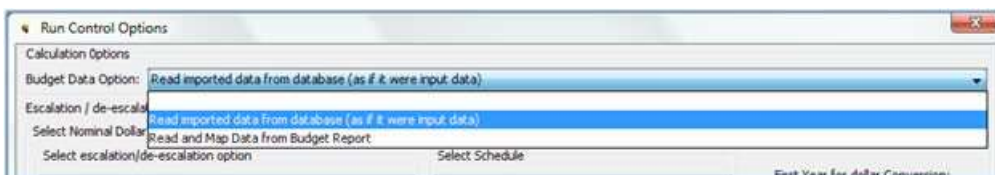
- Run the report
- Publish results
- Go to generic interface, and import the file 'nnn_Budget_data_values'. Make sure to set the number of qualifiers. Below is a screen print:



- Once you save the data, it is saved to the database as input values

Budget Construction - AFUDC & Close to Plant	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009
Capital Budget												
Construction Expenditures												
N/A												
Underground AM												
Above-Ground AM												
French Clean Smokestacks	92,464	92,464	92,464	92,464	92,464	92,464	92,464	92,464	92,464	92,464	92,464	92,464
French Restack Ash Pond	108,260	108,260	108,260	108,260	108,260	108,260	108,260	108,260	108,260	108,260	108,260	108,260
French Uprate (47MW)	13,953	13,953	13,953	13,953	13,953	13,953	13,953	13,953	13,953	13,953	13,953	13,953
French Fire Protection	4,816	4,816	4,816	4,816	4,816	4,816	4,816	4,816	4,816	4,816	4,816	4,816
French #1 Turbine Outfall	89,121	89,121	89,121	89,121	89,121	89,121	89,121	89,121	89,121	89,121	89,121	89,121

- Then when you run the report again, you can choose to have the report use THESE values rather than rerunning the underlying report. You do this in the **RUN CONTROL OPTIONS** dialog:



- With this setting, the report uses the input data – see the drill down:

TYOUNGQUIST-Plant-Budget Construction - AFUDC % Close to Plant										
Input : Time Data Winner Logic Annual-to-month option; Dollars (000) without Actuals										
Case	Type	Value	Winner	Last Updated By	Last Updated					
Capital Budget	Overlay	92,464	92,464	TYOUNGQUIST	Wed Jul 08 10:42:16 CDT 2009					
Budget 2009 - 2014		Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009
Construction Expenditures		92,464	92,464	92,464	92,464	92,464	92,464	92,464	92,464	92,464
Removal Expenditures		0	0	0	0	0	0	0	0	0

{ XE "Escalation Factor" * MERGEFORMAT }{ XE "Function - Escalation Factor" * MERGEFORMAT }Function - Escalation Factor

Function Description:

This function returns the cumulative escalation factor for the Escalation Entity ID defined on the argument line. Factors returned are annual, with escalation factors starting after the base year, e.g. 1.0, 1.03, 1.0712 (1.03 x 1.04), etc.

Note – this function only available in the Strategic Model. See also **ESCALATION RATE**.

Parameters:

- **Line for Entity ID of Escalation Rate** – The report line that contains the Entity ID of the Escalation Rate for which you wish to calculate the cumulative factor. Note that the Escalation Rate entity group is a special one.

Example:

The spreadsheet and screen prints below show the **ESCALATION FACTOR** function working within a Strategic Model scenario. Below are the Escalation Factors themselves.

Year	CPI	GNP Deflator	PPI
2009	4	3	2.5
2010	4	3	2.5
2011	4	3	2.5
2012	4	3	2.5
2013	4	3	2.5
2014	4	3	2.5
2015	4	3	2.5
2016			
2017			

The spreadsheet below shows an offline calculation in Excel of what the cumulative factors should calculate to be.

CPI			GNP		
Year	Rate	Cumulative Factor	Year	Rate	Cumulative Factor
2009	0	1.000	2009	0	1.000
2010	0.04	1.040	2010	0.03	1.030
2011	0.04	1.082	2011	0.03	1.061
2012	0.04	1.125	2012	0.03	1.093
2013	0.04	1.170	2013	0.03	1.126
2014	0.04	1.217	2014	0.03	1.159
2015	0.04	1.265	2015	0.03	1.194

Report Calculation

MM -...	Ref.	Line label	Formula-forecast
	A		Place Holder for Entity Description
	B	CPI	Entity ID(Escalation Rates,CPI)
	C	Escalation Rate - CPI	Escalation Rate(B:[CPI])
	D	Escalation Factor - CPI	Escalation Factor(B:[CPI])
	E		Label Only
	F	GNP	Entity ID(Escalation Rates,GNP Deflator)
	G	Escalation Rate - GNP	Escalation Rate(F:[GNP])
	H	Escalation Factor GNP	Escalation Factor(F:[GNP])
	I		Label Only
	J	PPI	Entity ID(Escalation Rates,PPI)
	K	Escalation Rate - PPI	Escalation Rate(J:[PPI])
	L	Escalation Factor PPI	Escalation Factor(J:[PPI])

Report Results

Note that the *ESCALATION FACTOR* function produces the anticipated annual factors.

Strategic - Base Case 2009-2026	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
System Total							
CPI	123,792	123,792	123,792	123,792	123,792	123,792	123,792
Escalation Rate - CPI	1.000	1.040	1.040	1.040	1.040	1.040	1.040
Escalation Factor - CPI	1.000	1.040	1.082	1.125	1.170	1.217	1.265
GNP	123,708	123,708	123,708	123,708	123,708	123,708	123,708
Escalation Rate - GNP	1.000	1.030	1.030	1.030	1.030	1.030	1.030
Escalation Factor GNP	1.000	1.030	1.061	1.093	1.126	1.159	1.194
PPI	123,876	123,876	123,876	123,876	123,876	123,876	123,876
Escalation Rate - PPI	1.000	1.025	1.025	1.025	1.025	1.025	1.025
Escalation Factor PPI	1.000	1.025	1.051	1.077	1.104	1.131	1.160

{ XE "Escalation Rate" * MERGEFORMAT }{ XE "Function - Escalation Rate" * MERGEFORMAT }Function - Escalation Rate

Function Description:

This function returns the escalation rate (e.g. 1.03, 1.04, 1.05) for the Escalation Entity ID defined on the argument line.

Note: This function is only available in the Strategic Model. See also [Escalation Factor](#).

Parameters:

- **Line for Entity ID of Escalation Rate** – The report line that contains the Entity ID of the escalation rate you wish to see. Note that the escalation rate entity group is a special one.

Example:

The spreadsheet and screen prints below show the **ESCALATION FACTOR** function working within a Strategic Model scenario. Below are the escalation factors themselves.

Year	CPI	GNP Deflator	PPI
2009	4	3	2.5
2010	4	3	2.5
2011	4	3	2.5
2012	4	3	2.5
2013	4	3	2.5
2014	4	3	2.5
2015	4	3	2.5
2016			
2017			

Report Calculation

MM -...	Ref.	Line label	Formula-forecast
	A		Place Holder for Entity Description
	B	CPI	Entity ID(Escalation Rates,CPI)
	C	Escalation Rate - CPI	Escalation Rate(B:[CPI])
	D	Escalation Factor - CPI	Escalation Factor(B:[CPI])
	E		Label Only
	F	GNP	Entity ID(Escalation Rates,GNP Deflator)
	G	Escalation Rate - GNP	Escalation Rate(F:[GNP])
	H	Escalation Factor GNP	Escalation Factor(F:[GNP])
	I		Label Only
	J	PPI	Entity ID(Escalation Rates,PPI)
	K	Escalation Rate - PPI	Escalation Rate(J:[PPI])
	L	Escalation Factor PPI	Escalation Factor(J:[PPI])

Report Results

Note that the escalation rate lines of the report return the annual factors per the above..

Strategic - Base Case 2009-2026	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013	Year 2014	Year 2015
System Total							
CPI	123,792	123,792	123,792	123,792	123,792	123,792	123,792
Escalation Rate - CPI	1.000	1.040	1.040	1.040	1.040	1.040	1.040
Escalation Factor - CPI	1.000	1.040	1.082	1.125	1.170	1.217	1.265
GNP	123,708	123,708	123,708	123,708	123,708	123,708	123,708
Escalation Rate - GNP	1.000	1.030	1.030	1.030	1.030	1.030	1.030
Escalation Factor GNP	1.000	1.030	1.061	1.093	1.126	1.159	1.194
PPI	123,876	123,876	123,876	123,876	123,876	123,876	123,876
Escalation Rate - PPI	1.000	1.025	1.025	1.025	1.025	1.025	1.025
Escalation Factor PPI	1.000	1.025	1.051	1.077	1.104	1.131	1.160

{ XE "Input" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Input

Function Description:

The Input function identifies a line in the **CALCULATION EDITOR** that can receive its value as an input. When the report is run, the function returns that line's inputted value for the current entity and time period of the run. All lines with the **INPUT** function are displayed in the **TIME DATA EDITOR** and can accept input values from there. Input lines can be populated either through the **TIME DATA EDITOR** or using the **MODEL IMPORT** screen.

Example:

The Line Name of *Input Data Alpha* is used along with an **INPUT** function for a line in the calculation grid. When time dependent data is edited for this report, an Excel Input Template will be generated with a line labeled *Input Data Alpha*, and columns for inputting tax rate data for the time periods identified. Report results will display input data for the input line.

Report Calculation

Ref.	Line Name	Formula/Source
A	Input Data Alpha	Input()
B	Input Data Bravo	Input()

Excel Data Entry Template

	B	C	D	E
1	Input	Jan	Feb	Mar
2		2006	2006	2006
3	Universal Assumptions			
4	Input Data Alpha			
5	Chicago Electric	200	300	400
6	Input Data Bravo			
7	Chicago Electric	2000	3000	4000

Report Results

2006-2010 Base Scen...	Jan	Feb	Mar
Input Data Alpha	200	300	400
Input Data Bravo	2,000	3,000	4,000
Input Data Alpha	200	300	400
Input Data Bravo	2,000	3,000	4,000

{ XE "Input Else Default" * MERGEFORMAT }{ XE "Input" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Input Else Default to

Function Description:

This function is identical to the *INPUT* function except for the additional parameter. It returns that line's inputted value for the current entity and time period of the run. If no input is found, it defaults to the value on the referenced line. Note that no input means there is no data at all. If any data exists, even zero, it is used.

Parameter:

- **From Line** - Select a line from the current report to use as the default value.

Example:

The screen prints below show this function returns the value in line A when there are no input values found for line B.

Report Calculation

Ref.	Line Name	Formula/Source
A	Default to line	43
B	Input Else Default to function	Input Else Default To([A:Default to line])

Report Results

2006-2010 Base Scenario					
	Jan	Feb	Mar	Apr	May
Default to line	43	43	43	43	43
Input Else Default to function	43	43	43	43	43

Interface Only

{ XE "Interface Functions" * MERGEFORMAT }{ XE "Function - Interface Only: Get Value For Account" * MERGEFORMAT }{ XE "Get Value" * MERGEFORMAT }Function - Interface Only: Get Value For Account

Function Description:

This function returns a value read in by the import interface. Note that this function will only work in a report that is set to run as part of the Import Interface. The report must be compiled each time before running the Import.

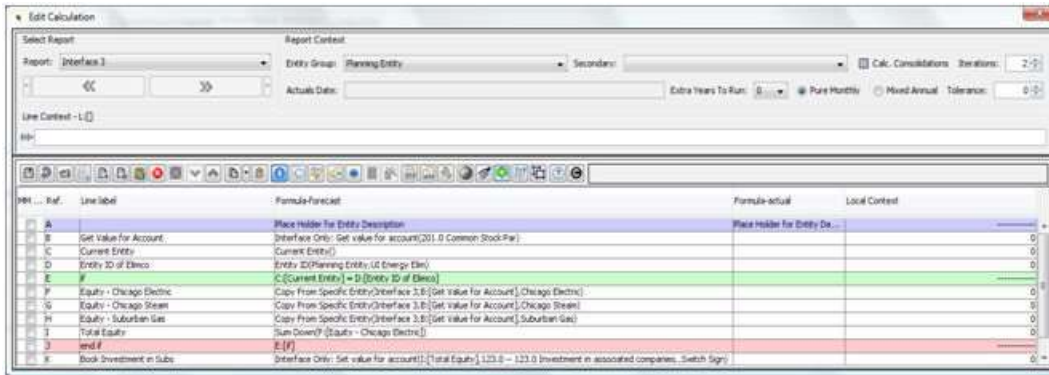
Parameter:

- **Account** - After clicking in the account selection box, the **SELECT ACCOUNT** dialog will open. Select the desired account or rollup node from the planning default account structure.

Example:

In the following example, we want to take certain equity accounts upon upload and book the corresponding investment in Subs elimination on the Elimco.

Report Calculation



Report Results

You can see the results in **BROWSE REPORTS**. The **GET VALUE FOR ACCOUNT** function returned the uploaded value for the requested account.

Detail Model 2009-2013 Base Plan	Jan 2009
Chicago Electric	
Get Value for Account	-20,000
Current Entity	Chicago Electric
Entity ID of Elimco	UI Energy Elim
if	
Equity - Chicago Electric	0
Equity - Chicago Steam	0
Equity - Suburban Gas	0
Total Equity	0
end if	
Book Investment in Subs	0
	0
Chicago Steam	
Get Value for Account	-10,000
Current Entity	Chicago Steam
Entity ID of Elimco	UI Energy Elim
if	
Equity - Chicago Electric	0
Equity - Chicago Steam	0
Equity - Suburban Gas	0
Total Equity	0
end if	
Book Investment in Subs	0
	0

{ XE "Get Value For Line" * MERGEFORMAT }{ XE "Function - Interface Only: Get Value For Line" * MERGEFORMAT }{ XE "Interface Functions" * MERGEFORMAT }Function - Interface Only: Get Value For Line

Function Description:

This function returns a value read in to a report line by the import interface. Note that this function will only work in a report that is set to run as part of the import interface. The report must be compiled each time before running the import.

Parameter:

- **Interface Data read into Report** – Select the report that the import is going to read data into.
- **Copy Value from Line** – Select the line from the import report that you want to get the value of.

Example:

In the following example, we want to take the value uploaded into the **Fuel Expense Report for Coal Expense**, adjust it and put the result onto another report. The uploaded data is:

Line #	Qual 1	Qual 2	Qual 3	Year	Jan Yr-1	Feb Yr-1	Mar Yr-1
1	Chicago Electric	Fuel Expense Report	Coal Cost	2009	35000	35000	35000
2	Chicago Steam	Fuel Expense Report	Coal Cost	2009	1000	1000	1000

Report Calculation

Ref.	Line label	Formula-forecast	Formula-actual	Local Context
A	Place holder for Entry Description		Place Holder For Entry D...	
B	Get value for line - from Fuel Expense Report	Interface Only: Get value for line(Fuel Expense Report.D(Generation Coal Cost - Interface))		
C	Factor	1.2		
D	Adjusted value	B(Get value for line - from Fuel Expense Report) * C(Factor)		
E	Set value for line - on Journal Entry Report	Interface Only: Set value for line(D (Adjusted value) Journal Entry.)(Coal Cost - adjusted)		

Report Results

You can see the results in **BROWSE REPORTS**. The **GET VALUE FOR LINE** function returned the uploaded value for the requested line.

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009
Chicago Electric					
Get Value for Line - from Fuel Expense Report	35,000	35,000	35,000	35,000	25,000
Factor	1	1	1	1	1
Adjusted value	42,000	42,000	42,000	42,000	30,000
Set Value for line - on Journal Entry Report	0	0	0	0	0
Chicago Steam					
Get Value for Line - from Fuel Expense Report	1,000	1,000	1,000	1,000	1,000
Factor	1	1	1	1	1
Adjusted value	1,200	1,200	1,200	1,200	1,200
Set Value for line - on Journal Entry Report	0	0	0	0	0

{ XE "Set Value for Account" * MERGEFORMAT }{ XE "Interface Only: Set Value for Account" * MERGEFORMAT }{ XE "Set Value" * MERGEFORMAT }Function - Interface Only: Set Value for Account

Function Description:

This function returns a value read in by the import interface. Note that this function will only work in a report that is set to run as part of the import interface. The report must be compiled each time before running the import.

Parameter:

- **Select Line to copy** – Select a line in the current report to provide the value to set the account to.
- **Set Account In Interface** - After clicking in the account selection box, the *Select Account* dialog will open. Select the desired account from the planning default account structure. Note that you **MUST** select a detail account, as the function will not post to a rollup node.

Example:

In the following example, we want to take certain equity accounts upon upload and book the corresponding investment in Subs elimination on the Elimco. The source data uploaded is:

Chicago Steam	201 - Common Stock at Par	2009	1	-10000
Chicago Electric	201 - Common Stock at Par	2009	1	-20000
Suburban Gas	201 - Common Stock at Par	2009	1	-5000

Report Calculation

Line Label	Formula-Parent	Formula-Actual	Local Context
Place Holder for Entity Description		Place Holder for Entity De...	
Get Value for Account	Interface Only: Get value for account(201.0 Common Stock Par)		
Current Entity	Entity ID(Planning Entity, UI Energy Elm)		
Entity ID of Elenco	Entity ID(Planning Entity, UI Energy Elm)		
Current Entity = D (Entity ID of Elenco)	Entity ID(Planning Entity, UI Energy Elm)		
Equity - Chicago Electric	Copy From Specific Entity(Interface 3.6 (Set Value for Account) Chicago Electric)		
Equity - Chicago Steam	Copy From Specific Entity(Interface 3.6 (Set Value for Account) Chicago Steam)		
Equity - Suburban Gas	Copy From Specific Entity(Interface 3.6 (Set Value for Account) Suburban Gas)		
Total Equity	Sum Down? (Equity - Chicago Electric)		
end if	E{F}		
Book Investment in Subs	Interface Only: Set value for account(1 (Total Equity) 123.0 - 123.0 Investment in associated companies, Switch Sign)		

Report Results

You can see the results on the **IMPORT SCREEN**. After running the import, when you click **COMMIT**, you can see the values about to be saved. The **SET VALUE FOR ACCOUNT** function set the target account to the total of the three subsidiaries.

Case	Qualifier 1	Qualifier 2	Qualifier 3	Year	Jan	Feb	Mar	Apr	May	Jun
Actuals		123.0 - 123.0 Investment in associated companies.	UI Energy Elm	2009	-35,000	0	0	0	0	0
Actuals		201.0 Common Stock Par	Chicago Electric	2009	-20,000					
Actuals		201.0 Common Stock Par	Suburban Gas	2009	-5,000					
Actuals		201.0 Common Stock Par	Chicago Steam	2009	-10,000					

{ XE "Set Value for Line" * MERGEFORMAT }{ XE "Function - Interface Only: Set Value For Line" * MERGEFORMAT }{ XE "Set Value" * MERGEFORMAT }Function - Interface Only: Set Value For Line

Function Description:

This function assigns a calculated value to be saved to a report by the import interface. Note that this function will only work in a report that is set to run as part of the Import Interface. The report must be compiled each time before running the Import.

Parameter:

- **Copy Value from Line** – Select the line in the current report that has the value you want to copy
- **Set Value In Interface** – Select the report that you want to write the value to
- **Set Value In Interface** – Select the destination line in the report. It must be tagged as 'input'

Example:

In the following example, we want to take the value uploaded into the **Fuel Expense Report for Coal Expense**, adjust it and put the result onto another report. The uploaded data is:

Line #	Qual 1	Qual 2	Qual 3	Year	Jan Yr-1	Feb Yr-1	Mar Yr-1
1	Chicago Electric	Fuel Expense Report	Coal Cost	2009	35000	35000	35000
2	Chicago Steam	Fuel Expense Report	Coal Cost	2009	1000	1000	1000

Report Calculation

Line #	Ref.	Line Label	Formula-forecast	Formula-actual	Local Context
			Place Holder for Entry Description	Place Holder for Entry D...	
B		Get Value for Line - from Fuel Expense Report	Interface Only: Get value for line[Fuel Expense Report.D[Generation Coal Cost - Interface]]		
C		Factor	1.2		
D		Adjusted value	B[Get Value for Line - from Fuel Expense Report] * C[Factor]		
E		Set value for line - on Journal Entry Report	Interface Only: Set value for line[D [Adjusted value] Journal Entry.] [Coal Cost - adjusted]		

Report Results

You can see the results in the **MODEL IMPORT** screen. After running the import, when you click **COMMIT**, you can see the values about to be saved. The **SET VALUE FOR LINE** function took the amount from the Fuel Expense value upload, adjusted it and wrote that amount to the Journal Entry Report.

Case	Qualifier 1	Qualifier 2	Qualifier 3	Year	Jan	Feb	Mar	Apr	May
Demonstrate Model Concepts	Fuel Expense Report	D:[Generation Coal Cost - Interface]	Chicago Steam	2009	1,000	1,000	1,000	1,000	1,000
Demonstrate Model Concepts	Fuel Expense Report	D:[Generation Coal Cost - Interface]	Chicago Electric	2009	35,000	35,000	35,000	35,000	35,000
Demonstrate Model Concepts	Journal Entry	J:[Coal Cost - adjusted]	Chicago Steam	2009	1,200	1,200	1,200	1,200	1,200
Demonstrate Model Concepts	Journal Entry	J:[Coal Cost - adjusted]	Chicago Electric	2009	42,000	42,000	42,000	42,000	42,000

Math and Statistics

{ XE "Generate Normaly Distributed Number" * MERGEFORMAT }{ XE "Function - Generate Normally Distributed Number" * MERGEFORMAT }Function - Generate Normally Distributed Number

Function Description:

When called repeatedly, this function will provide a normally distributed data set. Approximately 68% of the time this function will return a value within

one standard deviation of the mean, approximately 95% of the time it will return a number within two standard deviations of the mean, and approximately 99% of the time it will return a number within 3 standard deviations of the mean. The average value returned from the function will be the mean.

This function requires multiple iterations.

Parameters:

- **Mean** - Select the report line that has the value for the mean.
- **Standard Deviation** - Select the report line that has the value for the standard deviation.
- **Return Decimal or Integer** - Specify if the desired result is an integer or decimal.

{ XE "Max" * MERGEFORMAT }{ XE "Function - Max" * MERGEFORMAT }Function - Max

Function Description:

This function will return the largest (MAX) value in a range of lines for the period being processed.

Parameters:

- **Start Line of Range** - Select the report line that represents the first line in the range you want to check.
- **End Line of Range** - Select the report line that represents the last line in the range you want to check.

Example:

The screen prints below show the MAX function in use. Note that to calculate a minimum charge, you use the MIN function.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Minimum Charge Calculation	Label Only
C	Standard Charge (Service Charge + Energy Charge + Demand Charge)	Input()
D	Minimum Monthly Charge	Input()
E		
F	Minimum Charge	Max(C:[Standard Charge (Service Charge + Energy Charge + Demand Charge)],D:[Minimum Monthly Charge])
G		
H	Maximum Charge Calculation	Label Only
I	Billing Energy	Input()
J	Maximum Energy Rate	Input()
K		
L	Maximum Monthly Charge	I:[Billing Energy] * J:[Maximum Energy Rate]
M	Calculated Energy Charge	Input()
N		
O	Maximum Energy Charge	Min(L:[Maximum Monthly Charge],M:[Calculated Energy Charge])
P		

Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009
Chicago Electric				
B:[Minimum Charge Calculation]				
C:[Standard Charge (Service Charge + Energy Charge + Demand Charge)]	50	50	75	75
D:[Minimum Monthly Charge]	75	75	75	75
E:[]	0	0	0	0
F:[Minimum Charge]	75	75	75	75
G:[]	0	0	0	0
H:[Maximum Charge Calculation]				
I:[Billing Energy]	1,500	1,500	1,500	1,500
J:[Maximum Energy Rate]	0	0	0	0
K:[]	0	0	0	0
L:[Maximum Monthly Charge]	450	450	450	450
M:[Calculated Energy Charge]	1,000	1,000	250	250
N:[]	0	0	0	0
O:[Maximum Energy Charge]	450	450	250	250
P:[]	0	0	0	0

{ XE "Min" * MERGEFORMAT }{ XE "Function - Min" * MERGEFORMAT }Function - Min

Function Description:

This function will return the smallest (MIN) value in a range of lines for the period being processed.

Parameters:

- **Start Line of Range** - Select the report line that represents the first line in the range you want to check.
- **End Line of Range** - Select the report line that represents the last line in the range you want to check.

Example:

The screen prints below show the MIN function in use. Note that to calculate a maximum charge, you use the MAX function.

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Minimum Charge Calculation	Label Only
C	Standard Charge (Service Charge + Energy Charge + Demand Charge)	Input()
D	Minimum Monthly Charge	Input()
E		
F	Minimum Charge	Max(C:[Standard Charge (Service Charge + Energy Charge + Demand Charge)],D:[Minimum Monthly Charge])
G		
H	Maximum Charge Calculation	Label Only
I	Billing Energy	Input()
J	Maximum Energy Rate	Input()
K		
L	Maximum Monthly Charge	I:[Billing Energy] * J:[Maximum Energy Rate]
M	Calculated Energy Charge	Input()
N		
O	Maximum Energy Charge	Min(L:[Maximum Monthly Charge],M:[Calculated Energy Charge])
P		

Report Results

Detail Model 2009-2013 Base Plan				
	Jan 2009	Feb 2009	Mar 2009	Apr 2009
Chicago Electric				
B:[Minimum Charge Calculation]				
C:[Standard Charge (Service Charge + Energy Charge + Demand Charge)]	50	50	75	75
D:[Minimum Monthly Charge]	75	75	75	75
E: []	0	0	0	0
F:[Minimum Charge]	75	75	75	75
G: []	0	0	0	0
H:[Maximum Charge Calculation]				
I:[Billing Energy]	1,500	1,500	1,500	1,500
J:[Maximum Energy Rate]	0	0	0	0
K: []	0	0	0	0
L:[Maximum Monthly Charge]	450	450	450	450
M:[Calculated Energy Charge]	1,000	1,000	250	250
N: []	0	0	0	0
O:[Maximum Energy Charge]	450	450	250	250
P: []	0	0	0	0

{ XE "Natural Log" * MERGEFORMAT }{ XE "Function - Natural Log" * MERGEFORMAT }Function - Natural Log

Function Description:

This function returns the natural logarithm of an input amount. In simple terms, the natural logarithm of a number x is the power to which e (2.718281828) would have to be raised to equal x . For example, the natural log of e^2 (approximately 7.389) is 2, the natural log of e itself is 1 because $e^1 = e$, while the natural logarithm of 1 would be 0, since $e^0 = 1$. This function is equivalent to the Excel function IMLN.

Parameters:

- **Line** - Select the line from the current report that you want to calculate the Natural Log of.

Example:

The screen prints below illustrate the **NATURAL LOG** function. The spreadsheet below shows the calculation of the natural logs of several numbers, using the Excel IMNL function.

x	Natural Log of x
1	0
2.71828183	1
7.3890561	2
20.0855369	3
54.59815	4
100	4.60517
148.413159	5

Report Calculation

MM -...	Ref.	Line label	Formula-forecast
<input type="checkbox"/>	A		Place Holder for Entity Description
<input type="checkbox"/>	B	Input Data	Input()
<input type="checkbox"/>	C	Natural Log of Input Data	Natural Log(B:[Input Data])

Report results

Note that the **NATURAL LOG** function returns the same results as produced by the Excel IMNL function.

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009
Alpha 1							
Input Data	1.000000	2.718282	7.389056	20.085537	54.598150	100.000000	148.413159
Natural Log of Input Data	0.000	1.000	2.000	3.000	4.000	4.605	5.000

{ XE "Rank" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Rank

Function Description:

This function will return an entity order ranking based on the value of a selected line for the given period. A tie for 2nd between four entities will display as: 1,2,2,4. In Two-Dimensional reports it ranks the entity combination. Note also that this function will require additional report iteration and is in general fairly resource intensive for large entity groups, because sort logic is executed for every invocation (i.e. - every time period by entity combination). The **RANK** function takes an optional argument of an association. If an Association exists, the entities or entity combinations will be divided into sub-groups based on how they associate. The ranking returned will be the Entity's (or Entity Combination's) rank within the sub-group.

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Parameters:

- **Line** - Select the line from the current report to be used for generating the ranking.
- **Largest Value ranks #1?** - This is a Yes/No switch, to allow you to rank in ascending or descending order. The Default is Yes.
- **Optional Inherit Association From** - If the current entity group is linked that to another Entity Group, you can choose to 'inherit' the association.

Example:

The screen prints below illustrate the **RANK** function against a series of Projects, using the Project Score. The spreadsheet below shows the final project scores, and a calculation of what the rank should be.

	Score	Rank
Project Score		
French Clean Smokestacks	9	1
French Restack Ash Pond	9	1
French 1 Boiler Flue Leak&Exhaust	9	1
Dunes Scrubber	9	1
Dunes Turbine Replacement	9	1
French Pulverizer Rebuild	7	6
N/A		7
Underground AM		7
Above-Ground AM		7
French Fire Protection		7
French Electrostatic Precipitator		7
French Total Refurbishment		7
Distribution Line Mtce		7
Distribution Transformer Mtce		7
Dunes Fire Protection		7
Generation		7
South Distribution Line Transformer		7
Transmission & Distribution		7
French Uprate (47MW)	(6)	19
French #4 Turbine Outage	(7)	20
French #1 Turbine Outage	(8)	21
All	(10)	22
New Business - Residential	(29)	23
T&D Blanket	(71)	24

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Project Score	Copy From(Project Evaluation,AC:[Rounded Score],)
C	Rank by Project Score	Rank(B:[Project Score],Yes)

Report Results

Note that the rank for various projects as returned by the **RANK** function agrees with the rank as predicted via Excel above.

Budget 2009 - 2014	Dec 2009
French Restack Ash Pond	
Project Score	9
Rank by Project Score	1
French Uprate (47MW)	
Project Score	-6
Rank by Project Score	19
French Fire Protection	
Project Score	0
Rank by Project Score	7
French #1 Turbine Outage	
Project Score	-8
Rank by Project Score	21
French #4 Turbine Outage	
Project Score	-7
Rank by Project Score	20
French Pulverizer Rebuild	
Project Score	7
Rank by Project Score	6

{ XE "Ratio" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Ratio

Function Description:

This function calculates a ratio for any two lines of a report for the current entity and time period. In addition, this function provides a ratio calculation in the consolidation sum section of the report. This function is calculated during a model run as well as at the final report generation. This is to avoid the following problem: Some reports that have been defined with only ratios might zero suppress the entire report unless the line contained a value.

Parameters:

- **Numerator Line** - Select the line from the current report to be used as the Numerator.
- **Denominator Line** - Select the line from the current report to be used as the Denominator.

Example:

The screen prints below illustrate the **RATIO** function. The January ratio of input lines B and C for French1 are $30 / 60 = 0.50$. Note that results for the ratio function and the division formula are the same for each entity. However, the Ratio function will calculate a ratio of totaled results as seen in the *Totals* section of the report results. The division formula from line E of the report will be totaled in the *Totals* section. Results for this function are created at the time of reporting. Therefore, data is not available for drill-down or pull reporting.

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Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Input Value B	Input()
C	Input Value C	Input()
D		
E	B divided by C	[B:Input Value B] / [C:Input Value C]
F	Ratio of B and C function	Ratio([B:Input Value B],[C:Input Value C])

Report Results

2006-2010 Base Scenario			
	Jan	Feb	Mar
French 1			
Input Value B	30	40	50
Input Value C	60	40	30
B divided by C	0.500	1.000	1.667
Ratio of B and C function	0.500	1.000	1.667
French 2			
Input Value B	20	50	80
Input Value C	30	40	50
B divided by C	0.667	1.250	1.600
Ratio of B and C function	0.667	1.250	1.600
Totals			
Input Value B	50	90	130
Input Value C	90	80	80
B divided by C	1.167	2.250	3.267
Ratio of B and C function	0.556	1.125	1.625

{ XE "Round" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Round

Function Description:

This function returns the value in a selected line, rounded to a specified number of decimal places. If the rounding parameter is positive, it rounds to that number of places to the right of the decimal. If the parameter is negative, it rounds to that number of places to the left of the decimal.

Parameters:

- **Line** - Select the report line that contains the value you wish to report the rounded value of.
- **Digits** - Select the rounding parameter. It can range from -8 to +8.

Example:

The two screen prints below illustrate the **ROUND** function. The Report Calculation screen print shows all possible parameters. Note that the Report Results screen print shows the results all formatted to 6 decimal places.

Report Calculation

Ref.	Line Name	Formula/Source
A	Rounding Example	Label Only
B	Input Value	12,345,679
C		
D	Target number	{B:Input Value}
E		
F	Rounded to 10,000	Round({D:Target number}, -4)
G	Rounded to 1,000	Round({D:Target number}, -3)
H	Rounded to 100	Round({D:Target number}, -2)
I	Rounded to 10	Round({D:Target number}, -1)
J	Rounded to 0	Round({D:Target number}, 0)
K	Rounded to 0.1	Round({D:Target number}, 1)
L	Rounded to 0.01	Round({D:Target number}, 2)
M	Rounded to 0.001	Round({D:Target number}, 3)
N	Rounded to 0.0001	Round({D:Target number}, 4)
O		

Report Results

Rounding Example	
Target number	12,345,678.945678
Rounded to 10,000	12,350,000.000000
Rounded to 1,000	12,346,000.000000
Rounded to 100	12,345,700.000000
Rounded to 10	12,345,680.000000
Rounded to 0	12,345,679.000000
Rounded to 0.1	12,345,678.900000
Rounded to 0.01	12,345,678.950000
Rounded to 0.001	12,345,678.946000
Rounded to 0.0001	12,345,678.945700

{ XE "Sum Down" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Sum Down

Function Description:

This function sums the values of the lines above the current line, starting at the specified line.

Two items to note:

- The option '*Skip Embedded Sum Downs*' will exclude any lines in the range that are sum downs.
- Sum Down works over if-else blocks, skipping the if lines and else lines.

Note – while you can skip over embedded sum downs, be aware that if you have embedded formula lines (A+B+C) which are themselves subtotals, the **SUM DOWN** function cannot skip over these.

Parameters:

- **From Line** - Select the report line where you want to start the summation.

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- **Skip Embedded Sum Downs** – If this option is selected, the Sum Down will ignore any lines in the range that themselves are Sum-Downs.
- **Select this Option by Default (User Preference)** – If this option is selected, whenever you select the **SUM DOWN** function, it will be preset to the value selected in the first checkbox. E.G., if you check the box to ignore Embedded Sum-downs and check the default option, any time you select Sum Down it will already be set for you. As indicated, this is a User Preference

Example:

The **SUM DOWN** function is used on line J in the example below. The *From Line* parameter is line C. The *Skip Embedded Sum Downs* option has been selected. The function will thus return the sum of all lines, skipping line G, which is a Sum Down.

Report Calculation

Ref.	Line label	Formula-forecast
A	Income Statement	Place Holder for Entity Description
B		Label Only
C	Operating Revenue:	Label Only
D	Electric Revenue	Account(Electric Revenue)
E	Gas Revenue	Account(Gas Revenue)
F	Steam Revenue	Account(Steam Revenue)
G	Retail Revenue	Sum Down(C:(Operating Revenue:))
H	Affiliate Revenue	Account(Affiliate Revenue)
I	Goal Seek Revenue	Account(000.01Z -- Goal Seek Revenue)
J	Total Operating Revenue	Sum Down(C:(Operating Revenue:),Skip Embedded Sum Downs)

Report Results

TYOUNGQUIST-Financial Statements-Income Statement

Format Report Search Table Drilldown on Data Action Panel

Drilldown J:[Total Operating Revenue] - Chicago Electric (Dec/2010)

Sum Down

Line	Value
D:[Electric Revenue]	518,839
E:[Gas Revenue]	0
F:[Steam Revenue]	0
H:[Affiliate Revenue]	1,000
I:[Goal Seek Revenue]	0
Total	519,839

Report: Income Statement

Detail Model 2011-2015 Base Plan

	a-Dec 2010
Chicago Electric	
B:[]	
C:[Operating Revenue:]	
D:[Electric Revenue]	518,839
E:[Gas Revenue]	0
F:[Steam Revenue]	0
G:[Retail Revenue]	518,839
H:[Affiliate Revenue]	1,000
J:[Total Operating Revenue]	519,839
K:[]	

{ XE "Trend" * MERGEFORMAT }{ XE "Function - Trend" * MERGEFORMAT }Function - Trend

Function Description:

This function returns a value calculated using the trend of a line. It is similar to the Excel Trend function. It uses a least-squares approximation to fit a line into the data, beginning with the start of the run, and ending with the date specified. This function is

Parameters:

- **Line for End Date (YYYYMM)** - Select the report line containing the end date (in YYYYMM format) for the source data.
- **From Line** - Select the report line containing the data you want to trend.

Example:

The screen prints below show an example of the **TREND** function. The Excel sheet shows the source data, as well as the trend calculated using the Excel Trend Function.

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Amount	Value	Period
15	Input Value	1
15	Input Value	2
15	Input Value	3
15	Input Value	4
15	Input Value	5
15	Input Value	6
20	Input Value	7
20	Input Value	8
20	Input Value	9
20	Input Value	10
20	Input Value	11
20	Input Value	12
21	Input Value	13
22	Input Value	14
23	Input Value	15
25	Input Value	16
25	Input Value	17
25	Input Value	18
26	Input Value	19
26	Input Value	20
27	Input Value	21
29	Input Value	22
29	Input Value	23
29	Input Value	24
29.97	Calculated Trend	25
30.65	Calculated Trend	26
31.32	Calculated Trend	27
31.99	Calculated Trend	28
=TREND(B19:...	Calculated Trend	29
33.34	Calculated Trend	30

Report Calculation

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Final Date for Trend Calculation	201012
C	Input Data	Input()
D	Trend	Trend(B:[Final Date for Trend Calculation],C:[Input Data])

Report Results

Note that the trend for Jan 2011 through June 2012, as returned by the *TREND* function, agrees with the amounts as predicted via Excel above

Detail Model 2009-2013 Base Plan	Nov 2010	Dec 2010	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011
Alpha 1								
Final Date for Trend Calculation	Dec 2010	Dec 2010	Dec 2010	Dec 2010	Dec 2010	Dec 2010	Dec 2010	Dec 2010
Input Data	29	29	0	0	0	0	0	0
Trend	0.00	0.00	29.97	30.65	31.32	31.99	32.67	33.34

{ XE "Within Range" * MERGEFORMAT }{ XE "Function - Within Range" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Within Range

Function Description:

This function determines whether a number on a line falls within a specified range. The user can determine whether to use >= or > for the floor and <=

or < for the ceiling. The user can choose to only specify the floor or the ceiling for the range and not both, in which case negative or positive infinity will be used as the unspecified floor or ceiling. If the user selects a line for the return value, the value of that line will be returned if the range check returns true. Otherwise, this function will return 0. If the special return type 'Amount in Range' is selected and if the value is below the floor, 0 is returned. If the value is above the ceiling, the range size (ceiling minus floor) is returned. If the value is within the range, the value minus the floor is returned.

Process

{ XE "Highlight Cell" * MERGEFORMAT }{ XE "Function - Highlight Cell" * MERGEFORMAT }Function - Highlight Cell

Function Description:

This function will turn the referenced line to the selected color. On the **BROWSE REPORTS** screen, the cells for the specified line and item will be highlighted the specified color for any context (i.e. - period, entity, sub-entity) where this function was executed. For any contexts where this function was not executed those cells will not be affected.

The function is designed for use with conditional logic. Otherwise, standard formatting would accomplish the same objective. Note: The cell highlighting will only reflect the last report iteration.

Parameters:

- **Select Line to Highlight** - Select the report line you want to highlight.
- **Color** – Click on the box to bring up the detailed Color Grid. Select a color to use.

Example:

The screen prints below illustrate the use of the **HIGHLIGHT** function within a set of conditional logic. The section at the top of the report calculates the year over year change in net income. There are input lines for the Earnings Bands in order to allow you to change the ranges without changing the report.

Report Calculation

Input values – The low and high bands were set at 0% and 5%. In other words, the function should color the line Red if earnings growth was below 0%, Yellow if between 0% and 6%, and Green if above 6%.

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B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Earnings Growth	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
2009 - 2013 Base Plan																								
Earnings band low																								
Chicago Electric	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chicago Steam	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Suburban Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Earnings band high																								
Chicago Electric	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chicago Steam	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Suburban Gas	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Demonstrate Model Concepts																								

The screen print below shows how the conditional logic was built.

Ref.	Line label	Formula-forecast
A		Place Holder for Entry Description
B	Year over Year % change in net income	Ratio(F:[Year over Year Change in Net Income],E:[Previous 12 Month Net Income])
C	Net Income	Account(Net Income)
D	Latest 12 month net income	Latest 12-month Total(C:[Net Income])
E	Previous 12 Month Net Income	Value from Period(D:[Latest 12 month net income], -12)
F	Year over Year Change in Net Income	Year over Year Change(C:[Net Income])
G	Earnings band low	Input()
H	Earnings band high	Input()
I	Color Line B green	Highlight Cell(B:[Year over Year % change in net income],-10027162)
J	#	B:[Year over Year % change in net income] > G:[Earnings band low] AND B:[Year over Year % change in net income] <= H:[Earnings band high]
K	Color Line B yellow	Highlight Cell(B:[Year over Year % change in net income],-256)
L	else #	B:[Year over Year % change in net income] < G:[Earnings band low]
M	Color Line B red	Highlight Cell(B:[Year over Year % change in net income],-26215)
N	end #	:(#)
O		Label Only

Report Results

Below are the final results.

Detail Model 2009-2013 Base Plan	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
Chicago Electric					
B:[Year over Year % change in net i...		10.7%	8.7%	8.4%	3.4%
C:[Net Income]	982,923	1,088,360	1,183,144	1,282,141	1,326,168
D:[Latest 12 month net income]	982,923	1,088,360	1,183,144	1,282,141	1,326,168
E:[Previous 12 Month Net Income]	0	982,923	1,088,360	1,183,144	1,282,141
F:[Year over Year Change in Net Inc...	982,923	105,437	94,784	98,997	44,027
O:[]					
Chicago Steam					
B:[Year over Year % change in net i...		7.9%	8.0%	7.9%	4.1%
C:[Net Income]	-5,688	-6,139	-6,632	-7,158	-7,453
D:[Latest 12 month net income]	-5,688	-6,139	-6,632	-7,158	-7,453
E:[Previous 12 Month Net Income]	0	-5,688	-6,139	-6,632	-7,158
F:[Year over Year Change in Net Inc...	-5,688	-451	-493	-525	-296
O:[]					
Suburban Gas					
B:[Year over Year % change in net i...		2.7%	3.1%	3.1%	-1.3%
C:[Net Income]	-170,726	-175,345	-180,795	-186,448	-184,110
D:[Latest 12 month net income]	-170,726	-175,345	-180,795	-186,448	-184,110
E:[Previous 12 Month Net Income]	0	-170,726	-175,345	-180,795	-186,448
F:[Year over Year Change in Net Inc...	-170,726	-4,619	-5,449	-5,653	2,337
O:[]					

{ XE "Highlight Report" * MERGEFORMAT } { XE "Function - Highlight Report" * MERGEFORMAT } Function - Highlight Report

Function Description:

If this function is called the containing report will be colored the specified color on the **RUN SEQUENCES** screen. The function must be called in its last iteration.

Parameters:

- **Color** – Click on the box to bring up the detailed Color Grid. Select a color to use.

Example:

The screen prints below illustrate the use of the **HIGHLIGHT REPORT** function within a set of conditional logic. Note that because this report colorization is set in the last iteration, you should be cognizant of iterations. Also, the report will set the colorization based on the last entity run for the entity group.

Report Calculation

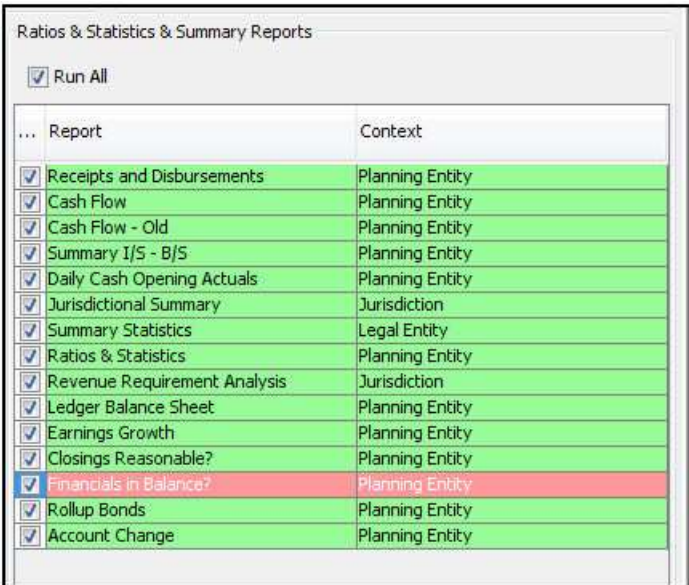
The screen print below shows how the conditional logic was built. Lines B through H perform a series of checks on the Financial Statements. If all of the checks are within tolerance, the If-Test returns Line J (Green). Otherwise, it returns Line M (red). Because it will be set on the last entity run, we pull in the Balance Sheet amounts from the Consolidated entity.

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Assets	Copy From Specific Entity(Balance Sheet, AL:[Total Assets],UI Energy Consolidated)
C	Liabilities	Copy From Specific Entity(Balance Sheet, BP:[Total Liabilities & Capitalization],UI Energy Consolidated)
D	Check Balance 2	B:[Assets] - C:[Liabilities]
E	Composite Check	D:[Check Balance 2]
F	#	E:[Composite Check] >= - 1 AND E:[Composite Check] <= 1
G	Color Panel Green	Highlight Report(-6684775)
H	I am one	1
I	else	
J	Color Panel Red	Highlight Report(-26215)
K	I am two	2
L	end if	F:[#]
M	a one and a two	H:[I am one] + K:[I am two]

Report Results

Below is the **RUN SEQUENCES** screen showing the report color coded for the out-of-balance condition.

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Here are the final results that gave rise to the report colorization.

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009
Other Segment Elm								
B:[Assets]	17,913,940	18,032,520	18,002,205	17,908,768	18,016,794	18,082,568	18,207,413	18,354,032
C:[Liabilities]	17,913,840	18,032,420	18,002,105	17,908,668	18,016,694	18,082,468	18,207,313	18,353,932
D:[Check Balance 2]	100	100	100	100	100	100	100	100
E:[Composite Check]	100	100	100	100	100	100	100	100
H:[I am one]	0	0	0	0	0	0	0	0
I:[I am two]	2	2	2	2	2	2	2	2
M:[a one and a two]	-2	-2	-2	-2	-2	-2	-2	-2

{ XE "If Else" * MERGEFORMAT } { XE "Function" * MERGEFORMAT } Function - If Else

Function Description:

This function allows the user to apply "if else" conditional logic on a single line of a report. Select two lines to compare and an operator to use when comparing them. Also select a line to be returned in a "true" condition and a line to be returned in a "false" condition.

Parameters:

- **Compare 1 (Line)** - Select a line in the active report from the drop list. This line will be compared to the *Compare 2* parameter line.
- **Comparison Operator** - Select an operator from the drop-down list provided. Five choices presented are ($=$, $<$, $>$, $<=$, $>=$). This parameter will be used to compare the *Compare 1* and *Compare 2* parameters.
- **Compare 2 (Line)** - Select a line in the active report from the drop list. This line will be compared to the *Compare 1* parameter line.
- **Value if True (Line)** - Select a line from the active report from the drop-down list. The line selected will be the results of this function if the condition is True.

- **Value if False (Line)** - Select a line from the active report from the drop-down list. The line selected will be the results of this function if the condition is False.

Example:

The **IF ELSE** function is illustrated in the screen prints below. The **IF ELSE** function returns 500 in January. $10 > 8 = True$, therefore the true value is 500.

Report Calculation

Ref.	Line Name	Formula/Source
A	Comparison 1	Input()
B	Comparison 2	Input()
C	Value if True	500
D	Value if False	800
E		
F	If Else function	If Else([A:Comparison 1],>,[B:Comparison 2],[C:Value if True],[D:Value if False])

Report Results

2006-2010 Base...	Jan	Feb	Mar	Apr	May
Comparison 1	10	20	30	40	50
Comparison 2	8	23	7	45	60
Value if True	500	500	500	500	500
Value if False	800	800	800	800	800
If Else function	500	800	500	800	800

{ XE "Account" * MERGEFORMAT }{ XE "Insert Accounts Below" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Insert Accounts Below

Function Description:

This function inserts account rollups and individual accounts below the selected rollup account. Note that the rollup on the specific account selected for this function is NOT included. Only those accounts/rollups that are below it in the first Ledger tree are included. Also note that the line label is replaced with the first account/rollup. Formatting for all inserted lines is copied from the line that starts the insert.

This function dynamically creates multiple lines of output (with drilldown), for all rollup nodes and accounts under the planning ledger node selected. This function is used to create diagnostic ledger reports that allow you see all at once all amounts at every rollup node simultaneously, down to individual accounts – with postings.

Parameters:

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- **Account** - After clicking in the account selection box, the **SELECT ACCOUNT** dialog will open. Select the desired rollup node from the planning default account structure.

Example:

The report calculation below has a single function at the revenue level node. Output results are all nodes and accounts below the node designated in the function.

Note that each rollup node is displayed with rollup totals. Each account is displayed with the amount for that account in the planning ledger.

Report Calculation

Ref.	Line Name	Formula/Source
A		Place Holder for Entity Description
B	Revenue	Insert Accounts Below(Revenue)

Report Results

Report results (revenue only)

2007-2011 Detail Model	2007 Jan
Chicago Electric	
Utility Revenue	513,746
Electric Revenue:	513,746
Electric Rate Revenue	513,130
440.0 Residential sales.	334,908
442.0 Commercial and industrial sales.	170,368
444.0 Public street and highway lighting.	1,831
445.0 Other sales to public authorities ...	0
446.0 Sales to railroads and railways (...)	0
447.0 Sales for resale.	6,023
448.0 Interdepartmental sales.	0
449.0 Other sales (Nonmajor only).	0
449.1 Provision for rate refunds.	0
Electric Misc Revenues	616
450.0 Forfeited discounts.	38
451.0 Miscellaneous service revenues.	94
454.0 Rent from electric property.	116
455.0 Interdepartmental rents.	0
456.0 Other electric revenues.	369

Planning Ledger



{ XE "Post all transactions" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Post All Transactions

This function is inactive

{ XE "Sequence Iteration" * MERGEFORMAT }{ XE "Function - Sequence Iteration Count" * MERGEFORMAT }Function - Sequence Iteration Count

Function Description:

This function allows you to check of the iteration count of the current sequence. The function will return the iteration number. If the sequence reaches the maximum number per the setting, the function will return 1. You would use this function in a report if you wanted to begin processing that report only after a certain number of iterations. An example might be a goal seeking report. For example, during the first several iterations of the sequence, the numbers may be changing too much. You might want to wait until the 3rd or 4th iteration to begin processing the report.

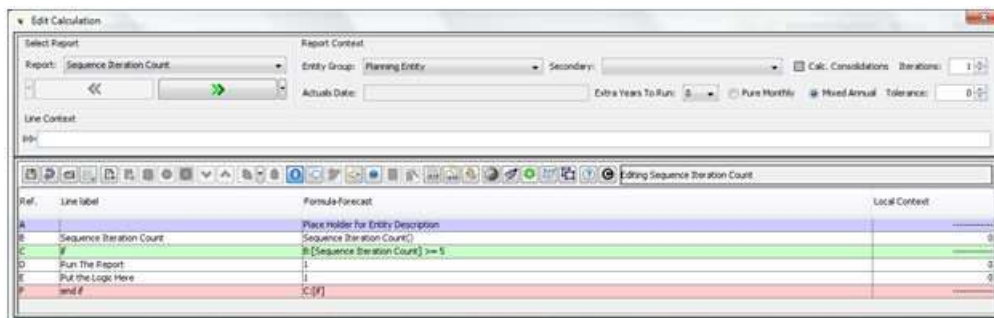
Parameters:

None

Example:

The example below shows a report where we have used the **SEQUENCE ITERATION COUNT** function to start running the calculation only in the 5th iteration. It would not run the report in the 1st through 4th iterations.

Report Calculation



{ XE "Function - Sequence Max Iteration" * MERGEFORMAT }{ XE "Sequence Iteration" * MERGEFORMAT }Function - Sequence Max Iteration

Function Description:

This function returns the maximum number of Iterations as set in the **MANAGE SEQUENCE SETS** screen for the currently running report sequence. You might use this function to trigger an event if the sequence is getting close to running the maximum number of iterations.

Parameters 1:

None

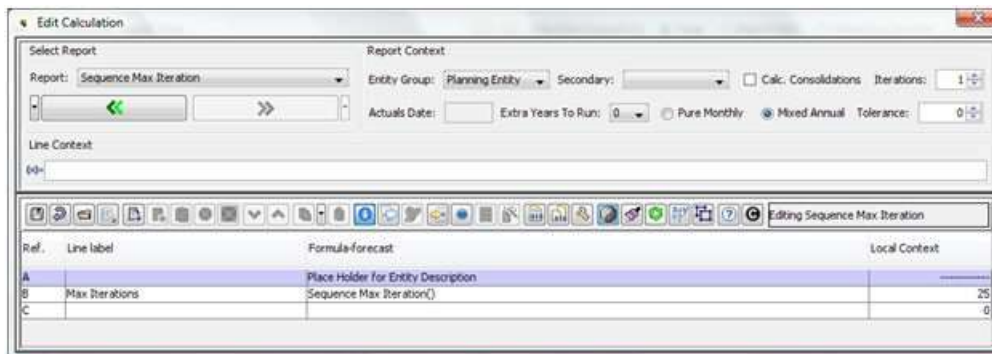
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Example:

The example below shows the **SEQUENCE MAX ITERATION** function. The financial report sequence is set to run a maximum of 25 times. The report returns this result.



Report Calculation



Report Results

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009
Chicago Electric							
Max Iterations	25	25	25	25	25	25	25
	0	0	0	0	0	0	0

{ XE "Tolerance Check Value for Repor" * MERGEFORMAT }{ XE "Function - Tolerance Check Value

for Report" * MERGEFORMAT }Function - Tolerance Check Value for Report

Function Description:

This function returns the maximum difference between iterations for this report.

This is defined as the largest change for any line for any entity in the last period processed. Note that this value is from the prior iteration, and is not really meaningful until the third iteration. Also note that the function does not return a value in the last period (the tolerance check period) because the value would by definition be the largest change for the report.

You might use this function to trigger or turn off processing of a report based on the check value for the report.

Parameters:

None

{ XE "Tolerance Check Value for Sequence" * MERGEFORMAT }{ XE "Function - Tolerance Check Value for Sequence" * MERGEFORMAT }Function - Tolerance Check Value for Sequence

Function Description:

This function returns the maximum difference between iterations for the current sequence.

The maximum change is defined as the largest change for any line for any entity for any report in the sequence in the last period processed. Note that this value is from the prior iteration, and is not really meaningful until the third iteration. Also note that the function does not return a value in the last period (the tolerance check period) because the value would by definition be the largest change for the sequence.

You might use this function to trigger or turn off processing of a report based on the check value for the sequence.

Parameters:

None

{ XE "Tolerance for Report" * MERGEFORMAT }{ XE "Function - Tolerance For Report" * MERGEFORMAT }Function - Tolerance for Report

Function Description:

Returns the tolerance setting for the current report (defined in *GROUP REPORTS*).

Parameters:

None

{ XE "Tolerance for Sequence" * MERGEFORMAT }{ XE "Function - Tolerance for Sequence" * MERGEFORMAT }Function - Tolerance for Sequence

Function Description:

Returns the tolerance setting for the current sequence (defined in *MANAGE SEQUENCE SETS*, under *ADVANCED PROPERTIES*).

Parameters:

None

{ XE "Transfer Export Line" * MERGEFORMAT }Function - Transfer Import Line

Function Description:

This function exports a line of a report for the T2 Text transfers between disconnected models. Lines you define with this function will be exported when you use the Publish T2 Text Transfer option on the Run Sequences screen.

Parameters:

- **Line to Export** - Select the report line that you want to export.

Example:

The screen prints below show an example of the T2 Export function. This report is run by Electric Revenue Schedule. It pulls in Total Revenue from the Electric Revenue Schedules report onto line B, and then calls that line to export.

Function - Transfer Input Line

Function Description:

This function is used to import data using the T2 Transfer functionality.

Parameters:

- **Line for Transfer Scenario Index** – Put the Index number of the related source scenario (this is set on the MANAGE SCENARIOS screen).
- **Report to Import** – Select the appropriate exported report.
- **Line to Import** – Select line containing the value you want.

Example:

The screen prints below show the T2 Import function in use.

Report Calculation

Report Results

Other

{ XE "Equation" * MERGEFORMAT }{ XE "Function" * MERGEFORMAT }Function - Equation

Function Description:

The *EQUATION* function is an internal function that is invoked when you type a formula in the *CALCULATION EDITOR* formula cell. You do not use the *FUNCTION EDITOR* to access this function.

Parameters:

None

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Example:

The screen prints below illustrate some of the capabilities of the **EQUATION** function. They are based on the reference line letter and the standard convention for the order of mathematical expressions. The elements of Report Formulas are:

- + Addition
- Subtraction
- * Multiplication
- / Division
- (Open Parentheses
-) Close Parentheses
- ^ Exponent

Report Calculation

Below are some examples of formulas you can create in the **CALCULATION EDITOR**. While you can build complex formulas following the standard conventions with parentheses, it is recommended that you follow the convention within UIPlanner of one function per line, and try to break complex formulas up into digestible pieces. See below.

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Input A	Input()
C	Input B	Input()
D	Input C	Input()
E	Input D	Input()
F		Label Only
G	ONE LINE	Label Only
H	A plus B times C minus D	(B:[Input A] + C:[Input B]) * D:[Input C] - E:[Input D]
I		Label Only
J	MULTIPLE LINES	Label Only
K	A plus B	B:[Input A] + C:[Input B]
L	Times C	K:[A plus B] * D:[Input C]
M	Minus D	L:[Times C] - E:[Input D]
N		Label Only

Report Results

Below are results of the above equations. Note that the same equation is shown in two variants: One line, and broken into several lines. The multi-step version is easier to understand.

Detail Model 2009-2013 Base Plan							
	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009
Alpha 1							
Input A	50	50	50	50	50	50	50
Input B	100	100	100	100	100	100	100
Input C	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Input D	25	25	25	25	25	25	25
ONE LINE							
A plus B times C minus D	50	50	50	50	50	50	50
MULTIPLE LINES							
A plus B	150	150	150	150	150	150	150
Times C	75	75	75	75	75	75	75
Minus D	50	50	50	50	50	50	50

{ XE "Set Attribute Value" * MERGEFORMAT }{ XE "Function - Set Attribute Value" * MERGEFORMAT }Function - Set Attribute Value

Function Description:

The **SET ATTRIBUTE** function allows you to actually change the value of an entity's attribute based upon the results of a **CALCULATION EDITOR** report. This function is available in Budget Scenarios only.

Notes

- After running the report sequence containing the **SET ATTRIBUTE VALUE** function, you need to click **SAVE** in order to save the attribute changes to the database.
- One of the parameters of the **SET ATTRIBUTE VALUE** function is the destination Attribute case. Be cognizant of which case you select to save the data, if you use multiple Attribute cases.

Parameters:

- **Line** – select the line in the current report containing the value you want to save to the attribute.
- **Attribute** – Use the drop-down list to select an attribute for the current report Entity Group.
- **Case:** Select the Attribute case in which to save the data. This drop-down list will contain the cases from the active scenario.

Example:

The screen prints below illustrate the use of the **SET ATTRIBUTE VALUE** function. This example shows the calculation of a project score in a report, which is then saved back to the database. Generally, you would use this function in a separate report sequence, one that would not be

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run every time. You would run this sequence, then select **Save** and update the attribute as desired.

Report Calculations

Ref.	Line label	Formula-forecast
A		Place Holder for Entity Description
B	Priority	Input()
C	Level of Effort	Input()
D	IRR	Input()
E	Composite	(B + C) * (D * 10)
F		
G	Set Project Score	Set Attribute Value(E:[Composite],Project Score,Change Attributes)

Report Calculation

Drilldown E:[Composite] - CHI Elec Dist P&G Plant 120V Lateral Extension (Jan/2009)

Equation = 3.00

([B:Priority] 1 + [C:Level of Effort] 1) * ([D:IRR] 15.00% * 10)

Detail Model 2009-2013 Base Plan	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009
CHI Elec Dist P&G Plant 120V Lateral Extension									
Priority	1	1	1	1	1	1	1	1	1
Level of Effort	1	1	1	1	1	1	1	1	1
IRR	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Composite	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Set Project Score	0	0	0	0	0	0	0	0	0
CHI Nuclear Production Glower Air and Vacuum Sys...									
Priority	2	2	2	2	2	2	2	2	2
Level of Effort	1	1	1	1	1	1	1	1	1
IRR	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
Composite	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Set Project Score	0	0	0	0	0	0	0	0	0
CHI Other Production Blankets (341-346)									
Priority	3	3	3	3	3	3	3	3	3
Level of Effort	2	2	2	2	2	2	2	2	2
IRR	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Composite	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Set Project Score	0	0	0	0	0	0	0	0	0

The screen print below shows the Project Score Attribute has been updated, to the values calculated in the above report.

Select Super Group: Detailed Model | Select Entity/Edit/Report Group: Model Project | Select Attribute or Case: Project Score

Assign Values for Selected Attribute [Right Click to Copy, Fill, & Export]

Object description	Winner	Base Attribute Case	Change Attributes
CHI Elec Dist P&G Plant 120V Lateral Extension	3.0		3.0
CHI Hydro Production Blankets (331-335)	0.0		0.0
CHI Hydro Production Fox River Turbine Enhancem...	0.0		0.0
CHI Hydro Production Land Blankets (330)	0.0		0.0
CHI Nuclear Production Blankets (321-325)	0.0		0.0
CHI Nuclear Production Glower Air and Vacuum Sys...	3.0		3.0
CHI Other Production Blankets (341-346)	7.5		7.5
CHI Software Blankets	0.0		0.0
CHI Special	0.0		0.0

GLOSSARY

A

Account: Planning Ledger objects used to accumulate postings from reports, and inputs for actual. Accounts in the planning ledger are similar to accounts in a General Ledger.

Account Roots: Highest level of Planning Ledger Rollup Nodes. Required structure of the highest Planning Ledger Rollup Node. Revenue, Expense, Net Income, Asset, Liability, Direct Cash, and Indirect Cash.

Account Structure: Defined rollup nodes and accounts defined in the Planning Ledger.

Account Structure Tree: See Account Structure

Actuals Date: Date which designates when actual data should be used in UIPlanner.

Amount Types: Each budget row may be displayed using any number of amount types. Typically, amount types are loaded; Direct dollars, FTE, Hours, and loaded dollars. Amount types express the same budget row value.

Association: Special attribute for an entity group which points to another entity group. Example: The entity group Generation units could have an "association" or pointer to the Plant Type entity group.

Attribute Data: Facts about an entity. Attribute are assigned to the Entity Group. Attribute data is then entered for each entity.

Attribute Definition: Placeholder for facts about entities. Attributes are assigned to the Entity Group. Attribute data is then entered for each entity.

C

Calculation Grid: Grid found on the Edit Calculation screen that contains the lines of a report

Case Definition: Information about a case, i.e., Name, Description, Type, Owner, etc.

Consolidation Sum: Totals at the bottom of a report summing a report line for all entities.

Customer Data: Customer billing determinates, or results of tariff calculations.

D

Default Rollup Structure: Primary Planning Ledger Rollup Structure. Structure will be used by the Account Function.

E

Entity: Building blocks for structured data within UIPlanner. Entities are specific elements of an Entity Group. Example: John Hancock, John Doe, Sally Johnson are Entities in the "Employee" Entity group. Example 2: Generation plants French 1, French 2 and Dunes are "Entities" in the Generation Entity Group.

Entity Group: A collection of Entities with identical data structure. Example: Individual employees John Hancock, John Doe, Sally Johnson are Entities in the "Employee Entity Group". Example 2: Generation plants French 1, French 2 and Dunes are Entities in the Generation "Entity Group."

Entity Group Tree: Entity Group Structure, where the highest node is Super Entity Group, followed by Entity Groups, and finally Entities.

Excel Input Template: Excel spread sheet created for data entry of Input items for a report.

F

From report: Parameter used by the Rollup function. From Report and report line is the target of the rollup function.

Function: Pre-programmed routines to accomplish specific tasks on the Calculation Grid. Report functions are similar to functions in Excel using parameters as input for function arguments. Example: The "current date" function will return year and month.

I

Interface mapping: Process of mapping large amounts of external data to UIPlanner. Interface mapping generally exists to import actual general ledger and budget data.

Iteration: Number of times UIPlanner runs a report or sequence of reports.

Iteration Across: Setting on the Sequence Reports screen. Iteration Across will run each report in sequence order for all time periods before running the next report.

Iteration Down: Setting on the Sequence Reports screen. Iteration Down will run all reports in sequence for the first time period, all reports for the second time period, etc., for all time periods specified..

Iteration Method: How reports in a sequence are run, either Iteration across or Iteration down.

L

Lag Factors: Monthly factors (percents) representing cash receipt or payment for an accrual transaction posted to the planning ledger. Lag factors normally total 100 percent and make up a Lag Pattern.

Lag Pattern: A specific pattern of cash receipt or payment related to an accrual transaction. The lag pattern is represented by monthly lag factors

M

Menu Item: Row at the top of the UIPlanner screen contains menu items. Each menu item contains a drop list of screens or options.

O

Object: Elements of the database. Object refers to elements of the UIplanner database, i.e., Entities, Reports, Cases, Accounts, Account Rollup nodes, Report groups, etc.

P

Planning Ledger: Similar to a General Ledger. The Planning ledger contains results of forecasted financial information generated by UIPlanner.

Pointer to another Entity: Establishes a relationship between two Entity Groups. Also called an Association to another Entity Group.

Pooled Resource: Entity in the Special type entity group, i.e., "Resource" that has a value of "Yes" in the "Pooled" attribute.

Primary Entity Group: The first Entity Group used when a report is run over two entity groups. See also: Secondary Entity Group.

R

Report Batch Tree: Tree structure displayed on the Browse Reports screen. The tree is made up of Report Batch, Report Group, Report (and Entity, if specified).

Report Elements: Parts of a report, i.e. Lines, Line labels, Totals, Consolidation Totals, etc.

Report Entity Group: The Entity Group used in a specific Report.

Report Group: Group of common or related reports, created on the Group Reports screen.

Rollup Node: Grouping of accounts or other rollup nodes in the Planning Ledger. Rollup Nodes can be called in a report using the Account Function.

Run over: Reports "run over" an entity group or in some cases two entity groups. Run over is used to describe the processing of data for all entities in an entity group by a report.

S

Saved Search: Search criteria for detailed customer data, defined on the Customer Browser screen.

Scenario Definition: Information about a scenario, i.e., Name, Description, Type, Owner, etc.

Screen: Dialog box opened by UIPlanner to create, view or input data into the system.

Screen Tab: Contains a UIPlanner screen. Tabs are created upon the initial selection of a screen from the menu item list.

Secondary Account Structure: Additional account structures. The Planning Ledger has a primary account structure, and options to create any number of secondary account structures.

Secondary Entity Group: The second Entity Group used when a report is run over two entity groups. See also: Primary Entity Group.

Sequence: Defines the run order of reports. Reports are placed in a sequence before they can be run.

Sequence Set: A defined set of report sequences.

Special Type Entity Group: Contains specific information used in the processing of data in UIPlanner. Unlike typical Entity Groups, Special Type Entity Groups are required to contain specific information used in the interworking of UIPlanner logic.

Super Entity Group: A grouping of Entity Groups. Super Entity Groups are used to organize Entity Groups into sets.

T

Tab: See "Screen Tab"

Time Dependent Data: Data that changes over time typically, i.e., monthly or annual information. Time Dependent Data is always saved in UIPlanner by entity and report line.

Tolerance: Degree of precision checked by UIPlanner when running iterative reports or sequences. See Iteration.

W

Winner logic: Rules applied to multiple cases in a scenario to determine, in a logical manner, what data should be used in the model run. Winner logic selects the "winner" datum from all cases in the scenario.

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