BI360 - Planning

User Guide 4.5

Published: December 31, 2014
For the latest information, please visit our support site:
support.solverusa.com

Follow Us

Table of Contents

Introduction

BI360 *Planning* is an Excel-based data entry tool and a component of the BI360 Suite from Solver, Inc. that is typically used for budgeting and forecasting. *Planning* can be used to store data entered directly into an Excel cell(s) and back to the Warehouse or with the assistance of the *Planning* data entry window. The data entry window assists users with data spreading, line item details, comparative analysis and several other input helpers.

Who should read this Manual

This manual is designed for all BI360 users, from administrators to end-users. Administrators may be responsible for tasks such as configuring the *Planning* templates and creating and managing Assignments. End users may be responsible for inputting data through the use of the *Planning* data entry window.

Additionally, the Solver Knowledgebase is a great resource for information on this product. Inside the Knowledgebase you will find technical articles, how to and features of the product that you may not have been aware of. The Knowledgebase is constantly growing with new content added weekly.

What is included in this Manual

This manual is designed to give an in-depth understanding of how to use the features of BI360 *Planning.* The manual is divided in the following parts:

1. Overview: Introduction to BI360 *Planning.*
2. Configuration: Explanation of how to setup and configure *Planning*, such as setting up input templates and creating Assignments.
3. Using *Planning*: Explanation of how to use the *Planning* data entry window, such as spreading data, entering line item details, and taking forms offline.

Symbols and Conventions

This manual uses the following symbols to make specific types of information stand out.

Symbol	Description
	The sunlight symbol indicates helpful tips, shortcuts, and suggestions.
	The warning symbol indicates situations we recommend to be aware of when completing tasks. Typically, this includes cautions about completing steps in their proper order or important reminders about how other information in BI360 may be affected.

Installation

Please consult the BI360 *Installation Guide* for details on installing the *Planning* add-in. the *Installation Guide* can be found at http://support.solverusa.com/. Once logged into the Solver support site, click on the Downloads from the Solver Support site header. Under Current Versions will be a link to the installation documentation.

ERP systems used by the organization must be integrated into the BI360 *Data Warehouse* so that *Planning* can access the proper data. Some of the integration methods include the following:

- Direct import via the *Data Warehouse Manager* Interface import wizard.
- Automated SQL Server Integration Services (SSIS).
- Manual entry (useful when certain dimensions do not exist in the source system).

Prior to using *Planning*, consult a Solver Consultant to determine the best method of the ETL process.

Users must have access to the following locations. This is required because necessary configuration and storage files are found in these locations.

Windows XP [1]	Windows Vista/7/Server 2008[1]
C:\Documents and Settings\All Users\Application Data\Solver BI360\Planning	C:\ProgramData\SolverBI360\Planning
C:\Documents and Settings\UserName\Application Data	C:\Users\Username\AppData

Notes:

1. *All OS bit versions*

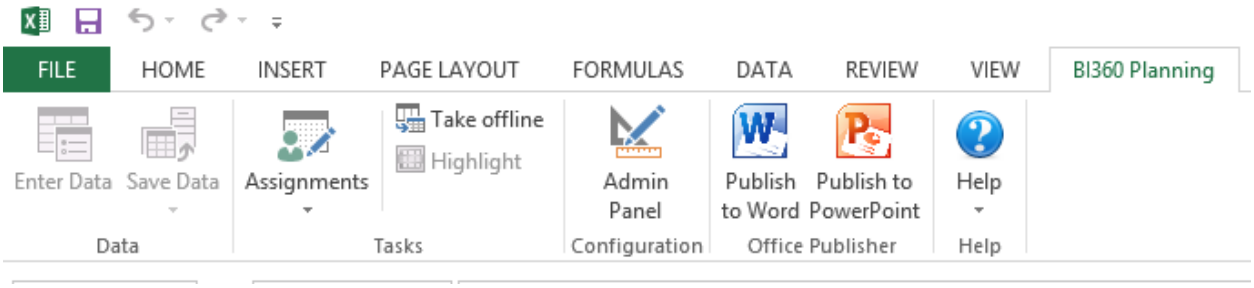
"UserName" refers to the user login in with Windows authentication

Planning Overview

BI360 *Planning* consists of an Excel ribbon, Assignment Task Pane, and a *Planning* data entry window; each of which is detailed below. All administrative and user sub-menus are accessible from the *Planning* ribbon.

Planning Ribbon

The BI360 *Planning* ribbon consists of the following tab groups (from left to right on the ribbon)



1. Data
    a. **Enter Data**: Opens the *Planning* data entry window for spreading, comments, line-item details, comparative analysis and more.
    b. **Save Data**: Saves data for the current Excel sheet or the entire workbook.
2. Tasks
    a. **Assignments**: Opens a task pane on the left side of the Excel screen where the end-users can locate workbooks (e.g. a budget file) assigned to them by an administrator
    b. **Assignment -> Change default connection**: Allows the user to select the database with Assignment information. Moreover, users can override the report connection by using the '**Advanced option'.**
    c. **Take Offline**: Active on a static Excel sheet. The user can click **Take Offline** to continue working on the input form (including Line Item Details) while disconnected from the server. Once the user is connected to the database, they can click on the **Online** button and then **Save Data** to the database. This feature embeds all line item details into the Excel sheet. The user may continue to use *Planning* except for the saving to the database. Please reference Deployment for more details on how to use Offline/Online feature.
    d. **Highlight**: When triggered, this feature will highlight rows that contain line item details.
3. Configuration:
    a. **Admin Panel**: Opens a task pane where the administrator can create and change the settings for the workbook. The settings are related to how the Excel workbook writes data to the *Data Warehouse* and displays information in the *Planning* data entry window.
4. Office Publisher: (optional component to convert Excel worksheets to Word/PowerPoint)
    a. **Publish to Word**: this option enables users to create tags to create Word documents based on the Excel worksheets. See the *Office Publisher User Guide* for more details.

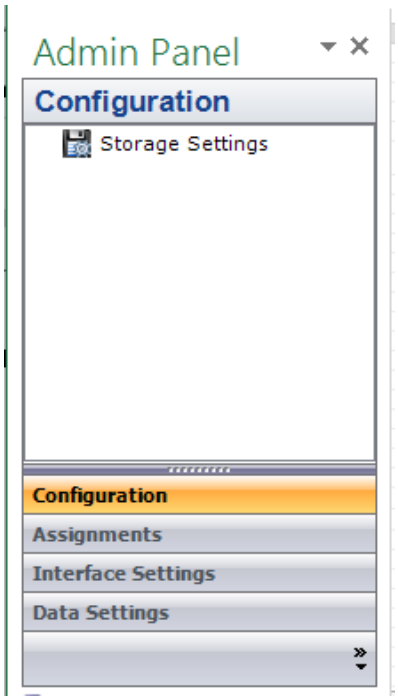
b. **Publish to PowerPoint**: This option enables users to create tags to create PowerPoint presentation based on Excel worksheets. See the *Office Publisher User Guide* for more details

5. Help
    a. **Help**: Connect to the Solver Support center where you can login to download the software, templates, documents and watch tutorial videos.
    b. **About**: Displays the version of *Planning* that is currently running as well as Solver contact information.

The following will describe the features found in each tab group.

Admin Panel

Once the **Admin Panel** is opened, users will have four options:



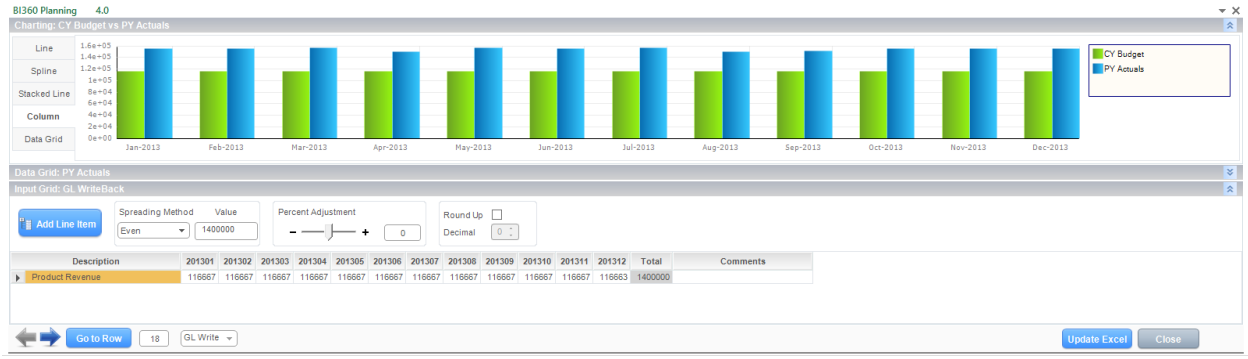
1. **Configuration**: Define the storage settings for the Planning sheet.
2. **Assignments**: Administrator can set up links to the Excel workbooks and supporting documentation that they want end users to see when users click Assignment in the *Planning* ribbon.
3. **Interface Settings**: Administrators can configure how the *Planning* data entry window displays information. Also, optional features may be enabled and disabled here; such as comparative analysis, charting and the Line Item Details feature.
   This feature is inactive unless working with a Planning template.
4. **Data Settings**. Administrators can configure a *Reporting* template to become a *Planning* template. Administrators map fields found on the Excel sheet that are required in order to store data back to the *Data Warehouse* database.

This feature is inactive unless the user is working with a Planning template.

Planning Data Entry Window

The *Planning* data entry window (see image below) is an optional way of entering data into Excel. The window is accessible by clicking **Enter Data.** Users may type their information directly into Excel or they may enter data with the use of the *Planning* window. The data is saved back only to the Excel workbook after input and not to the database. Users must select **Save Data** to save the data back to the database. When designing input templates based on a monthly input format, the *Planning* window is a powerful tool for the following:

1. Automatic spreading of numbers across many cells in Excel. Many spreading rules are available, including rules that can use prior year's actual data or seasonal trends as a base.
2. Input of text comments at the row or line item detail level.
3. Input of multiple rows of line item details below a single row in Excel (e.g. the user can list many business trips that automatically will roll up to a single travel expense row in Excel).
4. Automatic charting of the current row in Excel and comparison to another row with historical data.



Assignments

The Assignment feature within *Planning* enables Administrators to create assignments for end-users to complete. The assignments are typically the *Planning* template used for inputting budget and forecast figures. Assignments may also include references to most other file types, such as Word, PDF and web links. Assignments may be organized into folders of multiple-levels to create a workflow for users to follow.

Below is a list of some of the features available through the Assignments feature:

1. Easy access to Excel files and documentation.
2. Users can view deadlines for each assignment.
3. Assignments may be displayed to certain users only.
4. Data storage is locked depending on the assignment status.
5. Users may view general instructions related to each assignment.

Configuring BI360 Planning

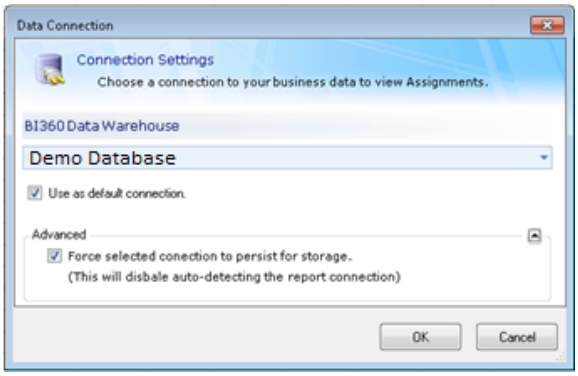
Planning requires minimal configuration to set up and use. The configuration is retained within the Excel workbook as the hidden tabs *Data Settings* and *Interface Settings*. Moreover, line item details and storage settings are stored in an XML file. It is important to note that numerical values and comments of the line item details are the only data values stored back into the database. Spread methods and percentage adjustments are not stored in the *Data Warehouse* and will not be available for viewing after saving the data.

The following will guide users through making a connection, accessing the Admin Panel and configuring an Assignment

Connection Settings

The first step in using BI360 *Planning* is to create a connection to the database. If a *Planning* template is opened, the connection associated with it will be inherited when *Planning* is opened. This connection will also be used when accessing Assignments or the Admin Panel

If an end-user opens a blank Excel sheet and select **Assignments**, the end-user will be prompted for a connection.

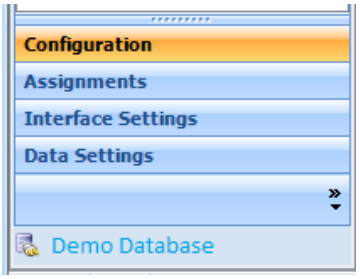


The dropdown arrow will populate all available connections that have been configured in BI360 *Reporting*. If the connection should be the default connection for the Assignment information, then the **Use as default connection** option should be check marked. Otherwise this window will be prompted every time the user clicks on **Assignment.**

Users may also override the *Reporting* connection setting within *Planning.* This may be necessary if one report is used to write back to multiple databases. Often times, the database containing the Assignment information is the same as the database BI360 *Planning* is writing back to. However, in special cases where the Assignment information is located on a different database, users may change the connection by clicking the arrow below the Assignment button on the BI360 *Planning* ribbon and selecting **Change default connection.**

If the Administrator chooses to override the inherited report connection for storage, the **Advanced** feature may be used. The connection selected in the dropdown box will always be the connection used

to store the data. The database used for storage will always be displayed at the bottom of the Admin panel, as show in the image below.



Admin Panel

Once a connection to the database has been established, Administrators may access the Admin Panel. Access to the Admin Panel is granted by giving a user "Planning Admin" permissions from User Management in Data Warehouse Manager. Please reference the User Management section of the Data Warehouse Manager User Guide for more information.

As previously mentioned, the Admin Panel has four core features available to the user: Configuration, Assignments, Interface Settings and Data Settings. The rest of this section will explain the functionality of each feature.

Configuration - Storage Settings

After the user selects Storage Settings, a new window will be displayed. From this window, users may configure the storage method for each sheet. Note that the Sheet selection dropdown box only populates sheet names that contain a configured data grid.

There are two storage settings:

1. Store Changes: *Planning* is designed to track input changes and dependent calculations within a single data grid. *Planning* keeps track of each change by storing the cell location within memory. This setting will help enhance performance when storing data by limiting the data stored back to the Data Warehouse.
2. Force Storage: In certain scenarios, a budge template may be designed such that the input cell is not part of the same data grid where dependent calculations are located. For instance, if two grids may be configured on different sheets, where one grid may store detail data to an optional module and the other grid may store summary data to the GL module. If the detail inputted updates the calculations located in the summary grid, *Planning* will not track the changes. In this case, the **Fore Storage** option will be required. Force store will store all cells within all *Planning grids located on the worksheet.*

Note: Since this is the default setting, there is no need to change and save the setting unless Store Changes is required.

Planning has seven (7) flags stored in the sheet. They can be found in Row 1, columns 256-261. The following describes the functions of each flag.

Column #	Description
1	The sheets encrypted password. This is referenced when templates are taken offline.
256	This flag is used for determining whether the Line Item Details (LID'S) should be refreshed from Database or from the XML. When saving the data to database i.e. Save Current Sheet/Workbook the flag is updated to '0' and upon selecting Update Excel the flag is updated to '1'. When refreshing the LIDs we check the flag to determine whether we have to get the LIDS from the database or from XML.
257	When management comments are updated the flag in this cell is set to 1. When we save the data we check if the flag in this cell is '1' only then we save the Management comments. This feature has been deprecated in version 3.6 and newer.
258	When Approval status is updated, the flag in this cell is set to 1. When we save the data we check if the flag in this cell is '1' and only then do we update the Approval status in the database.
259	This flag is used for enabling/disabling the Save button. In case of Store changes when any of the cells are edited this flag is set to '1' and the save button is set to Enabled.
260	This flag is used to clear the in-memory edited cells changes. In case of store changes the edited cells data is stored in the memory, however when a report is re-executed (without saving the data), the edited cells records need to be cleared from the memory.
261	This flag is used by the application to detect whether the Planning window was closed when the report was re-executed.

Planning Settings

Introduction

In order for BI360 Planning to fetch and store data back to the BI360 database from Excel, the user must create “Planning Settings”. Planning Settings are composed of two components, the Data Settings and the Interface Settings. By configuring the Planning Settings, the user is converting their Reporting templates into forms that can store data back to the BI360 database and do advanced budgeting such as Line Item Details.

It is recommended to keep Reporting templates separate from Planning templates. One template should not be used for both storage back to the BI360 database and to do monthly reporting.

The Planning Settings require the use of Row1 and Column A. These cells must be clear of all content.

The Data Settings menu allows the user to define the dimensions and the data to be stored back to the BI360 database.

The Interface Settings menu is used to configure the Planning Data Entry Window, also referred to as the Planning Window. This window displays one row at a time and is only available when enabled in the Data Settings and configured in the interface settings.

The Planning Window is built to work with templates built for monthly budgeting and is not designed for daily budgeting templates.

Data Settings

The Data Settings are used to map where values to be stored back to the BI360 database are located on the Excel sheet. Each sheet can consist of multiple Data Grids, keeping in mind that the more Data Grids per sheet, the slower data storage will be. A Data Grid is a single set of data to be stored back to the BI360 database.

It is recommended to plan out the design, function and goals of each Planning template so that the form is easy to create, maintain and has good performance.

Data Settings requires the use of the "ignore syntax" which tells the application to ignore values found in a particular row or column. The ignore syntax is designated with an "I" (or "i") placed in the corresponding row 1 or column A that contains data to be ignored. As an example, the "Total" column of the Planning template contains a value that will not be stored back to the database. To tell Planning not to store that value, place an "I" in A# that corresponds to the Total column. This concept will be discussed in more detail in the Exercise portion of this user guide.

The Data Settings menu contains three sections:

1. **Data grid header information**
    a. Users can create a user defined name for the data grid, set the module the data grid will store data to, map the cells where value to be stored back to the database will be referenced, add optional dimensions and enable the Planning window.
2. **Dimension mapping**
    a. Users map the dimension references to the Excel cells.
3. **Writeback field mapping**
    a. Users map the storage field references to the Excel cells.

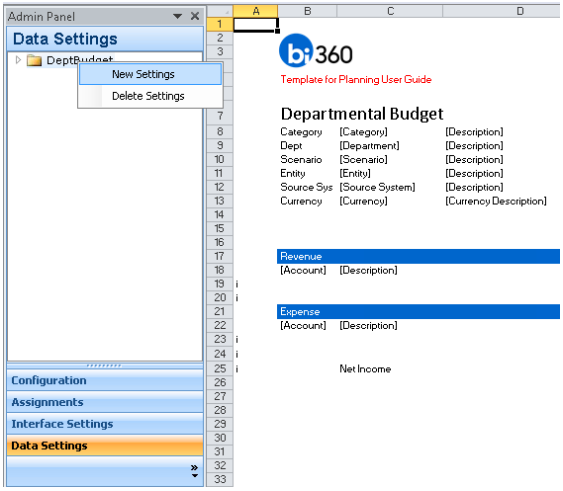
These features will be discussed later on in this section.

Data Settings Window

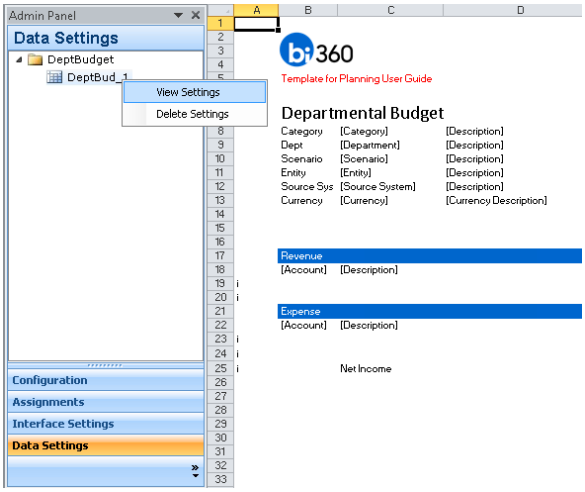
To access the Data Settings window, click **Admin Panel** found in the BI360 Planning ribbon. Once the Admin Panel has opened, select the **Data Settings** tab found at the bottom of the Admin Panel. If the tab is greyed out, it is because the file that is open is not a BI360 Reporting template.

An Excel sheet must be open in order to open the Admin Panel.

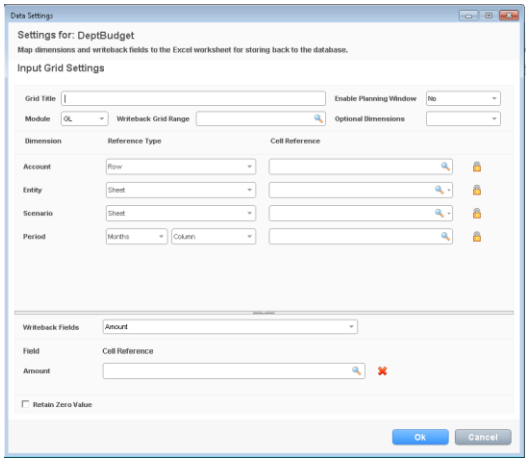
Upon clicking the Data Settings tab, the sheets currently available in the Excel workbook are visible. Right click on the sheet that will be used for budgeting and click **New Settings** to open the Data Settings menu.



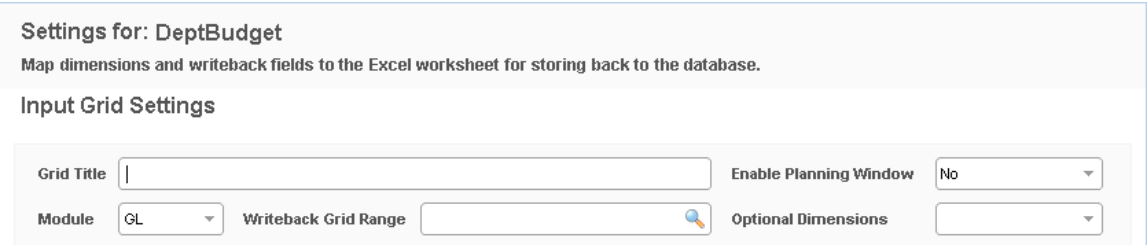
If Data Settings already exist, click the arrow icon to the left of the sheet name to expand the list of all of the created data grids. Double click (or right click- View Settings) the specific Data Settings to view its configuration.



Once the Data Settings menu has opened, the user will see the following interface.



The menu can be divided into three sections as mentioned before. The first section, the data grid header, displays global Data Settings information.

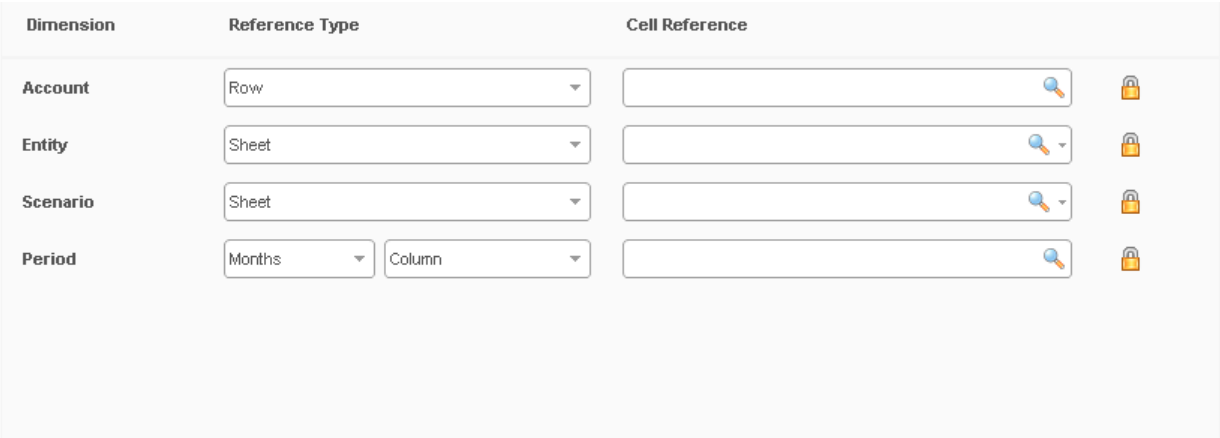


The top section displays the name of the sheet that the Data Settings is being configured for. The following is a description of the other available fields.

Field	Description
Grid Title	A user defined name given to describe the specific Data Grid. When creating the grid title, consider being specific about the grid name when multiple data grids will be created.
Enable Planning Window	Set the Planning Window to enable or disable by using the drop down. If it is desired that the user enter budget numbers directly into Excel, then this field should be set to “No” (default). If it is desired that users will need advanced budgeting feature such and even or quarterly spread and graphical, line item details or graphical analysis, the set this option to “Yes”.
Module	The module dropdown will display all available modules as configured in the BI360 Data Warehouse Manager. Once a module has been selected, the dimensions that are set to mandatory are automatically populated in the window.
Writeback Grid Range	The Writeback grid range is the Excel cell range where users will be entering budget numbers. This range of cells is typically the cells for direct input or where calculated values will be created and need to be stored back to the BI360 database. This range should include all values, comments and user defined fields specified for that grid. The grid range can contain multiple different storage values which will be mapped in the Writeback.
Optional Dimensions	Optional dimensions are those dimensions that have been added to the module but are not mandatory. Select the dimensions that will necessary for storage for the data settings being configured.

The Writeback Grid Range should include a row that will always render. If you map the first row where data will appear, it is possible that BI360 application security may prevent this row from loading and resulting in an error message. This concept will be explained in detail in the Example section.

The next section of the Data Settings menu is the dimension mapping section. Here, users map the dimension references to the Excel Sheet.



There is one field that needs to be filed out, Cell Reference. The Reference Type column will auto-populate the proper reference type based on the cells selected.

Field	Description
Dimension	A list of all dimensions selected for this data settings. This includes both required and optional dimensions.
Reference Type	Reference type defines how the dimension will appear on the sheet. • Row: The dimension will render on each row. Typically account codes are rendered per row. A row reference type occurs when two rows are selected for the dimension. • Column: The dimension will render in each column. Typically periods are rendered per column. A column reference type occurs when two columns are selected for the dimension. • Sheet: The dimension is a global dimension and applies to all transactions. Category is typically a global dimension. A sheet reference type occurs when only once cell is referenced.
Cell Reference	Users have a couple ways to reference the dimension. They may click the lookup icon and the select cells, click the dropdown arrow and select a dimension using the *Lookup DIM Code* or they may type in the dimension code into the textbox.

It is recommended to have as many Sheet Reference types as possible. This increases storage performance.

The bottom section of the Data Settings menu is the writeback field mapping. Here, the user references the cells where the values and/or text that will be stored back to the database will exist on the Excel sheet

The following is a description of the fields that are available.

Field	Description
Writeback Fields	Click the dropdown to view and select all available modules attributes. Select only the module attributes that relate to the dimensions mapped above.
Field	A list of all module attributes that have been added.
Cell Reference	Click the lookup icon to map the cell reference where the module attribute can be found. Keep in mind that if the report is expanding, then you need to map this module attribute one cell over and/or down. By default, Amount is populated with the writeback grid range mapping. If there are more module attributes that have been added to this section, then it is important to edit the Amount mapping to only reference where Amount exists on the Excel sheet.
Retain Zero Values	Select this option if it is necessary for the data settings to store “0” back to the database. This feature is per Data Settings and does not affect other Data Settings that have been configured for the sheet. This option is not selected by default. • This feature only stores “0”. If the cell is blank then the value will not be stored as a “0”. If you have a “0” in a cell and clear the value out of the cell, the value will be removed from the database. • “0” values cannot be stored at the Line Item Detail level.

Interface Settings

The Interface Settings menu is used to configure what is displayed in the Planning window. The Interface Settings option is only available for data grids that have the Enable Planning Window set to “Yes”. The mappings that are added in this menu only refer to the information displayed in the Planning Window and does not affect the data that is stored back to the BI360 database.

The Planning Window is built to work with templates built for monthly budgeting. It is not designed for daily budgeting templates.

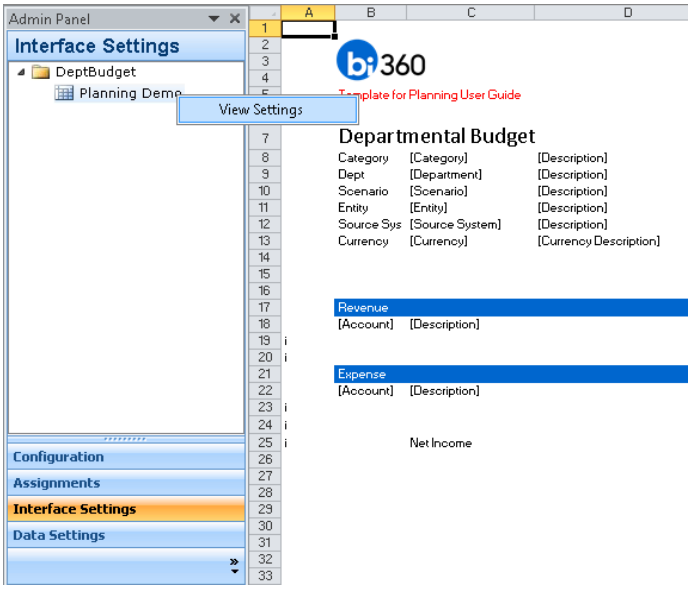
The Interface Settings window is divided up into 4 tabs. Each tab represents a different component of the Planning window and may be disable or enabled (if available). Each section will be described in more detail late on in this section.

1. **Input Grid Component**
    a. Configure the input grid component of the Planning window where data will be stored back to the BI360 database
2. **Comparative Grid Component**
    a. Configure the comparative grid component of the Planning window.
3. **Chart Grid Settings**
    a. Configure the charting component of the Planning window. This grid will create a visual analysis of the desired fields.
4. **Additional Settings**
    a. Configure the Planning window slider and choose whether or not to display comma separators.

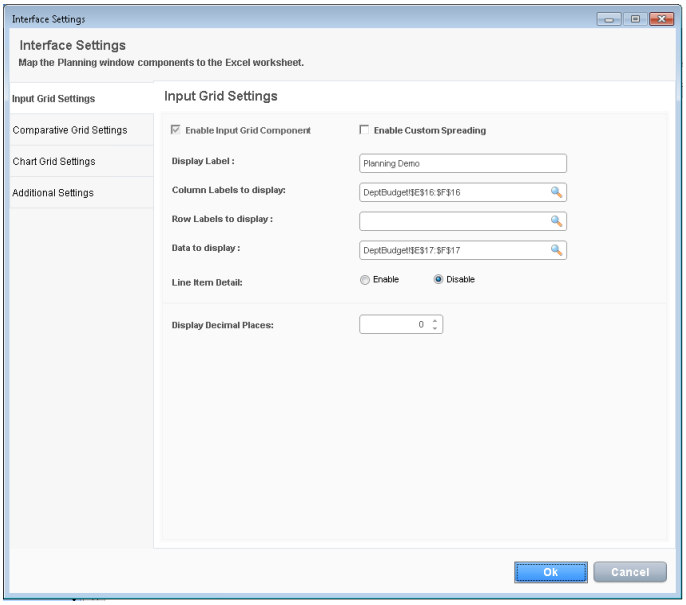
Interface Settings Window

To view the Interface Settings, click on the Interface Settings option found in the Admin Panel. Expand on the sheet that Data Settings were previously configured for and double click (or right click -> View Settings) to open the Interface Settings menu.

As mentioned above, it is recommended to select rows that will always render.



The below Interface Settings menu will appear in the center of Excel.

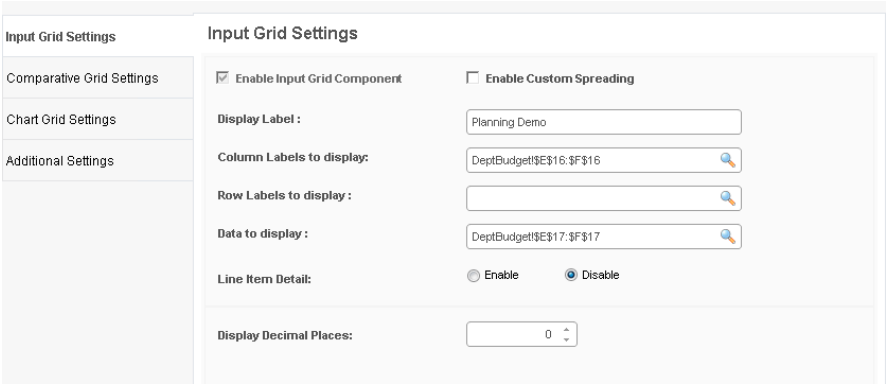


There are four tabs to become familiar with. The following is a brief description of each tab.

Tab Name	Description
Input Grid Settings	Configure the input grid component of the Planning window. This grid references the data entry section of the Planning Template. This field is always enabled.
Comparative Grid Settings	Configure the comparative grid component of the Planning window. This grid references data that is to be compared to the input grid. Typically, the data mapped here is the Prior Year Actuals or Budget. The number of cells referenced here must match the number of cells of the input grid.
Chart Grid Settings	Configure the charting component of the Planning window. This grid will create a visual analysis of the desired fields. Typically, this will be the input and comparative data, but users have the ability to have up to six data series in the charting component. Additionally, there are different chart types: • Line • Spline • Stacked Line • Column • Data Grid
Additional Settings	Configure the Planning window slider and turn on comma separators.

Input Grid Settings

The first tab, the Input Grid Settings, should be mapped to the cells that have been referenced in the Data Settings. This is because user will use the Planning window and its advanced budgeting features to paste values into these cells and store them back to the BI360 database.



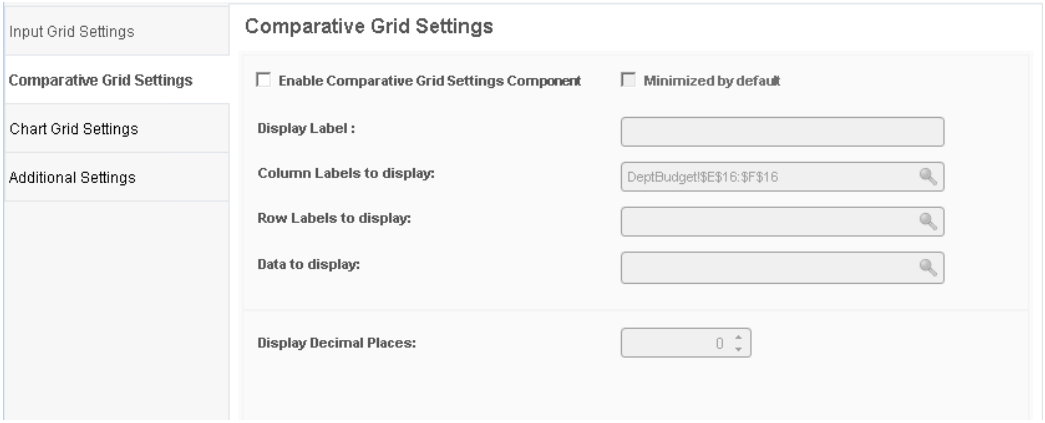
The following are descriptions of each of the available fields:

Field	Description
Enable Input Grid Component	Enabled by default. This is a mandatory feature of the Planning Window.
Enable Custom Spreading	Select this field to enable custom spreading within the Planning Window. Custom spreading works by reading the number of periods per fiscal year and then dividing the value entered by the number of weeks per period to get the proper distribution.
Display Label	A user friendly name for the input grid of the Planning Window
Column Labels to Display	Reference the columns to be displayed in the Planning Window. This is typically the Periods. • If using expanding columns, remember to select one extra cell to the right to account for expansion during run time. • This must match or exist within the number of columns referenced in the Period mapping of the Data Settings.
Row Labels to Display	Reference the row(s) to display in the Planning window. This is typically the Account and Account Description rows. Users may reference one or two cells that are on the same row
Data to Display	Reference the rows where data should be pasted from the Planning Window to the Excel sheet. This is typically the first row of the cells mapped in the data settings.
Line Item Detail	Enable or Disable the Line Item Details feature of the Planning Window. Line Item Details allow users to input details about a transaction to sum up to a value. The Line Item Detail and the Summary data are both stored back to the database.
Display Decimal Places	Define the number of decimals to display and to store back to the BI360 database. By default this value is set to 0 but may be set to 16 decimal places.

Comparative Grid Settings

The second tab of the Interface Setting is the Comparative Grid Settings. This allows users to configure a portion of the Planning Window that is typically used to display comparative data to the Input Grid Settings.

Click **Enable Comparative Grid Settings Component** to enable the feature and map the fields.



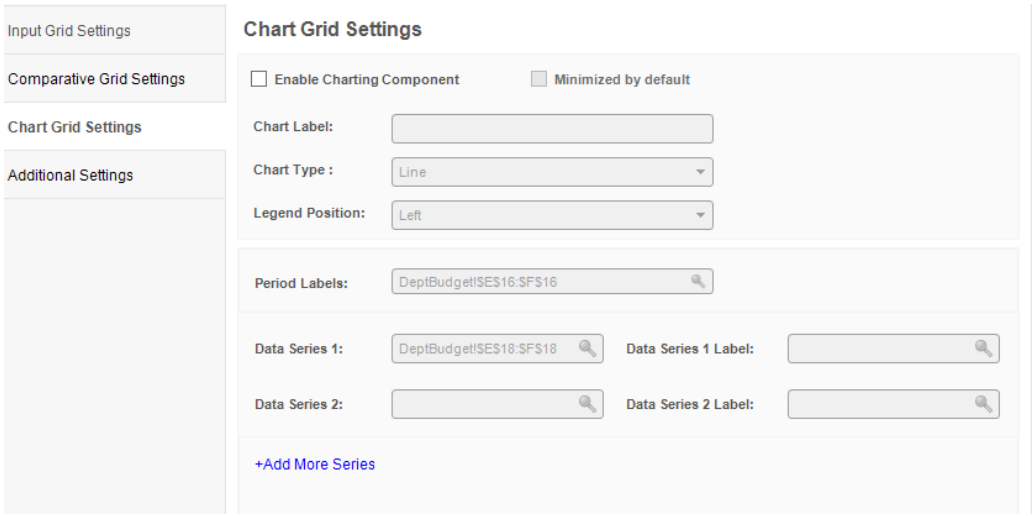
The following are descriptions of each of the available fields.

Field	Description
Enable Input Grid Component	Click to enable the feature.
Minimize by default	Select this field to keep this component of the Planning window minimized by default. By selecting this feature, the data is minimized upon opening the Planning Window, make better use of the space for the input grid component. When the user is ready to view the comparative data, they may expand the comparative grid component.
Display Label	A user friendly name for the comparative grid of the Planning Window.
Column Labels to Display	Reference the columns to be displayed in the Planning window. This is typically the Periods. • If using expanding columns, remember to select one extra cell to the right to account for expansion during run time.
Row Labels to Display	Reference the row(s) to display in the Planning window. This is typically the Account and Account Description rows. Users may reference one or two cells that are on the same row.
Data to Display	Reference the rows where data should be pasted from the Planning Window to the Excel sheet. This is typically the first row of the cells mapped in the data settings.
Display Decimal Places	Define the number of decimals to display and to store back to the BI360 database. By default this value is set to 1 but may be set up to 16 decimal places.

Chart Grid Settings

The third tab of the Interface Settings in the Chart Grid Settings. This section allows users to configure different types of charts for visual analysis. The user may have up to six data series to be displayed in a single chart.

Click **Enable Chart Grid Settings Component** to enable the feature and map the values.



The following are descriptions of each of the available fields.

Field	Description
Enable Chart Grid Component	Click to enable the feature.
Minimize by default	Select this field to keep this component of the Planning window minimized by default. By selecting this feature, the data is minimized upon opening the Planning Window, make better use of the space for the input grid component. When the user is ready to view the comparative data, they may expand the comparative grid component.
Chart Label	A user friendly name for the charting grid of the Planning window.

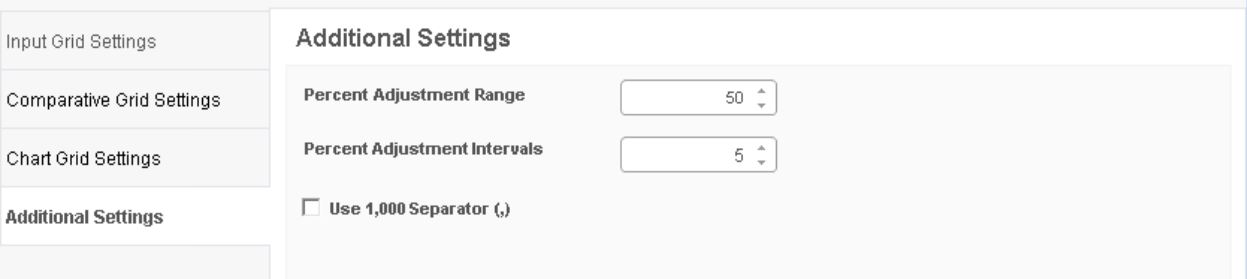
Chart Type	Select the default chart type. Upon opening the Planning window, the chart type selected here will appear. All other chart types will be available in the Planning Window.
	• The chart types available are
	  ○ Line
	  ○ Spline
	  ○ Stacked Line
	  ○ Column
	  ○ Data Grid

Legend Position	Define where the chart legend will appear in the charting component of the Planning window
Period Labels	Reference the rows where the periods to be shown in the chart are located.

	• If using expanding periods, remember to select one more cell to the right take account for expansion.
Data Series X	Reference the first row where data to be rendered in the chat exists on the Excel sheet.
Data Series X Label	A user defined name to describe the data that has been mapped for the data series. Users may either type in a name or they can reference a particular cell (only one cell).
Add More Series	Click this option to display 4 more data series. Not all data series must be filled out.

Additional Settings

The fourth section of the Interface Settings menu is the Additional Settings. This section displays general Planning Window settings.



Field	Description
Percent Adjustment Range	The Planning Window has the ability to do percent adjustments (increases and decreases) on the data displayed. Define the range that users may increase or decrease the numbers for the current data settings.
Percent Adjustment Intervals	Define the intervals at which users may move the percent adjustment. Users may move the slider in intervals of .5% or 10% for example.
Use 1,000 Separator (,)	Enable commas to be displayed in the Planning Window.

Assignments

BI360 Planning allows a user, typically an administrator, to assign individual assignments to the users of the Planning application. The assignments are typically a Planning template used for inputting budget and forecast figures. Assignments may also include references to most other file types, such as Word, PDF and web links. Assignments may be organized into folder of multiple levels to create a workflow for users to follow. Assignments allow administrators to:

1. Ensure that budget numbers are submitted on time by defining a deadline for each assignment.
2. Easy and centralized location for administrators to distribute templates.
3. Control file access through the Planning Assignments window.
4. Assign specific parameters for users to save data to.
5. Administrators may assign themselves or another user as an approver of the assignment.

Additionally, with the Insight module, after an assignment is submitted it becomes available in Insight for full collaboration. Please contact a Solver Sales representative for more information (sales@solverusa.com).

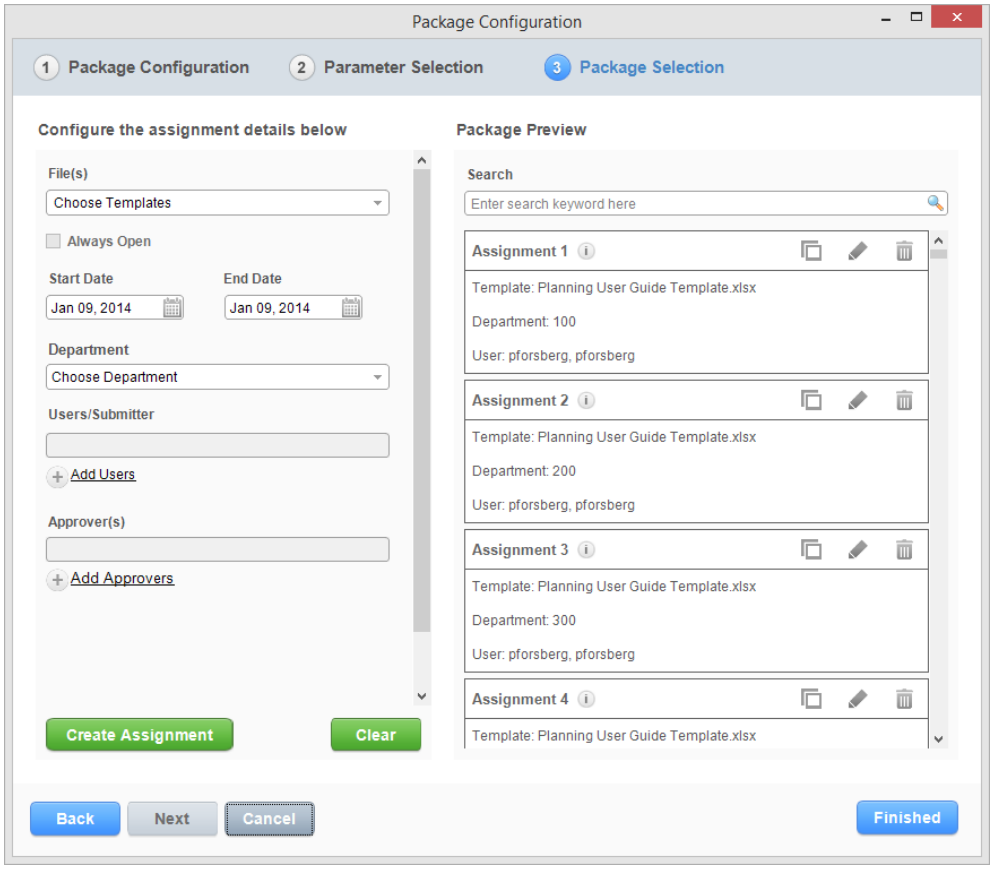
Users will find detailed instructions on how to create an assignment. This includes:

1. Creating an assignment with no options selected.
2. Creating an assignment with Assignment Submission.
3. Creating an assignment with Assignment Submission and Approval.
4. Creating an assignment with Workflow.

The Interface

Assignments consist of two menus, the Assignments Wizard accessed from the Admin Panel and the End User Assignments window accessed from the Assignments button found in the BI360 Planning ribbon. The two interfaces have been designed to be easy to use and configure. Below is the final page of the assignments configuration wizard. The details of this page will be described below.

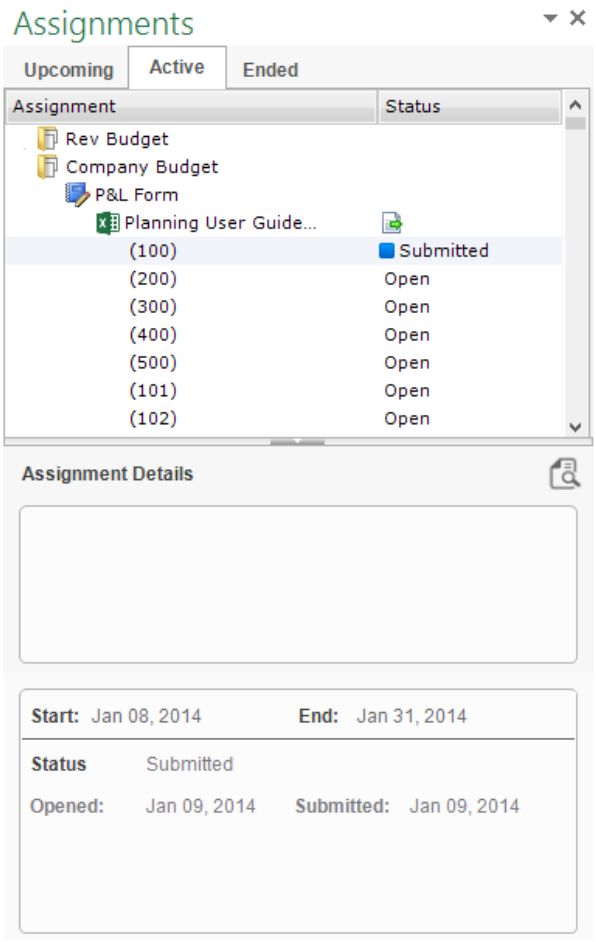
Assignments Wizard



The final page of the Assignments Wizard is shown above. On the left hand side, users configure each assignment. On the right hand side, a summary of each assignment is shown. Users can Copy, Edit, Delete and Search for a particular assignment related to this Assignment Package.

More details on this screen and the other screens that make up the Assignments Wizard will be provided later on in this User Guide.

Assignments Window



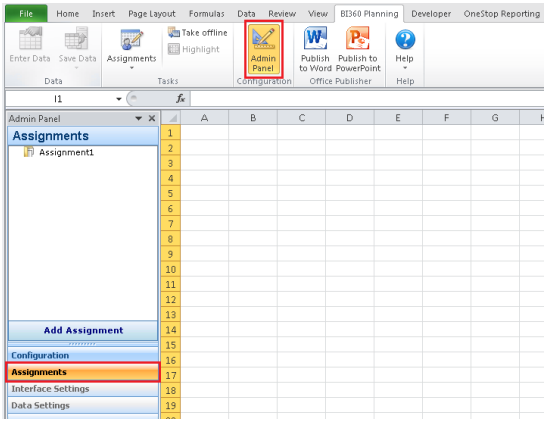
The End Users Assignment Interface, also known as the Assignments Window, is shown above. This is the centralized location for a user to view all assignments assigned to him or her. This window also displays assignment details such as instructions, start and end date and the status.

More details about this section will be provided later on in this user guide.

Creating an Assignment

The following will guide users through creating an assignment.

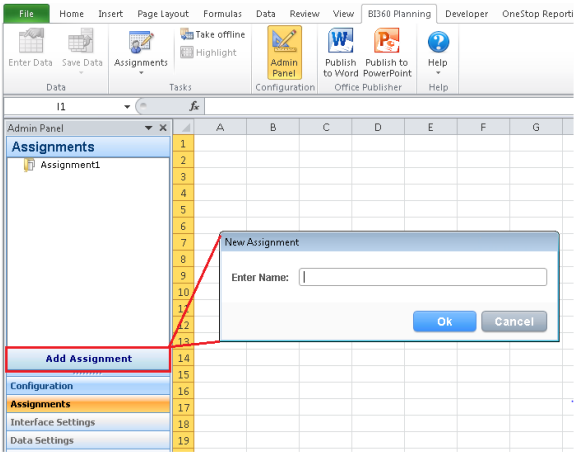
1. From the BI360 Planning ribbon, select **Admin Panel**.



Access to the Admin Panel is based on User Security that has been configured in the Data Warehouse Manager. If you do not have the right permissions, the Admin Panel button will be greyed out. Select **Assignments**.

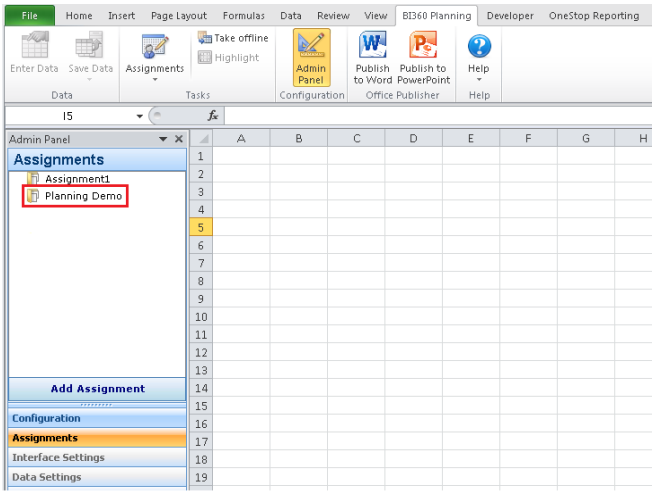
There is an Assignment that has been created with the installation called “Assignment1”. Users may use this Assignment or they can create their own. This guide will take users through creating their own Assignment.

2. To begin, click **Add Assignment**. A popup will appear prompting for an Assignment name. For this demo, we will use “Planning Demo”, but any name may be used. Within the End Users Assignment interface, assignments are displayed in a tree order with four levels. This name is the top level of the tree.

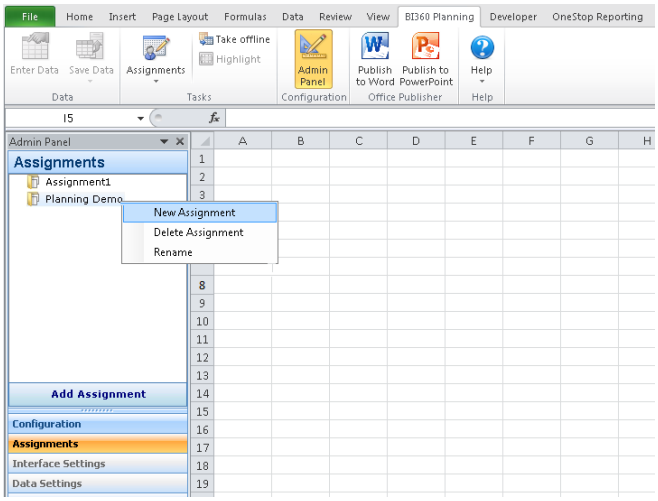


Assignment names cannot be more than 255 characters.

Click **Ok** once you have entered in the desired name. A popup will inform the user that the Assignment Name is saved. It will also appear in the Assignments pane.



3. Right click on the Assignment and select **New Assignment** to open the Assignment Wizard.



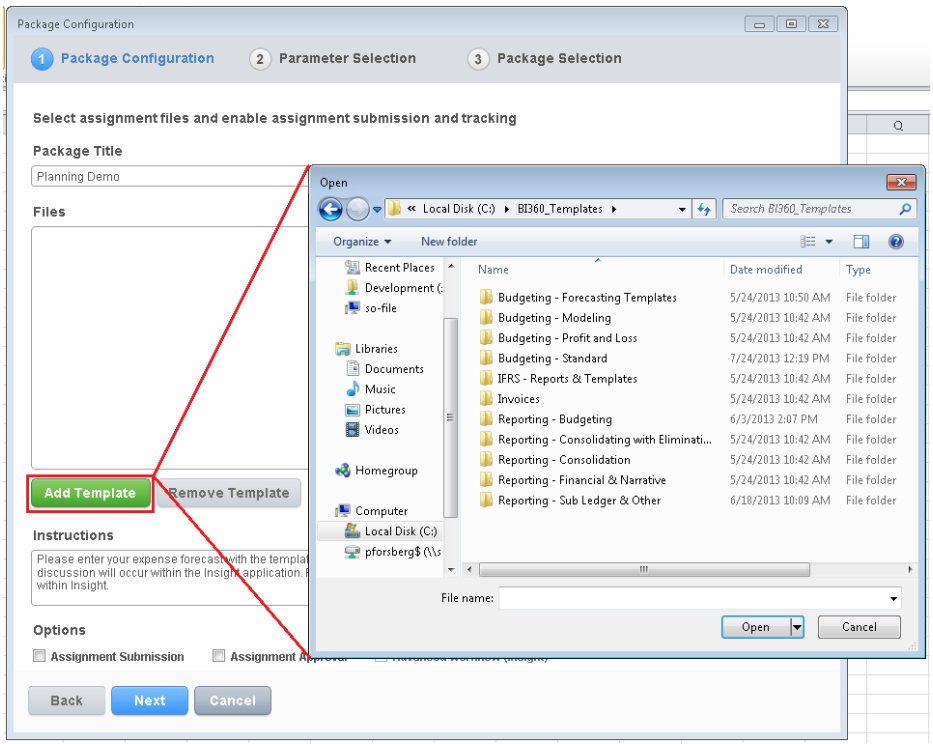
Feature	scription
New Assignment	Opens the Assignment Wizard to create and modify Assignments
Delete Assignment	Deletes the Assignment and all assignments associated with it. A confirmation window will appear asking the user to confirm this deletion.
Rename	Allows user to rename the assignment.

4. On the first page of the Assignments Wizard, users configure the Assignment Package. The Assignment Package can be thought of as a container where template(s) are added and users are assigned to the template(s). In practice an Assignment Package can consist of all Budget templates or one Budget template such as a Revenue form. In this walk through, we will call this package “Planning Demo”, but some examples of other package titles could be “Budget Templates” or “P&L Forms”.

The package title cannot be more than 255 characters.

After providing a Package Title, users can add templates by clicking the **Add Template** button. This opens a files browser where users can select file(s) to be added to the package. Add as many files as desired. Many file types may be added including, but not limited to:

- .xlsx
- .docx
- .ppt
- .pdf
- .jpeg/.png



Files should be saved to a location that all users using Assignments have access to. This is typically a shared drive within the organization.

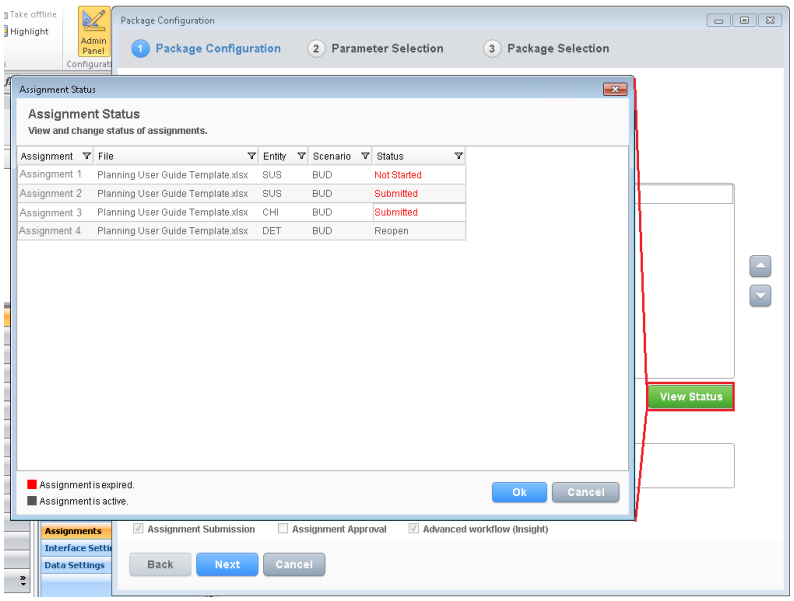
5. After selecting files, the administrator may add instructions that are visible from the Assignments Window to all users. This is not a mandatory field.

   Instructions are limited to 3,000 characters

6. Users have three options that they may select for the Package type, although no selection needs to be made to move onto the next page of the Assignments Wizard.

Package Option	Description
Assignment Submission	Check this option to enable assignment submission and tracked parameters. Tracking parameters allows an administrator to assign specific parameter to a user for saving data and submission.
Assignment Approval	Check this option to enable assignment approval. This is a limited approval where an administrator may assign only one user as an approver of the budget. After submission, from the End User Assignments pane, an approver may approve or reject an assignment. Features such as comments are not available with this approval option.
Advanced Workflow (Insight)	This is not a selectable option unless the license key entered during install “unlocks” this feature. This feature is enabled with the purchase of the Insight module. If available, selecting this options sends the Assignment from Excel to the Insight application for full collaboration (including comments, email notifications and documents) and a full approval can take place with multiple approvers and reviewers.

7. By clicking **View Status**, the Administrator may view the status off all assignments in this Assignment Package. This menu displays the Assignment, file name, parameters and the status.
    a. If the status is in red text, the assignment has passed its end date (expired).
    b. If the status is in black text, the assignment is still available and has not passed the end date.

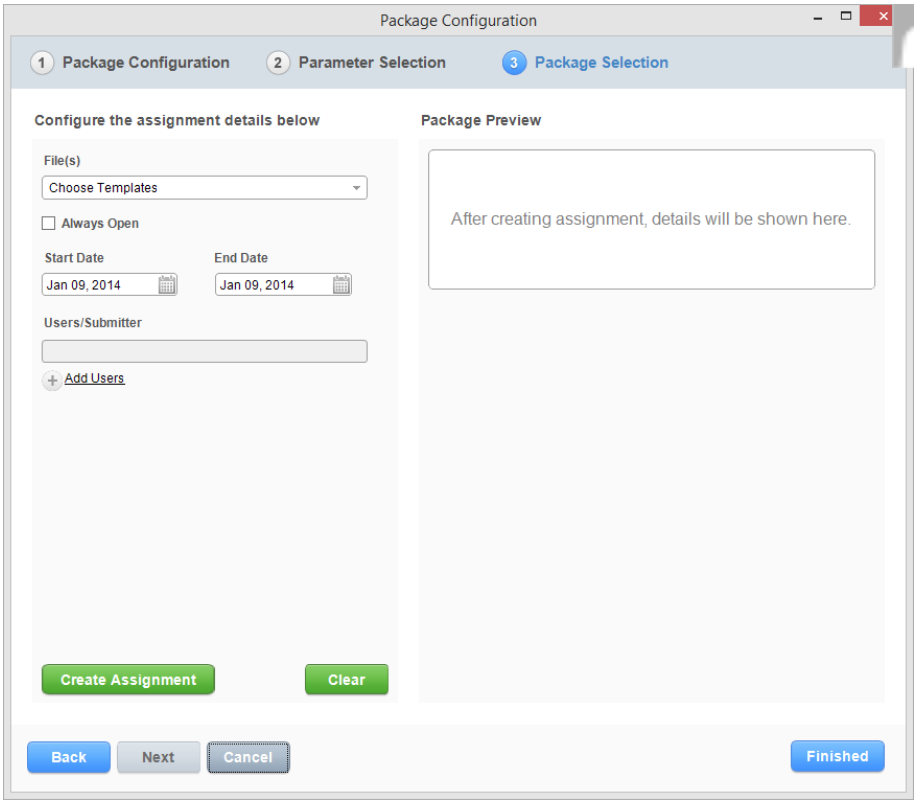


8. The following sections will go through setting up assignments with various options enabled or disabled.

Creating an Assignment with No Options Select

Users may create Assignments with no options selected. This may be desired if the organization would like to use Planning's Assignment feature and Excel as the central location for all users to access the files that are used in the budgeting process.

If the user responsible for setting up assignments chooses to leave all options unchecked, they may proceed to the next page (shown below) of the Assignments wizard where they can assign users to the template(s). Notice that "Parameter Selection" has been skipped. Since "Assignment Submission" is not enabled, there is no need to configure parameters for these assignments.



The Package Selection page is divided in half. On the left hand side, users can configure the assignment. This includes defining the assignment name, the start and end dates, and giving access to templates for specific users. More detailed descriptions of each feature is described below.

Feature	Description
Files	Select the files from the dropdown list that you wish to assign to a particular user(s).
Always Open	Selecting this options means that the assignment will always be available from the End User Interface until it is manually removed by an Administrator.
Start Date	Define when the assignment will be available for users to save data. If the Start date is in the future, the assignment will be in the "Upcoming" tab of the End User interface.

End Date	Define when the assignment will be closed and no longer available for save data. If the End Date has passed, then the assignment will appear in the "Ended" tab of the End User Interface.
Users/Submitters	Select the users from the list of user that have been added into the repository from BI360 Administration. Click the **Add Users** button to open a popup to display and select users.
Create Assignment	Click this button to create the assignment. It will appear on the right hand side of the screen
Clear	Clear out the assignment configurations to start over.

Depending on the Option selected, additional fields are visible. They are discussed in the sections below.

On the right hand side is a summary of the assignments that have been created. This summary includes the template, the parameters and the users. Additionally, next to the assignment name is an information icon ("i") that users may click to view who and when the assignment was created.

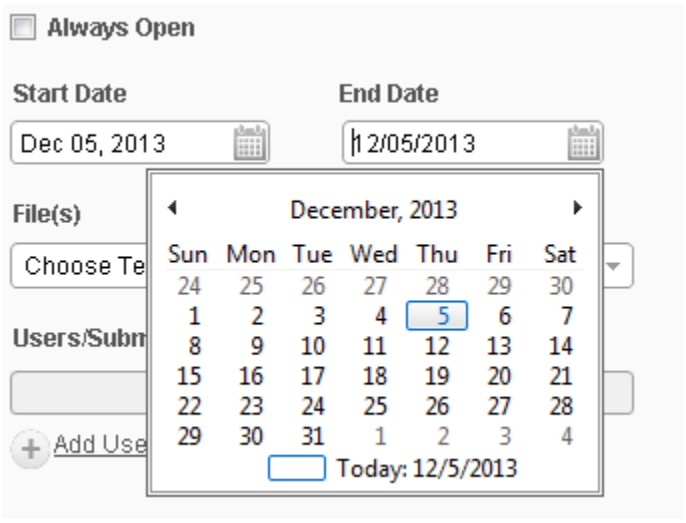
In the top of the right hand side is a search bar to allow a user to find a specific assignment. The search feature searches for assignment titles, templates and users, but does not search the parameters that have been assigned.

There are also the following three icons in the top right hand corner of each assignment summary. The description of each button is described below.

Feature	Description
	**Copy**: click this button to copy this assignments configuration and create a new assignment. After clicking this button, the details will appear in the left hand side. Add a new assignment title and change a selection to quickly and easily configure assignments that differ only slightly.
	**Edit**: click on this button to display this assignment's details in the left hand side for edits. After
	**Delete**: delete this assignment. A confirmation window will appear asking the user to confirming the deletion.

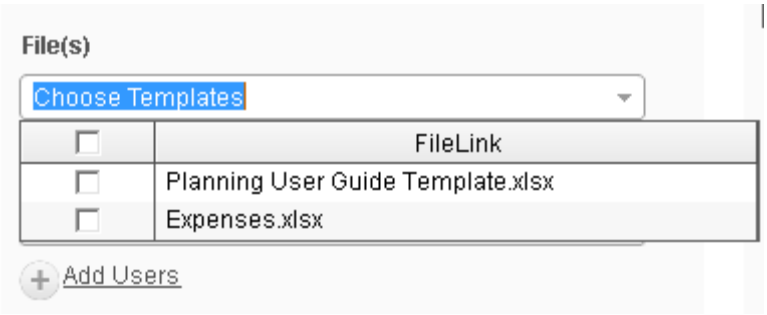
The steps to create an assignment with the above configuration are as follows

1. After clicking **Next** on the first page of the Assignments Wizard, the user is taken to the "Package Selection" page where files are selected and assigned to users.
2. Start off by choosing the file from the drop down.
3. Next provide a start and end date. Assignments become available at midnight of the start date and end at midnight of the end date of the local time. Selecting "Always Open" will make the assignment always available until closed by the administrator.



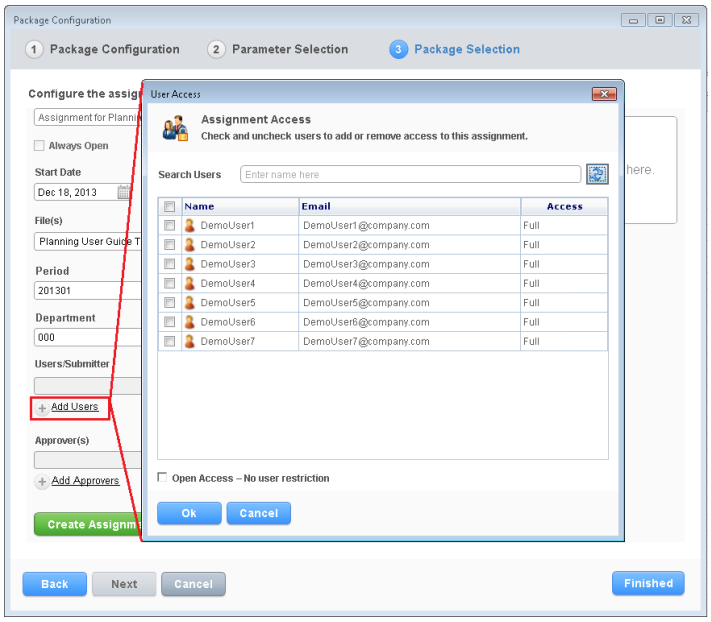
Click the calendar icon on the right of each dropdown box to select a date or users may manually type in a calendar date in their regional date format. Upon leaving the dropdown box, the date is converted to MMM DD, YYYY format for clarity.

4. On the templates drop down, select the template(s) to be assigned to the user(s).



Use the checkbox in the column header to select all available templates. After selecting the desired files, click out of the dropdown box to close the window.

5. Click **Add Users** to open a window that displays all currently added users in the BI360 Administration.



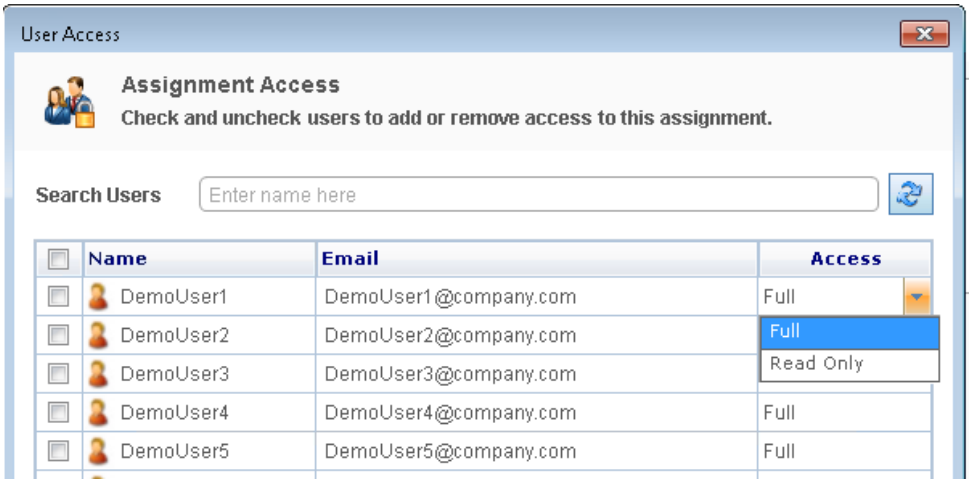
Use the checkboxes next to each user to select the users to be assigned to the template(s). The checkbox in the column header allows the administrator to select all users currently added in the BI360 Administration. This means that if a user is added later on in the BI360 Administration, this user will not have access to these assignments.

The users that are listed are those that have been given access to the Planning application from Data Warehouse Manager -> User Management.

To make assignment access dynamic so that it picks up all users, even those added after the assignment was created, select “Open Access – No user restriction”. Selecting this option means that the assignment will be available to all users currently added in BI360 Administration and any users added later on, will automatically have access to this template(s)

Additionally, the administrator can set a user’s access to the files. The administrator may grant Full or Read Only access to a file

- Full access grants the user full permissions to the file, including the ability to save data.
- Read Only access allows the user to view and run the report, but this user may not save data or modify the file.



The default has been set to Full access. By clicking the dropdown arrow that appears as you hover over the Access textbox, the Administrator may switch the user's access permission.

Finally, Administrators may also use the Search Users to find a specific user when a large number of users has been added to the BI360 Administration.

6. Once users have been added, select **Create Assignment**. The assignment that was just created, now appears on the right hand side and the administrator may go about configuring a new assignment.

   As previously described, in each Assignment summary are three icons that allow the administrator to copy, edit and delete the individual assignments

The administrator may configure as many assignments as desired. Once all assignments have been created, click **Finished** to exit the wizard.

It is important to click **Finished** after all assignments have been created. Clicking **Finished** saves the details of the Assignment Package.

It is recommended to create assignments in batches rather than creating all assignments at once.

Assignments begin at 12AM local time of the start date and end at 11:59PM local time of the end date.

Creating and Assignment with Options Enabled

The steps to create an assignment with one or multiple options enabled is the same as above with a couple additional steps. The following will guide users through configuring the same assignment as above but this time with “Assignment Submission” selected.

Planning templates with Planning Settings on multiple tabs may not be used with Assignments when any option is enabled.

Files cannot be removed from the Assignment configuration once the file has been submitted. The Assignment must be deleted first.

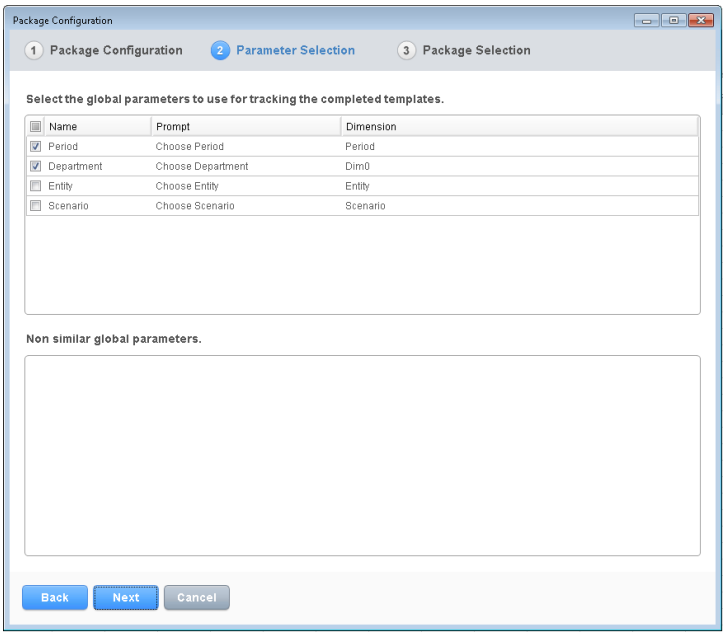
Assignments may be edited until the assignment has been submitted. Once submitted, the users and/or parameters may not be changed.

Parameters are tracked based on what is found on the form. When using a form that users a function such as last year all, remember that users will have to be assigned the previous year Period even though the form will be ran for the current year.

Assignment Submission

Assignments created with Assignment submission selected allow an administrator to define what parameters the user may store data to. Along with the BI360 Reporting security, this is a powerful way to make sure the correct budget numbers are being entered per user. The steps listed below will guide users through creating an assignment with Assignment Submission.

1. By selecting the “Assignment Submission” option on the first page of the Assignments wizards, the user has enabled this feature. As mentioned in the steps above, add an assignment package title, documents to be used in this assignment and instructions if desired and click **Next**.
2. On the second page of the wizard, a list of all parameters found in the reports is displayed. The top section displays all available parameters for tracking. These are the parameters that are shared (or exist) in all Planning templates that have been added.



For example:

Planning template 1 has Entity and Department as configured parameters.
Planning template 2 has Entity as a configured parameter.

In the top section, only “Entity” will appear as this is the only parameter that is shared amongst the attached reports.

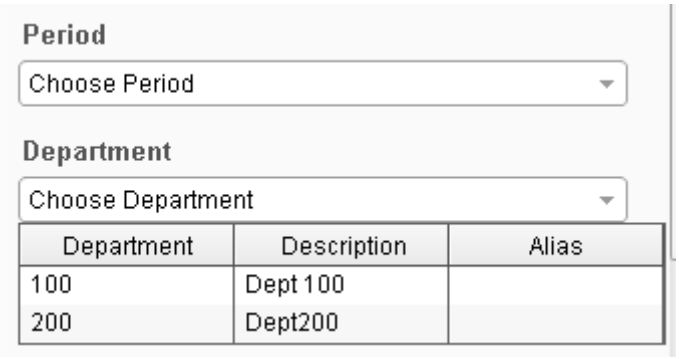
The bottom half of the wizard displays all non-similar parameters. These are the parameters that are not shared in all of the Planning templates that have been added. In the above example, Department would appear in this section.

Select only the parameters that are to be tracked in this assignment. After selecting the parameter(s), click **Next**.

3. On the third page of the wizard, the Administrator may configure the assignments. The steps to create an assignment are similar to as mentioned above with the addition of the parameter fields.
4. On the drop down for the parameters, the user will see a list of all the parameters associated to the dimension. Select the dimension to be assigned to the user.

Only one parameter may be selected per assignment.

The Period parameter is based on the periods rendered in the report and not based on the period the report is ran for. It is important to keep this in mind when creating assignments.



5. Click the **Add Users** button to display a user's window and select the users to be assigned to this Assignment.
6. Once completed, click **Create Assignment** to create the assignment. The assignment will now be available in the Assignments window once the Start Date begins.
7. Continue creating Assignments until all of the assignments have been created and click **Finished** to save your changes.

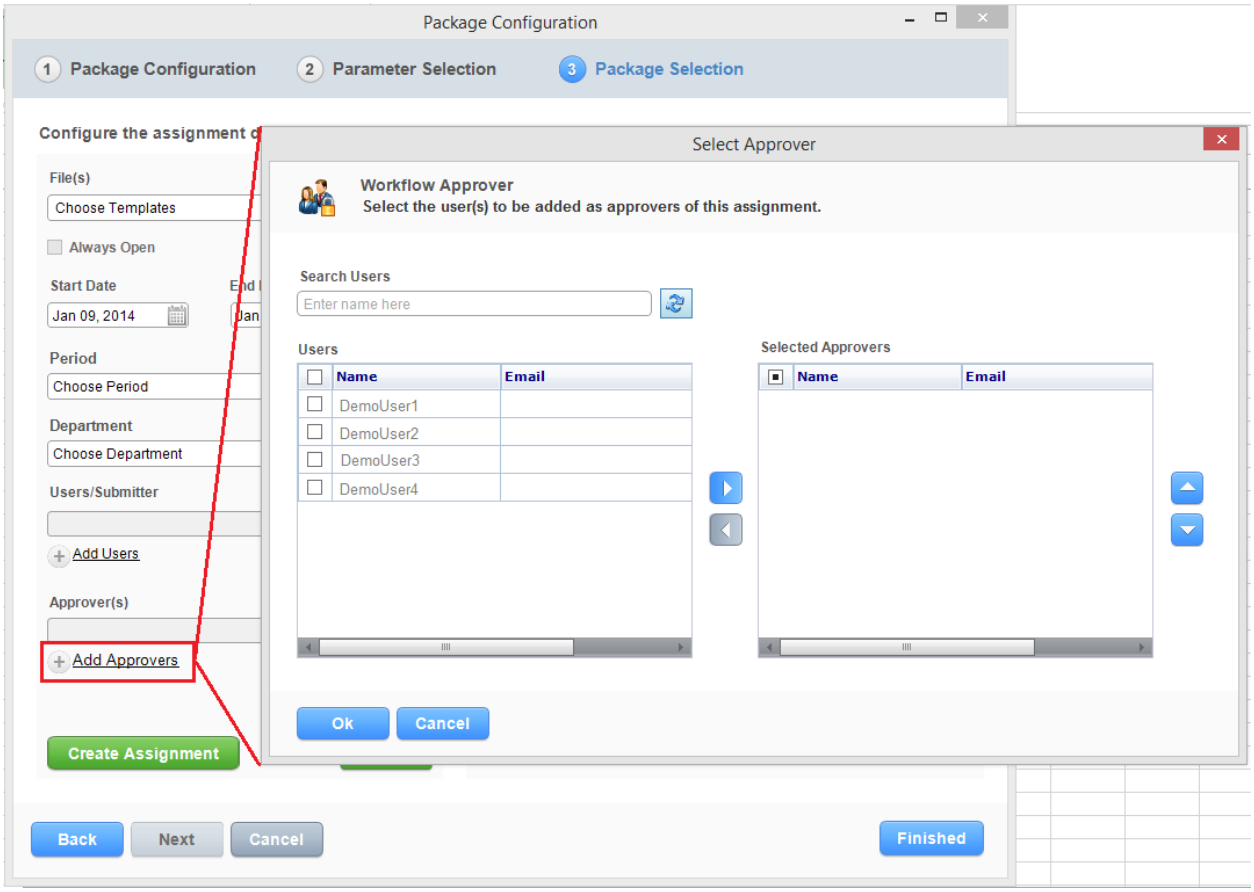
It is recommended to create assignments in batches rather than all at once.

Assignment Submission with Approval

Assignment Submission with Approval allows the Administrator to configure an assignment and have another user approve the numbers submitted. The setup is the same as above, but during the configuration of each assignment, there is one more option to select the "Approver".

Upon clicking **Add Approvers** the below window will appear. On the left hand side is a list of all users added in BI360 Administration except for the user(s) assigned to the assignment. When using Assignment Approval, only one (1) user may be added as an Approver.

To make a user an Approver, select the user from the left hand side and click the *right arrow* in the middle of the page. This will bring the user to the right hand side of the screen, designating the selected user as an Approver.



After the user is selected, click **Ok** to return to the Assignments Wizard to complete the configuration of the assignment.

Using Assignments with Published Forms

The Assignments feature also allows users to create assignments using Published forms, both online and offline forms. By following the steps above, users may be assigned a published form with or without Assignment options enabled.

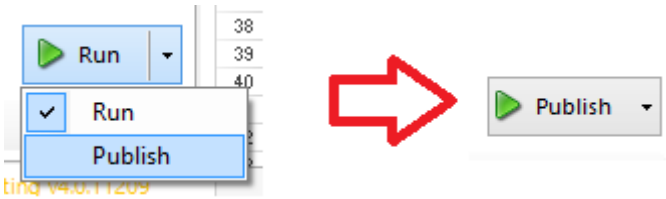
However, when using the Assignment options, there are two things to remember:

1. If the published form is to be shared amongst multiple users and uses the Line Item Details feature, then the form MUST be taken offline by the first user to use it. This is done by clicking the "Take Offline" button found in the Planning ribbon.
2. When using published forms, users must have read AND write permission on the shared folder where the form is saved.

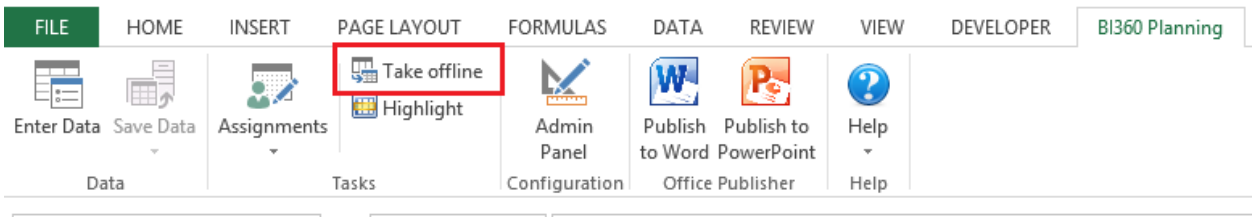
It is recommended to either hide or protect the storage field references in the Data Settings to prevent users from changing the parameter value.

Creating an Assignment with a Published Form

1. Start off by verifying that that Planning template is storing data back to the BI360 database as desired. Upon verifying this, from the "Run" tab, select **Publish** from the Run button drop down. Upon selecting **Publish**, the "Run" button will change to "Publish".



2. Click the **Publish** button to run the report. A new book will be opened with the report. Save the file.
3. At this point, if Line Item Details is a feature of the form, then take the form offline by clicking the "Take Offline" button found in the BI360 Planning ribbon. This embeds the line item details into the form and allows multiple users to view and edit the Line Item Details entered by other users.



At this point, users have successfully saved a published form. Refer to the above sections to create an Assignment with the desired configuration, adding the published form to Assignments instead of the Planning template.

A published form already has parameters defined, so it is important to remember the parameters the published form was run for and assign those parameters to a specific user(s). A published form may not be used for multiple parameters.

Editing an Assignment

Assignments may be edited as long as the assignment has not been submitted. Simply click the **Edit** button () found in the upper right hand corner of the Assignment summary to display the assignment details in the left hand side of the window and modify the assignment.

After the updates have been made, click **Update Assignment**.

Once all assignments have been updated, click **Finished** to save your changes.

Options to change fields will be greyed out once an assignment has been submitted.

Deleting an Assignment

Assignments may be deleted by clicking the **Delete** button () found in the upper right hand corner of each assignment.

Copying an Assignment

Copying an assignment is useful when there are multiple assignments that will be very similar in configuration need to be created. For example if the Administrator has one template to be distributed to 10 users, use the copy button to keep all the assignment settings and just change the user and the parameter the user may store back to is an easy and quick way to create assignments rapidly.

To copy an assignment, click the **Copy** button ()found in the upper right hand corner of each assignment. Clicking this button will bring the details of the assignment to the left hand side and allow for the creation of a new assignment.

This completes the creation and maintenance of assignments. Please see the End Users Assignment Interface for instructions on how to access the assignments that have been assigned to you.

Deployment

There are several ways to deploy the Excel templates depending on what works best within the organization and the preferred processes. The following will discuss some typical deployment options

Place Excel File(s) on a Shared File Server

Placing the Excel file on a network server or SharePoint allows administrators to control the template versions accessible by users. It also offers a single location where administrators may use the Assignments feature to point to file(s). In this manner, end users may open the template directly or access it through the assignments feature. Depending on the license that the user is assigned to, the report will open in Report Designer or Player mode. In either case, the user will have full *Planning* functionality to save data back to the database.

Distribute Excel Templates by Email

Administrators may also send an email to end-users with the Excel template attached. The users may then save the template locally and open and execute the template. If the end-users are not connected to the network where the BI360 *Data Warehouse* is located, they may send the executed template with the entered numbers in it to the administrator and the administrator may save the data back to the database. This is commonly referred to as an Offline Template.

Using Published/Offline Templates

Administrators may choose to send the templates offline as well. Sending a form “offline” disconnects it from the database and prevents data write back to the database until the form is brought back online. Users may also opt for the feature if the wish to share Published workbooks amongst one another. By embedding an XML file, which contains the line item details, within the Excel file, the offline template may be shared amongst users either by email or through a shared drive.

Both online and distributed users must have the *Planning* application installed on their computer in order to use the features. Once installed,

It is important not to tamper with or remove the XML file that is located on the local machine.

Published templates may not be shared amongst users unless the form is set to “offline” mode first. As noted before, the “Save Data” and “Assignments” icons are inactive in Offline mode.

The BI360 *Planning* license accommodates two types of users (as defined on the license order form)

1. Online users
2. Distributed users

Distributed users differ from normal (online) users in that a distributed license is used for users who do not need the *Reporting* component installed (Designer/Players). This simply means that the distributed user must be provided with an executed published template which the users may then use to enter and

save data back to the database. The user will not be able to rerun the report to verify that the data has been successfully saved back to the database.

There are typically two scenarios in which the distributed user may receive the published templates:

1. An online user publishes the *Planning* template, saves the template, sets it to "Offline" mode and emails or places the file in a shared drive for a distributed user(s) to access.
2. The *Planning* template is generated and emailed or sent to a shared drive from the Report Publisher applications.

Example Workflow of an Offline Template

The following will demonstrate how to use offline templates. This examples assumes that a working *Planning* template has been made and is storing back to the database as desired.

1. An administrator or power-user publishes a form to a shared folder or by email.
2. UserA (who is mapped to the SQL server and is a SODS_User) opens the template and enters data and saves the form. This user also changes the form to "Offline".
    a. Once the form is taken "Óffline", users may change the file name without issues.
3. Users A/B/C/D all work together to adjust the numbers as desired until the budgeting process is complete.
4. User A brings the form to "online" mode and "Saves Data" back to the database.

Input Template Design Tips

General

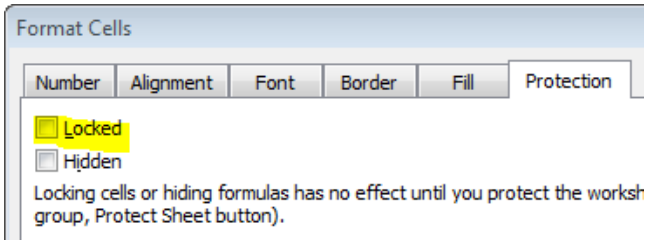
1. Keep in mind the purpose of the template is data input. The smaller the template and workbook, the better the performance will be when retrieving and storing data.
2. Avoid the pitfall of using the *Planning* templates as Reports. Reports should be designed and deployed in separate workbooks.
3. It is recommended that "originals" of all templates are kept. Edits to templates should be done on a renamed file (i.e. v1, v2 etc). A final version should be implemented into production.
4. It is required to leave Column A and Row 1 free of data. To force *Planning* to ignore columns or rows, place an 'I' in the row 1 or column A to be ignored.
5. Sheets with *Planning* settings should never be copied from one workbook to another.
6. It is recommended to Protect the worksheet and/or workbook to prevent end-users from making changes to the form. Since parameters located on the sheet are referenced in the *Planning* settings, it is a best practice to prevent users from editing the entries found in these cells. Please see the Security section for more details.
7. To help users identify write back cells, it is recommended to use a fill color on the cell(s). In the following screenshots, a light yellow grey color is used to represent write back cells.
8. Assignment files should be saved to a shared folder that uses a universal naming convention (UNC).
9. When possible, design single tab *Planning* workbooks. This will ensure optimal performance.
10. The *Planning* write back feature requires that every Excel cell intended for write back should have at least one column and one row dimension. For instance, it is typical to design a template with Periods in the columns and Accounts down the rows. This forms an intersection for the storage cells.
11. Worksheet names cannot contain any special characters. BI360 *Planning* will only accept alpha-numeric characters in the sheet name.
12. If the worksheet name needs to be changed after creating the *Planning* settings, then users must right-click the worksheet to be renamed and select **Rename**. This is a required step because the *Planning* settings need to be updated. Users cannot rename a sheet by double-clicking the sheet.
13. Always use the Category field when creating templates intended to use the Line Item Detail feature. This feature will store data to the 'LID' category. The excel template should be configured with the Category such as 'MAIN' in the Report Designer and also referenced in the *Planning* settings. This will avoid displaying duplicate data within the reports.
14. All attributes on a single transaction should be saved on the same form on a single row. As an example, storing Value 1 and Value 2 should be done on the same row to ensure proper storing.
15. There are two storage types. Please review the storage settings section to determine which storage method is best for the template.
16. When using Line Item Details, it is recommended to specify shared dimensions as a Sheet reference type rather than a Row or Column reference type. This is because *Planning* builds LID

queries based on the global dimensions for performance reasons. As an example, if *Entity* is the only dimension defined as a global dimension, then all LIDs from the reference *Entity* will be returned from the database. However, if more dimensions such as *Scenario*, *Category*, *Department* and other optional dimensions are specified, the query will be executed more efficiently.

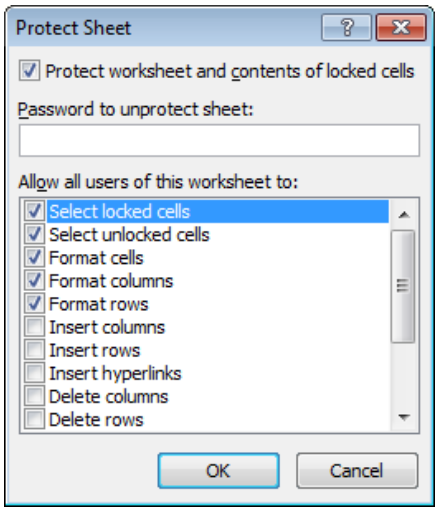
17. When designing a template with monthly periods. It is a best practice to use the Period dimension. However, when designing a template with daily periods, it is a best practice to use the Date dimension. This is so that the monthly period is in the format YYYYMM, whereas the daily period is in the format MM/DD/YYYY.
18. It is recommended to select ranges for the data settings and interface settings that will always render in the report. This is recommended because in cases where security prevents the first row of dynamic accounts to be brought in, this can result in error.

Security

1. **Protecting the worksheet**: Input templates may be locked to prevent users from making changes using Excel's *Protect Worksheet* option. *Planning* creates special flags in certain cells, it is important to ensure the Locked flag for row 1 in excel is unchecked. Because the executed report may dynamically create columns, it is sometimes difficult to pinpoint the exact. Columns to unlock, which is why unlocking the entire first row will ensure the cells remain unlocked. Moreover, users may hid row 1 so that changers are less likely to be made to the flagged cells.



The typical settings when locking a sheet are as follows.



If a worksheet or workbook is protected, it is important to remember to also set the password on the Report Properties Protection tab. See more details in the Report Designer User Guide.

2. Protecting the workbook: in addition to the flag stored in row 1 columns 256-261, *Planning* also creates two hidden tabs (Interface and DataSettings). When protecting the entire Excel workbook, it is important to ensure that these three tabs are not locked.
3. Encrypt with a Password: This is an Excel option. *Planning* uses an external file reader to view and store the data entered into the Excel workbook. *Planning* supports password protected Excel files.
4. File and folder read/write permissions: If the Excel file or the folder that contains the Excel file is set to read-only for the user (most common on server environments), *Planning* will be able to

write back to the database properly. In this way, end-users cannot make unwanted changes to the *Planning* form.

Formats

1. **Dimension codes with leading zeros**: By default, Excel will cut off leading zeros of cell information. If the dimension code contains a leading zero, e.g. '00101' *Planning* will see this as 101 and will result in an error. To resolved this issue, simply insert a parentheses before and after the OSR function. For instance, =(OSRGET("d_Account","Code"))
2. **Ignore rows and columns**: When using totals or other columns and rows in the middle of a Data Grid, it is important to remember to enter an 'I' in column A and row 1 to flag *Planning* to skip these columns and rows. Also note that no other data should be entered in column A and row 1throughout the entire worksheet. The ignore syntax (i) is not case sensitive.
3. **Planning reference dimensions**: It is always a good practice to create a hidden row section on the top part of the worksheet to store the dimension codes referenced in the *Planning* settings. These often include the *Entity*, *Department*, *Scenario* and other 'Sheet" reference type codes used for storing data back to the Data Warehouse. Doing this will avoid the potential of users inadvertently changing these important storage parameters, especially if the worksheet is not protected.

Fiscal Year vs. Calendar Year

Dependent on the organization, the fiscal year may not start in January of every year. The fiscal year start period may be set to a month other than January when a database is first created in Data Warehouse Manager. The *Planning* settings will read the year or period referenced in the Excel sheet and store data back accordingly.

Using BI360 Planning

In this section, the *Planning* end-user usage will be covered. This section assumes the Data Warehouse connection has been created in a BI360 *Reporting* module and the templates and Assignments have already been set up.

Examples in this section are based on the BI360 Data Warehouse Corporate Demo Model available on the Solver Support website.

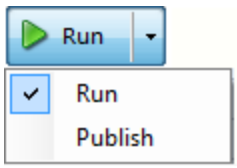
As previously mentioned, there are two ways to access a *Planning* template. Users may have direct access to a file location where the file is located or an administrator may choose to link the file through the Assignments feature. Please reference the End-User Assignment Interface section for detailed information on how to view the assignments assigned to the individual end user.

Executing a BI360 Planning Template

When a BI360 *Reporting* file is opened from the Assignments panel, depending on the user's license, the Report Designer or Report Player interface will be launched.

There are two options to run the template.

1. Run: Normal execution of a template. The template will be dynamics so that users may re-run the report to see the updated values.
2. Publish: Only done if the template is intended to be used in offline mode.



Entering Data

There are two methods for entering data in to the Excel templates. Data may be directly entered into the Excel sheet or data may be inputted through the use of the *Planning* Data Entry Window. If the administrator decides to disable the *Planning* Data Entry Window, the Enter Data button will be disabled in the *Planning* ribbon.

Entering Data Directly Into Excel

For input templates designed for Excel input only, users will enter all of their data directly into the Excel worksheet. Depending on how the templates are designed, input cell may be designated a certain color. Excel formulas may be entered into input cells but on the value will be retained. E.g. If the cell contains the formula '=100+100' and the form is stared and re-executed, the form will show 200 in the cell.

Entering Data Using the Planning Window

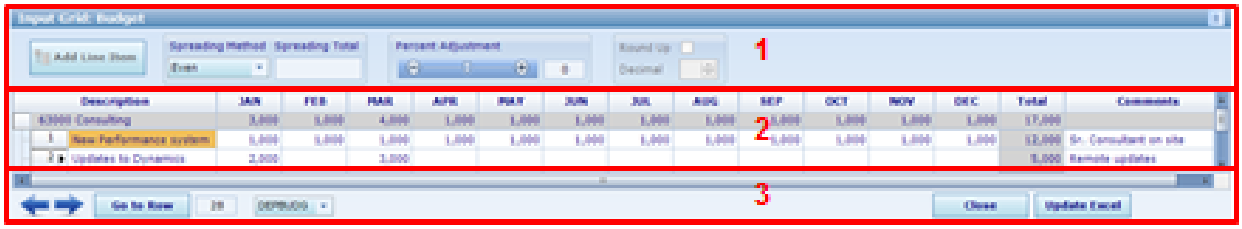
The *Planning* data Entry Window assists users with spreading data over 12 months, entering Line Item Details (LID) as well as comparing Actuals to other data. It also includes a graphical component to easily visualize comparative data as it is entered, such as Budget vs Actual.

After executing the template, to open the *Planning* window,

1. Select a cell that is within the Data Grid.
2. Click **Enter Data** within the *Planning* ribbon.
3. Depending on the interface settings, the *Planning* window will open and display the configured grid(s).

The *Planning* window is designed to handle spreading and line items for any number of months (12, 18 and 24 months). Within the input section of the *Planning* window, there are three primary sections.

1. Action Section: contains a button to enable Line Item Details, spreading options, percentage adjustments and rounding capabilities. The administrator has the ability to enable or disable the Line Item details feature from within the Interface Settings.
2. Input Section: This section contains the summary row data, Line Item Details and comments. Most fields in this section are editable and will be stored to the database.
3. Footer Section: This section contains navigation controls as well as buttons to close the *Planning* Window and a button to update the data in Excel with the values from the *Planning* window.



Any values entered into the input section will be considered as the true value. For masks are not applied when considering the precision. Users may adjust the preci modifying the decimal place option in the Interface Settings.

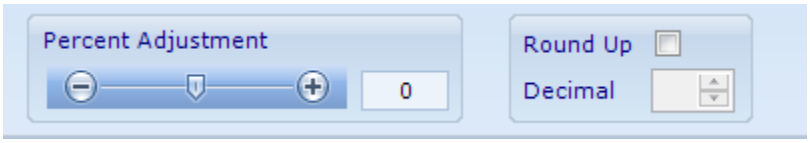
Summary Data Entry

Summary data is the account level data specific to the row in Excel. This may also be referred to as Row level entries. There are two options available to create/enter the data within the summary line.

1. Enter the data directly into the cells.
2. Use the spreading methods to create the data
    a. Even: By default, Even spreading is selected. This option will spread the value entered into the *Spreading Total* evenly across the number of months being budgeted. For example: entering 12,000 into the Spreading total box will result in $1,000 for each of the 12 months.

b. Historical Average: This feature is available if Comparative Data Settings are configured. This option uses the comparative data to average the monthly historical value and inserts it into the Budget line for the current row. This is calculated as the total for the year divided by the number of months show. This number is entered into each month of the current row being budgeted.
c. Copy History: this is an exact copy of what currently is shown in the comparison section. This option is only available when the comparison data pane has been configured.
d. Trend Based: This option requires an input into the Spreading Total box. The values are calculated by determining the weighted percentage for each month in the history (comparison) section multiplied by the spreading total. E.g. (Jan/year total)*(Spreading amount). This option is only available when the comparison data pane has been configured.
e. Quarterly Spread: this option will spread the Spreading total value into the first period of each quarter. Thus, the month that each quarter begins on will have the Spreading Total value divided by the number of quarters that exists in the *Planning* template design.

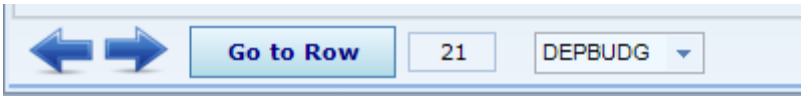
3. Adjust Values: Summary and Line Item Detail values may be adjusted using the Percentage Adjustment and /or Rounding functions within the *Planning* window.
   a. Percent Adjustment: summary and Line Item Details may be adjusted by changing the percentage +/- or manually entering values into the text box. To adjust the values, first click either on the summary row or the line item row to adjust the values for the entire row. The percentage increment is set by the administrator in the Interface Settings and by default is set to 5%. Additionally, the minimum and maximum percentage changes are set by the administrator.



The percentage change is not stored in the database. Once the template is closed and reopened, only the values will be visible, not the adjustment percentage.

   b. Rounding: The rounding function may be used when the administrator sets the decimals to more than one place. There is an option to round the summary data up or to round to a specific decimal, similar to the Excel rounding functionality. The rounding function does not apply to the Line Item Detail row, only the summary row. Excel rounding may also be used once the data is copied into the sheet.
   c. Navigation: *Planning* has several methods to navigate around the input template. When the *Planning* window is first opened, the row tha tis currently in focus is displayed within the the window. For instance, if the mouse cursor is currently on row 10 in the Excel worksheet, than that row will be displayed within the *Planning* window. If no cell

or row is selected within the Excel data grid section when *Planning* is opened, a prompt will request that the user select a cell within the data grid.



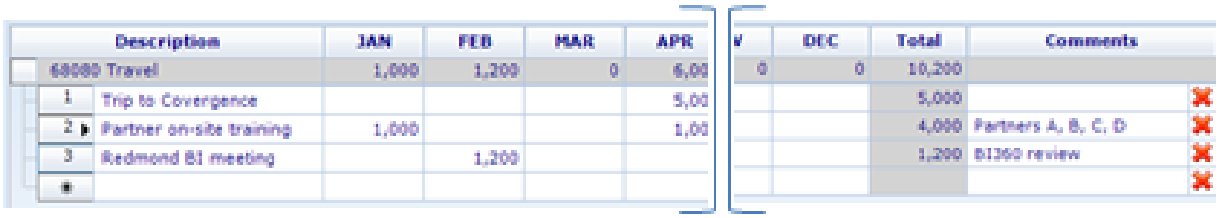
Once the *Planning* window is opened, users may navigate throughout the rows within the data grid by using the left and right arrows or by using the *Go to Row* feature. If there are multiple data grids on the same worksheet, the grids may be changed by clicking the dropdown box to the right of the row number.

For each row, there is a comment field available for entering text related to that row. This information is not directly loaded into Excel but is stored to the database and is available for reporting using the Comment2 field in the transaction table.

Line Item Detail Entry

When enabled, Line Item Details may be entered one level below the summary row. For instance, it is common to store LIDs for the Travel account within the General Ledger. These details are typically specific travel information which rolls up into the Travel GL account. Each summary row may have an unlimited number of LIDs.

To enter LIDs, click the **Add Line Item** button. This action will add a row below the summary line. Once enabled, the summary row will changed to a locked state (indicated by a grey fill color), so that no entry may be created at the summary row. Each line item entered will automatically roll up to the summary row. Each line item has three attributes:



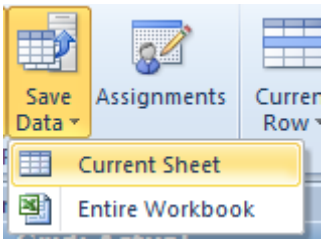
1. Description: Enter a short description for the Line Item Detail this information is not directly loaded into Excel, but is stored to the database and is available for reporting using the Row Description field in the transaction table.
2. Monthly Input: Values may be entered directly into each month or using the Spreading Total option. The summary row values will be updated on the Excel workbook, but not the underlying Line Item Detail values.
3. Comments: the comment field is used to enter additional details regarding either the summary row or the line item detail row. The information is not directly loaded into Excel but is stored in the database and is available for reporting using the Comment2 field in the transaction table.

Updating Excel from the Planning Window

Once the Summary and/or Line Item Details are entered and adjusted in the *Planning* window, the data needs to be written back to the Excel sheet. To update Excel, simply click on the **Update Excel** button. The values will be transferred to the current row within the Excel template. Note that the comments and line item descriptions are not saved to the template but are saved back to the Data Warehouse database for reporting.

Saving Data

Saving data back to the Data Warehouse manager is done by clicking the **Save Data** found within the *Planning* ribbon. There are two options when saving data, Current Sheet and Entire Workbook. Depending on how many Data Grids have been configured, one of the options may be disabled.



In BI360 *Planning*, there is an option configured by the administrator for each template which designates the template to track and store only changes or force storage of all data within the configured data grids. The saving option can be modified in the *Storage Settings* function found in the *Configuration* tab of the *Administration Panel*. When the *Store Changes* option is configured, *Planning* will store the cells that have changed since the last time the sheet was stored. This includes cells containing calculations in the same data grid as well as cells that have been deleted. Once the template is re-executed the tracked cells is reset.

Planning cannot prevent users from re-executing the template before storing any changes. In the event the template is re-execute without storing, all changes will be lost.

It is important to note that if an Excel template is storing data to more than one transaction table (e.g. GL and HR), which means at least two *data grids* have been configured, the track changes function will not track calculated cells in the second *data grid* if data input occurs only on the first grid. In this case the Force Storage option is most likely enabled, which means all data within the *data grids* will be stored each time the sheet or workbook is stored to the warehouse.

Furthermore, if the user desires to utilize the auto-macro from Report Designer, data storage can be performed by using the following macro in the *This Workbook* level:

```
Sub OSR_ReportComplete()
Dim addin As Office.COMAddIn
Dim automationObject As Object
Set addin = Application.COMAddIns("Planning.Connect")
Set automationObject = addin.Object
Application.ScreenUpdating = True
Application.ActiveWorkbook.CustomDocumentProperties.Item("ReportGenerated").Value = True
'Save Current Sheet
automationObject.SaveSheet
'Save Entire Workbook
automationObject.SaveWorkbook
End Sub
```

End User's Assignment Interface

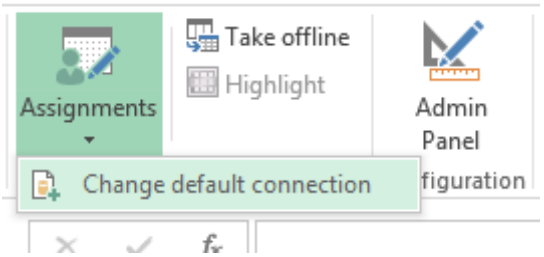
The end user's assignment interface, commonly referred to as the Assignments Window, displays the assignments that have been assigned to the logged in user or have been assigned to all users.

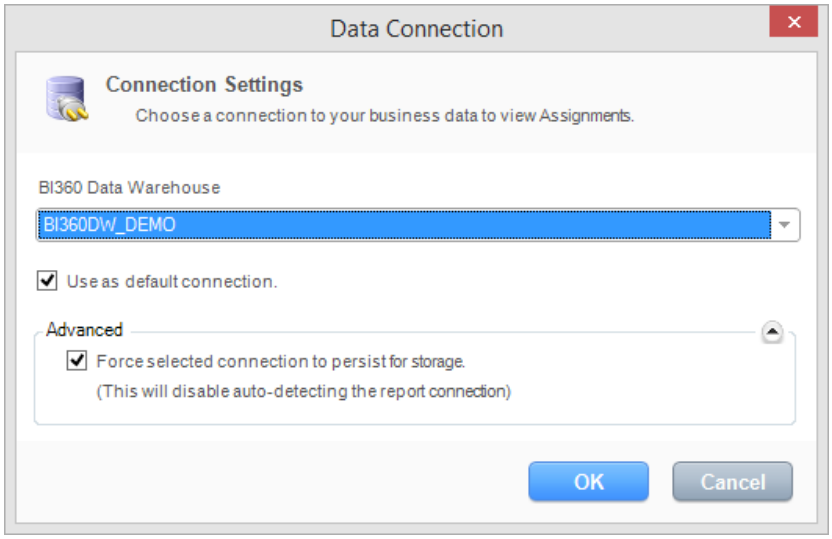
To access the assignments, click on the **Assignments** button in the BI360 *Planning* ribbon. If a default connection has not been configured, then the user will be prompted with a window to select the connection settings.

The Assignments feature does not inherit the report connection.

If the selected connection should be the *Default Assignment Connection,* place a checkmark in the box next to *Use as Default Connection.*

If the default connection needs to be modified, users can select the dropdown box in the *Assignment* button in the BI360 *Planning* ribbon and the Connection settings screen will be displayed. Then, users may change the default connection.



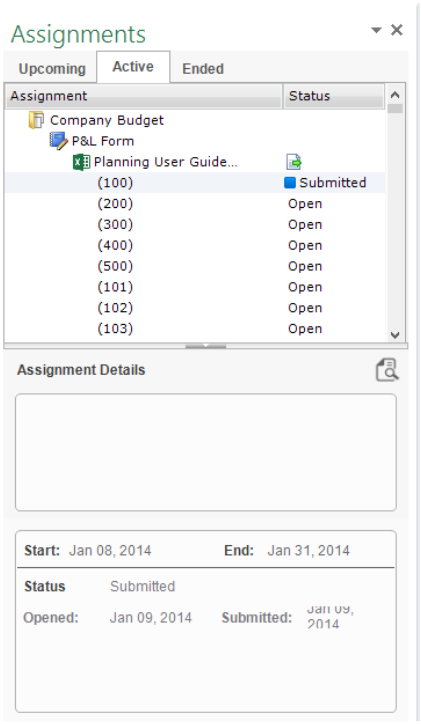


In cases where multiple BI360 databases exist, it may be necessary to use the Advanced option to ensure that the user is using the correct database.

General Interface

The Assignments Window has been designed to provide the user with all of the information regarding their assignments. This includes three tabs to help sort the user's assignments into:

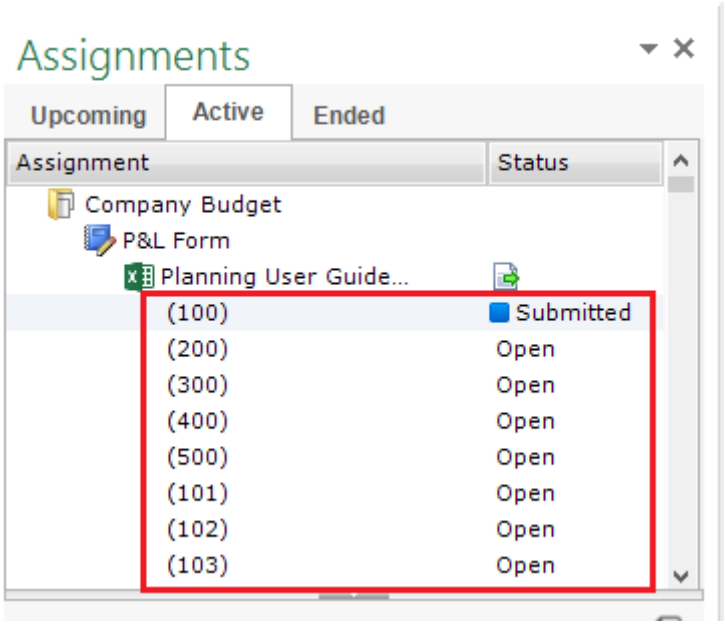
1. Upcoming
    a. Any assignment where the current date is before the start date.
2. Active
    a. Any assignment where the current date falls in between the start and end date.
3. Ended
    a. Any assignment where the current date is after the end date.



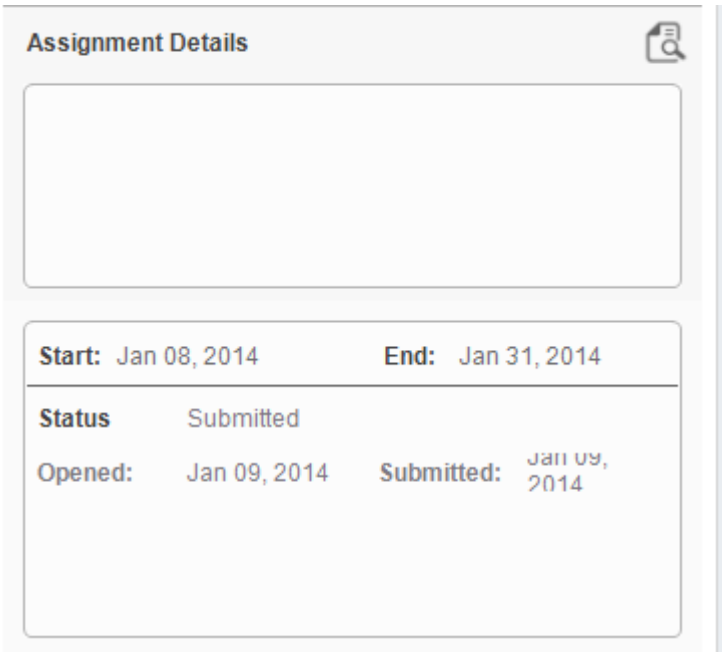
Additionally, the window uses colored flags to help sort the assignments within one of these tabs. The flags use the following colors with the following descriptions:

Flag	Location	Message
	Next to *Start Date*	The assignment will be active in more than five days.
	Next to *End Date*	The assignment end date has passed.
	Next to *Start Date*	The assignment will be active in less than five days.
	Next to *End Date*	The assignment will end in less than five days.

Expanding on each assignment will show the parameters that have been assigned to the user.



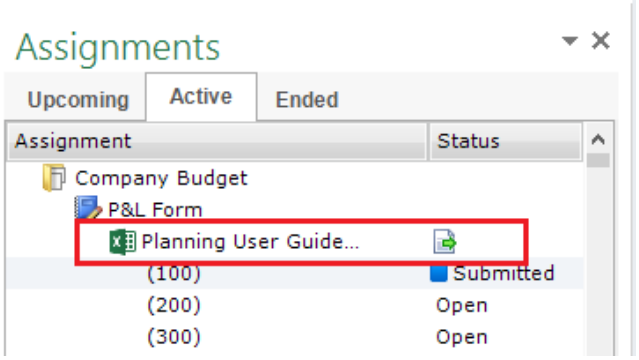
Additionally, in the bottom half of the Assignments Window, users will find more assignment information such as the start and end dates, instructions and status.



Users may also click the **View History** icon ( ) to view the history of the assignment such as when the assignment was opened and by whom.

Completing an Assignment

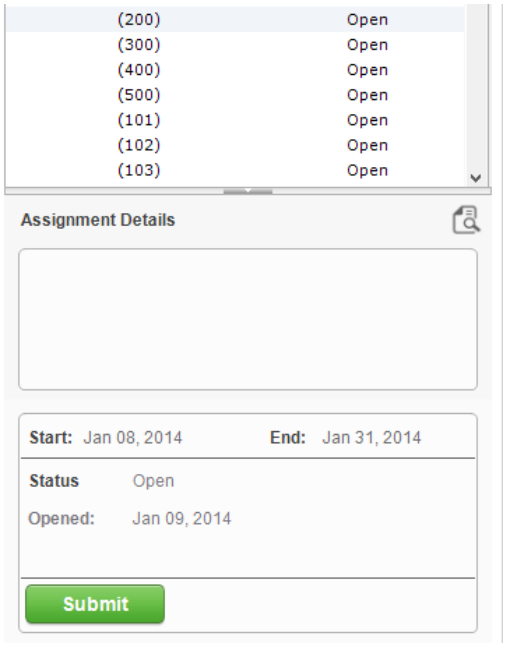
1. Once active, an assignment will appear in the Active tab of the Assignments window. To open an assignment, click the  found next to the template name.



2. The Planning template will open in Excel. Reference the parameters located below the file name to view the parameters that have been assigned to you.
3. Execute the template for one of the parameters that has been assigned to you and complete the budget. Notice that the status has changed from “Not Started” to “Open”.
4. After the budget numbers have been entered, click **Save Data** in the BI360 Planning ribbon to store the data to the BI360 database.

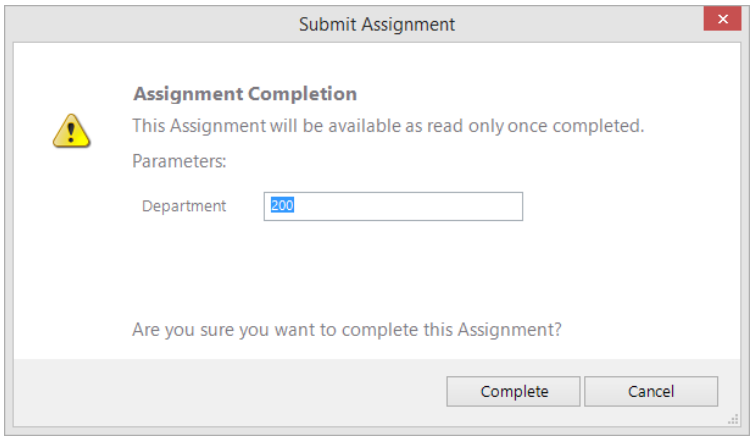
If a user attempts to store date to parameter(s) they do not have permissions to, storage is restricted with a user friendly message.

5. Keeping the form in an executed state, select from the list of parameters the parameter for which data has just been submitted for and click the **Submit** button found at the bottom of the Assignments window.



The Submit button appears after the assignment has been opened.

6. A popup window will ask the user to verify the parameters they are submitting the assignment for. Click **Complete** and you have successfully submitted the assignment.



You will notice that the status has changed from “Open” to “Submitted”.

Exercises

The sample exercise will walk users through creating a simple *Revenue* & *Expense Planning* template. The template will expand the natural accounts on the rows and 12 months across for the budget. Additionally, the template will include last year's actual data for comparison purposes. The second part of the exercise will cover configuring the *Planning Data Setting*, *Interface Setting,* and *Assignments*. Finally, the exercise will cover entering data directly in Excel and as well as spreading values and entering *Line Item Details* using the *Planning Data Entry Window*.

The following exercises will use Excel 2010, Reporting v3.7 and Planning and Data Warehouse Manager v3.7. The data and dimensions are based on the Corporate Demo model. It is assumed that all products, as well as the BI360 Data Warehouse Integration Package, have been installed. It further assumes that the user has been granted access to the database. The instructions in this exercise assume that there is a basic understanding of how reports are created within the BI360 Report Designer.

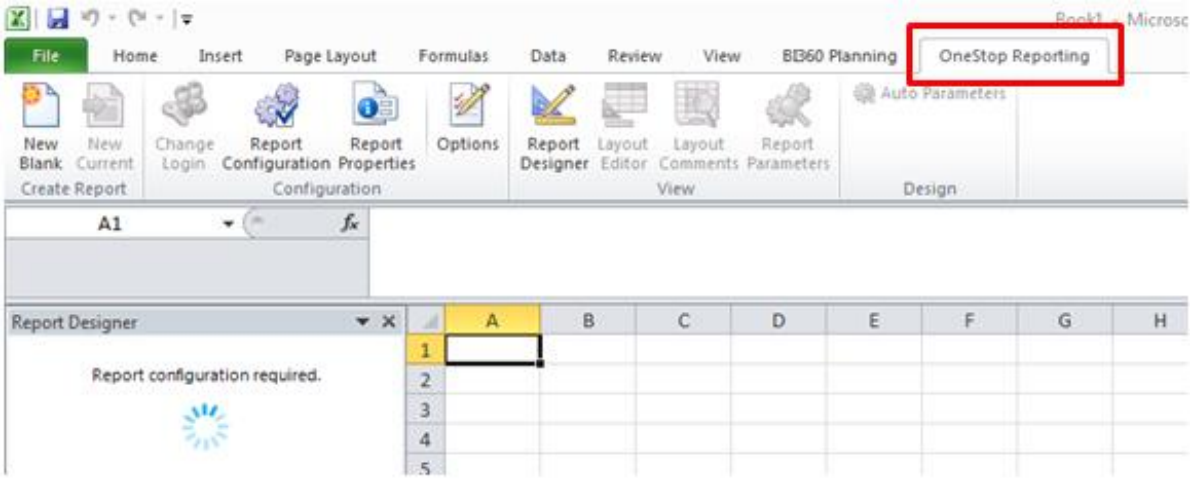
Designing the Planning Template

This exercise will cover:

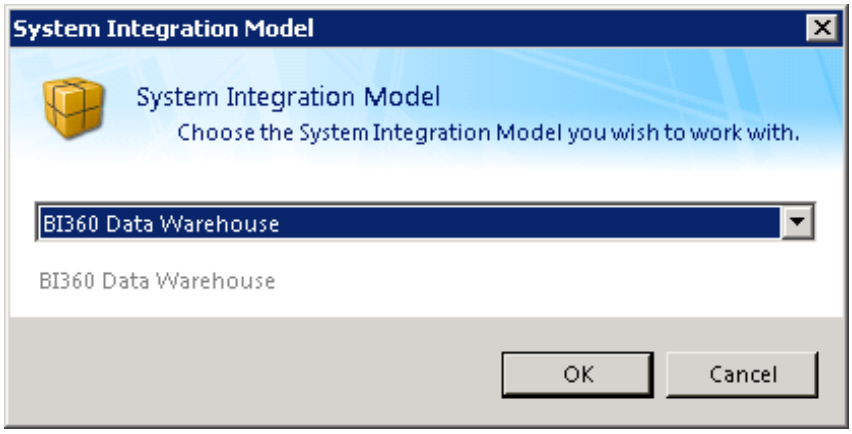
1. Creating the connection.
2. Designing a Simple Revenue & Expense budget template.
3. Setting up the Planning Settings including the ignore syntax.

Creating the Connection

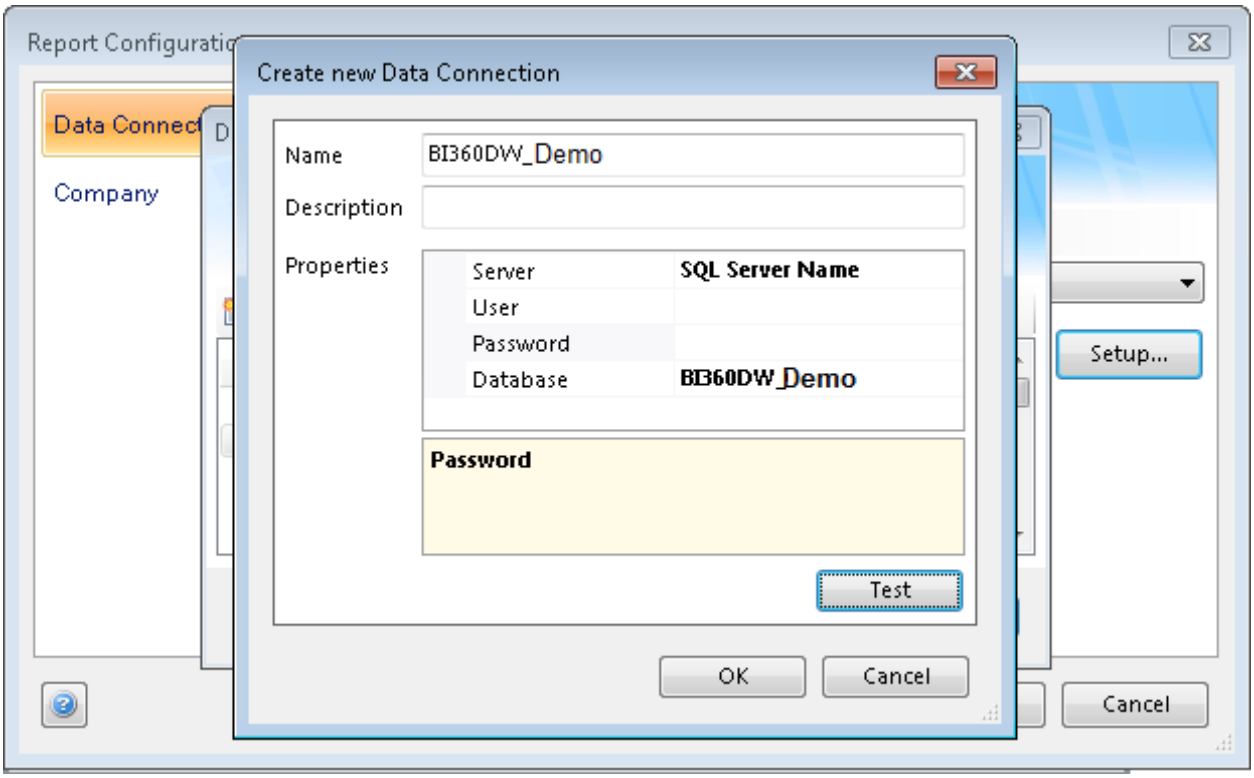
1. Start by opening Excel and Selecting the OneStop *Reporting* tab on the Excel ribbon. Next, click **New Current** button to configure the Report Designer connection.



2. Select BI360 Data Warehouse in the System Integration model prompt.



3. On the Report Configuration prompt, select **Data Connection** on the left side. Then select the BI360 Corporate Demo Model (*Note that the connection name may be different).* If the connection to the demo model has not been configured, create one by clicking **Setup** button to create the connection.
    a. If prompted for an Admin password, enter "admin".
    b. On the Data Connection window, click **New**.
    c. Complete all applicable fields (*Note that if Windows Authentication is used; leave the User and Password blank. If SQL Authentication is used, enter the appropriate User and Password.*
    d. Click **Test** and the OK to continue if the test is successful.
    e. Ensure the new connection is selected and close the connection screens.



Note the Report Designer and *Planning* share the same connection settings. Connections cannot be configured from the BI360 *Planning* ribbon so users must configure the proper connection through the OneStop *Reporting* ribbon.

Creating the Planning Template

When designing a *Planning* template, it is always best to spend time understanding the primary goals of the template. Since the template should always be dynamic, it is important to also think through the parameters required to drive the template. For instance, typical parameters for a *Planning* template include *Entity*, *Department*, *Period* and *Scenario*. However, the parameters should be specific to the goals and ensure that dimension selections that may change over time are not hard-coded in the design.

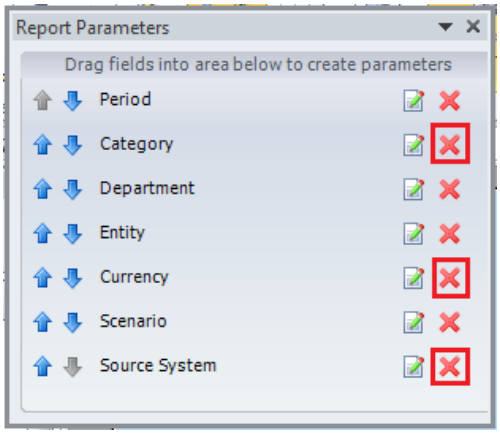
For this exercise, six parameters will be created to drive the template execution.

1. Category
2. Department
3. Scenario
4. Entity
5. Source System
6. Currency

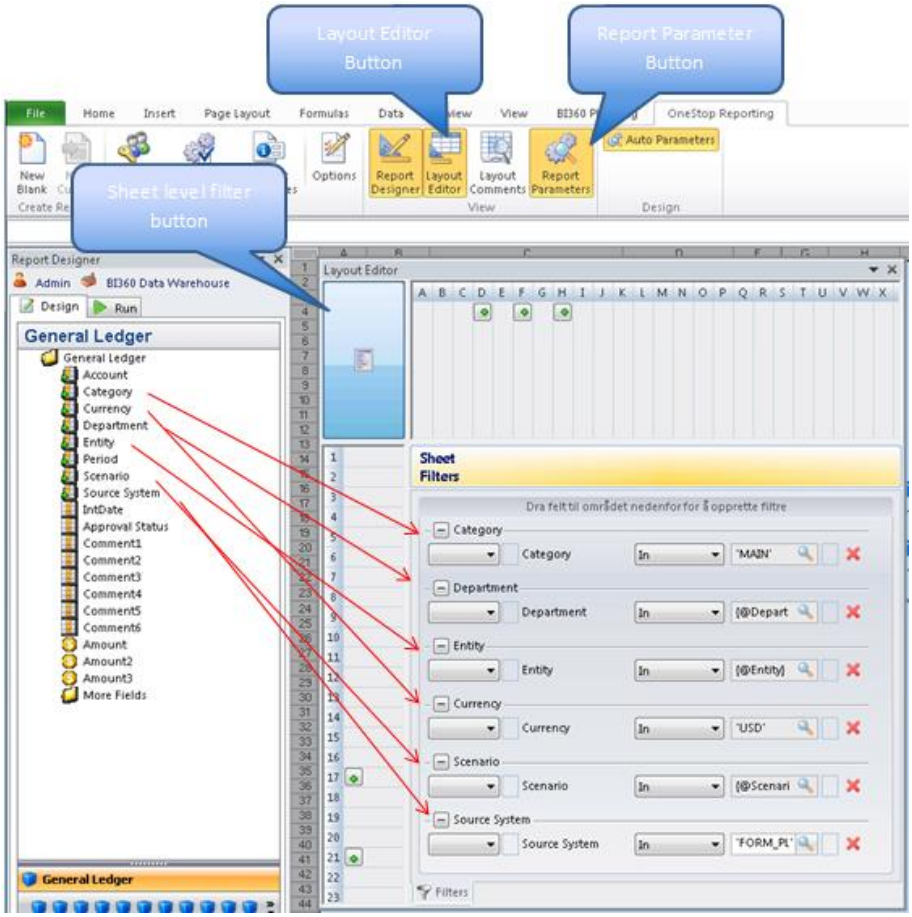
Start by changing the Excel sheet name from Sheet1 to DeptBudget and **Save** the Excel file as Departmental Budget.

1. From the Report Designer pane, click on the **General Ledger** option to ensure the General Ledger dimension and field selections are showing within the pane.
2. Click on the **OneStop *Reporting*** ribbon and select **Layout Editor** to make sure that the Layout Editor is open.
3. To select the entire worksheet, select the upper left sheet selection with in the Layout Editor.
4. Drag and Drop the following dimensions into the worksheet level of the Layout Editor Filter to create the parameter prompts and to set the dimension references for the entire worksheet
    a. Category Dimension
        i. Click on the lookup icon and select the code ‘MAIN’
    b. Department Dimension
    c. Scenario Dimension
    d. *Entity* Dimension
    e. Source System Dimension
        i. Click on the lookup icon and select the code ‘FORM_PL’
    f. Currency Dimension
        i. Click on the lookup icon and select the code ‘USD’

    Since Category and Source System have been set to a static filter, both parameters may be deleted by accessing the report parameters window from the OneStop *Reporting* ribbon.



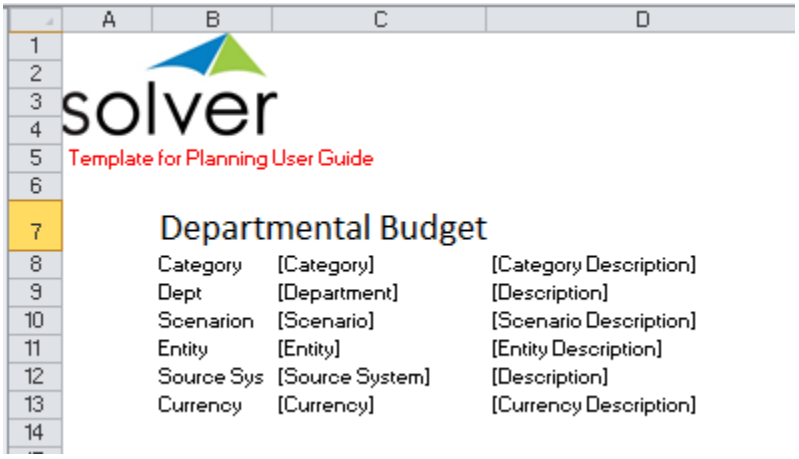
The results should match the screenshot below.



5. To test the parameters, click **Run** from the Report Designer pane. Test by clicking the lookup icon for each parameter.
6. To create headers for the report, drag the dimension attributes into the worksheet. Insert the following texts or dimensions into the cells mentioned in the following chart.

Cell	Type In	Drag In
B7	Category	N/A
B8	Dept	N/A
B9	Scenario	N/A
B10	Entity	N/A
B11	Source Sys	N/A
B12	Currency	N/A
C7	N/A	Category
C8	N/A	Department
C8	N/A	Scenario
C10	N/A	Entity
C11	N/A	Source System
C12	N/A	Currency
D7	N/A	Category Description
D8	N/A	Description
D9	N/A	Scenario Description
D10	N/A	Entity Description
D11	N/A	Description
D12	N/A	Currency Description

The worksheet should look like the image below. Note that row 1 and column A were kept empty so that the ignore syntax may be placed there later on in the exercise.

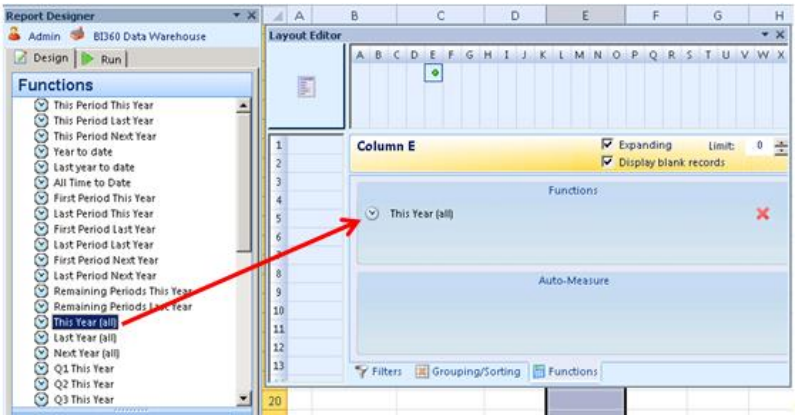


Company logos and other conditional formatting may also be applied.

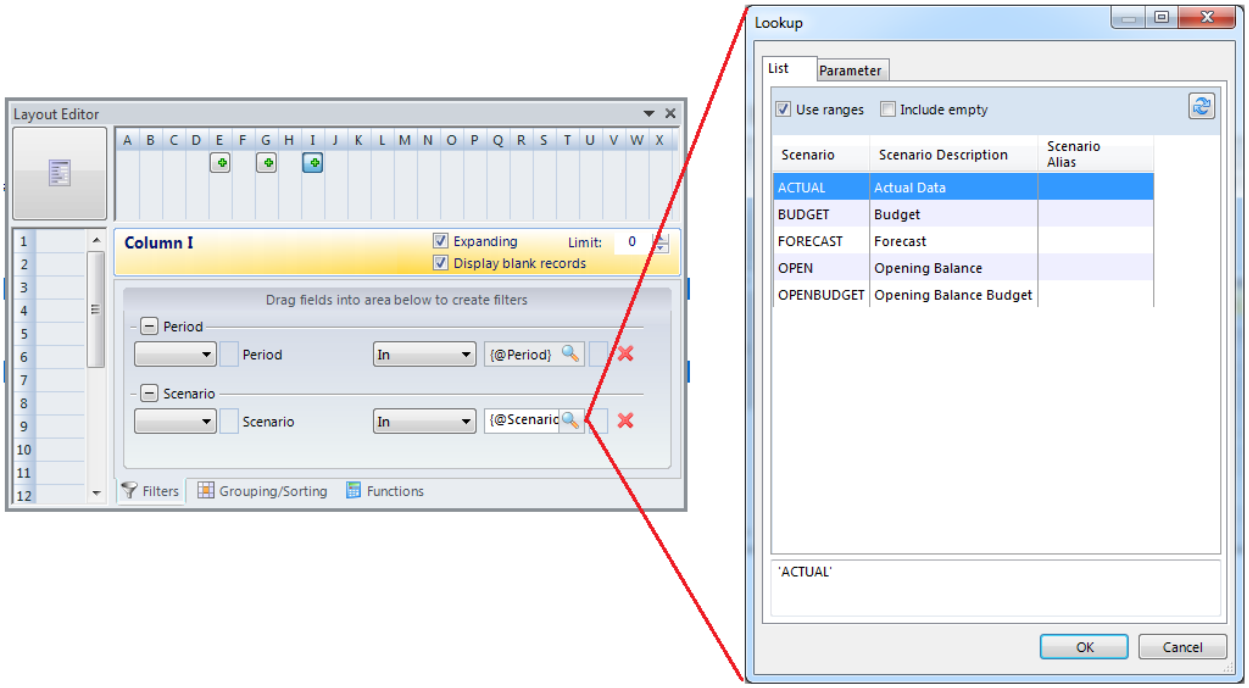
7. To create the monthly budget columns
    a. Drag in the PeriodStart from the Period dimension into cell E17.
    b. Select **Create a New Selection Group on the Column** from the prompt.
    c. Right-click in cell E17 and change the format properties to the custom format MMM-YYY and center the text within the cell.
    d. Open the Layout Editor and click on the expanding group on column E.

i. Drag in the Period dimension from the Designer pan in to the Filter tab of the Layout Editor. This will automatically create the Period parameter

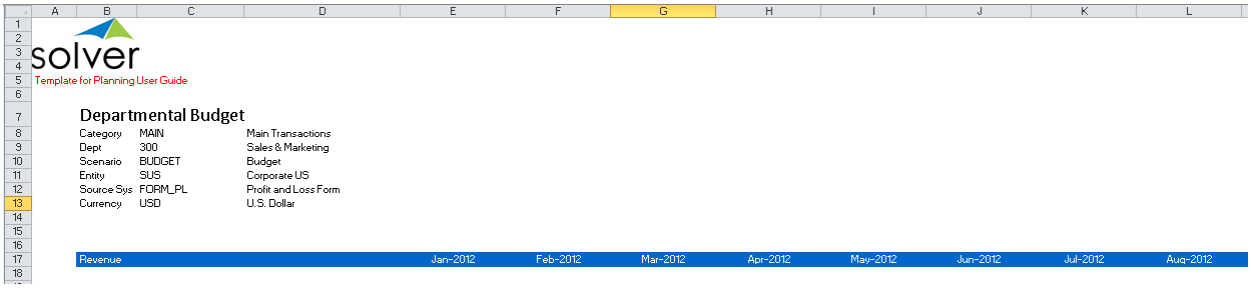
ii. Click on the Functions tab on the Layout Editor. From the Designer pane, click on **Functions** and drag the function 'This Year (all)' into the Functions tab.



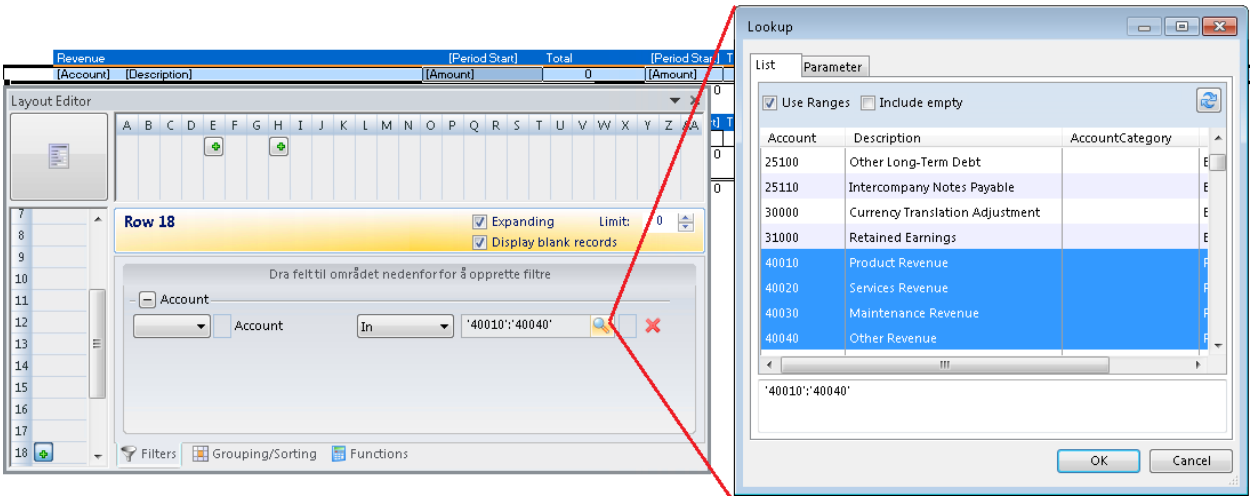
8. Type in the row header 'Revenue' into cell B17.
9. This report will be comparing the year the report is being ran for to the previous year Actuals. To bring in the previous year data, drag PeriodStart into cell I17. Similar to above, from Functions menu, drag in 'Last Year All' into the Functions tab.
10. Highlight the Expanding Group icon for Column I in the Layout Editor, drag in Scenario into the Filter. In the lookup, select **List** and select "Actuals". By applying this filter, all entries in the selected expanding group will refer to "Actual" data.



11. Test the form by going into the **Run** tab selecting a Period (i.e “201201’). Because of the ‘This year (all)’, the report will populate all periods that belong to 2012. Scrolling to the right some more, the period year will be populated as well. As mentioned above, custom formatting may be applied such as a fill and text color.



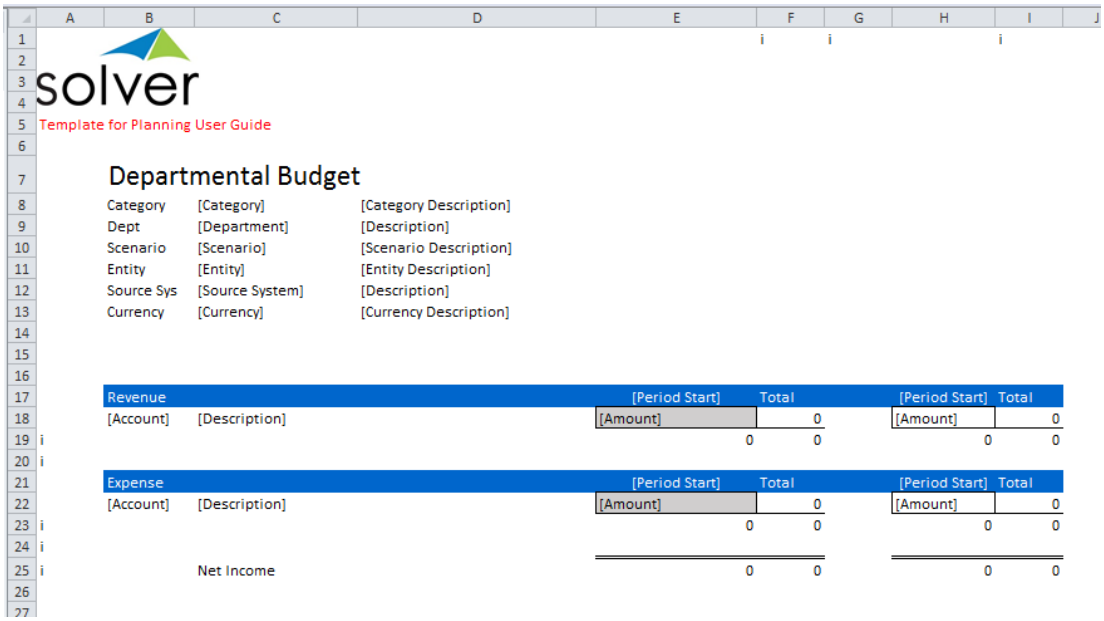
12. To add the Revenue Accounts to the template
    a. Drag in the Account dimension into cell B18. Select **Create a New Selection Group on the Row** from the prompt.
    b. Drag in the Description attribute from the Account dimension into cell C18.
    c. Open the **Layout Editor** and click on the expanding group for row 18.
    d. Click the lookup icon and select the revenue accounts 40010 – 40040 and click **Ok**.
    e. In addition, check the box next to **Display blank records** to always show all accounts.



13. To add the value corresponding to each account, drag in **Amount** from the Report Designer pane into cell E18 and H18.
14. To add a Year Total column, type in ‘Total’ for F17 and i17. To add the total calculation, right click in cell F18. In the menu, select One-Stop reporting and select **Create SUM for F18 (Amount)**. Repeat for cell i18
15. Add a row sub-total by typing in “Total Revenue’ into cell D19. To add the total calculation, right click in cell E19. In the menu, select **OneStop Reporting** and select **Create SUM for E18 (Amount).** Repeat for cell F19, H19 and I19

16. Next, following Step 10, Expense accounts will be added. Users may select Rows 18 and 19 and copy and paste them into Row 22 and 23. Change the Account filter to grab the Expense Accounts, 60010:68200. Apply the OSR Reporting -> create SUM for function to cells F22, E23 and F23.
17. Type in 'Net Income' into cell C25 and type in '=E19-E23' into cell E25 and '=F19-F23'. Repeat for cells H25 and I25
18. Finally add the "ignore" syntax to the following cells: F1, G1, I1, A19, A20, A23, A24 and A25. As previously mentioned, the ignore syntax tells *Planning* to ignore information found in these cells although they may exist in the Data Grid Write Back Range.

The finished report should look as follows.



Configuring the Planning Settings

This exercise will cover:

1. Configure the Data Settings for the input section.
2. Configure the Interface Settings for the *Planning* Data Entry Window.

The Data and Interface Settings (*Planning* Settings) are required to define how the data should be stored within the Data Warehouse. The Data Settings is used to map the dimensions and data to the storage fields within the Data Warehouse while the Interface Settings (optional) is used to map the *Planning* window. Templates may contain several Data Settings configurations depending on the complexity of the input template; however the template in the above exercise will be configured with only one setting. As an example, a Payroll template may store the main employee data to the Payroll module within the Data Warehouse and the summary General Ledger data to the GL module with the Data Warehouse.

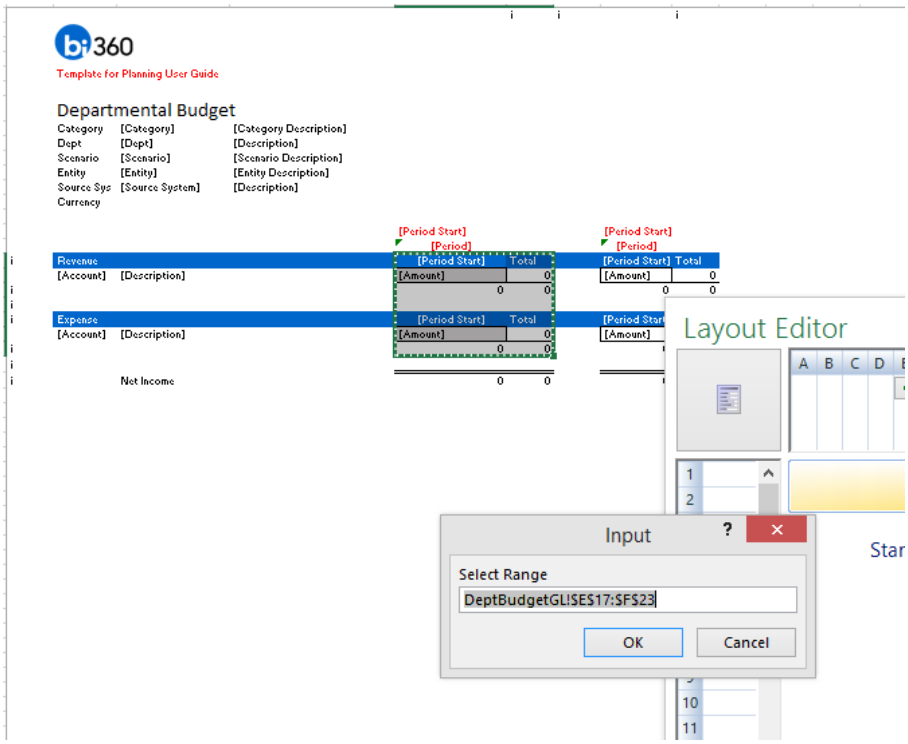
Although not required, there is improved performance while configuring the *Planning* Settings if the Layout Editor is closed.

Configuring the Data Settings

The following will guide users through creating the Data Settings for the template previously created. If it has not been done already, please save the template.

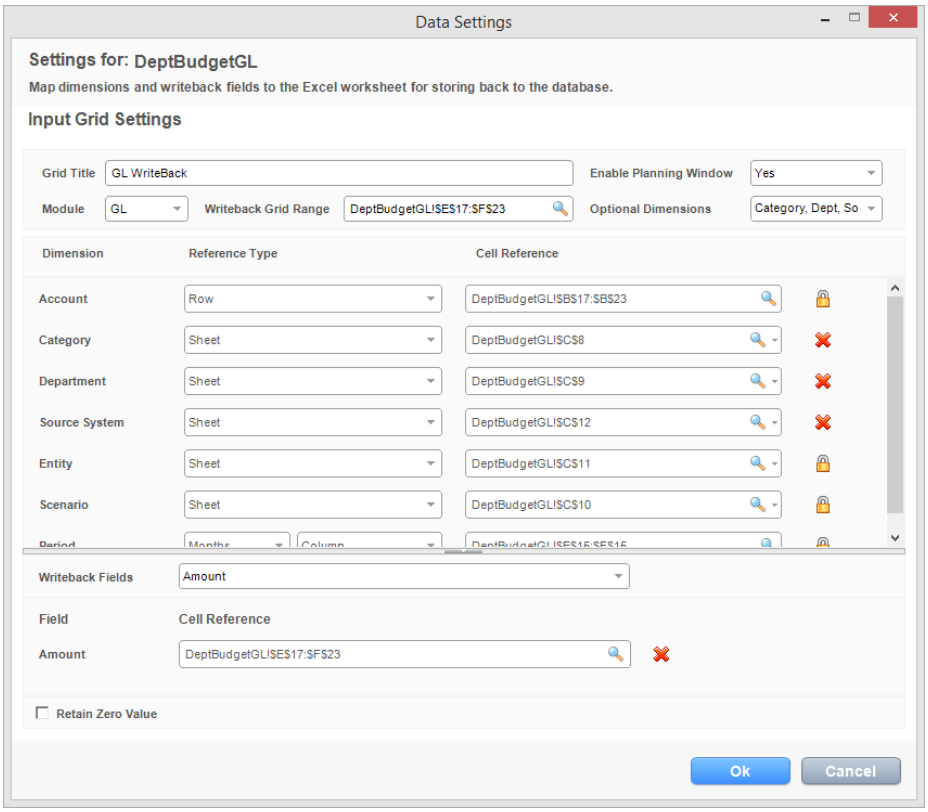
1. Start by clicking on the BI360 *Planning* ribbon and clicking the **Admin Panel**. Users will be prompted for a password. The default password is “admin” but it may be changed from within the BI360 Reporting Administration Tool.
2. Click on **Data Settings** menu and right click on the sheet where the template exists and select **New Settings**.
3. Now configure the Data Settings in the window that has been appeared
    a. Start by entering a Grid Title: Budget
    b. Select **Yes** for Enable *Planning* Window. The interface settings will be configured later in this exercise.
    c. Select the GL from the Module dropdown box.
    d. Click the lookup button for the data Gride range. Select the range which includes all input areas and one column and one row beyond the last input area. (This is required because the template is using expanding groups)

       In this example, there is an expanding group for the Periods in Column E and two expanding groups for the Accounts on rows 18 and 22. Thus, the Data range in this case is E17:F23.

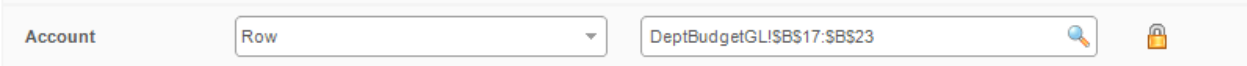


Note that we have selected Row 17 even though no data is being brought in here. As previously mentioned, it is recommended to include a row that will always render in your report to prevent application security from preventing this first row to render.

e. On the Add Optional Dimensions dropdown, click the checkmark box for: *Category, Currency, Department and Source System.*



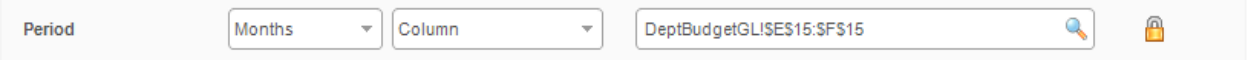
Account: in the example template, the Accounts are unique to each row. For the Account Reference Type click on the dropdown and select ***Row****. This means the Accounts may be different for each row (within the expanding groups). To select the Cell reference, click on the lookup button and select the entire account range related to the account code in the template. This should include the same start and end rows associated with the Data Range, but for the column containing the Account codes. Select E17:E24*



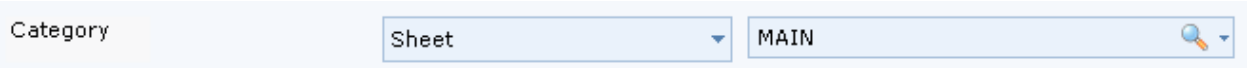
Entity: the entity is a global parameter in this example since it applies to the entire template. Set the Reference Type as Sheet and select the single cell in which the Entity code will be displayed in the generated input form.

Scenario: the scenario is a global parameter in this example since it applies to the entire template. Set the Reference Type as Sheet and select the single cell in which the Scenario code will be displayed in the generated input form.

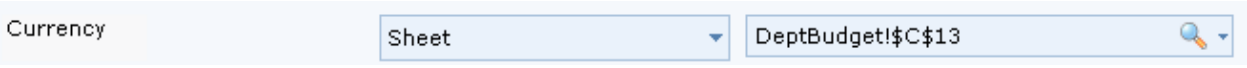
Period: The Period dimension expands over 12 columns to display January through December. Change the Reference Type to Column because the periods are unique for each column. This examples uses an expanding group to accomplish the full year display; the ference should be set to cover the cells in which the Period code will exist along with one additional column. The standard Period format in BI360 Data Warehouse is in YYYYMM.



Category: The category will be used in this example because of the use of Line Item Details. By default, Planning will store all Line Item Details to the category LID within the Data Warehouse. As A best practice, to avoid showing duplicate values, all budget input data should be stored to a different category other than LID. In this example, the category used will be MAIN (note: This could be any category). Planning allows direct, hard-coded entries within the reference section. Since the Category reference will never change, MAIN can be typed directly into the Reference Cell.



Currency: The Currency is a global parameter in this example since it applies to the entire template. Set the Reference Type to Sheet and select the single cell in which the Currency Code will be displayed in the generated input form.



Department: The Department is a global parameter in this example since it applies to the entire template. Set the Reference Type as Sheet and select the single cell in which the Department Code will be displayed in the generated input form.

Source System: The Source System is a hardcoded filter set at the sheet level. In this example, Source System is hardcoded to FORM_PL.

f. Write Back Field Mapping: Write back field mappings are the input or calculation fields which should be stored back to the Data Warehouse.

   In this example, a single storage field, Amount (Value1) is being used. The Amount field is a label which was given to the Value1 field with the Data Warehouse Manager

Application. Other Amount, comments and User Defined Fields (UDF) are available to store back to the Data Warehouse depending on the design of the input template.

By Default the Value1 field is selected for storage. This reference is based on the Data Grid range selection. For this example, no additional entries are required.

Click **Ok** at the bottom of the Data Settings Window.

Saving the Data Settings will perform the following tasks:

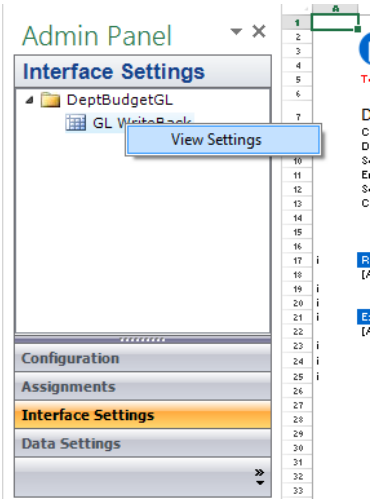
1. Save the settings to the hidden tab labeled: DataSettings
2. Create Excel Named ranges for the referenced cells. Use the Name Manager under the Excel Formulas tab to view the named ranges created.
3. Store the setting to the BI360 Data Warehouse.

Configuring the Interface Settings

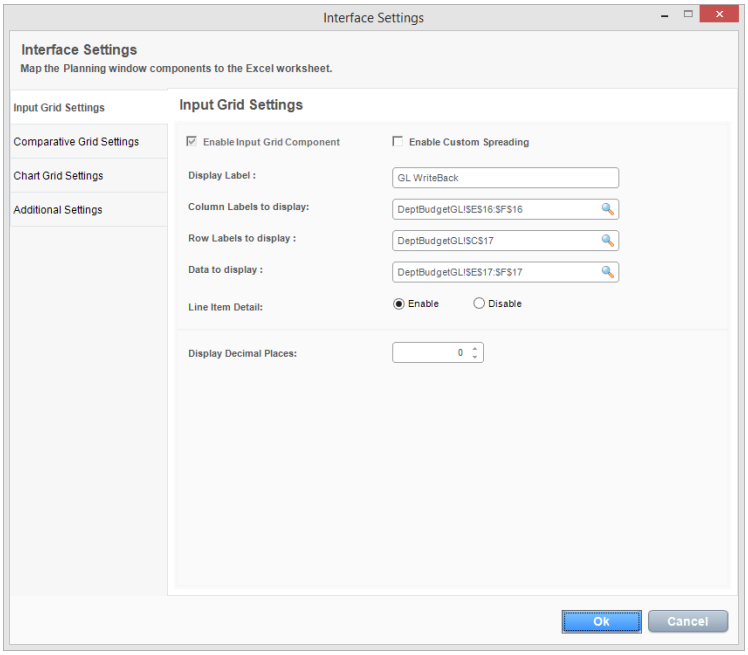
In this example, we will continue to build off the above template and configure the Interface Settings. As previously mentioned, the Interface Settings allow users to customize the look and feel of the *Planning* Data Entry window. This window is optional and was enabled by selecting **Yes** in the Data Settings configuration.

To begin:

1. Select **Interface Settings** from the Admin Panel.
2. Expand on the DeptBudget folder to view the available configured Data Settings. Right-click on the **Budget** grid and select View Settings.



3. In this example, the Charting, Comparative and Input Settings will be configured to show the various capabilities of *Planning*.



Charting Component

Charts may be used to visually show comparisons or trends between the Budget/Input data and Actual/comparative data. By default, this option is not enabled. Once enabled, the user may customize the following.

1. Chart Label: The label will be displayed in the chart header in the *Planning* window. Enter the text 'Budget vs Actuals'.
2. Chart Type: There are many chart types for users to choose from. The available options are Vertical and Line. The default is Vertical Bar and will be left as is for this exercise.

3. Legend Position: The legend for the chart may be positioned to different parts of the screen. The default is Left and will be left as is for this example.
4. Period Dimension Label: This is typically the Periods (Months) reference. The default, taken from the Data Settings should be correct. To change the location, simply browse the Excel file and select a different Period range.
5. First Data Series: The first data series is typically the budget input data. Confirm the default cell reference is correct. In this example it should be cells E17:F17. Use the lookup button to make the selection.
6. First data Series Label: This is the label to show to end users. This typically describes the type of data used as the first series. In this example, the budget data is used. Therefore type in 'Budget' into the textbox.
7. Second Data Series: the second data series is typically a reference to the actual/comparative data cell range. Click the lookup box and reference cells H17:I17
8. Second Data Series Label: This is the display name for the second data set. This typically describes the type of data used as the second series. Therefore, type in Actuals into the textbox.

Users may choose to have this option minimized upon initial load. Because of screen size, it may be desired to have the Charting Component but not load it by default. In this case, select Minimized by default. In this example, we will not be using this feature.

Comparative Data Setting Component

The next section references the actual or historical data in the Excel worksheet.

The Comparative Data Settings is disabled by default. This component will be enabled for this example, so from the drop down, select "Yes".

The following are customizable:

1. Cell range containing the column labels to display: use the lookup button to select the Period column labels for the actual data. Please select H17:I17.
2. Cell range containing the row labels to display (for first row in grid): this is the row label description. Typically this is the Account Code or the Account Code and Description. Select the range B18:C10.
3. Cell range containing the data to display (for first row in grid): This is a reference to the comparative data to display in the *Planning* Window. Typically the Amount cell should be referenced. Since the row is expanding, remember to select on cell over. In this case, select H17:I17.
4. Display label: The description users will see for this section. Type in 'Actuals' directly into the text box.

Users may choose to have this option minimized upon initial load. Because of screen size, it may be desired to have the Comparative Data Component but not load it by default. In this case, select Minimized by default. In this example, we will not be using this feature.

Input grid Component

The input grid section is the main section used within BI360 *Planning*. This section is used to reference input cells and is required for spreading input values as well as entering Line Item Details.

The following are customizable:

1. Cell range containing the column labels to display: By default, this input is populated with the Period referenced in the Data Settings. However, if a more user-friendly label was created in the report design, use the lookup to reference those cells. In this example, select cells E17:F17 if they are not selected already.
2. Cell range containing the row labels to display (for first row in grid): this is the row label description. Typically this is the Account Code or Account Code and Description. Select the range B17:C17.
3. Cell range containing the data to display (for first row in grid): By default, this input is populated with the Amount referenced in the Writeback Range in the Data settings. If the referenced amount is incorrect, then use the lookup to select the correct cells. In this example, make sure cells E17:F17 are selected.
4. Display Label: this is the description users will see for this section. Type 'Budget' directly into the textbox.
5. Line Item Detail: To enable the Line Item Details section of the *Planning* window, select the **Enable** radio button.
6. Display Decimal Places: The default is 0, however this may be changed to the desired precision.

Additionally, users may add a "separator" to their values if they desire. This feature will be used in this example and should be checked.

After completing: Click **Ok** to save the settings. Saving the settings does the following:

1. Saves the settings to the hidden tab: Interface
2. Creates Excel Named ranges for the referenced cells. Use the Name Manager under the Excel formulas tab to view the named ranges created.
3. Store the settings to the BI360 Data Warehouse

This completes the steps to convert a Reporting template to a Planning template. The next section will review how to use the features of Planning.

Entering Data Using the Planning Data Entry Window

This exercise will cover how to:

1. Enter data directly into Excel and store back to the Data Warehouse.
2. Enter and adjust data in the *Planning* Window.
3. Navigate around the *Planning* template from the *Planning* Window.
4. Create Line item Details within the *Planning* Window and store the data back to the Data Warehouse

Now that the template has been created, it is time to test it. Before beginning ensure the template is saved.

Entering and Saving Data Directly into Excel

1. The template should populate after running it for the following parameters.
    a. Entity: 'SUS'
    b. Department: '300'
    c. Scenario: 'Budget'
    d. Period: 201201
2. The first row should be the revenue account 40010. Note that all Excel functionality is available such as dragging values across the column and/or row.
3. After inputting data, select **Save Data** found in the BI360 *Planning* ribbon.
4. After the storage has completed, re-run the report to verify the data has stored.

Using the Planning Window

Three sections have been configured to be displayed when the user enters the *Planning* window. Each option may be minimized by select the "Collapse" icon in the header of each component. Additionally, as noted before these sections may be set to "Minimized by default" so that they are collapsed upon initial loading of the *Planning* window.

1. Click in the Jan cell for account 60010 – Salaries and select the **Enter Data** button from the BI360 *Planning* ribbon.
2. Enter data directly into the cells displayed in the Input Grid and click **Update Excel** to move the data into Excel.
3. Using the arrows, navigate to the next account. The Account information is displayed in the Window. By default, Even "Spreading Total" is selected. In the Spreading Total textbox, type in **12000**. The spreading total value will be evenly spread out to the number of Periods shown. In this case, 1000 will populate into each period. Click **Update Excel** to move these values into Excel.
4. Using the arrows again, move to the next row. In the Spreading total textbox, type in 12000 again. This time, use the Percent Adjustment to adjust the Spreading Total value by the Percent Adjustment. By default, Percentage Adjustment adjusts in increments of 5% and can adjust the total value by up to 50%. The incremental and total Percent Adjustments may be customized in the Interface Settings window.

After adjusting the value, click **Update Excel.**

There are many more features available such as rounding (when decimals are used) and other spreading methods. The other spread methods are only available in Comparative Settings are configured. If Comparative Settings are not configured, users will only see the Even spread option.

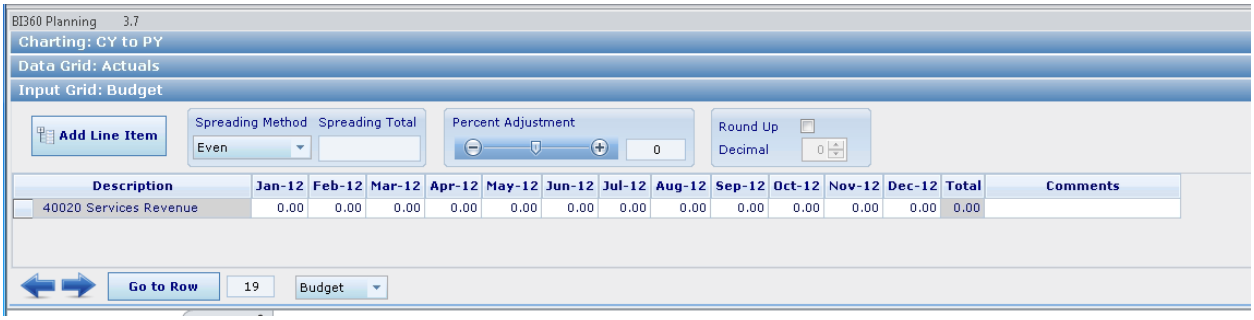
Three rows of data have been inputted into the *Planning* window. It is not necessary to click the **Save Data** option after each row of data is entered, but similar to making changes in any document, it is recommended to **Save Data** often.

Re-run the report to verify that the data was saved successfully.

Creating Line Item Details

Within the *Planning* Window, users may also create Line Item Details (LIDs) to create a more detailed budget. In this example, LIDs will be added to account 40020.

After clicking into the cell and opening the *Planning* window, select **Add Line Item**. This will add a new line below the account. In this example, 3 LIDs will be added.

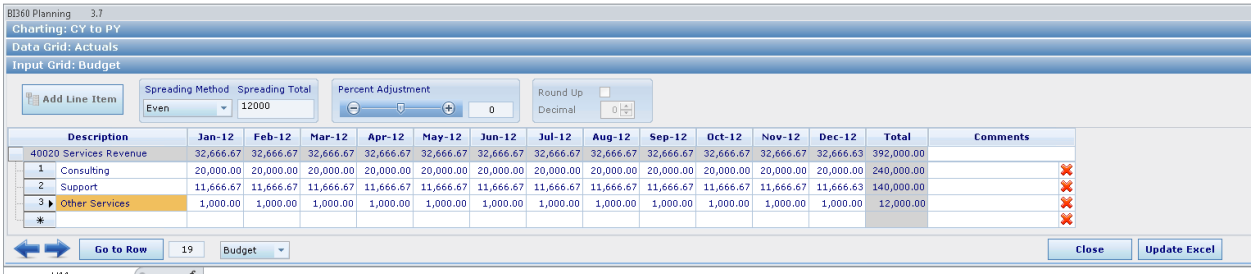


In this example, the Charting and Data Grid components have been minimized. All of the features that have been enabled, such as decimal places, separators and Line Item Details are active within the window.

To add a line item detail, click **Add Line Item**. A new row will appear below.

1. Add a user friendly description, in this case “Consulting”.
2. Add some data figures into the Spreading Total box. Notice, that the entered figure is spread evenly across all twelve months.
3. Repeat again, this time adding a LID for “Support”. Again, entered a figure into the Spreading Total box and notice that it will be divided evenly into the twelve months.
4. Add one more LID, “Other Services” and add some data figures.

Once complete, you will have three LIDs that are summarized into the 40020 account. Click **Update Excel**.



After Update is complete, simply click **Save Data** and the transactions will be saved. Re-run the report to verify they have been added successfully.

Appendix

Glossary

Assignments: These are folders in the Assignment Task Pane in *Planning*. Each Assignment folder can contain a number of Excel files (e.g. budget models) that the end—users can open directly from within Excel.

BI360-*Planning:* is an Excel-based data entry tool and a component of the BI360 product suite from Solver, Inc. that is typically used for budgeting and forecasting

BI360-*Reporting:* is an Excel-based report writer that is part of the BI360 product suite from Solver, Inc.

BI360-*Data Warehouse:* is the data warehouse that is part of the BI360 product suite from Solver, Inc.

Data grid: A data grid is any data (numbers) area of the Excel model that is going to be saved to the database as transactions and that relates to the same set of Excel rows and columns. For example, in a departmental expense form, the data typically relates to account numbers on the rows and months/periods on the columns.

Additional Information

Solver Support Center

The Solver Support Center (support.solverusa.com) is the centralized location for users to learn more about the BI360 Suite. From opening and managing your support tickets to reading knowledgebase articles about the product, the Solver Support Center has everything a user will need.

Users may contact Solver Support if they have questions about the BI360 Suite. One of our technical support consultants will gladly assist you.

Users can access the Solver Knowledgebase for more information about the entire BI360 Suite. From user guides, white papers, training manuals and much more, the Solver Support Center has everything a user will need to get started with the application.

Solver Forum

The Solver Forum (solverusa.com/forum) is a great resource for users to ask questions about the software. Other users or one of the many Solver employees frequently check the boards and can quickly answer your questions.

Solver Feedback

Solver invites customers to participate in providing feature requests for future versions of BI360 on a site just for user feedback, feedback.solverusa.com. On the Solver Feedback site, users may suggest features for updates and upgrades to BI360 – and/or vote on existing feature submissions from fellow customers to really push for feature(s) that would make BI360 even more powerful, dynamic, and intuitive.