Rational. Dashboard

Excel Walkthrough

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Before using this information, be sure to read the general information under the "Notices" section on page 36.

This edition applies to **VERSION 4.0**, **Rational Dashboard** and to all subsequent releases and modifications until otherwise indicated in new editions.

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Welcome

Welcome to the Excel Walkthrough for IBM Rational Dashboard!

IBM Rational Dashboard brings software management best practices within reach of every organization and every manager. Manage requirements, schedule, budget, quality, configuration management and size in one place; keeping total control of the drivers that keep projects on time and within budget.

IBM Rational Dashboard spans the gap between the management process desired and the one currently in place. Focus on managing by exception using IBM Rational Dashboard alerts, analysis, graphical displays and drillable views that provide all the information needed to make well-informed decisions quickly. Using a web-based interface and intelligent integrations to software life cycle tools, IBM Rational Dashboard delivers industry best practices ready to be applied. Finally, IBM Rational Dashboard checks project compliance with industry standards and unit templates, ensuring a course to success.

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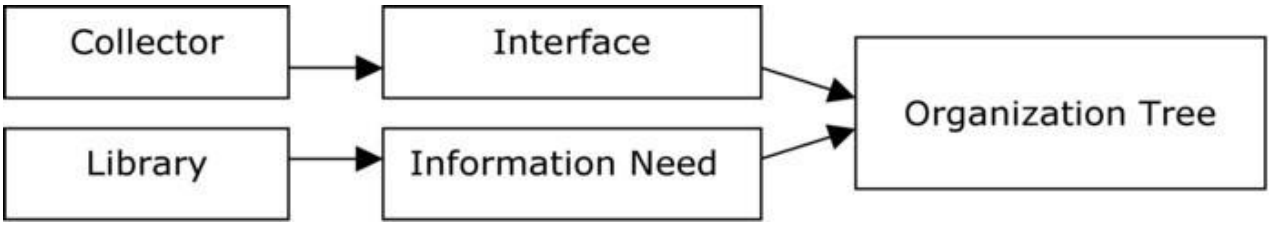
Data Collection Overview

Before beginning the integration to a data source, it is important to understand the key elements that allow the portal to gather and display data from your data.

Data in the Portal is gathered by the **Collector**, configured by the **Interfaces**, organized by **Information Needs** and analyzed in the **Organization Tree**.



The **Collector** (Windows based executable) - Gathers data from outside sources and stores it in the **Transform** database.

- **Outside Data Sources** include: IBM Rational DOORS, IBM Rational Synergy, IBM Rational Change, MS Project, IBM Rational ClearQuest, Oracle Databases, Microsoft SQL Databases, Microsoft Access, Microsoft Excel, ODBC, CSV, HP Quality Center.
- The **Transform** is a Microsoft SQL Database table located in the Dashboard_Transform database. It stores current and historical data collected from **Outside Data Sources**.

Interfaces (From the Collection tab in the Portal) – Allow users to define and organize data collected by the **Collector**. **Interfaces** are defined using three subtabs: **General**, **Fields** and **Queries**.

- The **General** tab includes the type of data being retrieved from the **Outside Sources** as well as the name of the database that will be used to store the data.
- The **Fields** tab defines the field sets of data that are being retrieved as well as the table name where information will be stored in the **Transform**.
- The **Queries** tab indicates the SQL queries that will be run against the **Transform** to produce data points for **Graphs.**

Information Needs (From the Library tab in the Portal) – Allow users to define graphs to display the collected data.

- **Graphs** contain **Series** that are used to plot data against time/events.
- **Series** are associated with **Queries** defined in **Interfaces** to determine which data to plot.
- **Information Needs** can be used by one or more interfaces.

Organization Tree (From the Status tab in the Portal) – Allows users to display and analyze data in **Graphs** which are defined in **Information Needs**.

- **Folders** and **Units** provide structure for the **Organization Tree.**
- **Units** can contain one or more **Information Needs.**

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Excel Sample Walkthrough

This sample describes the necessary steps to configure and collect data from Excel files. This sample walks a new user through all required steps needed to see graphs with data points populated from Excel files.

There are four areas that will be covered through this walkthrough:

- Format the Microsoft Excel file
- PORTAL
  a. Create an Information Need
  b. Create an Interface in the Portal
  c. Set up a Unit with Information Needs (or use a template)
- COLLECTOR
  a. Configure the Collector
  b. Run a collection
  c. Check/Resolve any collection errors/problems
- PORTAL
  a. Check for collected items in the Portal and assign them to Units
  b. Assign schedules to Items
  c. View collected data graphs in the Portal

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Format the Microsoft Excel File

The Portal requires that one of two formats be applied to the Microsoft Excel file. The first option, Vertical, is the most commonly used with Microsoft Excel files. The format requires that the first row of the file be the 'column' headers. An example of a Vertical setup is below:

	A	B	C	D	E
1	Date	Actual Tasks	Major Items	Minor Items	Reviewer
2	1/1/2008	1	0	1	Bob Jones
3	2/1/2008	7	2	5	John Smith
4	3/1/2008	14	3	11	Beverly Johnson
5	4/1/2008				
6	5/1/2008				
7	6/1/2008				
8	7/1/2008				
9	8/1/2008				
10	9/1/2008				
11	10/1/2008				
12	11/1/2008				
13	12/1/2008				

Each consecutive line should have data that lines up to the fields in the header and be on a line by itself.

The second format option that can be used for Microsoft Excel files is Horizontal. This format requires that the first column of the file be the headers. An example of this format is below:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Date	1/1/2008	2/1/2008	3/1/2008	4/1/2008	5/1/2008	6/1/2008	7/1/2008	8/1/2008	9/1/2008	10/1/2008	11/1/2008	12/1/2008
2	Actual Tasks	1	7	14									
3	Major Items	0	2	3									
4	Minor Items	1	5	11									
5	Reviewer	Bob Jones	John Smith	Beverly Johnson									

Once your Microsoft Excel file is setup correctly, you are ready to move on to configuring the Portal.

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Configuring the Portal

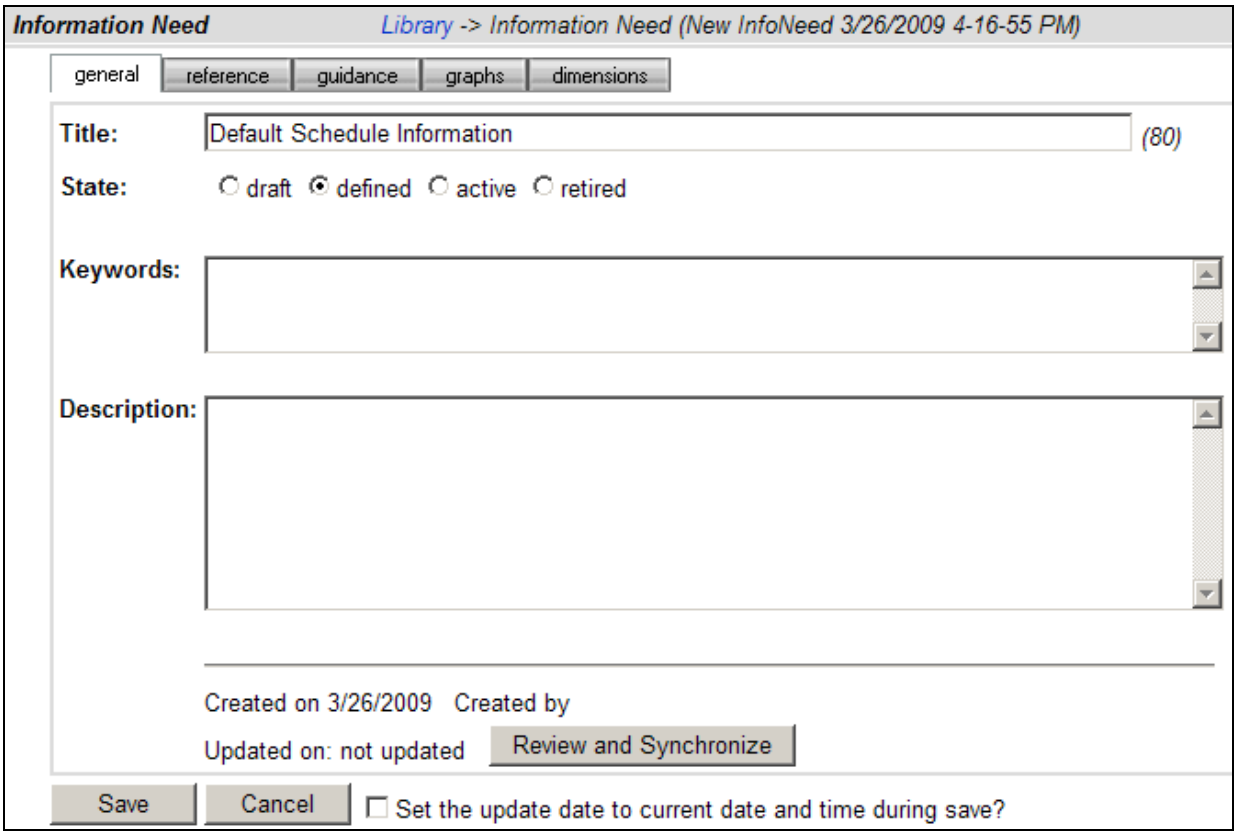
The Portal provides the user the ability to describe which data to collect, how to analyze it and then how to display it. Before information can be analyzed or displayed, the Portal must be configured to collect the information from an Excel file.

Create an Information Need

When adding a new data source, you have the option of creating a new Information Need, or using a pre-existing one. For this example, we'll create a new one, though we could use an existing Information Need.

Adding an Information Need

On the **Library** tab, click on the **Information Need List** link on the left hand side. From here, click on the **add** button above the list. On the **general** subtab, enter a name for the information need in the **Title** field and choose a **State** for the Information Need.



All other information on the **general** subtab is optional. Additionally, the information on the **reference** and **guidance** tabs is for use within your company. These tabs are generally used to convey information about an internal metrics plan, or ways to utilize best practices that have been collected during prior review processes. **Save** the Information Need and then reopen it by selecting the **Edit** button. (This is done as a precaution so that no data is lost when creating a graph.)

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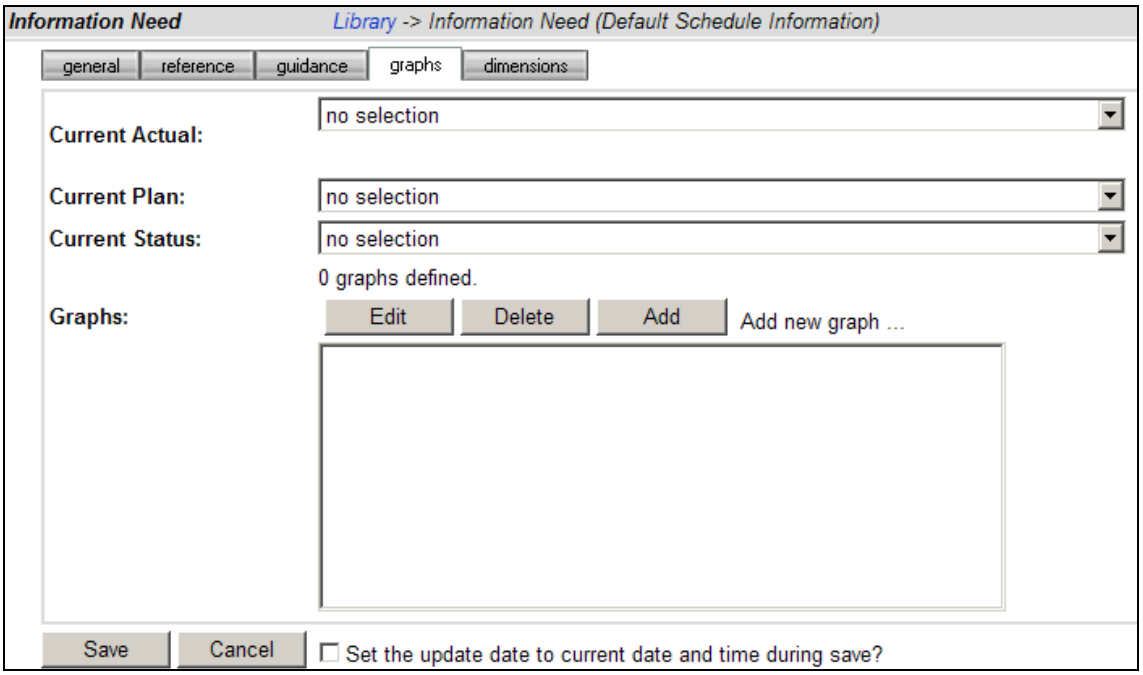
Adding a Graph to the Information Need

Within the Information Need, graphs will be added that are all related to the information area associated with the Information Need. For this example, only a single graph will be added, but as many graphs as necessary can be added to the information need.



Click on the **graphs** subtab of the Information Need. To create the graph, click on the **Add** button. The drop downs above the buttons will be addressed later.

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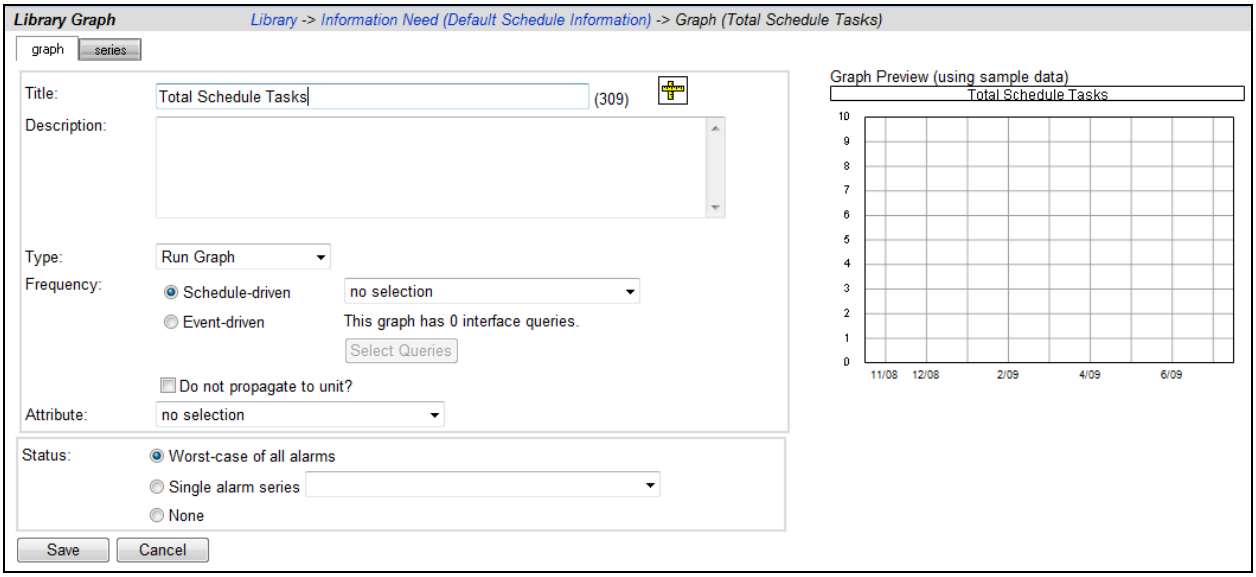
All of the basic information about the graph is set on the **graph** subtab. Enter a name for the graph in the Title field. The **description** is optional and may be left blank. The **Type** of graph is chosen from a drop down. For this example, select run graph from the drop down menu. For more information on graph types, please refer to the help files.



The next option is to choose a **Frequency**, either schedule-driven or event-driven. The difference between the two is that an event-driven graph does not have a pre-defined and consistent schedule. Examples of event-driven frequencies might be software releases or peer reviews. Schedule-based graphs are based on a static and consistent schedule, such as a daily, weekly, or monthly data collection. If no selection is chosen here, the graph will default to the same schedule as the Item to which it is assigned. This is the option chosen for this example.

Finally, the **Status** option allows you to select which alarm serie(s) provides the current color-coded status for the graph. A change would only be necessary in this area if more than one alarm existed on the graph or if you did not want the status from this particular graph to affect the status of the Information Need as a whole. For this example, leave the default of using the worst-case of all alarms selected.

Once these changes have been made, press Save.

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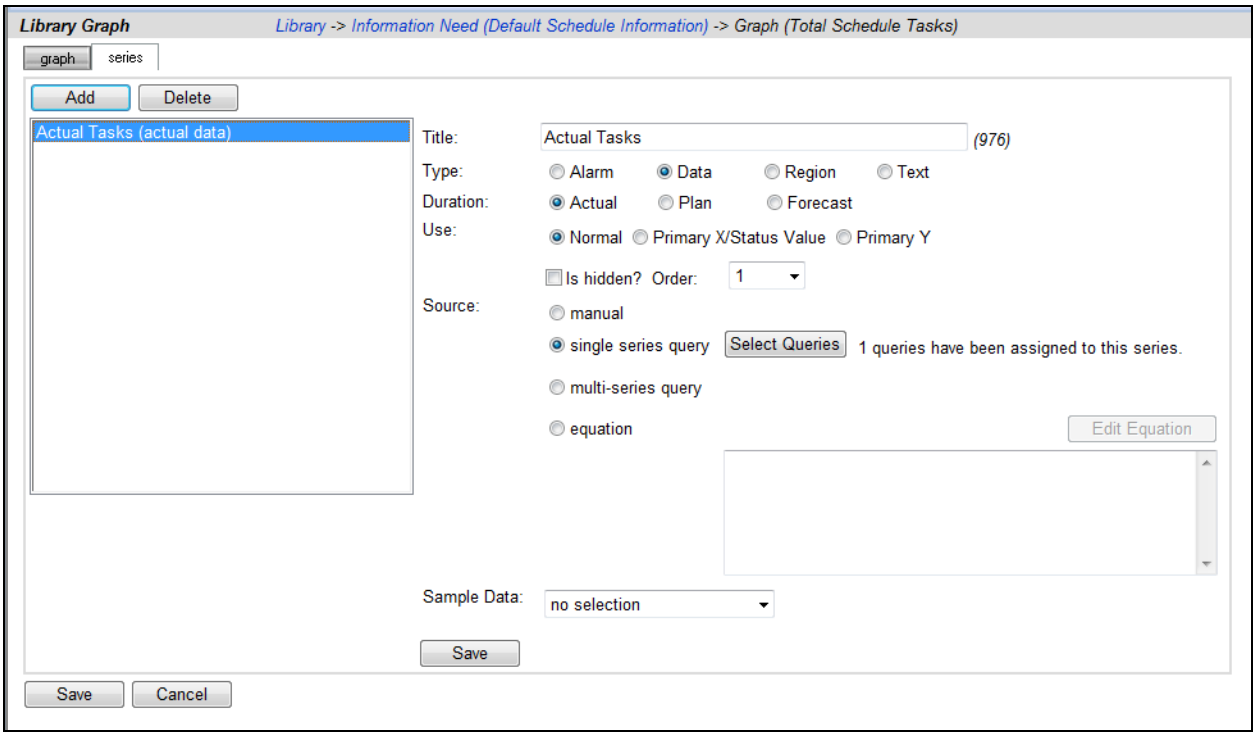
Next, add series by selecting the **series** subtab. This is where the information that will be displayed on the graph will be entered and/or selected. The graph for this example is very basic and will include three series: Actual, Plan, and an Alarm.

To create the series, click on the **Add** button. On the right hand side, you will see the series definition. Name the series 'Actual Tasks' using the **Title** field.

This series is a Data **Type** series, and is an actual **Duration**. (This means that it should only show data from a given date, backwards.) It is a normal **Use** series. For the **Source**, select the single series query radio button.



Save the series by selecting the **Save** button located under the Sample Data field.

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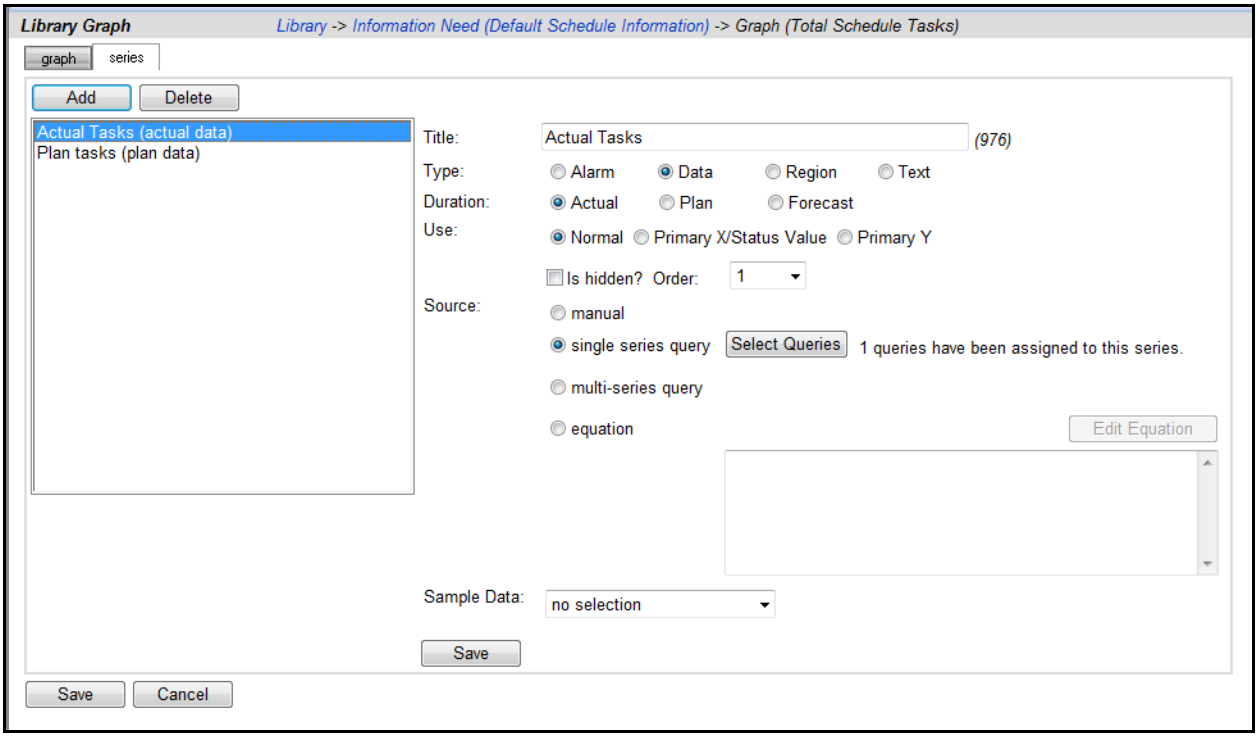
Create a second series and call it 'Plan Tasks'. Again this series is a Data **Type** series, but this series is going to use the Plan **Duration**, which means that it can have data for both before and after the current date. This series is also a normal **Use** series. Select manual for the **Source**. Click the **Save** button as before to save the series.



Create a third series and call it 'Total Tasks Alarm'. This series is going to be an Alarm Type series. Select Actual for the Duration and Normal for the Use.

For this series, the **Source** is going to be an equation, so select the equation radio button. In the equation box, type if((series("\Actual Tasks")>series("\Plan Tasks")),red,green). (**Do not copy** the query out of this document as Word documents change the quotation marks to an image character that is not accepted in the equation.) You can also use the **Equation Editor** to edit the equation for the alarm.

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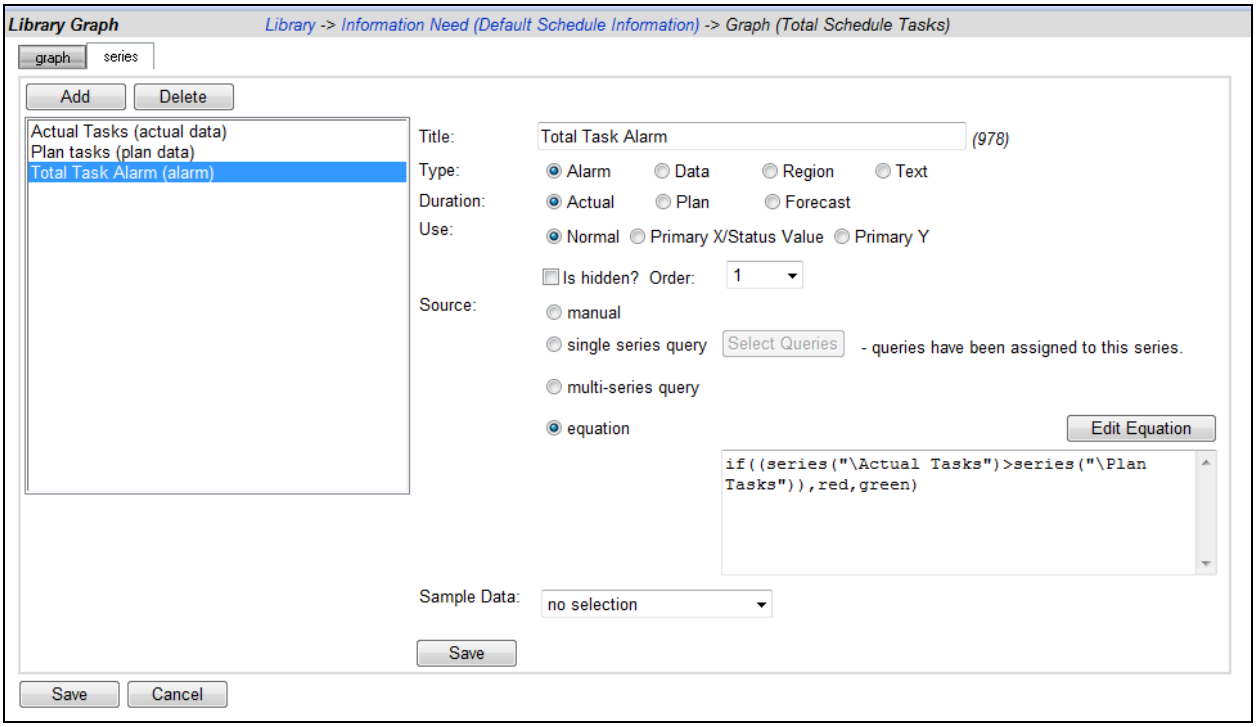
For the equation in this example, the alarm shows red if the total number of tasks is more than the planned number of tasks.



Once all series have been created, save the graph.

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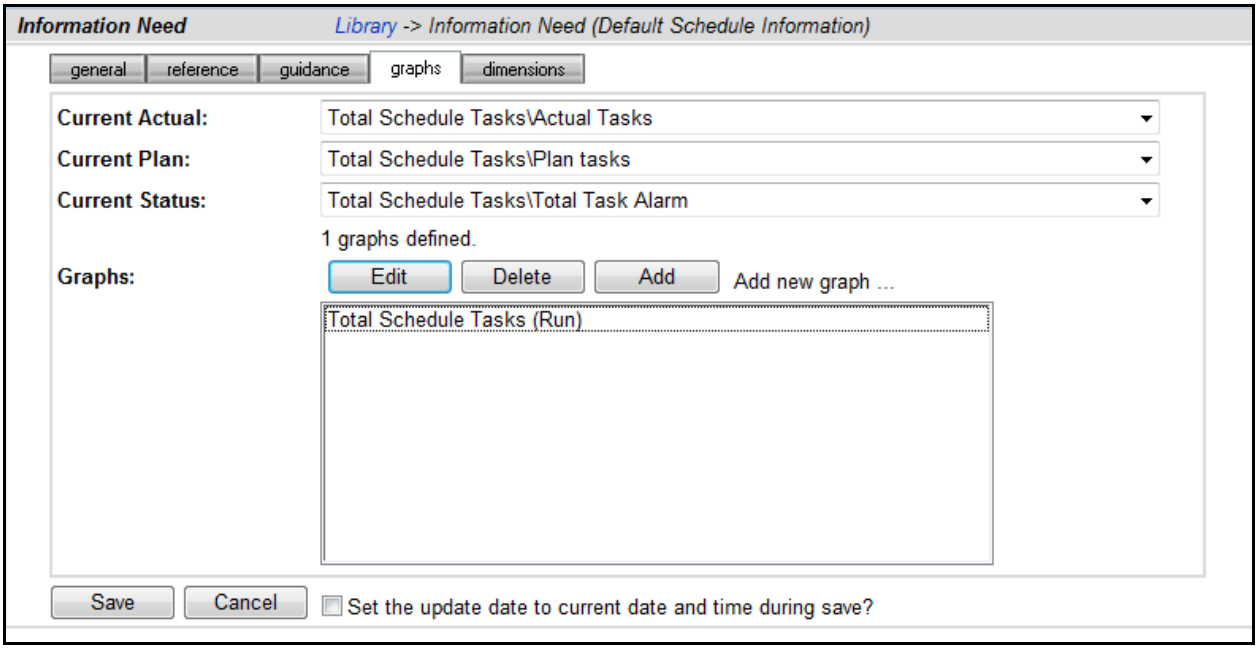
The final step is to set the Information Need status drivers, which are the drop downs on the graphs tab. These three areas drive the color status for the Information Need on the Status page. In this case, set the 'Actual Tasks' series as the **Current Actual** value, the 'Plan Tasks' as the **Current Plan** value, and the 'Total Tasks' as the **Current Status** value.



Save the changes to the Information Need.

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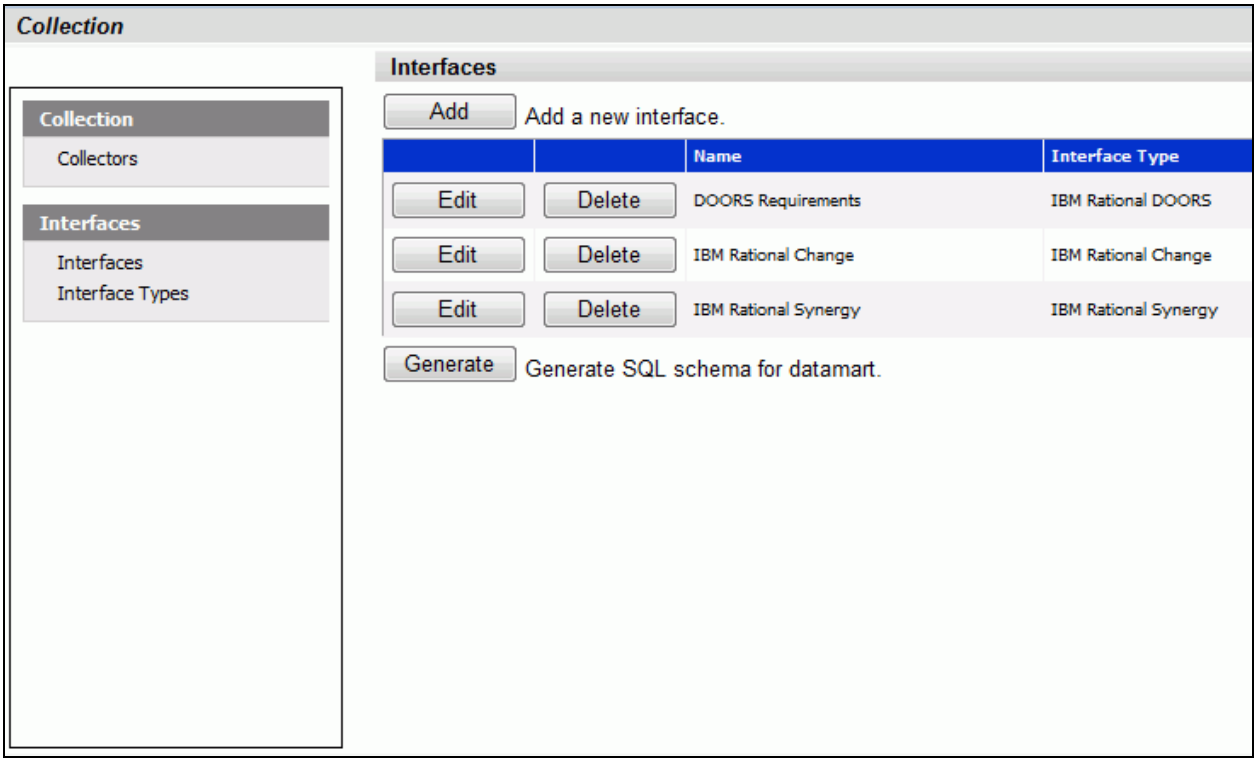
Create an Interface in the Portal

Before collecting data from the Microsoft Excel file, you will need to create a unique Microsoft Excel Interface in the Collection tab of the Portal. Click on the **Collection** tab, and then click on the **Interfaces** link on the left hand side.



From the Interfaces List, click on the **Add** button.

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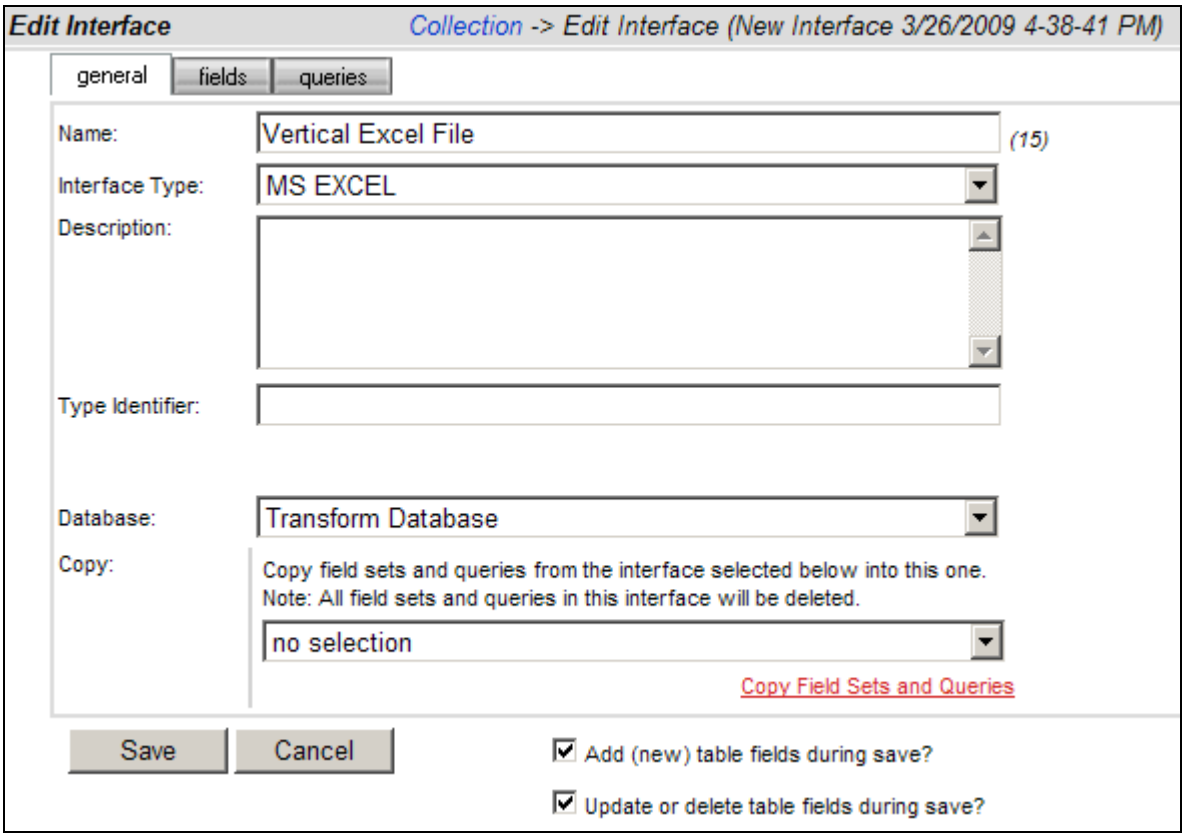
This will create a new **Interface**. The Interface stores all of the information pertaining to what data is being collected and where it is being saved for that data source.



On the **general** subtab, enter a **Name** for the Interface. In this example, we'll call it 'Vertical Excel File'. Select 'MS EXCEL' from the dropdown list for the **Interface Type** field. For Microsoft Excel files, the **Description** and **Type Identifier** are optional fields which will not affect the collection. For the **Database** field, select the database where the data should be stored. This is usually the Transform Database.

Next, switch to the "fields" subtab. In the **Database Table** field, enter the name of the table in the database where data will be stored. For this example, we'll use the table name 'Tasks'. (The table will automatically be created in the database when the Interface is stored.) Once you have entered this information, you may press the **Save** button and save the new interface.

Setting Up Fields

The Collector uses the information found in the **fields** subtab of the interface to determine what data to collect from the data source.

Open the newly created Vertical Excel File Interface and click on the **fields** subtab. This subtab is shown in the figure below.

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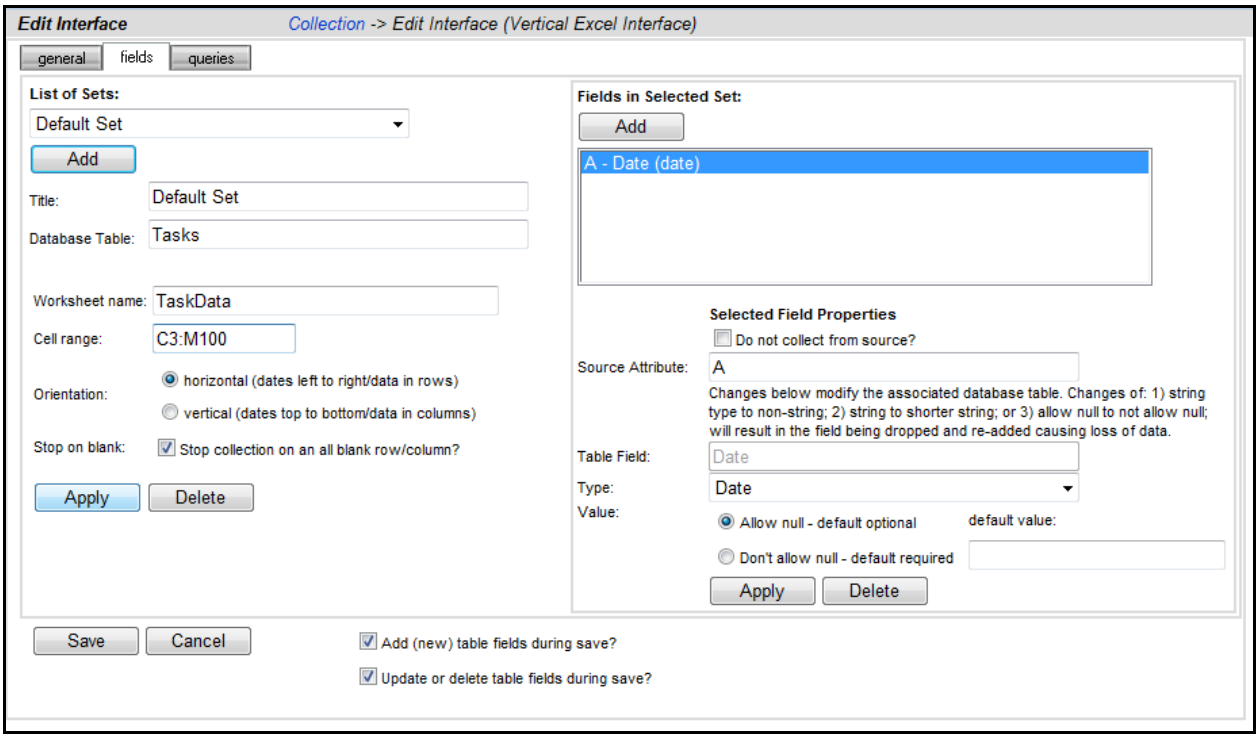

Notice that it is possible to define multiple **sets** of data, called field sets. For Excel, a field set allows you to collect several sets of data from one Excel file, with one set of data from one worksheet and a different set of data from another worksheet.

For each field set, you enter the Database Table name to specify where the data for this set is to be stored. You also enter the **Worksheet Name**, **Cell Range**, **Orientation** and indicate whether collection should **Stop on blank**. The **Worksheet Name** is the exact text from the Excel file, as shown in the tabs at the bottom of the file. The **Cell Range** is the top left and bottom right cell location separated by a colon, such as "A2:M99".

The **Orientation** indicates whether data is arranged horizontally: data is scanned top to bottom, with dates being in one row. Alternatively, data could be arranged vertically: data is scanned from left to right, with dates being on one column.

For each worksheet, click the **Apply** button located to save.

On the right hand side, select the **Add** button to create a column from the Microsoft Excel file to be collected by the Portal. For Microsoft Excel files, letters (vertical setup) or numbers (horizontal setup) should be added as fields based on the setup of the Microsoft Excel file to be collected. In this example, the Microsoft Excel file is set up as a Vertical Excel file so letters will be used. After selecting the Add button, change the **Source Attribute** field to 'A'. (This is the name of the field in the source.)

In the **Table Field**, enter 'Date'. (This will be the name of the field in the database table where the data is stored.) The only requirements for the Table Field are that it be unique for this table and that it follows SQL Server naming conventions.

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The **Type** field determines what kind of data can be entered into the database field. Make sure that the type chosen here is equivalent to the Source type. For this example, select Date.

The selection for the **Value** field determines whether the database field allows null values or not. If the 'Don't allow null' option is selected a default value of the type selected must be entered in the default value field. For this example, select the 'Allow Null' option.

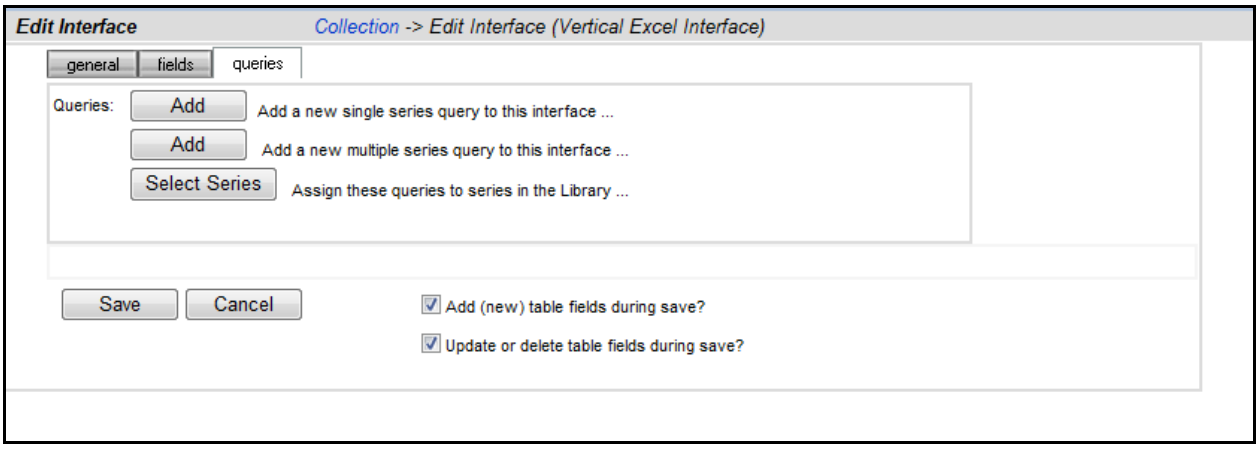
Select the **Apply** button to save information in this section.

After the fields have been created, the **Table Field** name cannot be modified through the interface. Once the addition of all of the fields from the Microsoft Excel file has been completed, the next step is to write queries for the data.

Defining Data Queries

The final tab of the Interface is the **queries** subtab. The queries subtab is used to define how data is counted or treated to display the information that is desired. This is done through SQL queries, with the help of the **Query Builder**. Most of the queries can be built with little or no knowledge of SQL, though some cursory knowledge would be helpful for troubleshooting.

You have a choice of two types of queries, **single series** and **multiple series**. A **single series** query returns a single value for one series in a graph and is the more common query to use. **Multiple series** queries are used when the same basic query will be used with a single difference. For example, if you want a graph that would display Defects by Priority, but are not sure how many different priorities are being used, you could use the multiple series to first retrieve the different priorities, use those priorities to create series for a graph and then count the number of defects for each priority. Or if you know the priorities, but there are a large number of them, you could use the multiple series query for the same use.



In this example, we will create a **single series** query. Click the **Add** button for the single series query. Enter a title, in this case "Total Tasks". For this query, the necessary information is a count per period of all of the tasks in the file, but only for this one Excel file. To get this, click on the radio button for **a count of**, and click both the check boxes for **the current item** (which restricts the data collection to just this one file) and **for the current**

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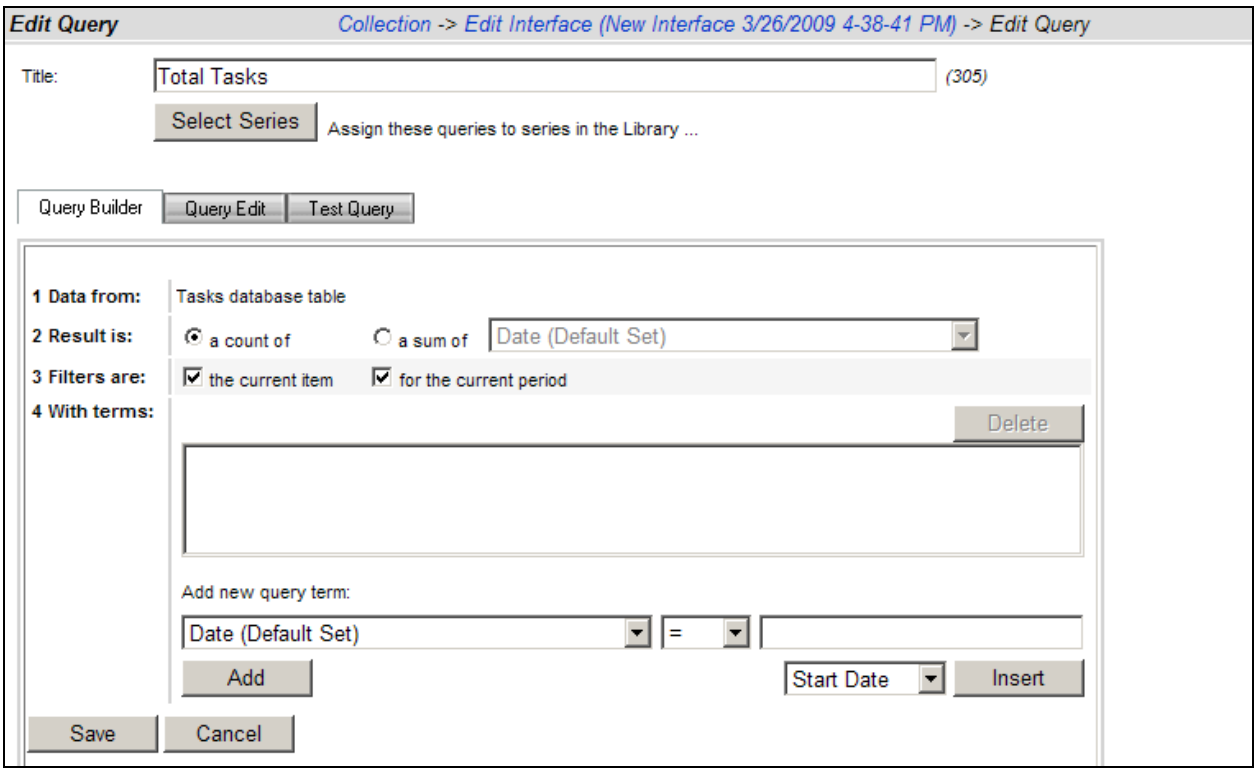
period (which restricts the data collection to the data collected for the specific time period). Usually the check boxes for the current item and current period should be checked. Your query should look like the following.



For other queries you may wish to add various other terms using the information from other columns or dates. For more information on setting up queries in the Portal, please refer to the help files.

Select the **Save** button, to save the information for this Interface.

Assigning Interface Queries to a Library Series

To enable data to be populated in a series, each series must have one or more interface queries associated with it. Once a query is associated with a series, the query is run after data collection to provide a data point for the series. Because a graph in the library is not specific to one interface (that is, a graph may have more than one interface that can provide data for it), you may select multiple interface queries for one series. So, you may assign a query from more than one interface to the same series in the Library. When the graph (that contains the series) is created in a Unit, the associated interface query is used.

For series with a data source of single-series or multi-series, you will see the number of Interface queries that have been assigned, and you can click on the "Select Queries" button to assign queries. If the Select Queries button is not enabled, make sure the source is

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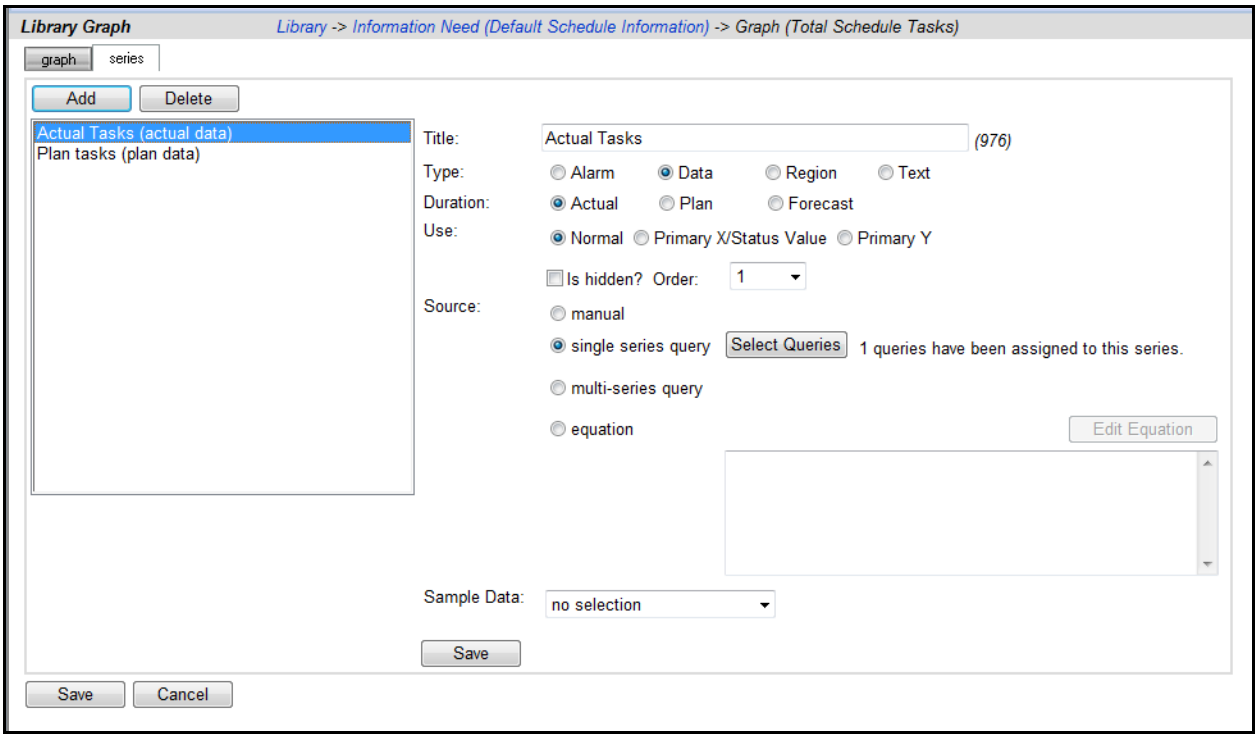
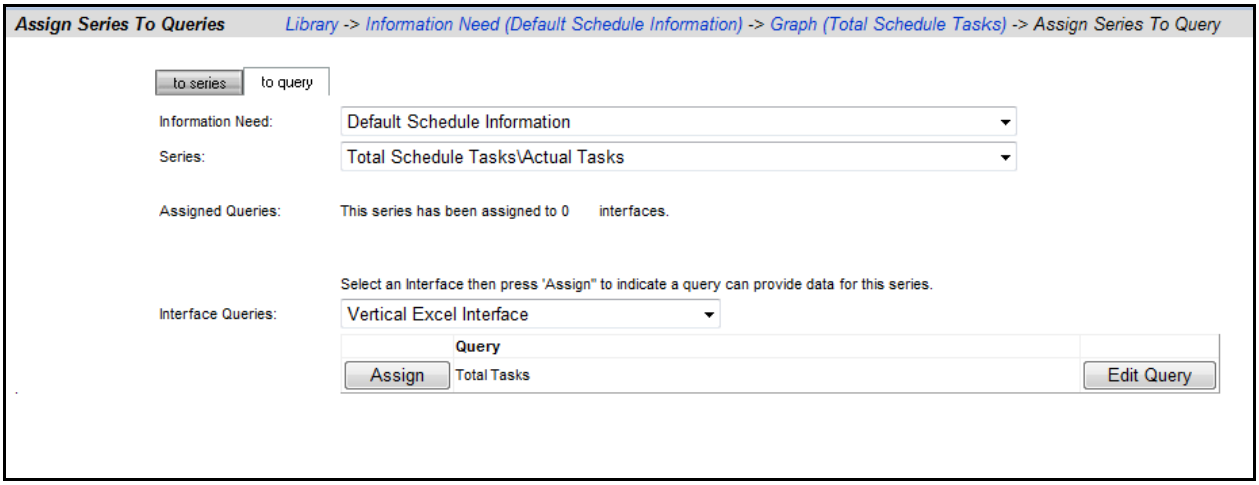
single-series or multi-series (as appropriate) and then press the Save button. To simplify the process, the Portal provides you with the ability to either 1) assign series to queries or 2) assign queries to series. You can access this from either the queries subtab in the Edit Interface page (see image above) or the Library Graph page (see "Select Series" button in next image).



The Assign Series to Queries page allows you to assign one of more queries to a series in the Library. This page has two sub-tabs described below. Once you are done with the assignment, use the breadcrumbs at the top of the page to return to previous page.



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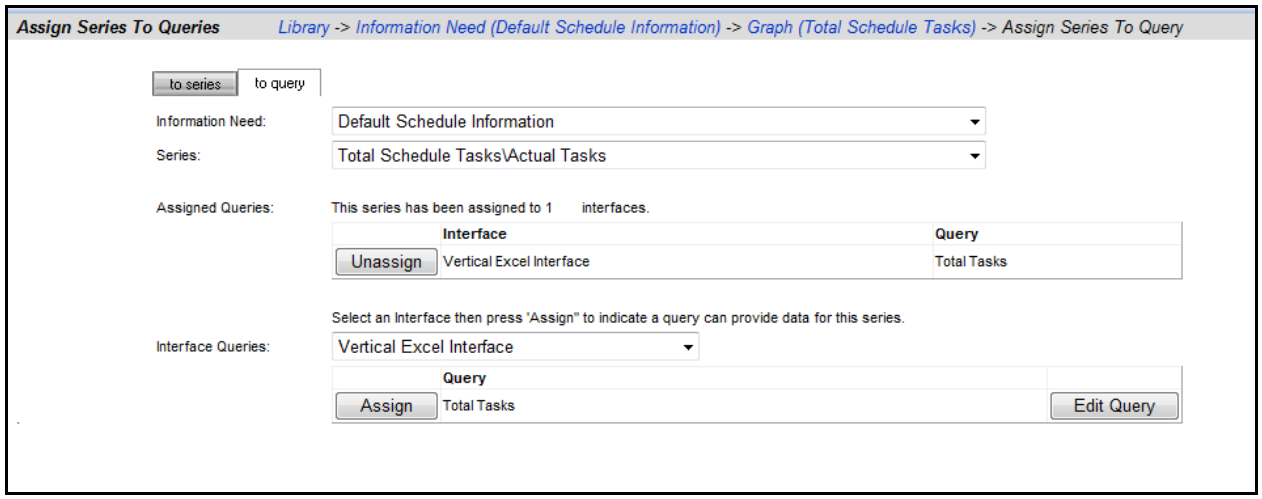
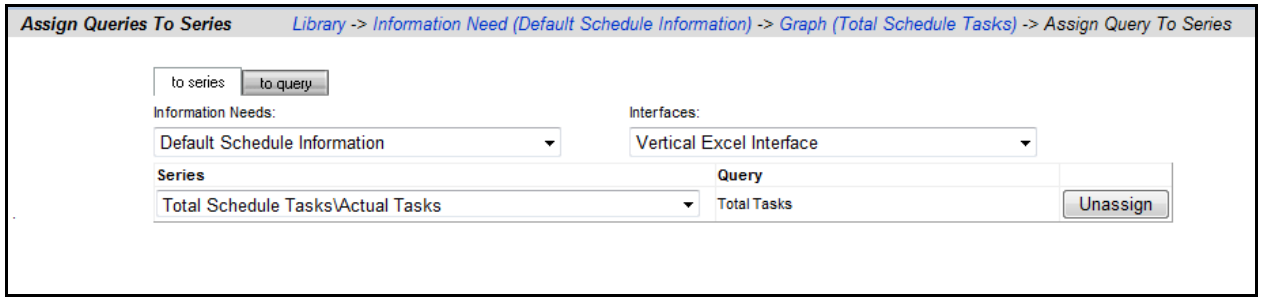
In the above image, notice that the new information need "Default Schedule Information" and (only) actual series "Total Schedule Tasks\Actual Tasks" has been selected and that there are 0 queries assigned to this series. To assign a query, select the new interface "Vertical Excel Interface" to display all the queries for this interface (in this case only one).



On the "to query" sub-tab, you may select a series from the Library (select an information need and then a graph/series from the drop downs) and then review a list of Interface queries, if any, that have been assigned to the series. You may select an interface from the (lower) dropdown, and then assign one of the Interface queries to the currently selected series. This sub-tab is designed to review all the interfaces that a single series has been assigned to.



Notice that the button on the appropriate column (below) now says "Unassign" indicating that has already been assigned.

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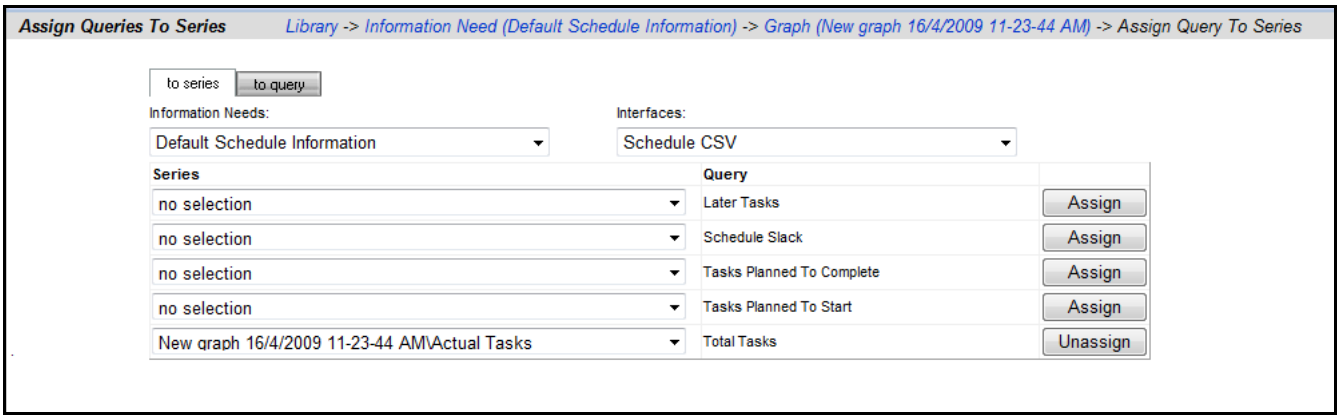
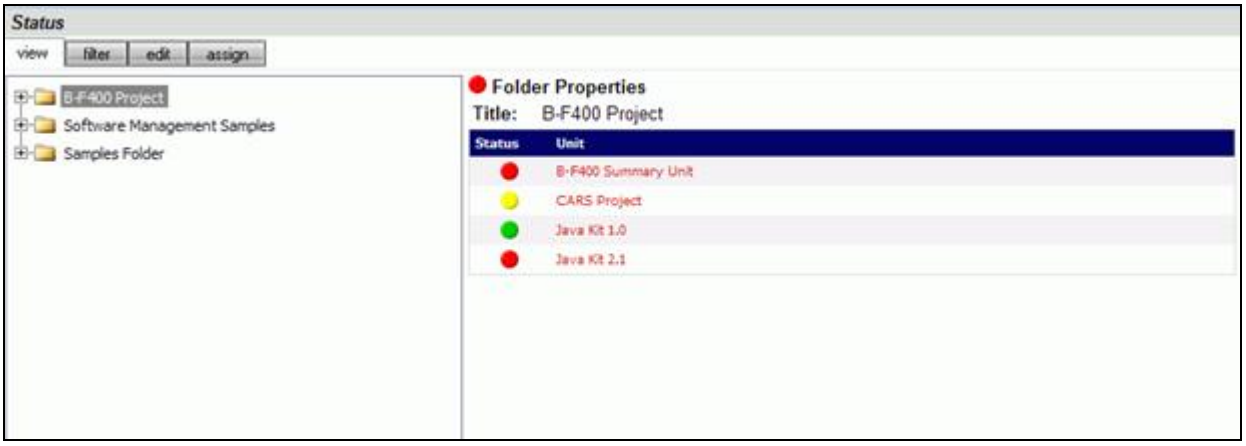


On the "to series" subtab, you may select an information need and interface and then assign or un-assign the series to queries as needed. This subtab is designed to help assign all the queries in an interface at one time to the series in one information need.

When you have finished assigning queries to a series, or reviewing them, you use the breadcrumb to return to the previous page.

Set Up a Unit

Once you've finished configuring the Information Need and Interface, it's time to set up a Unit to display the results you'll get from data collection. Begin by adding a new **Unit**.



Select the **Status** tab. To add a unit, click on the **Edit** subtab. This is where the data tree gets organized. Create a folder, or use an existing one, and then add a unit by selecting the **Add Unit** button.

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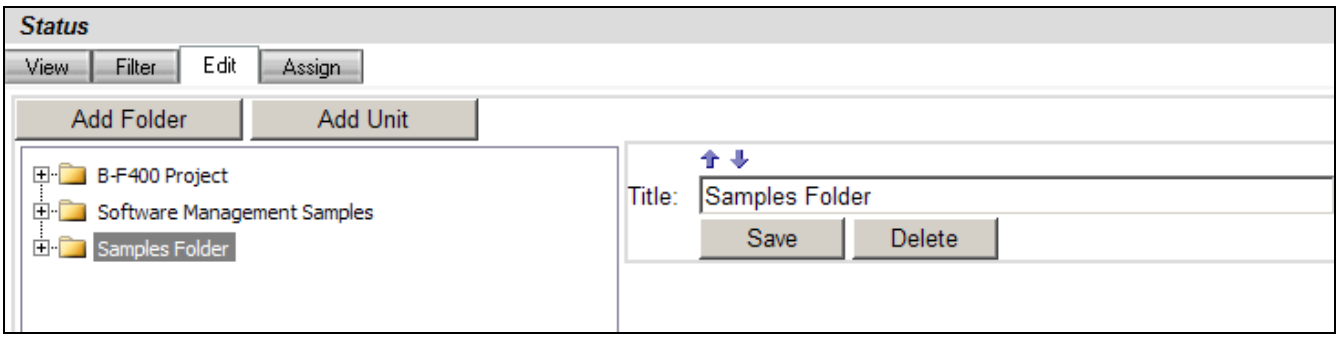
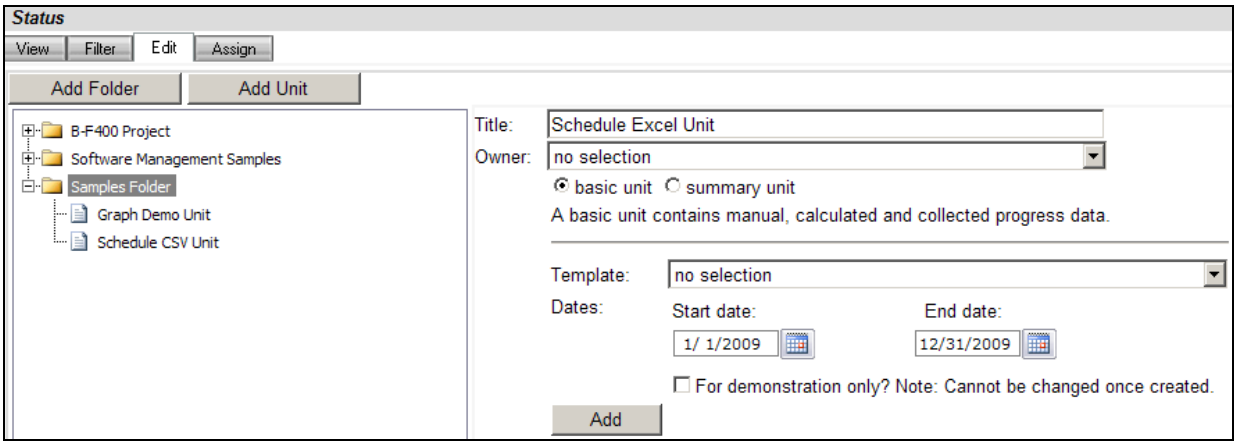


On the right hand side, you will see information about the Unit that is being adding.

Give the unit a **title**, and set an **owner** (this value can be changed later). You can leave the **template** set to no selection since no template has been setup for the new interface. A template automatically assigns Information Needs, and other information to your Unit and can be used to easily create homogenous units.



Click the **Add** button. At this point, you are ready to assign a schedule to the unit.

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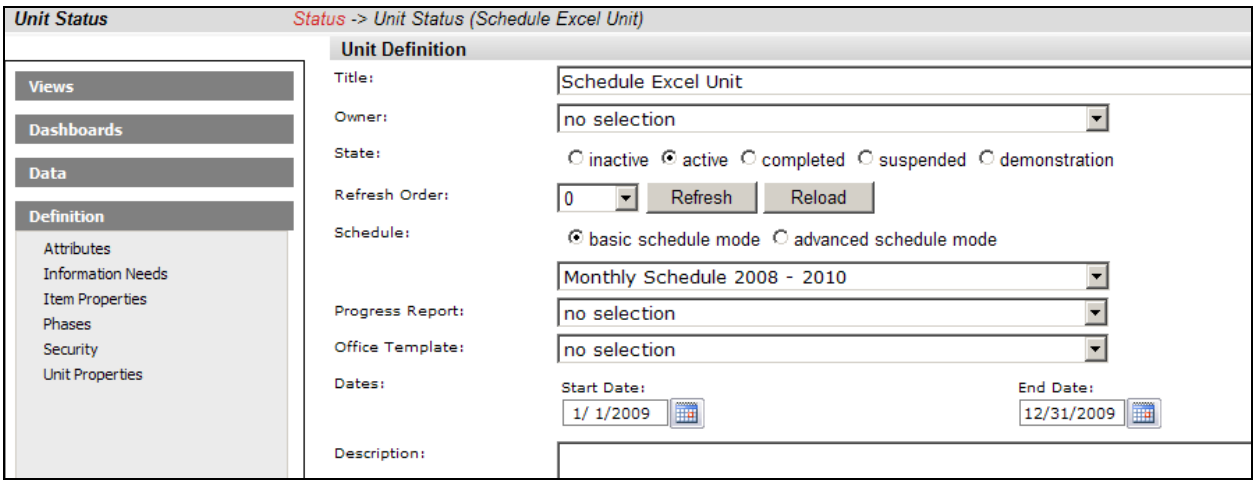
Assign a Schedule to a Unit

The schedule assigned to a unit becomes the default schedule for any items assigned to the unit as well as the graphs associated with them. The unit schedule is used in the Gantt View to determine the time period shown. The unit schedule is also used to update the status of the unit.

To assign a schedule, first go to the Status tab's **View** subtab and select the **unit.** Then click the **Details and status** icon. This will open the Unit Status page with the Gantt view displayed. Under the **Definition** section, select the **Unit Properties** option. The Unit Definition screen will open for the selected unit. Notice, the **Schedule** field is already set to basic schedule mode. Select Monthly Schedule 2008-2010 from the dropdown list. In the Dates fields, enter a **Start Date** and **End Date** for the schedule. Remember to save any changes to the schedule by selecting the **Save** button.



At this point, it is time to configure the Collector.

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Configuring the Collector

Open the Collector using Start >Programs>IBM Rational>IBM Rational Dashboard>Dashboard Collector.

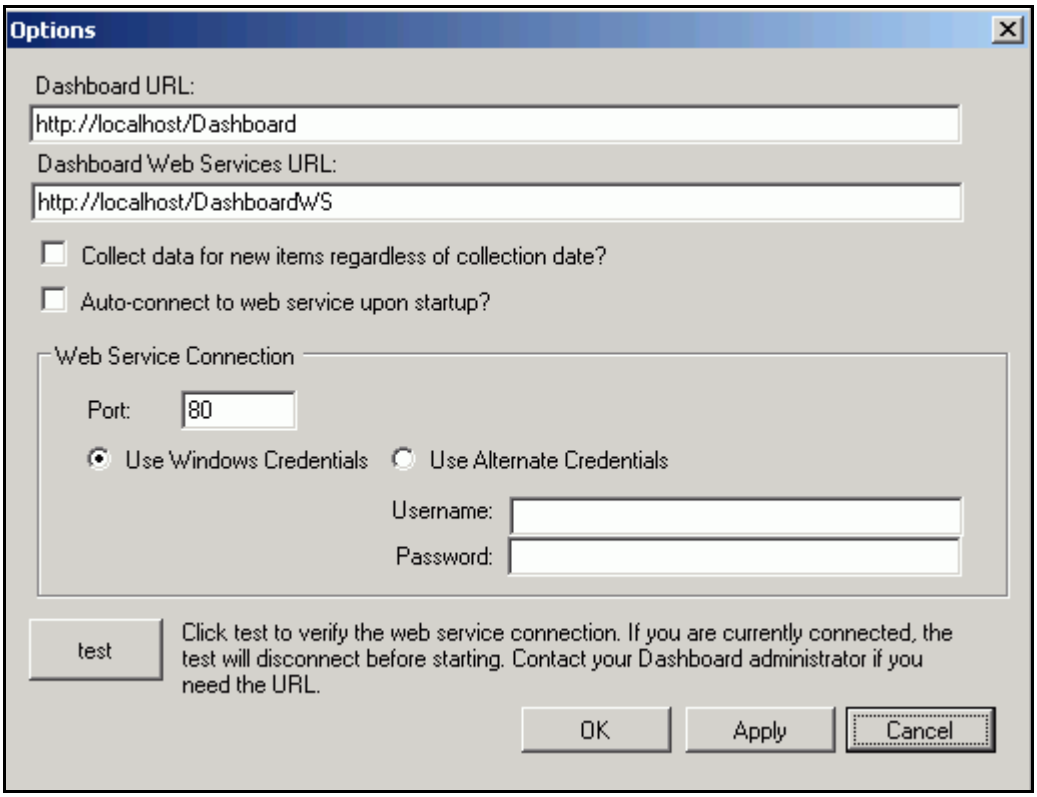
Verify Connection to Web Services

The Collector uses the IBM Rational Dashboard Web Services to communicate with the Portal. To verify your connection to the Web Services, click File, Options from the menu bar. By default the Web Services URL is set to:

http://localhost/DashboardWS

If you are running the collection from the server that is running the Portal then "localhost" will work fine. If you are running the collection from a machine other than the server where the Portal is installed, you will need to change the "localhost" part of the URL to the name of the server running the Portal. Be sure to click the **Apply** button if you make any changes.

Click the **test** button to test the connection.



If after pressing the "test" button, you receive an error or warning message, review the message and your web services configuration to correct the problem. The web services configuration information is contained in the web.config in the Web Services folder.

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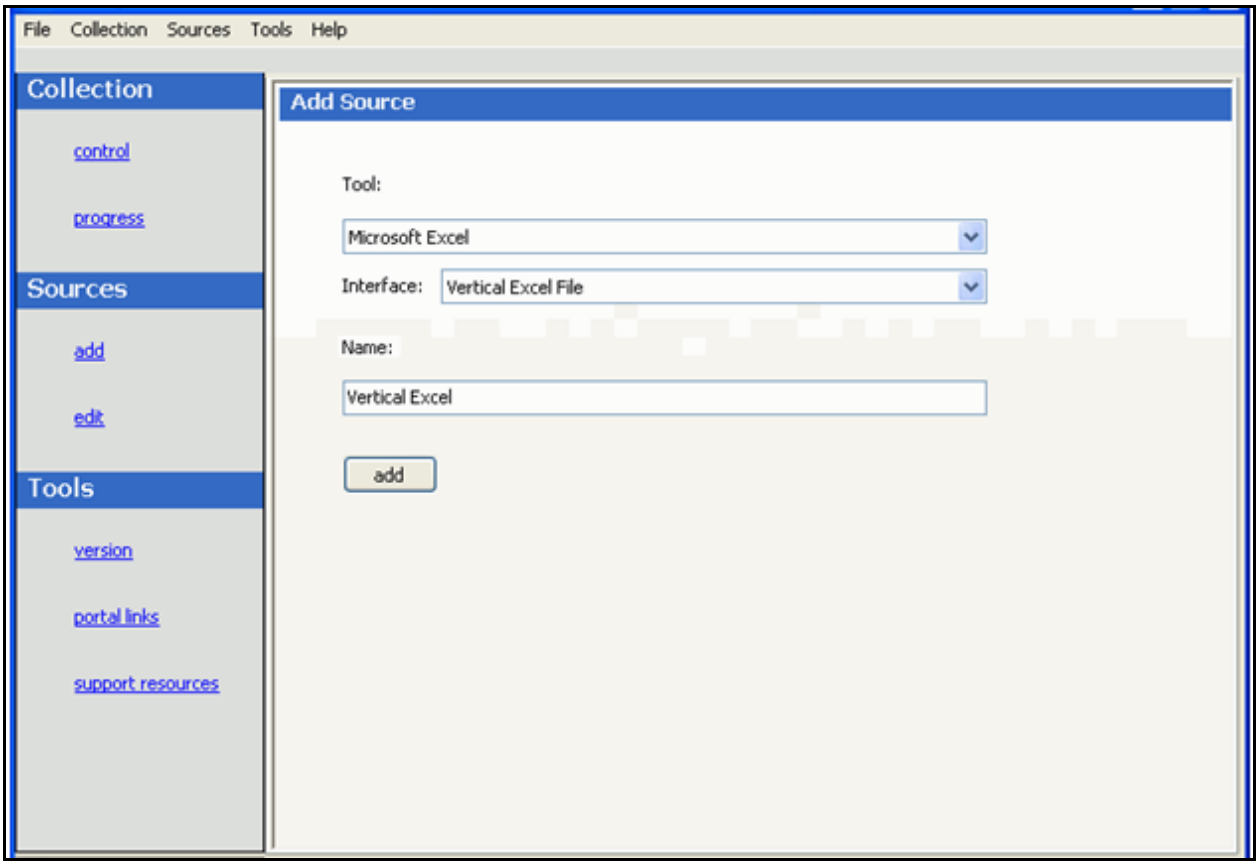
Add a Source

Choose **add** under the Sources section on the menu on the left hand side. Select Microsoft Excel from the drop down menu for the **Tool** field.

Notice a drop down list of **Interfaces** below the Tool selection. This is used to delineate between different instances of a tool and let the Collector know which Interface to use when collecting from a specific source. Select the Excel Vertical Interface from this drop down menu.

Enter a **Name** that will help to identify the source when used at a later time.

Once all information is selected, click **Add**.



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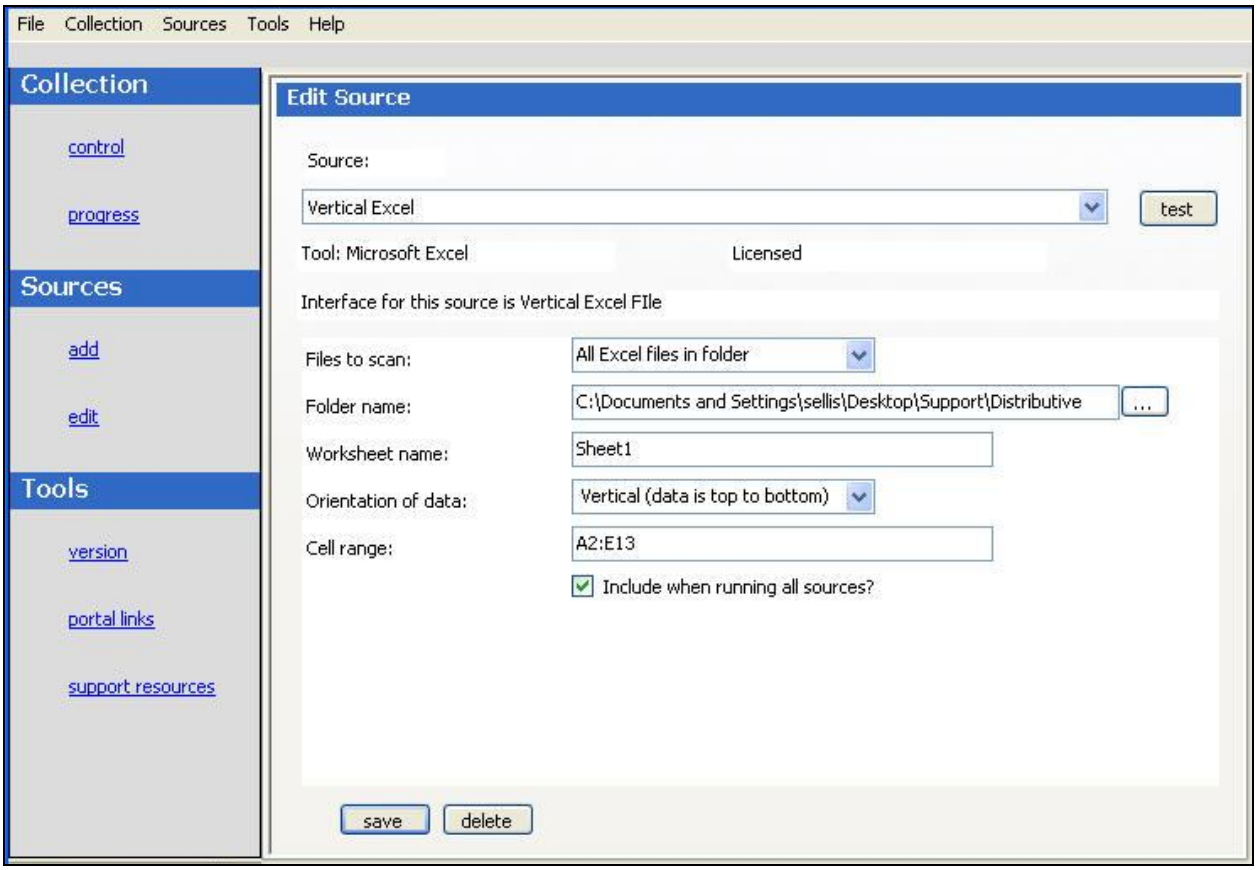
Setting up the Collector

The setup for a Microsoft Excel file requires some basic information about the file. First of all, there are several ways to collect in a Microsoft Excel file. The first is "All Excel Files in a Folder". For this option you chose a folder in the file system and the Collector will try to collect the fields that were set up in the Interface from all of the Microsoft Excel files in that folder. An example of this would be if the same report was coming in from several different projects but had the same structure and similar data. In this case, all of the projects could put their files in the same folder and the Collector would collect them individually. The folder that the files are in should be selected as the **Folder Name**.



Enter the name of the worksheet where the data resides in the **Worksheet Name** field.

The **Orientation of data** field indicates to the Collector how to read the data in the Microsoft Excel file. The selection in this field should match the setup of your Microsoft Excel file performed earlier. For this example, select the Vertical orientation.

For the **Cell range** field, enter the range of cells in which the data has been entered in the worksheet. (This should not include the headers for your data.)

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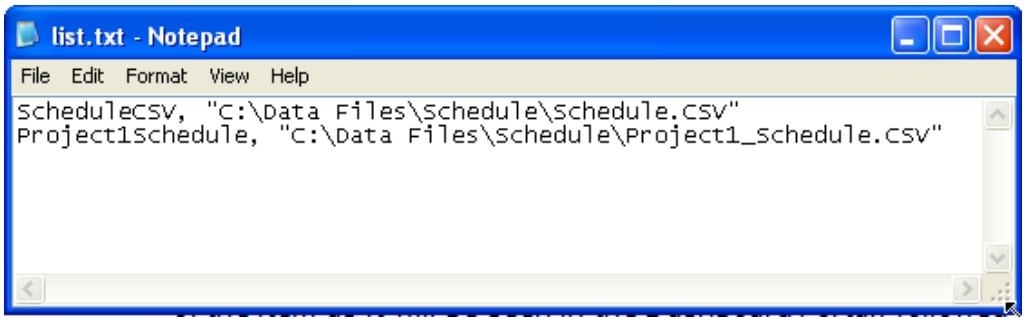
The second option is 'Use List File', which uses a file called list.txt to indicate which files to collect. Each line in the list file consists of a title of the item as it will be seen in the Portal, followed by the full path to the file in double quotes. An example is show in the image below.



You must create this file and choose where (which folder) this file is stored. The **Worksheet name**, **Orientation of Data**, and **Cell Range** fields are completed the same as above.

The final option is using the 'Date Stamped Excel Files' option. This option allows you to put files in a given folder that have a date stamp on them showing on which date they should be collected. The format for these file names should be <filename>_yyyymmdd.xls. The dates should match the Collection date for the schedule that is assigned to the item. The default schedule has a collection date of the last day of the month, so an example would be schedule_20070131.xls, which would have data for the month of January in 2007.

Once again the **Worksheet name**, **Orientation of Data**, and **Cell Range** fields are completed the same as above for this option.

Be sure to save your settings by clicking the **save** button in the bottom left corner.

Running a Collection

Once you have saved your configurations, you are ready to run the collection. Go to the **control** link in the Collection section. Click the radio button for One Source and select your Microsoft Excel source from the drop down on the right. Below the drop down, select "Specified Date" and choose the last day of the previous month. The default schedule for the Portal is a schedule that collects data on the last day of the previous month, so selecting this date will let you automatically see data in your graphs once the default information is applied. See the Help files for more information about how schedules affect the Collector.

Once you have picked the source and the collection date, click on the **start** button.

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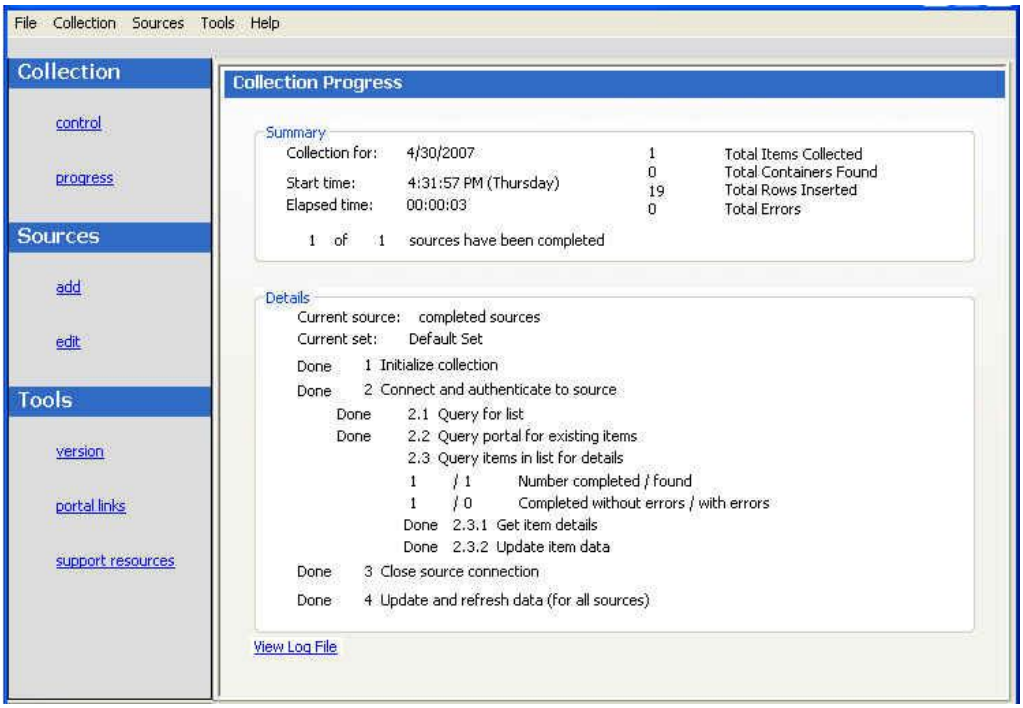
The **Collection Progress** page will appear and you will be able to track your collection as it runs. You will see in the details on the bottom the number of **items** and **containers** that were found and see how far you have progressed through the collection.



Once your collection finishes, the **summary** box at the top of the collector will tell you information about the collection itself, how long the collection took, how many **items** were collected, how many rows were inserted into the database tables and how many errors were encountered, if any.

If your collection does have errors, you can click on the "View Log File" link at the bottom of the progress page. This will open up the log file (which can also be reached under the File menu). This log file gives you information on why a module may not have been collected.

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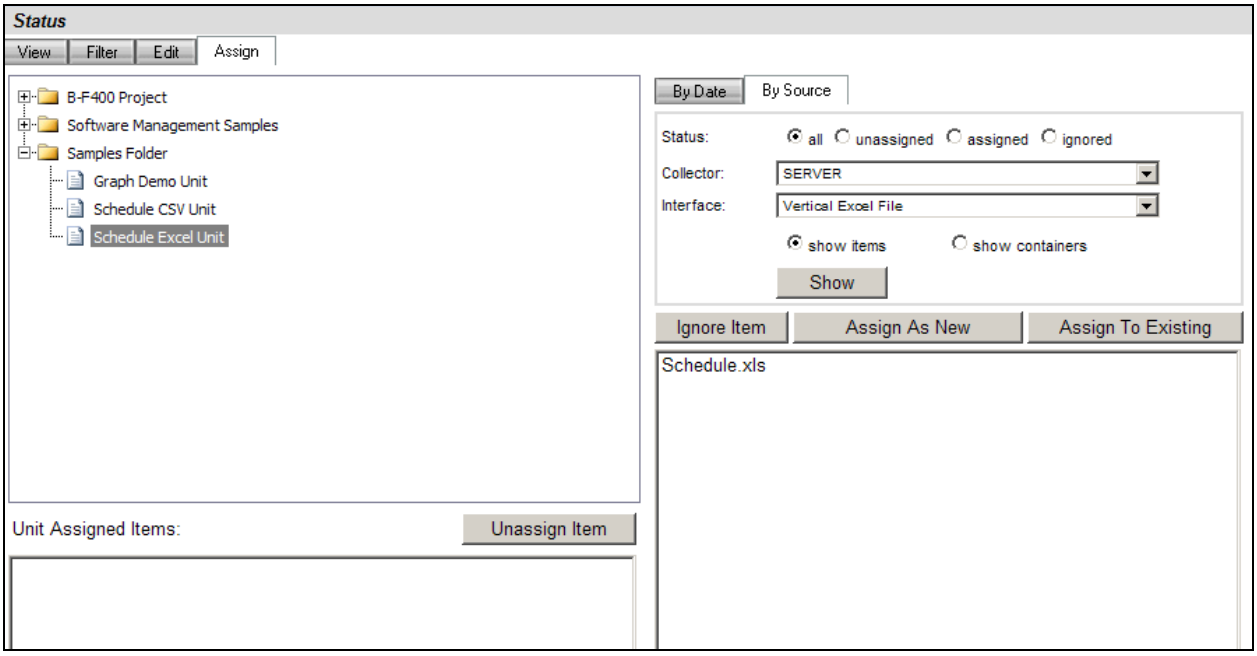
Configuring the Unit

Assigning Collected Items

Once you have run the collection without errors, you are ready to add **Items** to a **Unit**. Go back to the **Status** page and click on the **Assign** subtab. Click on the Unit you created earlier. On the right hand side, click on the **By Source** subtab. From the drop down menus, choose your Collector and the Interface that you are using to collect. When you have selected those options, click on the **show** button. In the list below you will see a list of all of the **items** that have been collected.



Click on the item(s) that you want to add to this unit and then click on the **Assign As New** button (since we haven't yet assigned an information need to this unit). The item(s) you assigned are now listed under Unit Assigned Items on the left.

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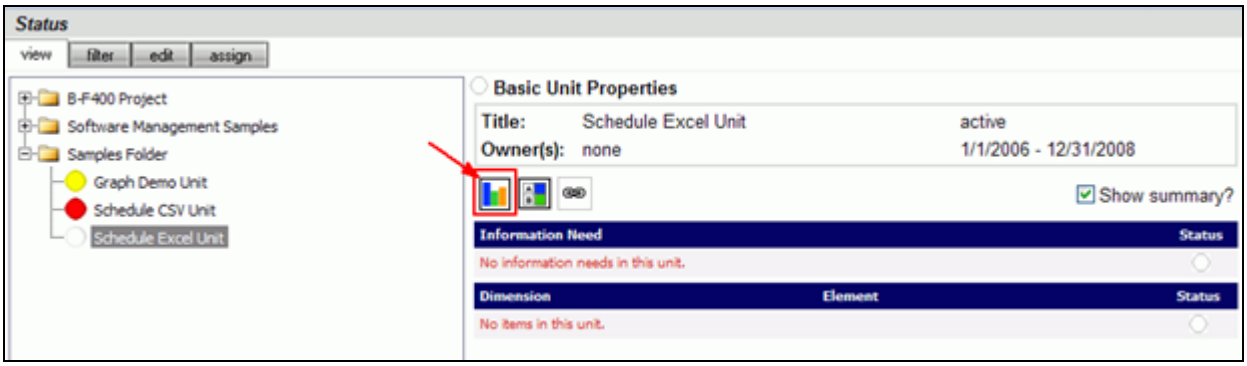
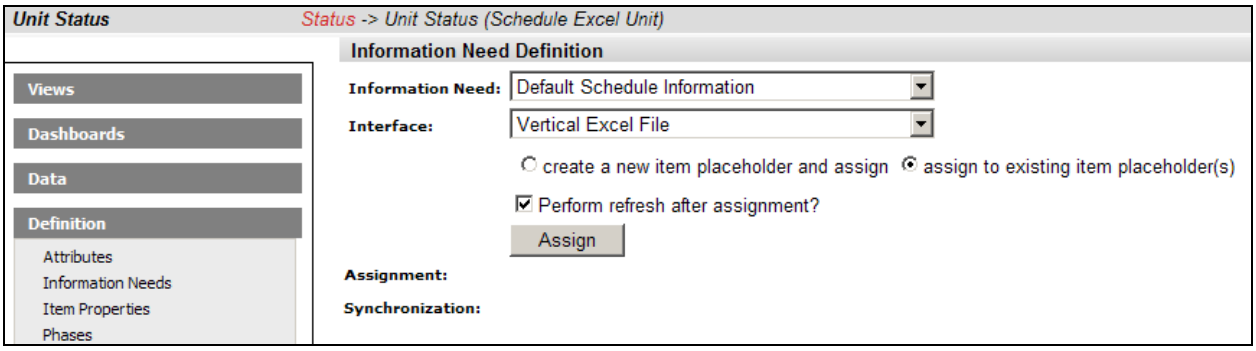
Assigning the Information Need to the Unit

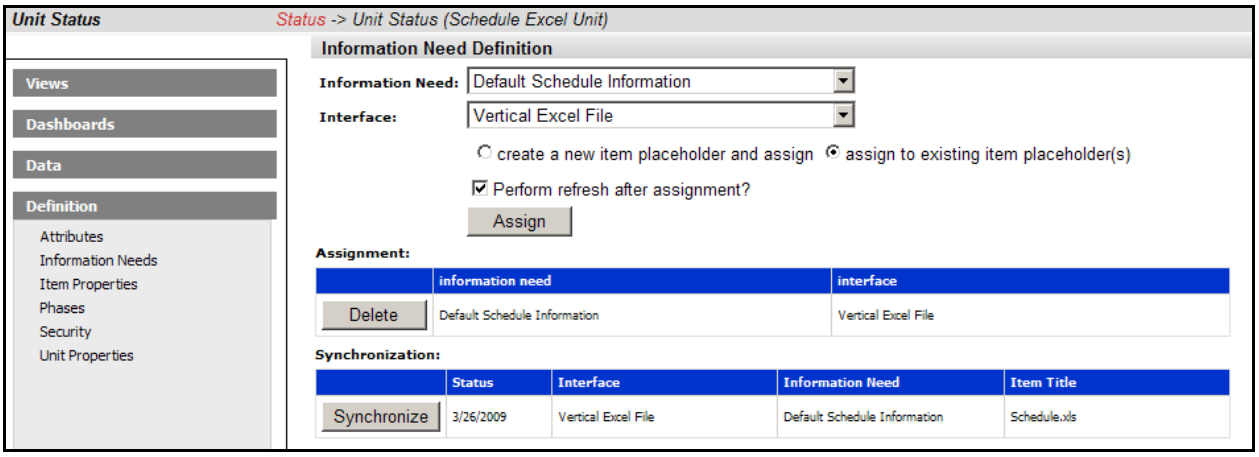
Staying on the Status tab, click on the **View** subtab and select your unit from the tree. On the right hand side, select the **Details and status** icon.



When you get in the unit, you should see an empty GANTT chart with your items listed along the side. From there, click on the **Information Needs** link under the Definition section**.**



From the drop down lists, select the Information Need and the Interface that you are using. Be sure that the **assign to existing item placeholder(s)** radio button is selected. Then, click the **Assign** button.



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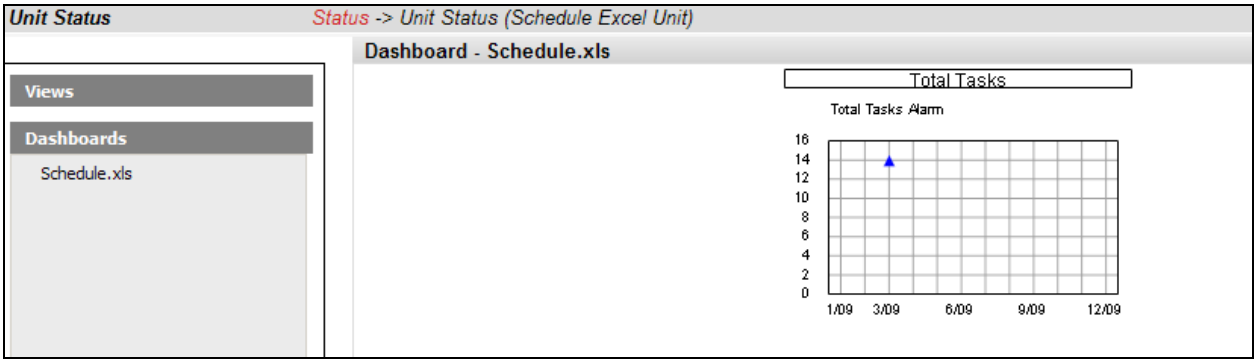
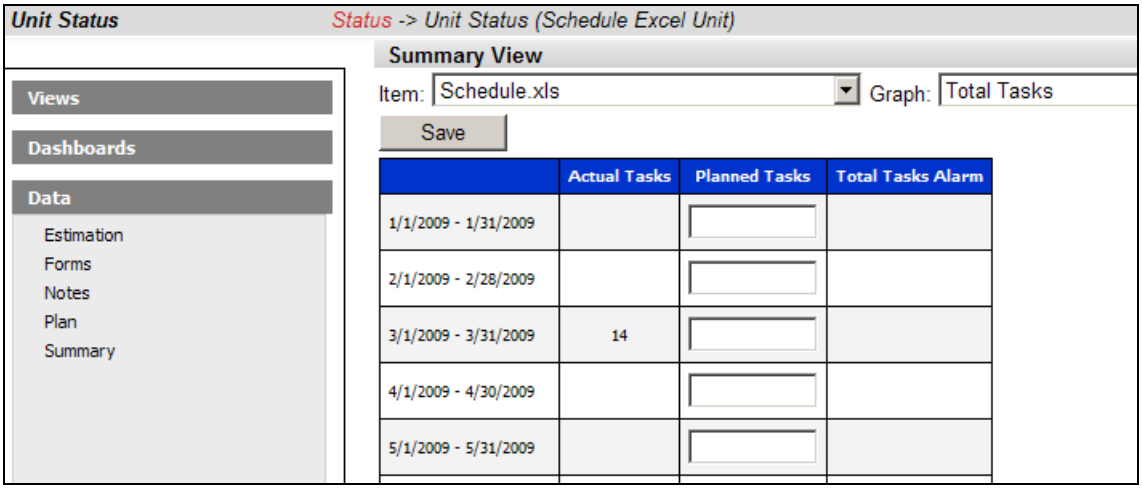
View Data in the Portal

Now you're ready to see your data. From the Dashboards section, click on one of your items to view its data and graphs. You should see a data point in your graphs for the date that you ran the collection.



For our example, since we were using a manual data entry series, we will need to edit the data for the graph before an alarm status will show. From the Data section, click on Summary to open the Summary View.



Enter data for the Planned Tasks series in the Planned Tasks column.

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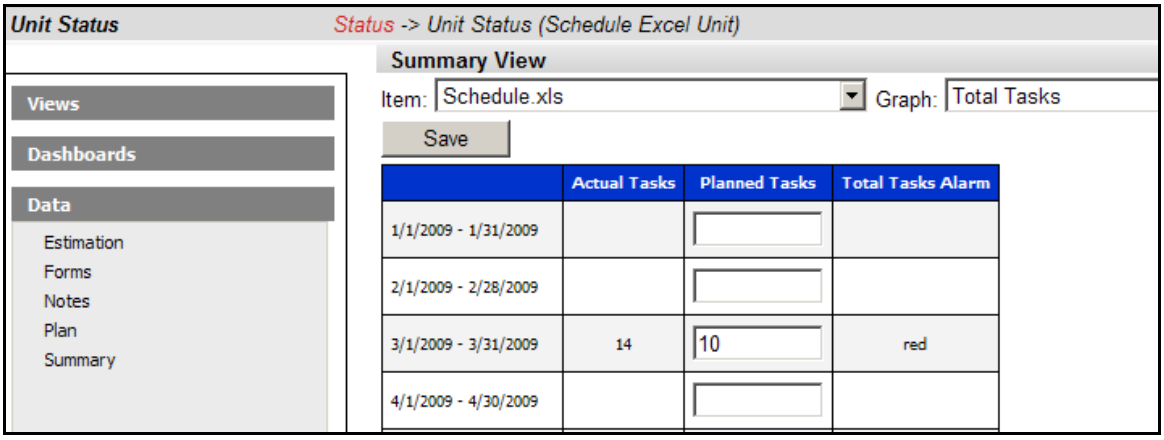
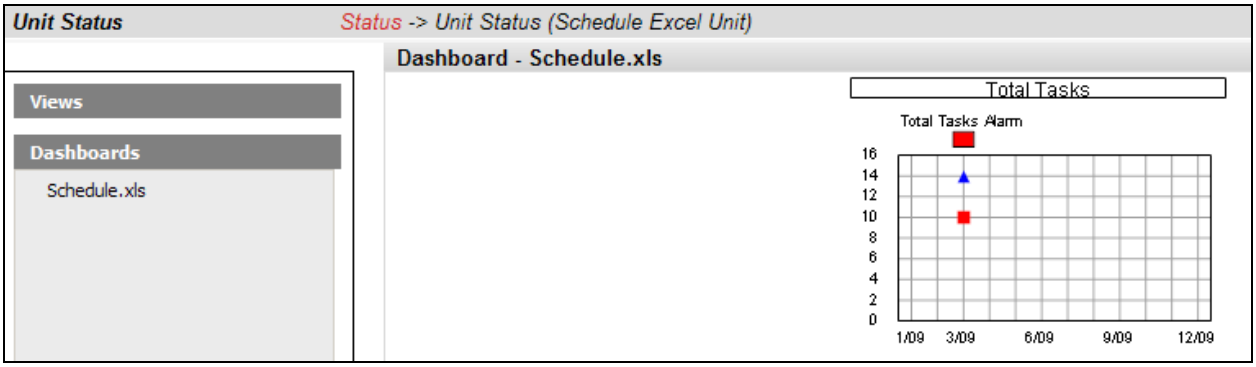
In the example below, the data value entered turns the alarm red as can be seen in the Total Tasks column after saving.



Be sure the data changes are saved, and return to the graph view from the Dashboards section.

You should now see Planned Tasks and Total Tasks Alarm on the graph.



Congratulations! You've successfully set up an Excel integration.

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Contact Information

This chapter contains the following topics:

- Contacting IBM Rational Software Support
- Prerequisites
- Submitting problems
- Other information

Contacting IBM Rational Software Support

If the self-help resources have not provided a resolution to your problem, you can contact IBM Rational Software Support for assistance in resolving product issues.

Note: If you are a heritage Telelogic customer, you can go to http://support.telelogic.com/toolbar and download the IBM Rational Telelogic Software Support browser toolbar. This toolbar helps simplify the transition to the IBM Rational Telelogic product online resources. Also, a single reference site for all IBM Rational Telelogic support resources is located at http://www.ibm.com/software/rational/support/telelogic/

Prerequisites

To submit your problem to IBM Rational Software Support, you must have an active Passport Advantage® software maintenance agreement. Passport Advantage is the IBM comprehensive software licensing and software maintenance (product upgrades and technical support) offering. You can enroll online in Passport Advantage from http://www.ibm.com/software/lotus/passportadvantage/howtoenroll.html.

- To learn more about Passport Advantage, visit the Passport Advantage FAQs at http://www.ibm.com/software/lotus/passportadvantage/brochures_faqs_quickguides.html.
- For further assistance, contact your IBM representative.

To submit your problem online (from the IBM Web site) to IBM Rational Software Support, you must additionally:

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- Be a registered user on the IBM Rational Software Support Web site. For details about registering, go to http://www-01.ibm.com/software/support/.
- Be listed as an authorized caller in the service request tool.

Submitting Problems

To submit your problem to IBM Rational Software Support:

1. Determine the business impact of your problem. When you report a problem to IBM, you are asked to supply a severity level. Therefore, you need to understand and assess the business impact of the problem that you are reporting.

   Use the following table to determine the severity level.

Severity	Description
1	The problem has a *critical* business impact: You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution.
2	This problem has a *significant* business impact: The program is usable, but it is severely limited.
3	The problem has *some* business impact: The program is usable, but less significant features (not critical to operations) are unavailable.
4	The problem has *minimal* business impact: The problem causes little impact on operations or a reasonable circumvention to the problem was implemented.

2. Describe your problem and gather background information, When describing a problem to IBM, be as specific as possible. Include all relevant background information so that IBM Rational Software Support specialists can help you solve the problem efficiently. To save time, know the answers to these questions:
   - What software versions were you running when the problem occurred?

     To determine the exact product name and version, use the option applicable to you:

     - Start the IBM Installation Manager and select **File** > **View Installed Packages**. Expand a package group and select a package to see the package name and version number.

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- Start your product, and click **Help** > **About** to see the offering name and version number.
- What is your operating system and version number (including any service packs or patches)?
- Do you have logs, traces, and messages that are related to the problem symptoms?
  - Can you recreate the problem? If so, what steps do you perform to recreate the problem?
  - Did you make any changes to the system? For example, did you make changes to the hardware, operating system, networking software, or other system components?
  - Are you currently using a workaround for the problem? If so, be prepared to describe the workaround when you report the problem.

3. Submit your problem to IBM Rational Software Support. You can submit your problem to IBM Rational Software Support in the following ways:
   - **Online**: Go to the IBM Rational Software Support Web site at https://www.ibm.com/software/rational/support/ and in the Rational support task navigator, click **Open Service Request.** Select the electronic problem reporting tool, and open a Problem Management Record (PMR), describing the problem accurately in your own words.

     For more information about opening a service request, go to http://www.ibm.com/software/support/help.html

     You can also open an online service request using the IBM Support Assistant. For more information, go to http://www-01.ibm.com/software/support/isa/faq.html.
   - **By phone**: For the phone number to call in your country or region, go to the IBM directory of worldwide contacts at http://www.ibm.com/planetwide/ and click the name of your country or geographic region.
   - **Through your IBM Representative**: If you cannot access IBM Rational Software Support online or by phone, contact your IBM Representative. If necessary, your IBM Representative can open a service request for you. You can find complete contact information for each country at http://www.ibm.com/planetwide/.

If the problem you submit is for a software defect or for missing or inaccurate documentation, IBM Rational Software Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. Whenever possible, IBM Rational Software Support provides a workaround that you can implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM Rational Software Support Web site daily, so that other users who experience the same problem can benefit from the same resolution.

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Other Information

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