Rational. Dashboard

Synergy Walkthrough

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.

Welcome

Welcome to the on-line Synergy Walkthrough for IBM Rational Dashboard!

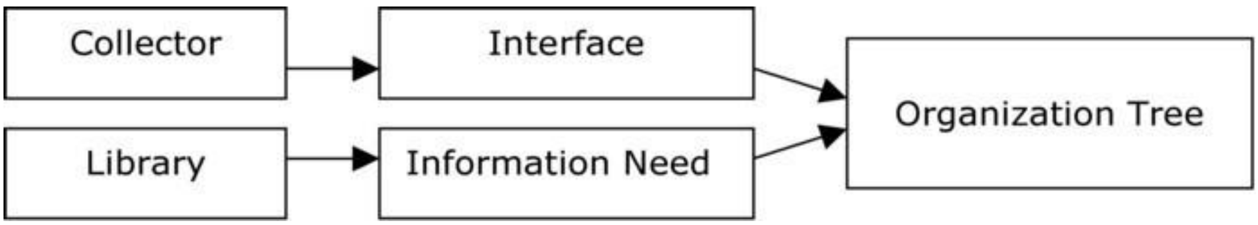
IBM Rational Dashboard brings software management best practices within reach of every organization and every manager. Manage requirements, schedule, budget, quality, configuration management and size in one place; keeping total control of the drivers that keep projects on time and within budget.

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.

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, Microsoft Project, Oracle Databases, Microsoft SQL Databases, Microsoft Access, Microsoft Excel, ODBC, CSV, and 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.**

IBM Rational Synergy Sample Walkthrough

This sample describes the steps to needed to configure and collect data from IBM Rational Synergy. This sample walks a new user through all required steps needed to see graphs with data points populated with information from IBM Rational Synergy.

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

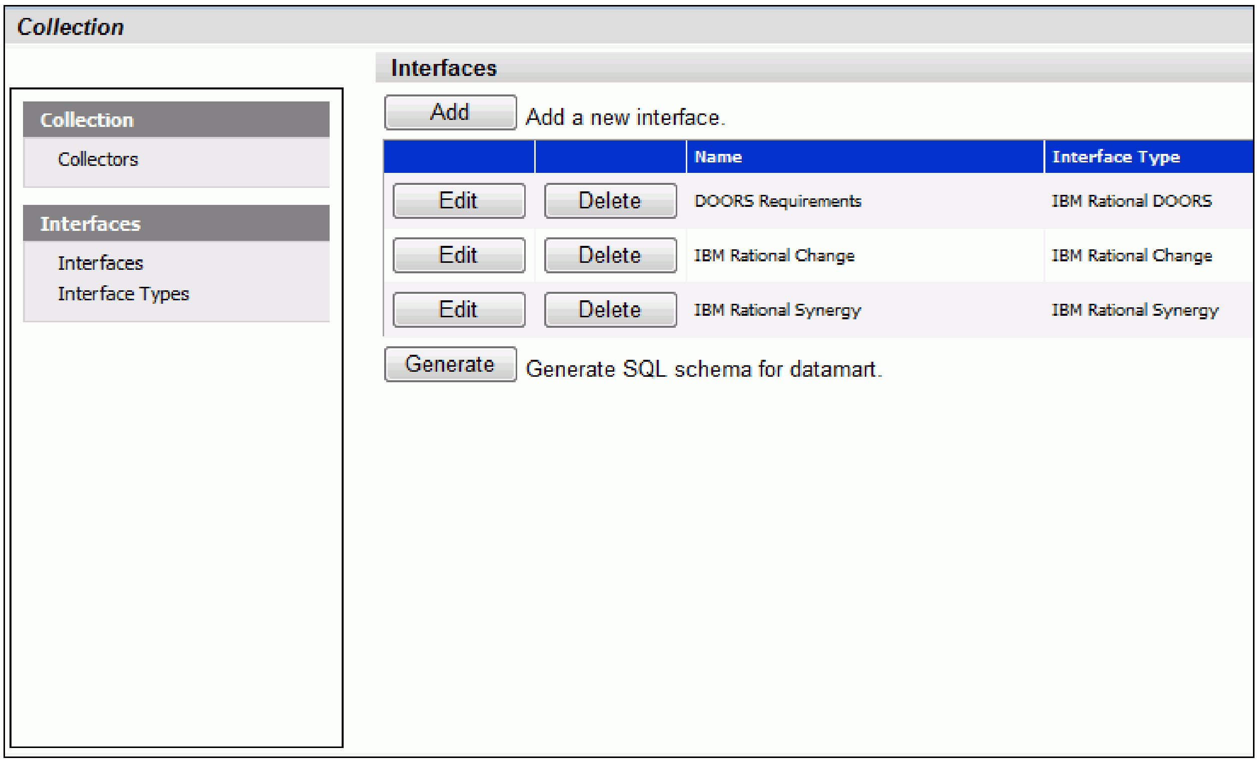
- Portal Configuration:
  - Examine/Configure an Interface in the Portal
  - Examine/Configure an Information Need
  - Assigning Schedules to a Template
  - Setup a Unit with a Template
- Collector Configuration
  - Configure the Collector
  - Run a collection
  - Check/Resolve any collection errors/problems
- Unit Configuration
  - Check for collected items in the Portal and assign them to Units
  - Refresh the Unit
  - View collected data graphs in the Portal

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 IBM Rational Synergy.

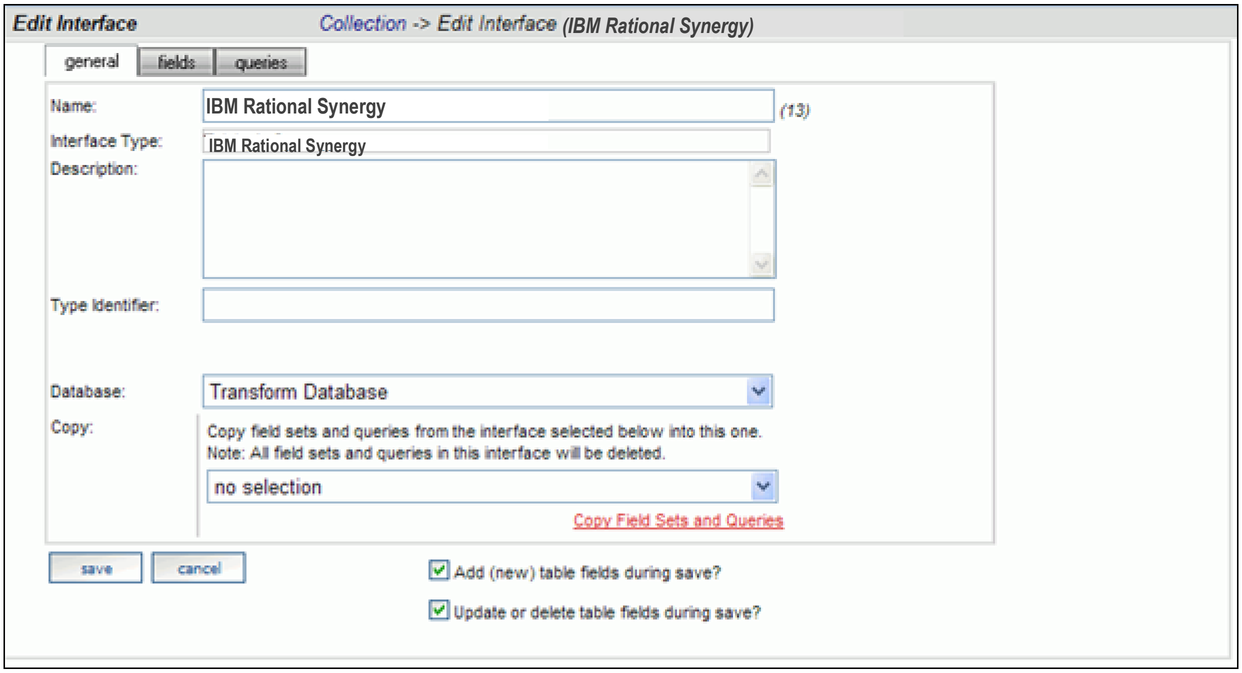
Verifying the Interface in the Portal

Upon opening the application, the Portal defaults to the Status page. The first step is to verify the Interface. Select the **Collection** tab, and then click on the **Interfaces** option on the left hand side.



Select the **edit** button for the IBM Rational Synergy interface from the list of Interfaces displayed.

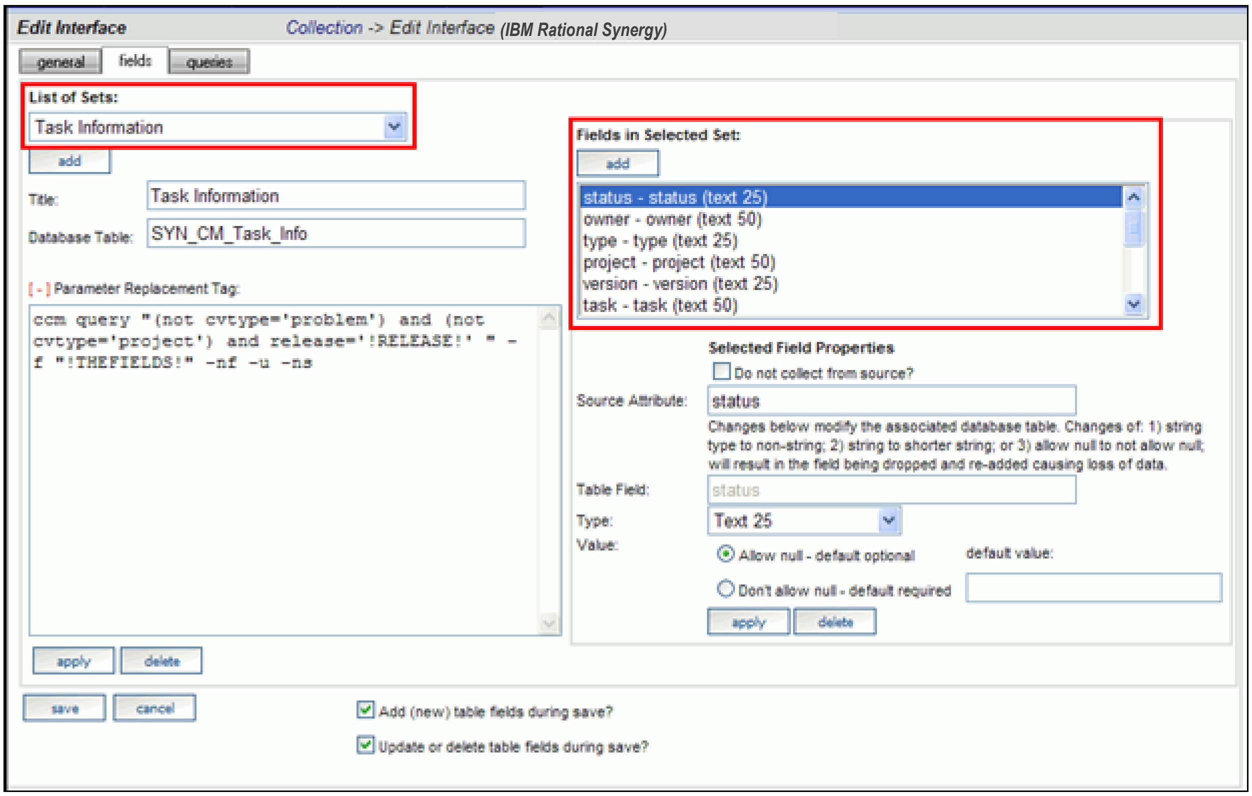
The interface will open in the **general** tab which provides an overview of the interface. Notice that the Transform Database has been selected as the Database. This specific interface is a default interface for IBM Rational Synergy.



Next, click on the fields tab.

Setting up the Fields

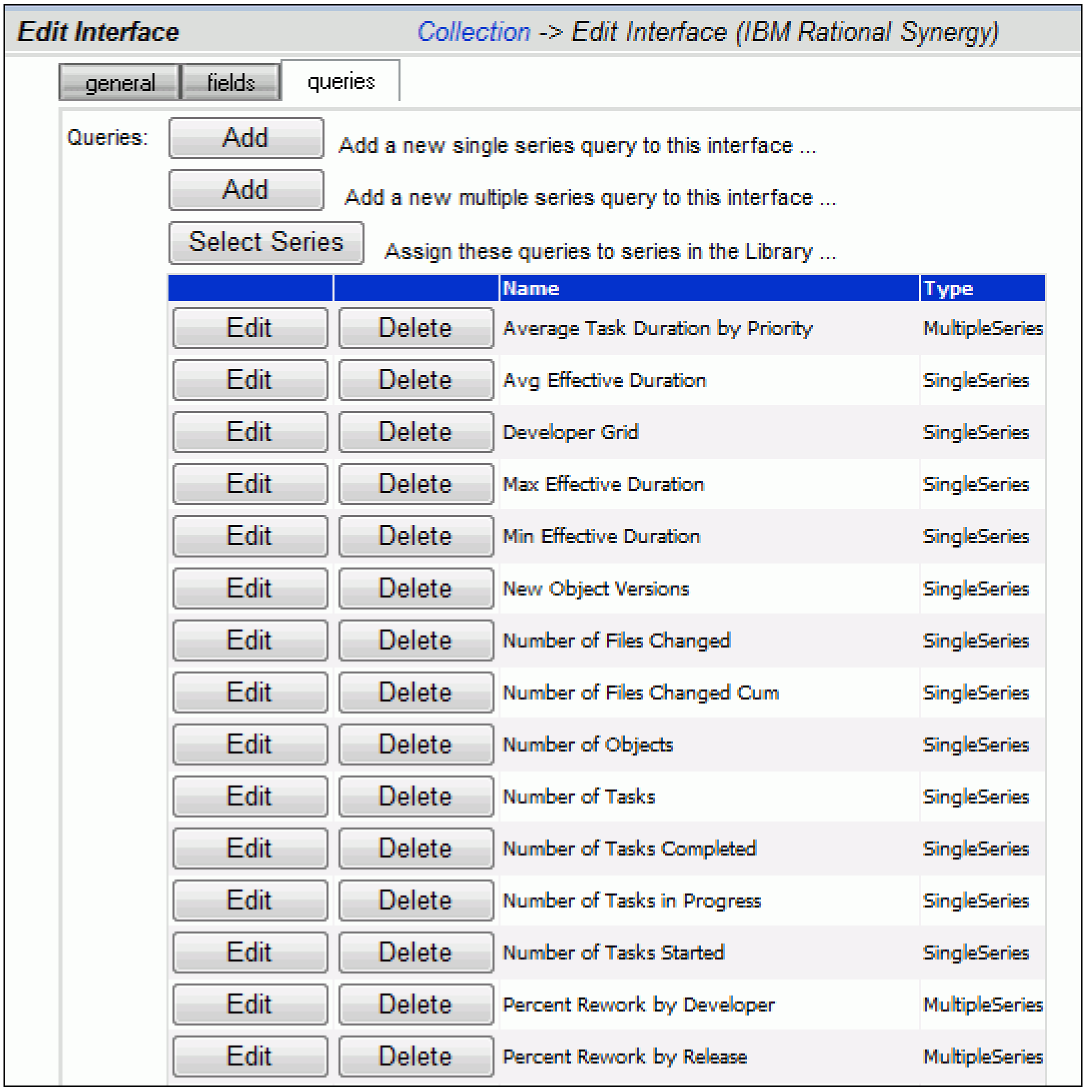
The information entered in the **fields** tab of the Interface defines the information that will be collected and where it will be stored. The list of sets (each containing a group of fields) and the database where the information will be stored is located on the left section of the screen. A list of default fields, which are being collected by the Portal, is located on the right hand section of the screen. The list of fields displayed changes based on the set selected from the **List of Sets** drop down menu. These fields are the default values that all of the graphs will use to display the data.



Next, click on the queries tab.

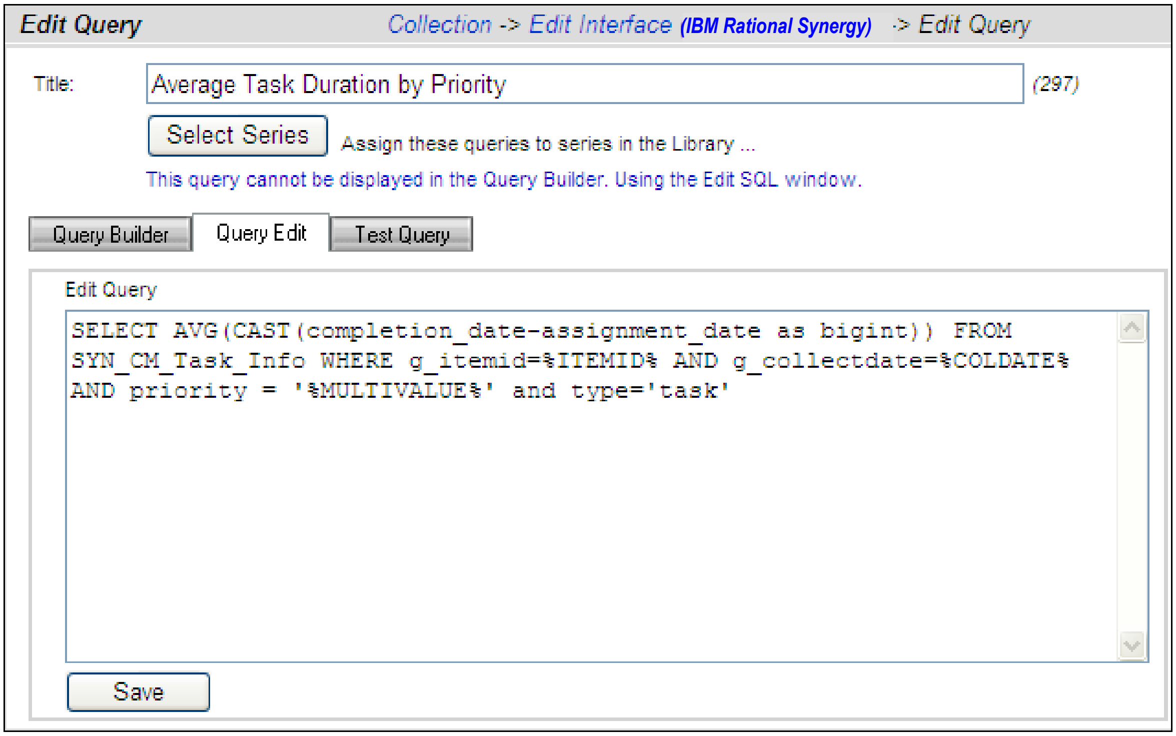
Modifying the Data Queries

The Query tab will list all of the queries assigned to the Interface. These queries are used to count and quantify the data that is collected.



Clicking the **edit** button, for a query in the main list, will open the Edit Query page and allow the user to edit the selected query.

There are two options available when modifying a query; Query Builder and Query Edit. For complex queries (those that use SQL terms not supported by the Query Builder), you must use the Query Edit sub-tab. The Query Edit sub-tab provides a **text field** for maintaining the SQL statements.

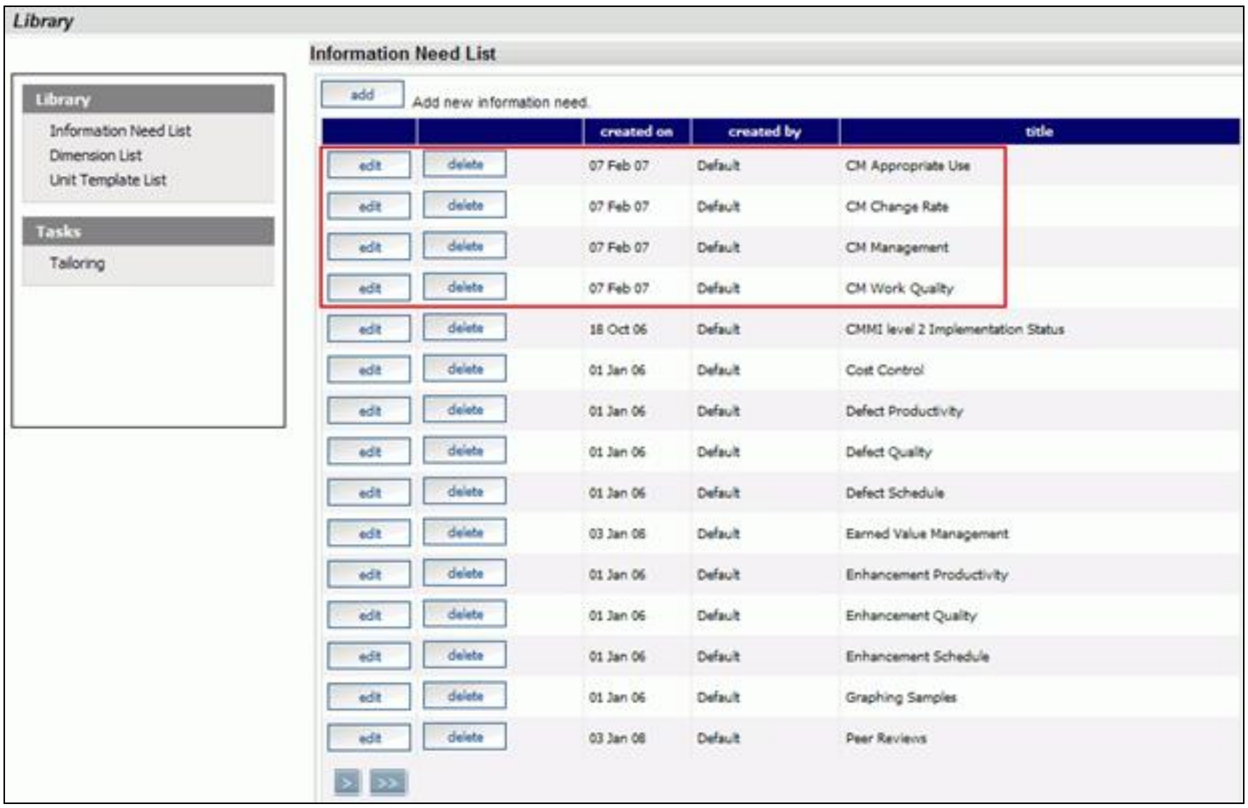


If you change the query, be sure to press **save.**

Verifying the Information Need

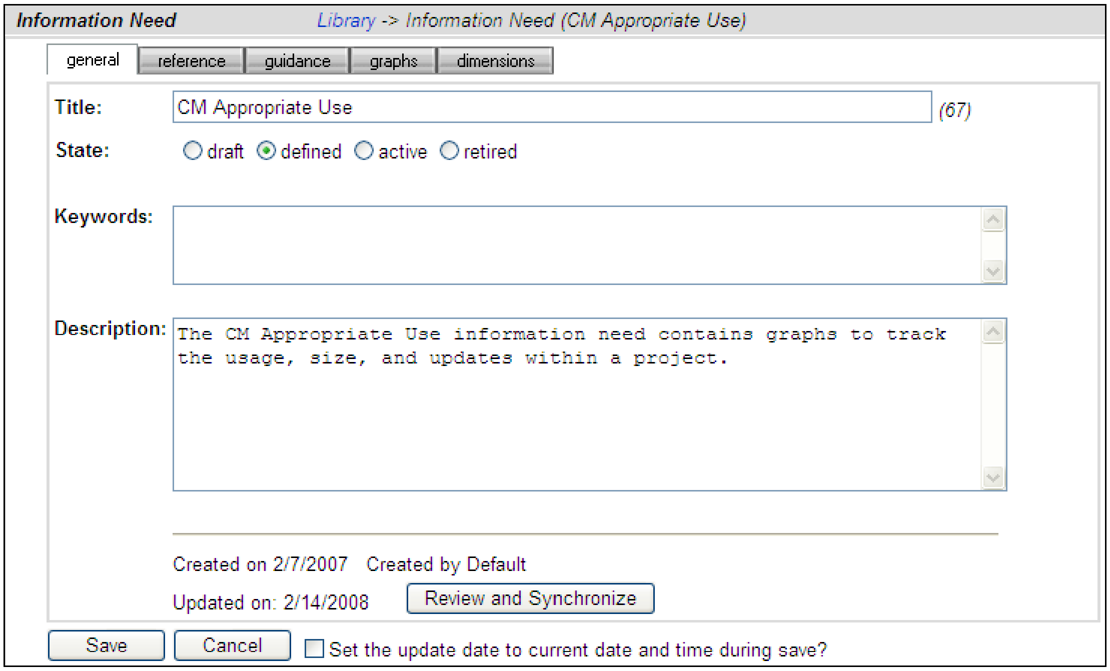
This step is optional, as no changes need to be made to the Information Need in order for the Collector to run. This will allow you to familiarize yourself with the graphs that will be used to display data in the future. To see the Information Needs, click on the **Library** tab of the Portal.

There are four information needs that are setup to work with IBM Rational Synergy automatically. They are: CM Appropriate Use, CM Change Rate, CM Management and CM Work Quality.

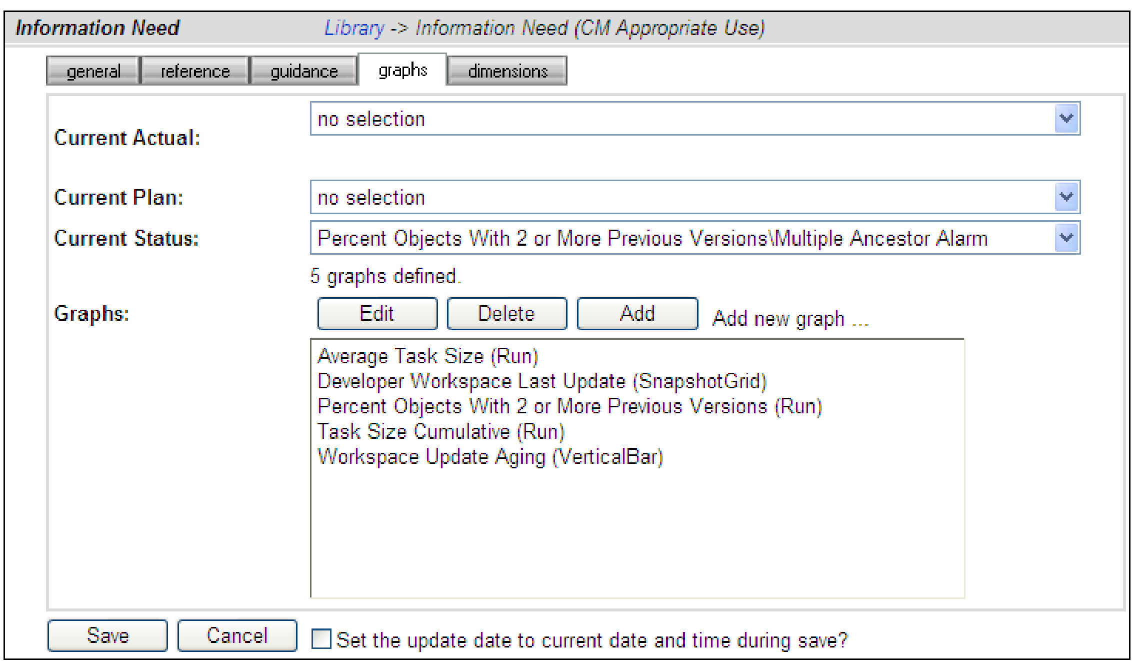


Let's take a look at the information need, CM Appropriate Use. To open the information need, click on the **edit** button.

The information need will default to the **general** tab.



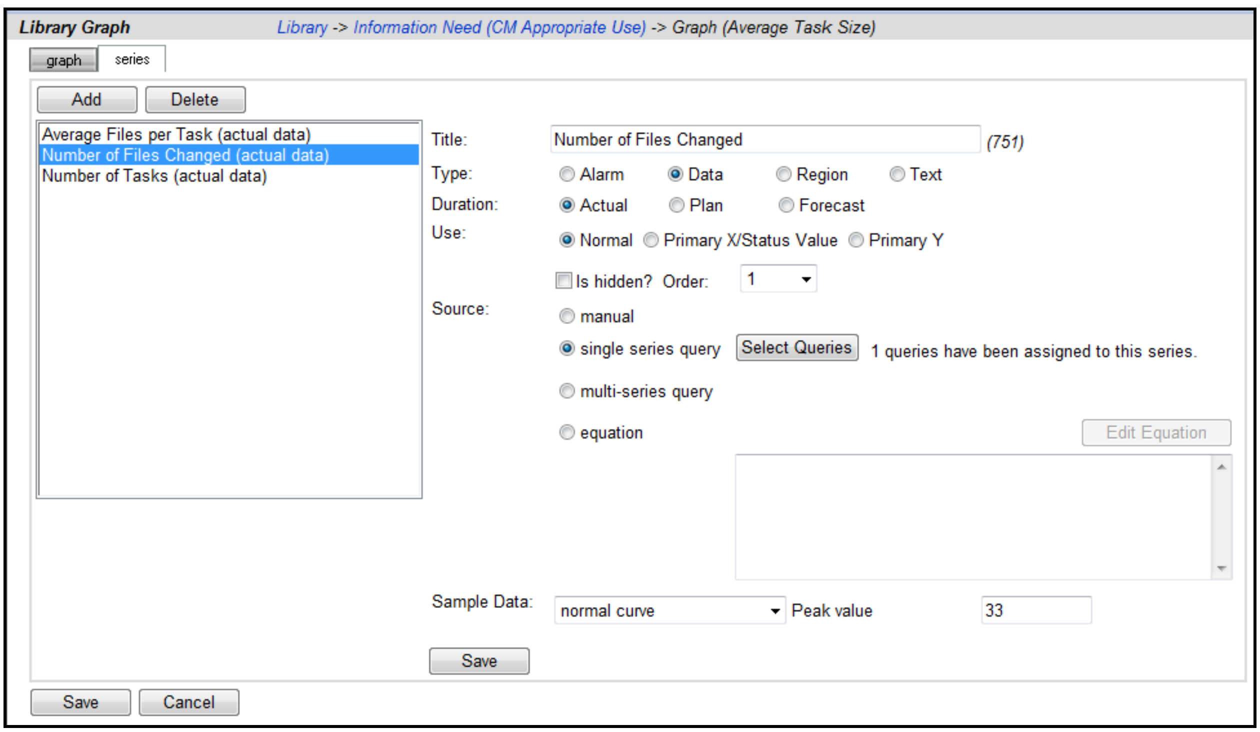
Selecting the **graphs** tab will list the graphs associated with the selected information need. In the sample below, CM Appropriate Use has five graphs defined. The various graph descriptions and series for each of the listed graphs can be edited here. When the Information Need is added to a unit, the graphs are applied to the data.



Assigning Interface Queries to a Library Series

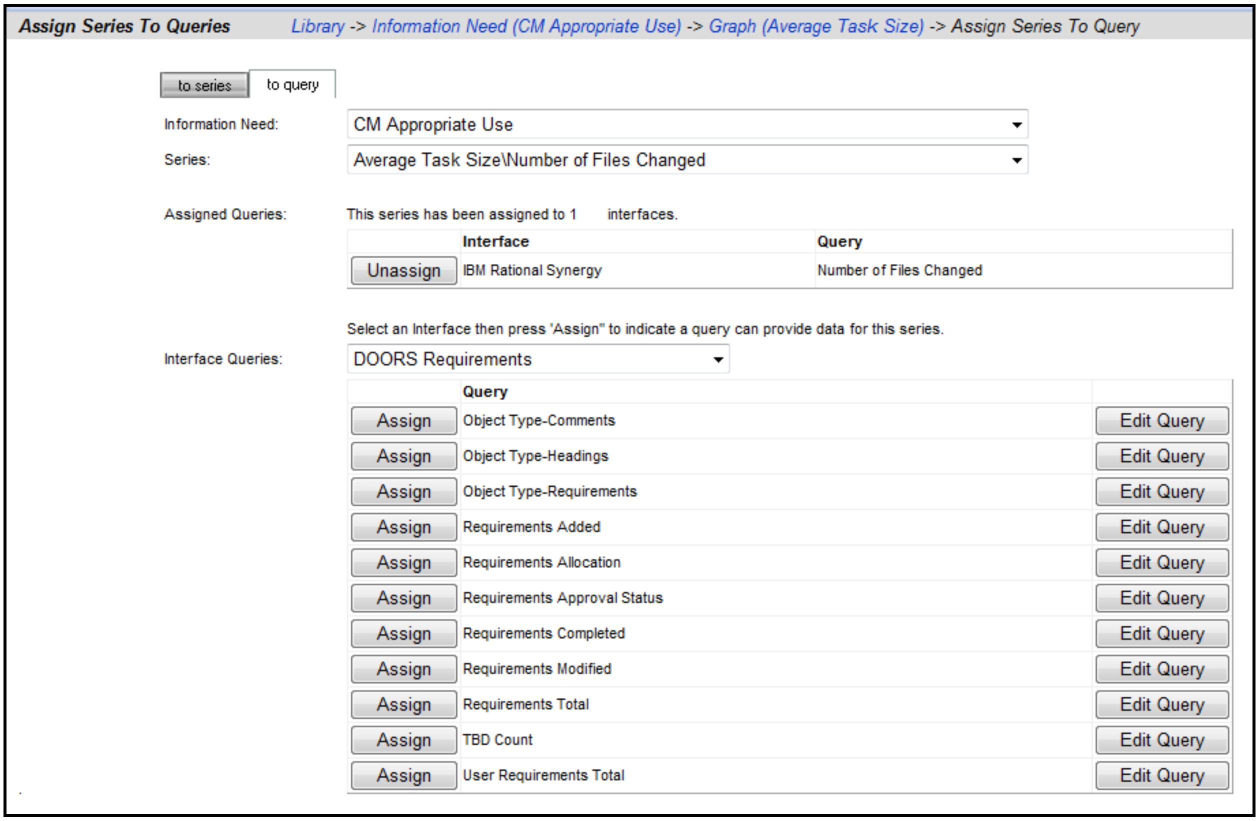
To enable data to be populated in a series, each series must have one or more interface queries associated with it. Once a query is associated with a series, the query is run after data collection to provide a data point for the series. Because a graph in the library is not specific to one interface (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 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 Library Graph page (see next image) or the queries subtab in the Edit Interface page.



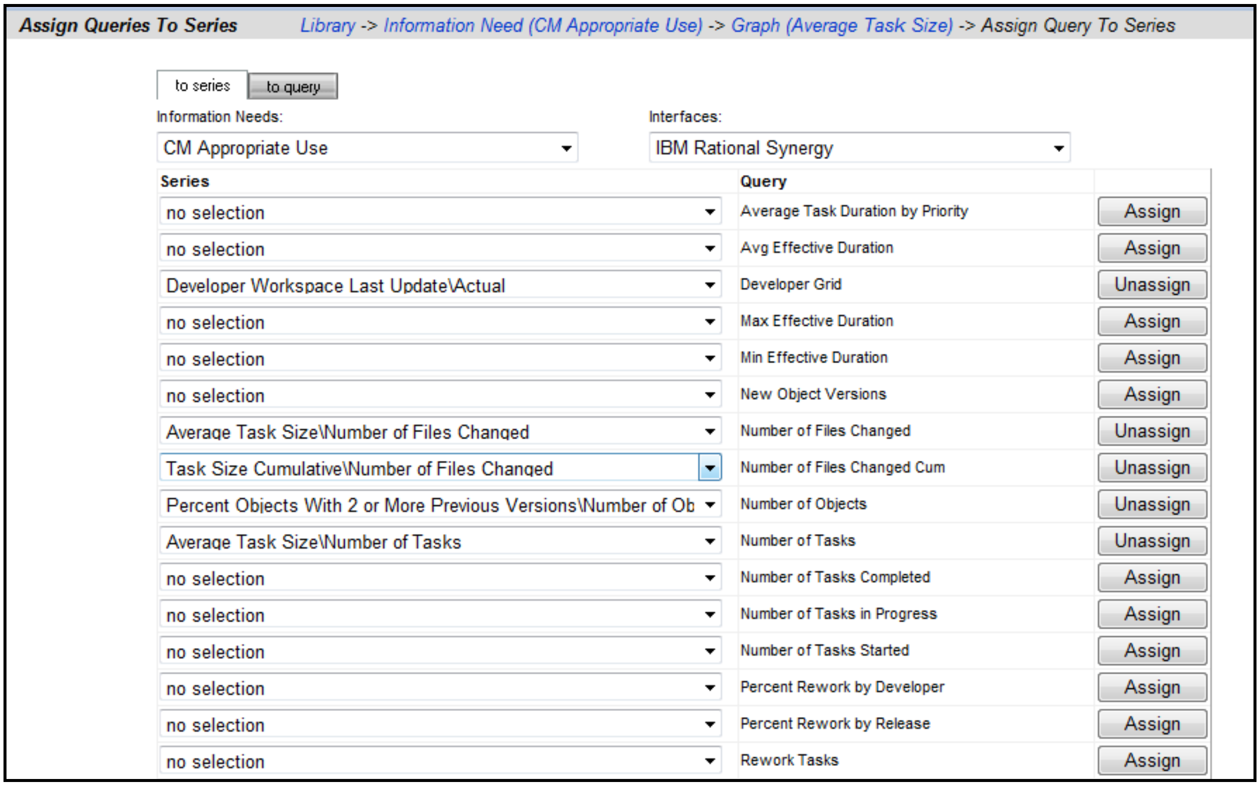
The Assign Series to Queries page allows you to assign one of more queries to a series in the Library. This page has two subtabs described below. Once you are done with the assignment, use the breadcrumbs at the top of the page to return to previous page.

On the “to query” subtab, 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 subtab is designed to review all the interfaces that a single series has been assigned to.



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. Below, the “Number of Files Changed” query from the Synergy interface has been assigned to the “Number of Files Changed” series of our graph. Notice that the button on the appropriate column (below) now says “Unassign” indicating that has already been assigned.

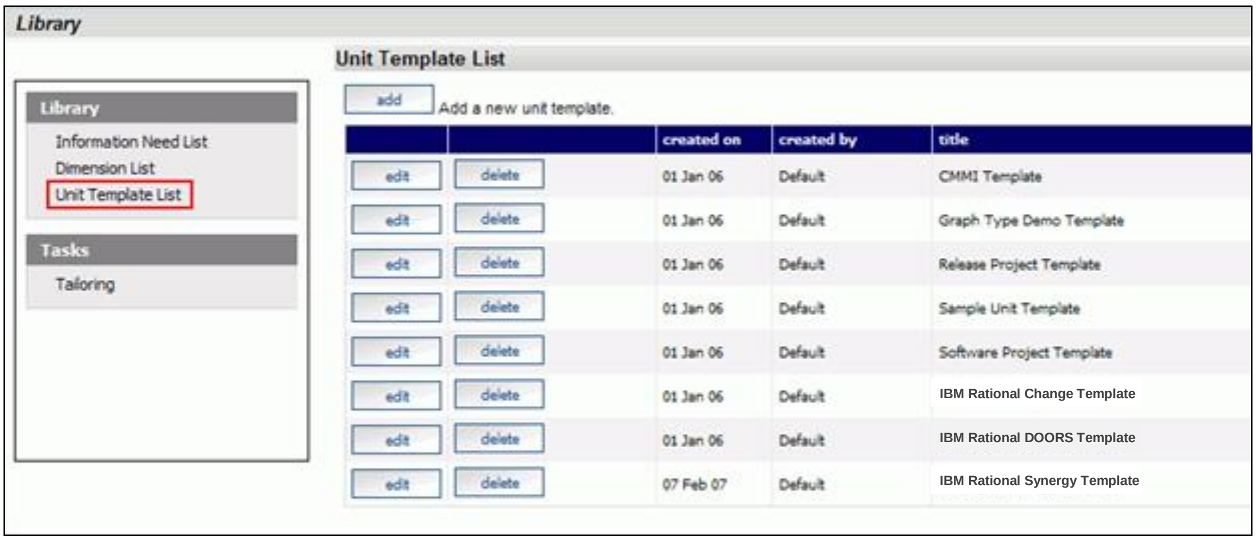


Once you are done with the assignment, use the breadcrumbs at the top of the page to return to previous page.

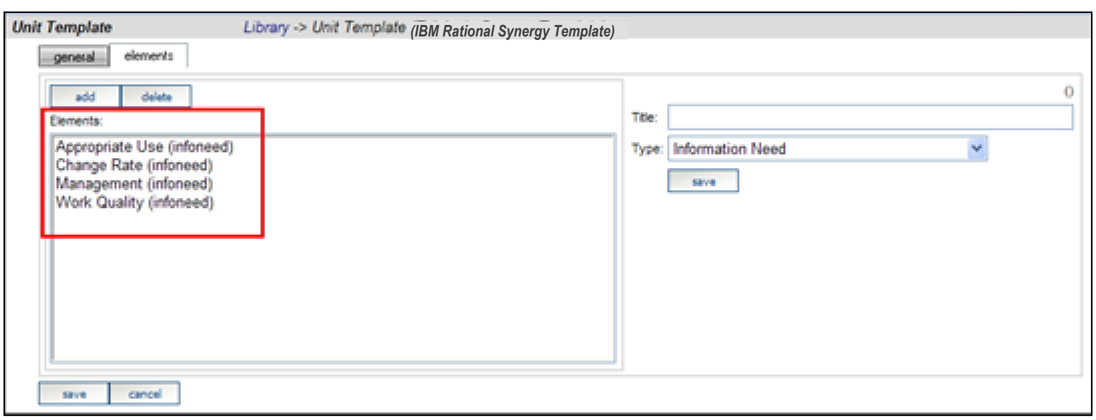
Assign a Schedule to a Synergy Template

This is an optional step that is not required in the setup process. To assign a schedule to a unit when using a template, it is necessary to add a schedule to the template before creating a unit using the template. If a schedule is not included in the template, the unit schedule will default to a monthly schedule.

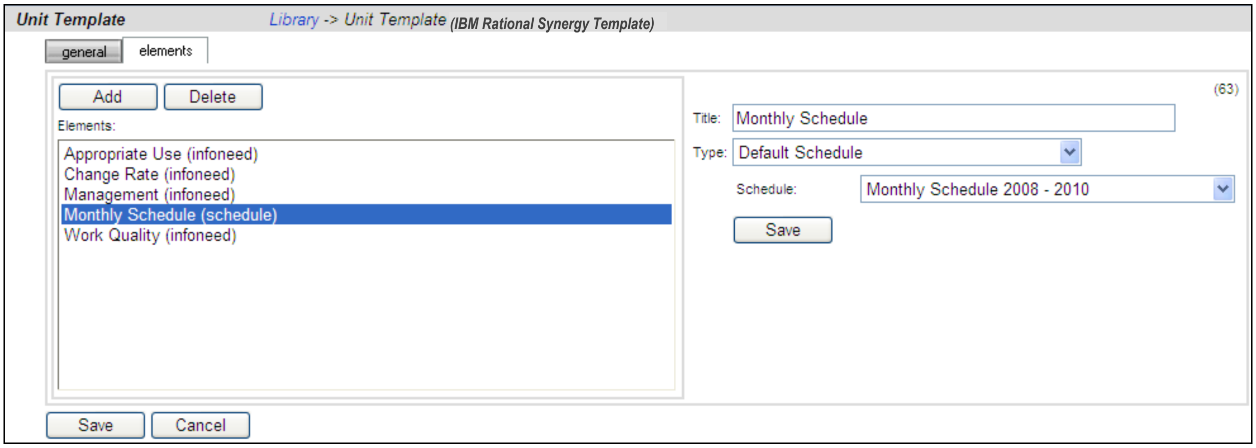
To include a schedule in a template, go to the **Library** tab. Select the **Unit Template List** from the Library section on the left hand side of the page. This will open a list of templates currently available for use.



Select the **edit** button beside IBM Rational Synergy Template. Selecting the **elements** subtab opens the page displaying the elements that have been assigned to the template.



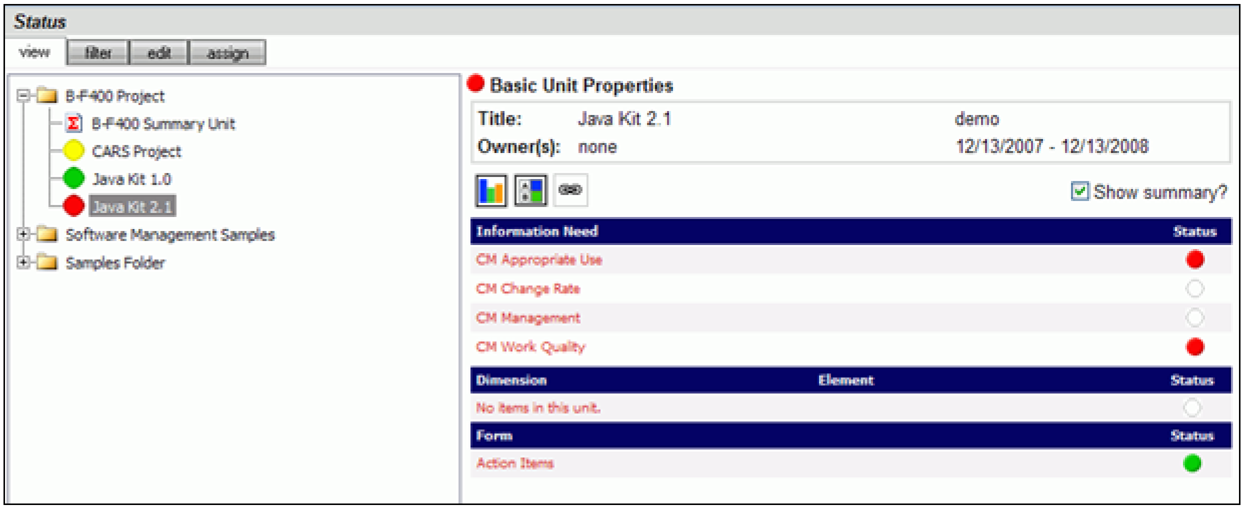
Select the **add** button and enter the **Title**. Select **Default Schedule** from the drop down list for the **Type** field and select the desired schedule from the **Schedule** drop down list.



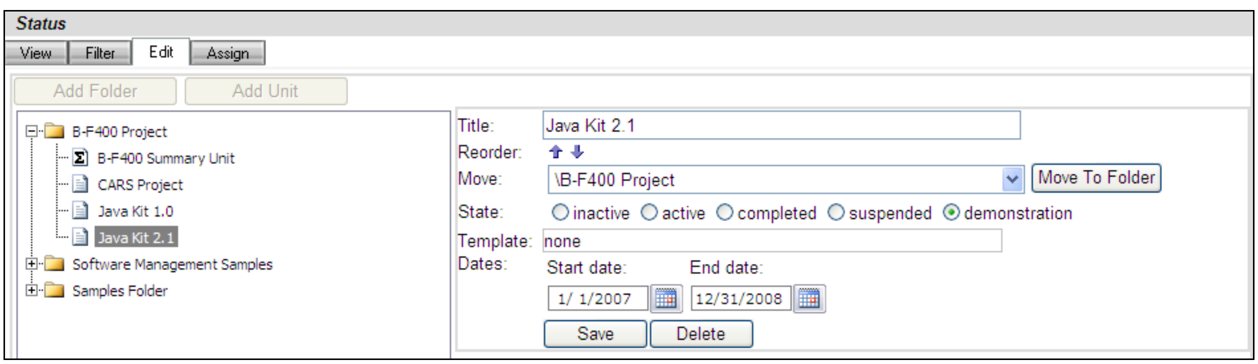
Make sure to **save** your changes.

Setup a Unit with the Synergy Template

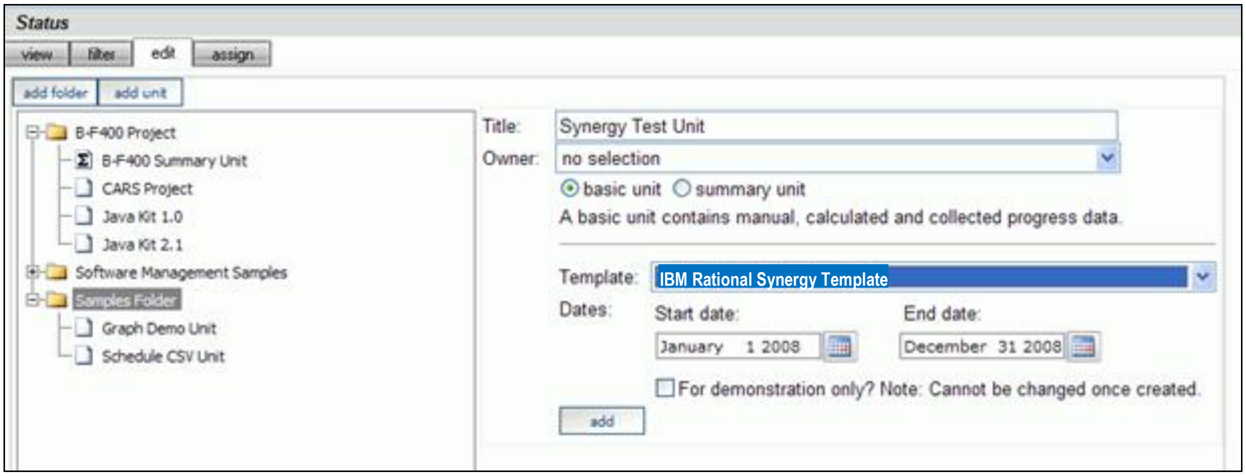
Once everything is set up correctly for the collection, the next step is to configure the Status tab to show the data results. A **unit** can be created for each project to display the data results and status for that project**.**



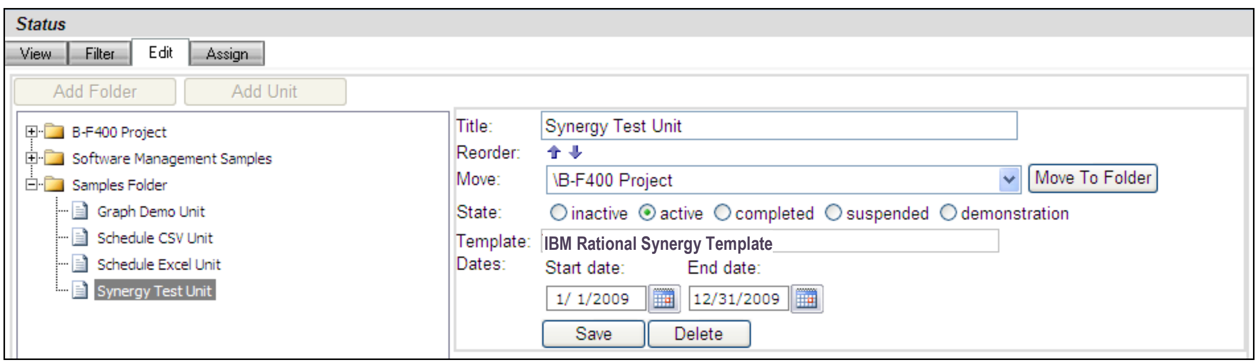
To start, click on the **Status** tab. To add a unit, click on the **edit** subtab to organize the data tree to include information on a project or projects. Create a folder, or use an existing one, and then add a unit.



To add a unit, click the **add unit** button above the tree. On the right hand side of the screen, enter a **Title**, **Owner**, **Start Date** and **End date** for the Unit. Select the **IBM Rational Synergy Template** from the drop down list. In the sample below, we added a new Unit to the Samples Folder and assigned the IBM Rational Synergy Template.



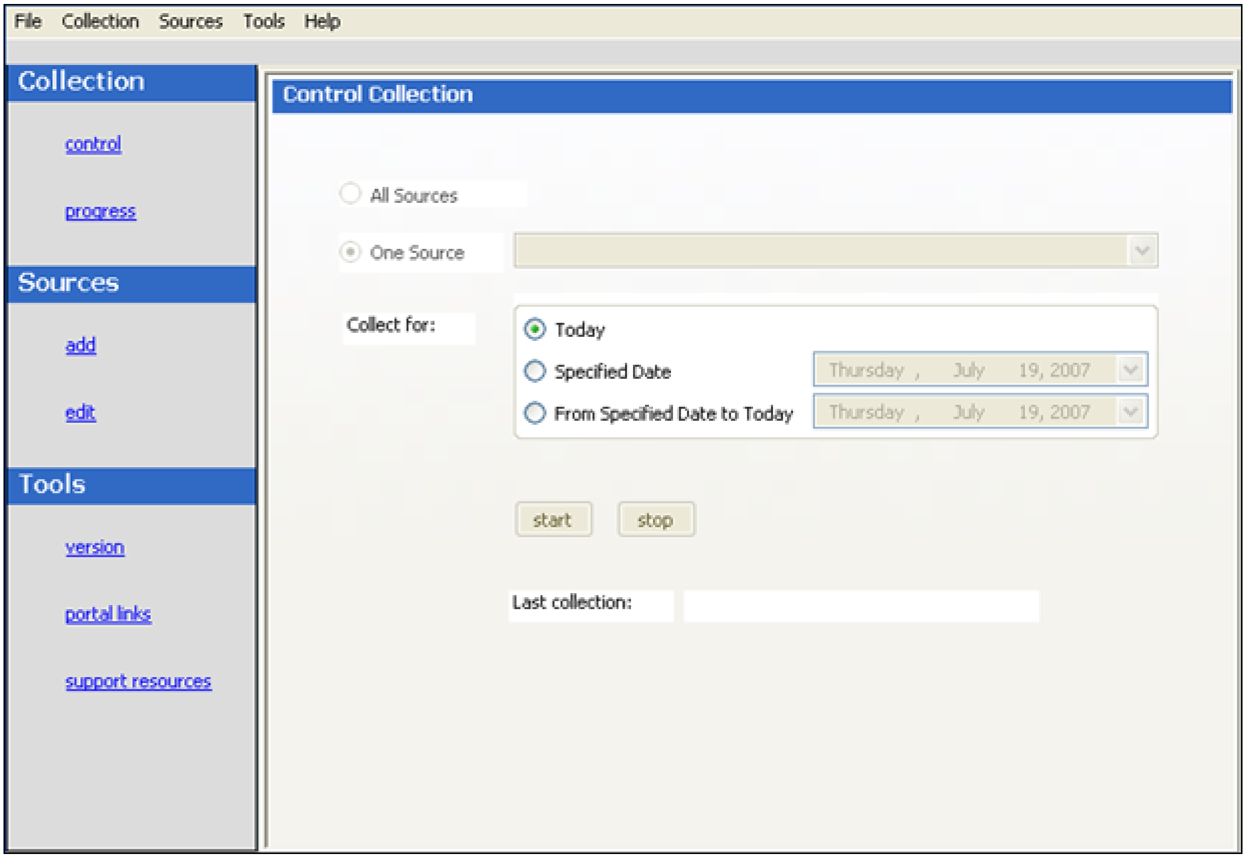
After you click the **add** button, the new unit will appear in the Status tree.



With the Portal configuration complete, you are ready to configure your Collector and collect your data.

Configuring the Collector

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



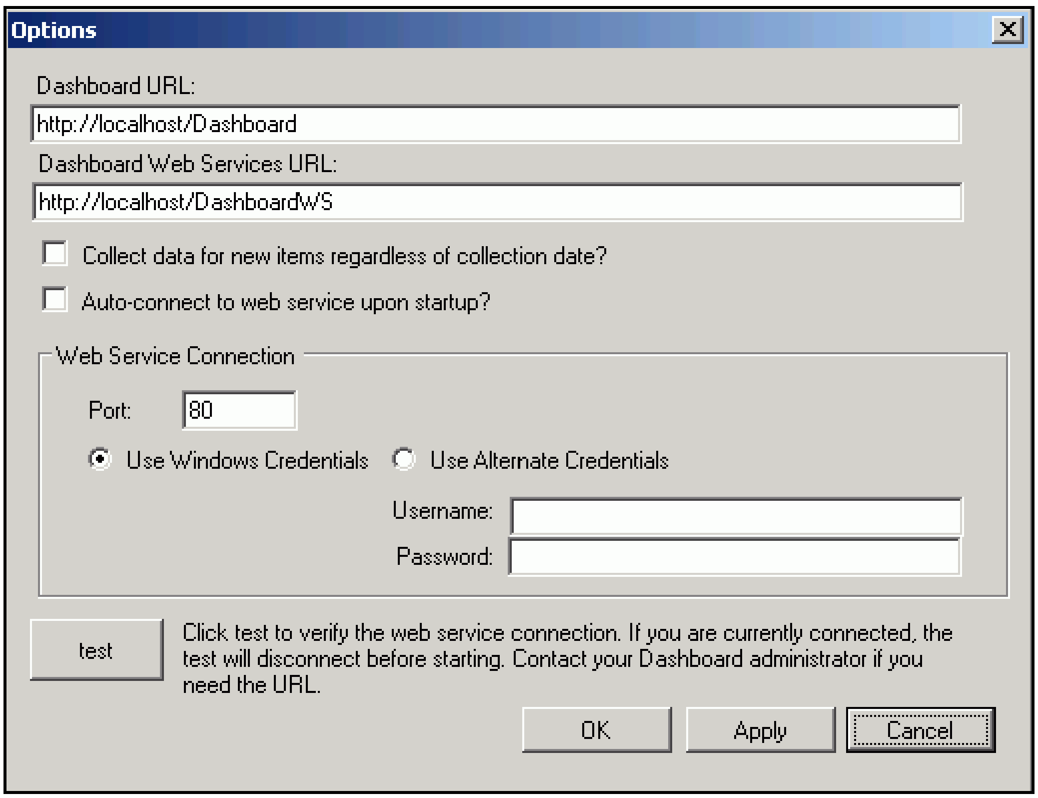
Verify Connection to Web Services

Verify Connection to Web Services

The Collector uses the 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 IBM Rational Dashboard Web Services URL is set to:

http://localhost/DashboardWS

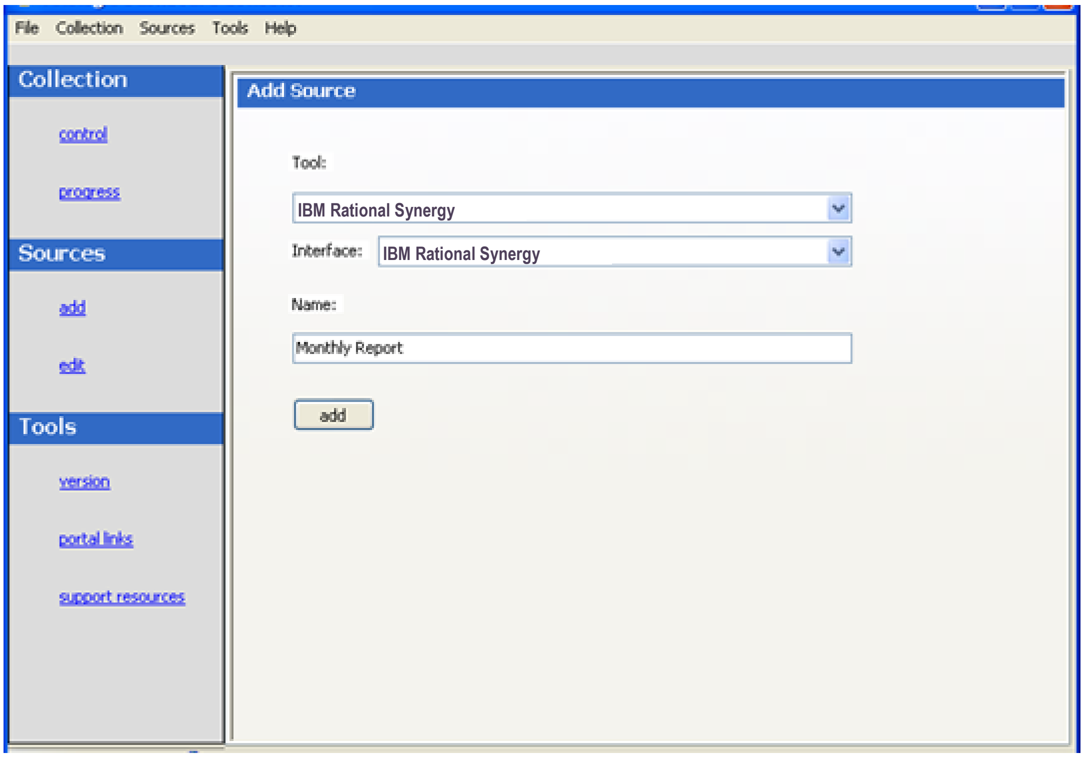
If you are running the collection from the server that is running the Portal then "localhost" will work fine. If you are running the collection from a machine other than the Portal server you will need to change the "localhost" part of the URL to the name of the server running the IBM Rational Dashboard 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.

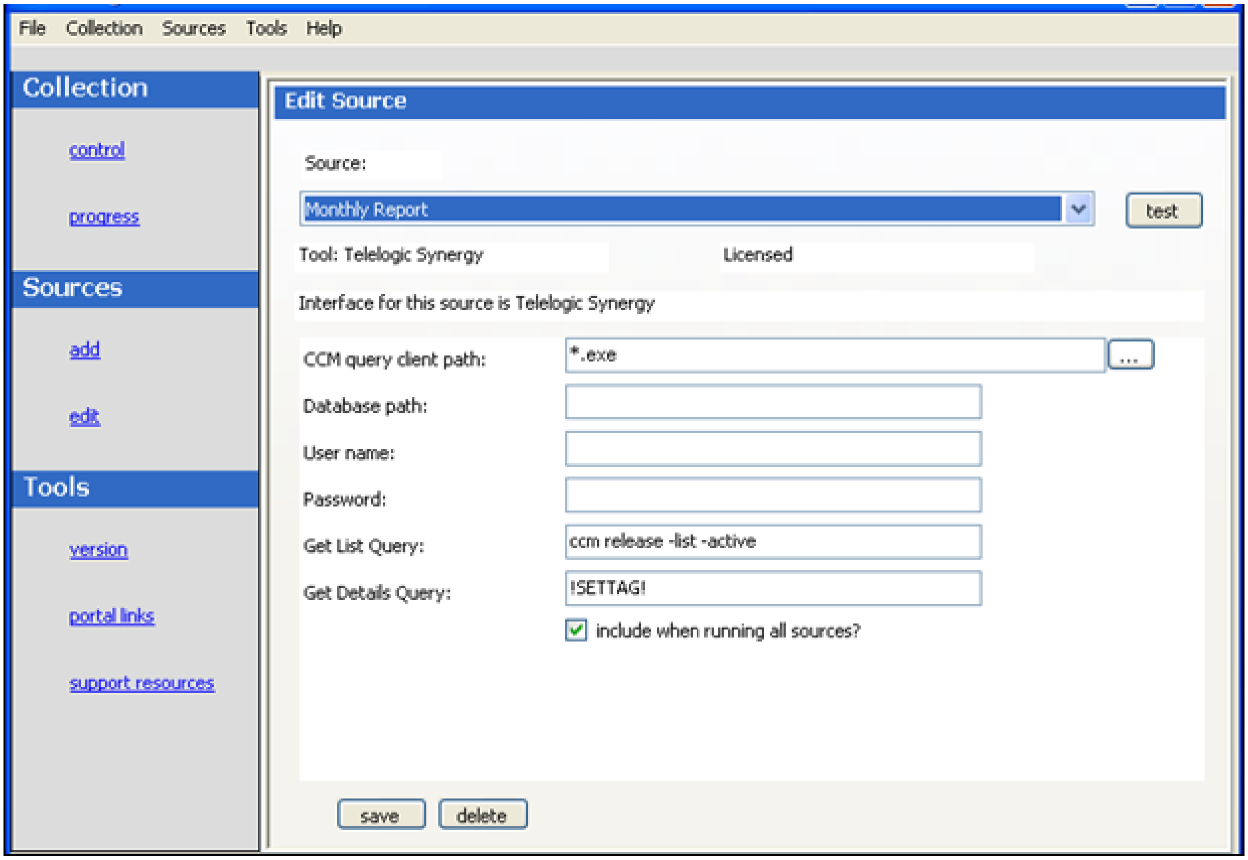
Add a Source

Choose **sources/add** from the left menu. Select IBM Rational Synergy as the **Tool** and the **Interface** from the drop down menus and enter a name for your source. (You will notice a drop down list of Interfaces below the Tool selection. This is used for many sources to delineate between different instances of a tool and let the Collector know which Interface to use when collecting from a specific source.)



Click the **add** button.

The setup for IBM Rational Synergy requires some basic log in information as well as some Portal specific information.



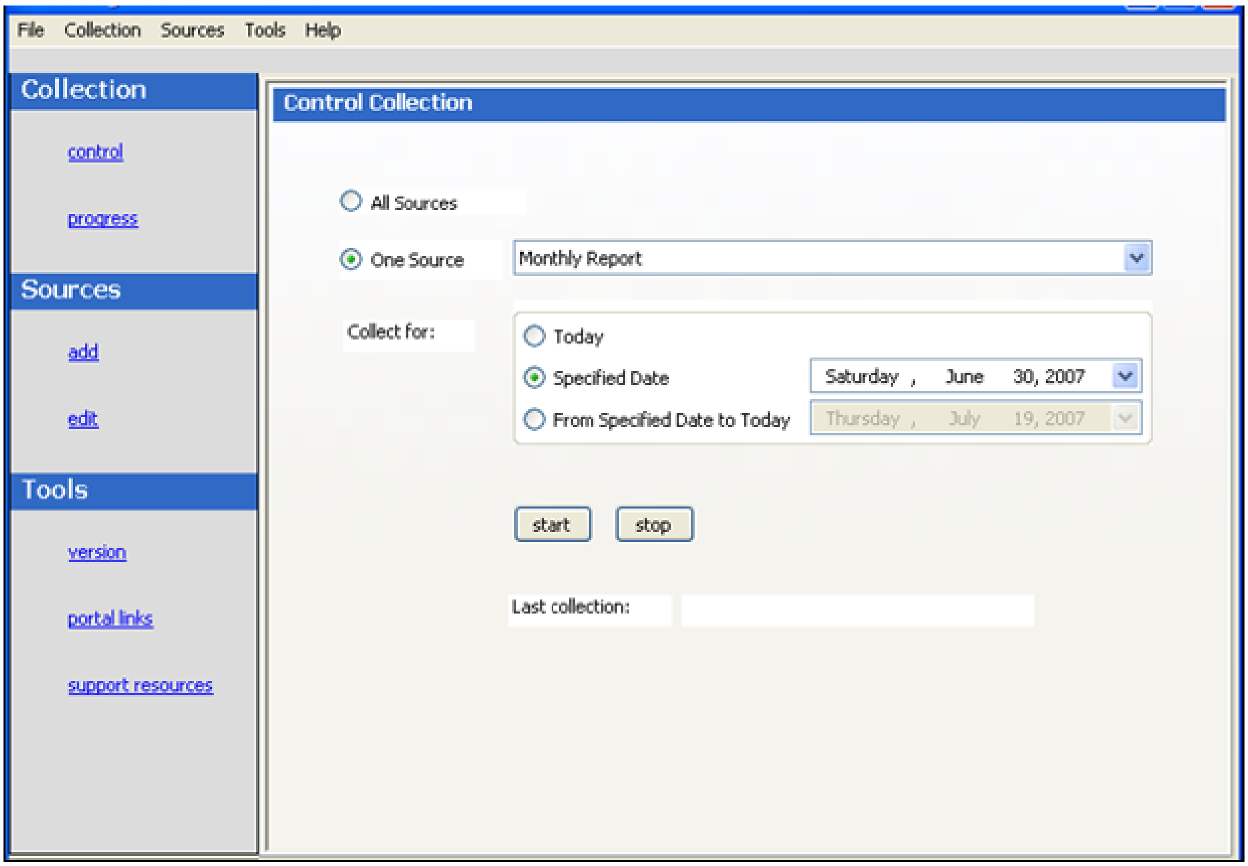
The **CCM query client path** is the location where IBM Rational Synergy is installed on the local machine. The **Database path** is the location of the IBM Rational Synergy Database. The **Username** and **Password** allows access to Synergy database.

The **Get List Query** will default to: ccm release -list -active. This query will return a list of releases. The items in the list are then used in the Get Details Query. The **Get Details Query** will default to:!SETTAG!. !SETTAG! is a reserved word used by the collector. During collection, the collector will replace the reserved word !SETTAG! with the text in each interface field set's 'Parameter Replacement Tag' field. The field set Parameter Replacement Tag is located on the field subtab of the Edit Interface screen. For IBM Rational Synergy, the !SETTAG! reserved word is replaced by ccm queries found in the field sets for the IBM Rational Synergy interface.

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

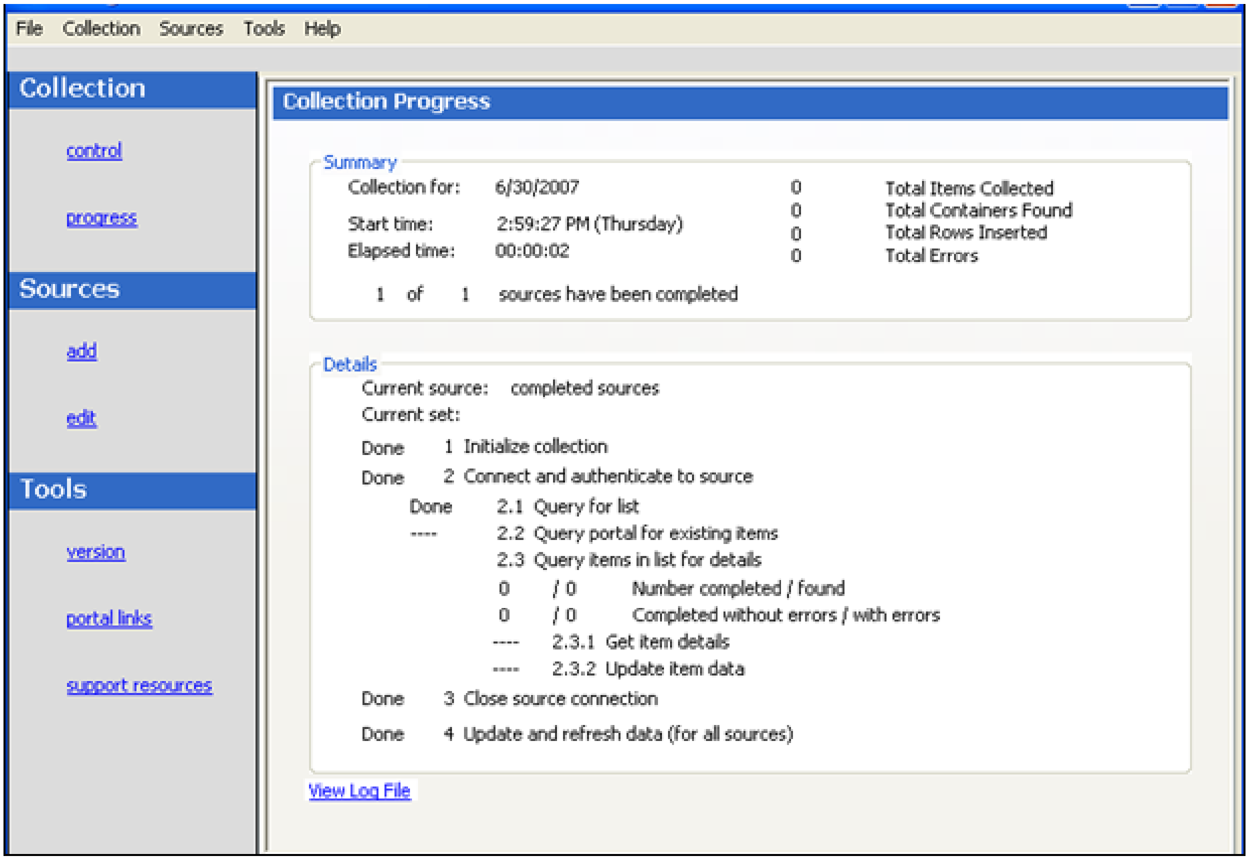
Running a Collection

Once you've saved your configurations, you're ready to run your collection. Go to the **control** link in the Collection section. Click the radio button for **One Source** and select your source from the drop down on the right. Below the drop down, select "Specified Date" and choose the last day of the previous month. This will allow you to see data in your graphs automatically. See the Help files for more information about how schedules affect the Collector.



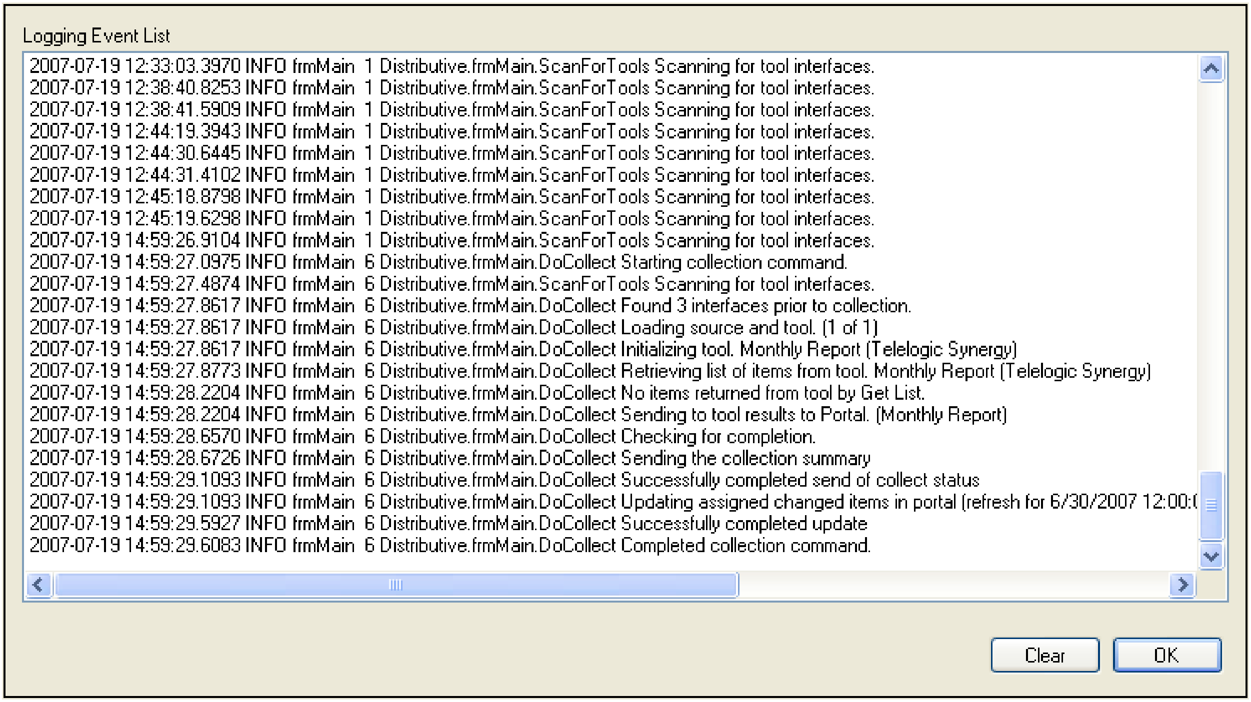
Once you've picked your source and your date, click on the **start** button.

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



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 has 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.

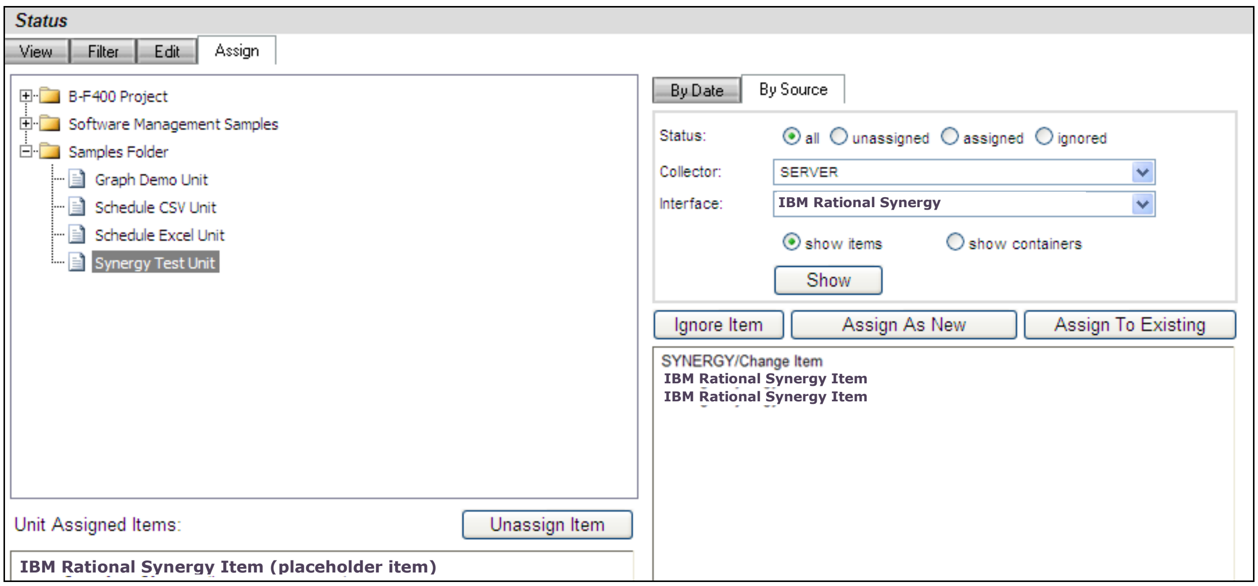


The next step is configuring the Unit.

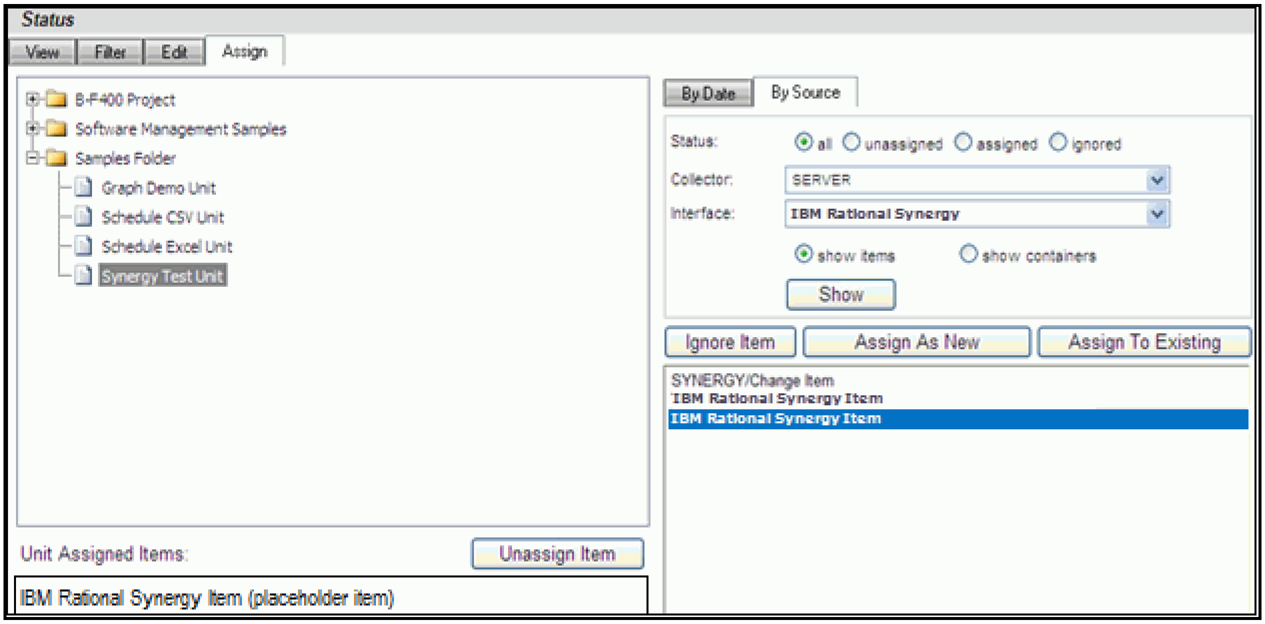
Unit Configuration

Assigning Collected Items

Once you have run the collection without errors, you are ready to add **Items** to the **Unit**. Go back to the **Status** page and click on the **assign** subtab. Select the Unit that 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've 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. The names of the items will be the names of your releases.



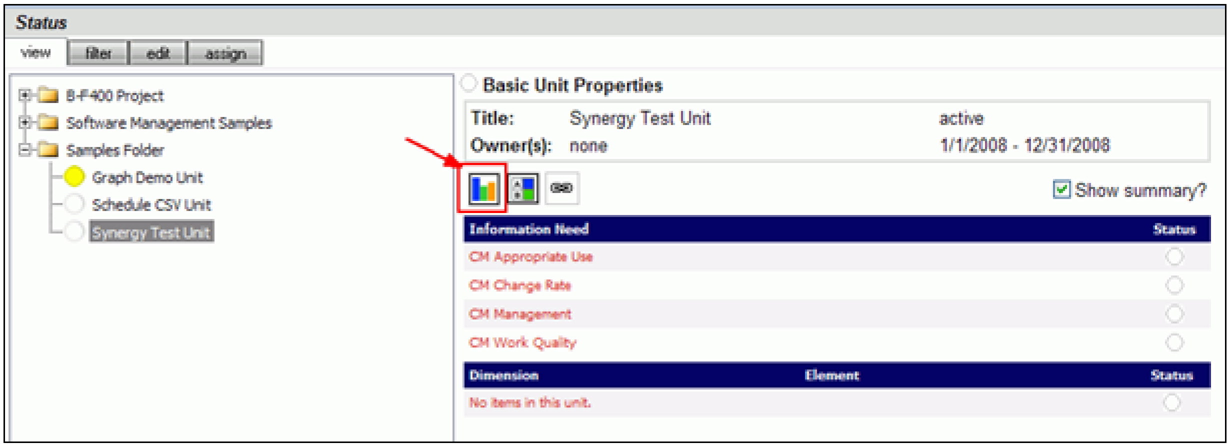
Click on the items that you want to add to this unit and then click on the **assign** button on the right hand side.



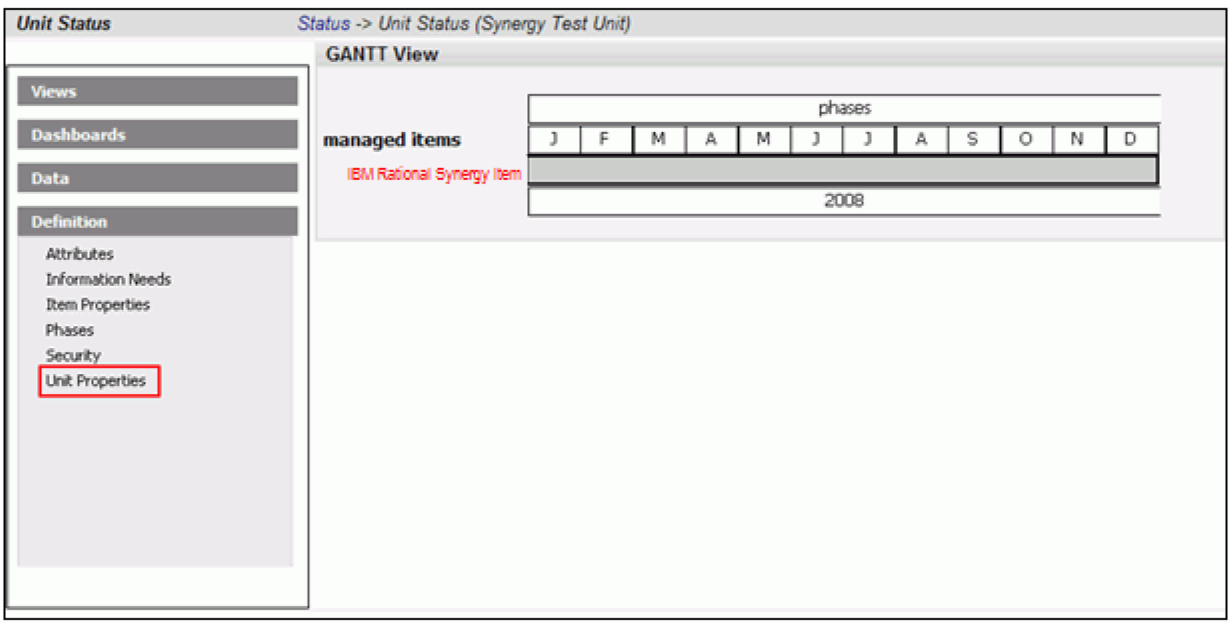
On the left hand side of the page, you will see your list of items set as Assigned Items. Now all you have to do is refresh your unit and you'll see data in your graphs.

Refreshing the Unit

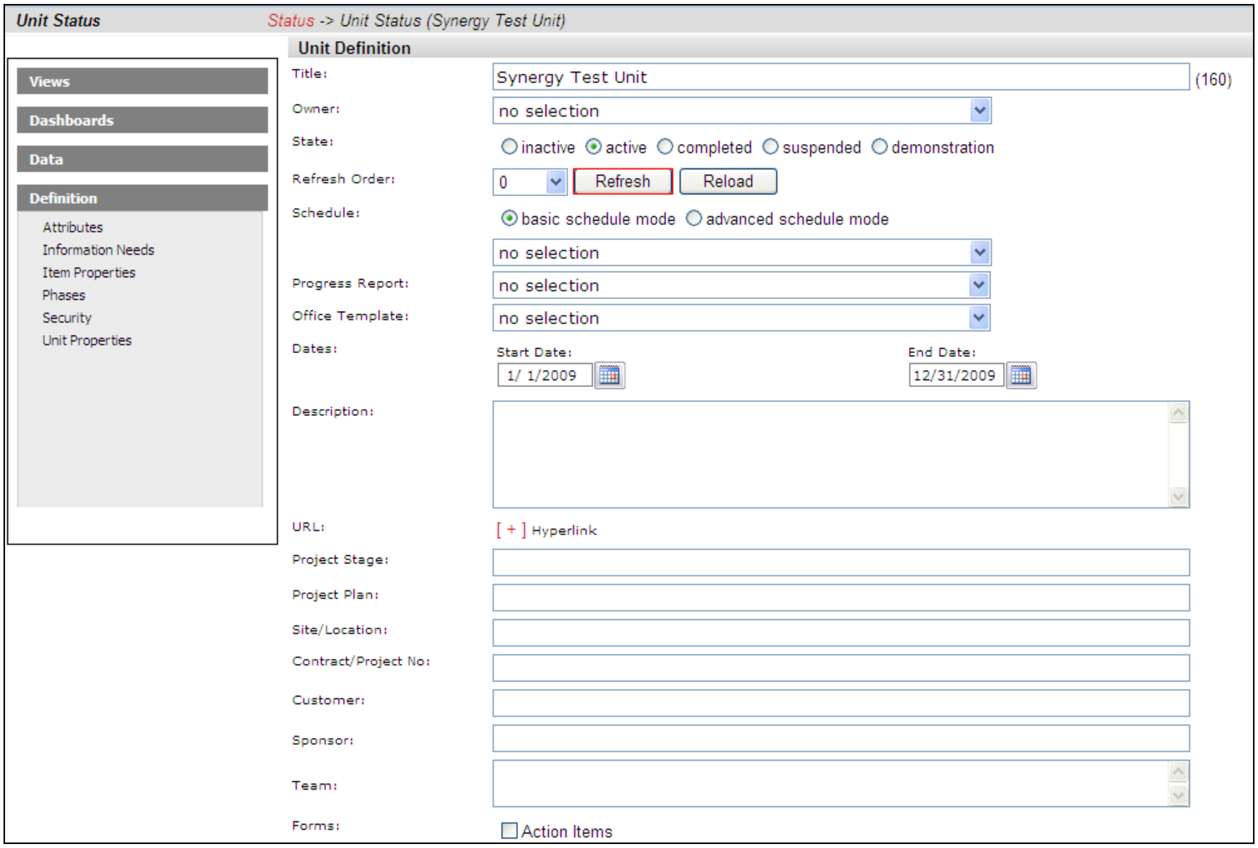
While on the Status tab, click on the view subtab and select your unit from the tree on the left hand side. On the right hand side of the page, click on the **Details** button.



In the subsequent **Unit Status** page, you will see an empty GANTT chart with your items listed along the side. From there, click on the **Unit Properties** link under the Definition section.

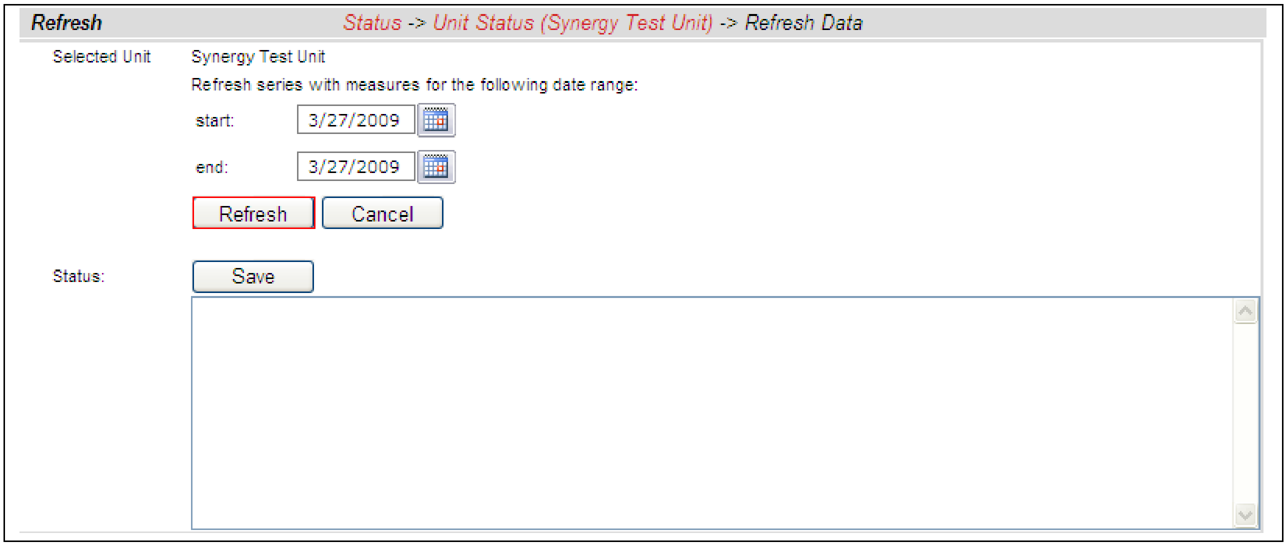


Next, click on the **refresh** button in the center of the page. This will let you refresh the data for all of the Items and their graphs over a period of time.



On the Refresh page, you need to choose the dates for refreshing the graphs. Since you've run a collection for only one date, you'd only need to refresh over that date. So if, for example, you ran your collection for March 31st, you would want to refresh over that date.

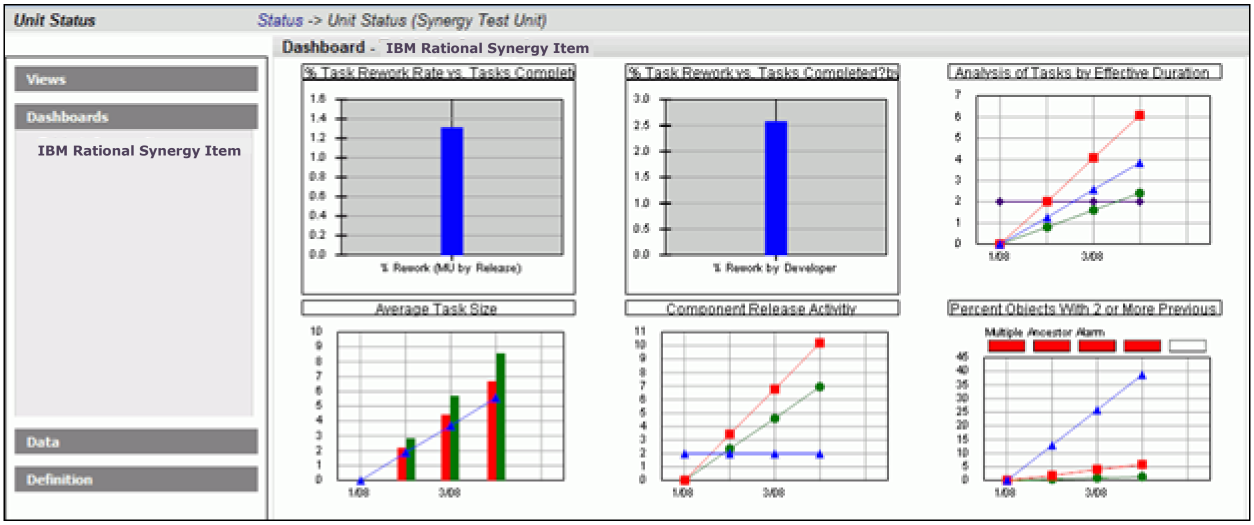
In this example, the refresh runs from January 1st to April 1st, but it could be any span of dates that include March 31st.



After you've selected your dates, click the **refresh** button. The Status box below will tell you when the refresh has completed. To get back to your unit use the bread crumbs or the **cancel** button. The **save** button will create a log file with the information in the Status box. This is useful if there were errors during a refresh.

View Data in the Portal

Now you're ready to see your data. Once you're back on the **status** page in your **Unit**, select a **Dashboard** to view. You should see a data point in your graphs for the date that you ran the collection.



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:

- 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.

        - 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.

Other Information

For Rational software product news, events, and other information, visit the IBM Rational Software Web site on http://www.ibm.com/software/rational/.

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