Rational. Dashboard

Change Walkthrough

Before using this information, be sure to read the general information under the "Notices" section on page 37.

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 Change Walkthrough for IBM Rational Dashboard!

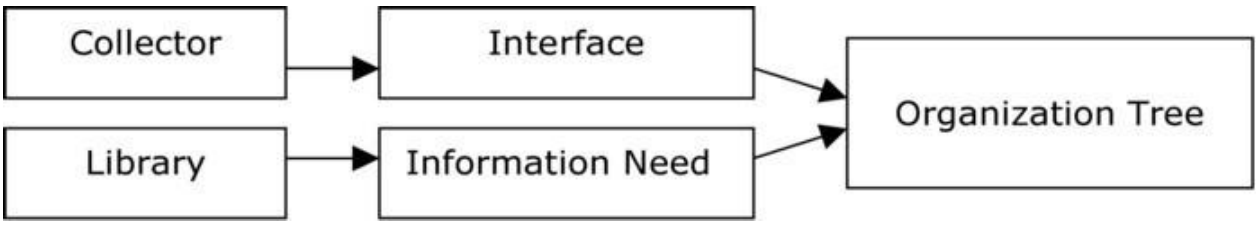
IBM Rational Dashboard brings software management best practices within reach of every organization and every manager. Manage requirements, schedule, budget, quality, configuration management and size in one place; keeping total control of the drivers that keep projects on time and within budget.

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, IBM Rational ClearQuest, 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 Change Sample Walkthrough

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

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

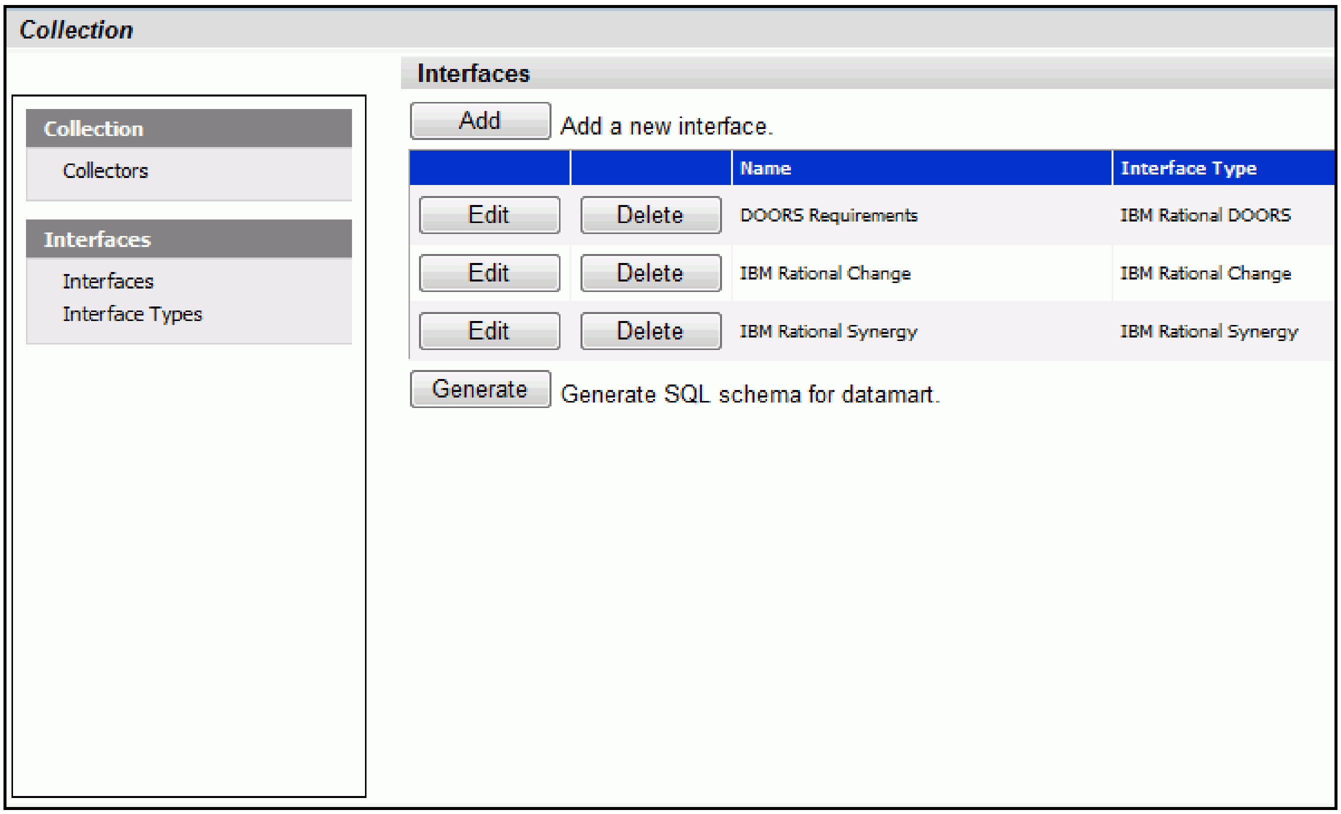
- Portal Configuration:
  - Examine/Configure an Interface in the Portal
  - Examine/Configure an Information Need
  - Assigning Schedules to a Template
  - Setup a Unit with Information Needs (or use a template)
- Collector Configuration
  - Configure the Collector
  - Run a collection
  - Check/Resolve 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 Change.

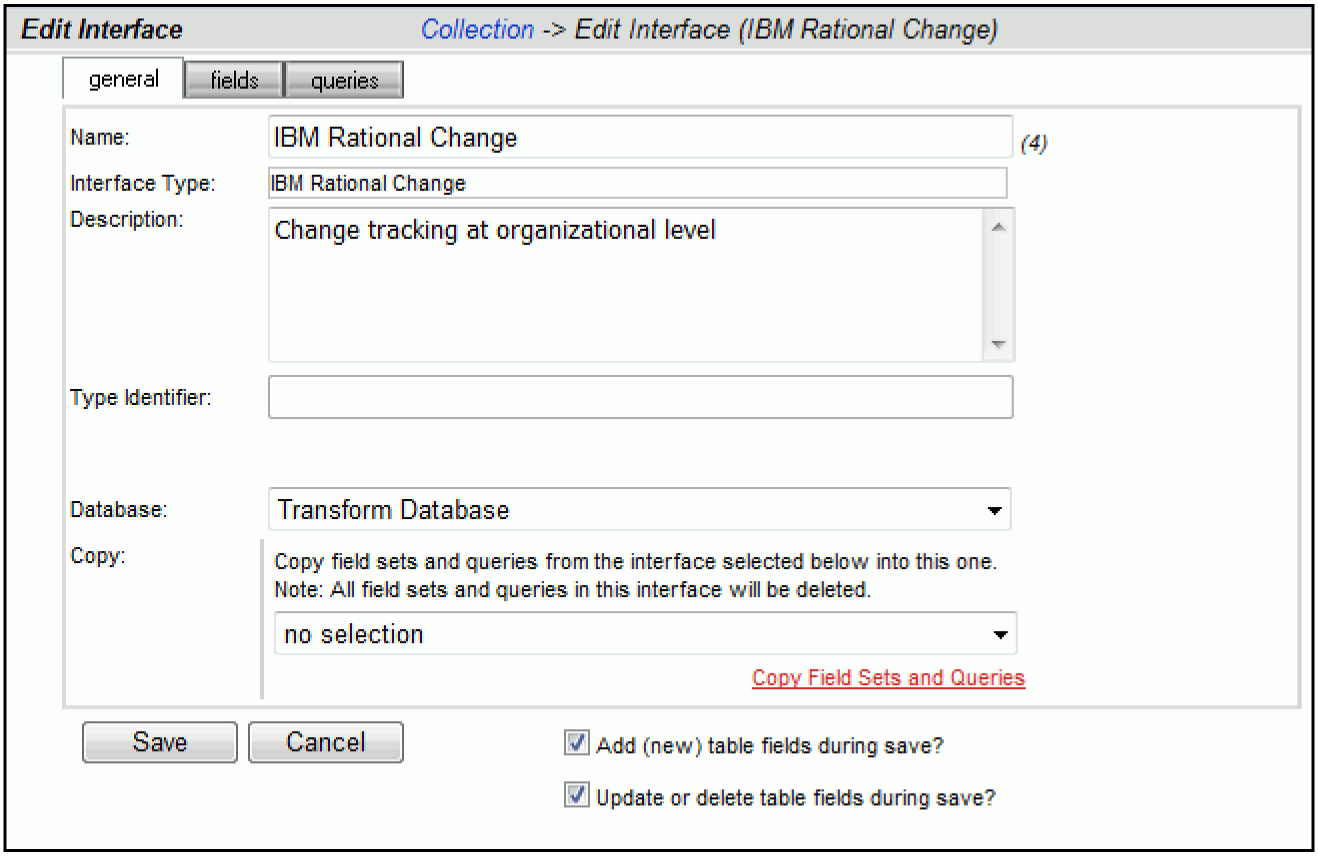
Verifying the Interface in the Portal

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.



From the Interfaces List, click on the **edit** button to open the IBM Rational Change interface.

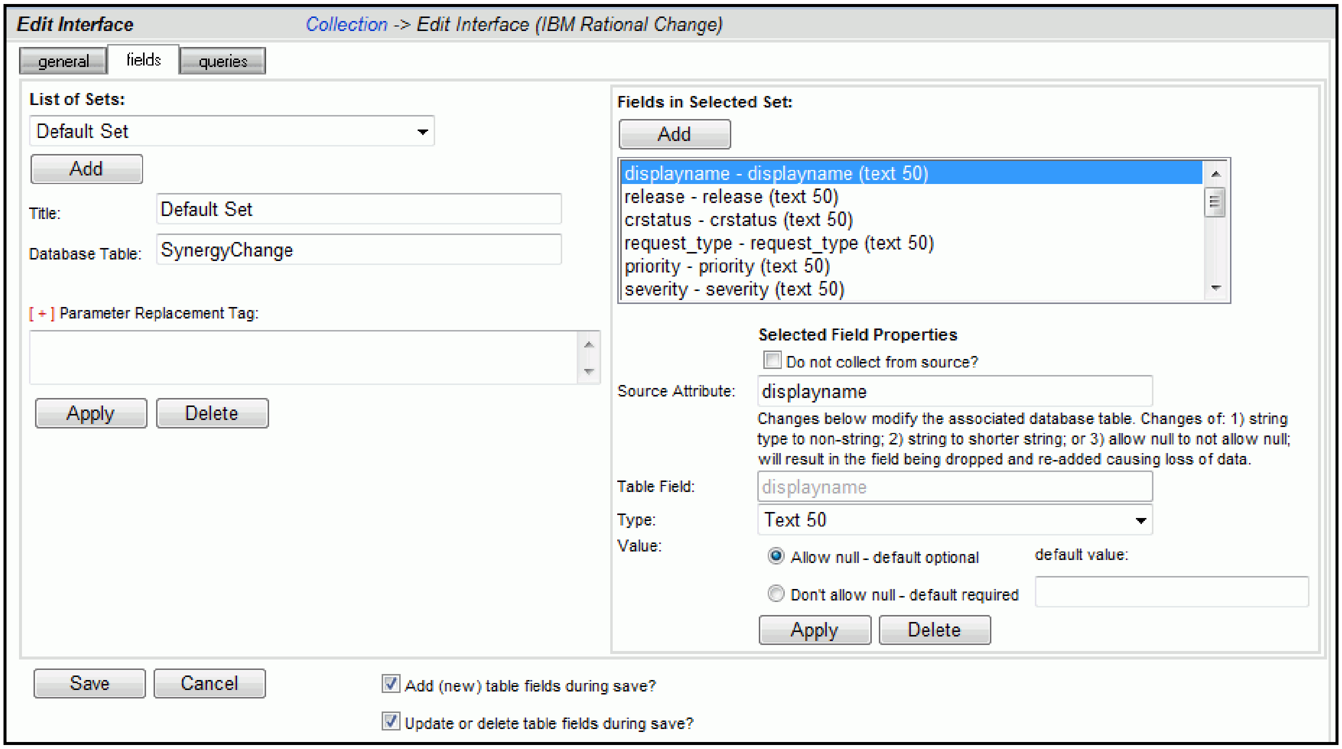
The interface will open in the **general** tab. This is where all the information about what is being collected is stored. This specific interface is a default interface for IBM Rational Change. You will notice that a short description has been entered and the Transform Server has been selected as the Database.



Next, click on the fields tab.

Setting up the Fields

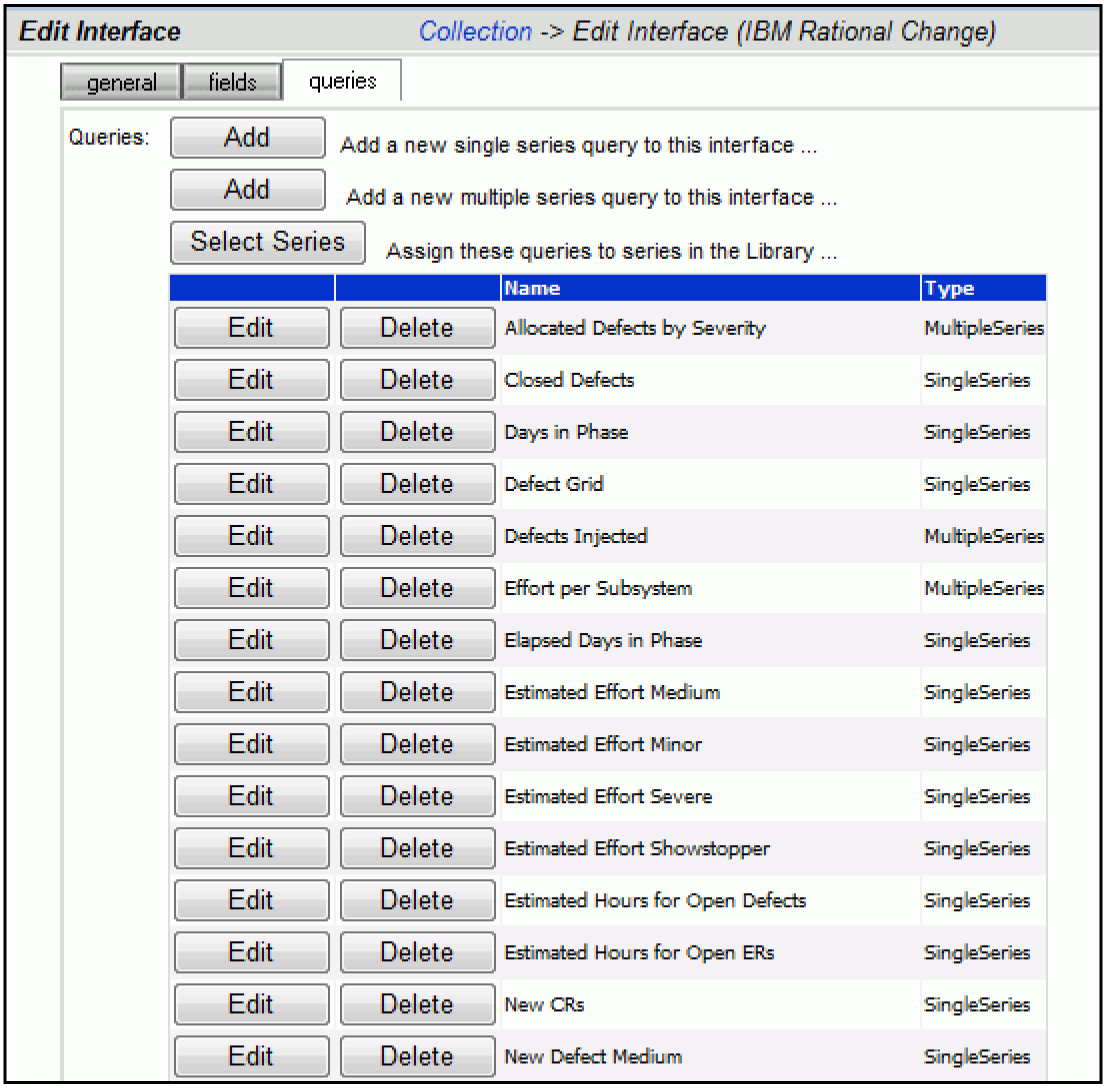
The information entered in the **fields** tab of the Interface defines the information that will be collected and where it will be stored. The list of sets (each containing a group of fields) and the database where the information will be stored is located on the left section of the screen. A list of 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.

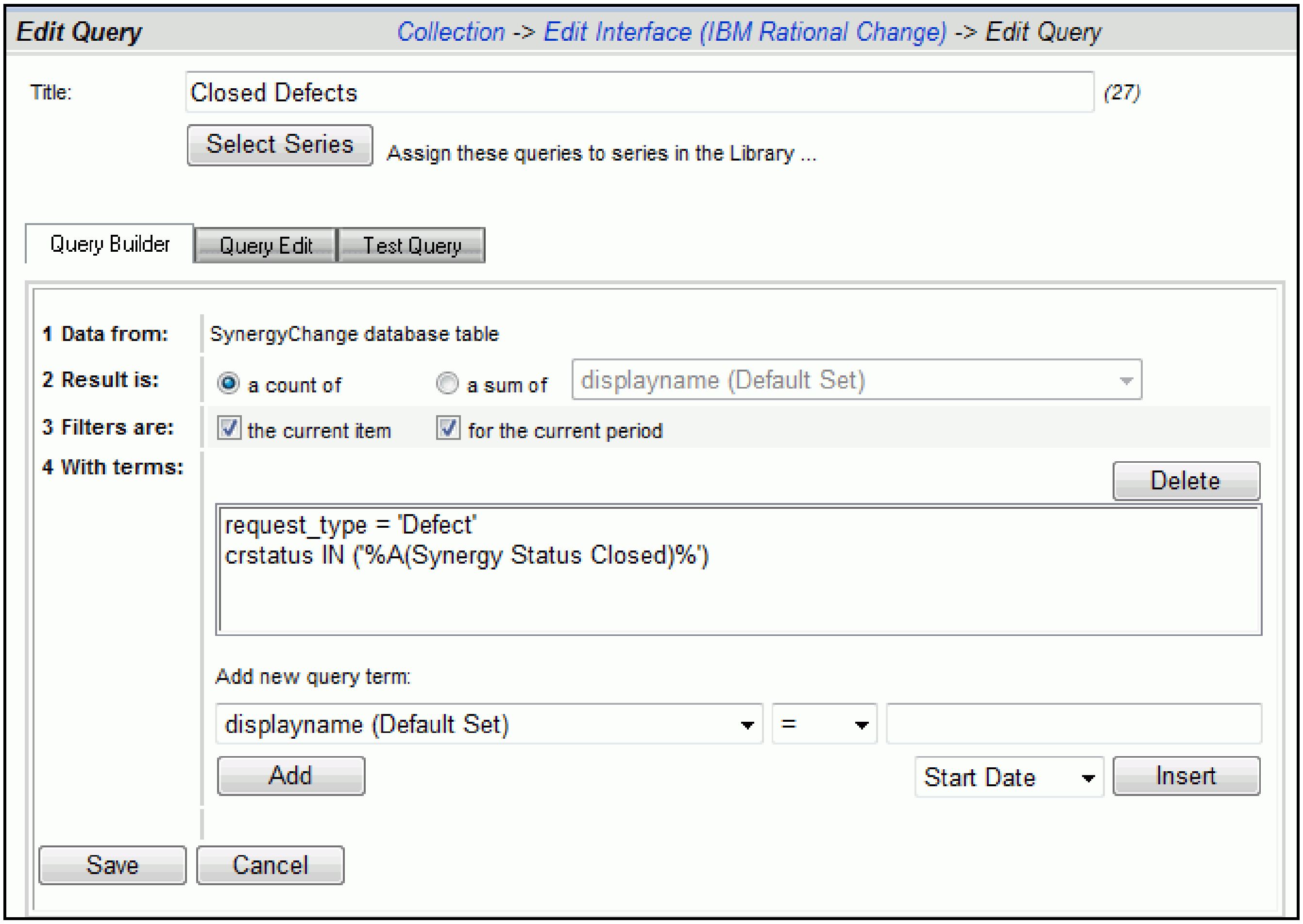
Modifying the Data Queries

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.



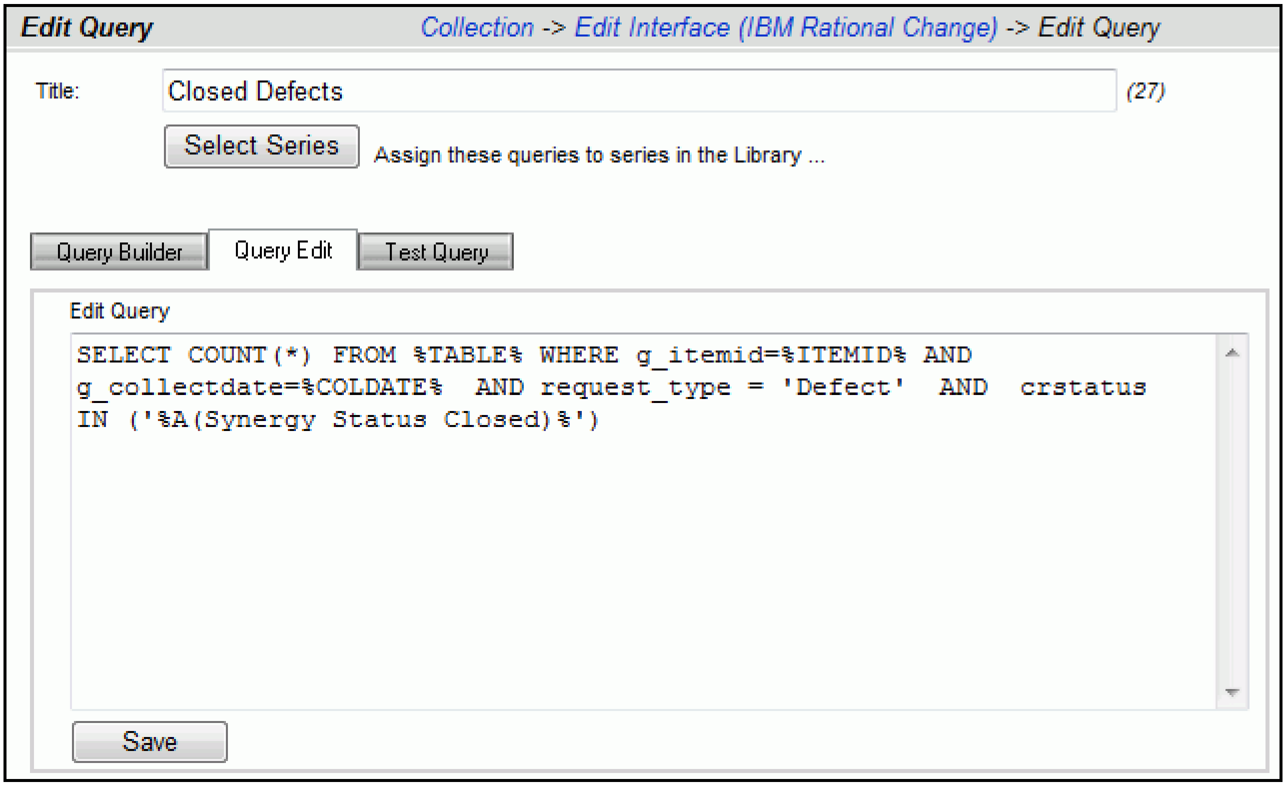
Clicking the **edit** button, for a query in the main list, will open the Edit Query page and allow the user to edit the selected query.

Below is the **Edit Query** page for Closed Defects. There are two options available when modifying a query: Query Builder and Query Edit.



To modify this query, click on the **Query Edit** button.

The Edit Query tab has a **text field** where the SQL statements can be entered, modified or deleted. You can place your cursor anywhere in the text field to add or modify the query. At this point we could modify the statement or delete a portion of the query.

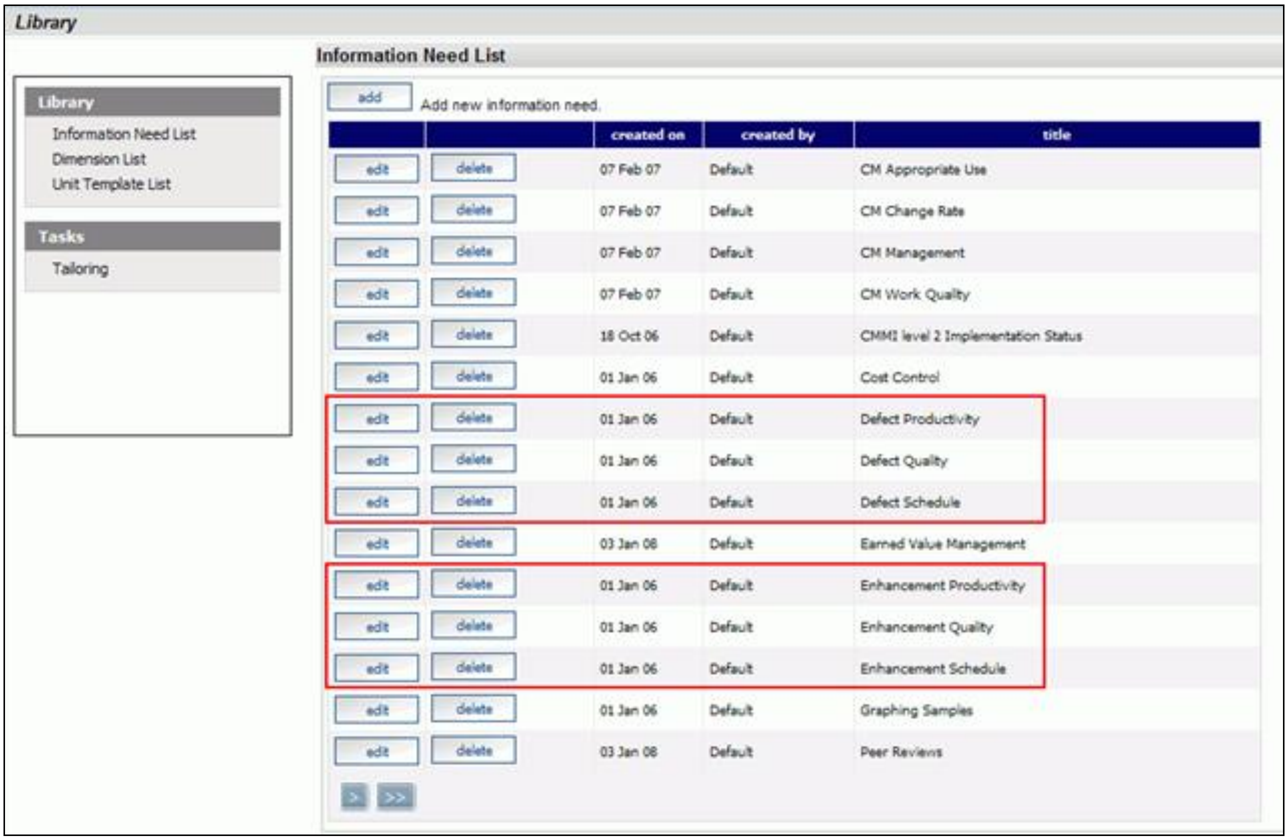


If any changes are made to the query, be sure to save your changes.

Verifying the Information Need

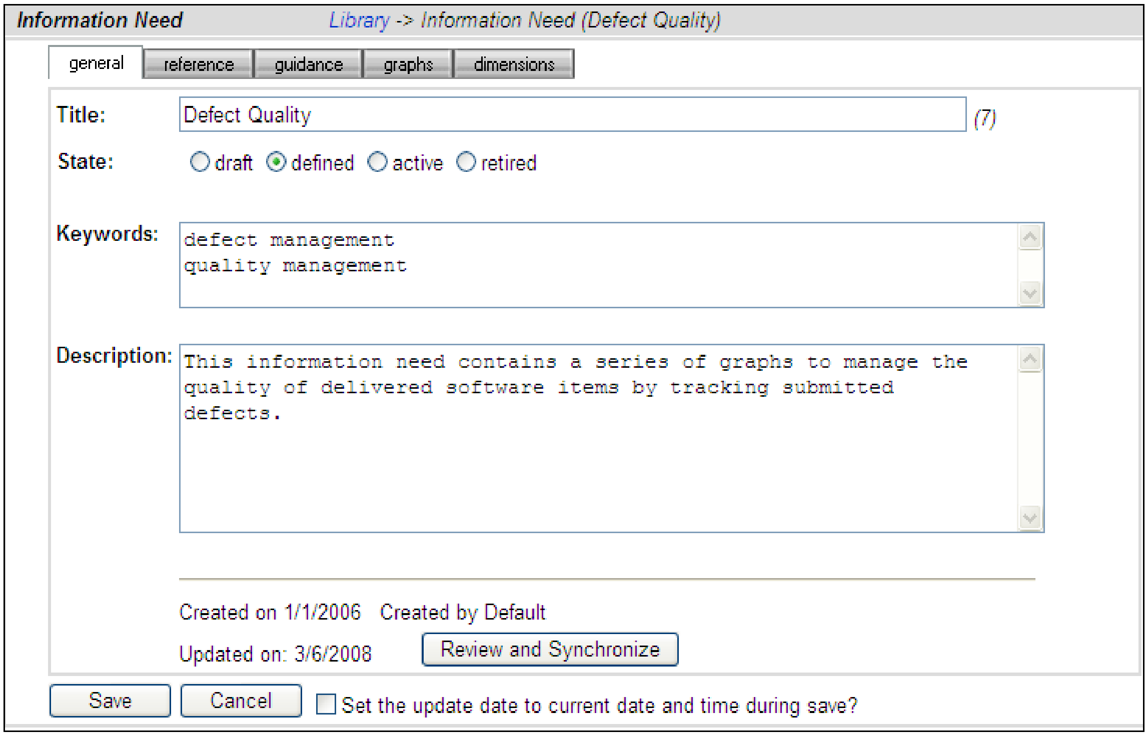
This step is optional, as no changes need to be made in the Information Need to help the Collector run. This will allow you to familiarize yourself with the graphs that will be displaying data in the future. To see the Information Needs, click on the **Library** tab of the Portal.

There are six information needs that are setup to work with IBM Rational Change automatically. They are: Defect Productivity, Defect Quality, Defect Schedule, Enhancement Productivity, Enhancement Quality and Enhancement Schedule.

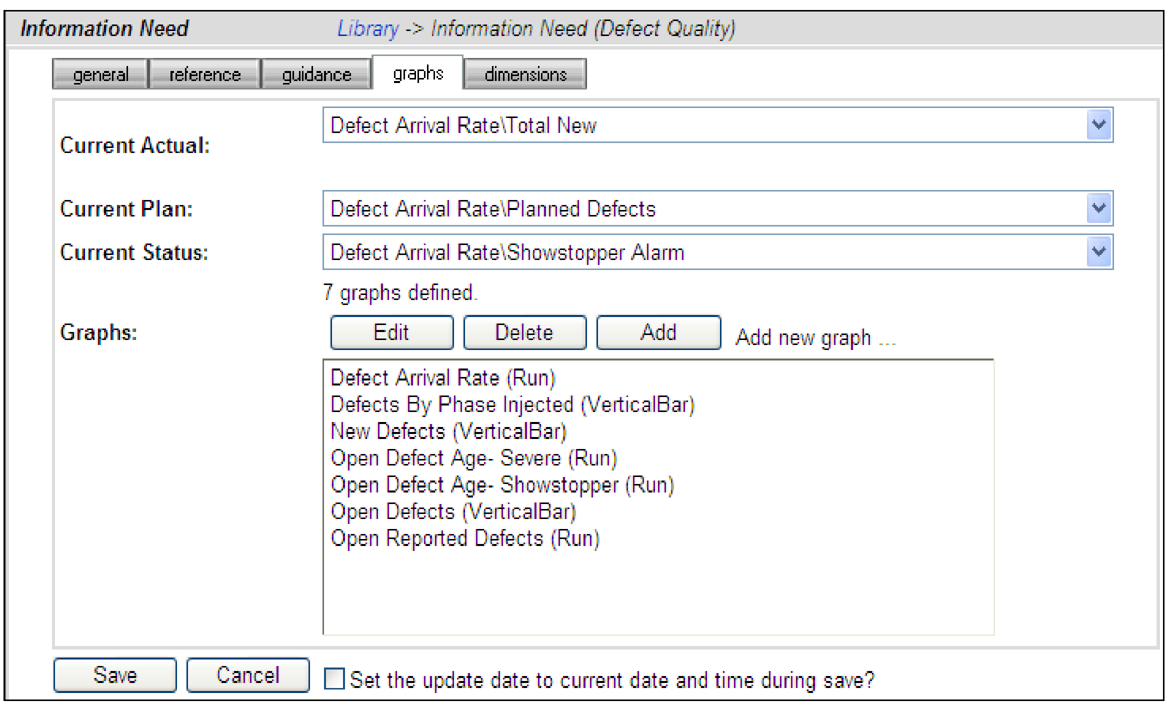


Let’s take a look at the information need, Defect Quality. To open the information need, click on the **edit** button.

The information need will default to the **general** tab. The information need, Defect Quality, contains graphs that will track the quality of the delivered software.



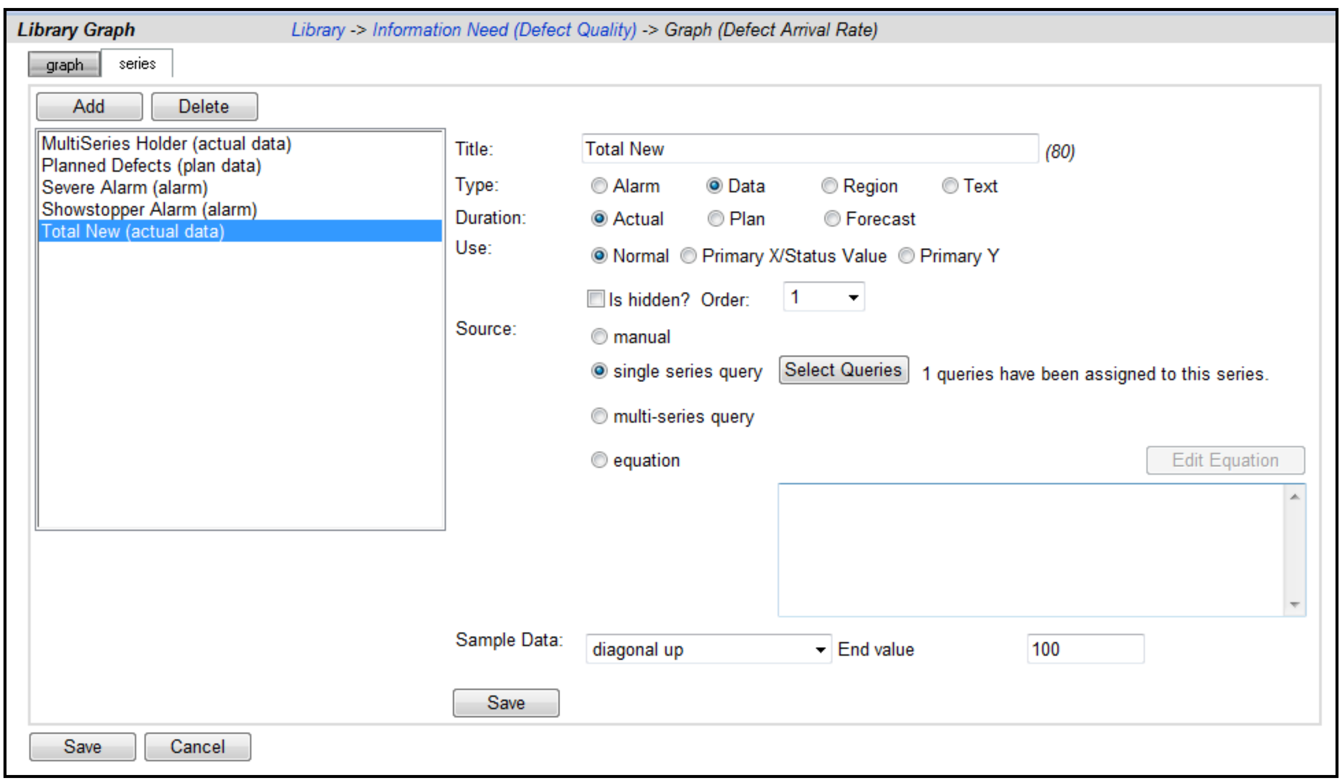
Selecting the **graphs** tab will list the graphs associated with the selected information need. In the sample below, Defect Quality has seven graphs defined. The various graph descriptions and series for each of the listed graphs can be edited here. When the Information Need is added to a unit, the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



Assigning Interface Queries to a Library Series

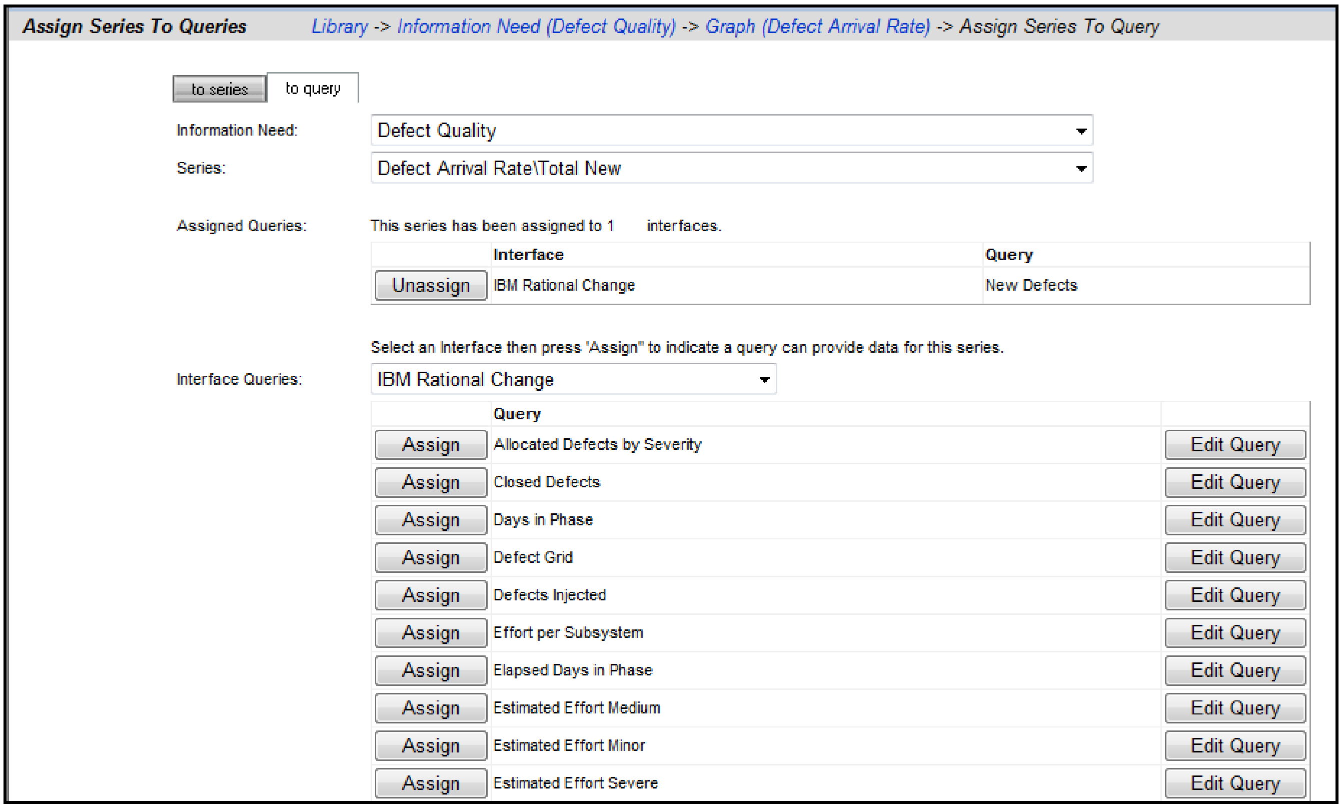
To enable data to be populated in a series, each series must have one or more interface queries associated with it. Once a query is associated with a series, the query is run after data collection to provide a data point for the series. Because a graph in the library is not specific to one interface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

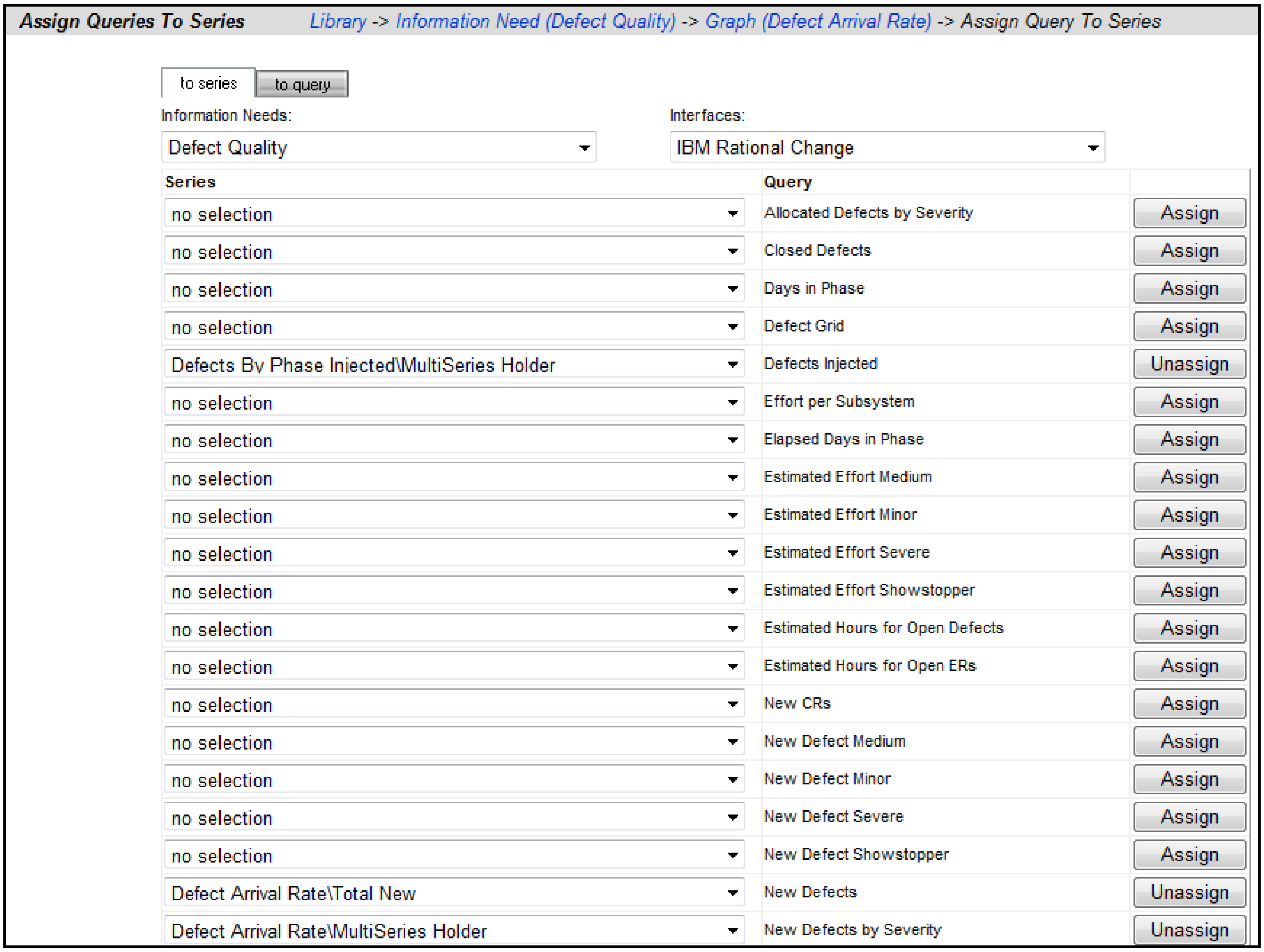


The Assign Series to Queries page allows you to assign one of more queries to a series in the Library. This page has two sub-tabs described below. Once you are done with the assignment, use the breadcrumbs at the top of the page to return to previous page.

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.



On the "to series" sub-tab, you may select an information need and interface and then assign or un-assign the series to queries as needed. This sub-tab is designed to help assign all the queries in an interface at one time to the series in one information need. Below, the "New Defects" query from the IBM Rational Change interface has been assigned to the "Total New" series. Notice that the button on the appropriate column (below) now says "Unassign" indicating that has already been assigned.


Assign Queries To Series — Library -> Information Need (Defect Quality) -> Graph (Defect Arrival Rate) -> Assign Query To Series

to series | to query

Information Needs: Defect Quality

Interfaces: IBM Rational Change

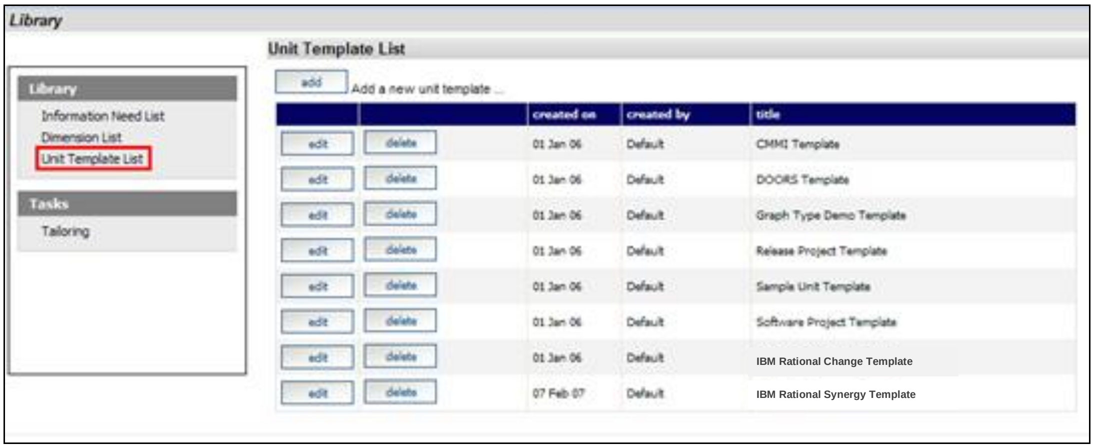
Series	Query	
no selection	Allocated Defects by Severity	Assign
no selection	Closed Defects	Assign
no selection	Days in Phase	Assign
no selection	Defect Grid	Assign
Defects By Phase Injected\MultiSeries Holder	Defects Injected	Unassign
no selection	Effort per Subsystem	Assign
no selection	Elapsed Days in Phase	Assign
no selection	Estimated Effort Medium	Assign
no selection	Estimated Effort Minor	Assign
no selection	Estimated Effort Severe	Assign
no selection	Estimated Effort Showstopper	Assign
no selection	Estimated Hours for Open Defects	Assign
no selection	Estimated Hours for Open ERs	Assign
no selection	New CRs	Assign
no selection	New Defect Medium	Assign
no selection	New Defect Minor	Assign
no selection	New Defect Severe	Assign
no selection	New Defect Showstopper	Assign
Defect Arrival Rate\Total New	New Defects	Unassign
Defect Arrival Rate\MultiSeries Holder	New Defects by Severity	Unassign

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

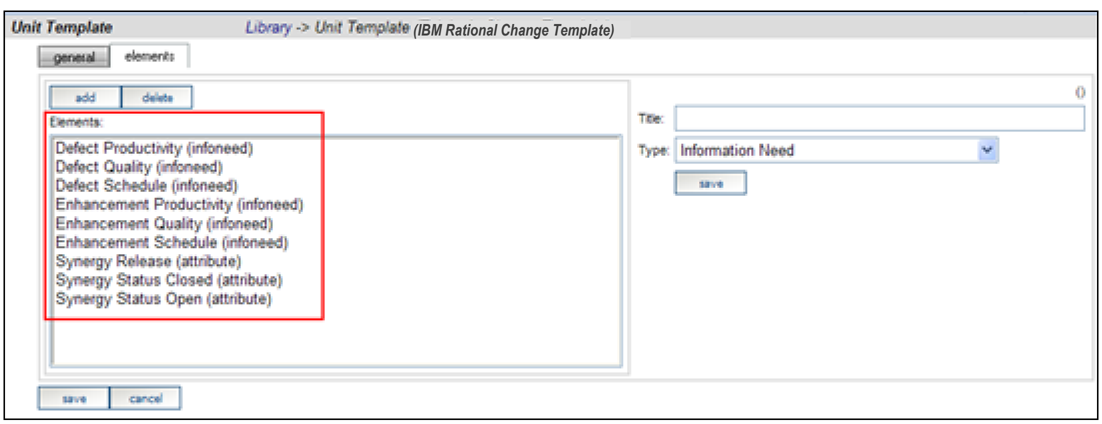
Assign a Schedule to a Change Template

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.

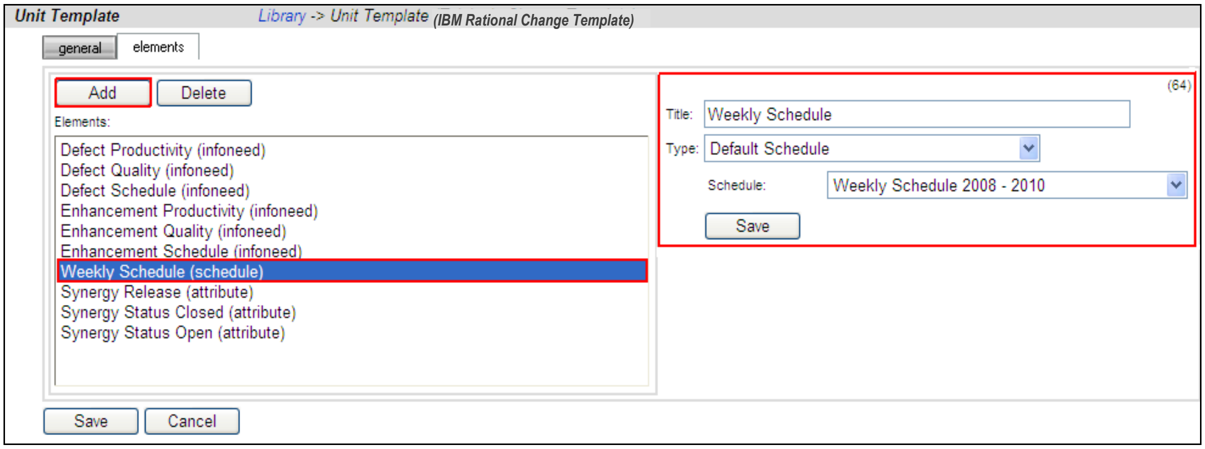
To include a schedule in a template, go to the **Library** tab. Select the **Unit Template List** from the Library section on the left hand side of the page. This will open a list of templates currently available for use.



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



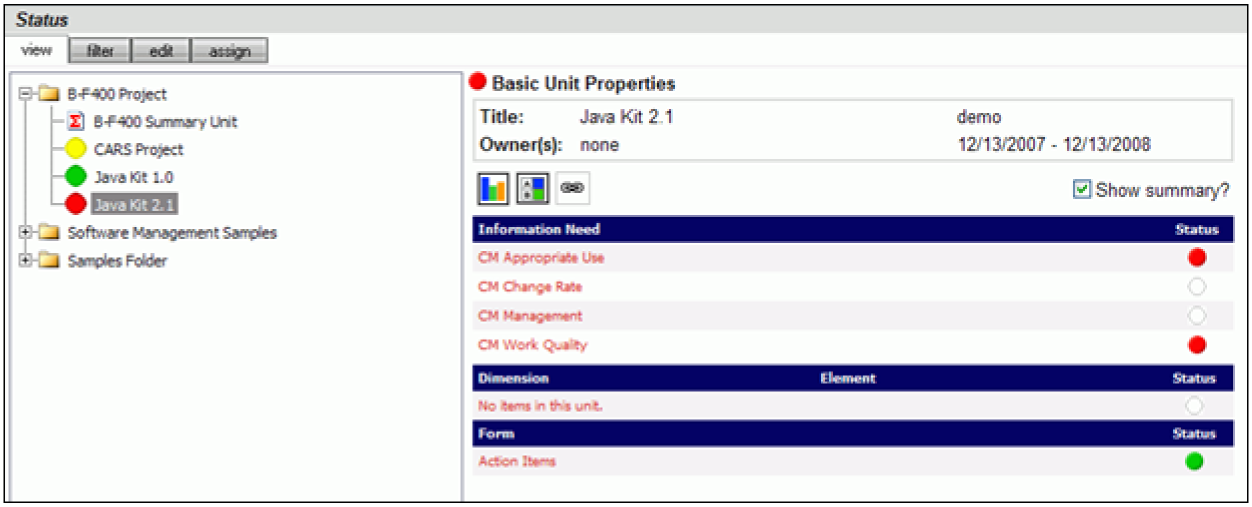
Select the **add** button and enter the **Title**. Select **Default Schedule** from the drop down list for the **Type** field and select the desired schedule from the **Schedule** drop down list.



Make sure to **save** your changes.

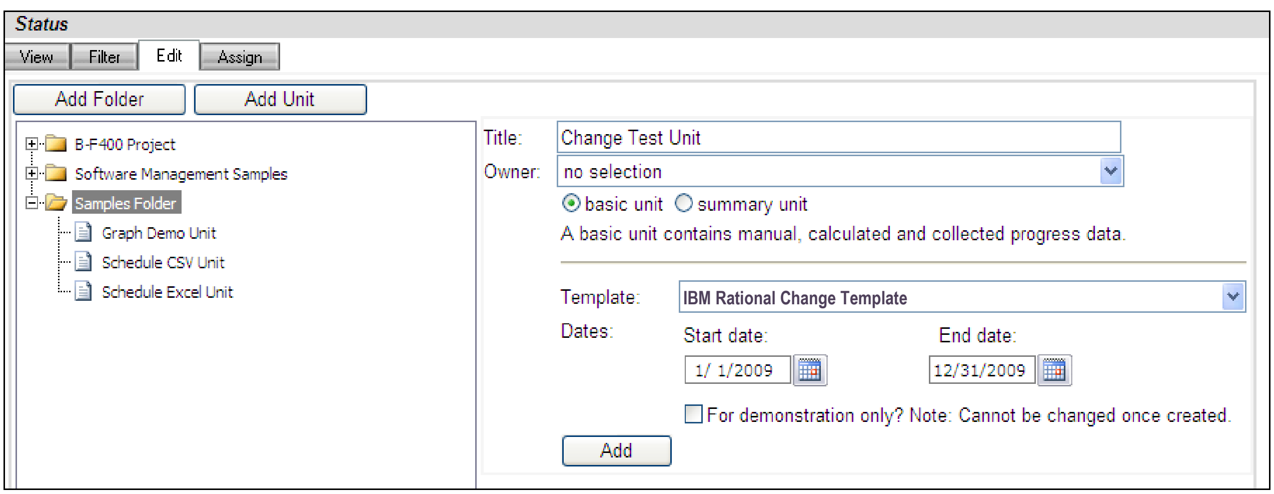
Setup a unit with the IBM Rational Change Template

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**.**

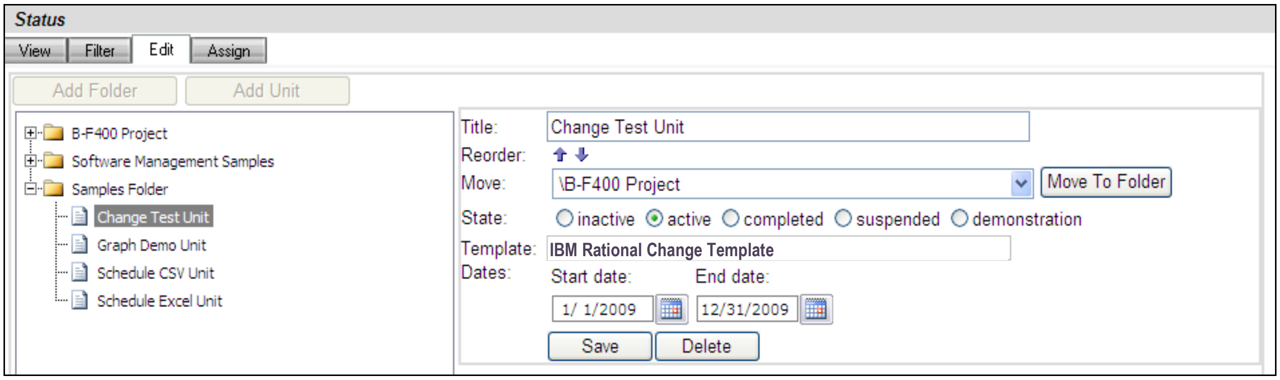


To start, click on the **Status** tab. To add a unit, click on the **edit** subtab to organize the data tree to include information on a project or projects. Create a folder, or use an existing one, and then add a unit.

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 Change Template** from the drop down list. In the sample below, we added a new Unit to the Samples Folder and assigned the IBM Rational Change Template.



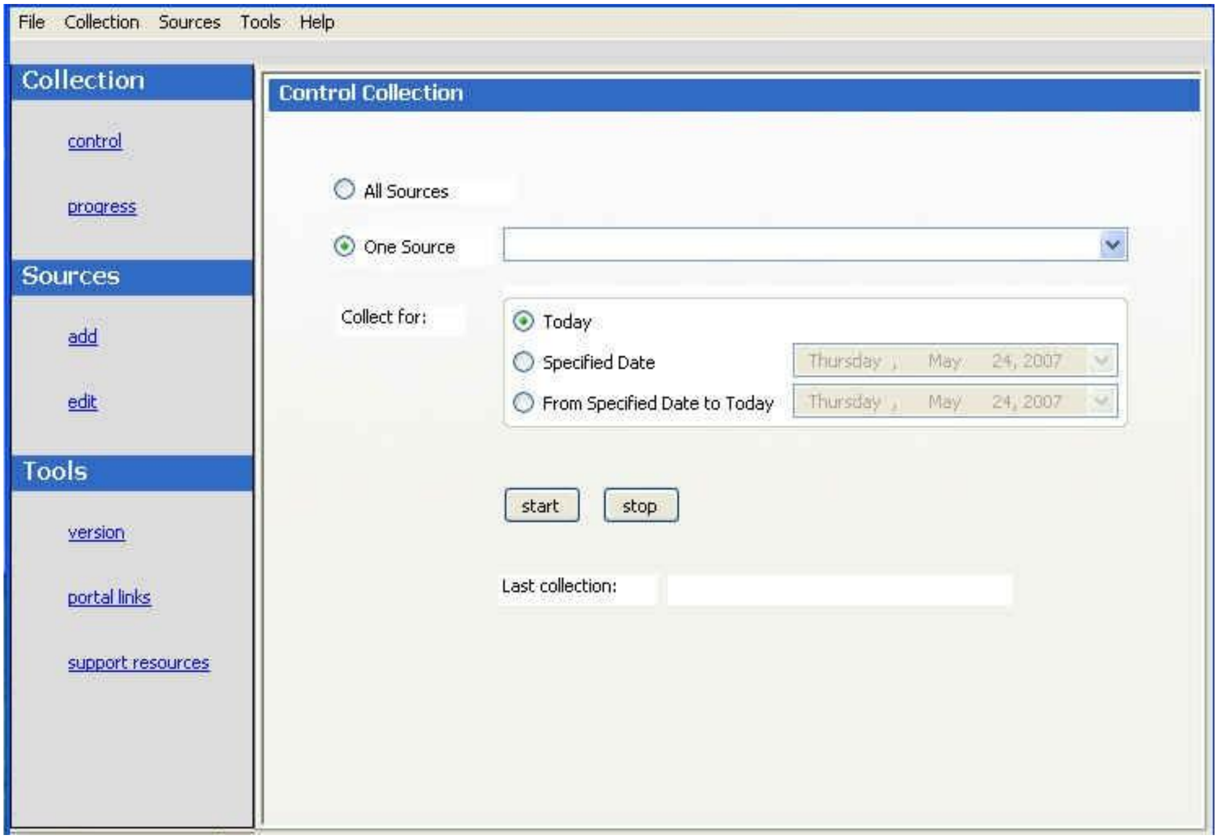
After you click the **add** button, the new unit will appear in the Status tree.



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

Configuring the Collector

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

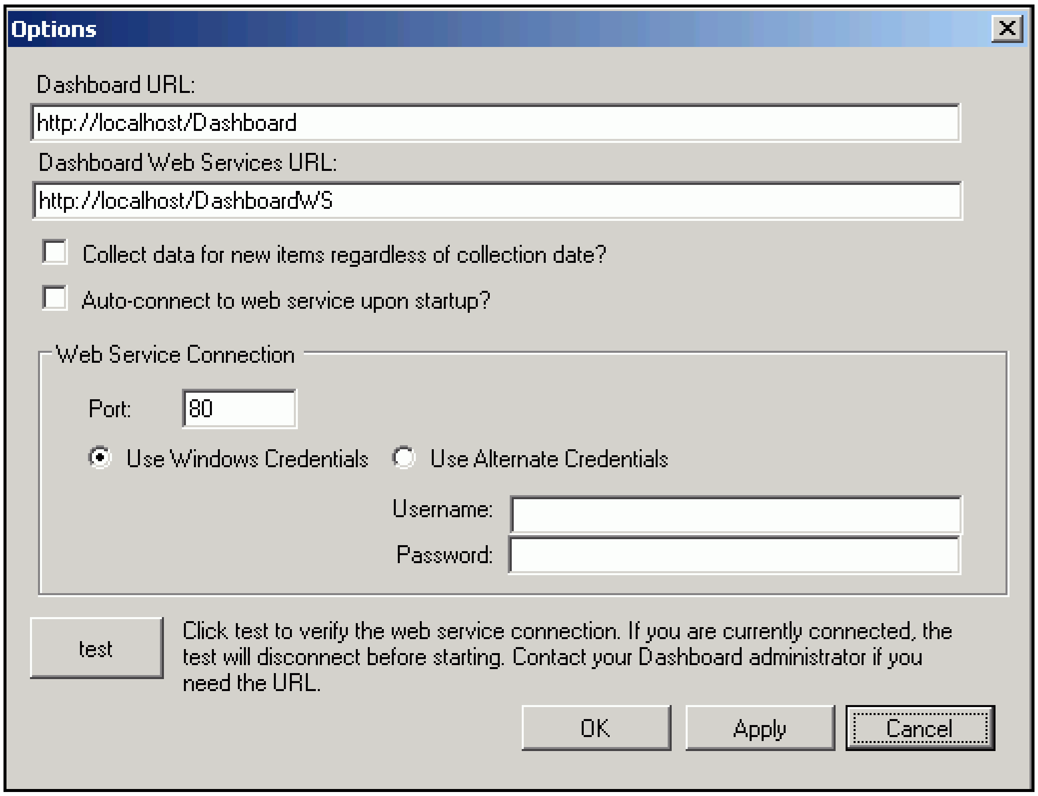


Verify Connection to Web Services

The Collector uses the 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

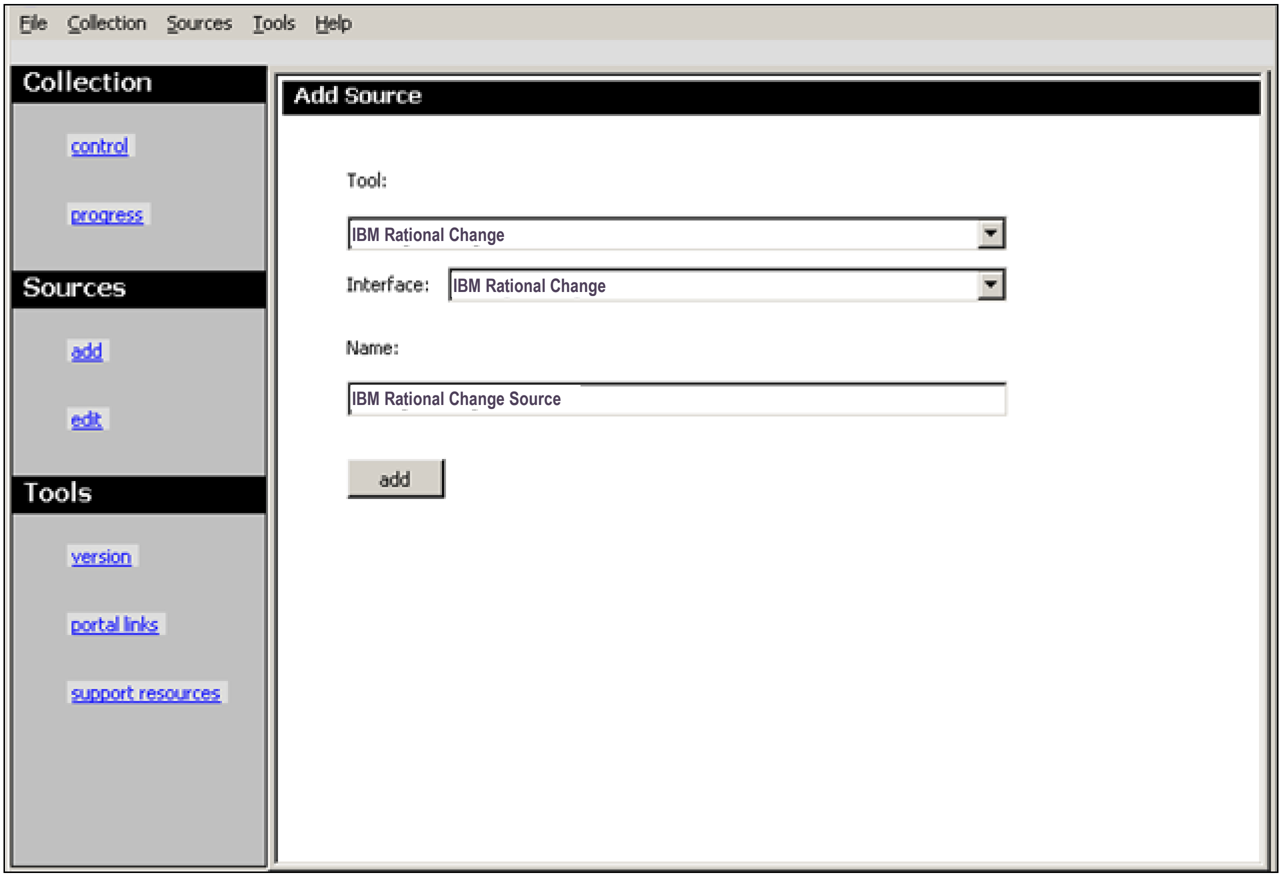
If you are running the collection from the server that is running the Portal then “localhost” will work fine. If you are running the collection from a machine other than the Portal server you will need to change the “localhost” part of the URL to the name of the server running the Portal. Be sure to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



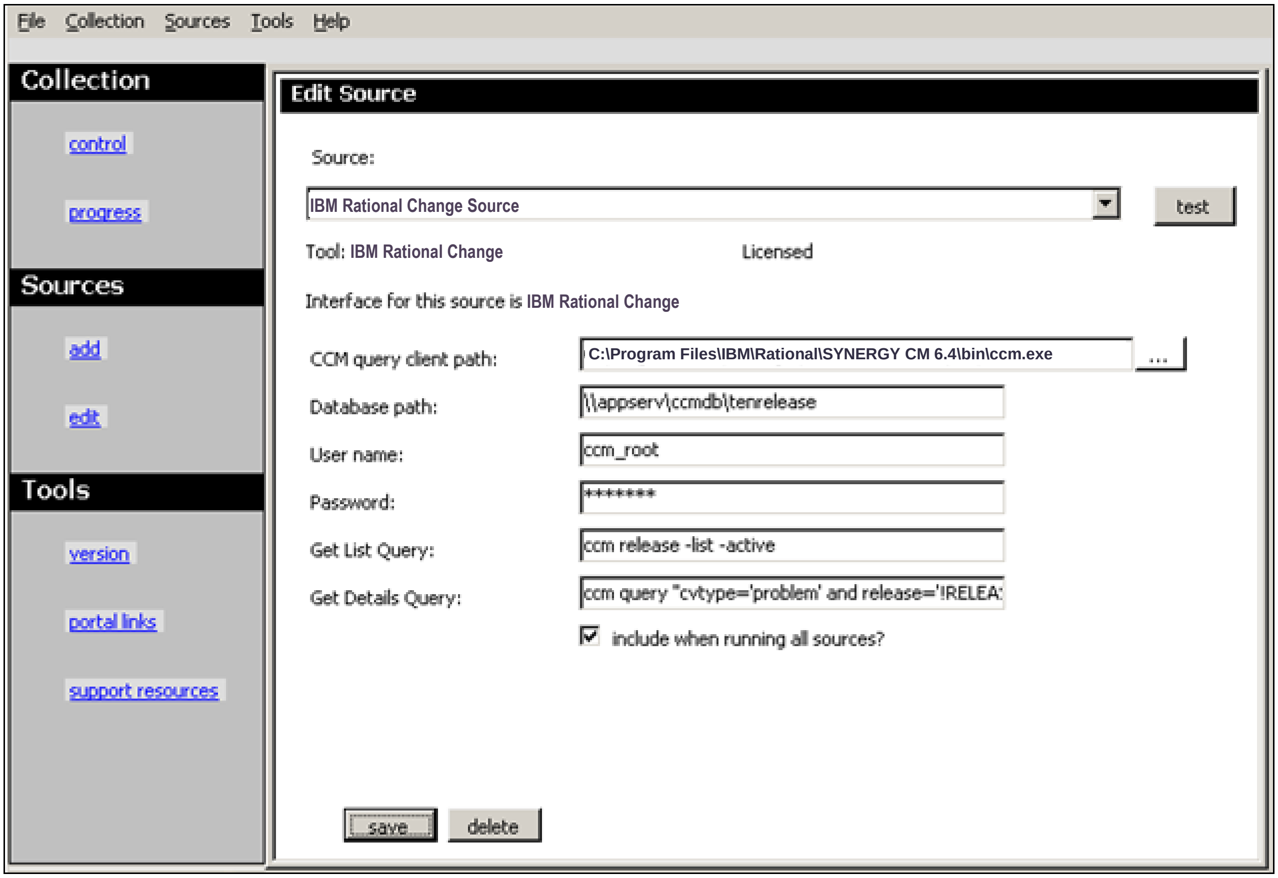
Click the test button to test the connection. If, after pressing the "test" button, you receive an error or warning message, review the message and your web services configuration to correct the problem. The web services configuration information is contained in the web.config in the Web Services folder.

Add a Source

Choose **sources**/**add** from the left menu. Select IBM Rational Change as the Tool, select the IBM Rational Change interface from the drop down 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 Change requires some basic log in information as well as some Portal specific information.



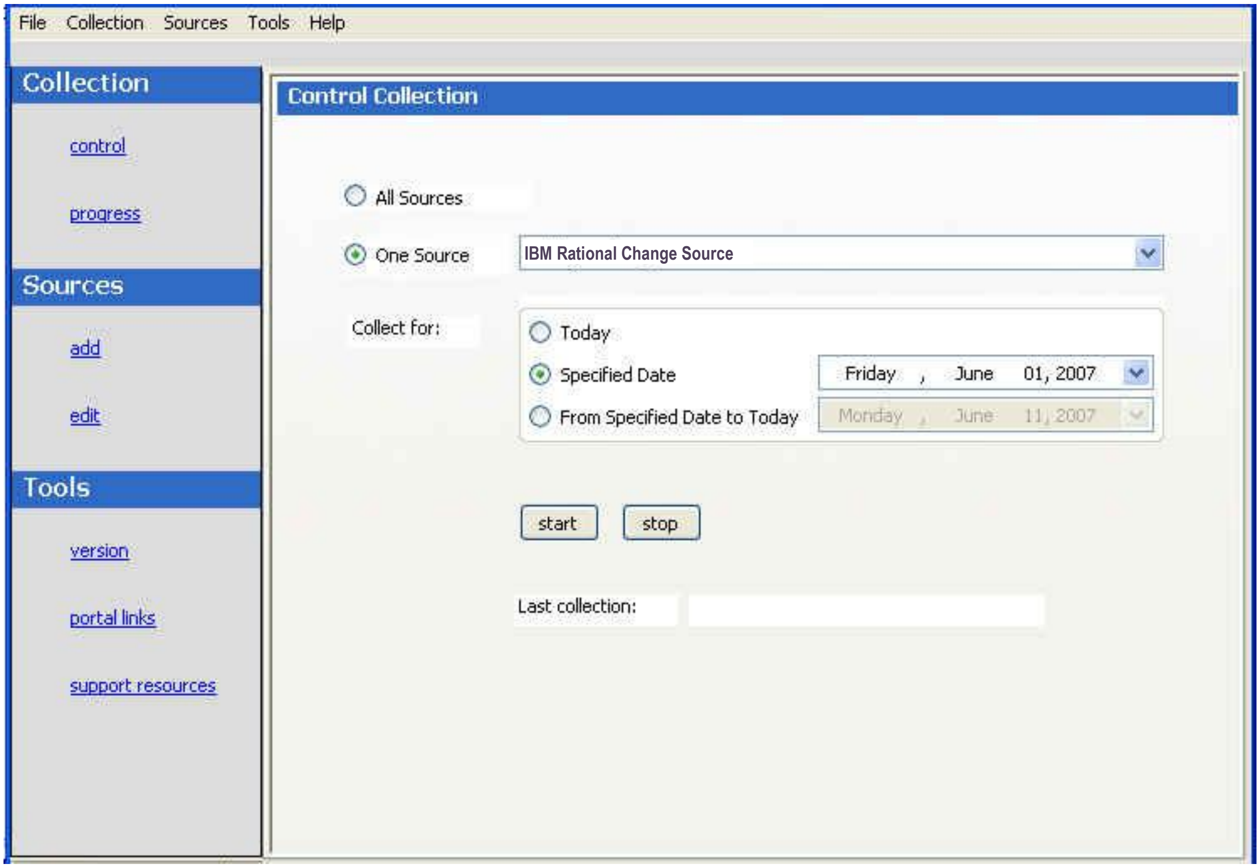
The "**Path to client**" is the location where IBM Rational Change is installed on the local machine. The "**Database path**" is the location of the IBM Rational Change Database. The Username and Password allows access to IBM Rational Change database.

The **Get List Query** will default to: ccm release -list -active. This query will return a list of releases. This list is then used in the Get Details Query. The **Get Details Query** will default to: ccm query "cvtype='problem' and release='!RELEASE!' and (request_type='Defect' or request_type='Enhancement')" -f "!THEFIELDS!" -nf -u -ns. The Get Details query will run the default query for each item reported from the Get List Query. It will return defect and enhancement information for each release that is returned in the initial query.

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

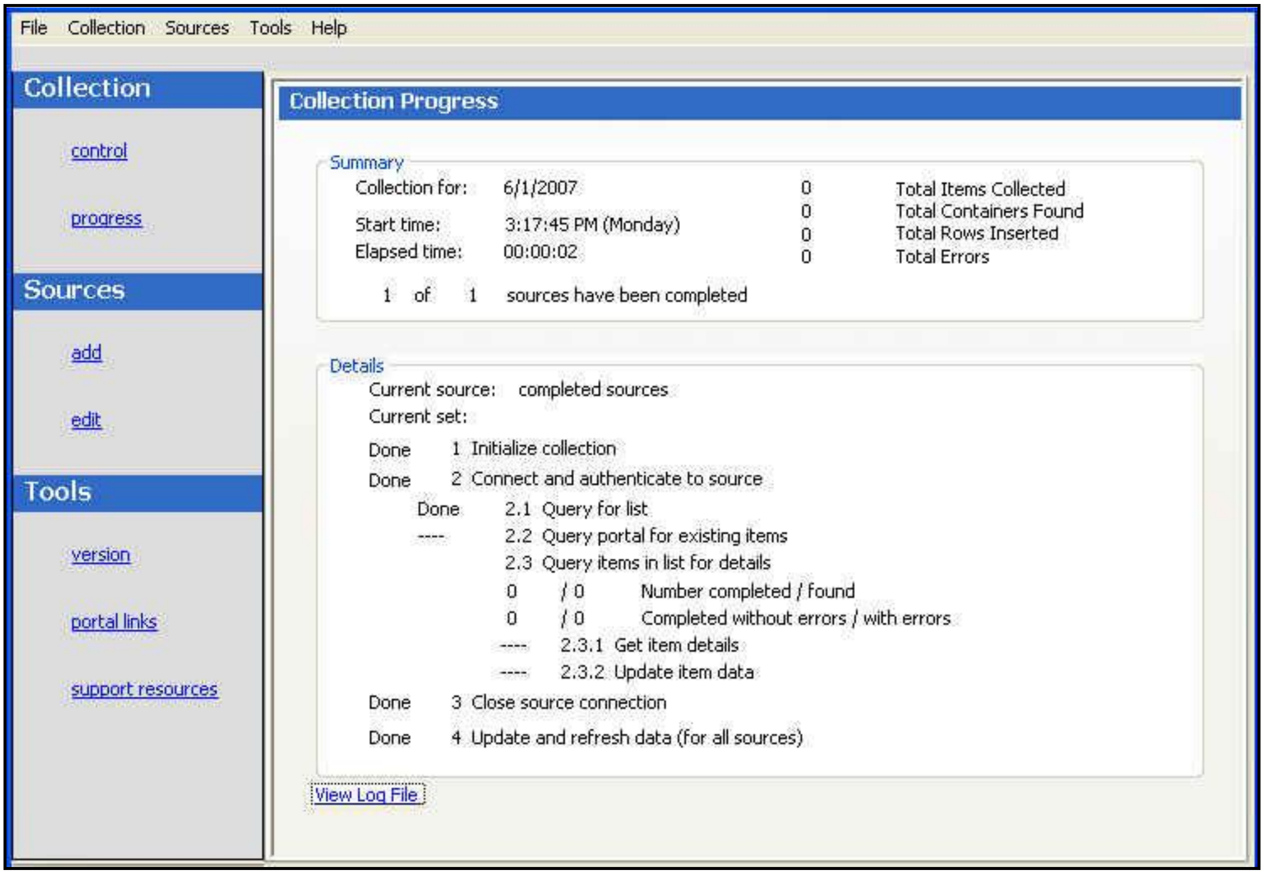
Running a Collection

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.



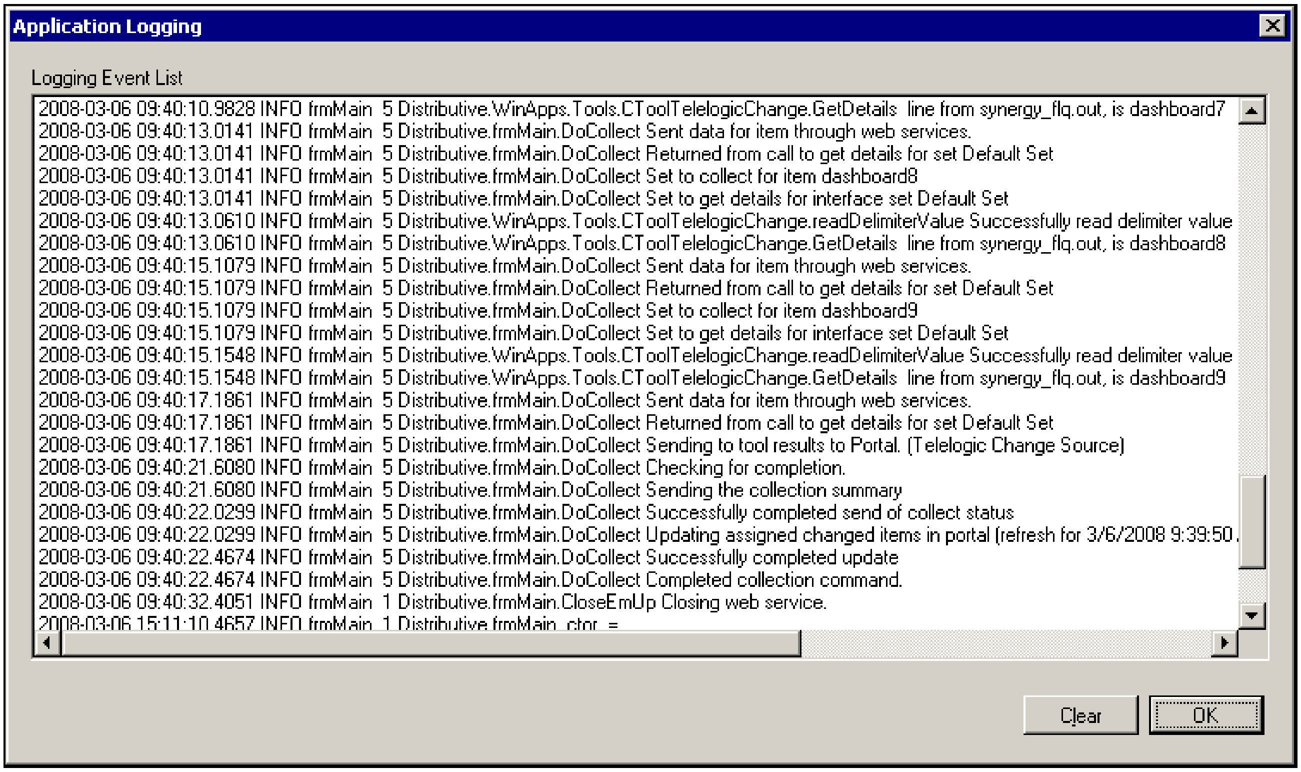
Once you've picked your source and your date, click on the **start** button.

The **Collection Progress** page will appear and you will be able to track your collection as it runs. You will 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. You also might notice that the number of found items is greater than the number of items completed. This is most likely caused by finding containers (which are folders for IBM Rational Change), and unless there is a report of errors, everything collected correctly.

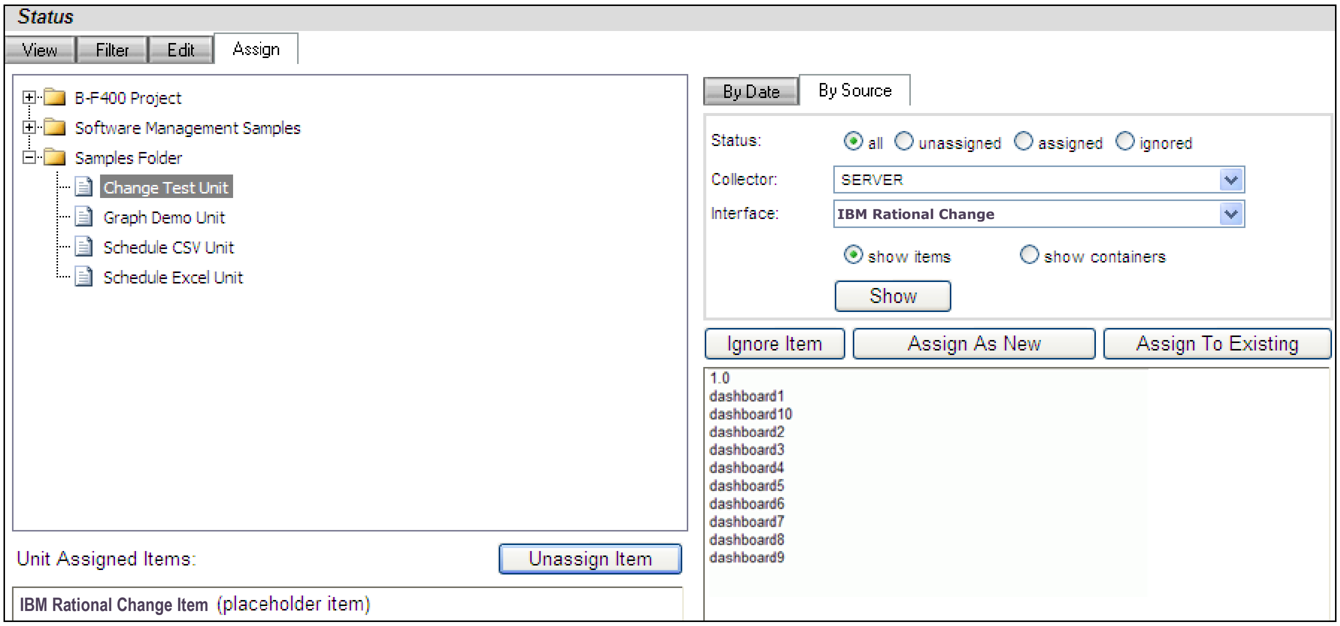


The next step is configuring the Unit.

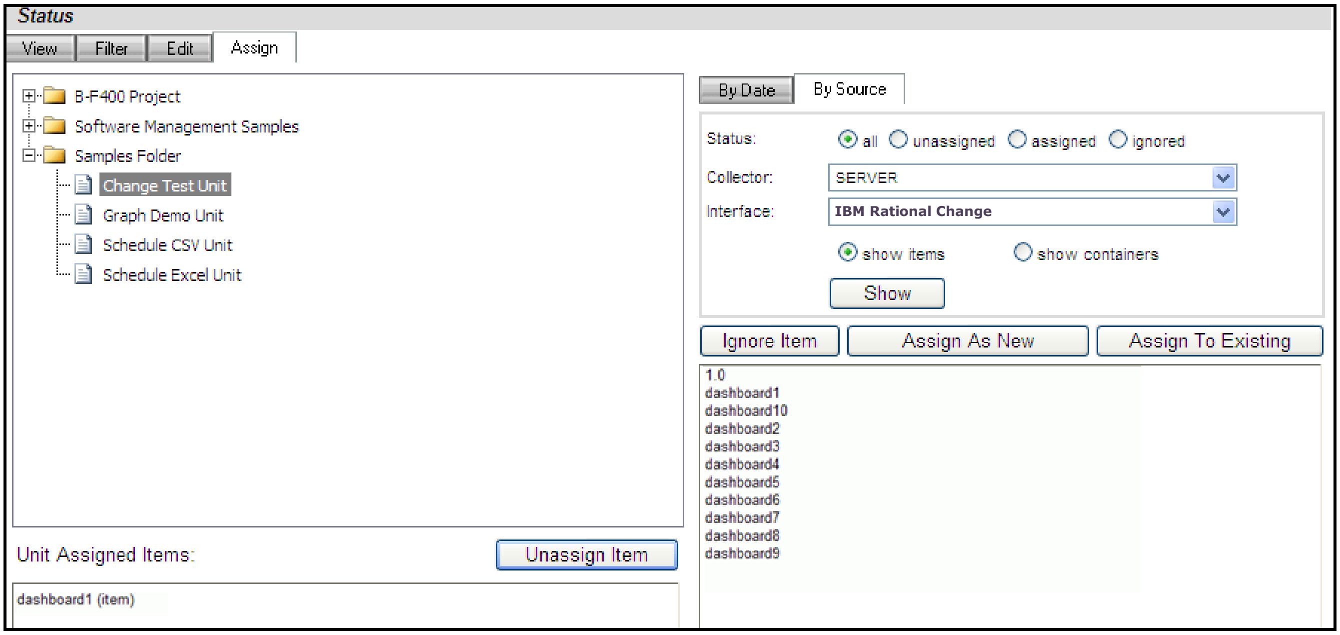
Configuring the Unit

Assigning Collected Items

Once you have run your collection without errors, you are ready to add your **Items** to your **Unit**. Go back to the **Status** page and click on the **edit** subtab. Click on 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.



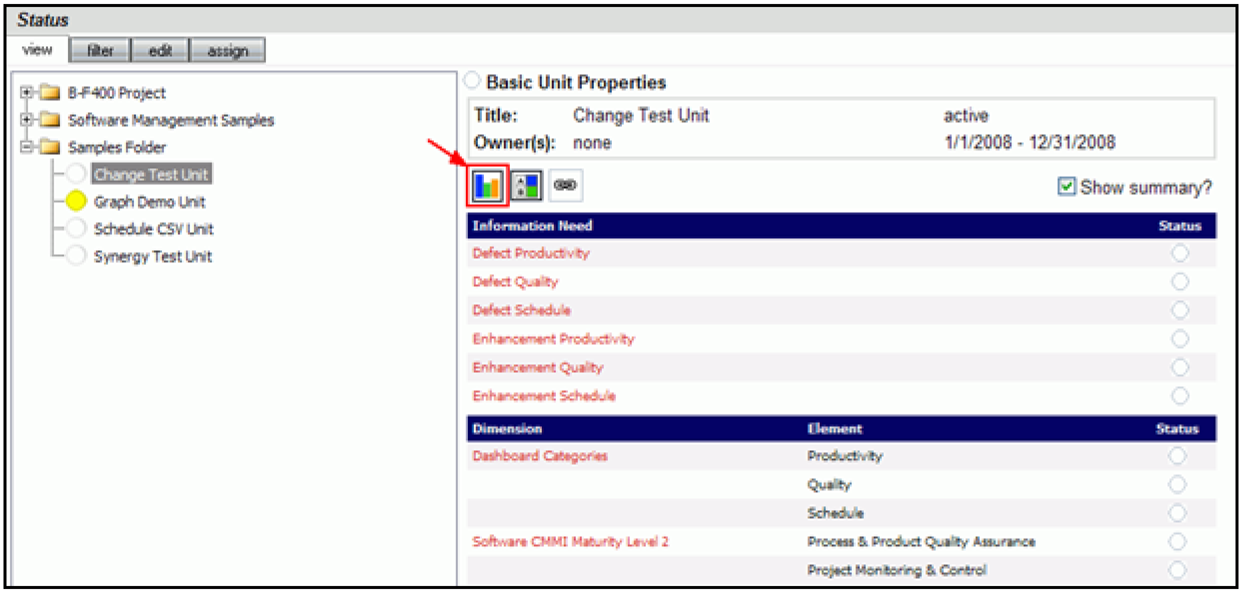
Click on the items that you want to add to this unit and then click on the **assign** button on the right hand side.



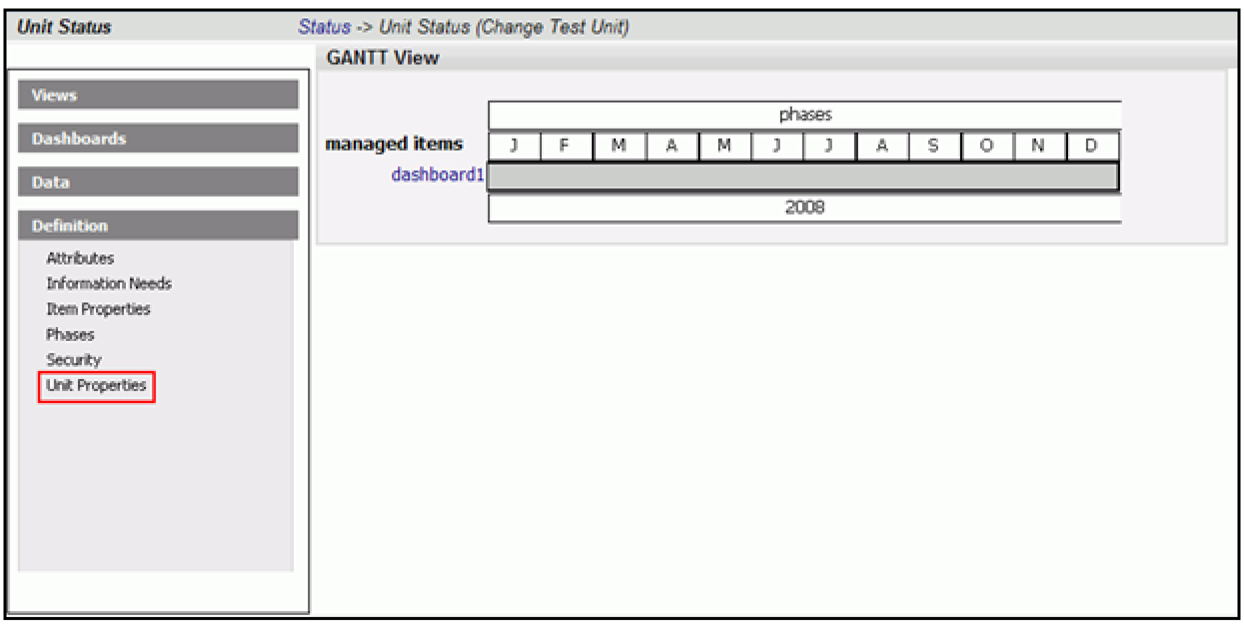
On the left hand side of the page, you will see a list of items set as **Assigned Items**. Now all you have to do is refresh the unit and you will see data in the graphs.

Refreshing the Unit

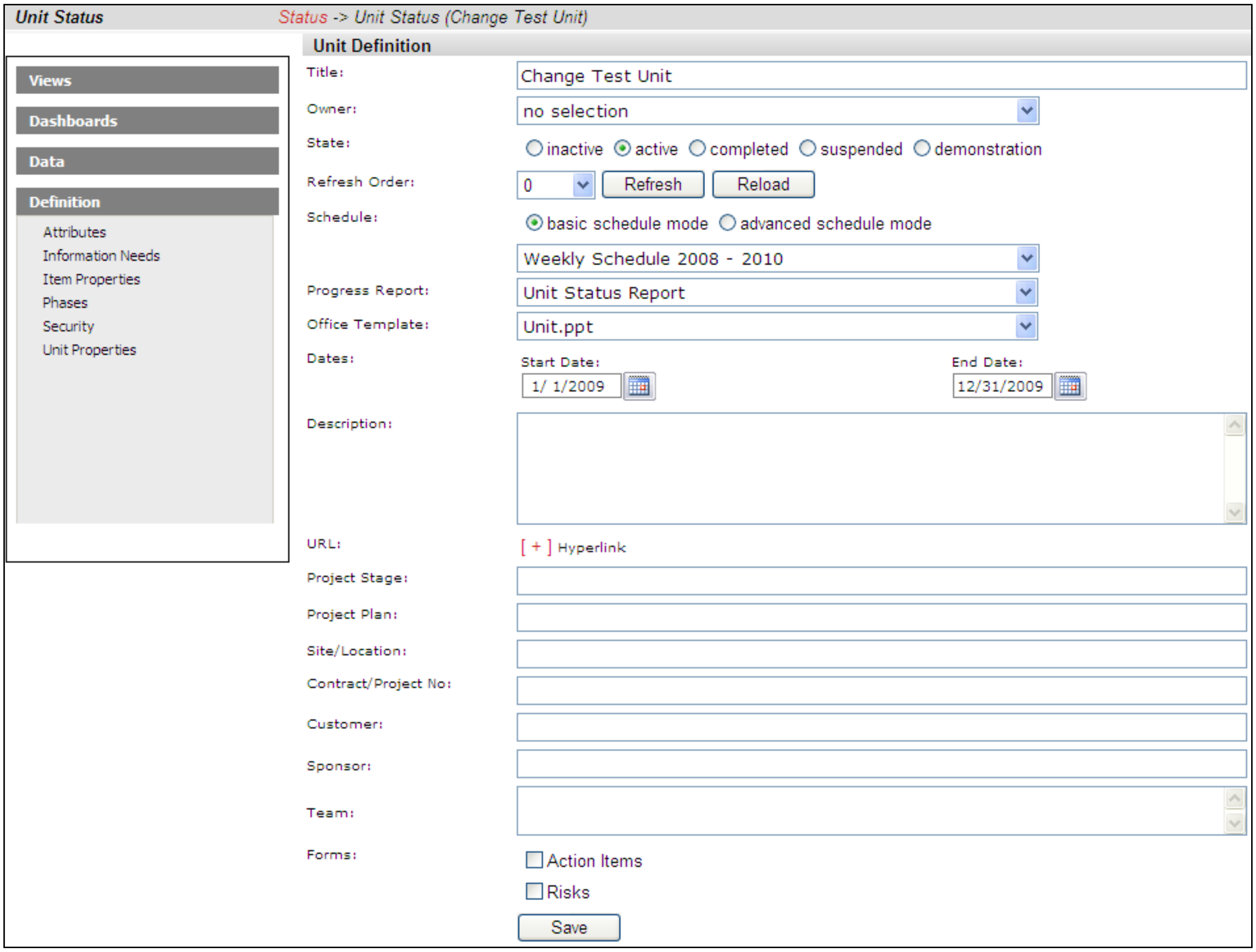
While on the Status tab, click on the view subtab and select your unit from the tree on the left hand side. On the right hand side of the page, click on the **Details** button.



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.

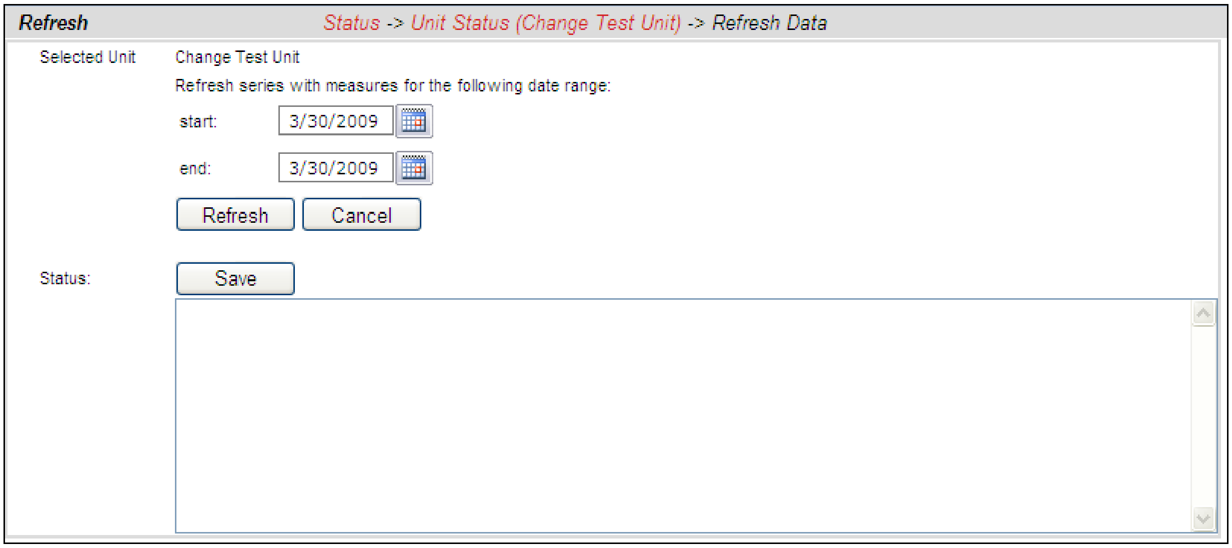


Next, click on the **refresh** button in the center of the page. This will let you refresh the data for all of the Items and their graphs over a period of time.



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 February 28th, you would want to refresh over that date.

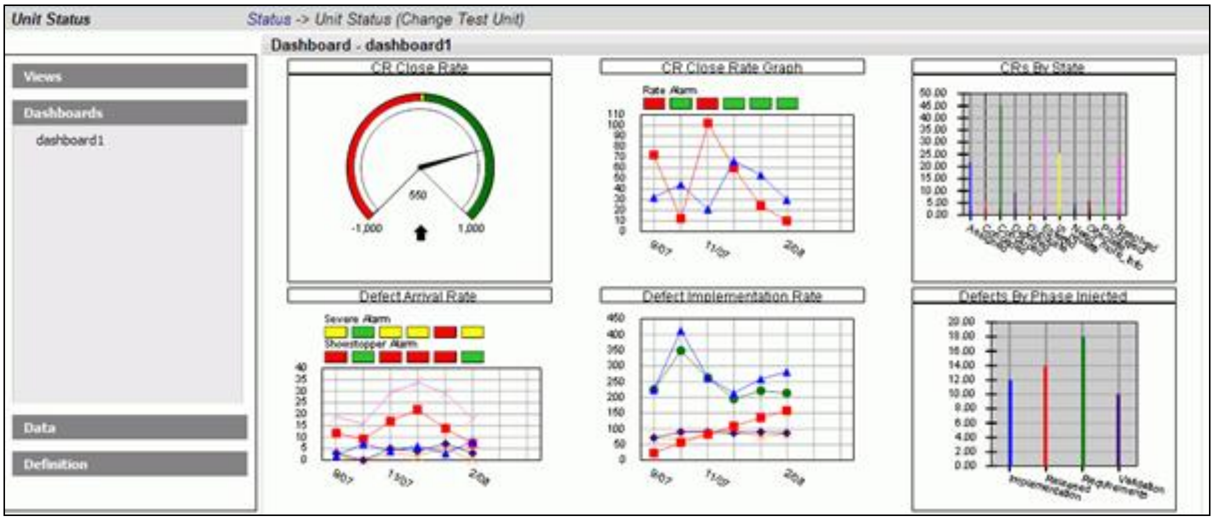
In this example, the refresh runs from January 1st to March 6th, but it could be any span of dates that include February 28th.



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 **managed item** 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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