Telelogic Change Report Builder Help

Release 5.1

Before using this information, be sure to read the general information under Notices (page 6).

This edition applies to **VERSION 5.1, Telelogic Change (product number 5724*V87*)** and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Introduction

Telelogic® Change™ is a generic change request management system that is web-based and integrated with Telelogic® Synergy™.

The following pages give you the basic information needed to use Telelogic Change in the Report Builder (*ReportBuilder*) role:

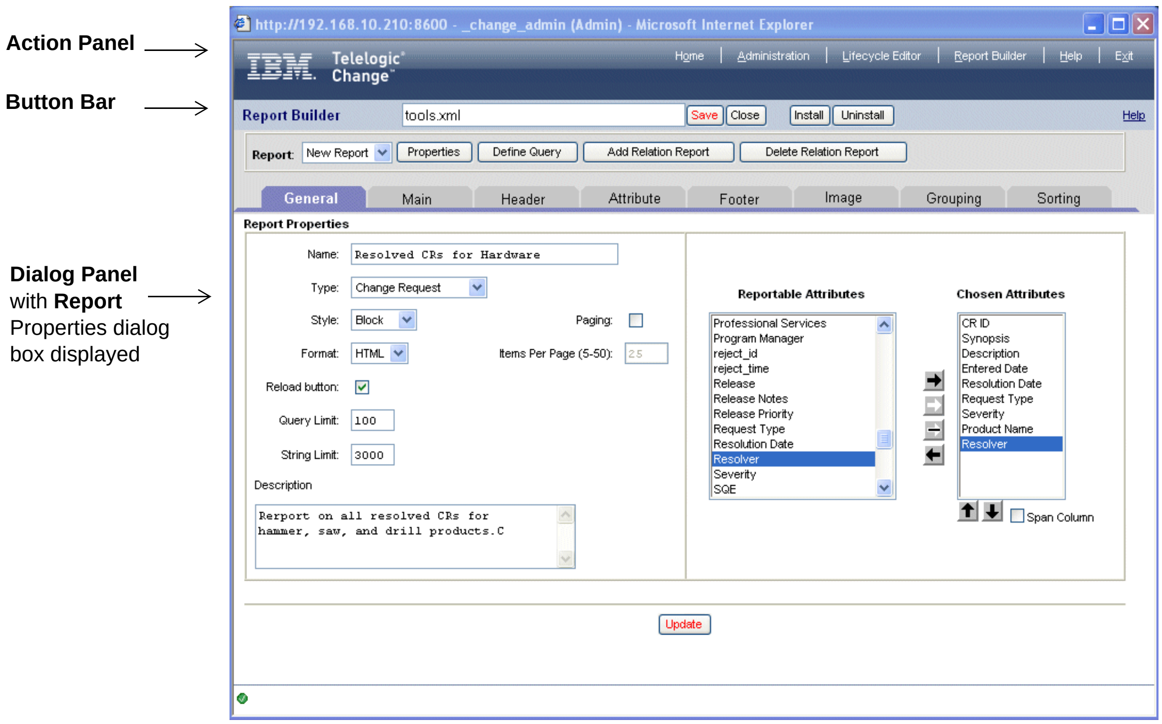
- Take the Telelogic Change Report Builder Interface Tour (page 2)
- Start a Telelogic Change Session (page 4)
- Using Help (page 5)

For access to documentation and technical support, go to http://support.telelogic.com/change.

Take the Telelogic Change Report Builder Interface Tour

The Telelogic Change interface consists of an [Action Panel (page 2)](#), a [Button Bar (page 3)](#), and a [Dialog Panel (page 3)](#) that changes when you click an Action Panel button.

The following figure shows the Telelogic Change window after you have clicked the **Report Builder** button and selected a report.



Action Panel

The Action Panel is the top row in the Telelogic Change window and is where you start any operation (for example, **Report Builder**). Clicking a button displays the action's corresponding dialog box in the Dialog Panel.

The following actions are available in the Action Panel for users in the *ReportBuilder* role:

Home button

Click to display the first Telelogic Change Welcome page.

Report Builder button

Click to build a Telelogic Change report using customizable components.

Help button

Click to display help for your role.

Exit button

Click to log out of Telelogic Change. This operation quits the Telelogic Change session and frees the session's resources.

Button Bar

Help link

Click the Help link on each dialog box's button bar to display context-sensitive help.

Other buttons may be visible, depending on the dialog that is displayed.

Dialog Panel

The Dialog Panel is the remaining portion of the Telelogic Change window and is where dialog boxes and the results of most operations are displayed.

The following graphics indicate the operation's status:

 A green check mark indicates success.

 A red "X" indicates failure.

 An "i" ("information") indicates that you should read the results dialog box to determine what happened.

If the graphic indicates failure, the accompanying text gives the reason for the failure. If you do not know how to correct the failure, contact your Telelogic Change administrator.

Start a Telelogic Change Session

Starting a session requires the following:

- You are running a supported browser
- You have the URL for your Telelogic Change installation
- Your User ID has at least one of the Telelogic Synergy roles associated with the Telelogic Change login role you are using.

To start a session:

1. Display a browser.
2. Surf to the URL for your Telelogic Change server.

   The URL will be something like `http://`*`hostname`*`:`*`port_number`*.

   Note To specify the URL using an IP address, you must edit the `synergy.xml` file manually in the *`CS_INSTALL`*`\cs_app\etc` directory.

3. In the **Telelogic Change Login** window, type your **User ID** and **Password**.
4. Press **Login**.
5. In the **Database** list, click the database you want to use.

   Note You may see slightly different log on options, depending on whether you have previously logged on to Change.

6. In the **Role** list, click *ReportBuilder.*
7. Press **Connect**.

   The Telelogic Change window appears. The Action Panel (page 2) is the small frame at the top of the window and contains buttons for the actions you can perform in your role. The Dialog Panel (page 3) is the large frame occupying the remainder of the window.

In the Dialog Panel you will see the Welcome pages. The Welcome pages give you a brief tour of Telelogic Change.

Using Help

Report Builder help contains information about setting up and using Telelogic Change when you log in using the *ReportBuilder* role. Help is in HTML format and is designed to run on any platform using the supported browsers. Help uses frames to give you a fast and persistent way of finding information in the help system.

Your browser must be enabled to use cookies for Help to store and retrieve certain settings. If cookies are disabled, the Help system will not open with the last tab page you selected nor link to the Telelogic Synergy Web site.

Display context-sensitive help by clicking the **Help** link on the dialog box's button bar. View a different topic in this help by clicking its link in the text, in the Contents page, or in the Index.

You can also display help by clicking the **Help** button in the Action Panel.

Notices

This information was developed for products and services offered in the U.S.A. IBM® may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send written license inquiries to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send written inquiries to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106-0032, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions. Therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

Intellectual Property Dept. for Rational® Software
IBM Corporation
1 Rogers Street
Cambridge, Massachusetts 02142
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Copyright license

Trademarks

Building Reports

Use the Report Builder to design a report that will contain all the information needed to track CRs, tasks, and objects.

Reports contain information about items in a selection set. When you define a report, you must define the query used to generate the selection set, choose the attributes to show for each selection set item, and define the report layout. You can also define relation reports, which show information about associated CRs, tasks, or objects.

After you have defined a report while in the *ReportBuilder* role, the report is displayed in the **System** folder in the **Reports** dialog box for users who logged in using the *User* role. The format is also added to the System folder under the report name.

The main report definition operations are as follows:

- Build a Report (page 10)
- Build a Relation Report (page 23)
- Install a Report (page 26)

For a detailed example, see Report Builder Example (page 27).

Build a Report

The following steps summarize how to build reports using the Report Builder. You must perform the steps in the order shown to avoid errors.

1. Plan the report.

   For example, based on the CR Process you are using, determine whether you are reporting on CRs, tasks, or objects, decide which attributes to choose for the report, and decide which, if any, values you want calculated for you. You will need to define the specific information you want in the report in order to define the components of the report.

   For example, you must determine if you need a subreport or a relation report. Subreports and relation reports are similar, in that both allow you to look up an item related to the context item. For instance, if the context item is a CR, you may want to look up its associated tasks. Subreports and relation reports differ in several ways:

   - Defining a relation report is very similar to defining a top-level report, except that it doesn't have a separate query or a main template. A subreport, on the other hand, has its own query that references the context item. It is actually a separate report that was previously defined. It is merely included inside another report.
   - Relation reports can be chained together in a linear fashion. That is, each item can show a single related item. Subreports enable reporting on multiple related items. This is done by including multiple subreports for the context item.

   So, if you wanted to show a CR and its tasks, both relation reports and subreports can do the job. However, to show a CR with its tasks and attachments, you would need to use a subreport, because the relation report can only show one or the other (the tasks or the attachments, but not both at the same time).

2. Start a Telelogic Change Session (page 4).

3. Install a process package, if you have not done so already.

   A process package contains the list of reportable attributes for a CR Process. Unless you install one of these packages, your attribute list will be empty. *Admin* Help.

4. On the Action Panel, click **Report Builder**.

   The **Report Builder** dialog box appears, with the **Select Report File** subdialog box displayed.

5. Select a report name, or create a new report by typing a new report name.

   To change an existing report, click a report name in the **Available Report Files** list, and then click **Edit**.

   To define a new report, type a new report name in the **New Report File** box (including the `xml` file name extension), and then click **Create**.

If you do not type a file name, Telelogic Change creates a report named `csReportX.xml`, where *XX* is a number incremented whenever Telelogic Change creates a report using an existing report name.

6. Define the query that will generate the selection set of CRs, tasks, or objects on which you are reporting.

   For steps, see Define a Query (page 12).

7. Define General Report Properties (page 13). The report name you type will appear in users' **System** report and format lists.
8. Select Templates to Include (page 14) on the report.
9. Define the Header (page 15), which is the information that will appear at the top of the report page.
10. Define the Report Body (page 16), which is the information that will appear in the body of the report.
11. Define the Footer (page 18), which is the information that will appear at the bottom of the report page.
12. Add a Chart to the Report (page 19) that will appear at the bottom of the report.
13. Define Grouping (page 20). Groupings create sections on the report based on an attribute value. You can also define a graphic for each grouping.
14. Define Sorting (page 22). Sorting determines the order that the items appear in the report.

    Note Sorting is always applied *after* grouping; therefore, the attribute selected for grouping never appears in the sorting lists.

15. Build a Relation Report (page 23) (optional).

    If your selection set contains items that have associated items (such as CRs with associated tasks), you can define a relation report that will show the associated items.

16. Install a Report (page 26).

For a detailed example, see Report Builder Example (page 27).

Define a Query

You must define a query for the content of the report.

1. In the **Report Builder** dialog box, click **Define Query**.

   The **Define Query** dialog box appears.

2. Choose query criteria.

   Select an operand, operator, and value, and the appropriate buttons. Repeat these steps until your query is completed. You can also type the entire query, or parts of the query, into the **Query String** box.

3. Click **Update**.

Related Topics

- Define the Query (Example) (page 29)

Define General Report Properties

You must define the general report properties, including the report name and what type of objects will be shown in the report.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **General** tab.
3. Define the general report properties.
   a. In the **Name** box, type a report name.

      Make the name meaningful because the name will be listed in **System** reports and formats.
   b. In the **Type** list, click **Change Request**, **Task**, or **Object**. This selection determines the content of the **Reportable Attributes** list.
   c. In the **Style** list, click **Block** or **Column**.
   d. In the **Format** list, click the format for the generated report.
   e. In the **Description** box, type a description of the report.
4. Set up paging (optional).
   a. Select the **Paging** check box.

      Clear the **Paging** check box if you intend to print the report or use it for bulk transitioning; otherwise, you will have to print the report or transition the CRs one page at a time.
   b. In the **Items Per Page**, type the number of items.
5. If you want to include a reload button on HTML reports, click **Reload button**.
6. In the **Query Limit** box, type the maximum number of items to find. If the query result exceeds this limit, the report is stopped.
7. In the **String Limit**, type the maximum string length of a reported attribute value. Attribute values that exceed this limit are truncated.
8. In the **Reportable Attributes** list, select the attributes to display on the report.

   The **problem_number**, **problem_synopsis**, and **problem_description** attributes are included automatically in the **Attributes in Report** list when you create a new report.

   For information about arranging and setting the attributes, see *Admin* Help.
9. Click **Update**.

Related Topics

- Define General Properties (Example) (page 31)

Select Templates to Include

You must choose the templates you will use to construct the report. The templates represent different report elements, such as the header, body, and footer.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Main** tab.
3. Select templates to include on the report.
    a. Select the **Include Header Template** check box to display a header at the top of the report.
    b. Select the **Include Attribute Template** check box to define the body of the report.
    c. Select the **Include Footer Template** check box to display a footer at the bottom of the report.
    d. Select the **Include Image Template** check box to display a charting graphic at the bottom of the report.
4. Click **Update**.

Related Topics

- Select Templates to Include (Example) (page 33)

Define the Header

Define the header if you want to include a header in the report.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Header** tab.
3. Define the header layout.
   a. Select the **Title** check box if you want to show the report title.

      The **Title** is the name the user gives the report before running it.
   b. Select the **Date** check box if you want to show the date.
   c. Select the **Object Count** check box if you want to show the number of reported items.
   d. Select the **Report Name** check box if you want to show the name of the report.
   e. Select the **Query Name** check box if you want to show the name of the query.
   f. Select the **Query String** check box if you want to show the query string.
4. Define header metric operations (optional).
   a. In the **Metric Operations** area, click **Add**.

      The **Available Metric Operations Definition** subdialog box appears.
   b. In the **Select a Metric Type** list, click **Column** or **Row & Column**.
   c. In the **Select a Metric Operation** list, click a metric operation.

      The ***XXX*** **Metric** area appears under **Available Metric Operations**.

      Define the metric. For more information, see Metric Operations Explained (page 50).
   d. In the metrics definition area, click **Create**.
5. Under the **Layout** area, click **Update**.

Related Topics

- Define the Header (Example) (page 34)

Define the Report Body

Define the report body, unless you want to show only a graphic.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Attribute** tab.
3. Define the body layout.
   a. In the **Number of Columns** box, type the number of columns to use on the report.
   b. Select the **Include Border** check box to include borders around attribute/value pairs on the report.
   c. Select the **Include Bulk Operations** check box to allow users to transition multiple items on the report.
4. Define subreports (optional).

   A subreport shows a selection of set of objects obtained from a previously defined report. Typically, the objects are attachments (unlike relation report objects, for which the objects are CRs, tasks, or objects). For more information about when to use subreports, see Build a Report (page 10).

   a. Under the **Subreports Included on Attribute Template** list, click **Add**.

      The **Add Subreport** subdialog box appears.

   b. Click **Change Request**, **Task**, or **Object**, depending on what type of subreport you want to run.

      This action sets the **Select Report** list to the correct choices.

   c. In the **Select Report** list, click the report to run.

      The **Define Query** dialog box appears.

   d. In the **Define Query** subdialog box, create the query for the subreport.

      Be sure to include a keyword for the type of object for which the report is run. For example, include `%problem_number`, `%task_number`, or `%cvid` in the query string to run reports for each CR, task, or object, respectively.

5. Define body metric operations (optional).
   a. In the **Metric Operations** area, click **Add**.

      The **Available Metric Operations Definition** subdialog box appears.

   b. In the **Select a Metric Type** list, click **Row**.
   c. In the **Select a Metric Operation** list, click a metric operation.

      The ***XXX* Metric** area appears under **Available Metric Operations**.

      Define the metric. For more information, see Metric Operations Explained (page 50).

  d. In the metrics definition area, click **Create**.

6. Under the **Layout** area, click **Update**.

Related Topics

- Define the Body (Example) (page 36)

Define the Footer

Define the footer if you want to include a footer in the report.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Footer** tab.
3. Define the footer layout.
   a. Select the **Title** check box if you want to show the report title.
      The **Title** is the name the user gives the report before running it.
   b. Select the **Date** check box if you want to show the date.
   c. Select the **Object Count** check box if you want to show the number of reported items.
   d. Select the **Report Name** check box if you want to show the name of the report.
   e. Select the **Query Name** check box if you want to show the name of the query.
   f. Select the **Query String** check box if you want to show the query string.
4. Define footer metric operations (optional).
   a. In the **Metric Operations** area, click **Add**.
      The **Available Metric Operations Definition** subdialog box appears.
   b. In the **Select a Metric Type** list, click **Column** or **Row & Column**.
   c. In the **Select a Metric Operation** list, click a metric operation.
      The ***XXX* Metric** area appears under **Available Metric Operations**.
      Define the metric. For more information, see Metric Operations Explained (page 50).
   d. In the metrics definition area, click **Create**.
5. Under the **Layout** area, click **Update**.

Related Topics

- Define the Footer (Example) (page 38)

Add a Chart to the Report

Define the image template if you want to include a chart in the report.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Image** tab.
3. Under **Layout**, click **Add**.

   The temporary chart name, `_New_Chart,` appears in the subdialog **Charts Included in Report** box.
4. Define the chart.
   a. In the **Title** box, select the `_New_Chart` string, and then type the chart name.

      The title appears in the **Charts Included in Report** list.
   b. In the **Type** list, click a chart type.
   c. In the **Tool** list, click a tool.
   d. In the **Attribute** list, click the attribute to chart.
   e. In the **2ND Attribute** list, click the attribute to chart, if required.
   f. In the **Width in Pixels** box, type the graphic width, or accept the default value.
   g. In the **Height in Pixels** box, type the graphic height, or accept the default value.
5. Click **Update**.

Related Topics

- Add a Chart to the Report (Example) (page 39)

Define Grouping

Define attribute grouping if you want the report results to be grouped.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Grouping** tab.
3. Define the grouping layout.
    a. In the **Group By** list, click the attribute by which to group. For example, if you query for CRs and group using the **product_name** attribute, CRs with the same product name are grouped on the report.
    b. Select the **Include Grouping Count** check box if you want to show the number of items in the group on the report.
    c. Select the **Include Grouping Value** check box if you want to show the attribute used to group the results on the report.
4. Select or create charts for the group (optional).

    Select one or more charts, or add a chart by performing the following steps:

    a. Under **Charts Included on Grouping Template**, click **Add**.

        The **Grouping Chart Layout** subdialog box appears.

        The temporary chart name, `_New_Chart`, appears in the subdialog **Charts Included in Report** box.

    b. In the **Title** box, select the `_New_Chart` string, and then type the chart name.
    c. In the **Tool** list, click a tool.
    d. In the **Attribute** list, click the attribute to chart.
    e. In the **2ND Attribute** list, click the attribute to chart, if required.
    f. In the **Width in Pixels** box, type the graphic width, or accept the default value.
    g. In the **Height in Pixels** box, type the graphic height, or accept the default value.
    h. Click **Update**.

        The chart title appears in the **Charts Included On Grouping Template** list.

5. Define grouping metric operations (optional).
    a. In the **Metric Operations** area, click **Add**.

        The **Available Metric Operations Definition** subdialog box appears.

    b. In the **Select a Metric Type** list, click **Column** or **Row & Column**.
    c. In the **Select a Metric Operation** list, click a metric operation.

        The ***XXX* Metric** area appears under **Available Metric Operations**.

        Define the metric. For more information, see Metric Operations Explained (page 50).

   d. In the metrics definition area, click **Create**.

6. Under the **Layout** area, click **Update**.

Related Topics

- Define Grouping (Example) (page 40)

Define Sorting

Define attribute sorting if you want the report results to be sorted.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Sorting** tab.
3. Choose the order in which items appear on the report, based on the values of up to three attributes.

   Note The grouping attribute takes precedence over the attributes selected on this tab.

   a. In the **Attribute** list, click an attribute.
   b. In the **Sort Type** list, click the type of the attribute.
   c. In the **Direction** list, click **Ascending** or **Descending** order (for example, click **Ascending** to list items in increasing order by attribute value).

Related Topics

- Define Sorting (Example) (page 41)

Build a Relation Report

A relation report definition determines the layout and content of information reported for associated CRs, tasks, or objects. Relation Reports are “embedded” in reports, following the parent CRs with which they are associated.

> **Note** The **Main** and **Grouping** tabs are not available for relation reports. Also, relation reports do not have their own queries.

1. Display the **Report Builder** dialog box.
2. Define a Relation Report (page 24).
3. In the **Report** list, click the relation report name.
4. Define General Relation Report Properties (page 25).
5. Define the Header (page 15), which is the information that will appear at the top of each relation report.
6. Define the Report Body (page 16), which is the information that will appear in the body of the relation report.
7. Define the Footer (page 18), which is the information that will appear at the bottom of each relation report.
8. Add a Chart to the Report (page 19), which will appear at the bottom of the relation report.
9. Define Sorting (page 22). Sorting determines the order that the items appear in the report.
10. The report is ready to install. See Install a Report (page 26).

Define a Relation Report

Define a relation report if you want to generate a report for associated objects.

1. On the subbutton bar, click **Add Relation Report**.

   The **Define a Relation Report** dialog box appears.

2. In the **Report Name** box, type the relation report name.
3. In the **Report Type** list, click **Change Request, Task**, or **Object**.
4. Specify a relation. In the **Select Existing Relations** list, click the relation report items' relationship to the parent item. **Associated Tasks, Attachments**, and **Duplicate of** are shipped relations. You can create additional relations by creating relation attributes in the CR Process. The relation appears in the **Report Relation** box.

   Or, type the relation name in the **Report Relation** box. For additional information on relation types you can type in, see Telelogic Synergy Help for the `relate` command.

5. Click **Update**.

Related Topics

- Build the Relation Report (Example) (page 42)

Define General Relation Report Properties

Define the general relation report properties, including the relation report name and what type of objects will be shown in the report.

1. In the **Reportable Attributes** list, select the attributes to display on the relation report.

   For information about arranging and setting the attributes, see *Admin* Help.

2. Click **Update**.

Related Topics

- Define General Relation Report Properties (Example) (page 44)

Install a Report

Before anyone can use a system report, you must create and install the package for the report.

1. On the subbutton bar, click **Save**.
2. On the subbutton bar, click **Uninstall** to uninstall any previous version of this report.

   This operation removes the report package from the **Installed Packages** list on the **Package Installer** tab.
3. On the button bar, click **Install**.

   This operation adds the report package to the list of installed packages, and to the user list of **System** reports and formats.

Related Topics

- Save and Install the Report (Example) (page 47)

Report Builder Example

The following procedures show how to build a CR report, with task relation reports, for all resolved CRs with **hammer**, **saw**, and **drill** product names. The CRs will be grouped by product name, then sorted by request type. This example uses the *dev_process* that is shipped with the product.

To try this example, you must do the following:

1. Add **hammer**, **saw**, and **drill** values to the **product_name** list box attribute.

   For information about setting the attributes, see *Admin* Help.

2. Create CRs using the **hammer**, **saw**, and **drill** product names.
3. Create associated tasks for some of the CRs.
4. Complete the associated tasks.
5. Set the completed dates for the CRs.
6. Transition the CRs to the *resolved* state.

Related Topics

- Build the Report (Example) (page 28)
- Build the Relation Report (Example) (page 42)
- Save and Install the Report (Example) (page 47)

Build the Report (Example)

Define the report for the CRs.

1. Start a Telelogic Change Session (page 4).
2. Install a process package, if you have not done so already.

   For example, install the `dev_process` CR Process. For more information, see *Admin* Help.
3. On the Action Panel, click **Report Builder**.

   The **Report Builder** dialog box appears, with the **Select Report File** subdialog box displayed.
4. Create the report name.

   Type a new report name in the **New Report File** box (including the `xml` file name extension), and then click **Create**.
5. Define the Query (Example) (page 29).
6. Define General Properties (Example) (page 31).
7. Select Templates to Include (Example) (page 33).
8. Define the Header (Example) (page 34), which is the information that will appear at the top of the report.
9. Define the Body (Example) (page 36), which is the information that will appear in the body of the report.
10. Define the Footer (Example) (page 38), which is the information that will appear at the bottom of the report.
11. Add a Chart to the Report (Example) (page 39).
12. Define Grouping (Example) (page 40).
13. Define Sorting (Example) (page 41).
14. Build the Relation Report (Example) (page 42).
15. To deploy the report being created, see Save and Install the Report (Example) (page 47).

Define the Query (Example)

Define a query for resolved CRs with product name **hammer**, **saw,** or **drill**.

1. In the **Report Builder** dialog box, click **Define Query**.

   The **Define Query** dialog box appears.

2. Choose query criteria.

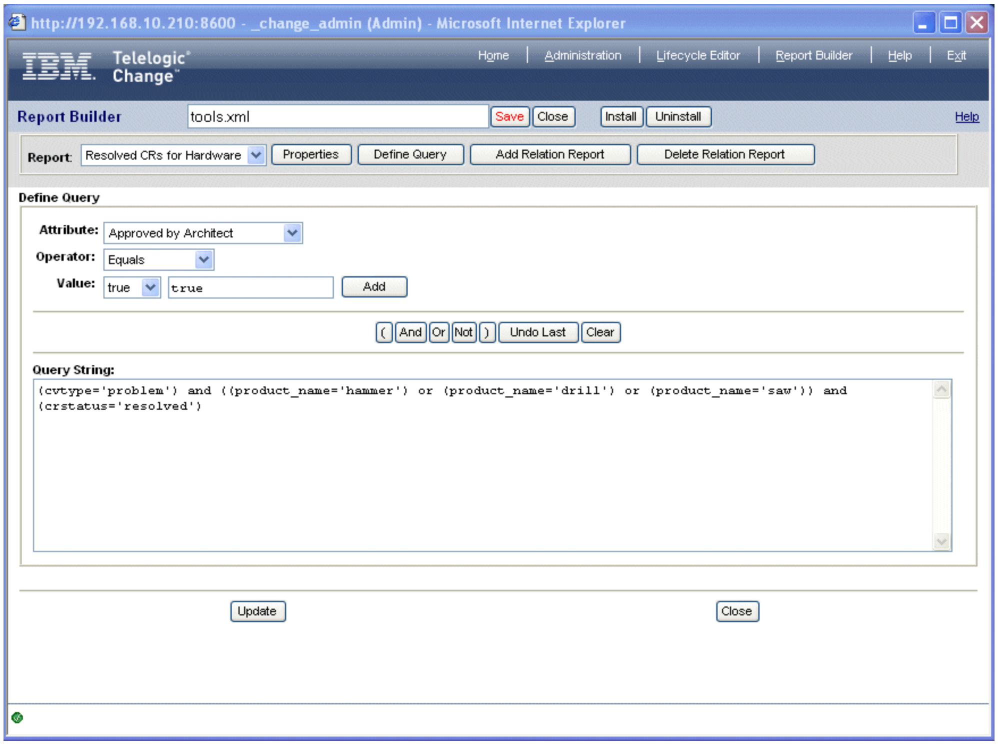
   Find all resolved CRs for the **hammer**, **saw**, and **drill** products.

   Select an operand, operator, and value, and the appropriate buttons. Repeat these steps until your query is completed. You can also type the entire query, or parts of the query, into the **Query String** box. Your query string should be:

   ```
   (cvtype=’problem’)

   and

   ((product_name='drill') or (product_name='hammer') or
   (product_name='saw'))

   and

   (crstatus=’resolved’)
   ```

3. Click **Update**.

The following figure shows the query definition.


http://192.168.10.210:8600 - _change_admin (Admin) - Microsoft Internet Explorer
Telelogic Change
Home | Administration | Lifecycle Editor | Report Builder | Help | Exit
Report Builder
tools.xml
Save Close Install Uninstall Help
Report: Resolved CRs for Hardware
Properties Define Query Add Relation Report Delete Relation Report
Define Query
Attribute: Approved by Architect
Operator: Equals
Value: true true Add
(And Or Not) Undo Last Clear
Query String:
(cvtype='problem') and ((product_name='hammer') or (product_name='drill') or (product_name='saw')) and (crstatus='resolved')
Update
Close

Define General Properties (Example)

Define the general report properties, including specifying that the report is for change requests and will be in an HTML format.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **General** tab.
3. Define the general report properties.
   a. In the **Name** box, type `Resolved CRs for hardware`.
   b. In the **Type** list, click **Change Request**.
   c. In the **Style** list, click **Block**.
   d. In the **Format** list, click **HTML**.
   e. In the **Description** box, type a description of the report; for example, `Report on all resolved CRs for hammer, saw, and drill products`.
4. Select the **Reload button** checkbox, so that a reload button appears on HTML reports.
5. Accept the default values for the **Query Limit** and **String Limit**.
6. In the **Reportable Attributes** list, select the attributes to display on the report.

   You will select **Include Border** on the **Attribute** tab; therefore, you need not insert lines between attributes.

   The **CR ID**, **Synopsis**, and **Description** attributes are included automatically in the **Chosen Attributes** list when you create a new report.

   Also add the following attributes:

   Entered Date

   Resolution Date

   Request Type

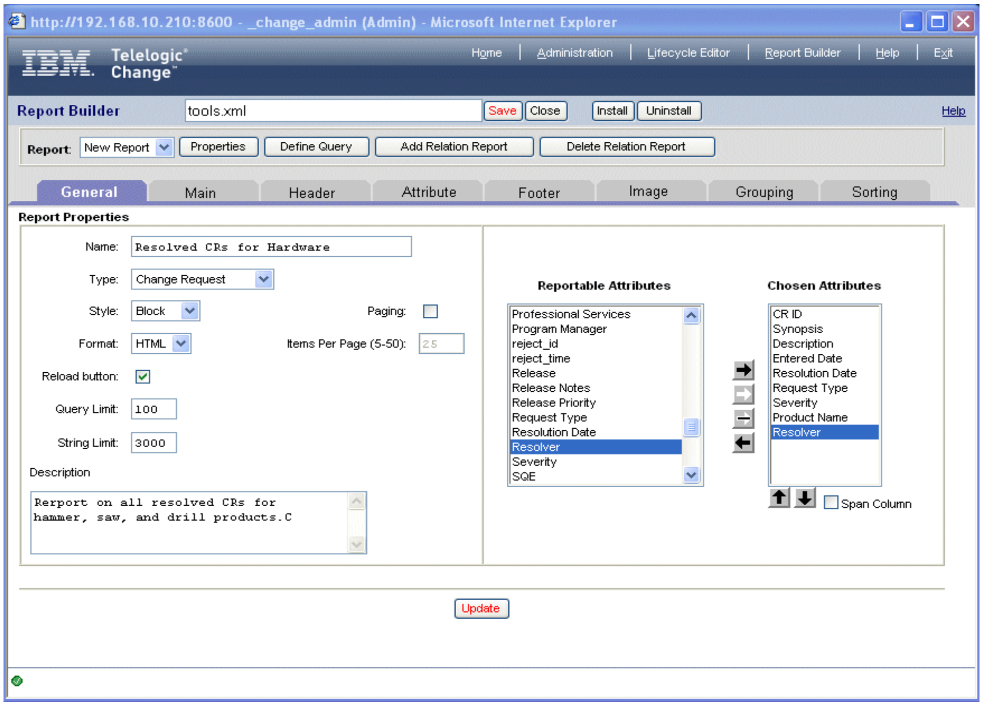
   Severity

   Product Name

   Resolver

   Select the **Span Column** check box for **problem_synopsis** and **problem_description**.
7. Click **Update**.

The following figure shows the general properties definition.

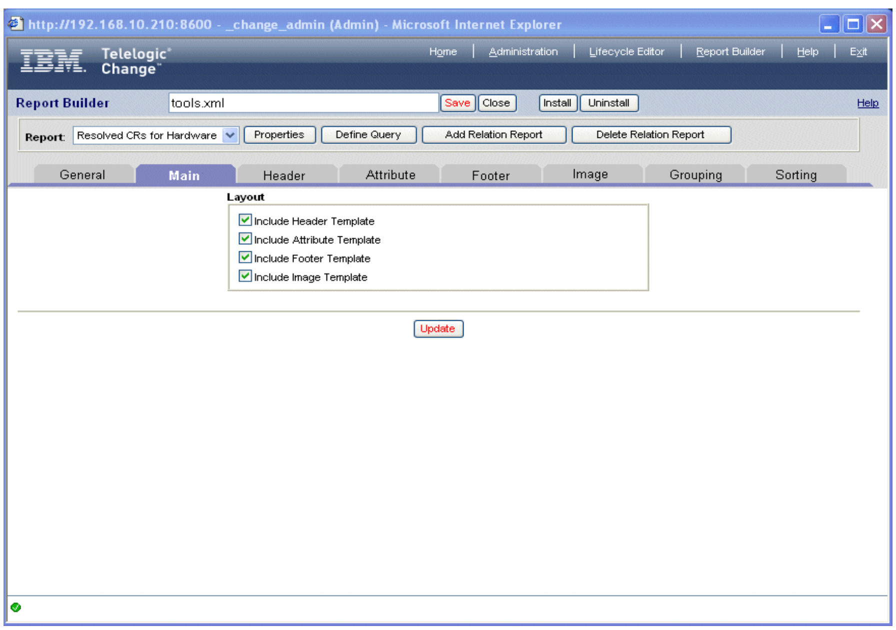

http://192.168.10.210:8600 - _change_admin (Admin) - Microsoft Internet Explorer
Telelogic Change
Home
Administration
Lifecycle Editor
Report Builder
Help
Exit
Report Builder
tools.xml
Save
Close
Install
Uninstall
Help
Report: New Report
Properties
Define Query
Add Relation Report
Delete Relation Report
General
Main
Header
Attribute
Footer
Image
Grouping
Sorting
Report Properties
Name: Resolved CRs for Hardware
Type: Change Request
Style: Block
Paging:
Format: HTML
Items Per Page (5-50): 25
Reload button:
Query Limit: 100
String Limit: 3000
Description
Rerport on all resolved CRs for hammer, saw, and drill products.C
Reportable Attributes
Professional Services
Program Manager
reject_id
reject_time
Release
Release Notes
Release Priority
Request Type
Resolution Date
Resolver
Severity
SQE
Chosen Attributes
CR ID
Synopsis
Description
Entered Date
Resolution Date
Request Type
Severity
Product Name
Resolver
Span Column
Update

Select Templates to Include (Example)

Include a header, footer, body, and image on the report.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Main** tab.
3. Select templates to include on the report.
   a. Select the **Include Header Template** check box.
   b. Select the **Include Attribute Template** check box.
   c. Select the **Include Footer Template** check box.
   d. Select the **Include Image Template** check box.
4. Click **Update**.

The following figure shows the included templates definition.



Define the Header (Example)

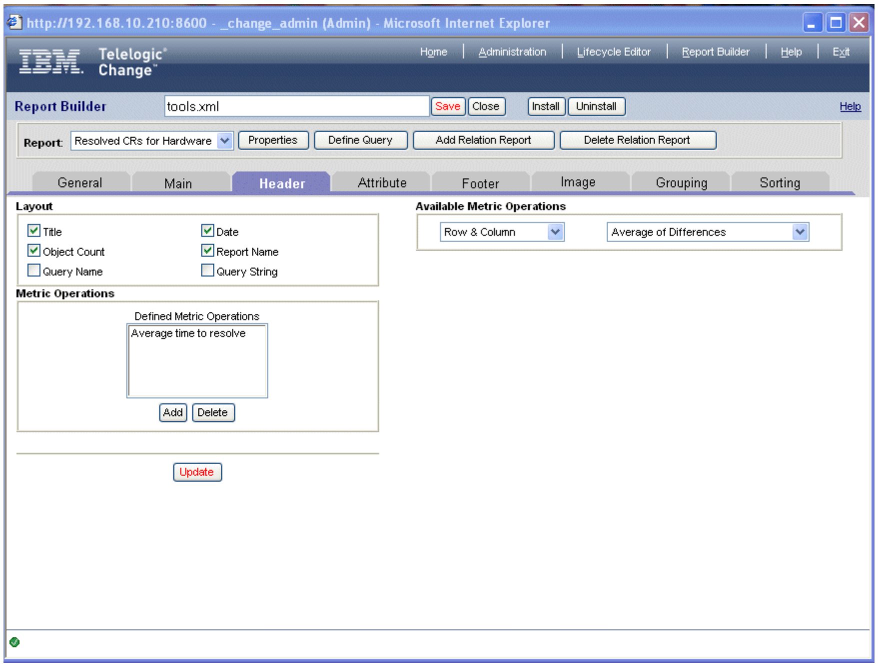
Include a title, date, object count, and report name in the header.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Header** tab.
3. Define the header layout.
   a. Select the **Title** check box.
   b. Select the **Date** check box.
   c. Select the **Object Count** check box.
   d. Select the **Report Name** check box.
4. Define the header metric operation for computing the average time, in minutes, to resolve a CR.
   a. In the **Metric Operations** area, click **Add**.

      The **Available Metric Operations Definition** subdialog box appears.
   b. In the **Select a Metric Type** list, click **Row & Column**.
   c. In the **Select a Metric Operation** list, click **Average of Differences**.

      The **Row & Column Average of Differences Metric** area appears under **Available Metric Operations**.
   d. In the **Label** box, type `Average Time to Resolve`.
   e. In the **Find the Difference of** list, click **resolution_date**.
   f. In the **minus** list, click **entry_date**.
   g. In the **Data Type** list, click **Date**.
   h. In the **Date Unit** list, click **Minutes**.
   i. In the metrics definition area, click **Create**.
5. Under the **Layout** area, click **Update**.

The following figure shows the header definition.


http://192.168.10.210:8600 - _change_admin (Admin) - Microsoft Internet Explorer
IBM Telelogic Change
Home | Administration | Lifecycle Editor | Report Builder | Help | Exit
Report Builder
tools.xml
Save
Close
Install
Uninstall
Help
Report:
Resolved CRs for Hardware
Properties
Define Query
Add Relation Report
Delete Relation Report
General
Main
Header
Attribute
Footer
Image
Grouping
Sorting
Layout
Title
Date
Object Count
Report Name
Query Name
Query String
Available Metric Operations
Row & Column
Average of Differences
Metric Operations
Defined Metric Operations
Average time to resolve
Add
Delete
Update

Define the Body (Example)

In the body, show how much time is required to resolve CRs.

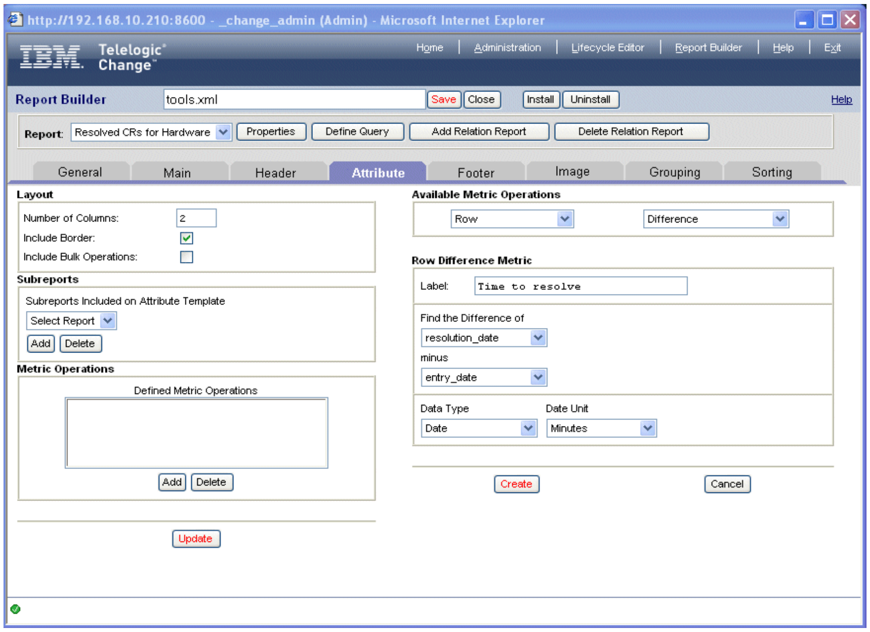
1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Attribute** tab.
3. Define the body layout.
   a. In the **Number of Columns** box, accept the default value (2).
   b. Select the **Include Border** check box to include borders around attribute/value pairs on the report.
   c. Clear the **Include Bulk Operations** check box, if set.

      In this example, the CRs for the report are already resolved.
4. Define the body metric operation. For more information about metrics, see Metric Operations Explained (page 50).
   a. In the **Metric Operations** area, click **Add**.

      The **Available Metric Operations Definition** subdialog box appears.
   b. In the **Select a Metric Type** list, click **Row**.
   c. In the **Select a Metric Operation** list, click **Difference**.

      The **Row Difference Metric** area appears under **Available Metric Operations**.
   d. In the **Label** box, type `Time to Resolve`.
   e. In the **Find the Difference of** list, click **resolution_date**.
   f. In the **minus** list, click **entry_date**.
   g. In the **Data Type** list, click **Date**.
   h. In the **Date Unit** list, click **Minutes**.
   i. In the metrics definition area, click **Create**.
5. Under the **Layout** area, click **Update**.

The following figure shows the body definition.

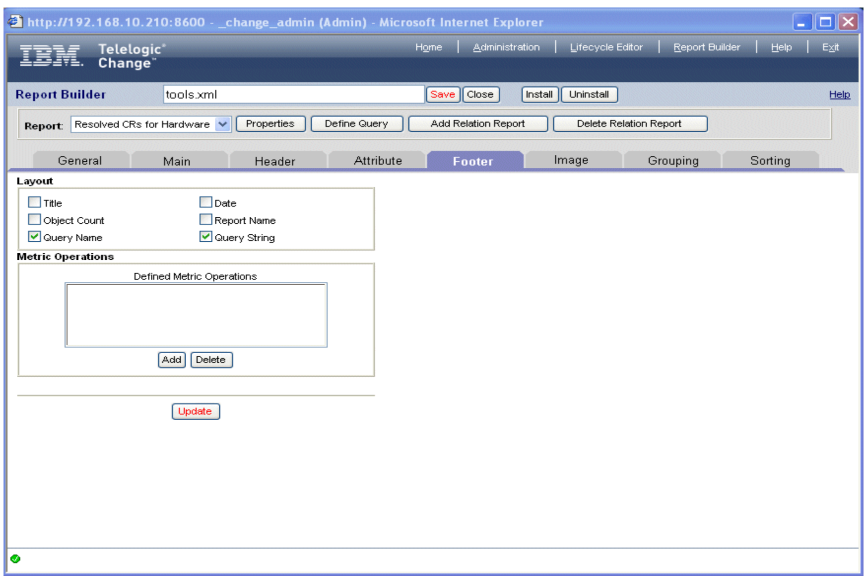

http://192.168.10.210:8600 - _change_admin (Admin) - Microsoft Internet Explorer
Telelogic Change
Home
Administration
Lifecycle Editor
Report Builder
Help
Exit
Report Builder
tools.xml
Save
Close
Install
Uninstall
Help
Report:
Resolved CRs for Hardware
Properties
Define Query
Add Relation Report
Delete Relation Report
General
Main
Header
Attribute
Footer
Image
Grouping
Sorting
Layout
Number of Columns:
2
Include Border:
Include Bulk Operations:
Subreports
Subreports Included on Attribute Template
Select Report
Add
Delete
Metric Operations
Defined Metric Operations
Add
Delete
Update
Available Metric Operations
Row
Difference
Row Difference Metric
Label:
Time to resolve
Find the Difference of
resolution_date
minus
entry_date
Data Type
Date Unit
Date
Minutes
Create
Cancel

Define the Footer (Example)

Include the query name and query string in the footer.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Footer** tab.
3. Define the footer layout.
   a. Select the **Query Name** check box to show the name of the query.
   b. Select the **Query String** check box to show the query string.
4. Click **Update**.

The following figure shows the footer definition.



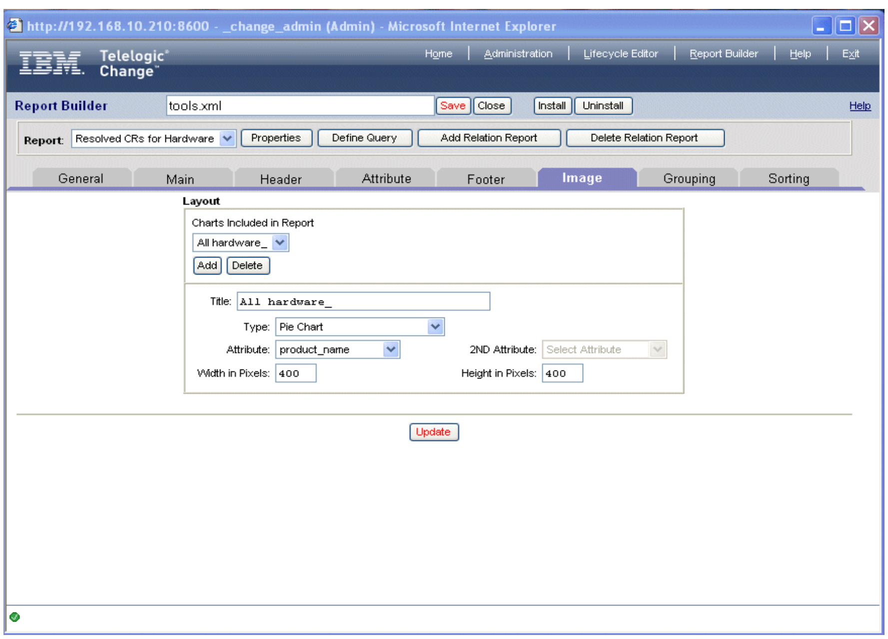
Add a Chart to the Report (Example)

Include a chart that shows the number of resolved CRs for each product.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Image** tab.
3. Under **Layout**, click **Add**.

   The temporary chart name, `_New_Chart`, appears in the subdialog **Charts Included in Report** box.
4. Define the chart.
   a. In the **Title** box, select the `_New_Chart` string, and then type `All hardware`.
   b. In the **Type** list, click **Pie Chart**.
   c. In the **Attribute** list, click **product_name** to create the chart products.
   d. In the **Width in Pixels** and **Height in Pixels** boxes, accept the default values (400 pixels).
5. Click **Update**.

The following figure shows the image definition.

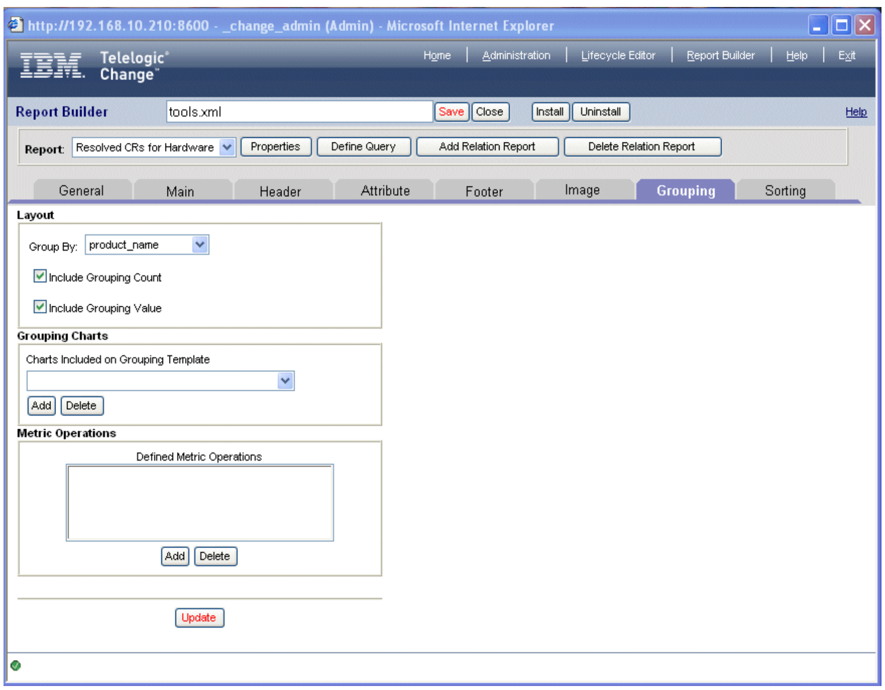


Define Grouping (Example)

Group the results by product name.

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Grouping** tab.
3. Define the grouping layout.
   a. In the **Group By** list, click `product_name`.
   b. Select the **Include Grouping Count** check box.
   c. Select the **Include Grouping Value** check box.
4. Click **Update**.

The following figure shows the grouping definition.

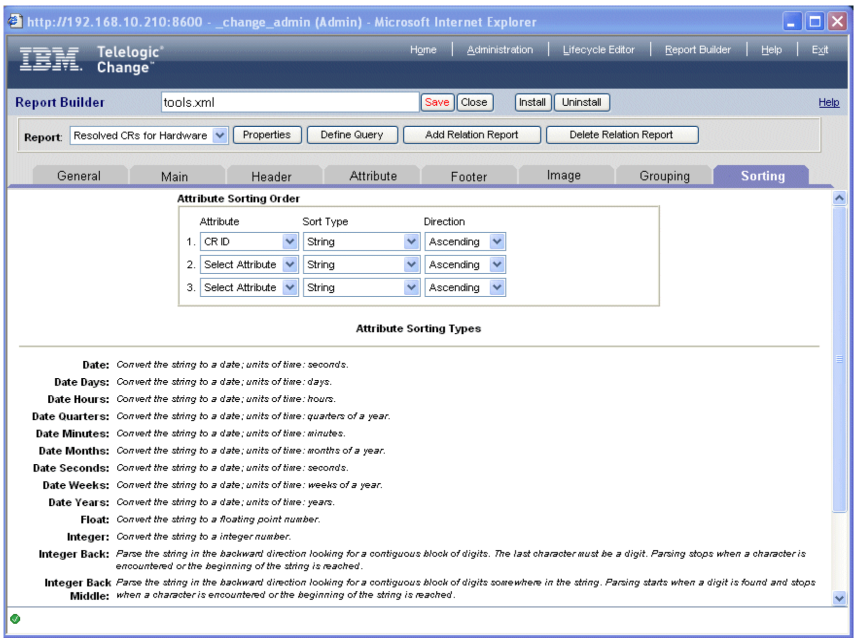


Define Sorting (Example)

Sort the results by request type (after the results have been grouped).

1. In the **Report Builder** dialog box, click **Properties**.
2. Click the **Sorting** tab.
3. Choose the order in which items appear on the report.
   a. In the **Attribute** list, click **request_type**.
   b. In the **Sort Type** list, click **String** or **listbox** to maintain the listbox order.
   c. In the **Direction** list, click **Ascending** to list items alphabetically by product name.

The following figure shows the sorting definition.



Build the Relation Report (Example)

Define the relation report for the associated tasks.

1. Display the **Report Builder** dialog box.
2. Define the Relation Report (Example) (page 43).
3. In the **Report** list, click the relation report name.
4. Define General Relation Report Properties (Example) (page 44).
5. Define the Relation Report Header (Example) (page 45), which is the information that will appear at the top of each relation report.
6. Define the information that will appear in the body of the relation report.

   For steps, see Define the Relation Report Body (Example) (page 46).

Define the Relation Report (Example)

Define a relation report that shows associated tasks.

1. On the subbutton bar, click **Add Relation Report**.

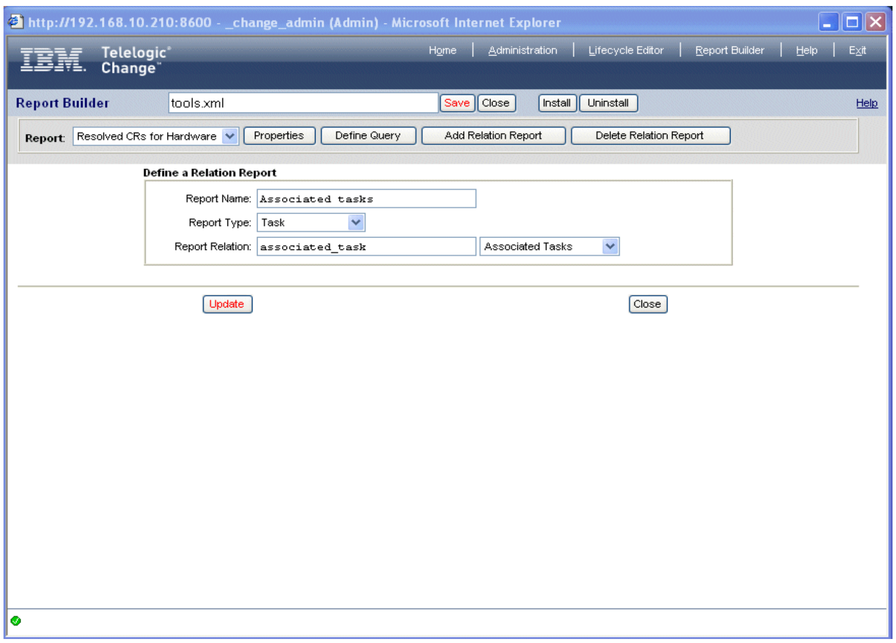
   The **Define a Relation Report** dialog box appears.

2. In the **Report Name** box, type `Associated Tasks`.
3. In the **Report Type** list, click **Task**.
4. In the **Existing Relations** list, click **Associated Tasks**.

   The relation appears in the **Report Relation** box.

5. Click **Update**.

The following figure shows the relation report general properties definition.



Define General Relation Report Properties (Example)

Define the general properties of the relation report, including the task attributes to show.

1. In the **Report** list, click the new relation report name.

The **General** tab appears. The **Relation Report Properties** are defined already.

2. In the **Reportable Attributes** list, select the attributes to display on the relation report.

Add the following attributes:

Task ID

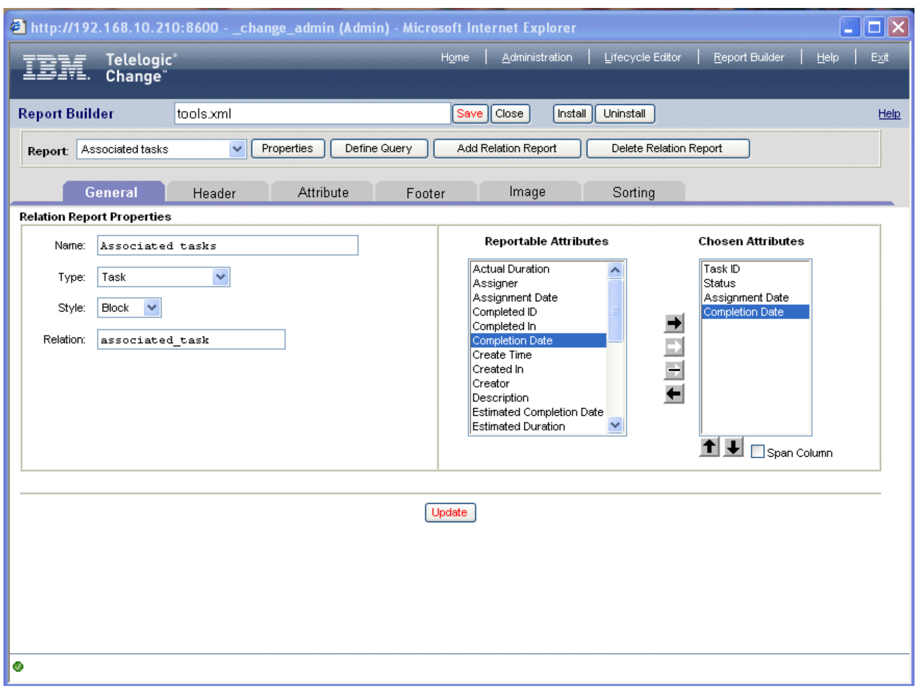
Status

Assignment Date

Completion Date

3. Click **Update**.

The following figure shows the relation report general properties definition.

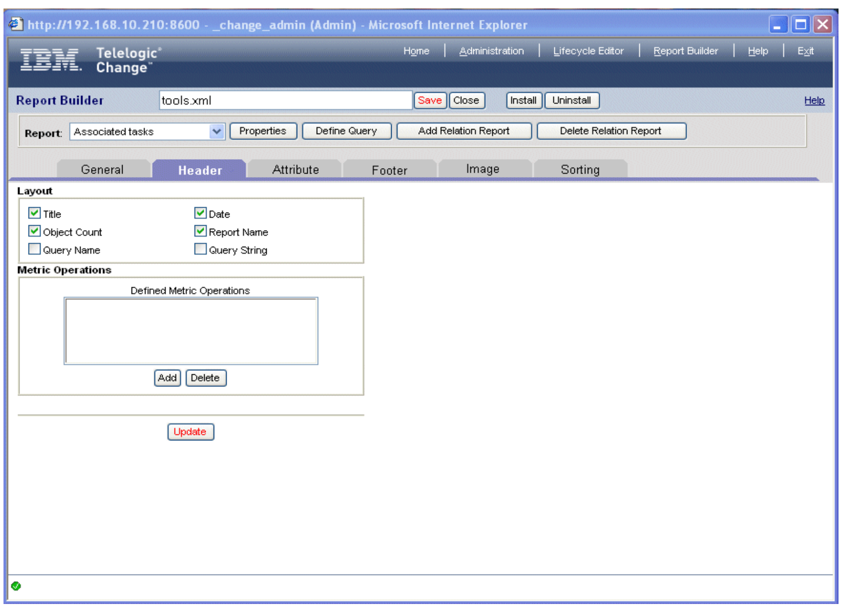


Define the Relation Report Header (Example)

Include a title, date, object count, and report name in the header.

1. In the **Report** list, click the new relation report name.
2. In the **Report Builder** dialog box, click **Properties**.
3. Click the **Header** tab.
4. Define the header layout.
    a. Select the **Title** check box.
    b. Select the **Date** check box.
    c. Select the **Object Count** check box.
    d. Select the **Report Name** check box.
5. Click **Update**.

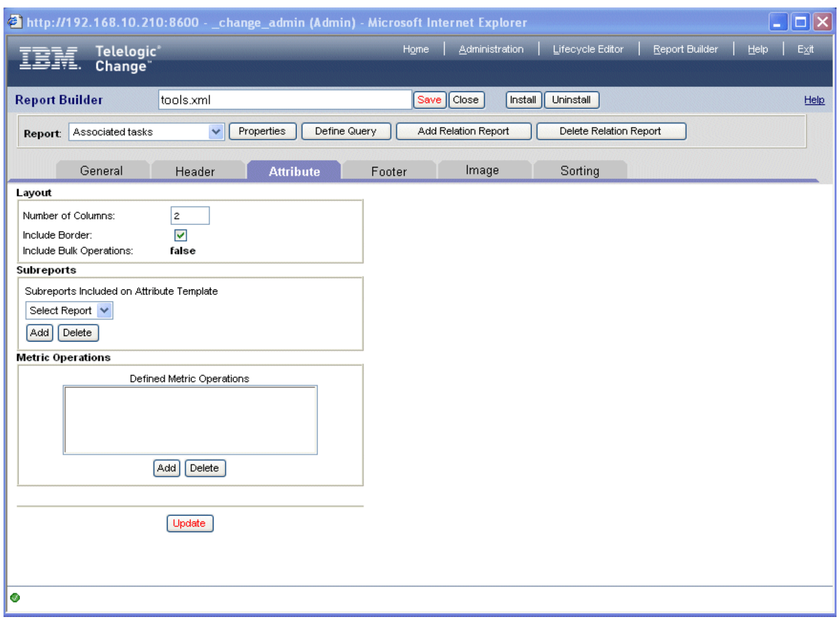
The following figure shows the relation report header definition.



Define the Relation Report Body (Example)

Define the layout for showing the tasks.

1. In the **Report** list, click the new relation report name.
2. In the **Report Builder** dialog box, click **Properties**.
3. Click the **Attribute** tab.
4. Select **Include border**.
5. Click **Update** to save the settings.



Save and Install the Report (Example)

Before anyone can use the custom report, you must create a package for the report, and then install it.

1. On the button bar, click **Save**.

2. On the button bar, click **Install**.

This operation adds the report package to the list of installed packages, and to users' lists of **System** reports and formats.

3. Run the report.

a. Start a session as a user.

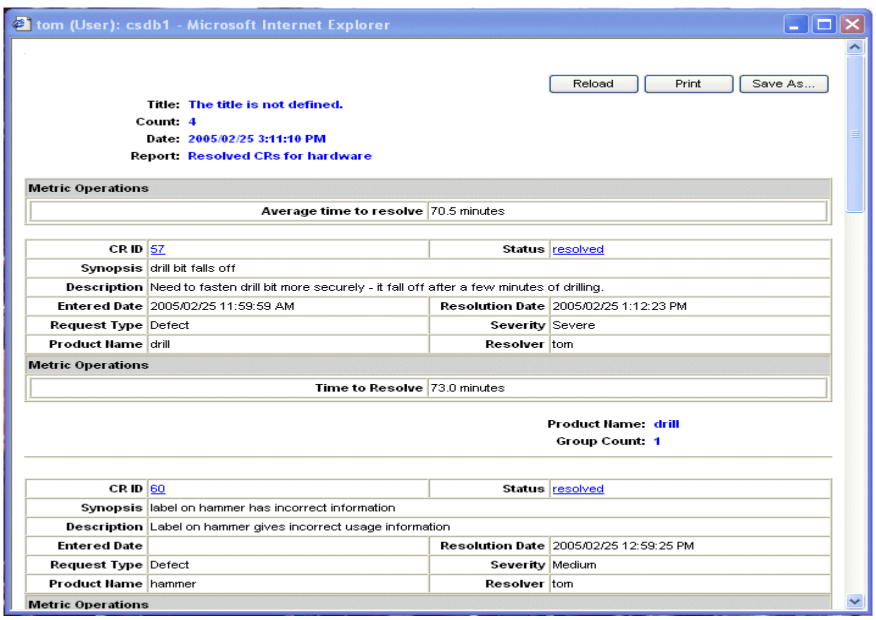
b. On the Action Panel, click **Reports**.

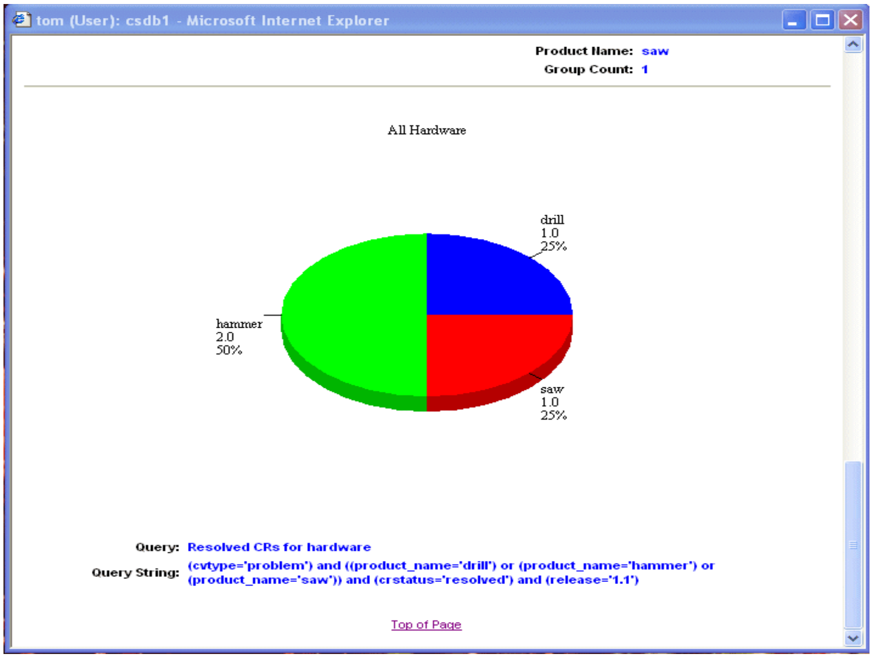
c. In the **Reports** folder, click **System**.

d. In the **System** report list, click the new report, then click **Run**.

e. View the report.

The following figures show the top and bottom of a custom report generated using this procedure.




tom (User): csdb1 - Microsoft Internet Explorer
Product Name: saw
Group Count: 1
All Hardware
drill
1.0
25%
hammer
2.0
50%
saw
1.0
25%
Query: Resolved CRs for hardware
Query String: (cvtype='problem') and ((product_name='drill') or (product_name='hammer') or (product_name='saw')) and (crstatus='resolved') and (release='1.1')
Top of Page

More Reporting Information

Metric Operations Explained

Metric operations are computations performed with attribute values. The results of the computations, or *metrics*, are included on your report.

Metric operation options are available only on the **Header**, **Footer**, **Attribute**, and **Grouping** tabs.

The metric operation type is either **Row** or **Row & Column**. Telelogic Change performs Row operations on the specified attributes of each item (CR, task, or object) in a selection set, and performs Row & Column operations first on each item's attributes, then across all items.

The following table shows a Rows and Columns example for a set of tasks The last column, **Attribute_M**, represents the amount of time required to complete the task.

Item	Attribute 1	Attribute 2	Attribute 3	...	***Attribute_M***
1	Task # 1	Assigned Date 1	Completion Date 1	...	*attribute_M* 1
2	Task # 2	Assigned Date 2	Completion Date 2	...	*attribute_M* 2
...	...	...	...	...	...
N	Task # *N*	Assigned Date *N*	Completion Date *N*	...	*attribute_M N*

The following are examples of Row and Row & Column metric operations based on the above table:

- `Difference` (Row)

  Compute the time to complete a task -- the difference between the assigned date/time (**Assigned Date**) and completion date/time (**Completion Date**) for each task.

- `Maximum` (Column)

  Determine which task was completed last -- had the latest completion date (**Attribute 3**).

- `Average of Differences` (Row & Column)

  Compute the average time to complete all tasks -- differences between **Attribute 3** and **Attribute 2,** then averaged)

The list of available metric operations depends on which tab is displayed. **Header** and **Footer** tabs define the content of sections at the top and bottom of each report, for all items in the report; therefore, Column and Row & Column metric operations are available on these tabs because they are performed across all items. The **Attribute** tab defines content for the body of the report, where each item is listed individually; therefore, only Row metric operations are available on this tab. The **Grouping** tab defines item groupings based on their attribute values; therefore, Column and Row & Column metric operations are available on this tab.

Header and **Footer** tabs can group metric operations, thus spanning rows. An **Attribute** tab looks at individual rows only.

> **Note** If the attributes do not exist for the computation you want to perform, you must define the attributes and make them reportable in your CR Process; save, create, and install the updated CR Process; and then add the attributes to the **Attributes in Report** list on the Report Builder's **General** tab.

The Report Builder has more than 30 metric operations. For more information about these operations, see the "PTReport" Wslets section in the *Telelogic Change Customization Reference*

Index