

**User Guide**  
**GanttChart for ClearQuest**  
**Version 1.0 Beta 1**

**LLC CM-Consult**

**Moscow**

**2009**

# Contents

<b>1.</b>	<b>LIST OF ABBREVIATIONS AND TERMS.....</b>	<b>3</b>
<b>2.</b>	<b>GLOSSARY .....</b>	<b>3</b>
<b>3.</b>	<b>INTRODUCTION.....</b>	<b>4</b>
3.1	FIELD OF APPLICATION OF THIS DOCUMENT.....	4
3.2	PURPOSE OF THIS DOCUMENT.....	4
3.3	SYSTEM REQUIREMENTS .....	4
<b>4.</b>	<b>GENERAL DESCRIPTION.....</b>	<b>4</b>
<b>5.</b>	<b>INSTALLATION PACKAGE.....</b>	<b>5</b>
<b>6.</b>	<b>INSTALLATION.....</b>	<b>5</b>
<b>7.</b>	<b>CONFIGURATION.....</b>	<b>11</b>
<b>8.</b>	<b>USING THE PLUG-IN.....</b>	<b>16</b>
8.1	BUILDING A GANTT CHART.....	16
8.2	OPENING FORMS .....	18
8.3	SAVING CHANGES OF PLANNED DATES .....	19
<b>9.</b>	<b>APPENDIX A.....</b>	<b>22</b>

## 1. List of Abbreviations and Terms

<i>Abbreviation</i>	<i>Expansion</i>
CM	Change management
DB	Database

## 2. Glossary

<i>Term</i>	<i>Interpretation</i>
ClearQuest	IBM Rational change management system
Change Request	Document/ ClearQuest object

## 3. Introduction

### 3.1 Field of Application of This Document

This Guide is intended for users of ClearQuest.

### 3.2 Purpose of This Document

The document provides users with information on functionality of the GanttChart for ClearQuest application that allows effectively use ClearQuest when planning works and tracking their statuses.

The document covers the following topics:

- Installing the GanttChart for ClearQuest
- Configuring the application
- Using the application

### 3.3 System Requirements

To be able to use the GanttChart for ClearQuest plug-in you must have

- IBM Rational ClearQuest Eclipse Client 7.0.0 or later version.

## 4. General Description

GanttChart for ClearQuest is the plug-in for the Eclipse client for ClearQuest that provides the following opportunities:

- Building a Gantt chart on basis of executed queries. It allows building a chart of any necessary view.
- Visualizing change request hierarchy and relations between the requests in the form of a Gantt chart.
- Visualizing task completion rate.
- Visualizing ratio of planned to actual dates.
- Visualizing change requests using different colour schemes depending on the completion rate and ratio of planned to actual dates.
- Splitting a Gantt chart on sections for visualization of composite requests for more convenient analysis and work planning.

- Changing and saving results of updating planned dates of change requests.
- Opening forms of change requests from a Gantt chart.

## 5. Installation Package

The installation package includes the following files:

1. User Guide.doc – this document.
2. **com.cmc.ganttchart.site.zip** – installation package for the plug-in.

## 6. Installation

The plug-in is installed using the regular mechanism of installation and integration of modules implemented in the Eclipse environment – the same mechanism that underlies the integration of ClearQuest 7.x.x.x.

To install the module, in the **Help** menu, select **Software Updates, Find and Install** (see Figure 1. Launching the module installation)

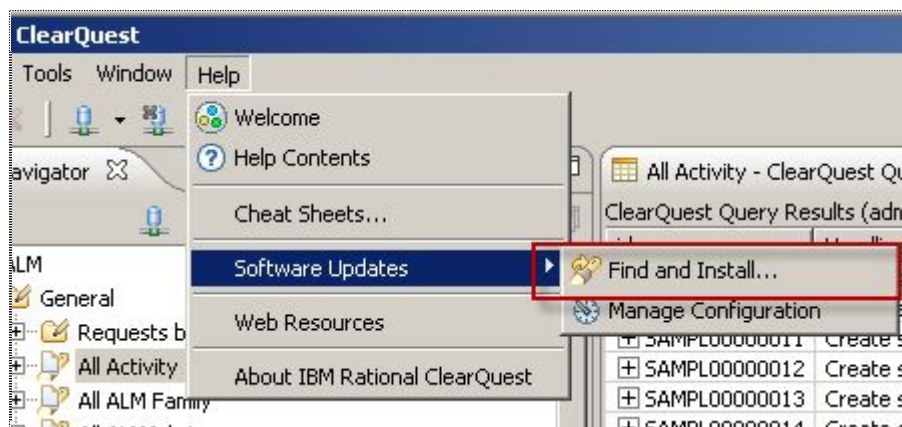


Figure 1. Launching the module installation

The **Install/Update** dialog box opens, where you should select the way of searching for a new module to install. Select the **Search for new features to install** option here (see Figure 2. Selecting the installation type)

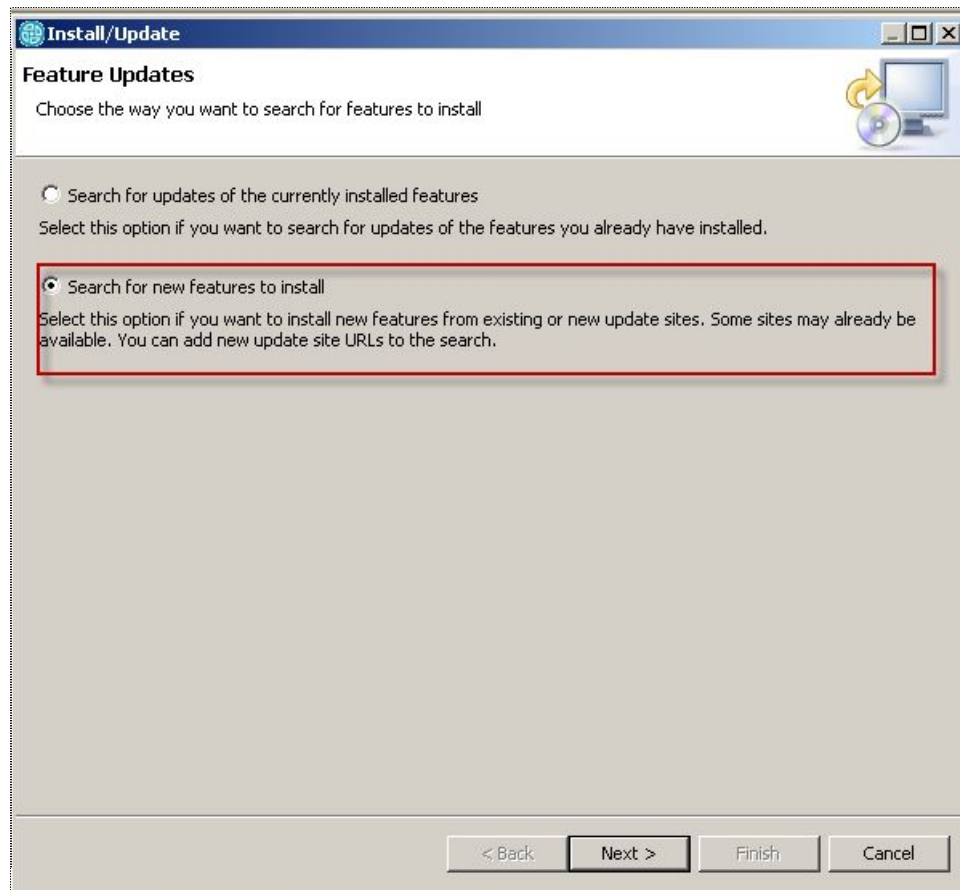


Figure 2. Selecting the installation type

Next, you should select the source where to search for the new modules. Click **New Archived Site** (see Figure 3. Selecting the installation source).

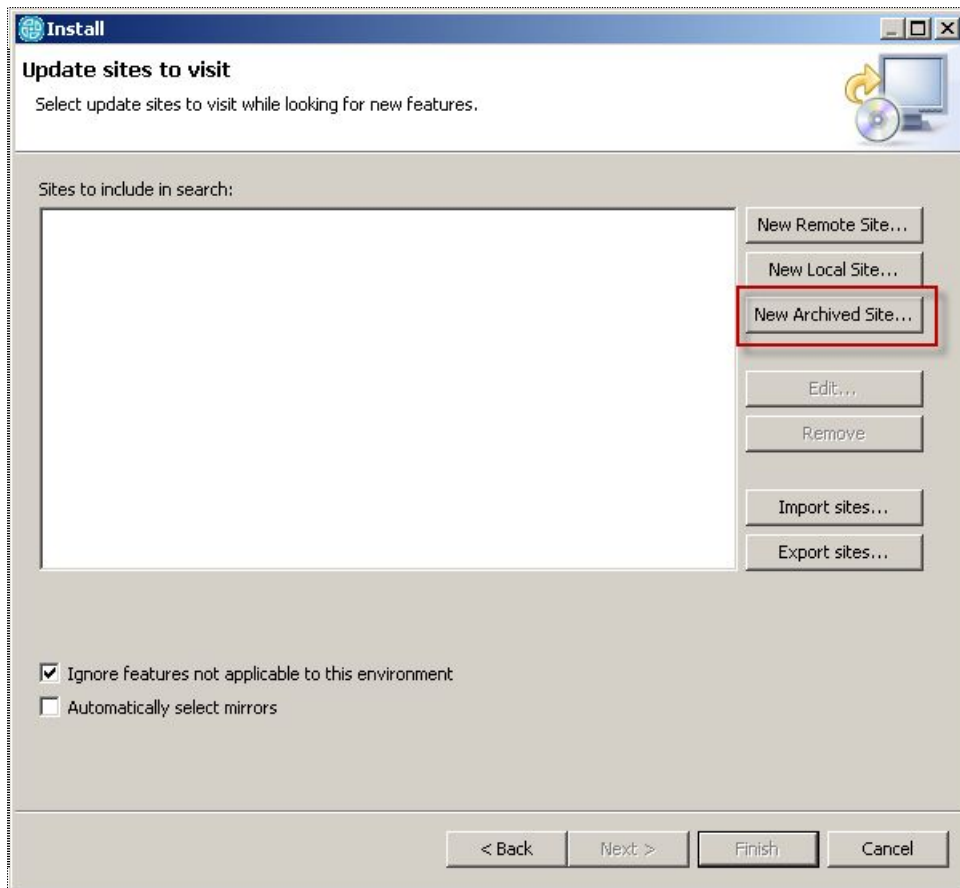


Figure 3. Selecting the installation source

In the next dialog box, select the archive file containing the installation package (see Figure 4. Selecting the archive with the module installation package)

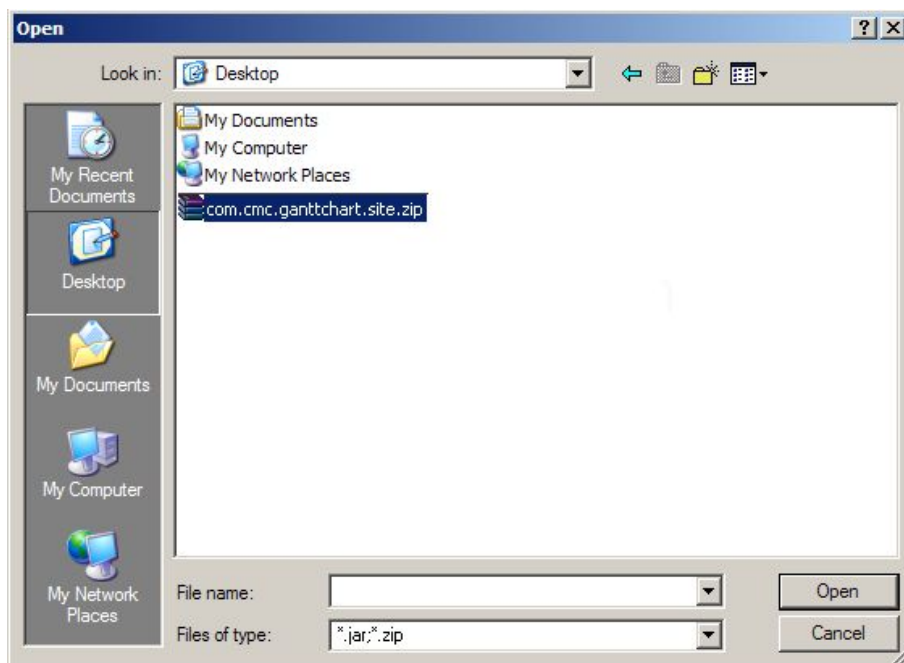


Figure 4. Selecting the archive with the module installation package

The installer defines what modules are in the installation package and offers to select the modules to install. Select **com.cms.ganttchart.site.zip** and click **Finish** (see Figure 5. Selecting the module from the installation package).

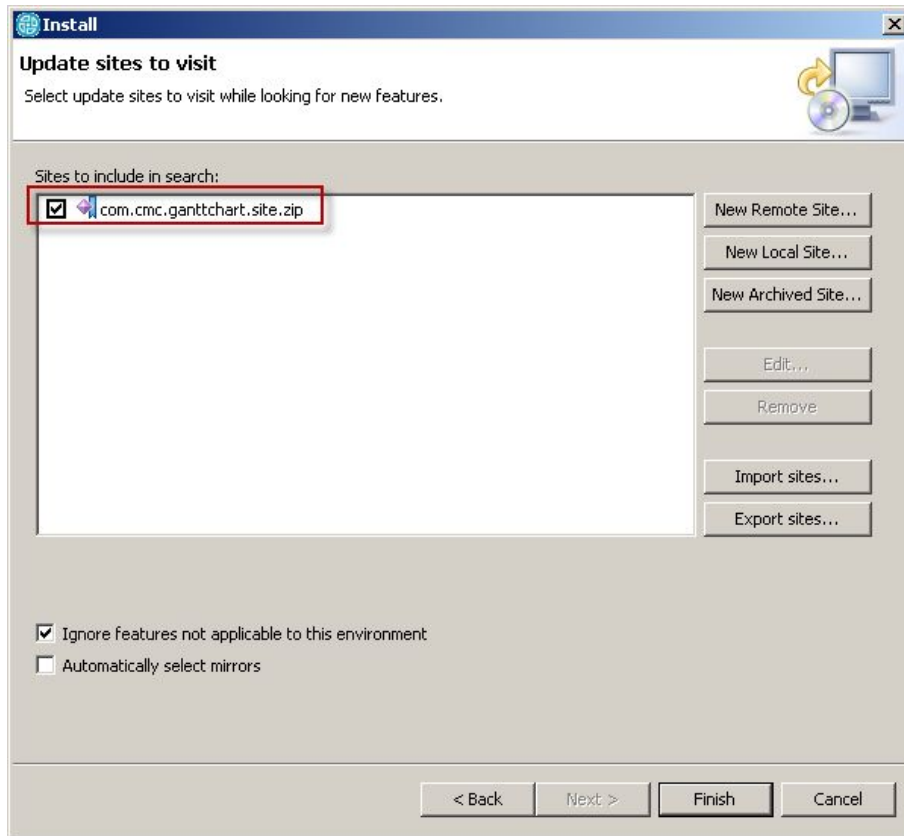


Figure 5. Selecting the module from the installation package

This dialog box (see Figure 6. Confirming the list of modules to be installed) contains a list of selected modules. To confirm the installation, select the module name and click **Next**.

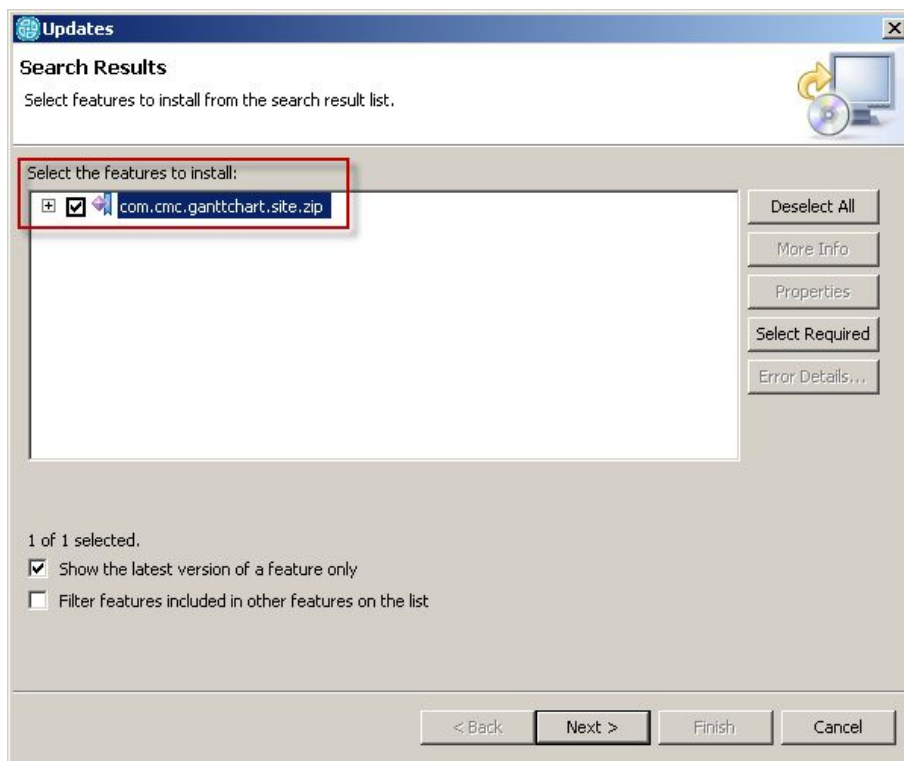


Figure 6. Confirming the list of modules to be installed

The next dialog box contains the license agreement and offers to accept it (see Figure 7. Terms of the license agreement). Select the **I accept the terms in license agreement** option and click **Next**.

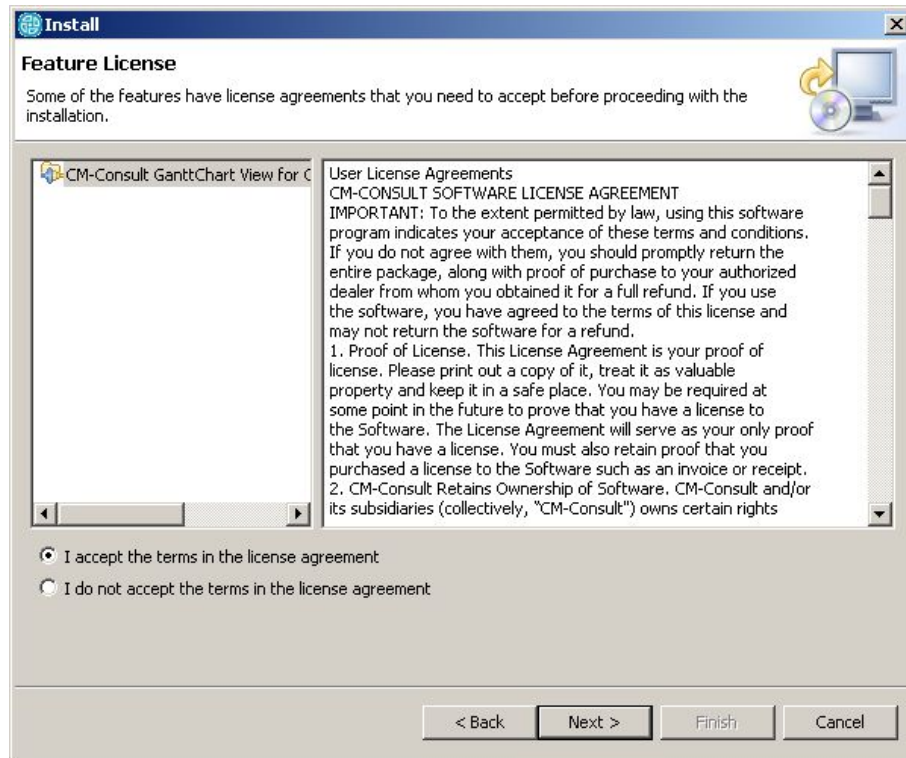


Figure 7. Terms of the license agreement

Then the dialog box opens where the module characteristics and the installation directory are displayed (see Figure 8. List of installed modules). In this dialog box, click **Finish**.

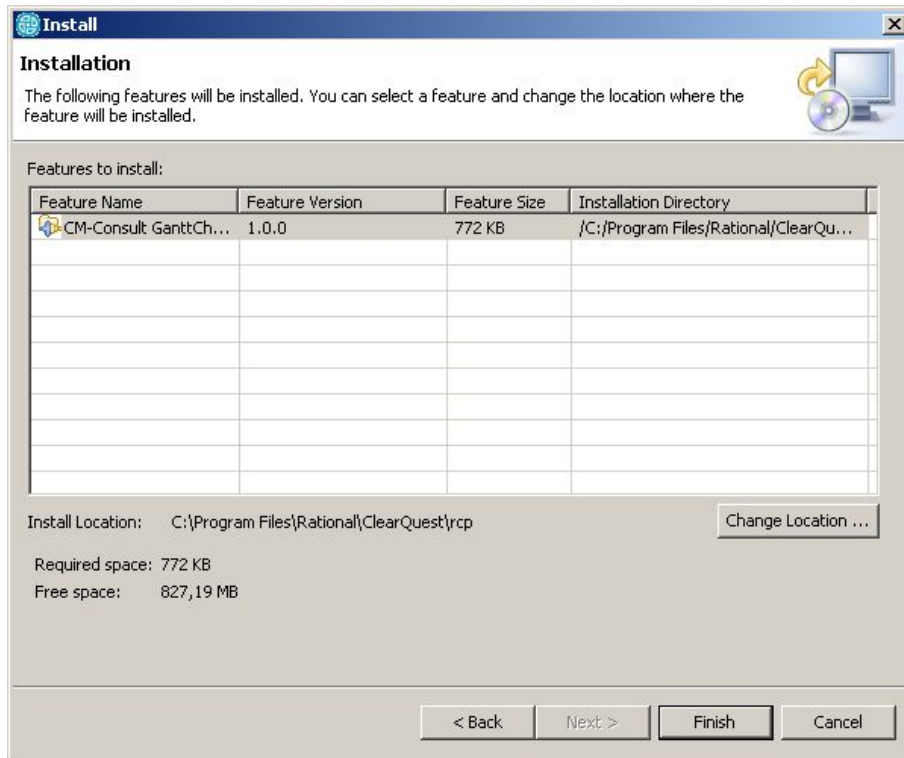


Figure 8. List of installed modules

In the next dialog box, the information about module's digital signature is displayed. (see Figure 9. Information about the module's digital signature). To install the module, click **Install**.

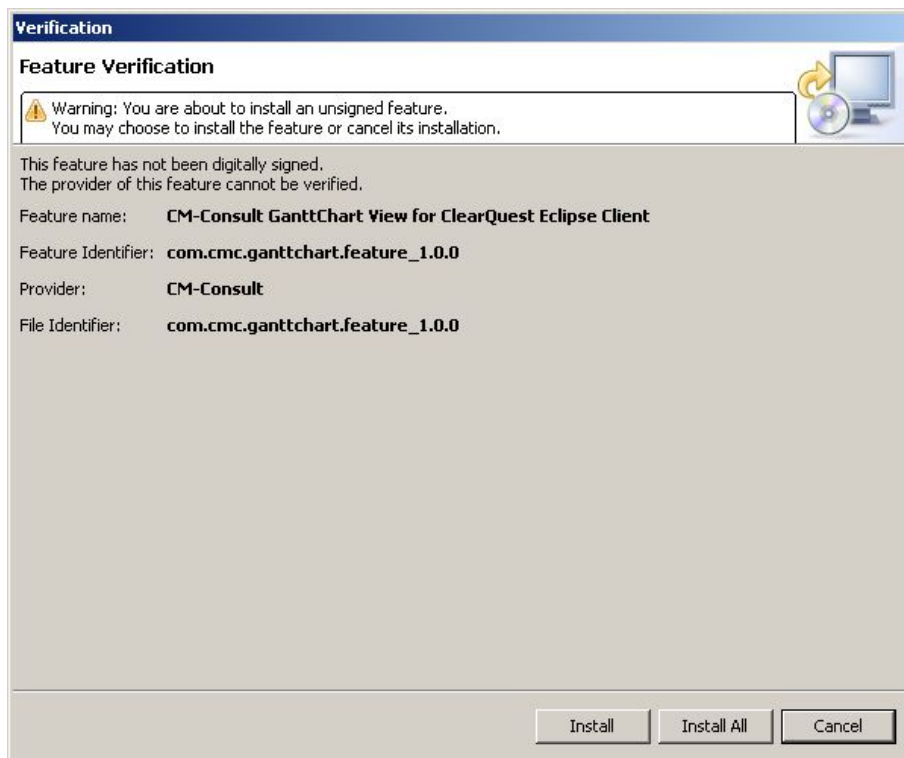


Figure 9. Information about the module's digital signature

After the installation is completed, you need to restart the application. The next dialog box will offer you to restart ClearQuest now or later (see Figure 10. After the installation is completed, the installer offers you to restart application)

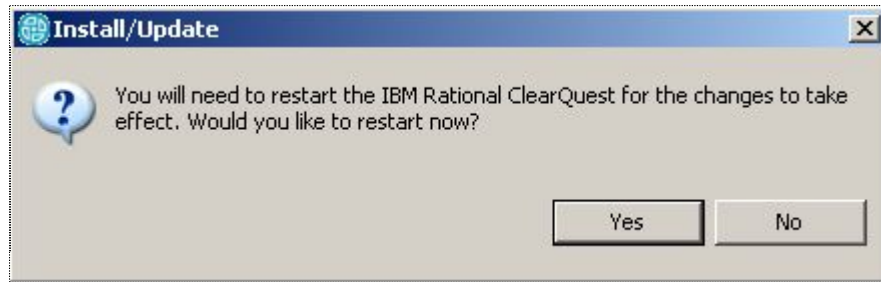


Figure 10. After the installation is completed, the installer offers you to restart application  
After the restart of the application, the new item appears in the menu bar – **CMC Plug-ins**.

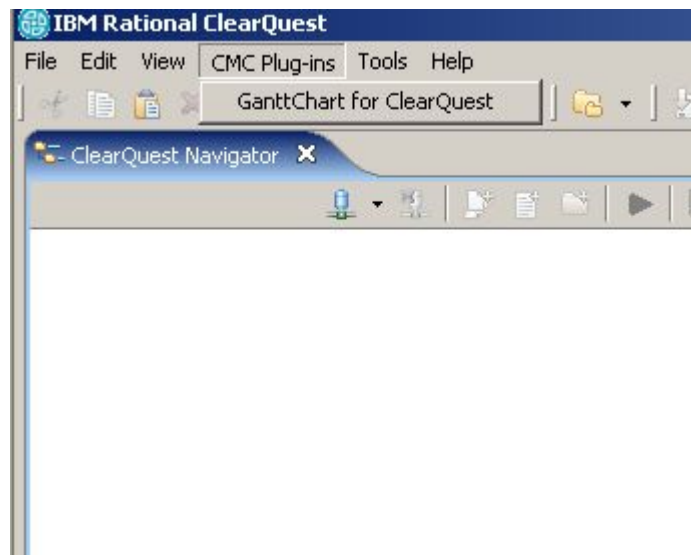


Figure 11. Result of the installation

## 7. Configuration

Configuration includes setting up the parameters of record types for which the Gantt chart will be build. First, you should set up the connection to the DB (see Figure 12. Setting up the connection to the ClearQuest database).



Figure 12. Setting up the connection to the ClearQuest database

To adjust the module settings, in the **Window** menu, select **Preferences**. (see Figure 13. Opening the dialog box for adjusting the module settings).

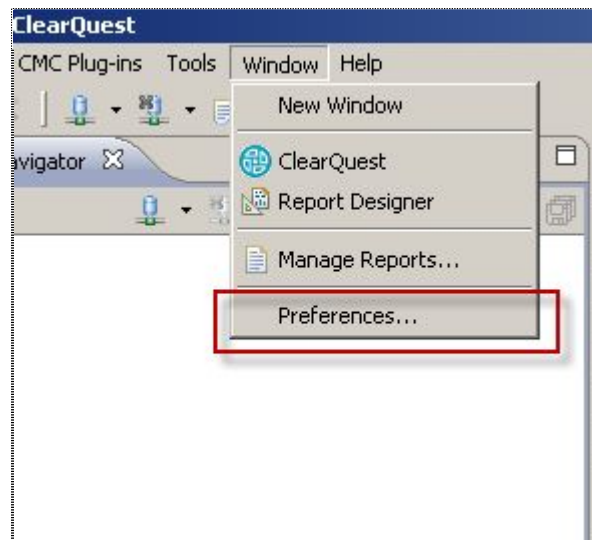


Figure 13. Opening the dialog box for adjusting the module settings

In the **Preferences** dialog box, on the left, select **CMC Plug-ins/GanttChart for ClearQuest**. The **Preferences** dialog box will open. (see Figure 14. Configuring the module (the ALMRequest entity is taken as an example)). This dialog box contains the following tabs:

1. **Record types** – on this tab, you can configure all necessary record types, for which the Gantt chart will be built.
2. **Record types hierarchy** – on this tab, you can set up all necessary relations between change requests:
  - a. Hierarchical relations
  - b. Sequential relations
3. **Advanced** – on this tab, you can adjust additional settings.

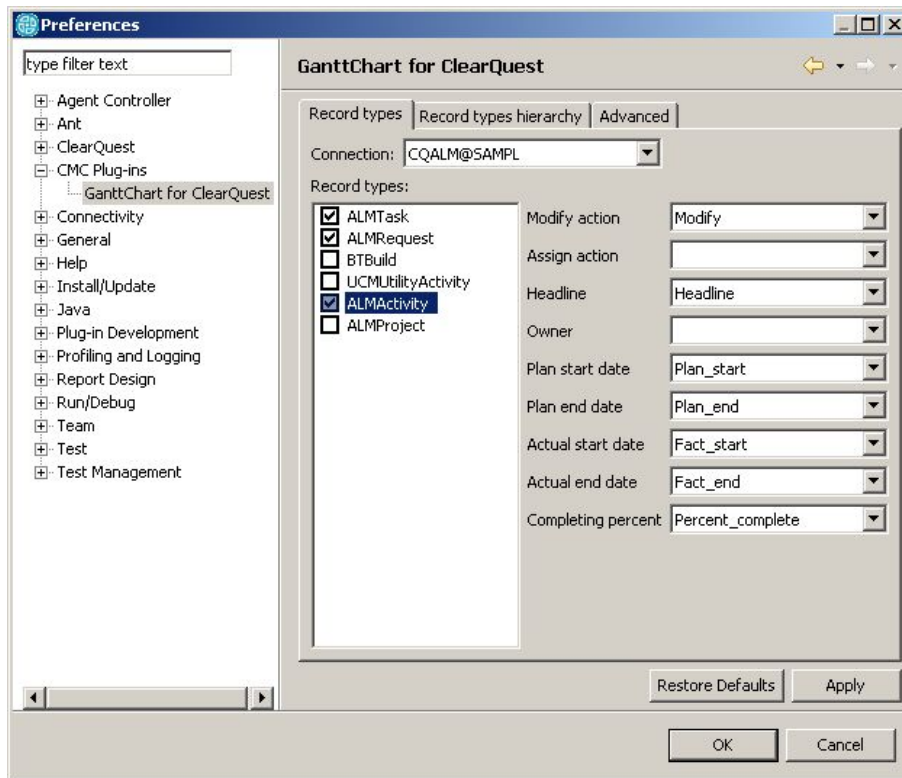


Figure 14. Configuring the module (the ALMRequest entity is taken as an example)

The **Record types** tab contains the following settings:

1. **Connection** – the list of active ClearQuest connections. In this list, you should select the connection to the user’s ClearQuest database.
2. **Record types** – the list of record types that are used in the user’s ClearQuest DB. In this list, select the record types that should be used for building the Gantt chart. For every record type, you can set up a number of parameters displayed on the right of the record types list:
  - a. **Modify action** – the action performed by ClearQuest to modify the change request. It is used for saving planned values for the change requests. This is an optional parameter. You need not set it up unless you need to save changes in the Gantt chart.
  - b. **Assign action** – the action performed by ClearQuest to transfer a change request into the *Assigned* state. It is used if it is necessary to automatically transfer a change request into the *Assigned* state when an owner is assigned to the request. This is an optional parameter. You need not set it up unless you need to automatically transfer a change request into the *Assigned* state.
  - c. **Headline** – this field contains a brief description. This is a mandatory parameter.

- d. **Owner** – this field contains a name of an owner assigned to a change request. This is a mandatory parameter.
- e. **Plan start date** – this field contains a planned date of starting work in the ClearQuest request. This field is not mandatory for change requests with child requests.
- f. **Plan end date** – this field contains a planned date of finishing work in the ClearQuest request. This field is not mandatory for change requests with child requests.
- g. **Fact start date** – this field contains an actual date of starting work in the ClearQuest request. This field is not mandatory for change requests with child requests.
- h. **Fact end date** – this field contains an actual date of finishing work in the ClearQuest request. This field is not mandatory for change requests with child requests.
- i. **Completing percent** – this field contains the task completion rate. Its value should fall into the range between 0 and 100. This parameter is optional.

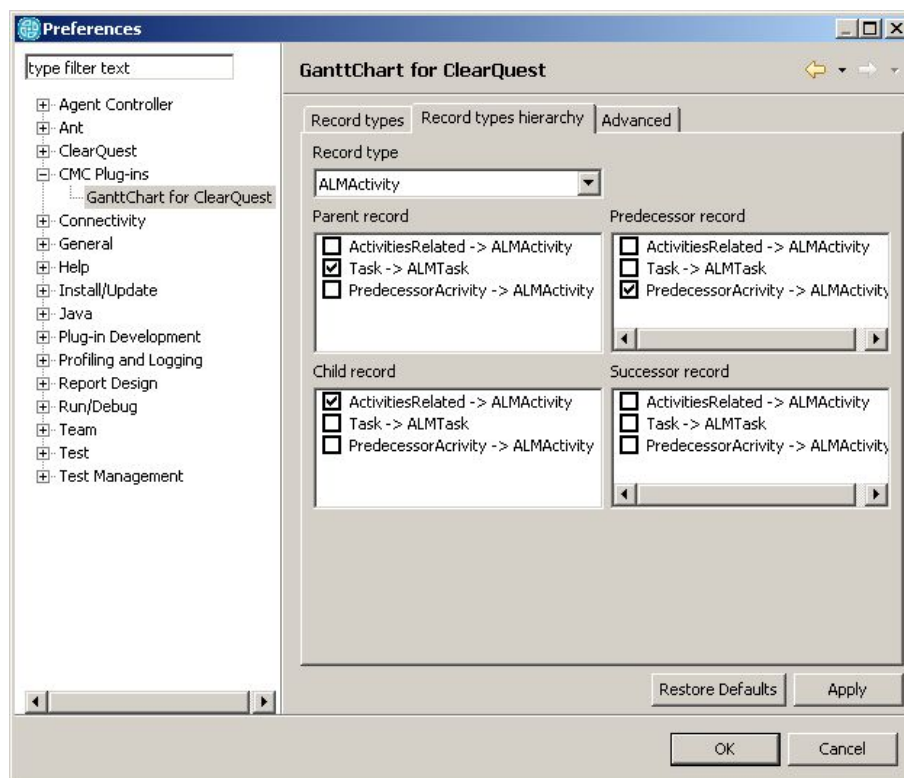


Figure 15. Configuring the hierarchy for the ALMActivity entity

For setting up relations between change requests, you should open the **Record types hierarchy** tab (see Figure 15. Configuring the hierarchy for the ALMActivity entity). This tab

contains the **Record types** list containing the list of record types that were configured on the **Record types** tab. For every record type, you can set up a number of relationship parameters:

1. Parameters for hierarchical relations, that are displayed in a Gantt chart as aggregated tasks:
  - a. **Parent record** – a parent change request for the request that is currently being configured.
  - b. **Child record** – a child change request for the request that is currently being configured.
2. Parameters for the sequential relations:
  - a. **Predecessor record** – a change request that goes before the request that is currently being configured.
  - b. **Successor record** – a change request that goes after the request that is currently being configured.

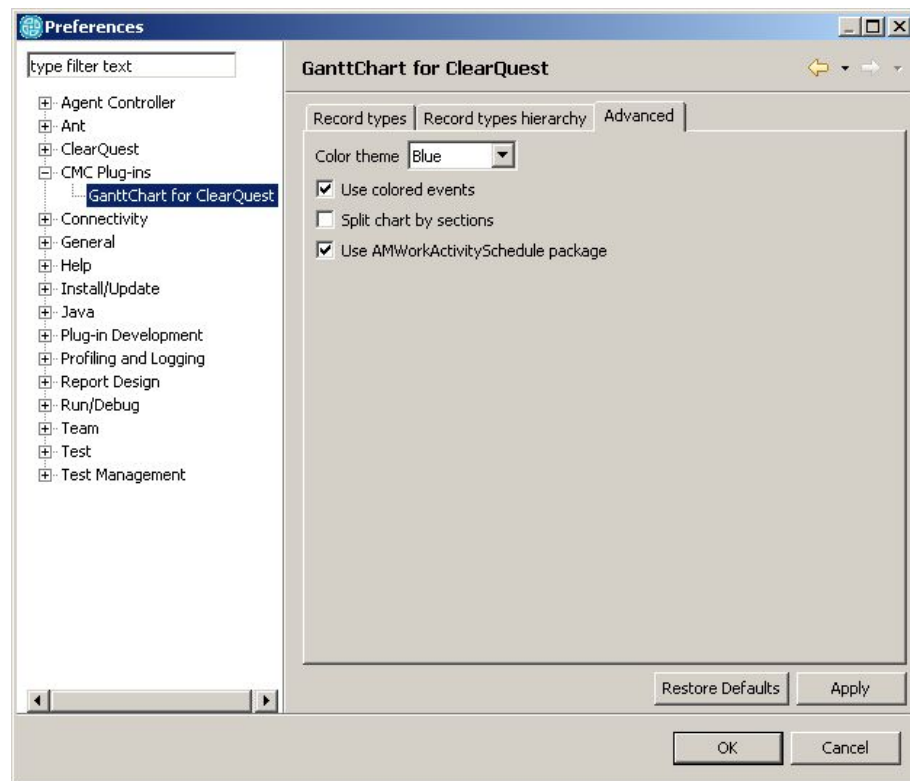


Figure 16. Additional settings

The **Advanced** tab contains the following settings:

1. **Color theme** – the color scheme that will be applied to a Gantt chart.
2. **Use color events** – if this option is selected, all tasks will be highlighted by different colors depending on their states:
  - a. *Grey* – the task has not been planned.

- b. *Blue* – the task has been planned and the plan end date has not come yet.
  - c. *Yellow* – the task has been planned and is in progress.
  - d. *Crimson* - the task has been planned, but the planned start date is past due.
  - e. *Red* - the task has been planned and the planned finish date is past due.
  - f. *Green* – the task is completed.
3. **Split chart by section** – if this option is selected, the Gantt chart is divided into sections concerning records of the first level of hierarchy.
  4. **Use AMWorkActivitySchedule package** – if this allows to use AMWorkActivitySchedule package.

To finish the configuration, click **Apply**.

## 8. Using the plug-in

### 8.1 Building a Gantt chart

Since GanttChart for ClearQuest uses requests selected from the ClearQuest, to build a Gantt chart it is necessary to execute a query that will return the list of records (see Figure 17. Configuring the filter of displayed records).

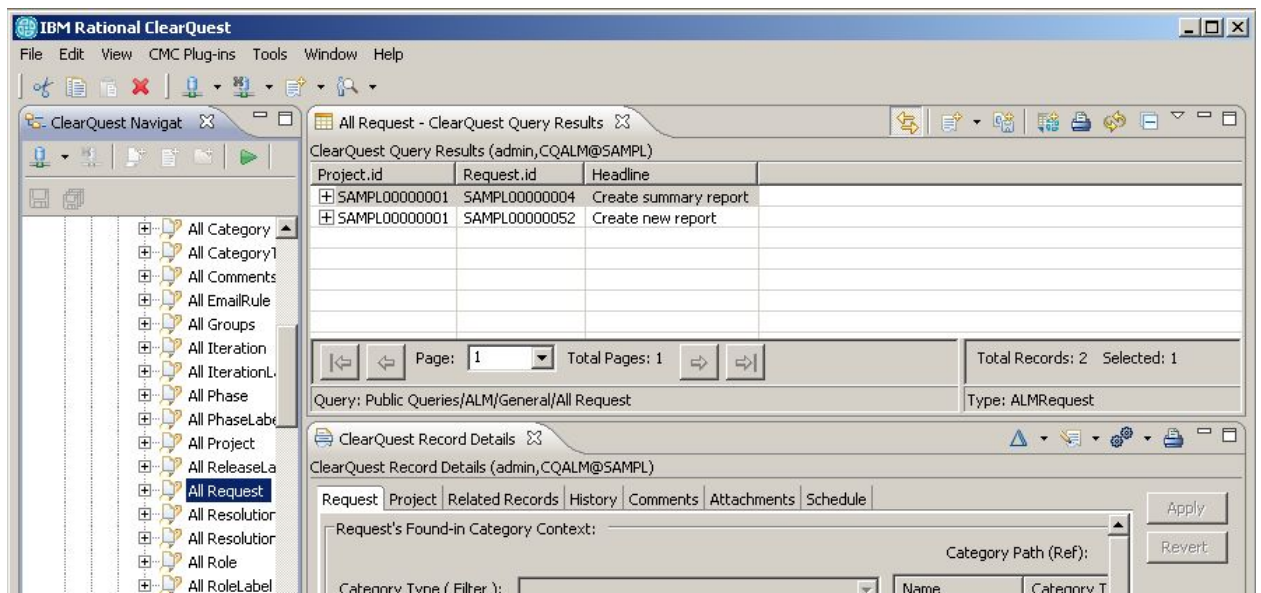


Figure 17. Configuring the filter of displayed records

In the CMC Plug-ins menu, select **GanttCart for ClearQuest** (see Figure 18. Launching the plug-in). The new tab **GanttCart for ClearQuest** will open (see Figure 19. Plug-in's tab displayed in ClearQuest).

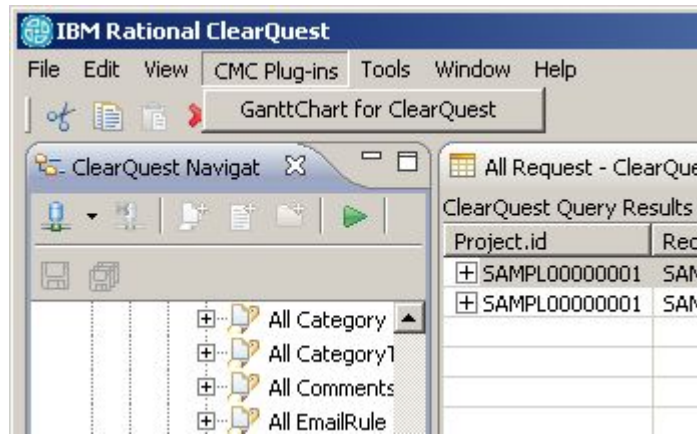


Figure 18. Launching the plug-in

On the **GanttCart for ClearQuest** tab, in the **Executed queries** list, select the executed query and, to build a Gantt chart, click **Fill from result** (see Figure 19. Plug-in's tab displayed in ClearQuest, Figure 20. Filtering).

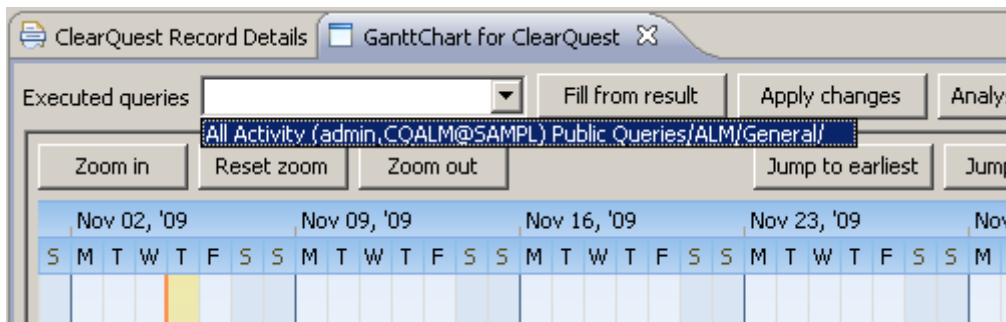


Figure 19. Plug-in's tab displayed in ClearQuest

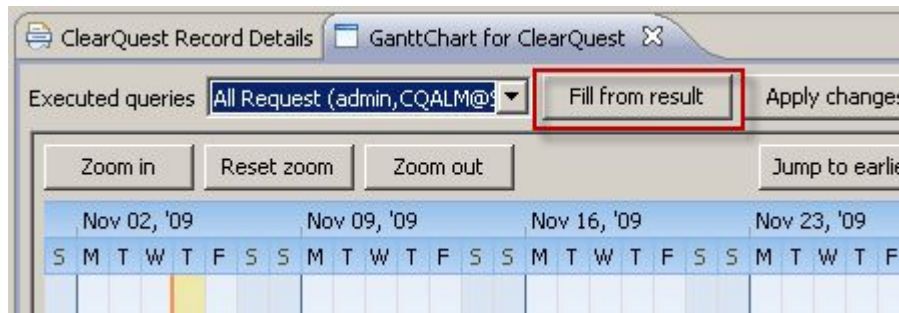


Figure 20. Filtering

As a result of the plug-in installation and configuration, you will get the Gantt chart (see Figure 21. Displaying the Gantt chart).

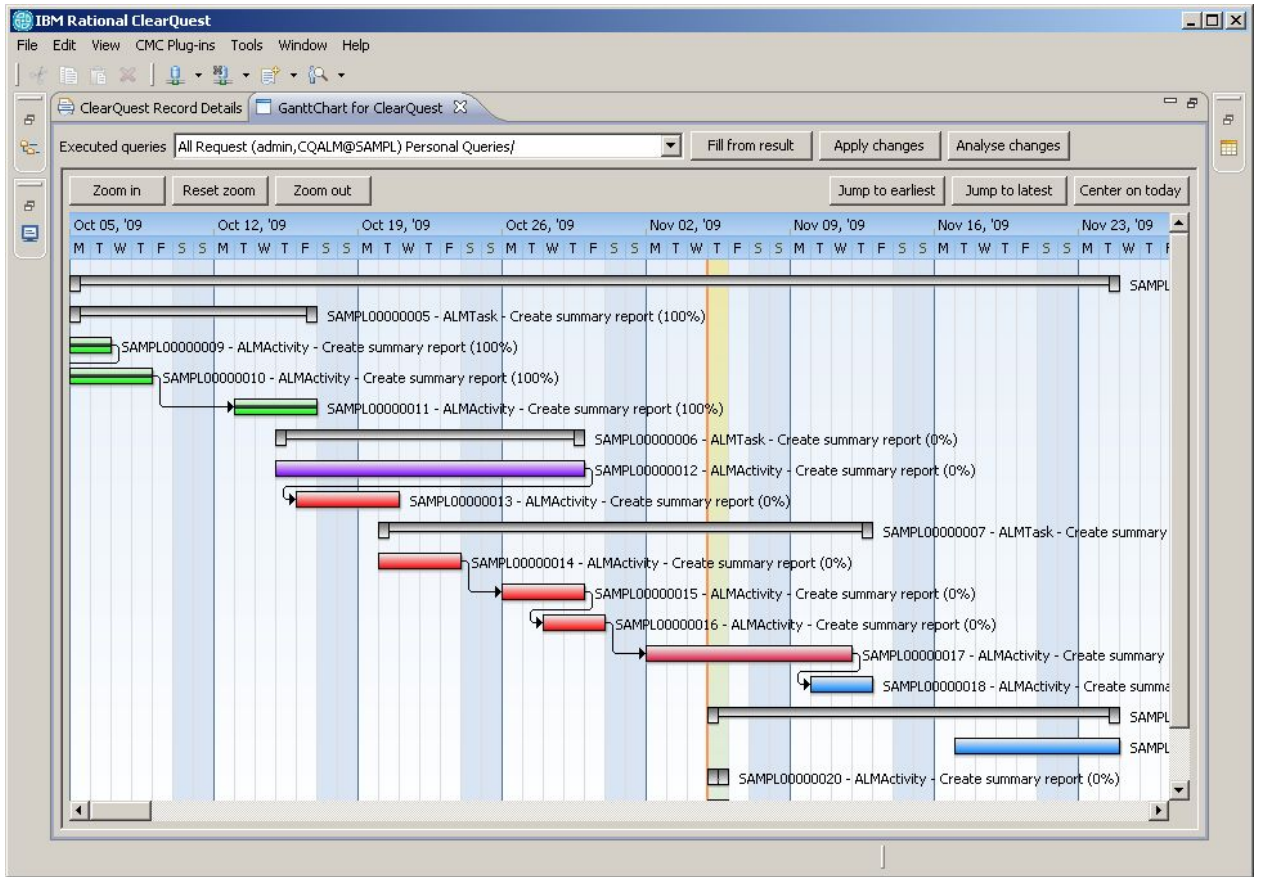


Figure 21. Displaying the Gantt chart

## 8.2 Opening forms

GanttChart for ClearQuest allows opening forms of change requests directly from a Gantt chart. To open a change request form, click the necessary task in the Gantt chart. The ClearQuest form will open where you can perform all regular operations with the request, i.e. view, modify, change its state, etc.

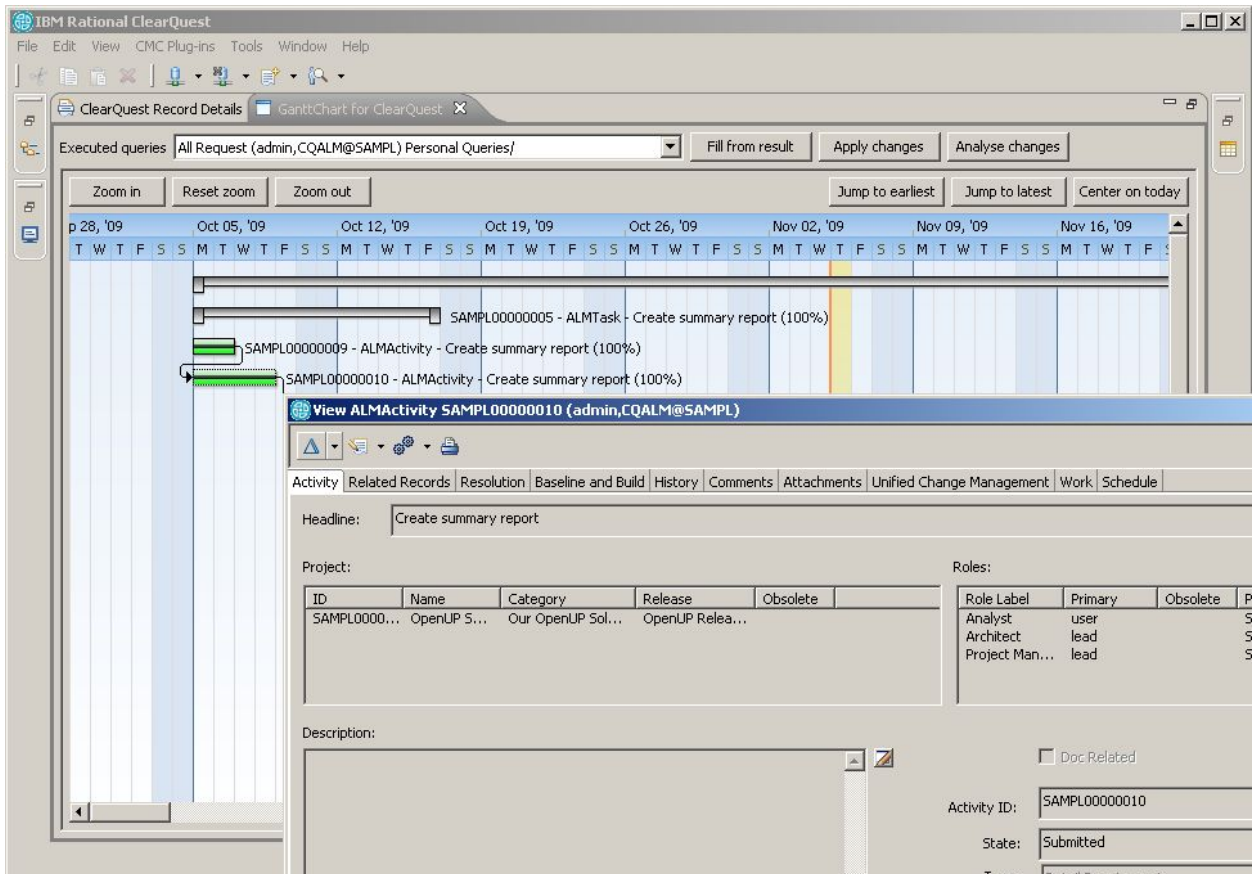


Figure 22. ClearQuest Form Opened from a Gantt Chart

### 8.3 Saving changes of planned dates

GanttChart for ClearQuest supports changing planned dates directly from a Gantt chart. To change planned dates for a task, in the chart, move one on the task's ends by the cursor. To evaluate how the new planned dates differ from the previous ones, right-click the Gantt chart and select **Show Planned Dates** (see Figure 23. Displaying the shift between old and new planned dates). In the chart, additional green and red lines appear indicating the shift between old and new planned start dates and planned finish dates correspondingly. If a task has actual dates, these lines will indicate the shift between actual and planned dates of the task.

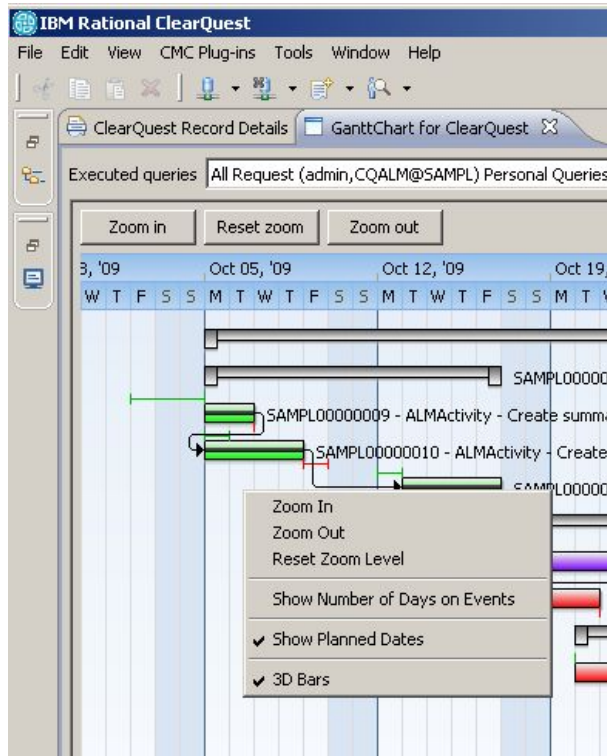


Figure 23. Displaying the shift between old and new planned dates

To save the results of planning in the Gantt chart, you can use two methods (see Figure 24. Saving planned dates):

1. **Complete saving of all changes** Click **Apply changes**. All changes made in the Gantt chart are saved into the ClearQuest change requests.
2. **Selective saving.** Click **Analyse changes**. The **Records to update** dialog box will open containing the list of updated tasks and fields that were changed (see Figure 25. Selecting tasks for saving).
3. In this dialog box, select tasks you want to save.

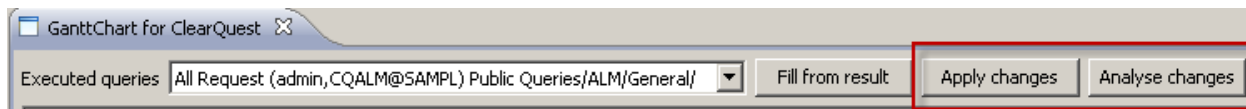


Figure 24. Saving planned dates.

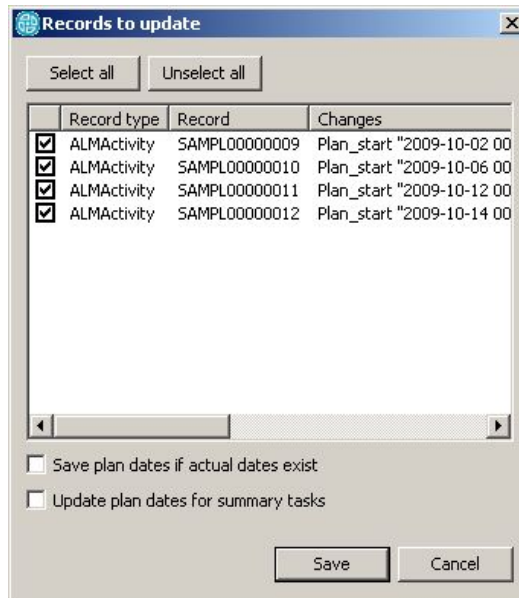


Figure 25. Selecting tasks for saving

The process of updating the planned dates is logged into the console window of the Eclipse client for ClearQuest (see Figure 26. Log of the planned dates saving process):

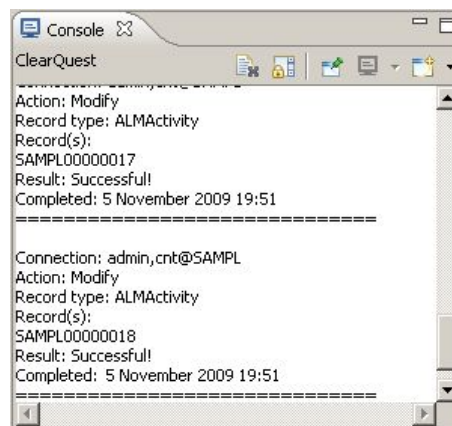


Figure 26. Log of the planned dates saving process

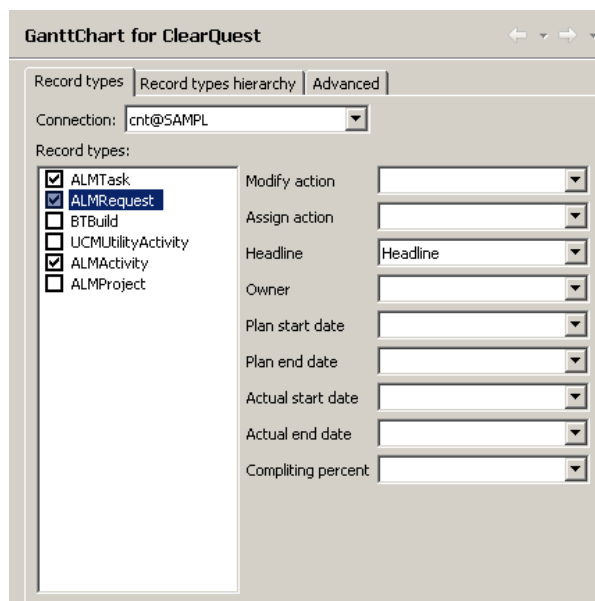
## 9. Appendix A

### Example of ALM-schema configuration

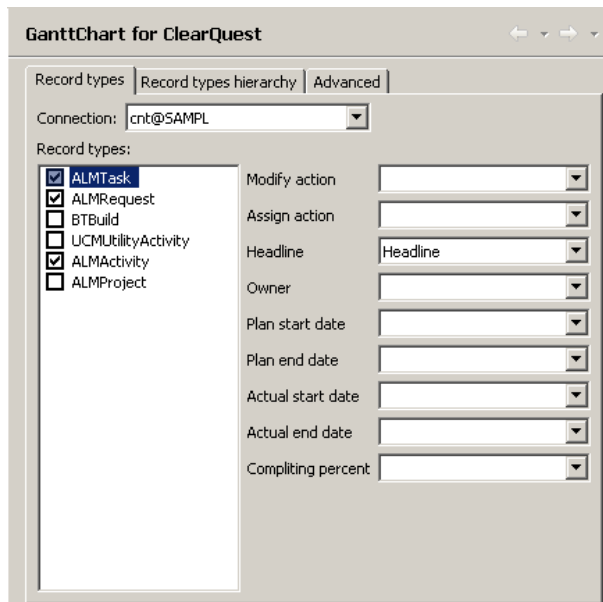
The following configuration is given for guidance only.

This appendix contains detailed description of configuration and step-by-step instructions for adjusting the ALM-schema:

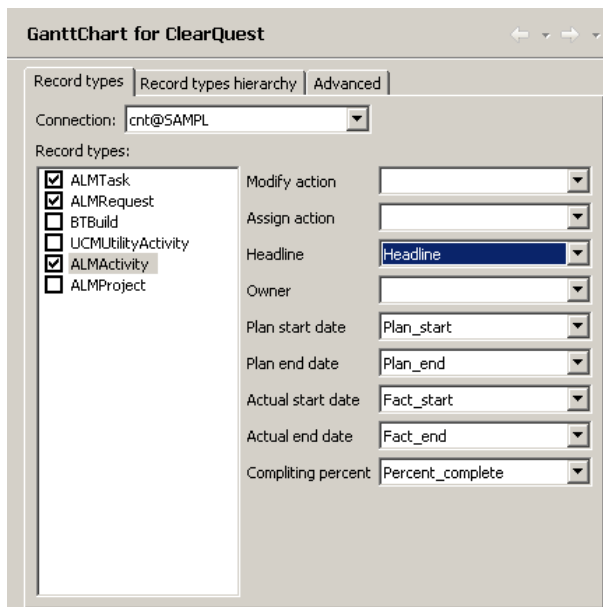
1. **Changes in the schema.** Since the ALM-schema does not have all necessary fields for setting planned and actual dates, you should add them using ClearQuest Designer. For the **ALMActivity** record type it is necessary to add the following fields:
  - a. **Plan\_start** – planned start date, type DATE\_TIME;
  - b. **Plan\_end** – planned end date, type DATE\_TIME;
  - c. **Fact\_start** – actual start date, type DATE\_TIME;
  - d. **Fact\_end** – actual end date, type DATE\_TIME<sup>1</sup>;
  - e. **Percent\_complete** – completion rate, type INT;
  - f. **PredecessorActivity** – predecessor for a task, type REFERENCE\_LIST for the record type **ALMActivity**;
2. Configuring the application
  - a. Configuring fields for ALMRequest:



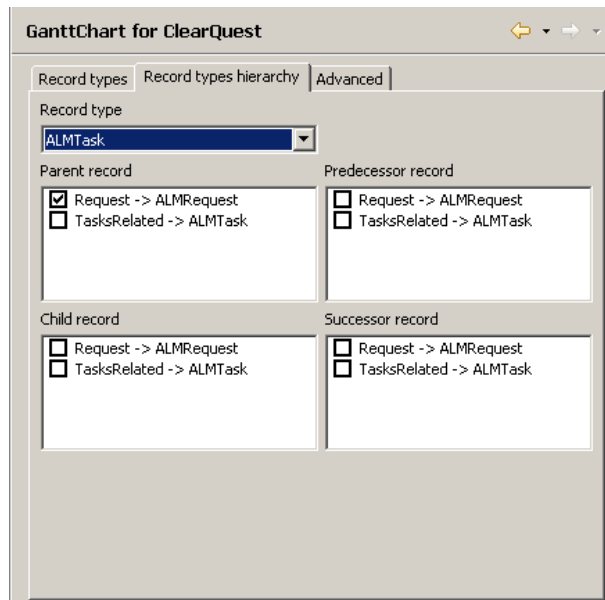
- a. Configuring fields for ALMTask:



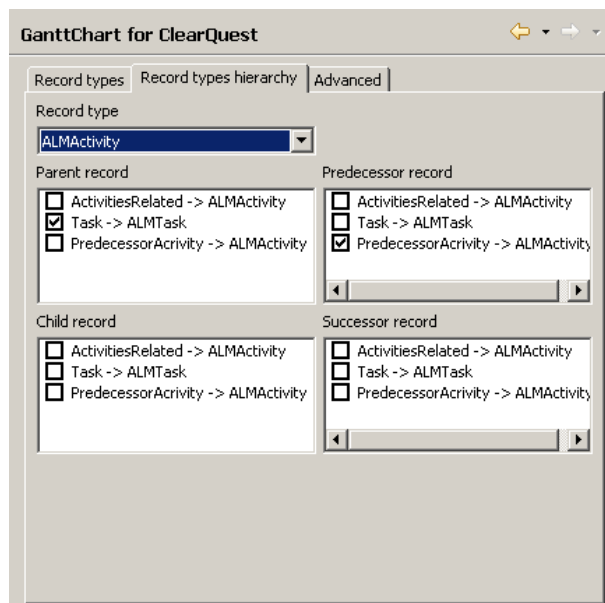
c. Configuring fields for ALMActivity:



d. Configuring relations for ALMTask:



e. Configuring relations for ALMRequest:




---

<sup>i</sup> For the fields with actual dates, it is necessary to write hooks that will automatically fill in dates for a task according to changes of the task's state.