Rational. Change

IBM

Process Guide

IBM Rational Change Process Guide

Release 5.2

Before using this information, be sure to read the general information under Appendix, “Notices” on page 13.

This edition applies to VERSION 5.2 IBM Rational Change Process Guide (product number 5724V87) and to all subsequent releases and modifications until otherwise indicated in new editions.

Table of Contents

1 Introduction

When you deploy IBM® Rational® Change, you must decide which change request (CR) process to install and use. This document provides a high-level overview of the CR process packages that are shipped with the delivered product to help you determine which change process to install and use.

Note The specific steps for using Rational Change are documented in the Rational Change Help. Also, all Rational Change documentation is available in the Rational Software Information Center, located at `http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp`

Choosing a change request process

The CR process manages one or more lifecycles. A lifecycle is a set of rules that governs how users can modify and transition CRs.

The specific lifecycle (including its states and transitions) can be defined to show a unique set of attributes, grant privileges to users so that they can modify some or all attributes, send email notifications about changes made to the CRs, and so forth.

Instead of starting with a new, blank CR process, you can use one of the bundled CR processes, either as-is or as a basis for your own customized CR process. The following are the CR process packages that are shipped with the delivered product:

- “Development Process” on page 7
- “Enterprise Change Process” on page 9

For more information about customizing Rational Change, see the *IBM Rational Change Customization Reference* document, available in the Rational Software Information Center.

Conventions used in this document

The following describes the conventions used in this document.

Typefaces and symbols

The table below describes the typeface and symbol conventions used in this guide.

Typeface	Description
Italic	Used for book titles and terminology. Also designates names of roles (*User*), states (*working*), and users (*sue*).
Bold	Used for items that you can select and menu paths, also used for emphasis.
`Courier`	Used for commands, filenames, and directory paths. Represents command syntax to be entered verbatim. Signifies computer output that displays on-screen. Also used for the names of attributes (`modify_time`), functions (`remote_type`), and types (`csrc`).
`Courier Italic`	Represents values in a command string that you supply. For example, (/home/username).

This document also uses the following conventions:

Note Contains information that should not be overlooked.

Caution Contains critical information that must be observed or damage to the database or system could result.

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, a single reference site for all 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 at 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.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 https://www.ibm.com/software/support/isa/faq.html.

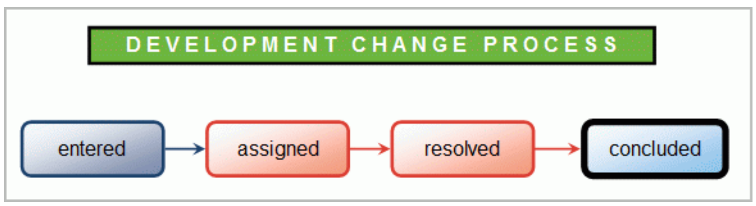
- **By phone**: For the phone number to call in your country or region, go to the IBM directory of worldwide contacts at http://www.ibm.com/planetwide/ and click the name of your country or geographic region.
- **Through your IBM Representative**: If you cannot access IBM Rational Software Support online 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/.

2 Development Process

This chapter provides an overview of the Rational Change development process and briefly describes some of its benefits, features, and usage.

The development process is included with the delivered product and is contained in the `dev_process.xml` file. This process is a methodology for tracking CRs as they transition from being entered into the system to being resolved. The development process provides a basic software development change management lifecycle and is a good starting point for first time users.

The most common transitions and states for the development process are shown in the following figure.



In addition to the above transitions and states, the CR can also be marked as a duplicate of another CR, made obsolete, or rejected.

Benefits and features

The development process:

- Is a simple, easy to use CR lifecycle.
- Is suitable for small to medium teams.
- Provides a good starting point to customize your own process.
- Allows you to view and create IBM® Rational® Synergy tasks.
- Includes pre-made reports to locate and visualize all CRs at one time.
- Is configured to send email notifications when a CR is assigned.

Typical usage

The following is one of many possible scenarios for a CR when using the development process.

This usage scenario involves several users. Based on their assigned privileges, users can perform particular actions for CRs in given states.

- A quality engineer discovers a defect and submits a new CR. The CR begins its lifecycle in the *entered* state.
- A team lead, who has the *assigner* privilege, reviews the CR in the subsystem and determines that the defect should be fixed. Then, the team lead transitions the CR into the *assigned* state and assigns the developer as the resolver of the CR.
- The developer receives email notification and reviews the CR. Then, in Rational Synergy, the developer creates a task to fix the defect and associates that task to the CR.
- The developer performs the work that is necessary to fix the defect and transitions the CR into the *resolved* state.
- The quality engineer verifies that the defect was fixed, determines that the fix is sufficient, and transitions the CR into the *concluded* state.

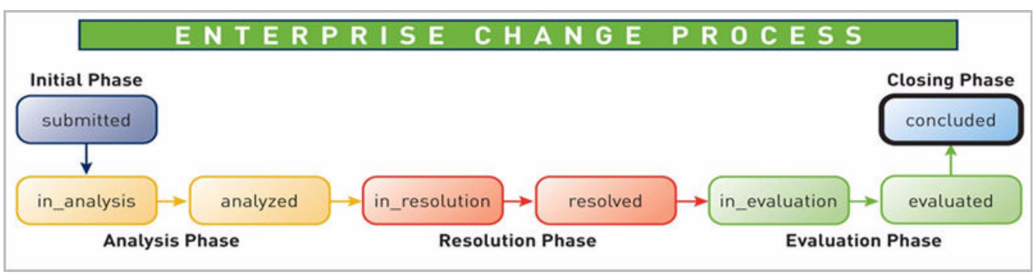
3 Enterprise Change Process

This chapter provides an overview of the Rational Change enterprise change process (ECP) and briefly describes some of its benefits, features, and usage.

ECP is included with the delivered product and is contained in the `ECP_process.xml` file. ECP provides an efficient and systematic enterprise-wide approach to change management. With ECP, you can monitor when defects are introduced and discovered. By analyzing this data, you can reduce development costs and improve product quality by finding defects closer to when they are introduced.

A detailed lifecycle, ECP is comprised of five logical phases:

- Initial
- Analysis
- Resolution
- Evaluation
- Closing



Most ECP phases are comprised of two states: one state to do the required work, and one state to review and sign off on the work before the CR transitions to the next phase.

For a in depth discussion about ECP, see the *IBM Rational Enterprise Change Process* White Paper, located at `http://www.ibm.com/support/techdocs/atsmastr.nsf/Web/WhitePapers`.

Benefits and features

The following are the benefits and features of ECP:

- Provides sign-off authority in critical phases.
- Helps with assessing and avoiding risks.
- Groups attributes on forms into collapsible sections for the phase to which they apply.
- Automatically expands and collapses the phase sections, based on the state of the CR. This allows for fast access to the most relevant details.
- Is designed to scale to support change management needs for small or large teams.
- Was developed with industry best practices in mind. The process is ready for immediate use for many enterprise teams.
- Allows you to view and create Rational Synergy tasks.
- Is ready for immediate use with the `CCMI_MatrixReports` package to provide reports that support high maturity Capability Maturity Model Integration® (CMMI) and Six Sigma®.
    - Phase Containment Effectiveness
    - Phase Screening Effectiveness
    - Weighted Matrix
- Configured to send email notifications at several points in the lifecycle. These notifications include details that are relevant to the current state of the CR.
- Encourages users to maintain actual and estimated effort per CR as it transitions through the lifecycle.
- Supports parent-child relationships. The child CRs:
    - Partition work among different owners or provide fine grained tracking of particular CR phases.
    - Support the same lifecycle as their parent CRs and can have children themselves.
- Incorporates the IBM® Rational® DOORS® lifecycle for optional, easy integration with the IBM® Rational® Change for DOORS® Interface.
- Provides additional privileges so that you have more control over the CRs. For example:
    - Users with the **CRmgr** role are super users who can change almost any attribute and reassign CRs as needed.

- Users with the **CRowner** role have similar abilities, but only for the CRs they own.

Typical usage

The following is one of many possible scenarios for a CR when using ECP.

This usage scenario involves several users. Based on their assigned privileges, users can perform particular actions for CRs in given states.

In this example, the Development team lead has the *assigner* privilege. The review board members have *CRmgr* privileges, so that they can update the CR at any point in the lifecycle.

- A quality engineer discovers a defect and submits a CR. The CR begins its lifecycle in the *submitted* phase.
- A review board receives email notification and reviews the submitted CR. The board determines that the defect should be fixed and transitions the CR into the *analysis* phase by assigning the CR to the Development team lead for review and analysis.
- The Development team lead receives email notification, reviews the CR, and assesses the risk involved in fixing the defect.
- The Development team lead determines that the defect should be fixed, documents the findings, and transitions the CR into the *analyzed* state.
- A manager reviews the CR to determine whether the risk and estimated effort of fixing the defect fits into the current schedule. One option is to postpone the fix for later release. However, in this case, the risk and estimated effort are acceptable, so the CR is transitioned into the *resolution* phase. The Development team lead is assigned as the CR resolver.
- Then, the developer assigned to the CR receives email notification and, in Rational Synergy, creates a task to fix the defect and associates the task to the CR.
- The developer completes the work necessary to fix the defect, and, in Rational Synergy, completes the task. Then, in Rational Change, the developer documents how the defect was fixed, transitions the CR into the *resolved* state, and updates the actual effort required.
- The development team lead reviews the CR, approves the work, and transitions the CR into the *evaluation* phase for testing.
- A quality engineer verifies the fix, documents how the tests were performed, and marks the CR as evaluated.

- The team lead reviews the quality engineer's comments, determines that the testing is sufficient, and transitions the CR into the *concluded* phase.

Appendix: Notices

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