IBM Software Group

IBM® Rational® Application Developer V6.0

ClearCase® Plug-in New Features

To understand the new team programming features in IBM Rational Application Developer V6.0.

At the end of the presentation, you will know how to use the new features in IBM Rational Application Developer V6.0.

Agenda

- Overview
- ClearCase Plug-in
- Summary
- References

Overview

ClearCase SCM Adapter – new features

ClearCase Remote Client for Eclipse

ClearQuest Client for Eclipse

CVS New Features

Summary / References / Glossary

ClearCase: Overview

- When a team of developers edit the same piece of code at the same time, team programming software is needed to manage their source code so that it is not lost, overwritten, etc.

- In IBM Rational Application Developer V6.0 provides Eclipse based CVS and ClearCase plug-ins to help developers solve this problem.

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When a team of developers edit the same piece of code at the same time, team programming software is needed to manage their source code so that it is not lost, overwritten, etc.

In IBM Rational Application Developer V6.0 answers with Eclipse based CVS and ClearCase plug-ins to help developers solve this problem.

ClearCase: Overview

- Rational ClearCase (CC) is a comprehensive client-server tool for version control, workspace management, and build management
  - ▶ Allows for the version control of files and directories into a version tree
  - ▶ Stores versioned data in a network-accessible Version Object Bases or VOB (repository)
- ClearCase has two pieces, a server and a client
  - ▶ IBM Rational Application Developer V6.0 provides the client software (or plug-in) that connects to a ClearCase server
  - ▶ The client piece provides all the control functions (synchronize, checkout, update, etc)
  - ▶ The server holds the VOBs and stores the information
- Supports both pessimistic and optimistic version control models
- Prerequisites
  - ▶ Install ClearCase Server on Windows™ NT/2000/Server machine
  - ▶ NTFS hard-drive format needed

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ClearCase Plug-in New Features   © 2004 IBM Corporation

So what is ClearCase? Rational ClearCase (CC) is a comprehensive client-server tool for version control, workspace management, and build management. It allows for the version control of files and directories into a version tree. Then it stores this versioned data in a network-accessible Version Object Bases or VOB (repository).

ClearCase has two pieces, a server and a client. IBM Rational Application Developer V6.0 provides the client software (or plug-in) that connects to a ClearCase server. The client piece provides all the control functions (synchronize, checkout, update, etc). The server holds the VOBs and stores the information.   Supports both pessimistic and optimistic version control models

Prerequisites

    Install ClearCase Server on Windows NT/2000/Server machine

    NTFS hard-drive format needed

Glossary

- CC LT = ClearCase Light

- CC SCM = ClearCase, Source Control Management

- SDP = Software Development Platform (Rational SDP)

- Atlantic = The name for all Rational software based on Eclipse v3.0.

- RCP = Rich Client Platform, Eclipse base.

- SR3/SR4 = Service Release 3/ Service Release 4

- ClearCase Plug-in = Rational SCM Adapter Plug-in

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ClearCase Plug-in New Features

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Since there are new additions to the ClearCase lineup, it is necessary to introduce a few acronyms….

CC LT = ClearCase Light

CC SCM = ClearCase, Source Control Management

SDP = Software Development Platform (Rational SDP)

Atlantic = The name for all Rational software based on Eclipse v3.0.

RCP = Rich Client Platform, Eclipse base.

SR3/SR4 = Service Release 3/ Service Release 4

ClearCase Plug-in = Rational SCM Adapter Plug-in

CVS = Concurrent Versions System

VOB = Version Object Base

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Section

ClearCase Plug-in

ClearCase Plug-in: New Features Overview

- The ClearCase Plug-in (a.k.a. - CC SCM Adapter Plug-in) is included with all Atlantic SDP products

- ClearCase Plug-in is installed by default with base IBM Rational Application Developer V6.0.

- ClearCase server (full or light version) still needs to installed, still is an option from install window

CC SCM Adapter is included with all Atlantic SDP products

CC LT v2003.06.13 (SR3) is included with all Atlantic SDP products, with the exception of RWD.
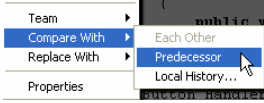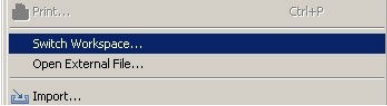
CC SCM Adapter is installed by default. No need to choose optional component at install time

ClearCase server (full or light version) still needs to installed.

Improved compare/merge support

    Integrated with Eclipse compare/merge framework

    Manual Disconnect option – previously you would have to shut down the IDE and
    bring it back up and choose not to connect.

Workspace / view management

    Support for workspace switching
    (Eclipse feature)

Best practices and online help improvements

Improved Disconnected Mode

    Manual Disconnect option
    New preference to auto-hijack a file when editing in disconnected mode

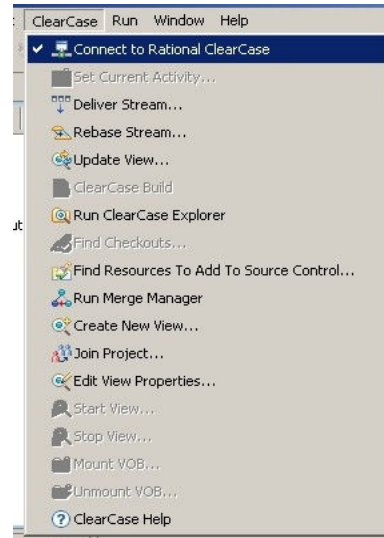Miscellaneous usability enhancements

    New Join Project operation from the ClearCase Menu bar
    Background task for connect operation
    Auto-connect disabled by default

ClearCase Plug-in: Capabilities

- ClearCase Plug-in (SCM Adapter Plug-in) added to new Eclipse "Capabilities" feature
  - allows for a plug-ins menus and functions to appear/disappear as needed
- The ClearCase Plug-in capability is **disabled** by default
- Automatically enabled under following conditions:
  - CC/CC LT is detected at IBM Rational Application Developer V6.0 startup
  - A project is imported from a ClearCase view
  - A project is added to source control (using Team > Share) in a CC view
- Can be turned on and off manually. Go to Window > Preferences > Workbench > Capabilities > Team > ClearCase SCM Adapter.

CC SCM Adapter added to new Eclipse "Capabilities" feature.

Capabilities allow for a plug-ins menus and functions to be turned on and off as needed.

CC SCM Adapter capability is disabled by default and are automatically enabled under following conditions:

CC/CC LT is detected at IBM Rational Application Developer V6.0 startup

A project is imported from a ClearCase view

A project is added to source control (using Team > Share) in a CC view

Can be turned on and off manually. Go to Window > Preferences > Workbench > Capabilities > Team > ClearCase SCM Adapter.

ClearCase Plug-in: Preferences

- Diff Merge Patterns preference page allows user to specify the file patterns they wish to merge using either native CC Diff Merge tools or Eclipse tools
  - ▶ Only valid for file types that can be compared/merged in Eclipse
- New Compare/Merge Server preference page to control behavior of the Eclipse compare/merge server
  - ▶ Important for compares/merges that are invoked externally
- New preferences to control hijack status when files are edited
  - ▶ Allow for more control of how files are treated when working offline
- Changed preferences:
  - ▶ Auto connect to ClearCase, disabled by default.
  - ▶ Fetch CC status on demand only, enabled by default, improves performance.

Diff Merge Patterns preference page allows user to specify the file patterns they wish to merge using either native CC Diff Merge tools or Eclipse tools

Only valid for file types that can be compared/merged in Eclipse

New Compare/Merge Server preference page to control behavior of the Eclipse compare/merge server

Important for compares/merges that are invoked externally

New preferences to control hijack status when files are edited

Allow for more control of how files are treated when working offline

Preference to manually enable/disable capability is under Workbench > Capabilities > ClearCase SCM Adapter

Changed preferences:

Auto connect to ClearCase, disabled by default.

Fetch CC status on demand only, enabled by default, improves performance.

ClearCase Plug-in: Preferences

ClearCase Plug-in: Known Limitations

- Eclipse compare/merge integration will only work for
  - performing comparisons from within IBM Rational Application Developer V6.0
  - for merges that result from checking in a old file (not the latest version of a file)

- All compares/merges that occur external to RAD will result in bringing up the native CC DiffMerge tools, regardless of Compare/merge preference

Know Limitations

Eclipse compare/merge integration will only work for performing comparisons from within RAD or for merges that result from checking in a non-LATEST file

All compares/merges that occur external to RAD will result in bringing up the native CC DiffMerge tools, regardless of Compare/merge preference

Summary

- Rational ClearCase Plug-in has a few new features in IBM Rational Application Developer V6.0

- The ClearCase plug-in is installed with IBM Rational Application Developer V6.0, no separate install

- The ClearCase plug-in is part of Eclipse's Capabilities technology

- There are a few limitations with Eclipse's Compare/Merge and V6's Diff/Merge

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The ClearCase plug-in is part of Eclipse's Capabilities technology

There are a few limitations with Eclipse's Compare/Merge and V6's Diff/Merge

The ClearCase Plug-in will be superceded by the ClearCase Remote Client

References

- ClearCase Plug-in (SCM Adapter Plug-in)
  - http://www-128.ibm.com/developerworks/rational/library/1376.html
  - http://www-306.ibm.com/software/awdtools/clearcase/

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