



IBM Software Group

# IBM® Rational® Application Developer V6

## *CVS Plug-in Client New Features*



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## Goals

- To understand the new CVS Plug-in features in Eclipse 3.0 and available in IBM Rational Application Developer V6.0



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
- CVS Client
- Summary / References



### Overview

ClearCase® SCM Adapter – new features

ClearCase Remote Client for Eclipse

ClearQuest Client for Eclipse

CVS New Features

Summary / References / Glossary

## Section

# *CVS Client*

## CVS Client: Overview

- CVS
  - ▶ Stands for Concurrent Versioning System
  - ▶ is an open-source SCM (Source Control Management) software mostly used by UNIX-based development teams
  - ▶ Uses a client – server model

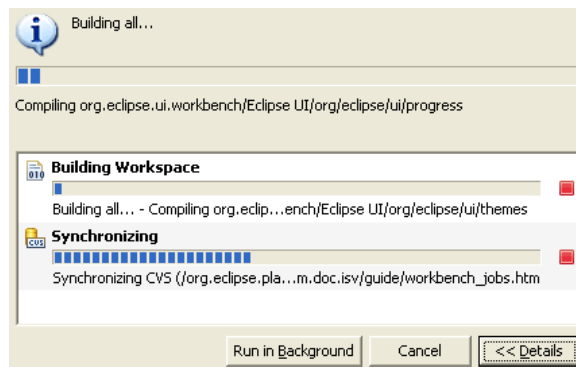


CVS stands for Concurrent Versioning System.

Open source SCM mostly used by UNIX-based development teams.

## CVS Client: Enhancements

- New Progress view
  - ▶ Shows CVS checkout
  - ▶ Workspace building in background operation (Run In Background)

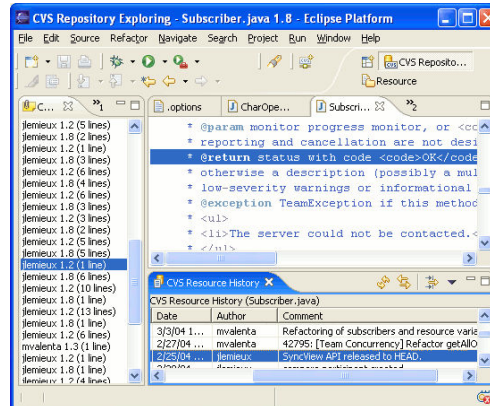


The new Progress view showing the progress of a CVS checkout and a Workspace build background operation. Many user operations can now optionally be run in the background. When you see the progress dialog with the Run In Background button you can select it and the operation you are running will allow you to continue to work. CVS operations have been enabled to run in the background. This means that you can spend more time working and less time looking at the synchronize, update, compare, and checkout progress dialogs.

This dialog also shows you the details of other currently running operations in the workspace and informs you when one operation is blocked waiting for another to complete.

## CVS Client: Blame View – Annotate View

- Annotate View
  - ▶ Shows which user changed or added code to a text based file
  - ▶ Opens the file in editor and highlights code changed when clicking on annotation entry
  - ▶ Able to view resource history while



### Blame View - Show Annotation

Let's say you have found a bug on line 65 of a file and you don't understand the code. Who do you ask, or blame, for the change? Well you could start by looking at the resource history for the file, but that won't tell you who changed that particular line. This is why the Annotate command is useful. You can pick any ASCII file (see note on binary files) and get a listing of who changed what line.

The Show Annotation action is available from the following places: History View, Repository Explorer, Synchronize View, and the Resource and Packages View. When the annotate is run you will be able to:

Step through changes in the Annotate View and the text editor will highlight the associated lines associated with the selected change.

You can select a line in the text file and the Annotate View will select the change that is associated with that line.

The History View will show the history for the opened file and highlight the revision of the currently selected change. This allow you to quickly see the commit comment for a particular change.

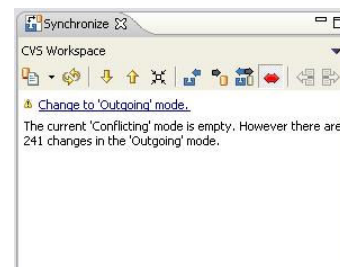
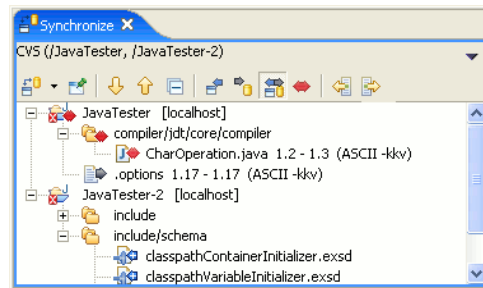
Only works with text files

The annotate command will only work with files that are marked as ASCII in the CVS repository. Also, the command will open a text file to show the changes even if the associated editor in the workbench is a non-text editor. For example, if you run annotate on a plugin.xml file a simple text editor will be opened instead of the full PDE editor.

## CVS Client: Synchronize View

### ■ New Features

- ▶ Multiple synchronizations viewable
- ▶ Dynamically update with workspace changes
- ▶ Problem Markers and label decorations
- ▶ Warnings about filter changes



The Synchronize View has changed significantly since 2.1. Here is a short list of the new features:

Multiple synchronizations can appear in the view. A dropdown action allows navigating between them.

The view dynamically updates when changes are made to the workspace. This means that you don't have to synchronize to browse outgoing changes.

There are new helpful decorations: problem markers are displayed, conflicts are propagated to parents, and when a background operation is working on an element in the view it appears in italics until the operation is complete.

You can configure a synchronize to periodically run in the background.

There are new layouts: hierarchical, compressed folders, commit sets.

### Problem Markers

The Synchronize View now shows error and warning problem markers. This will help users avoid releasing changes that contain problems or are in projects that contain problems.

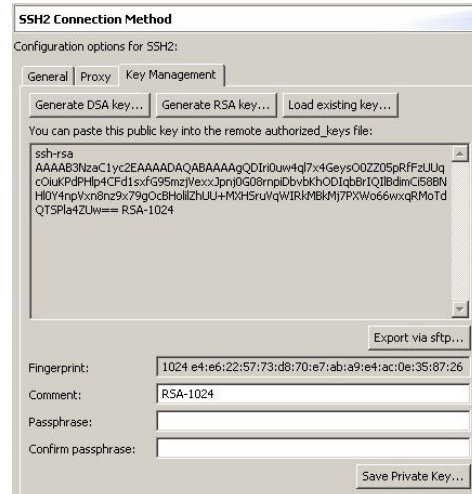
### Global Synchronize Action

A Team Synchronize action has been added that allows quick access to the synchronize actions for loaded repository tools. For CVS, it allows scoped synchronization and ability to schedule synchronizations. The action can be key-bound for quick access.



## CVS Client: SSH2 Support

- SSH2 Encryption added
- Can generate keys from CVS preferences
- Includes an SSH client for accessing a remote CVS server



The **extssh** CVS connection method now supports connecting to CVS servers running SSH2. The **Team > CVS > SSH2 Connection Method** preference page also allows you to create and manage your SSH2 keys.

SSH2 Encryption added

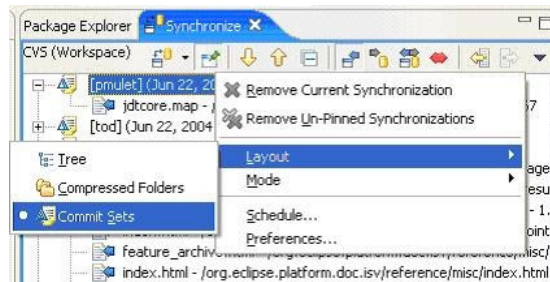
Connecting and configuring CVS with SSH

Eclipse includes an SSH client for accessing a remote CVS server. The client supports both the SSH1 and SSH2 protocol versions. To use SSH2 with a CVS repository select the extssh connection type.

Different methods can be used to authenticate, depending on the level of functionality and security you want. User authentication methods used by the client by default are, in the following order: public-key, Keyboard-Interactive, and password authentication.

## CVS Client: Miscellaneous Updates

- New Layouts
  - ▶ Hierarchical
  - ▶ Compressed folders
  - ▶ Commit Sets
- CVS operations run in background
  - ▶ Synchronize
  - ▶ Update
  - ▶ Compare
  - ▶ Checkout
- CVS Date Tags



The CVS Synchronize view now lets you review changes grouped logically by commit comment, committer, and date. This presentation is selected by the **Layout > Commit Sets** found on the drop down menu of the CVS Synchronize View. CVS operations have been enabled to run in the background. This means that you can spend more time working and less time looking at the synchronize, update, compare, and checkout progress dialogs. You can now use date tags to compare, checkout, merge, or simply browse a CVS repository. You can add date tags from either the CVS Repositories view or from any tag selection page.

## Summary

- The CVS Client is part of the open source Eclipse 3.0 project
- Improved synchronization and UI
- CVS operations run in background to allow the user to work while CVS operations are running



The CVS Client is part of the open source Eclipse 3.0 project

Improved synchronization and UI

CVS operations run in background to allow the user to work while CVS operations are running

## References

### ■ CVS

- [www.cvshome.org](http://www.cvshome.org)
- <http://dev.eclipse.org/viewcvs/index.cgi/platform-vc-home/main.html?rev=1.27>
- <http://dev.eclipse.org/viewcvs/index.cgi/>
- [http://dev.eclipse.org/viewcvs/index.cgi/%7Echeckout%7E/platform-vc-home/docs/online/cvs\\_features2.0/](http://dev.eclipse.org/viewcvs/index.cgi/%7Echeckout%7E/platform-vc-home/docs/online/cvs_features2.0/)

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