Eclipse Technology Project

SUBVERSIVE

Creation Review
December 2006
Summary

**Project name:** Subversive

**Project area:** Subversion (SVN) Team provider for Eclipse

**Goal:** Join eclipse.org as an Eclipse Technology Subproject

**Sponsor:** Polarion Software
Introduction

Current state:

- The Subversion (SVN) becomes one of the most popular version control systems
- SVN support for Eclipse Platform available only through external plug-ins

What people want to see:

- SVN Team provider as a part of Eclipse Platform
- Efforts of SVN plug-ins developers consolidated to create one joint solution

What we propose:

- Use Subversive project as a start point for the Eclipse SVN Team provider creation
Goals

Main goal:

- Provide high quality Eclipse Platform SVN Integration with functionality similar to the Eclipse CVS

Other goals:

- Participate in Team API extension and improvement
- Stimulate SVN community growth
- Propose project inclusion to the standard Eclipse distribution

Main direction:

- Create Eclipse SVN Team provider as an Eclipse Technology Subproject based on code contribution from the Subversive project currently hosted at polarion.org
Scope

- Develop project
- Provide API and extension points for integration with other projects
- Contribute to Eclipse Team Services and SVN improvements
- Provide support to users
- Create project documentation, including help files and specifications
- Follow Eclipse guidelines and best practices
Project Principles

- Similarity to the Eclipse CVS Team project
- Extensibility
- Follow agile development process
- Community feedback gathering
- Self-hosting

Subversive project facts:

- Project is self-hosted for over a year
- Project is integrated with Mylar, Buckminster, FastTrack, and Project Set projects
- New builds are released every week or every two weeks
- Since project publishing, over 1000 user reports have been processed to improve the plug-in
Functionality

Standard operations set:

• Support for all SVN functionality
• Support for all standard features of Team providers
• Operations with the repository
• Synchronize operations

Unique features:

• Full projection of Eclipse refactoring operations into SVN
• Cross-project atomic commit
• Correct cancellation of operations with SVN
• Interactive merge operation, similar to merge in Eclipse CVS plug-in
Architecture

External Plug-ins

UI extension points/UI API

SVN Team UI Plug-in

Eclipse Platform Team Services

Core API

SVN Team Core Plug-in

SVN Client extension point (JavaHL)

JavaHL Client Plug-in

JavaSVN Client Plug-in

External Client Plug-ins
Extension Points

- SVN Client Library
- Checkout Operation
- Commit Operation
- Synchronize View Actions
- Share Project Wizard
- Mail Settings Provider
- Multi-Line Comments in History View
Current Status (at polarion.org)

Two development streams:

- 1.1.x targeted specially at Eclipse 3.2/Callisto
- 1.0.x targeted at Eclipse 3.0, 3.1 and 3.2

SVN 1.1, 1.2, 1.3 and 1.4 support through pluggable client libraries

- standard [JavaHL]
- standard and extended [JavaSVN]

Integration with projects:

- Buckminster
- Fast Track
- Mylar
- Project Set

Project inclusion into the Suse Linux and the Yoxos distributions
Community (at polarion.org)

- The latest version has been downloaded more than 12,000 times
- Over 1,000 posts to the project forum and over 500 posts to the mailing list
- The project was the most popular one on the EPIC site during several weeks
- The project is supported by numerous volunteers who contribute to the project development by sending patches
- One of the volunteers has joined the development team
Initial Project Team

Polarion Software (in alphabetic order):

- Alexander Gurov
- Sergiy Logvin
- Elena Matokhina
- Antonin Pokorny: Project Lead
- Igor Vinnykov

Community volunteers:

- Alessandro Nistico
Schedule

0.7 M1 - January 2007
- Release of Subversive 1.1.0 – transfer to Eclipse as SVN Team provider version 0.7 M1

0.7 M2 - February 2007
- Open API and extensibility

0.7 M3 - March 2007
- Extendable Repository and Project model

0.7 M4 - April 2007
- PSF Editor
- Revision Journal

0.7 M5 - May 2007
- Global Team menu

0.7 Release - June 2007
- Eclipse 3.3 support
- Join to Europa release train

Future directions for the next release
- Ant extensions for SVN
- JavaHL improvements
- Traceability tree
FAQ

Q: What SVN client library is going to be primary?

A: Project architecture allows using extended JavaSVN, standard JavaSVN, JavaHL or any other library. JavaHL library has a compatible with EPL license, which allows library distributing together with the project. JavaSVN has EPL incompatible license and so can’t be distributed together with the project. Because of licensing aspects, JavaHL is used as a default library and included to project distribution. JavaSVN library can be installed as an optional feature from external update sites.

Q: What is the relationship with other Eclipse projects?

A: Subversive team cooperates with Mylar and Buckminster developers to work on integration tasks.