Eclipse Virgo Project Creation Review

Glyn Normington

Quick Facts

- Proposal: http://www.eclipse.org/proposals/virgo
- Creation review date: 24 February 2010
- Communication channel for the review
 - Eclipse forums » Proposals » Virgo
- Mentors: Jeff McAffer, Mik Kersten
- Project lead: Glyn Normington
- Supporters: VMware, SAP, Tasktop

Proposal Summary

- Proposed open source project under EclipseRT
- OSGi server platform built on Equinox
- Based on SpringSource dm Server v2.0
- Mostly enthusiastic community response
 - Widespread coverage (google "+Eclipse +Virgo +OSGi" gives >8000 hits)
 - Jetty integration proposal updated
 - Future of SpringSource Enterprise Bundle Repository under review
 - Doubts of suitability of OSGi for enterprise applications
 - Suspicion that SpringSource is dumping dm Server

Donating dm Server

- dm Server is an existing open source project
- Hosted at http://www.springsource.org/dmserver
- Licensed under GPL v3 with some Apache v2
- Authors: Andy Wilkinson, Ben Hale, Chris Frost, Christian Dupuis, Colin Yates, Damilola Senbanjo, Glyn Normington, Juliet Shackell, Leo Dos Santos, Paul Harris, Paul Kuzan, Radhika Madala, Ramnivas Laddad, Rob Harrop, Sam Brannen, Steffen Pingel, Steve Powell, Terry Hon
- All of dm Server will move to Virgo
- Virgo will be licensed under EPL throughout

Donating dm Server Tooling

- Bundlor and the dm Server tools projects
- Outside "runtime" scope of EclipseRT
- Contribution will be made to existing projects for the sake of consistency
 - WTP, PDE will be approached
 - Will be contributed directly to existing projects, rather than to Virgo initially and moved later, to preserve "runtime" scope of Virgo
- All the tooling will move to Eclipse
- All the tooling will be licensed under the EPL

Components

- Kernel: application model, deployment, configuration, provisioning
- Web support extends Gemini Web Container
- Admin console and shell
- Local/remote repository
- Diagnostics
- Service management extends Gemini Blueprint
- Build system based on Ant, Ivy
- Tests: unit, integration, acceptance
- Documentation, samples
- Development tooling: Bundlor and Eclipse based dm Server tooling

Deployment Artifacts

- OSGi bundles
- Properties files mapped to Config Admin
- Plans
 - List of deployment artifacts in a repository
 - Scoped or unscoped
 - Atomic or non-atomic lifecycle
- Plan archives (PARs)

Kernel Features

- Extensible deployment pipeline
- Provisioning
- Scoping isolates applications from each other
- User region isolates kernel from applications
- Local or remote (ssh) shell

Initial Committers

- Andy Wilkinson, VMware
- Ben Hale, VMware
- Chris Frost, VMware
- Christian Dupuis, VMware
- Glyn Normington, VMware (Project Lead)
- Leo Dos Santos, Tasktop
- Rob Harrop, VMware
- Steffen Pingel, Tasktop
- Steve Powell, VMware

These committers are developers on the existing codebase.

Outline Plan

- Transfer to Eclipse 2Q2010
- Baseline release 2Q2010
 - Functionally equivalent to dm Server 2.0
- First feature release 2H2010
 - Jetty integration
 - Equinox upgrade
 - Select features from product backlog
- Join Eclipse release train 2011

Future Directions

- Tooling discussion with WTP and PDE teams
 - Began in January, will continue at EclipseCon
 - Contribution plan to be defined
- Further integration with EclipseRT, e.g. with p2
- More server types, e.g. integration, batch
- Multiple user regions
- Prototyping in relation to OSGi standards