Virgo Graduation & 2.1.0 Release Review

Planned Review Date: TBA

Communication Channel: Virgo forum

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Introduction

- Virgo is a mature project derived from SpringSource dm Server v2

- Release contents

  - Web server for enterprise Java applications

  - Kernel – base for web server and other server types

  - Samples

  - Documentation

- Virgo is an active project, ready for graduation

  - Committers: 3 (SpringSource/VMware)

  - Non-committer code contributors: 5

Features

- The objective of this release is migration of community and applications from SpringSource dm Server 2.0.x.

- Virgo specific features:

  - 5x startup performance

  - Tomcat & Logback upgrades

  - Equinox console integration

Features (continued)

- Features inherited from SpringSource dm Server:

  - admin console for management and fault diagnosis

  - plans define the artifacts that comprise an application

  - automatic provisioning from local and remote repositories

  - web container for WAR files and Web Application Bundles
    - Built on Gemini Web

  - user region to isolate the kernel from applications

  - Spring 3 - Virgo packages Spring 3.0 final, but can easily be configured to use a different version of Spring

  - hot deployment

  - logging via embedded LogBack

Non-Code Aspects

- User documentation:
    - User Guide
    - Programmer Guide
- Tutorial:
    - Creating an Application with Virgo
- Samples:
    - GreenPages, Formtags, Config props, & OSGi samples
- Webinar
- I18n enabled, English resource files only

APIs

- The APIs in this release meet Eclipse Quality standards

- Migration from dm Server 2.0.x is straightforward and documented

- Some internal APIs have been promoted to external to improve extensibility

Architectural Issues

- Kernel/app isolation allows app dependencies to be upgraded independently of kernel dependencies, e.g. Spring

- Equinox was recently upgraded to 3.6

- Web support based on Tomcat

  - Tomcat provided via Gemini Web

  - Jetty support high priority for post 2.1.0

- Virgo uses 3 OSGi service impls from Apache Felix

  - Migration to Equinox equivalents post 2.1.0

- p2 support under investigation

Tool Usability

- SpringSource Tool Suite supports Virgo

    - Runs a Virgo server instance

    - Fast deploy/debug/update cycle

- We plan to donate this tooling to Eclipse

End-of-Life

- The following dm Server features did not make it through the Eclipse IP process:

    - Jline based kernel shell – replaced by Equinox console command
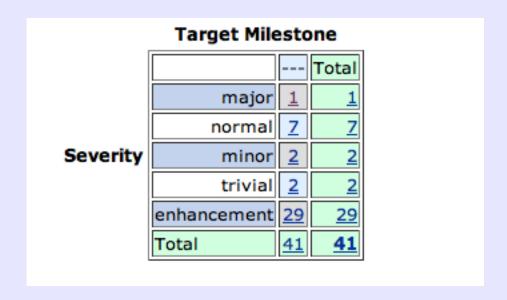
    - Tanuki service wrapper - dropped

Bugzilla

- Fixed
  - Excludes CQ tracking bugs

Target Milestone

Severity	---	2.1.0.M02-incubation	2.1.0.M03-incubation	2.1.0.M04-incubation	2.1.0.M05-incubation	Total
critical	3	.	.	.	.	3
major	1	.	.	.	.	1
normal	35	1	1	2	1	40
minor	3	.	.	.	1	4
trivial	2	.	.	.	.	2
enhancement	4	.	.	4	.	8
Total	48	1	1	6	2	**58**

Bugzilla

- Not fixed, all P3

- Major bug is obscure and relates to deleting symlinks
    - Following up with raiser

Target Milestone

Severity	---	Total
major	1	1
normal	7	7
minor	2	2
trivial	2	2
enhancement	29	29
Total	41	**41**

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Standards

- Virgo requires Java 6 or later

- The Gemini Web container provides support for Web Bundles as defined by OSGi Enterprise Spec v4.2

- Tomcat 6.0.x provides underlying servlet 2.5 support

- Kernel uses prototype composite bundle (OSGi RFC 138) support in Equinox

  - Project lead engaged in OSGi process to standardise this

UI Usability

- Admin Console

  - developed over two releases of dm Server

  - no usability issues raised by users

- Equinox shell command

  - Replaces dm Server kernel shell

  - Lacks tab completion and command history previously provided by the kernel shell

Schedule

- First release slipped from 1Q10 to 4Q10
- First milestone was a stable target for migration testing
    - This shipped in 2Q10

Communities

- Bugzilla in active use by users and contributors

- Virgo forum and virgo-dev similarly active

- Weekly Virgo community call although attendance is low (2-4 people)

- Blogs

    - SpringSource blog covers Virgo milestones

    - Other blogs have complimented Virgo code quality

- Twitter is used for propagating news updates

- Committers have demo'd Virgo at Sofia and Walldorf Eclipse DemoCamps

- Webinar in August

- Presentations at EclipseCon and OSGi conferences

- Interaction with Gemini, Equinox, Jetty, p2, Logback, & Spring projects

IP Log

- The Eclipse IP policies and procedures have been followed

- IP Log:

    - http://www.eclipse.org/projects/ip_log.php?projectid=rt.virgo

    - Not yet frozen

    - 5 CQs still pending for 2.1.0 release

Graduation

- Virgo must exit incubation to release 2.1.0

- The dm Server project came with a stable codebase, a diverse set of users, and an open development process

- The codebase is stable and demonstrable

  - See webinar

- The community is diverse and active

- The project is open and transparent

- The team is adhering to the Eclipse development process and IP policy and relates well to other RT projects. The project lead is an active member of the RT PMC

Credits and Kudos

- Non-commiter code contributors:
  - Nikolai Tankov (SAP AG)
  - Hristo Illiev (SAP AG)
  - Borislav Kapukaranov (SAP AG)
  - Dmitry Sklyut (Chariot Solutions)
  - Olivier Girardot
  - Florian Waibel (EclipseSource)

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