Virgo 3.0.0 Release Review

Planned Review Date: 17-24 August 2011

Communication Channel: Virgo forum

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Introduction

- Virgo is a mature project derived from SpringSource dm Server v2. Version 3 represents the first major functional enhancement since the contribution.

- Release contents

  - Tomcat based web server for enterprise Java applications

  - Jetty based web server for enterprise Java applications

  - Kernel – base for web servers and other server types

  - Snaps framework for modular OSGi web applications

  - Documentation

  - New version of GreenPages sample

eclipse

Features

- The objective of this release is closer integration with other Eclipse RT projects.

- Major features:

  - Provide Jetty based alternative to Virgo Tomcat Server

  - Support snaps modular OSGi web applications framework

  - Upgrade Equinox to 3.7 and OSGi 4.3

  - Upgrade Tomcat to version 7 and Servlet 3.0

  - Upgrade Spring framework to 3.0.5

  - Upgrade Gemini Web to 2.0 and make web behaviour conform strictly to the OSGi web spec

  - Replace the Equinox shell with Apache Felix Gogo, including telnet and ssh access

  - Base region support on OSGi standard framework hooks via Equinox region digraph support

  - Use Equinox rather than Felix OSGi service implementations

  - Allow PARs to contain plans

  - Support OSGi Log service

  - Integrate Declarative Services support in both kernel and user region

  - Separate Configuration Admin instances in kernel and user region

eclipse

Non-Code Aspects

- User documentation:
    - User Guide
    - Programmer Guide
    - Snaps User Guide
    - 2.x to 3.0 migration notes
    - A Guide to the GreenPages Sample
- I18n enabled, English resource files only
- GreenPages sample v2.4.0 will be released with Virgo 3.0

APIs

- The APIs in this release meet Eclipse Quality standards

- Migration from Virgo 2.1 is straightforward and documented

Architectural Issues

- p2 integration deferred to a future release (probably 3.5) as it is taking longer than expected to finalise

Tool Usability

- Virgo tooling has been donated to Eclipse

    - First milestone issued

    - Work in progress to clean up the dependencies and fix various bugs

Incubation Content

- Virgo 3.0 includes bundles from Equinox bundles project that are in incubation

  - Region digraph (moved from Virgo)

  - Console supportability (integrates Apache Felix Gogo)

- Rationale for inclusion

  - Region digraph is stable and mature

  - New console no longer depends on OSGi Alliance standard being finalised

- The download page will note the incubation content to avoid misleading anyone

End-of-Life

- Web Application Bundles are now processed in strict conformance with the OSGi specification

    - Previous behaviour can be enabled by a configuration property

    - This property causes a message to be issued to warn that the property may not be supported in future releases

Bugzilla

› Fixed

Target Milestone

Severity	3.0.0.M01	3.0.0.M02	3.0.0.M03	3.0.0.M04	3.0.0.M05	3.0.0.M06	3.0.0.RC1	Total
critical	1	.	.	.	.	.	.	1
major	3	1	.	2	.	.	2	8
normal	39	4	5	9	12	4	11	84
minor	6	2	1	1	.	1	2	13
trivial	2	1	.	.	2	1	.	6
enhancement	16	1	1	3	7	5	1	34
Total	67	9	7	15	21	11	16	146

Bugzilla

≤ Not fixed

- Both major bugs relate to the tooling

Target Milestone

Severity	---	2.4.0.RELEASE	3.0.0.RELEASE	3.5.0.RELEASE	Total
major	2	.	.	.	2
normal	34	1	1	10	46
minor	.	.	.	1	1
trivial	1	.	.	.	1
enhancement	89	.	.	11	100
Total	126	1	1	22	150

Standards

- Virgo requires Java 6 or later
- Virgo supports OSGi v4.3
- The Gemini Web container provides support for Web Bundles as defined by OSGi Enterprise Spec v4.2
- Tomcat 7 provides underlying servlet 3.0 support
- Kernel uses OSGi standard framework hooks
- Lazily activated bundles are started in conformance with the OSGi specification

UI Usability

- Admin Console

  - no usability issues raised by users

- Shell

  - Completely replaced by new shell based on Apache Felix Gogo

Schedule

- Release slipped from June 2011 to August 2011

Communities

- Bugzilla in active use by users and contributors
- Virgo forum and virgo-dev similarly active
- Weekly Virgo community call
- Blogs
- Twitter is used for propagating news updates
- IRC channel has seen a small number of users
- Committers have demo'd Virgo at EclipseCon and elsewhere
- Presentations at EclipseCon and OSGi conferences
- Interaction with Gemini, Equinox, Jetty, and p2 projects

IP Log

- The Eclipse IP policies and procedures have been followed

- Frozen IP log:

  - https://bugs.eclipse.org/bugs/attachment.cgi?id=200883

Credits and Kudos

- New committers:
  - Hristo Illiev (SAP AG)
  - Borislav Kapukaranov (SAP AG)
  - Violeta Georgieva (SAP AG)
  - Dmitry Sklyut (Chariot Solutions)