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
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
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*

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Bugzilla

- Not fixed
  - Both major bugs relate to the tooling
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)