

# *Virgo 3.0.0 Release Review*

The logo features the word "eclipse" in a white, lowercase, sans-serif font. The letter "i" is replaced by a dark, circular sphere with a bright white highlight on its upper-left edge, creating a 3D effect. Three horizontal white lines pass behind the sphere, extending across the width of the word. The background is a dark blue gradient with a subtle radial glow around the sphere.

eclipse

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

		Target Milestone							
		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
Severity	critical	<u>1</u>	.	.	.	.	.	.	<u>1</u>
	major	<u>3</u>	<u>1</u>	.	<u>2</u>	.	.	<u>2</u>	<u>8</u>
	normal	<u>39</u>	<u>4</u>	<u>5</u>	<u>9</u>	<u>12</u>	<u>4</u>	<u>11</u>	<u>84</u>
	minor	<u>6</u>	<u>2</u>	<u>1</u>	<u>1</u>	.	<u>1</u>	<u>2</u>	<u>13</u>
	trivial	<u>2</u>	<u>1</u>	.	.	<u>2</u>	<u>1</u>	.	<u>6</u>
	enhancement	<u>16</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>7</u>	<u>5</u>	<u>1</u>	<u>34</u>
	Total	<u>67</u>	<u>9</u>	<u>7</u>	<u>15</u>	<u>21</u>	<u>11</u>	<u>16</u>	<u>146</u>

# Bugzilla

- Not fixed
  - Both major bugs relate to the tooling

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

# *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
- IP Log:
  - [http://www.eclipse.org/projects/ip\\_log.php?projectid=rt.virgo](http://www.eclipse.org/projects/ip_log.php?projectid=rt.virgo)
  - Plan to freeze the IP log on 3 August 2011
  - CQs 4309 and 4312 to be removed from frozen IP log as they are not needed for 3.0.0 release



# *Credits and Kudos*

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