



# **Sun GlassFish Enterprise Manager Performance Monitor 1.0 Release Notes**



Sun Microsystems, Inc.  
4150 Network Circle  
Santa Clara, CA 95054  
U.S.A.

Part No: 820-7313-10  
January 2009

Copyright 2009 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology embodied in the product that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more U.S. patents or pending patent applications in the U.S. and in other countries.

U.S. Government Rights – Commercial software. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

This distribution may include materials developed by third parties.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, the Solaris logo, the Java Coffee Cup logo, docs.sun.com, Java, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. or its subsidiaries in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

Products covered by and information contained in this publication are controlled by U.S. Export Control laws and may be subject to the export or import laws in other countries. Nuclear, missile, chemical or biological weapons or nuclear maritime end uses or end users, whether direct or indirect, are strictly prohibited. Export or reexport to countries subject to U.S. embargo or to entities identified on U.S. export exclusion lists, including, but not limited to, the denied persons and specially designated nationals lists is strictly prohibited.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

---

Copyright 2009 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. Tous droits réservés.

Sun Microsystems, Inc. détient les droits de propriété intellectuelle relatifs à la technologie incorporée dans le produit qui est décrit dans ce document. En particulier, et ce sans limitation, ces droits de propriété intellectuelle peuvent inclure un ou plusieurs brevets américains ou des applications de brevet en attente aux Etats-Unis et dans d'autres pays.

Cette distribution peut comprendre des composants développés par des tierces personnes.

Certains composants de ce produit peuvent être dérivées du logiciel Berkeley BSD, licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays; elle est licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, le logo Solaris, le logo Java Coffee Cup, docs.sun.com, Java et Solaris sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc., ou ses filiales, aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui, en outre, se conforment aux licences écrites de Sun.

Les produits qui font l'objet de cette publication et les informations qu'il contient sont régis par la législation américaine en matière de contrôle des exportations et peuvent être soumis au droit d'autres pays dans le domaine des exportations et importations. Les utilisations finales, ou utilisateurs finaux, pour des armes nucléaires, des missiles, des armes chimiques ou biologiques ou pour le nucléaire maritime, directement ou indirectement, sont strictement interdites. Les exportations ou réexportations vers des pays sous embargo des Etats-Unis, ou vers des entités figurant sur les listes d'exclusion d'exportation américaines, y compris, mais de manière non exclusive, la liste de personnes qui font objet d'un ordre de ne pas participer, d'une façon directe ou indirecte, aux exportations des produits ou des services qui sont régis par la législation américaine en matière de contrôle des exportations et la liste de ressortissants spécifiquement désignés, sont rigoureusement interdites.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFACON.

# Sun GlassFish Enterprise Manager Performance Monitor 1.0 Release Notes

---

Sun GlassFish Enterprise Manager Performance Monitor (Performance Monitor) is a client application that connects to and monitors both local and remote installations of Sun GlassFish Enterprise Server, providing a rich set of real-time performance metrics about servers, domains, clusters, instances, web applications, JVMs, and so on.

Built on the NetBeans framework and encapsulating VisualVM, Performance Monitor presents the performance metrics in convenient, easy-to-interpret graphs, and organizes the monitored objects in a way familiar to users of the GlassFish Admin Console.

This document contains the following sections:

- “Revision History” on page 4
- “Platform Requirements” on page 4
  - “Platforms Supported” on page 4
  - “Application Servers Supported” on page 5
- “Known Issues” on page 5
  - “After upgrading to JDK 6 Update 12, Performance Monitor does not display applications (6802057)” on page 5
  - “After a connection is restored, existing inactive views block new views (6794019)” on page 5
  - “After adding a JMX connection, the list of items under the connection takes a long time to display (6794029)” on page 5
  - “Only the domain administration server instance of a cluster displays a JDBC connection pool (6790176)” on page 6
  - “Simultaneous startup of all cluster instances might cause monitoring to fail for some instances (6796388)” on page 6
  - “Using the Profiler adversely affects server performance (6802071)” on page 6
  - “Online help is not available when there is no internet connection (6802082)” on page 7
  - “On Windows Vista, Performance Monitor fails to run after being unzipped using cygwin (6790266)” on page 7

- “On Windows XP, local GlassFish domains might fail to start when both Performance Monitor and Cisco VPN are running (6798749)” on page 7
- “Documentation, Support, and Training” on page 8
- “Third-Party Web Site References” on page 8
- “Sun Welcomes Your Comments” on page 8

## Revision History

Version	Date	Description of Changes
10	January 2009	Initial release version.

## Platform Requirements

Performance Monitor is a Java application, and requires the Java SE Development Kit (JDK) version 6 update 7 (1.6.0\_7) or later.

## Platforms Supported

Performance Monitor 1.0 has been tested on and is supported to run on the following platforms.

Platform	Minimum Memory / Disk Space	Recommended Memory / Disk Space	JVM Version
Solaris 10 (SPARC and x86)	512 MB RAM / 250 MB free	512 MB / 500 MB free	Java SE 6 Update 7
Red Hat Enterprise Linux 4.0 (x86)	512 MB RAM / 250 MB free	1GB / 500 MB free	Java SE 6 Update 7
SUSE Linux Enterprise Server 10 SP1 (x86)	512 MB RAM / 250 MB free	1GB / 500 MB free	Java SE 6 Update 7
Windows XP (x86)	1 GB RAM / 500 MB free	2 GB RAM / 1 GB free	Java SE 6 Update 7
Windows Vista (x86)	1 GB RAM / 500 MB free	2 GB RAM / 1 GB free	Java SE 6 Update 7
Mac OS X 10.5.4 (64-bit x86)	512 MB RAM / 250 MB free	512 MB RAM / 500 MB free	Java SE 6 Update 7

## Application Servers Supported

Performance Monitor 1.0 has been tested with and is supported to work with Sun GlassFish Enterprise Server 2.1.

## Known Issues

### After upgrading to JDK 6 Update 12, Performance Monitor does not display applications (6802057)

After upgrading to JDK 6 Update 12 (1.6.0\_12), Performance Monitor does not display any applications in the Applications window. This issue appears when any application on the system is running JDK 6 Update 12, even if Performance Monitor is running JDK 6 Update 11 or earlier.

**Workaround:** Uninstall JDK 6 Update 12, reverting back to JDK 6 Update 11 (1.6.0\_11).

### After a connection is restored, existing inactive views block new views (6794019)

When Performance Monitor loses the connection to a monitored item, it does not close any open view for that item. Later, if the connection is restored, trying to open a view of the item fails. Instead, Performance Monitor brings the existing inactive view of the item to the front.

**Workaround:** Close the existing inactive view, and then open a new view.

---

**Tip** – You can use the Close Inactive Views command on the Window menu to close all inactive views without having to locate and select each one.

---

### After adding a JMX connection, the list of items under the connection takes a long time to display (6794029)

After adding a JMX connection and then expanding it in the tree pane, the items under the connection can sometimes take more than a minute to display.

**Workaround:** None. When a JMX connection is added, Performance Monitor sends several JMX messages to the connection to build the list of items the connection has available for monitoring. The elapsed response time of these messages depends on many factors, including: the load on the system hosting the domain or instance, the load on the domain or instance hosting the connection, and network bandwidth.

## Only the domain administration server instance of a cluster displays a JDBC connection pool (6790176)

Even when a web application is available and enabled on a cluster, only the domain administration server instance of the cluster displays a JDBC connection pool. The other instances do not.

**Workaround:** In the GlassFish Admin Console, select the JDBC resource associated with the web application. Then, use the Manage Targets command to make the resource available and enabled on the cluster.

## Simultaneous startup of all cluster instances might cause monitoring to fail for some instances (6796388)

When a cluster is started using the `asadmin start-cluster` command or the Start Cluster command in the GlassFish Admin Console, GlassFish starts all the cluster instances simultaneously. In some cases, this simultaneous startup causes some of the instances to start without monitoring available. In Performance Monitor, such instances display "Unavailable" in their Memory and Uptime fields on the cluster view.

This issue has been observed on clusters of 8 instances with JMX over SSL, with the instances distributed on uniform hardware. It might also occur on larger clusters without SSL.

**Workaround:** Start the instances individually at staggered intervals. For example, using a script that starts the instances 10 to 20 seconds apart prevents this issue from occurring. (The exact delay time is hardware dependent.)

## Using the Profiler adversely affects server performance (6802071)

Using the Profiler (available on local GlassFish domains and JVMs) adversely affects performance of the profiled application. When profiling is started, the profiled application is suspended while profiling instrumentation is enabled, and when profiling is stopped, the profiled application is again suspended while profiling instrumentation is disabled. While profiling is active, performance of the profiled application is reduced.

**Workaround:** None. Using the Profiler is not advised on production servers. For preproduction and development systems, here are some tips:

- If you want to profile a web application (not the entire server), use the NetBeans Profiler with its GlassFish integration instead of the Profiler in Performance Monitor. The NetBeans Profiler automatically constrains the profiling instrumentation to the application, so overall server performance is not as greatly affected.

- If you need to profile the server, try to define small rootsets (method entry points) so that only parts of the server get instrumented for profiling. Also, make as much memory and CPU time as possible available to the profiled server and to Performance Monitor.

## Online help is not available when there is no internet connection (6802082)

When running Performance Monitor on a system that does not have an internet connection, online help (available at <http://wikis.sun.com/display/PerfMonitorOLH>) is inaccessible.

**Workaround:** None.

## On Windows Vista, Performance Monitor fails to run after being unzipped using cygwin (6790266)

On Windows Vista, after downloading Performance Monitor and unzipping it using the cygwin command shell, Performance Monitor fails to run. Instead, Windows Vista displays this message:

Windows cannot access the specified device, path or file. You may not have the appropriate permissions to access the item.

**Workaround:** Do not use the cygwin command shell to unzip Performance Monitor.

## On Windows XP, local GlassFish domains might fail to start when both Performance Monitor and Cisco VPN are running (6798749)

On Windows XP, if both Performance Monitor and Cisco VPN are running, attempts to start a local GlassFish domain might fail, producing a series of exceptions.

**Workaround:** Follow these steps:

1. Exit Performance Monitor.
2. Stop any residual Java VMs related to the failed server startup.
3. Start the GlassFish domain.
4. Wait for server startup to complete.
5. Start Performance Monitor.

## Documentation, Support, and Training

The Sun web site provides information about the following additional resources:

- Documentation (<http://www.sun.com/documentation/>)
- Support (<http://www.sun.com/support/>)
- Training (<http://www.sun.com/training/>)

## Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

---

**Note** – Sun is not responsible for the availability of third-party web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other materials that are available on or through such sites or resources. Sun will not be responsible or liable for any actual or alleged damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such content, goods, or services that are available on or through such sites or resources.

---

## Sun Welcomes Your Comments

Sun is interested in improving its documentation and welcomes your comments and suggestions.

To share your comments, go to <http://docs.sun.com> and click Feedback. In the online form, provide the document title and part number. The part number is a seven-digit or nine-digit number that can be found on the title page of the book or at the top of the document.