

# **ServiceGuard Manager Version A.03.00 Release Notes, Third Edition**



**Manufacturing Part Number: B8325-90041**

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# **1 ServiceGuard Manager Version A.03.00 Release Notes, Third Edition**

## Announcements

ServiceGuard Manager is the graphical user interface for ServiceGuard product. With it, you can view and monitor clusters managed by MC/ServiceGuard, ServiceGuard Extension for RAC, MetroClusters, and Continental Clusters. You can also issue common administrative commands.

ServiceGuard Manager replaces ClusterView. It can be launched independently, or from OpenView or ServiceControl Manager.

If you connect to a server running ServiceGuard A.11.12 or later, you can see maps of clusters from local or remote management stations that are running HP-UX, Linux, or Windows.

You can also do common administrative commands through the interface if you connect, with root permission, to an HP-UX server with ServiceGuard A.11.14 or later. These actions are:

- You can run or halt a cluster, node, or package
- You can move a package to a new node
- You can change package- and node-switching flags

Even if you cannot see a particular object in your current map view, an icon on the toolbar warns you about new problems. High-availability alerts are posted when ServiceGuard Manager polls. The Alerts window has aids for analyzing the problems.

If your HP-UX cluster nodes are configured for SNMP, you can receive their SNMP cluster trap messages in the SNMP Browser window. You can set your management station as a trap destination from a tab in the window. Messages can be sorted and re-organized.

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## What's in this Version

Version A.03.00.01 is a minor update of ServiceGuard Manager. It has the same functionality as version A.03.00 (see below). The only change is that it now supports ServiceGuard 11.15 and SuSE Linux. (SuSE is available only in English.) In this document, information about A.03.00 also applies A.03.00.01, unless specifically noted. To see what version you have, go to the Help menu and select "About."

ServiceGuard Manager, versions A.03.00 and A.03.00.01, can be installed on HP-UX, Linux, and Windows. All platforms are available from the web at [software.hp.com](http://software.hp.com), or are delivered on CD ROM:

- Product B8325BA software and license for HP-UX
- Product T1228BA software and license for Linux
- Product B8341BA software and license for Windows

Now, ServiceGuard Manager interface is now available in 5 languages:

- English
- Japanese
- Korean
- Simplified Chinese
- Traditional Chinese

With version A.03.00 and later, you can see clusters on more than one subnet. One instance of ServiceGuard Manager can display several sessions, where each session represents a connection to a Cluster Object Manager. Hewlett-Packard supports up to 10 connected sessions in one instance of ServiceGuard Manager. One new property sheet shows information about all sessions in the map. Also, each session now has its own property sheet.

With version A.03.00 and later, an Alerts icon on the toolbar can show you the most critical problem in all the cluster objects on the map, whether they are visible at the moment or not. Click the Alerts icon, and you see a window with a table of all alerts, problems with clusters, nodes,

## What's in this Version

and packages. These are gathered and updated by ServiceGuard Manager each time it refreshes. In the Alerts window, you can filter and order the messages for help in troubleshooting.

Performance has improved again.

With version A.03.00 and later, problems with ServiceGuard Manager are presented as they occur, and no longer silently added to log files. When you see an error window, click the “details” button to see the log messages. You will see directions there telling you how to report the problem.

ServiceControl Manager Version 3.0 now launches ServiceGuard Manager A.03.00 or later, with for ServiceControl Manager.)

OVO 7.0 now integrates ServiceGuard Manager A.03.00 and later.

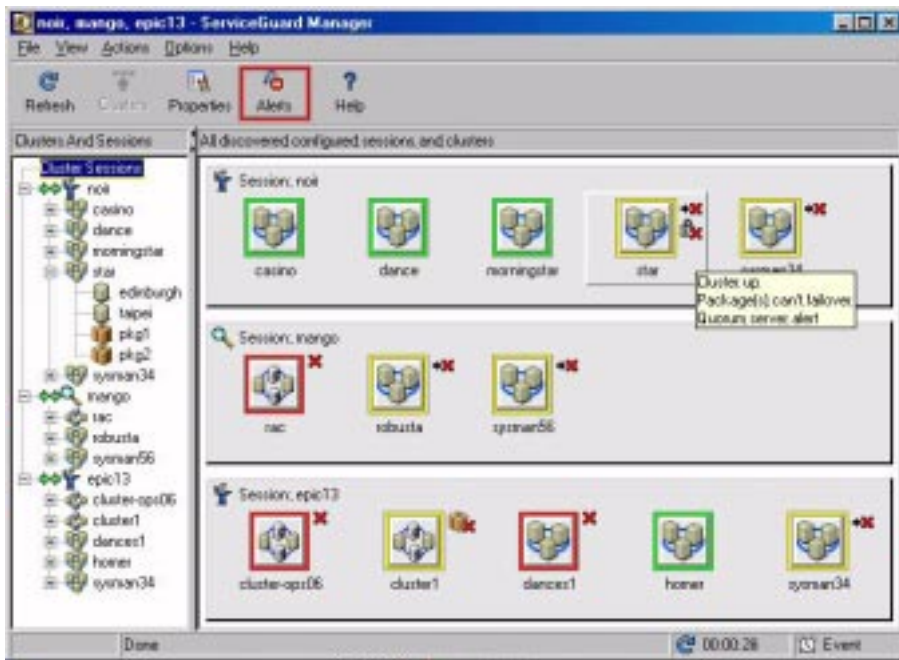
Accessibility has been improved. See the “Accessibility” topic in the Help Table of Contents, under “Using ServiceGuard Manager.”

## What You See

The figure below shows an instance of ServiceGuard Manager with three sessions. The icon by the connection to COM mango shows that the user's role is view-only for those clusters. In the first and last sessions, an icon shows the user can do administrative commands.

The Alerts button tells you there is information about serious alerts. We can see some red-bordered clusters that are down. Also critical are the clusters that have a package icon with a red cross, showing they have packages that are down.

**Figure 1-1 ServiceGuard Manager: All Sessions View**



With ServiceGuard Manager, you see your ServiceGuard clusters three ways.

- In the map on the right pane, you can see configuration relationships by the position of objects in the diagram. You can see status from the colors and symbols. You can also get a small text message about the status if you pause the mouse over a cluster object.
- In the tree on the left pane, you can see cluster relationships listed hierarchically.

You can navigate through the map by clicking an object in the tree. The map pane will show information relevant to the object you clicked. For example, if you click a node, you see that node only, its cluster, and the packages configured to run on it.

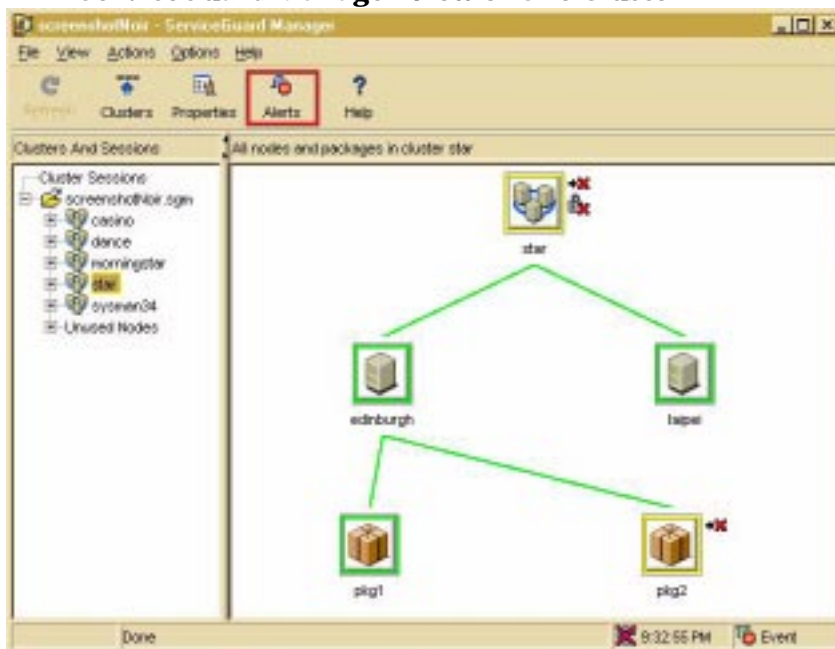
## What's in this Version

- In Properties, you see more detailed information about any session, cluster, node, or package on your map. To open Properties, select an object, then go to the menu on top. Or right-click an object and use the pop-up menu.

You can save a record of your clusters. For example, you could document a newly configured cluster. If that cluster has problems later, you could easily compare the original and current states. Launch two instances of ServiceGuard Manager. Open the saved file in one, and connect “live” in the other. You can navigate both maps, and open equivalent property sheets for comparisons. Messages in the Events Browser are not saved in .sgm files.

The following screenshot shows one of the clusters in Fig. 1.1. The session was saved as screenshotNoir.sgm. When opened, the user navigated to the star cluster for this view.

**Figure 1-2 ServiceGuard Manager View of One Cluster**



This is a saved view of the cluster Star, seen in Fig 1.1. You can see the no-failover alert on the cluster refers to pkg2. Details about the cluster lock alert are in the Cluster Properties in the Quorum Server tab. The

red Alerts button on the toolbar tells you that there is a serious problem in some cluster. Even though you don't see that cluster now, you could click Alerts and get information about it from the Alerts window.

## How it Works

You install ServiceGuard Manager on a management station. This can be HP-UX, Linux, or Windows.

From the management station, you connect to a server with COM (Cluster Object Manager) software on a ServiceGuard node (HP-UX or Linux). (The COM is installed as a part of ServiceGuard.) Each server connection is displayed on the interface as a session.

You tell the COM server to go out on its subnets, and discover ServiceGuard nodes configured for these types of clusters:

- MC/ServiceGuard, Version A.10.10 and later
- ServiceGuard Extension for RAC, Version A.11.14 or later
- ServiceGuard OPS Edition, Version A.11.08 and later
- LockManager, Version A.11.02 and later
- MetroCluster, all versions
- Continental Clusters, all versions

If you use a valid logon and password for a COM server with ServiceGuard A.11.12 or later, you get viewing permission.

To do administrative commands, you must log in as root on an HP-UX server with ServiceGuard A.11.14 or later and Cluster Object Manager Version A.01.03.01 or later. (See "Required and Recommended Patches" in this document.)

The server queries ServiceGuard nodes on its subnet for status and configuration information. If the server has access permissions, the cluster node will supply the information. (See "Before Installing ServiceGuard Manager," below, for a description of configuring node access permissions with `cmclnodelist`.)

This information is used for the map, tree, and properties. Any status alerts are posted in the Alerts window.

Note: Because Continental Clusters are always on more than one subnet, ServiceGuard Manager sees them as two clusters. To see all the information about a Continental cluster, open two separate sessions, connecting to a COM server on each subnet.

## What Documentation is Available for This Version

These Release Notes will help you install ServiceGuard Manager.

Once ServiceGuard Manager is running, online help has the information about how to use the interface. Start with the Help topic "Using ServiceGuard Manager."

Documentation for the ServiceGuard products themselves is available at <http://www.docs.hp.com> and is updated regularly. Click High Availability, then scroll through the alphabetical listings.

You will find two manuals for ServiceGuard:

- *Managing MC/ServiceGuard*
- *Configuring OPS clusters with ServiceGuard OPS Edition*

Two manuals are specifically for ServiceGuard on Linux:

- *Getting Started with ServiceGuard on Linux*
- *ServiceGuard for Linux*

You will also find Release Notes for the following:

- MC/ServiceGuard
- ServiceGuard for Linux
- ServiceGuard Extension for RAC
- ServiceGuard OPS Edition (formerly MC/LockManager)
- MetroCluster
- ContinentalClusters
- ServiceGuard Manager (see end of ServiceGuard list)

You can order the book *Clusters for High Availability: A Primer of HP Solutions*, second edition, by Peter Weygant (HP Press: Prentice Hall, ISBN 0-13-089355-2). This guide describes basic cluster concepts. To see information about this retail book, go to <http://www.hp.com/hpbooks/> and click search, then enter the first few words of the title.

For information about HP-UX, go to: <http://www.docs.hp.com> and scroll to HP-UX in the alphabetical listing.

For information about Red Hat Linux, go to <http://www.redhat.com>

For information about SuSE Linux, go to <http://www.suse.com>

For information about HP OpenView Operations, IT/Operations, and Network Node Manager, refer to:

<http://www.docs.hp.com/hpux/netsys>

### **Further Information**

Additional information about ServiceGuard and high-availability topics may be found on HP's web pages: <http://www.hp.com/hpux/ha> (High Availability) and <http://www.hp.com/linux> (Linux-specific).

Also see <http://www.hp.com/go/ha>.

Support information is available from the Hewlett-Packard IT Resource Center at:

<http://itrc.hp.com> (US and Asia Pacific)

<http://europe.itrc.hp.com> (Europe)

To receive the latest news about recommended patches, product support matrices, and recently supported hardware, go to the IT Resource Center site above, and subscribe to the *High availability programs tips and issues digest*.

The most recent versions of users's guides and white papers are available on Hewlett-Packard's documentation web pages:

<http://docs.hp.com/hpux/ha> (High Availability) and

<http://docs.hp.com/linux> (Linux-specific)

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## Compatibility Information and Installation Requirements

Before you begin an installation, read this entire document and any other Release Notes or READMEs you have.

The following tables summarize the compatibility and requirements of the different releases of ServiceGuard Manager.

**Table 1-1**                      **Compatibility: ServiceGuard Manager A.01.00 (Oct 00)**

<b>SGManager: Hardware and Software</b>	<b>COM (Cluster Object Manager)</b>	<b>Discovered ServiceGuard Clusters</b>	<b>Comments</b>
S700/S800 Workstation with HP-UX 11.x.  Windows NT 4.0, Windows 2000 Professional Edition	COM A.01.01 (SG A.11.12)	SG A.10.10 or later  Metro Clusters, all  Continental Clusters, all	Shows users a tree, graphic map of clusters, nodes, and packages.  Includes basic property sheet.  Can export static cluster map as .sgm file, and a graphic of map as .jpg or .gif

**Table 1-2                      Compatibility: ServiceGuard Manager A.01.01 (Dec 00)**

<b>SGManager: Hardware and Software</b>	<b>COM (Cluster Object Manager)</b>	<b>Discovered ServiceGuard Clusters</b>	<b>Comments</b>
S700/S800 workstation with HP-UX 11.x.  Windows NT 4.0, Windows 2000 Professional Edition	COM A.01.01 (SG or SG OPS Edition, A.11.12)	SG A.10.10 or later  SG/OPS, all  LockManager 11.02  Metro Clusters, all  Continental Clusters, all	Added: automatic polling, new connection dialog including scoping, refreshable property sheets.  Japanese version available.

**Table 1-3                      Compatibility: ServiceGuard Manger A.01.02 (Jun 01)**

<b>SGManager: Hardware and Software</b>	<b>COM (Cluster Object Manager)</b>	<b>Discovered ServiceGuard Clusters</b>	<b>Comments</b>
Added: Red Hat Linux 7.1 (kernel version 2.4.2.)  S700/S800 workstation with HP-UX 11.0 and 11.11  Also Windows 2000 Professional Edition or NT 4.0 or later	COM A.01.01 (with SG or SG OPS A.11.12)  or A.01.03 (with SG or SG OPS A.11.13)	SG A.10.10 or later  SG OPS Edition, all  LockManager A.11.02  Metro Clusters, all  Continental Clusters, all	Added support for System Multi-node Packages.  Usability improvements for icons and badges, menu and toolbar, property sheet.

**Table 1-4                      Compatibility: ServiceGuard Manager A.02.00 (Oct 01)**

<b>SGManager: Hardware and Software</b>	<b>COM (Cluster Object Manager)</b>	<b>Discovered ServiceGuard Clusters</b>	<b>Comments</b>
<p>S700/S800 workstation with HP-UX 11.0, HP0UX 11.11, or Red Hat Linux 7.1 (kernel version 2.4.2)</p> <p>Windows NT 4.0, Windows 2000 Professional Edition, or XP Professional Edition</p>	<p>Monitor: COM A.01.01 (SG 11.12 or SG OPS Ed 11.12)</p> <p>COM A.01.03 (SG or SG OPS 11.13, and Linux 11.13)</p> <p>Admin: COM A.01.03.01 (SG 11.14 or SG OPS Ed 11.14)</p>	<p>SG A.10.10 or later</p> <p>SG OPS Edition, all</p> <p>Lock Manager A.11.02</p> <p>Metro Clusters, all</p> <p>Continental Clusters, all</p>	<p>Basic administration when user is connected to HP-UX COM as root:</p> <ul style="list-style-type: none"> <li>* Run or halt a cluster, node, and package, (including system multi-node packages).</li> <li>* Move package to another node.</li> <li>* Change package/node switching.</li> </ul> <p>For Quorum Server, add a property sheet, and a status badge on the map.</p>

**Table 1-5                      Compatibility: ServiceGuard Manager A.02.01 (Mar 02)**

<b>SGManager: Hardware and Software</b>	<b>COM (Cluster Object Manager)</b>	<b>Discovered ServiceGuard Clusters</b>	<b>Comments</b>
<p>S700/S800 workstation with HP-UX 11.0, HP-UX 11.11, HP-UX 11.22, or Linux Red Hat 7.1 or greater. Kernel version 2.4.2</p> <p>Windows: 2000 Prof, XP Prof, NT 4.0</p> <p>Red Hat Linux 7.1 (kernel 2.4.2) Red Hat AS 2.1</p>	<p>Monitor: COM A.01.01 (SG or SG OPS Ed 11.12)</p> <p>COM A.01.03 (SG or SG OPS Ed 11.13 and SG Linux 11.13)</p> <p>Admin: COM A.01.03.01 (SG 11.14.01, SG OPS Ed 11.14)</p>	<p>SG A.10.10 or later</p> <p>SG Ext RAC, all</p> <p>SG OPS Ed, all</p> <p>SG Linux, all</p> <p>Metro Clusters, all</p> <p>Continental Clusters, all</p>	<p>Event Browser added.</p> <p>Add support for OPS packages, with new status badges on the map.</p> <p>Support for HP-UX 11.22.</p>

**Table 1-6                      Compatibility: ServiceGuard Manager A.03.00 (Dec 02)**

<b>SGManager: Hardware and Software</b>	<b>COM (Cluster Object Manager)</b>	<b>Discovered ServiceGuard Clusters</b>	<b>Comments</b>
<p>No change:  S700/S800 workstation with HP-UX 11.0 HP-UX 11i v 1, or Linux Red Hat 7.1 or greater. Kernel version 2.4.2</p> <p>Windows: 2000 Prof, XP Prof, NT 4.0</p> <p>Red Hat Linux 7.1 (kernel 2.4.2) Red Hat AS 2.1</p>	<p>Monitor:  COM A.01.01 (SG or SG OPS Ed 11.12)</p> <p>COM A.01.03 (SG 11.13 or SG OPS Ed 11.13)</p> <p>Admin:  COM A.01.03.01 (SG or SG OPS Ed 11.14)</p> <p>COM A.02.01.01 (SG Linux 11.14.02)</p>	<p>SG A.10.10 or later</p> <p>SG Ext RAC, all</p> <p>SG OPS Ed, all</p> <p>SG Linux, all</p> <p>Metro Clusters, all</p> <p>Continental Clusters, all</p>	<p>Can have several sessions, one for each COM connection.</p> <p>Each session has a property sheet.</p> <p>Support for ServiceGuard Extension for RAC, with new cluster tab and distinguishing cluster icon.</p> <p>Available in English, Japanese, Korean, Traditional Chinese, and Simplified Chinese</p>

**Table 1-7                      Compatibility: ServiceGuard Manager A.03.00.01 (Jun 03)**

<b>SGManager: Hardware and Software</b>	<b>COM (Cluster Object Manager)</b>	<b>Discovered Service- Guard Clusters</b>	<b>Comments</b>
<p>S700/S800 workstation with HP-UX 11.0, HP-UX 11i v 1.0, or Linux: Red Hat 7.1 or SuSE 8</p> <p>Windows: 2000 Professional Edition, XP Professional, NT 4.0</p>	<p>Monitor: COM A.01.01 (SG or SG OPS Ed 11.12)</p> <p>COM A.01.03 (SG or SG OPS Ed 11.13, SG Linux 11.13)</p> <p>Admin: COM A.01.03.01 (SG or SG OPS Ed 11.14)</p> <p>COM A.02.01.01 (SG Linux 11.14.02)</p>	<p>SG A.10.10 or later</p> <p>SG Ext RAC, all</p> <p>SG OPS Ed, all</p> <p>SG Linux, all</p> <p>Metro Clusters, all</p> <p>Continental Clusters, all</p>	<p>Same functionality as A.03.00.00</p> <p>Support for ServiceGuard A.11.15 on HP-UX 11.11</p> <p>Support for SuSE Linux (SuSE is available only in English.)</p>

**Table 1-8                      Compatibility: ServiceGuard Manager A.03.00.01 (Sept 03)**

<b>SGManager: Hardware and Software</b>	<b>COM (Cluster Object Manager)</b>	<b>Discovered Service- Guard Clusters</b>	<b>Comments</b>
<p>Add SuSE Linux S700/S800 workstation with either:</p> <ul style="list-style-type: none"> <li>• HP-UX: 11.0, 11.i v 1.0</li> <li>• Linux: Red Hat 7.1 or SuSE 8</li> </ul> <p>Or a PC with one:</p> <ul style="list-style-type: none"> <li>• Windows 2000 Professional Edition</li> <li>• XP Professional</li> <li>• NT 4.0</li> </ul> <p>HP-UX Integrity Servers:</p> <ul style="list-style-type: none"> <li>• 11i v2</li> </ul>	<p>Monitor:</p> <p>COM A.01.01 (SG or SG OPS Ed 11.12)</p> <p>COM A.01.03 (SG or SG OPS Ed 11.13, SG Linux 11.13)</p> <p>Admin:</p> <p>COM A.01.03.01 (SG or SG OPS Ed 11.14)</p> <p>COM A.02.01.01 (SG Linux 11.14.02)</p>	<p>SG: A.10.10 or later</p> <p>SG Ext RAC: all</p> <p>SG OPS Ed: all</p> <p>SG Linux: all</p> <p>Metro Clusters: all</p> <p>Continental Clusters: all</p>	<p>Same functionality as A.03.00.00</p> <p>Support for ServiceGuard A.11.15 on HP-UX 11i v 1 and v 1.5, and v 2.0</p> <p>Support for SuSE Linux (SuSE is available only in English.)</p>

### **System requirements**

ServiceGuard Manager version A.03.00 and A.03.00.01 can be installed on a computer with one of the following operating systems:

- HP-UX, Version 11.0 or later, except for HP-UX 11 i v 1.6. ServiceGuard Manager Version A.03.00 installs on most HP-UX versions. However, HP-UX 11i version 1.6 (11.22) requires ServiceGuard Manager Version A.02.01.

Viewing ServiceGuard Manager through Reflection X is not supported.

- Red Hat Linux Advanced Server Release 2.1.
- SuSE Linux, SLES (Linux Enterprise Server), version 8, United Linux version 1.0, with kernel version 2.4.19-64GB-SMP. (SuSE is available only in English.)
- Microsoft Windows XP Professional Edition, Windows 2000 Professional with Service Pack 1 or later, or NT 4.0 with Service Pack 5 or later, and with a video adapter of SVGA or higher resolution.

## Hardware Requirements

ServiceGuard Manager will run on the HP 700 Series workstations and the HP 800 Series servers.

ServiceGuard Manager will run on a PC with a Pentium II 200 MHz or higher, and a video adapter with resolution of SVGA or higher.

## Memory Requirements

Running on HP-UX, these are the minimum requirements for ServiceGuard Manager:

- 256 MB of available memory
- 65 MB of available hard disk space under `/opt`
- 1 MB of available hard disk space under `/usr`
- 1 MB of available hard disk space under `/etc/opt/OV` if OpenView is installed.
- 3-15 MB of available hard disk space under `/var` for log files.

Running on Red Hat or SuSE Linux, these are the minimum requirements for ServiceGuard Manager:

- 128 MB of available memory
- 100 MB of available hard disk space under `/usr/local`
- 15 MB of additional hard disk space available for log files created when ServiceGuard Manager is run:
  - Red Hat: `/usr/local/sgmgr/log`
  - SuSE: `/opt/sgmgr/log`

Running on Windows, these are the minimum requirements for ServiceGuard Manager:

- 128 MB of memory
- 25 MB of available hard disk space
- 15 MB for log files when ServiceGuard Manager is run.
- Up to 30 MB of additional hard disk space during the installation process.

## Port Requirements

ServiceGuard Manager itself does not have any requirements about ports.

ServiceGuard does, particularly when interacting with internal firewalls. If you are using a firewall such as Bastille, and connecting to a Cluster Object Manager outside the cluster, these rules apply:

*Each ServiceGuard Manager node must allow these connections:*

- from the cluster nodes:
  - udp on port 162
- to the cluster nodes:
  - udp on port 161

*Each ServiceGuard node must allow these connections:*

- from the ServiceGuard Manager node:
  - udp on port 161
- to the ServiceGuard Manager node:
  - udp on port 162
- to the COM node:
  - tcp on port 5303 - and allow only packets with SYN flag.

*Each cluster node must allow these connections:*

- from the COM node to the cluster nodes:
  - tcp on port 5302 and allow only packets with the SYN flag

- udp on port 5302
- to the COM node from the cluster nodes
  - tcp and udp on port numbers 49152-65535 from the cluster nodes

*The node running the COM must allow these connections:*

- from ServiceGuard Manager to the COM node:
  - tcp on port 5303 - and allow only packets with the SYN flag
- from cluster nodes to the COM:
  - tcp and udp on port numbers 49152-65535 from the cluster nodes
- to the cluster nodes
  - tcp on port 5302 - and allow only packets with the SYN flag
  - udp on port 5302

Each cluster node should allow SNMP connections between it and the ServiceGuard Manager node. The Event Browser in ServiceGuard Manager can receive messages from SNMP traps. SNMP requires ports 161 and 162. The list of port assignments is in the */etc/services* file.

Because SNMP uses a single dedicated port, only one application can receive messages. For more information about SNMP, open online help and go to Troubleshooting Clusters, SNMP Problems.

## Installing and Running ServiceGuard Manager

### Installing Software

You can install ServiceGuard Manager on an HP-UX workstation (with or without ServiceGuard), on a Linux workstation (with or without ServiceGuard), or on a PC with Windows XP Professional Edition, Windows NT, or Windows 2000 Professional.

If a previous version of ServiceGuard Manager is already installed, uninstall it before installing the new version. See information about uninstalling below.

### Before Installing ServiceGuard Manager

When deciding where to install ServiceGuard Manager, consider the connections from users to the server nodes, the connection from the server nodes to cluster nodes, and creating the security you want.

- Which operators will use the interface, and on which computers?

To *view* a cluster, the ServiceGuard Manager operator needs a logon and password on at least one server on the cluster's subnets. The server is a node with ServiceGuard A.11.12 or later.

To *administer* clusters on the map, these three things must be true:

- The user is logged in to the server node as root
  - The server has ServiceGuard, Version A.11.14 or later installed, with patches.
  - The server node has Cluster Object Manager, Version A.01.03.01 or later.
  - The server node must be allowed to interact with the target nodes.
- Security Considerations

If you are an experienced ServiceGuard user, you may notice that the way a ServiceGuard Manager user gets information about remote clusters is similar to the way a ServiceGuard command-line user can

issue the `cmviewcl` command to get information about a remote cluster. Using ServiceGuard Manager, certain users can also relay the most common administrative commands to ServiceGuard clusters, and the effect is the same as logging into the node and issuing the command on the command line.

Please notice, however, that the permissions and access mechanisms are *not* the same. The ServiceGuard Manager user's permissions depend on his login to the *server*, not the cluster node. It is the server that interacts with the cluster nodes on the user's behalf, through the Cluster Object Manager, a ServiceGuard API.

A ServiceGuard Manager user does not need any direct access to the target nodes that are displayed in the map. The configuration and status information is collected by his server node and sent back to the management station.

The server node always accesses other ServiceGuard nodes as `user=root`. The server needs access to the nodes. The recommended access mechanism is to include the server name or IP address in the target nodes' `cmclnodelist` file. A less secure way is to include the server node in a target node's `.rhosts` file. Listing in `cmclnodelist` limits contact to ServiceGuard; a listing in `.rhosts` grants wider access.

If the user is logged in to the server node as root, the server node will also display certain common administrative commands in the menu. The server relays these commands to the clusters in the session for the users.

If you are updating from an earlier version, think about permissions on your HP-UX nodes with ServiceGuard Version A.11.13 or later, with Cluster Object Manager Version A.01.03.01 or later. Any person who can log in to that node as root may be able to do administrative commands on any cluster objects on that node's subnets. If you do not want access, you can limit the root logins on that node, or limit that node's access to particular clusters on its subnets.

## Installing Software

You can install ServiceGuard Manager on three platforms: HP-UX, Linux, or Windows. The methods are slightly different for each. Use the section below that is appropriate for your type of installation.

There are two ways to install ServiceGuard Manager: from the HP ServiceGuard Distributed Components disk, or from this web site: <http://www.software.hp.com>. You can choose the English, Japanese, Korean, Simplified Chinese, or Traditional Chinese version.

ServiceGuard Manager installs its own JRE (Java Runtime Environment™), and can not use any other JRE that may already be installed.

If you are updating from an earlier version, first uninstall the earlier version.

If you update from an earlier version of ServiceGuard Manager, your user preference files will be replaced with default settings. The new preference files are compatible with architecture changes in ServiceGuard Version A.03.00 and A.03.00.01. Earlier preferences cannot be carried over.

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**NOTE**

ServiceGuard Manager supports system default colors for all platforms. Most system settings work, but a custom color setup could cause problems. For example, you may see what seems to be an empty box. However, when you drag the mouse to highlight it, you may discover that your system is displaying white font on a white background. If you restore the system to default colors, you will be able to see things as they were designed.

---

**Installing ServiceGuard Manager on HP-UX** You can install Version A.03.00 or A.03.00.01 of ServiceGuard Manager on a computer with bundles specifically for HP-UX Version 11.0 or 11.11.

On 11.23 (11iv2), you can install ServiceGuard Manager A.03.00.01.

Versions A.03.00 and A.03.00.01 of ServiceGuard Manager are not supported on HP-UX 11iv 1.6 (11.22). The ServiceGuard Manager depot for 11iv6 (on the HP Distributed Components Disk or <http://software.hp.com>) automatically installs ServiceGuard Manager Version A.02.01. The Release Notes for version A.02.01 are on the HP Distributed Components Disk, and at <http://docs.hp.com> -> high availability.

For 11iv2, you can only install from the web. For other configurations, you can install from two places:

- To install from the HP ServiceGuard Distributed Components disk:
  1. Mount the CD-ROM directory, choosing `/SD_CDROM` for your mount directory.
  2. Enter the `swinstall` command.
  3. When the window opens, set Source Depot Type to: `LocalCDROM`.  
For Source Depot Path, fill in the appropriate release name. For example, if you have HP-UX 11.22, use:  

```
SD_CDROM/SGManager/HP-UX/11.22/sgmanager.depot
```
  4. `swinstall` allows you to select: `B8325BA A.03.00 ServiceGuard Manager` or `B8325BA A.03.00.01 ServiceGuard Manager for HP-UX 11.00 and HP-UX 11.11`. (For HP-UX 11.22, select `B8325BA A.02.01 ServiceGuard Manager`). Select the appropriate platform, then start the install.
- To install from the web, go to <http://www.software.hp.com>. Click High Availability, then ServiceGuard Manager for HP-UX. Fill out the information form. A download window opens.
  1. Select your operating system from the “Software Specification” pull-down list. (To see the version of HP-UX, use the `uname` command.) Available versions are HP-UX 11.00, 11.11, 11.22, and 11.23 (11iv2). The 11.22 build will install ServiceGuard Manager A.02.01, the only version available for 11.22. The 11.0, 11.11, and 11.23 (11iv2) build can install ServiceGuard Manager A.03.00 or A.03.00.01. The 11.23 (11iv2) build can install A.03.00.01.
  2. Download the depot, and store it on your disk, perhaps in the `/tmp` directory. To save disk space, you can remove this depot from your disk when you have finished installing.
  3. Run the `swinstall` command on this depot. The user interface will lead you through the installation (mark, analyze, install). Select the `B8325BA ServiceGuard Manager` product. Depending on your operating system, choose `B8325BA_11.00`, `B8325BA_11.11`, `B8325BA_11.22` or `B8325BA_11.23`.

After `swinstall` completes, verify the installation:

1. Is the man page installed? (Enter: `man sgmgr`)
2. Was the directory created for log files? (Enter: `ll /var/opt/smgr`)

3. Are all the program files in the installation directory? If you install in the default directory, you should see the following when you enter

```
ll /opt/sgmgr/* :
```

- bin
- examples
- jre
- lib
- OV (if HP OpenView is installed)

ServiceGuard Manager installs its own JRE (Java™ Runtime Environment) and cannot use any other JRE on the computer.

If you are updating from an earlier version of ServiceGuard Manager, your user preference files are replaced with default settings. The new preference files are compatible with architecture changes in ServiceGuard Manager Version A.03.00. Your old preferences cannot be carried over.

If you have Network Node Manager or OpenView Operations installed on this computer, also see the section below, *Installing with HP OpenView*.

For more information about installation procedures and related issues, refer to the man page for `swinstall`. Also see the manual *Managing HP-UX Software with SD-UX*, which can be viewed or printed from <http://www.docs.hp.com> -> HP-UX 11.0 Operating System -> System Administration.

**Installing ServiceGuard Manager on Linux** Install ServiceGuard Manager on a computer that has one of these versions of Linux:

- Red Hat Linux, version 7.1 or later, with kernel version 2.4.2 or later.
- SuSE Linux, SLES (Linux Enterprise Server), version 8, United Linux version 1.0, with kernel version 2.4.19-64GB-SMP. (SuSE is available only in English.)

You can install from two places: from a disk or from a browser

- To install from the ServiceGuard Distributed Components CD:
  1. Insert the disk and mount the CD-ROM drive. Choose a name for your directory, for example `</SGM_ROM>`.

2. From `</SGM_ROM>/SGManager/LINUX`, enter:

— For Red Hat Linux:

```
rpm -i sgmanager-A.03.00-1.product.redhat.i386.rpm
```

or

```
rpm -i sgmanager-A.03.00.01-1.product.redhat.i386.rpm
```

— For SuSE Linux:

```
rpm -i sgmanager-A.03.00.01-1.product.suse.i386.rpm
```

• To install from the web:

1. Go to <http://www.software.hp.com> Click **High Availability**. Click **ServiceGuard Manager** in the alphabetical list.

2. Save the `sgmanager-A.03.00-1.product.redhat.i386.rpm` file to your disk. (To save disk space, you can remove the rpm file when installation is done.)

3. From the directory where you saved the file, run the install process with this command:

— For Red Hat Linux:

```
rpm -i sgmanager-A.03.00-1.product.redhat.i386.rpm
```

— For SuSE Linux (English only):

```
rpm -i sgmanager-A.03.00-1.product.suse.i386.rpm
```

After rpm completes, verify the installation:

1. Is the man page installed? (Enter: `man sgmgr`)

2. Are all the program file directories in the installation directory? By default, the Red Hat default directory is `/usr/local/sgmgr/`. By default, the SuSE install directory is `/opt/sgmgr/`.

- bin
- examples
- jre
- lib
- log
- users

## Installing and Running ServiceGuard Manager

ServiceGuard Manager installs its own JRE (Java Runtime Environment™) and cannot use another JRE already installed on the computer.

If you are updating from an earlier version of ServiceGuard Manager, your user preference files are replaced with default settings. The new preference files are compatible with architecture changes in ServiceGuard Version A.03.00 and A.03.00.01. Your old preferences cannot be carried over.

**Installing ServiceGuard Manager on Windows** Install ServiceGuard Manager on a computer that has Microsoft Windows XP Professional Edition, NT 4.0 (or later), or 2000 Professional installed. If you currently have an older version of ServiceGuard Manager, uninstall it first: Start -> Programs -> ServiceGuard Manager -> Uninstall.

You can install from two places:

- To install from the ServiceGuard Distributed Components CD:
  1. Insert the disk in the PC's drive
  2. Click the Start menu in lower left corner of your screen. Choose Settings -> Control Panel. Double-click Add/Remove Programs.
  3. Click on Install.
  4. Navigate to SGManager\Windows. Select sgmanager.exe.
  5. Click Finish and follow installation directions.
- To install from the web:
  1. Go to <http://www.software.hp.com>. Click High Availability, then ServiceGuard Manager.
  2. Click on the link under Download Software (sgmanager.exe).
  3. You can store the file on your system, or run it directly from the website. If you download to your system, you can remove it after installation.
  4. On your PC, run sgmanager.exe (or double-click the sgmanager.exe file in Explorer).
  5. Choose a language option. The default install directory is: C:\Program Files\Hewlett Packard\ServiceGuard Manager\ but you can choose a custom installation directory.

The ServiceGuard Manager icon will appear on your desktop.

Using Windows Explorer, verify that these folders are installed:

- bin
- examples
- jre
- lib
- log
- users
- ov (if OpenView Network Node Manager is already installed on the PC)

ServiceGuard Manager installs its own JRE (Java Runtime Environment™) and cannot use any other JRE already on the computer.

If you have Network Node Manager installed on this computer, see *Installing with OpenView*, below.

Verify that the name ServiceGuard Manager is listed in Start -> Programs ->. Verify that a ServiceGuard Manager icon is on your desktop.

If you are updating from an earlier version of ServiceGuard Manager, your user preference files are replaced with default settings. The new preference files are compatible with architecture changes in ServiceGuard Manager Version A.03.00 and A.03.00.01. Your old preferences cannot be carried over

**Installing with HP OpenView** When you install ServiceGuard Manager, it looks to see if you have installed one of these OpenView products:

- NNM (Network Node Manager) Version 6.x or later
- ITO (IT/Operations) Version 5.3 or later (ITO includes NNM.)
- OpenView Operations Version 6.0. (OVO includes NNM.)  
ServiceGuard Manager does not support VPW (Vantage Point for Windows).

If you have installed any of these, the install process automatically does these things:

## Installing and Running ServiceGuard Manager

- Adds a menu item and a button on the toolbar of NNM, ITO, or OVO to start ServiceGuard Manager (“ServiceGuard Mgr Launcher”).
- Sends ServiceGuard events to be logged in the Event Log. The ServiceGuard subagent is responsible for notifying the management station when status or configuration changes. By default, it is installed in `/usr/sbin/cmsnmpd`.
- Adds ServiceGuard messages to the ITO or OVO Message Browser if assigned, and in the NNM Alarm Browser.
- Modifies the Event Configuration Tool so you can set up automatic actions and filter ServiceGuard messages.
- Lets you configure the data collection to get historical MIB data from network nodes, including data stored in ServiceGuard MIB objects. The ServiceGuard subagent services the ServiceGuard MIB objects. By default, it is installed in `/usr/sbin/cmsnmpd`.

Then the installation process looks to see if you have OVO or ITO Version 5.3 or later. If so, it checks to see if you also have ClusterView.

If you do have ClusterView installed, no files will be overwritten. The launcher will be installed, so you can open an instance of ServiceGuard Manager from the OpenView menu.

If you do not have ClusterView, but you do have ITO or OVO, tools are added to the Tool Bank, ready for an OpenView administrator to assign them. These tools are listed below.

Assign these tools carefully. Some require root access to the ServiceGuard nodes, and some can grant it indirectly.

- **ServiceGuard Mgr launcher:** You can launch ServiceGuard Manager from OpenView. ServiceGuard Manager is independent of OpenView. It does not use the OV daemons or object database to discover the configuration or status of clusters. Instead, it gets information by connecting to ServiceGuard Version A.11.12 or greater; then ServiceGuard goes out on its subnets and gathers the information.
- **Installs these Tools to work on a selected cluster node:**
  - **HA Info Tools:**
    - **Query Cluster Conf:** uses `cmquerycl` to gather configuration information

- **Scan Cluster:** uses `cmscancl` to display information about cluster configuration, LAN cards, disks, and file systems.
- **View Cluster Binary Config:** uses `cmviewconf` to see an ASCII extraction of the binary configuration file.
- **View Cluster Config:** uses `cmviewcl` to see cluster configuration and status of running clusters.
- **View System Log:** opens `vi` editor to view `/var/adm/syslog/syslog.log`
- **HA Admin Tools:**
  - **Cluster Admin:** opens SAM to the ServiceGuard cluster administration section
  - **Cluster Config:** opens SAM to the ServiceGuard cluster configuration section
  - **Package Admin:** opens SAM to the ServiceGuard package administration section
  - **Package Config:** opens SAM to the ServiceGuard package configuration section
  - **Run Cluster:** uses the `cmruncl` command to start a cluster from the node you selected
  - **Halt Cluster:** uses the `sghaltcl` command (a variant of the `cmhaltcl` command) to halt the cluster of the node you selected
  - **Run Node:** uses the `cmrunnode` command to join the selected node to its cluster
  - **Halt Node:** uses the `cmhaltnode` command to make the selected node inactive in its cluster
- **Net Diag Tools**
  - **View Interface Config:** displays LAN interface configuration parameters
  - **LAN Diag and Admin:** launches the program `lanadmin`, which administers and tests the local area network.
  - **Scan LAN interfaces:** uses `lanscan` to display information about each LAN device that has software support on the system.

## Installing and Running ServiceGuard Manager

- IP Interface Stat: uses `netstat` to display statistics for network interfaces and protocols, as well as the contents of various network-related data structures. (Choose options to filter output.)
- LVM tools.
  - View Logical Volumes: displays the logical volumes currently configured
  - View Volume Groups: uses `vgdisplay` to show information about the volume groups configured.

### Uninstalling ServiceGuard Manager

**Uninstalling from HP-UX** On HP-UX, uninstall ServiceGuard Manager by running this command:`swremove B8325BA`

After uninstalling ServiceGuard Manager, you can remove the ServiceGuard Manager logs; if you are not going to re-install, you can remove the entire directory (by default, `/var/opt/sgmgr/`). If you are not going to re-install, you can also remove the preferences that are stored in the user's home directory, under the `.sgmgr` directory.

**Uninstalling from Linux** On Linux, uninstall ServiceGuard Manager by running this command:

```
rpm -e sgmanager-A.03.00-1  
or: rpm -e sgmanager-A.03.00.01-1
```

After uninstalling, you can remove the ServiceGuard Manager logs; if you are not going to re-install, you can remove the entire directory (by default, `/user/local/sgmgr` on Red Hat and `/opt/sgmgr` on SuSE). If you get a message about "unable to remove." you can ignore the ones about error messages. If you are not going to reinstall, you can remove the preferences that are stored in the user's home directory, under the `.sgmgr` directory.

**Uninstalling from Windows** On Windows, there are two ways to uninstall ServiceGuard:

- From the Start menu, choose Programs -> ServiceGuard Manager -> Uninstall.
- From the Start menu, choose Settings -> Control Panel -> Add/Remove Programs. Select ServiceGuard Manager from the list.

After uninstalling ServiceGuard Manager, you can delete the log files; if you are not going to re-install, you can remove the entire directory: C:\Program Files\Hewlett-Packard\ServiceGuard Manager\log folder. If you are not going to re-install, you can also remove the user preferences folder. By default, preferences are in: C:\Program Files\Hewlett-Packard\ServiceGuard Manager\users

**Removing ServiceGuard Manager - OpenView Integration** In addition to doing the `swremove` of ServiceGuard Manager, you need to manually do the following things if you integrated ServiceGuard Manager into OpenView.

- If you have NNM only (not OVO):
  1. Remove event templates: Go to the NNM or ITO menu and select Options -> Event Configuration. From the list, delete the following event groups:
    - hpEMSTraps
    - hpmcMgmt Traps
    - hpmcSGTraps
  2. Remove SGMgr MIBs: Go to the NNM or ITO menu and select Options -> Load/Unload MIBs:SNMP. Unload the following MIBs:
    - hp-cluster
    - hp-sgcluster
- If you have OVO (which includes NNM):
  1. Remove messaging: Go to the Message Group Bank, and delete Message Group HA.
  2. Remove templates and monitors: Open the Message Source Templates window. By default, the following are visible on the top level. Remove them:
    - Syslog
    - SG\_check\_cmsnmpd
    - EMS SNMP Traps
    - HA Cluster SNMP Traps

## Installing and Running ServiceGuard Manager

3. Remove Application Tools: From the Application Bank, remove these tool groups:

- HA Info
- HA Admin
- LVM
- Net Diag

**Uninstalling: Removing SNMP Trap Destinations** If you are not going to re-install, and you do not wish to receive SNMP traps anymore, you need to “unset” the trap destinations on the sending nodes.

1. First get a list of the nodes that are sending traps to your computer. Select Event Browser from the View menu. Click the Configuration tab. Make a note of the nodes and IP addresses.

Notice that the configuration tab shows only the nodes in your current map. If you have several subnets, connect to a server (Cluster Object Manager) in each, and use the Discover All option.

2. Log in to each node and edit the `/etc/snmpd.conf` file to remove your computer from the list.

3. Stop and re-start the SNMP Master Agent on the node.

a. Find the process ID number, using: `ps -ef | grep snmp`.

The master agent will show as `snmpd`, and the subagent will show as `cmsnmpd`.

b. Stop that process, using: `kill <pid>`

c. Restart the agents.

Use: `/sbin/init.d/SnmpMaster start` for the master agent

Use: `/sbin/lbin/cmsnmpd` for the subagent.

## Setting up ServiceGuard Manager

### Making a Highly Available Connection

If you wish, you can create a ServiceGuard package that will keep the connection between your monitoring station and the server highly available. If there is a failure in the connection, you might see the

“Connection Dropped” message flash momentarily, but ServiceGuard will maintain your connection. It will fail the connection over from one node in a ServiceGuard cluster to another node in the same cluster.

ServiceGuard Manager gets its information by connecting to a server with ServiceGuard A.11.12 or later. A component of ServiceGuard, the Cluster Object Manager, polls the available subnets to discover other ServiceGuard objects. It collects status and configuration information, and sends the information back to ServiceGuard Manager.

To set up the highly-available connection between ServiceGuard Manager and server nodes in a cluster, follow these steps:

Create the package in a cluster with ServiceGuard. For viewing, use ServiceGuard A.11.12 or later. For administration commands use ServiceGuard A.11.14 or later.

See “Creating the Package Configuration” chapter in the ServiceGuard manual. All ServiceGuard manuals are posted on the web and you can view or print them there. Go to <http://www.docs.hp.com> and click High Availability; the products are listed alphabetically.

1. Get an IP address to use as the package’s relocatable address. You can use `nslookup` to be sure the package name and IP address are correctly associated in your DNS table.
2. When naming the package, choose one that your users will recognize, such as `Clus3Srvr`. The first time a user opens ServiceGuard Manager they will see the Connect dialog box. They can type this name in for Server. After that, the name will appear in a list every time that user opens ServiceGuard Manager.
3. Make only these two modifications to the package configuration file template, and leave the defaults for the other fields:
  - List the package nodes. For high-availability, it is best to list all the nodes in the cluster.
  - For the run and halt scripts pathname, specify the control script name and path for the run and halt script. (The default path is in the documentation.)
4. Open the control script template. Make just two modifications. These will allow the connection between your client (ServiceGuard Manager station) and the server (ServiceGuard A.11.12 cluster):

## Installing and Running ServiceGuard Manager

- Insert the IP address associated with your package (the package's relocatable address).
- Insert the address of the subnet.

### Assigning and Configuring New OpenView OVO/ITO Tools

When you install ServiceGuard Manager, it checks to see if you have OpenView OVO installed. If you do, it checks to see if you have the tools listed in “Installing with HP OpenView” above. If you do not have those tools, it installs them for you.

The ITO tools are installed like other OpenView applications: SD control scripts place the files on the system and register both the back end and the front end with OpenView. The OpenView configuration is customized for user `opc_adm` only. The ITO Administrator is responsible for assigning access privileges and responsibilities.

**To Restore Default Configuration** If the ServiceGuard Manager configuration gets lost or corrupted, follow these steps to restore the default configuration that came with ServiceGuard Manager:

1. Exit all ITO user sessions.
2. Stop the ITO server process with the `/opt/OV/bin/ovstop opc` command.
3. Go to `/opt/sgmgr/OV` and untar the configurations files in with the `tar -xvf ito-ux.tar` command.
4. Go to `/opt/OV/bin/OpC` and upload the new configuration with the `opccfgupld -replace -subentity /opt/sgmgr/OV/SGOpC` command.
5. Stop and restart the ITO package with the `/opt/OV/bin/OpC/opcsv -stop` and `/opt/OV/bin/OpC/opcsv -start` commands.

### Launching ServiceGuard Manager

You can starting ServiceGuard Manager directly from HP-UX, Linux, and from Windows. You can also start ServiceGuard Manager from within the HP OpenView and ServiceControl Manager applications.

## Launching ServiceGuard Manager from HP-UX

To launch ServiceGuard Manager, standalone, in HP-UX, go to the ServiceGuard Manager directory (by default, `/opt/sgmgr/bin`) and enter the `sgmgr` or `./sgmgr` command, plus any options you want. To see the full command, enter `man sgmgr`. The options are also listed below in *sgmgr Command Syntax*.

You can also create a script or alias that includes the options you want.

## Launching ServiceGuard Manager from Linux

To launch ServiceGuard Manager in Linux, go to the ServiceGuard Manager directory (by default, Red Hat is `/usr/local/sgmgr/bin` and SuSE is `/opt/sgmgr/bin`). (SuSE is available only in English.) Enter the `sgmgr` or `./sgmgr` command, plus any options you want. To see the full command, enter `man sgmgr`. The options are also listed below in *sgmgr Command Syntax*.

## Launching ServiceGuard Manager from Windows

Here are 3 ways to launch ServiceGuard Manager in Windows:

- By default, a shortcut icon is placed on your desktop (labelled SG Manager A.03.00 or SG Manager A.03.00.01). Click it to launch the program. When installed, it has the simple command without options. You will be prompted to enter the options once the program opens. You can modify the icon's properties to use any of these options: your name, password, server to connect to, and clusters to discover. If you want to modify it follow the steps below:

1. Right-click on the icon, then choose Properties from the popup menu.
2. Add options to the command in "Target." The options are listed below in *sgmgr Command Syntax*.

It is best to put quotes around command and file path names; Windows allows spaces and other characters in directories, and that could cause parsing errors.

- From the *Start* menu, select Programs -> ServiceGuard Manager. This launches the simple command, with no options.

- Open a *DOS* window. At the DOS prompt, enter the `SGMgrDOS.exe` command. Depending on your system path setup, you may have to enter the `SGMgr` directory (by default `C:\Program Files\Hewlett-Packard\ServiceGuard Manager\bin`). You can also enter options, as listed below in *sgmgr Command Syntax*.

It is best to put quotes around command and file path names.

### **Launching ServiceGuard Manager from HP OpenView**

Within OpenView, you can launch `SGMgr` from the menu bar or by clicking the `SGMgr` icon.

### **Launching ServiceGuard Manager from ServiceControl Manager**

If you have ServiceControl Manager installed, you will find a ServiceGuard Manager tool. Click this tool icon to launch the interface.

### **sgmgr Command Syntax**

The basic command to launch ServiceGuard Manager in Linux or HP-UX is `sgmgr`. In Windows, it is `SGMgr.exe` or `SGMgrDOS.exe`. The options are listed below. If you do not mention an option with the command, you will be prompted to specify it in a window after the interface opens.

- To open a saved (static) file:
  - The `-f <filename>` option opens a saved `.sgm` file. Enter the pathname of the saved file, in quotes. This option is not used with any other options.
- To open a server connection and see a map that you can update; repeat these options for each session:
  - The `-s <servername>` option specifies a node with ServiceGuard A.11.12 or later. Your ServiceGuard Manager session will connect to ServiceGuard on this node. ServiceGuard will start an Object Manager process to discover the other clusters on its subnet, and report back their configuration and status information.
  - If you specify the `-s` option, you may also specify the `-l <username>` option to give the logon name of a user on that server.

- If you specify the `-l` option, you may also specify the `-p <password>` option to give that user's password.
  - The `-c <clustername>` option specifies the clusters you want the server to discover. (The server can discover only the nodes on its subnets.) These clusters will be displayed on your map, under the session with the COM server's name. Repeat the `-c` option for several clusters in this server's session.
  - Specify `-un TRUE` to see the unused nodes discovered by this server on the server's subnets. These are nodes that have ServiceGuard installed, but are not currently configured in any cluster.
- To open another session, repeat these steps.

When the interface opens, you will see what you have chosen, and you will be given a chance to fill in any options you have not yet chosen.

## Using the Interface

When ServiceGuard Manager opens, you have a chance to choose Connect or Open (unless you have already specified one in the command line).

To get acquainted with the program, Open a supplied Example file.

To see your own clusters, use Connect. You need to have a logon for a node that is running ServiceGuard A.11.12 or later. This will be your server. It can discover clusters on its subnets, if it has node access permission, as root, in `cmclnodelist` or `.rhosts`. If you want to also do administrative commands, you need to log on, as root, to an HP-UX server node that is running ServiceGuard A.11.14 or later. (See "Required and Recommended Patches" in this document.)

Once you have a map in place, open Help. Open the Getting Started topic from the Help window's Table of Contents in the left pane. Open the Map Legend topic to interpret the colors.

There are Help topics about troubleshooting clusters and troubleshooting ServiceGuard Manager itself.

Right click on a tree or map object, and choose "Properties of <object>" from the popup menu. Each tab in Properties has its own Help button. that briefly describes each property.

**Installing and Running ServiceGuard Manager**

Right click a tree or map object and look at the popup menu again. You will see which administration commands can be done on this cluster object at this time if you have root permission on an HP-UX server with ServiceGuard A.11.14 or later. (See “Required and Recommended Patches” in this document.)

## Patches and Fixes in this Version

This section lists known patches, defects that have been fixed in this version, and current known defects and workarounds.

Please consult the Release Notes for the language you will install, to find information about language-specific patches, defects, and known problems.

### Required and Recommended Patches

This section lists patches required or recommended for ServiceGuard Manager Version A.03.00 and A.03.00.01. This list is subject to change without notice. Contact your HP support representative for up-to-the-moment information. Patches can be superseded or withdrawn at any time, so always be sure to check the status of any patch before downloading it.

An updated list of patches is available on the Hewlett-Packard IT Resource Center: <http://itrc.hp.com> (Americas and Asia Pacific) and <http://europe.itrc.hp.com> (Europe).

In non-English locales, when installing on HP-UX 11.0 or 11.11, install the TrueType Fonts patch:

- HP-UX 11.0:
  - Japanese: PHSS\_26972
  - Korean: PHSS\_26974
  - Chinese-Simplified: PHSS\_26976
  - Chinese-Traditional: PHSS\_24937
  - Font Server: PHSS\_25091
- HP-UX 11.11
  - Japanese: PHSS\_26971
  - Korean: PHSS\_26973
  - Chinese-Simplified: PHSS\_26975
  - Chinese-Traditional: PHSS\_24977

— Font Server: PHSS\_25092

Before you use the Event Browser, install two patches on all HP-UX nodes in the clusters that will *send* the SNMP traps to your ServiceGuard Manager Event Browser. The patch numbers are:

- PHSS\_26724 (for HP-UX 10.x)
- PHSS\_27858 (for HP-UX 11.x)

ServiceGuard Manager installs its own JRE (Java Runtime Environment). Check for defects for each platform's JRE:

- On HP-UX PA, ServiceGuard Manager automatically installs JRE Version 1.4.1\_01.
- On Linux, ServiceGuard Manager automatically installs JRE Version 1.4.1\_01
- On Windows, ServiceGuard Manager automatically installs JRE Version 1.4.1\_01

Check your operating system for patches:

- For HP-UX, check patches at: <http://www.itrc.hp.com> (Americas and Asia Pacific) or <http://www.europe.itrc.hp.com> (Europe).
- For Linux, check patches at: <http://www.redhat.com>
- For Windows PC, check Service Pack at: <http://microsoft.com/ms.htm>.

## Fixed in Version A.03.00

The problems listed below were fixed for the A.03.00 release. The section after this has a list of problems fixed in A.03.00.01, after the release of A.03.00. To see what version you have, go to the Help menu and select "About."

- JAGad91137 - sgmgr can not handle `cmddeleteconf`
- JAGad90129 - On Linux, Japanese online help shows hyphens rendered as square characters.
- JAGad82212 - On NT, you may see "Illegal Access Violation." This is a Java problem (Sun bug ID 4479199)

- JAGae11148 - Admin progress dialog unresponsive after ServerProviderException error.
- JAGae10859 - When saving a map as a .GIF or .JPG, a dialog box pops up. The editable field for path does not work. (Java problem, fixed.)
- JAGae08747 - Setting trap destination requires you to restart Master Agent. (Fixed with SNMP patch.)

### **Fixed in Version A.03.00.01 (but not in A.03.00)**

These problems are fixed in A.03.00.01, but not in A.03.00. To see what version you have, go to the Help menu and select “About.”

- JAGae67232 - Right-click in tree may cause an exception
- JAGae64679 - HP-UX/OpenView installation doesn't show IPv6 traps.
- JAGae62189 - Incorrect specification of command in admin progress dialogue: cmhaltcl instead of cmhaltnode.
- JAGae55465 - sgmgr core dumps when executed by non-root user (JRE directory problem).
- JAGae51034 - Event notification not supported by SG 11.12 Object Manager.
- JAGae50988 - Trap status is given as “Trap Setting” if IP address is unresolved.
- JAGae50769 In Simplified Chinese locales on Windows, installer renders buttons as squares.
- JAGae50692 - Can not read sgm files saved from ServiceGuard Extension for RAC.
- JAGae50948 - SGMgr (cmsnmpd) reports node joined cluster when node did not join. Event Browser reports “HA Cluster Node Joined Cluster” when it should report “HA Cluster Node Up.” In A.03.00, incorrect message appears in Event Browser.
- JAGae50883 - Event Browser Time/Date sorting not working correctly.

## Known Problems and Workarounds

The following lists known problems for ServiceGuard Manager, Versions A.03.00 and A.03.00.01, at time of publication. This list is subject to change without notice. Contact your HP support representative for up-to-the-moment information. More recent information on known problems and workarounds may be available on the Hewlett-Packard IT Resource Center: <http://www.itrc.hp.com> (Americas and Asia Pacific) or <http://www.europe.itrc.hp.com> (Europe).

Some of these problems were fixed in A.03.00.01, but remain problems for A.03.00. To see what version you have, go to the Help menu and select "About."

### **JAGae87041 - In SuSE Linux on IPF, ServiceGuard Manager sometimes does not run.**

- *What is the problem?* Although it installs correctly, sometimes ServiceGuard Manager will not run on SuSE Linux on IPF hardware platforms, because it cannot find a library. It will abort before anything appears on the screen, leaving a message in the log file that says:

```
Exception in thread "main"  
Java.lang.UnsatisfiedLinkError:  
/opt/sgmgr/jre/lib/i386/libawt.so:  
libXp.so.6: cannot open shared object file: No such file or  
directory.
```

- *What is the workaround?* Explicitly export the library environment variable before running ServiceGuardManager. Use the following command:

```
export LP_LIBRARY_PATH=/usr/X11R6/lib
```

### **JAGae81488 - Installing SGMgr A.03.00.01 caused Windows PC to crash**

- *What is the problem?* A PC hung. The cause is apparently some interaction between the graphics accelerator card and JRE 1.4.1-01.b0.

ServiceGuard Manager was downloaded from <http://software.com> onto a Windows 2000 laptop. The installer crashed seconds after the OK button was clicked. A similar crash occurred on a Compaq notebook running Windows XP Professional, when exiting ServiceGuard Manager.

- *What is the workaround?* Use the `java -version` command to see if your system default is JRE is version 1.4.1-01.b0. (You may have several versions installed.) If it is the default, follow these steps:
  1. Right click on the Windows 2000 main window, to open Properties -> Advanced Settings -> Troubleshooting.
  2. Find the Hardware Accelerator slider. Make a note of its position. Set it to NONE by sliding it to the far left.
  3. Re-run the installer.
  4. After install is complete, open the Properties again (step 1) and reset the Hardware Accelerator slider to its former position (step 2)

#### **JAGae69202 - Rarely, cannot start program when running on SuSE via ReflectionX**

- *What is the problem?* Occasionally, an exception happens when using ReflectionX to remotely start ServiceGuard Manager on SuSE Linux. (SuSE Linux is supported for English only.)
- *What is the workaround?* This is related to a problem in the Java Runtime Environment. There is no workaround. Often it will work if you try again.

#### **JAGae69297 - Man page formatting issue / only available in English**

- *What is the problem?* The `sgmgr` man page is not correctly formatted. Also, the man page is not available in all of the languages that the interface is available in.
- *What is the workaround?* You can open the interface by entering `sgmgr` (`sgmgr.exe` on Windows). You can specify all options after the interface opens. The man page syntax is given in online help under Using ServiceGuard Manager -> ServiceGuard Manager Command.

**JAGae68450 - Sometimes map connecting lines between node and package are missing**

- *What is the problem?* Rarely, a cluster map is drawn with no lines connecting a node to the packages running on it.
- *What is the workaround?* This will usually correct if the user changes the view, and then returns.

**JAGae67232 - Right click in tree may cause an exception (Fixed in A.03.00.01)**

- *What is the problem?* Commands do not always complete if user right-clicks on an object that is *not selected*. Here is one scenario: A new view opens and nothing on tree or map has been selected with a left-click. The user then right-clicks on a node in the tree. The menu pops up, and the user selects a command. However, the command does not complete, and user gets an error message.
- *What is the workaround?* Before using the right-click popup menu, be sure the cluster object is selected. When an object is selected, the map shows a change to the area around it.

**JAGae64679 - HP-UX/OpenView installation doesn't show IPv6 traps (Fixed in A.03.00.01)**

- *What is the problem?* IPv6 trap template should be overwritten when ServiceGuard is installed on an OpenView system. However, it isn't.
- *What is the workaround?* There is not workaround. This is fixed in ServiceGuard Manager A.03.00.01, but not in A.03.00.

**JAGae67456 - Using RemoteX, "Save Map" creates empty file**

- *What is the problem?* When using ServiceGuard Manager A.03.00.01 on Linux with XWindows or ReflectionX, saving map as .jpg or gif file does not work. It creates a file of size 0.
- *What is the workaround?* Save file from local console.

**JAGae62189 - Incorrect executing command message in halt node progress dialog (Fixed in A.03.00.01)**

- *What is the problem?* Halt node progress dialog says command executing is `cmhaltctl -v -f`. It should say `cmhaltnode -v -f`.

- *What is the workaround?* There is no workaround. Realize that when you halt a node, the progress dialog box will report it is halting the cluster, even though it is halting the node as requested. Message fixed in ServiceGuard Manager A.03.00.01, but not in A.03.00.

**JAGae55465 - sgmgr core dumps when executed by non-root user (JRE directory permission problem) (Fixed in A.03.00.01)**

- *What is the problem?* On some HP-UX systems, a JRE file permission problem causes ServiceGuard Manager to core dump when a non-root user opens the interface.
- *What is the workaround?* Have an administrator log on to the HP-UX system, as root. Go to the `/opt/sgmgr/jre/lib` directory. Change permissions: `chmod 555 PA_RISC2.0`

**JAGae45299 - Printing Help pages may use 100% CPU**

- *What is the problem?* When trying to print a Help topic, CPU usage may suddenly jump to 100% of capacity, and stay there.
- *What is the workaround?* This is a known problem with Java (ID=4768427).

**JAGae51034 Event notification not supported by SG 11.12 Object Manager (Fixed in A.03.00.01)**

- *What is the problem?* In A.03.00, if you connect to a server with ServiceGuard 11.12, you will not be able to receive SNMP event messages. Fixed in A.03.00.01'
- *What is the workaround?* If you want SNMP events, connect to a node that has a later version of ServiceGuard.

**JAGae50988 - Trap status is "trap Setting" if IP address is unresolved (Fixed in A.03.00.01)**

- *What is the problem?* Wrong message is given in A.03.00 if IP address is unresolved.
- *What is the workaround?* There is no workaround. Message fixed in ServiceGuard Manager A.03.00.01, but not in A.03.00.

**JAGae50883 - Event Browser Time/Date sort does not work correctly (Fixed in A.03.00.01)**

- *What is the problem?* More recent events were found in the middle of the table, not at the top or bottom.
- *What is the workaround?* There is no workaround. Fixed in ServiceGuard Manager A.03.00.01, but not in A.03.00.

**JAGae50948 Event Browser reports “HA Cluster Node Joined Cluster” when it should report “HA Cluster Node Up.” (Fixed in A.03.00.01)**

- *What is the problem?* In A.03.00, incorrect message appears in Event Browser. Fixed in A.03.00.01.
- *What is the workaround?* Remember to substitute correct message. To be sure you have correct status, check the node’s Properties.

**JAGae50816 “Java Webstart not installed” message displayed when using Netscape.**

- *What is the problem?* The problems occurs when using Service Control Manager 3.0 to launch ServiceGuard Manager for Netscape 6.0 or later. You see a message saying that Java Webstart 1.2 is not installed, even when it is installed.
- *What is the workaround?* ServiceGuard Manager has incorporated a workaround that will alert the user to the problem and offer a chance to continue launching ServiceGuard Manager.

**JAGae50813 Cannot launch ServiceGuard Manager 3.00 from Service Control Manager 3.0**

- *What is the problem?* When launching ServiceGuard Manager from Service Control Manager, SCM searches the client system for version 1.2 of Java Webstart. If it does not find it on the system, it directs you to install it. However, at the time of writing this document, Webstart 1.2 is not available on HP-UX.
- *What is the workaround?* You cannot launch HP-UX ServiceGuard Manager from Service Control Manager until HP-UX is compatible with Java Webstart version 1.2. Check HP-UX for updates.

### **JAGae50775 In Traditional Chinese locale, in HP-UX, need to use Java OOB tool prior to install**

- *What is the problem?* Java performance is bad on HP-UX in the Traditional Chinese.
- *What is the workaround?* Before installing ServiceGuard Manager on Traditional Chinese version of HP-UX, HP recommends running the Java Out-Of-The-Box tool to modify kernel parameters. Please refer to [http://www.hp.com/products1/unix/java/java2/outofbox/infolibrary/release\\_notes\\_java\\_oob.html](http://www.hp.com/products1/unix/java/java2/outofbox/infolibrary/release_notes_java_oob.html).

### **JAGae50774 In Traditional Chinese and Simplified Chinese, the license agreement radio button text is illegible.**

- *What is the problem?* In the installer, the Licence Agreement window shows a radio button to check, confirming that the user agrees with the license terms. The text is too small to be easily read in Chinese.
- *What is the workaround?* Remember that the first button says “I accept the terms of the license agreement” and is checked by default. The other button says “I do NOT accept the terms of the license agreement.”

### **JAGae50773 In non-English locales, installer shows “OK” in first panel**

- *What is the problem?* When installing Korean, Simplified Chinese, and Traditional Chinese, the first panel in the installer gives the customer the local choice in a pull-down menu. The button beside the choose reads “OK” in all languages. This button should be localized, but is not.
- *What is the workaround?* To proceed with install, press “OK.”

### **JAGae50772 Rendering issues for non-English locales running W2P (English Version)**

- *What is the problem?* If ServiceGuard Manager is installed on an English version of Windows 2P, certain non-English characters are not rendered correctly.
- *What is the workaround?* HP recommends that non-English locales install native versions of ServiceGuard Manager on native versions of the Windows operating system, and not on English versions.

**JAGae50769 In Simplified Chinese and Traditional Chinese locales on Windows, installer renders buttons as squares. (Fixed in A.03.00.01)**

- *What is the problem?* When installing non-English versions of ServiceGuard Manager on some English versions of Windows, the installation buttons are incorrectly sized and difficult to read.
- *What is the workaround?* HP recommends that you only install the non-English versions of ServiceGuard Manager on native versions of Windows. If you do not match SG Manager and Windows locales, remember the standard order of buttons is (from left to right): Quit, Previous, and Next. To continue installing, click the right-most (Next) button.

**JAGae50746 “Include Unused SG nodes” button does not work in Change Sessions dialog**

- *What is the problem?* If you change “Include Unused SG nodes” setting in the Change Sessions window, the change is often ignored.
- *What is the workaround?* Open a new session with the desired setting for the unused nodes option.

**JAGae50727 In non-English locales, typed characters not visible in HP-UX**

- *What is the problem?* When running non-English versions of SGMgr on HP-UX, typed non-English characters are invisible in the input text boxes. The characters can be read by the program, but not seen by the user. This occurs in the text fields of Alerts: Search and Help: search.
- *What is the workaround?* The computer is printing white characters on a white background, making them invisible. Set the system colors of the CDE Style Manager from the HP-UX toolbar. Choose a color set with a black foreground color, like Alpine or Wheat.

**JAGae50692 - Can not read sgm files saved from ServiceGuard Extension for RAC (Fixed in A.03.00.01)**

- *What is the problem?* When saving an .sgm file of a ServiceGuard Extension for RAC cluster, save does not work. A file is saved, but it is not readable.

- *What is the workaround?* There is no workaround for A.03.00. Update the COM (Cluster Object Manager) to a version later than B.02.02.

**JAGae50336 Alerts Panel: package status unknown for some newly added packages**

- *What is the problem?* Under certain circumstances, the Alerts window can show status unknown for a package when it is first added. It may stay that way through several updates.
- *What is the workaround?* Double-check the map and properties. If problem persists, disconnect the session and then reconnect.

**JAGae50110 Welcome Dialog and others: Mnemonic underline indicator can be incorrect in non-English interfaces**

- *What is the problem?* In non-English interfaces, the keyboard mnemonics are indicated by underlining a letter in parentheses. This indicates that the item can be accessed by holding the alt key while pressing that letter. In some translations, the underline is misplaced.
- *What is the workaround?* Use the letter in parentheses for the alt-key short-cut, even if the underline has moved into a word.

**JAGae50003 - SNMP Event Browser cannot be scrolled during arrival of burst of events**

- *What is the problem?* In stress testing, if a large number of events came in at once, the scroll bar became unusable as it tried to track many rapid inserts to the list.
- *What is the workaround?* Wait until the table finds a stable order. Usually this will be just a moment after rush of new events calms.

**JAGae49513 - Cluster Properties shows Rolling Upgrade = yes if node version is unknown.**

- *What is the problem?* It may be confusing to see Rolling Upgrade = YES in the cluster property sheets, when the administrator believes that a rolling upgrade is not in progress.

## Patches and Fixes in this Version

- *What is the workaround?* Realize that Rolling Upgrade says NO only when ServiceGuard Manager can verify that all nodes in the cluster have the same version. If ServiceGuard Manager cannot determine the version of one or more nodes, it will report YES for Rolling Upgrade.

### **JAGae48058 - View-Tree menu unclick does not remove tree.**

- *What is the problem?* Session disconnects if trying to discover many clusters with bad configurations.
- *What is the workaround?* There is no workaround.

### **JAGae42868 - File Chooser window for file Open and Save can be slow to pop up.**

- *What is the problem?* When you request to save or open a file, a window pops up where you can enter the filename, or browse. It sometimes takes a few seconds to appear.
- *What is the workaround?* Change your expectations, and allow extra time for the window to open.

### **JAGae40370 - Alerts dialog Apply button should accept the Enter key.**

- *What is the problem?* You cannot use the Enter key to activate the Apply button in the Alerts dialog box.
- *What is the workaround?* Use the mouse to click the button, or tab to it to select it, then use the Return key to activate it.

### **JAGad80600 - Certain progress messages are not localized.**

- *What is the problem?* ServiceGuard Manager displays progress messages directly from ServiceGuard as administration commands are processed. ServiceGuard does not localize these messages and ServiceGuard Manager can only translate the start and end messages for every admin operation. The intermediate messages are only in English.
- *What is the workaround?* There is no workaround.

## Software Availability in Native Languages

ServiceGuard Manager Versions A.03.00 and A.03.00.01 interface are available in five language options:

- ABA American English
- ABJ Japanese
- AB0 Simplified Chinese
- AB1 Korean
- AB2 Traditional Chinese

Please consult the Release Notes for the language you will install, to find information about language-specific patches, defects, and known problems.

The following ServiceGuard Manager Release Notes are available from <http://docs.hp.com>. For localized documents, click the button on the left.

- American English (B8325-90036)
- Japanese (B8325-90037)
- Simplified Chinese (B8325-90038)
- Korean (B8325-90039)
- Traditional Chinese (B8325-90040)

