

# HP Serviceguard/SGeRAC/Storage Management Suite/Serviceguard Manager Plug-in Compatibility and Feature Matrix

*Best if viewed at a resolution of 1280 x 800 or greater*

**November 13, 2009**

<b>SG A.11.19 for HP-UX 11i v3 COMPATIBILITY</b>								
<i>Intro Date March 2009</i>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <small>Additional information can be found in the release notes at www.docs.hp.com</small>	SG Mgr Plug-in Version <small>For Serviceguard Manager standalone version information see: http://docs.hp.com/en/5808/Servicegua rdmgr.pdf</small>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <small>For specific naming conventions for the various SMS bundles please refer to the product release notes at http://docs.hp.com</small>	HPVM <small>Additional HPVM information can be found at: http://docs.hp.com/en/1 0560/IntegrityVM_HA_ Solutions- SGandVM.pdf</small>
SG/SGeRAC A.11.19 Mar 2009 / Mar 2014	HP-UX 11i v3	Integrity PARISC	A.04.20	B.02.00 JDK Support - version 5.0.17 or later or 6.0.05 or later (note, JRE not supported) SysMgmtWeb A.3.0.X (11iv2 & 11iv3 0903 AR/OE or later) hpuxwsTomcat B.5.5.23.02 or later (11.23 & 11.31 0903 AR/OE or later) DSAU Support - 11.31 -- DSAUtilities C.01.00.18 or later	B.06.00.00	A.02.00.04 - single IP only A.03.00 - single IP only A.04.00 - single or alternate IP's supported	A.02.01 for 11i v3 released in May 2009 (T2771CB, T2773CB, T2774CB, T2775CB & T2777CB)	See HPVM specific support information at the end of this document
<b>SG A.11.19 for 11iv3 NEW FEATURES</b>								
<i>Intro Date March 2009</i>								
SG New Features <small>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</small>	SGeRAC New Features <small>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: http://docs.hp.com/en/6257/SGeRAC- SLVM-CVM_Support.pdf For information regarding Serviceguard support with VPart see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at http://docs.hp.com/en/hpx11v3.html and the Oracle site: http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</small>				SG SMS New Features <small>Additional detail for the Serviceguard SMS bundles can be found at http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</small>			
<ul style="list-style-type: none"> <li>• Complex Dependencies</li> <li>• Package Weights</li> <li>• Node Capacities</li> <li>• IPv6 hostname address family for all cluster components, with some restrictions</li> <li>• Serviceguard can now monitor subnets at the IP level, as well as the link level</li> <li>• Online Cluster Configuration Capabilities</li> <li>• Online Modular and Legacy Package Configuration capabilities for most parameters</li> <li>• Preview Capabilities</li> <li>• Partial-Startup Maintenance Mode</li> <li>• Configure up to 300 packages per cluster</li> <li>• Quorum Server support for up to 150 clusters / 300 nodes with QS version A.02.04 and later</li> <li>• New Cluster Parameters:                             <ul style="list-style-type: none"> <li>- NETWORK_AUTO_FAILBACK - tells SG how to handle the recovery of the primary LAN interface after it has failed over to the standby interface because of a link level failure</li> <li>- CONFIGURED_IO_TIMEOUT_EXTENSION - must be set for extended-distance clusters using iFCP interconnects between sites</li> </ul> </li> <li>• Supports Veritas CVM and CFS 5.0 only (3.5 and 4.1 versions not supported). This applies to CVM standalone and CVM included in SMS bundles</li> </ul>	<ul style="list-style-type: none"> <li>• Support for Cluster Interconnect Monitoring on IPv4 and IPv6</li> <li>• Support for Oracle VIP network monitoring on IPv4 and IPv6</li> <li>• Enablement for improved RAC VIP management &amp; failover performance</li> <li>• GMS authorization</li> <li>• Support for Logical Volume Manager Version 2.0 (or later)</li> <li>• Supports Veritas CVM and CFS 5.0 only (3.5 and 4.1 versions not supported). This applies to CVM standalone and CVM included in SMS bundles</li> <li>• Support for the SGeRAC Toolkit                             <ul style="list-style-type: none"> <li>— Support for modular package format, package maintenance mode, package halt reason feature, package description feature</li> </ul> </li> <li>• Oracle RAC Compatibility:                             <ul style="list-style-type: none"> <li>- RAC 9iR2 with SLVM</li> <li>-- Cluster size: 16 nodes maximum</li> <li>-- Extended Cluster support (up to 100km between sites):                                     <ul style="list-style-type: none"> <li>--- With SLVM: 2, 4 nodes (4 nodes requires SLVM v2)</li> </ul> </li> <li>- RAC 10gR2 with SLVM, ASM over SLVM or raw disks, CVM/CFS 5.0 only</li> <li>-- Cluster size: 16 nodes maximum</li> <li>-- Extended Cluster support (up to 100k between sites):                                     <ul style="list-style-type: none"> <li>--- With SLVM and ASM over SLVM: 2, 4 nodes (4 nodes requires SLVM v2)</li> <li>--- With ASM over Raw disks: ASM mirroring with Extended Cluster is allowed by HP, supported by Oracle, contact Oracle for ASM mirroring configuration requirements.</li> </ul> </li> <li>--- With CVM/CFS 5.0: 2,4,6,8,..16 nodes (up to 10km between sites), 2 nodes (up to 100km between sites)</li> <li>- RAC 11gR1 with SLVM, ASM over SLVM or raw disks, CVM/CFS 5.0 only</li> <li>-- Same Cluster size and Extended Cluster support as RAC 10gR2</li> </ul> </li> <li>- SGeRAC is supported in cross subnet environments only when used with Metrocluster in a Site Aware Disaster Tolerant Architecture</li> </ul>				Support for SG A.11.19			

SG A.11.19 for 11iv3 NEW FEATURES Continued <span style="float: right;">Intro Date March 2009</span>		
SG New Features	SGeRAC New Features	SG SMS New Features
<p><i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i></p>	<p>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a></p> <p>For information regarding Serviceguard support with VPairs see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a></p>	<p>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></p>
<ul style="list-style-type: none"> <li>• July 2009 SG A.11.19 Patch provides: <ul style="list-style-type: none"> <li>- IPv6 only hosts and quorum server</li> <li>- Online maintenance on a modular, failover package</li> <li>- Rolling upgrade using DRD</li> <li>- New -K param with cmgetconf (disables polling of VG's)</li> <li>- Improved support for nested mounts</li> </ul> </li> <li>• October 2009 SG A.11.19 Patch provides: <ul style="list-style-type: none"> <li>- Rolling upgrade using DRD (enhanced)</li> <li>- New Serviceguard Manager capabilities (graphical map, toolkit integration, display site information)</li> <li>- Support for CFS, VxVM and CVM version 5.0.1 on HP-UX 11i v3</li> <li>- Support for the target port congestion control capability in HP UX 11i v3.</li> <li>- Support for parallel resynchronization of LVM volume groups in HP-UX 11i v3 .</li> </ul> </li> </ul>		

SG A.11.19 for HP-UX 11i v2 COMPATIBILITY <span style="float: right;">Intro Date March 2009</span>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM <i>Additional HPVM information can be found at: <a href="http://docs.hp.com/en/10560/IntegrityVM_HA_Solutions-SGandVM.pdf">http://docs.hp.com/en/10560/IntegrityVM_HA_Solutions-SGandVM.pdf</a></i>
SG/SGeRAC A.11.19 Mar 2009 / Dec 2013	HP-UX 11i v2	Integrity PARISC	A.04.20	B.02.00 JDK Support - version 5.0.17 or later or 6.0.05 or later ( note, JRE not supported) SysMgmtWeb A.3.0.X (11iv2 & 11iv3 0903 AR/OE or later) Tomcat B.5.5.23.02 or later (11iv2 & 11iv3 0903 AR/OE or later) DSAUI Support - 11.23 – DSAUtilities C.01.00.15 or later	B.06.00.00	A.02.00.04 - single IP only A.03.00 - single IP only A.04.00 - single or alternate IP's supported	A.02.01 for 11i v2 released May 2009 (T2771CA, T2773CA, T2774CA, T2775CA & T2777CA)	See HPVM specific support information at the end of this document
SG A.11.19 for 11iv2 NEW FEATURES <span style="float: right;">Intro Date March 2009</span>								
<b>SG New Features</b> <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>		<b>SGeRAC New Features</b> Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC_SLVM_CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC_SLVM_CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generix_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generix_unix_new.html</a>			<b>SG SMS New Features</b> <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
<ul style="list-style-type: none"> <li>• Complex Dependencies</li> <li>• Package Weights</li> <li>• Node Capacities</li> <li>• IPv6 hostname address family for all cluster components, with some restrictions</li> <li>• Serviceguard can now monitor subnets at the IP level, as well as the link level</li> <li>• Online Cluster Configuration Capabilities</li> <li>• Online Modular and Legacy Package Configuration capabilities for most parameters</li> <li>• Preview Capabilities</li> <li>• Partial-Startup Maintenance Mode</li> <li>• Configure up to 300 packages per cluster</li> <li>• Quorum Server support for up to 150 clusters / 300m nodes with QS version A.02.04 and later</li> <li>• New Cluster Parameters: <ul style="list-style-type: none"> <li>- NETWORK_AUTO_FAILBACK - tells SG how to handle the recovery of the primary LAN interface after it has failed over to the standby interface because of a link level failure</li> <li>- CONFIGURED_IO_TIMEOUT_EXTENSION - must be set for extended-distance clusters using iFCP interconnects between sites</li> </ul> </li> <li>• Supports Veritas CVM and CFS 5.0 only (3.5 and 4.1 versions not supported). This applies to CVM standalone and CVM included in SMS bundles</li> </ul>		<ul style="list-style-type: none"> <li>• Support for Cluster Interconnect Monitoring on IPv4 and IPv6</li> <li>• Support for Oracle VIP network monitoring on IPv4 and IPv6</li> <li>• Enablement for improved RAC VIP management &amp; failover performance</li> <li>• GMS authorization</li> <li>• Supports Veritas CVM and CFS 5.0 only (3.5 and 4.1 versions not supported). This applies to CVM standalone and CVM included in SMS bundles</li> <li>• Support for the SGeRAC Toolkit <ul style="list-style-type: none"> <li>— Support for modular package format, package maintenance mode, package halt reason feature, package description feature</li> </ul> </li> <li>• Oracle RAC Compatibility: <ul style="list-style-type: none"> <li>- RAC 9iR2 with SLVM, CVM/CFS 5.0 (Integrity only) <ul style="list-style-type: none"> <li>-- Cluster size: 16 nodes maximum</li> <li>-- Extended Cluster support (up to 100km between sites): <ul style="list-style-type: none"> <li>--- With SLVM: 2 nodes</li> <li>--- With CVM/CFS 5.0: 2,4,6,8,...16 nodes (up to 10km between sites), 2 nodes (up to 100km between sites)</li> </ul> </li> </ul> </li> <li>- RAC 10gR2 with SLVM, ASM over SLVM, CVM/CFS 5.0 only <ul style="list-style-type: none"> <li>-- Cluster size: 16 nodes maximum</li> <li>-- Extended Cluster support (up to 100k between sites): <ul style="list-style-type: none"> <li>--- With SLVM and ASM over SLVM: 2 nodes</li> <li>--- With CVM/CFS 5.0: 2,4,6,8,...16 nodes (up to 10km between sites), 2 nodes (up to 100km between sites)</li> </ul> </li> </ul> </li> <li>- RAC 11gR1 with SLVM, ASM over SLVM, CVM/CFS 5.0 only <ul style="list-style-type: none"> <li>-- Same Cluster size and Extended Cluster support as RAC 10gR2</li> </ul> </li> </ul> </li> <li>- SGeRAC is supported in cross subnet environments only when used with Metrocluster in a Site Aware Disaster Tolerant Architecture</li> </ul>			Support for SG A.11.19			

**SG A.11.19 for 11iv2 NEW FEATURES Continued**

*Intro Date March 2009*

- July 2009 SG A.11.19 Patch provides:
  - IPv6 only hosts and quorum server
  - Online maintenance on a modular, failover package
  - Rolling upgrade using DRD
  - New -K param with cmgetconf (disables polling of VG's)
  - Improved support for nested mounts
- October 2009 SG A.11.19 Patch provides:
  - New Serviceguard Manager capabilities (graphical map, toolkit integration, display site information)

SG A.11.19 for Linux COMPATIBILITY <span style="float: right;">Intro Date April 2009</span>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <small>Additional information can be found in the release notes at www.docs.hp.com</small>	SG Mgr Plug-in Version <small>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Servicegua&lt;br/&gt;rMgr.pdf">http://docs.hp.com/en/5808/Servicegua rMgr.pdf</a></small>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <small>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></small>	HPVM <small>Additional HPVM information can be found at: <a href="http://docs.hp.com/en/1&lt;br/&gt;0560/IntegrityVM_HA_&lt;br/&gt;Solutions-&lt;br/&gt;SGandVM.pdf">http://docs.hp.com/en/1 0560/IntegrityVM_HA_ Solutions- SGandVM.pdf</a></small>
SG A.11.19 Apr 2009 / Apr 2014	Red Hat 5, SLES 10, SLES 11	ProLiant Integrity	N/A	B.02.00 <b>Integrity Support:</b> JDK - 6.0 update 17 or later (note, JRE not supported) SMH - hpsmh-2.1.11-07.linux Tomcat - hpsmh-tomcat-1.2- 02.linux DSAUI - 2.4-1 <b>IA-32 Linux Support:</b> JDK - 5.0 update 22 or later & 6.0 update 17 or later (note, JRE not supported) SMH- hpsmh-3.0.0-68 Tomcat - hpsmh-tomcat-1.0- 11.linux DSAUI - 2.4-1 <b>X86-64 Linux Support:</b> JDK - 5.0 update 22 or later & 6.0 update 17 or later (note, JRE not supported) SMH- hpsmh-3.0.0-68 Tomcat - hpsmh-tomcat-1.0- 11.linux	B.06.00.00	A.02.00.04 - single IP only A.03.00 - single IP only A.04.00 - single or alternate IP's supported	N/A	See HPVM specific support information at the end of this document

SG A.11.19 for Linux NEW FEATURES <span style="float: right;">Intro Date April 2009</span>		
SG New Features <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>	SGeRAC New Features <i>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPairs see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a></i>	SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>
<ul style="list-style-type: none"> <li>• Complex Dependencies</li> <li>• Package Weights</li> <li>• Node Capacities</li> <li>• IPv6 hostname address family for all cluster components, with some restrictions</li> <li>• Serviceguard can now monitor subnets at the IP level, as well as the link level</li> <li>• Online Cluster Configuration Capabilities</li> <li>• Online Modular and Legacy Package Configuration capabilities for most parameters</li> <li>• Preview Capabilities</li> <li>• Partial-Startup Maintenance Mode</li> <li>• Configure up to 300 packages per cluster</li> <li>• Quorum Server support for up to 150 clusters / 300 nodes with QS version A.02.04 and later</li> <li>• Persistent reservations (PR) to control access to LUNs</li> </ul> <ul style="list-style-type: none"> <li>• New Features for A.11.19.01 (August 2009 Patches): <ul style="list-style-type: none"> <li>- SLES 11 support</li> <li>- IPv6 only hosts and quorum server</li> <li>- Online maintenance on a modular, failover package</li> <li>- VLAN support</li> <li>- New -k param with cmgetconf (disables polling of VG's)</li> <li>- Improved support for nested mount points</li> </ul> </li> <li>• New Features for A.11.19.01 (October 2009 Patch): <ul style="list-style-type: none"> <li>- New Serviceguard Manager capabilities (graphical map, cluster configuration enhancements, etc.)</li> </ul> </li> </ul>	N/A	N/A

SG A.11.18 for HP-UX 11i v3 COMPATIBILITY								Intro Date Sept 2007
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM <i>Additional HPVM information can be found at: <a href="http://docs.hp.com/en/10560/IntegrityVM_HA_Solutions-SCandVM.pdf">http://docs.hp.com/en/10560/IntegrityVM_HA_Solutions-SCandVM.pdf</a></i>
SG/SGeRAC A.11.18 Sept 2007 / Sept 2012	HP-UX 11i v3	Integrity PARISC	A.04.20	B.01.01	B.05.00.00	A.02.00.04 A.03.00 single or alternate IP support	A.02.00 for 11i v3 (T2771CB - T2777CB)	See HPVM specific support information at the end of this document
SG A.11.18 for 11iv3 NEW FEATURES								Intro Date Sept 2007
SG New Features <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>		SGeRAC New Features Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11v3.html">http://docs.hp.com/en/hpux11v3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a>			SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
<ul style="list-style-type: none"> <li>Same as listed below for SG/SGeRAC A.11.18 on HP-UX 11i v2 plus:</li> <li>Support for the LAN Monitor mode of APA</li> <li>SG Patch April 2008 adds support for LVM Version 2 Volume Groups</li> </ul>		<ul style="list-style-type: none"> <li>Oracle RAC Compatibility: <ul style="list-style-type: none"> <li>RAC 9iR2 with SLVM</li> <li>Cluster size: 16 nodes maximum</li> <li>Extended Cluster support (up to 100km between sites): <ul style="list-style-type: none"> <li>With SLVM: 2, 4 nodes (4 nodes requires SLVM v2)</li> </ul> </li> <li>RAC 10gR2 with SLVM, ASM over SLVM and ASM over raw disks/LUs, CVM/CFS 5.0</li> <li>Cluster size: 16 nodes maximum (CVM/CFS 5.0 - 8 nodes)</li> <li>Extended Cluster support (up to 100k between sites): <ul style="list-style-type: none"> <li>With SLVM and ASM over SLVM: 2, 4 nodes (4 nodes requires SLVM v2)</li> <li>With ASM over Raw disks: ASM mirroring with Extended Cluster is allowed by HP, supported by Oracle, contact Oracle for ASM mirroring configuration requirements.</li> <li>With CVM/CFS 5.0: 2,4,6,8 nodes (up to 10km between sites), 2 nodes (up to 100km between sites)</li> </ul> </li> <li>RAC 11gR1 with SLVM, ASM over SLVM and ASM over raw disks/LUs, CVM/CFS 5.0</li> <li>Same Cluster size and Extended Cluster support as RAC 10gR2</li> </ul> </li> <li>SGeRAC is supported in cross subnet environments only when used with</li> </ul>			<ul style="list-style-type: none"> <li>A.02.00 for 11i v3 includes: <ul style="list-style-type: none"> <li>Symantec Veritas version 5.0</li> <li>Performance enhancements</li> <li>Support with SGeFF A.01.00</li> <li>Extended Distance Cluster (EDC) support with SG SMS version 2.0 on HP-UX 11i v3 is available with the following patches: <ul style="list-style-type: none"> <li>PHCO_38412 - 11.31 VxVM 5.0 GARP2 Commands Patch 02</li> <li>PHKL_38413 - 11.31 VxVM 5.0 GARP2 Kernel Patch 02</li> </ul> </li> </ul> </li> <li>These patches are available from the ITRC patch web site at: <a href="http://h71028.www7.hp.com/enterprise/cache/286850-0-0-0-121.html">http://h71028.www7.hp.com/enterprise/cache/286850-0-0-0-121.html</a></li> <li>Oracle Details: <ul style="list-style-type: none"> <li>Support for 10gR2, 11gR1</li> <li>Oracle RAC 9iR2 is not supported in this version</li> </ul> </li> </ul>			

SG A.11.18 for HP-UX 11i v2 COMPATIBILITY <i>Intro Date June 2007</i>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM <i>Additional HPVM information can be found at: <a href="http://docs.hp.com/en/10560/IntegrityVM_HA_Solutions-SGandVM.pdf">http://docs.hp.com/en/10560/IntegrityVM_HA_Solutions-SGandVM.pdf</a></i>
SG/SGeRAC A.11.18 June 2007 / June 2012	HP-UX 11i v2	Integrity PARISC	A.04.11	B.01.01	B.05.00.00	A.02.00.04 A.03.00 single or alternate IP support	A.02.00 for 11i v2 (T2771CA - T2777CA) Jul 2007/Jun 2012 A.01.01 (T2771BA - T2777BA) Jun 2007/Jun 2012	See HPVM specific support information at the end of this document
SG A.11.18 for HP-UX 11i v2 NEW FEATURES <i>Intro Date June 2007</i>								
SG New Features <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>		SGeRAC New Features Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11v3.html">http://docs.hp.com/en/hpux11v3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a>			SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
<ul style="list-style-type: none"> <li>Online network config: <ul style="list-style-type: none"> <li>-add delete NIC's, Change designation of Heartbeat &amp; Stationary IP's, Reconfigure cluster IP Addr, Change network polling</li> </ul> </li> <li>New networking support : <ul style="list-style-type: none"> <li>- Support for Virtual LANs (VLANS) over APA, Support for LACP_ mode of Auto Port Aggregation, cmmodnet to enable or disable a LAN_name</li> </ul> </li> <li>Online cluster config: <ul style="list-style-type: none"> <li>-Change HB interval, Change node timeout, Change auto start timeout</li> </ul> </li> <li>Multi-node packages</li> <li>Package dependencies</li> <li>Package priorities</li> <li>New Modular package architecture</li> <li>Lock LUN support on HP-UX</li> <li>SG Manager Plug-in B.01.01 only (standalone not supported with A.11.18)</li> <li>Hostnames for cluster nodes extended to 39 characters</li> <li>SG Patch Oct 2007 adds the following new functionality: <ul style="list-style-type: none"> <li>-Legacy to Modular package migration utility, VxVM Volume Monitor, Support for Alternate Quorum Server Subnet, Package Application parameter, SG Halt Reason environment variable</li> </ul> </li> <li>SG Dec 2007 Patch adds support for cross-subnet configurations <ul style="list-style-type: none"> <li>- Note, SLVM, CVM, and CFS are not currently supported in a cross subnet configuration</li> <li>- Note, SAP and NFS are not supported in a cross-subnet configuration</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>SGeRAC Toolkit for 10gR2 RAC</li> <li>Cluster Interconnect Subnet Monitor</li> <li>Oracle RAC Compatibility: <ul style="list-style-type: none"> <li>- RAC 9iR2 with SLVM, CVM 3.5, CVM/CFS 4.1, CVM/CFS 5.0 (HP Integrity only) <ul style="list-style-type: none"> <li>-- Cluster size with SLVM: 16 nodes maximum</li> <li>-- Cluster size with CVM 3.5, CVM/CFS 4.1, CVM/CFS 5.0: 8 nodes maximum</li> </ul> </li> <li>-- Extended Cluster support: <ul style="list-style-type: none"> <li>--- With SLVM: 2 nodes (up to 100km between sites)</li> <li>--- With CVM 3.5, CVM/CFS 4.1, CVM/CFS 5.0: 2,4,6,8 nodes (up to 10km between sites), 2 nodes (up to 100km between sites)</li> </ul> </li> <li>- RAC 10gR2 with SLVM, ASM over SLVM, CVM/CFS 4.1, CVM/CFS 5.0 <ul style="list-style-type: none"> <li>-- Cluster size with SLVM and ASM over SLVM: 16 nodes maximum</li> <li>-- Cluster size with CVM/CFS 4.1, CVM/CFS 5.0: 8 nodes maximum</li> </ul> </li> <li>-- Extended Cluster support: <ul style="list-style-type: none"> <li>--- With SLVM and ASM over SLVM: 2 nodes (up to 100km between sites)</li> <li>--- With CVM/CFS 4.1, CVM/CFS 5.0: 2,4,6,8 nodes (up to 10km between sites), 2 nodes (up to 100km between sites)</li> </ul> </li> <li>- RAC 11gR1 with SLVM, ASM over SLVM, CVM/CFS 5.0 <ul style="list-style-type: none"> <li>-- Cluster size with SLVM and ASM over SLVM: 16 nodes maximum</li> <li>-- Cluster size with CVM/CFS 5.0: 8 nodes maximum</li> </ul> </li> <li>-- Extended Cluster support: <ul style="list-style-type: none"> <li>--- With SLVM and ASM over SLVM: 2 nodes (up to 100km between sites)</li> <li>--- With CVM/CFS 5.0: 2,4,6,8 nodes (up to 10km between sites), 2 nodes (up to 100km between sites)</li> </ul> </li> </ul> </li> <li>- SGeRAC is supported in cross subnet environments only when used with Metroclust in a Site Aware Disaster Tolerant Architecture</li> </ul>			A.02.00 for 11i v2 includes: <ul style="list-style-type: none"> <li>• Symantec Veritas version 5.0</li> <li>• Performance enhancements</li> <li>• Support with SGeFF A.01.00</li> </ul> Oracle Details: <ul style="list-style-type: none"> <li>• Supports Oracle 9iR2 and 10gR2</li> </ul> A.01.01 includes: <ul style="list-style-type: none"> <li>• Symantec Veritas version 4.1</li> <li>• Support with SGeFF A.01.00</li> <li>• Support with HPVM 3.0</li> </ul> Oracle Details: <ul style="list-style-type: none"> <li>• Supports Oracle 9iR2 and 10gR2</li> </ul>			

SG A.11.18 for Linux COMPATIBILITY <span style="float: right;">Intro Date July 2007</span>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <small>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></small>	SG Mgr Plug-in Version <small>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5308/Serviceguardmgr.pdf">http://docs.hp.com/en/5308/Serviceguardmgr.pdf</a></small>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <small>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></small>	HPVM
SG/LX A.11.18 July 2007 / - Feb 2012 (for RedHat 4), - Apr 2014 (for RedHat 5) - Apr 2014 (for SLES10)	Red Hat 4, Red Hat 5, SLES10	Integrity and ProLiant	N/A	B.01.01	B.05.00.00	A.02.00.04 A.03.00 single or alternate IP's	N/A	HPVM 4.0
SG A.11.18 for Linux NEW FEATURES <span style="float: right;">Intro Date June 2007</span>								
SG New Features	SGeRAC New Features <small>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11v3.html">http://docs.hp.com/en/hpux11v3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a></small>				SG SMS New Features <small>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></small>			
<ul style="list-style-type: none"> <li>• Online network config: -add delete NIC's, Change designation of Heartbeat &amp; Stationary IP's, Reconfigure cluster IP Addr, Change network polling</li> <li>•New networking support: -Use cmmodnet to enable or disable a LAN_name</li> <li>• Online cluster config: -Change HB interval, Change node timeout, Change auto start timeout</li> <li>• Multi-node packages</li> <li>• Package dependencies</li> <li>• Package priorities</li> <li>• New Modular package architecture</li> <li>• SG Manager Plug-in B.01.01 only (standalone not supported with A.11.18)</li> <li>• Hostnames for cluster nodes extended to 39 characters</li> <li>• IPv6 support for data links only</li> <li>• SNMP subagent</li> <li>• SAF API's for cluster membership and locking services</li> <li>• WBEM provider</li> <li>• SG Patch Oct 2007 adds the following new functionality: -Legacy to Modular package migration utility -Support for Alternate Quorum Server Subnet -Package Application parameter -SG Halt Reason environment variable -Support for HPVM Linux Guest as SG Node (Integrity) -Support for VMware Linux guest as SG Node (ProLiant)</li> <li>• SG Feb 2008 Patch adds support for cross-subnet support configurations, DeviceMapper multipath (DM-MPIO) for application LUNS</li> </ul>	N/A				N/A			
SG Manager Plugin Notes: B.01.01 requires J2SE 1.4.2 or 5.0 or 6.0								

SG A.11.17.01 for HP-UX 11i v3 COMPATIBILITY <span style="float: right;">Intro Date Feb 2007</span>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <small>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></small>	SG Mgr Plug-in Version <small>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></small>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <small>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></small>	HPVM
SG/SGeRAC A.11.17.01 Feb 2007 / Feb 2012	HP-UX 11i v3	Integrity and PARISC	A.04.11	B.01.00	B.04.00.01	A.02.00.04 A.03.00	N/A	N/A
SG A.11.17.01 for HP-UX 11i v3 NEW FEATURES <span style="float: right;">Intro Date Feb 2007</span>								
SG New Features <small>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</small>	SGeRAC New Features <small>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a></small>				SG SMS New Features <small>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></small>			
<ul style="list-style-type: none"> <li>• HP-UX agile addressing.</li> <li>• HP-UX native multipathing and load balancing.</li> <li>• Serviceguard Manager plug-in</li> <li>• New networking capabilities:               <ul style="list-style-type: none"> <li>-The HP-UX olrad -C command now identifies network interface cards (NIC's) that are part of the Serviceguard cluster configuration.</li> <li>-Supports the LACP_AUTO mode of Auto Port Aggregation</li> <li>-Supports Virtual LANs (VLANs) over APA</li> </ul> </li> <li>•39 byte Hostnames</li> </ul>	<ul style="list-style-type: none"> <li>• All SG New Features plus:               <ul style="list-style-type: none"> <li>- SGeRAC Toolkit for 10gR2 RAC and 11gR1 RAC integration</li> </ul> </li> <li>• Oracle RAC Compatibility:               <ul style="list-style-type: none"> <li>- RAC 9iR2 with SLVM,</li> <li>- RAC 10gR2 with SLVM, ASM over SLVM and ASM over raw disks/Lus</li> <li>- RAC 11gR1 with SLVM, ASM over SLVM and ASM over raw disks/LUS</li> </ul> </li> </ul>				N/A			

SG A.11.17 for HP-UX 11i v2 Update 2 COMPATIBILITY <span style="float: right;">Intro Date Dec 2005</span>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <small>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></small>	SG Mgr Plug-in Version <small>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></small>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <small>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></small>	HPVM
SG/SGeRAC A.11.17 Dec 2005 / Dec 2010	HP-UX 11i v2 U2	Integrity and PARISC	A.04.11	N/A	B.04.00.00	A.02.00.03 A.03.00	A.01.00	N/A
SG A.11.17 for HP-UX 11i v2 Update 2 NEW FEATURES <span style="float: right;">Intro Date Dec 2005</span>								
SG New Features <small>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</small>		SGeRAC New Features <small>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with V/Pars see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/11v3.html">http://docs.hp.com/en/11v3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a></small>			SG SMS New Features <small>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></small>			
<ul style="list-style-type: none"> <li>• Support for VxVM /VxFS 5.0</li> <li>• Support for CFS/CVM 4.1, maximum 8 nodes</li> <li>• Multi-node package is now supported for HP-specified applications.</li> <li>• Several new Serviceguard commands have been added for CFS support.</li> <li>• Simple dependencies are introduced for HP-specified applications.</li> <li>• Support for Distributed Systems Administration Utilities (DSAU).</li> <li>• Tested with security containment</li> <li>• HP Fabric Clustering System for (No Suggestions) as cluster heartbeat and data networks using IPoB.</li> <li>• Support for HPVM 1.2, 2.0, 3.0 &amp; 3.5</li> <li>• Supports the LACP_AUTO mode of Auto Port Aggregation</li> </ul>		<ul style="list-style-type: none"> <li>• All SG New Features Plus: <ul style="list-style-type: none"> <li>- Support for Oracle 9iR2 RAC and 10gR2 RAC (on HP Integrity Servers) with CFS/CVM 4.1, maximum 8 nodes</li> <li>- Oracle 10gR2 RAC with SGeRAC A.11.17 can be configured using multi-node packages (MNP) and simple dependencies.</li> <li>- Support for a maximum of 16 node clusters when using Shared LVM (SLVM)</li> <li>- Support for Shared LVM Single Node Online Volume Reconfiguration (SNOR).</li> <li>- Support for Shared LVM Online Node Addition and Deletion.</li> <li>- Support for 8192 Oracle foreground Server Processes for Oracle 9iR2 RAC</li> <li>- Support for Oracle ASM with SGeRAC, requires: SGeRAC A.11.17, Oracle 10gR2, and ASM disk group members must be raw volumes managed by SLVM; maximum 16 nodes when configured with the multinode packages (MNP) and simple dependencies integration framework, maximum 16 nodes without MNP's and dependencies</li> <li>- SGeRAC Toolkit for Oracle 10gR2 RAC and 11gR1 integration</li> <li>- Extended Distance Cluster support with CVM 4.1 or CFS 4.1: <ul style="list-style-type: none"> <li>up to 8 nodes with a maximum distance between data centers of 10km</li> <li>up to 2 nodes with a maximum distance between data centers of 100km</li> </ul> </li> </ul> </li> <li>• Oracle RAC Compatibility: <ul style="list-style-type: none"> <li>- RAC 9iR2 with SLVM, CVM 3.5, CVM 4.1, or CFS 4.1</li> <li>- RAC 10gR1 with SLVM, or CVM 3.5</li> <li>- RAC 10gR2 with SLVM, CVM 4.1 or CFS 4.1</li> <li>- Oracle 10gR2 with ASM over SLVM</li> <li>- RAC 11gR1 with SLVM, ASM over SLVM</li> </ul> </li> </ul>			<ul style="list-style-type: none"> <li>• Support with HPVM 2.0, 3.0, &amp; 3.5</li> </ul>			

SG A.11.16.02 for Linux COMPATIBILITY <span style="float: right;">Intro Date July 2005</span>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the page titled "HP Storage Management Product Naming Conventions"</i>	HPVM
SG/LX A.11.16.02 July 2005 / Oct 2009	Red Hat Enterprise Linux 4, AS or ES	ProLiant Integrity	N/A	N/A	B.03.01.00	A.02.00.03 A.03.00	N/A	N/A
SG A.11.16.02 for Linux New Features <span style="float: right;">Intro Date July 2005</span>								
SG New Features		SGeRAC New Features Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a>			SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
* Support Red Hat EL 4		N/A			N/A			

SG A.11.16.01 for Linux COMPATIBILITY <i>Intro Date Feb 2005</i>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM
SG/LX A.11.16.01 Feb 2005 / Oct 2010 (for RedHat), July 2011 (for SLES9)	Red Hat Enterprise Linux 3, AS or ES (WS is not supported) SUES Linux Enterprise Server (SLES) 9	ProLiant Integrity	N/A	N/A	B.03.01.00	A.02.00.03 A.03.00	N/A	N/A
SG A.11.16.01 for Linux NEW FEATURES <i>Intro Date Feb 2005</i>								
SG New Features	SGeRAC New Features Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VParS see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a>				SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
<ul style="list-style-type: none"> <li>Support for access control policies</li> <li>Support for GUI based configuration using Serviceguard Manager A.04.02</li> </ul>	N/A				N/A			

SG A.11.16 for HP-UX 11i v1 and 11i v2 Update 2 COMPATIBILITY <span style="float: right;">Intro Date Oct 2004</span>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <small>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></small>	SG Mgr Plug-in Version <small>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></small>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <small>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></small>	HPVM
SG/SGeRAC A.11.16 Oct 2004 / Dec 31, 2013 with 11i v1  Oct 2004/ Jun 30 2009 with 11i v2	HP-UX 11i v1  HP-UX 11i v2 U2	PARISC only  Integrity & PARISC	EMS A.04.00.02  .	N/A	B.03.00.00  B.03.00.01	A.02.00.01  A.03.00	N/A	N/A
SG A.11.16 for HP-UX 11i v1 and 11i v2 Update 2 NEW FEATURES <span style="float: right;">Intro Date Oct 2004</span>								
SG New Features <small>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</small>		SGeRAC New Features <small>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11v3.html">http://docs.hp.com/en/hpux11v3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a></small>			SG SMS New Features <small>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></small>			
<ul style="list-style-type: none"> <li>Mixed node support HP 9000 and HP Integrity with HP-UX 11i v2 Update 2</li> <li>Support for 16 node clusters on HP Integrity</li> <li>IP over IB support for SG Heartbeat with required patches (as of Apr'05)</li> <li>VPar support with SG on HP-UX 11i v2 May 2005 release on Integrity and PA platforms including mixed node clusters. Also in this release is Serviceguard support for Security Containment on HP-UX 11i v2.</li> <li>Support for HPVM 1.2, 2.0, 3.0 &amp; 3.5 on HP-UX 11i v2 only</li> </ul>		<ul style="list-style-type: none"> <li>All New SG Features Plus:</li> <li>Online SLVM node addition supported with required patches (as of Apr'05)</li> <li>IP over IB support for SG Heartbeat with required patches (as of Apr'05)</li> <li>SGeRAC is not supported in a mixed node configuration</li> <li>Oracle RAC Compatibility:               <ul style="list-style-type: none"> <li>- RAC 9.2 with SLVM or CVM 3.5</li> <li>- RAC 10gR1 with SLVM, or CVM 3.5</li> <li>- RAC 10gR2 with SLVM</li> </ul> </li> </ul>			N/A			

SG A.11.16 for HP-UX 11i v1 and 11i v2 COMPATIBILITY								
Intro Date June 2004								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM
SG/SGeRAC A.11.16 Jun 2004 / Dec 31, 2013 with 11i v1  June 2004/ Jun 30 2009 with 11i v2	HP-UX 11i v1  HP-UX 11i v2	PARISC only  Integrity & PARISC	EMS A.04.00.02  "	N/A	B.03.00.00  B.03.00.01	A.02.00  "	N/A	N/A
SG A.11.16 for HP-UX 11i v1 and 11i v2 NEW FEATURES								
Intro Date June 2004								
SG New Features <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>		SGeRAC New Features  Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11v3.html">http://docs.hp.com/en/hpux11v3.html</a> and the Oracle site: <a href="http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html">http://www.oracle.com/technology/products/database/clustering/certify/tech_generic_unix_new.html</a>			SG SMS New Features  <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
<ul style="list-style-type: none"> <li>Support access control policies with required patches (as of Apr'05)</li> <li>Support for faster failover</li> <li>Support for Network Monitoring</li> </ul>		<ul style="list-style-type: none"> <li>All New SG Features Plus:</li> <li>Enhanced RAC monitoring with Access Control Policies</li> <li>RAC packaging through Serviceguard Manager A.04.00</li> <li>RAC 100 KM Extended Distance Cluster (requires RAC 9.2 or 10gR2) with SLVM or CVM 3.5, maximum 2 nodes</li> <li>Oracle RAC Compatibility:               <ul style="list-style-type: none"> <li>- RAC 9.2 with SLVM or CVM 3.5</li> <li>- RAC 10gR1 with SLVM, or CVM 3.5</li> <li>- RAC 10gR2 with SLVM</li> </ul> </li> </ul>			N/A			

SG A.11.15.02 for Linux COMPATIBILITY <i>Intro Date April 2003</i>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM
SG/LX A.11.15.02 April 2004 / April 2006	Linux Red Hat EL 3	Integrity ProLiant	N/A	N/A	B.02.02.01	A.02.00	N/A	N/A
SG A.11.15.02 for Linux NEW FEATURES <i>Intro Date April 2004</i>								
SG New Features	SGeRAC New Features <i>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a></i>				SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
• Red hat Enterprise Linux 3 update 1 support with ProLiant and Integrity servers	N/A				N/A			

SG A.11.15.01 for Linux COMPATIBILITY <span style="float: right;">Intro Date November 2003</span>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <small>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></small>	SG Mgr Plug-in Version <small>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></small>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <small>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></small>	HPVM
SG/LX A.11.15.01 Nov 2003 / Nov 2007	Linux SLES 8 (SP3 and later)	Integrity ProLiant	N/A	N/A	B.02.02.01	A.02.00	N/A	N/A
SG A.11.15.01 for Linux NEW FEATURES <span style="float: right;">Intro Date November 2003</span>								
SG New Features	SGeRAC New Features <small>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11v3.html">http://docs.hp.com/en/hpux11v3.html</a></small>				SG SMS New Features <small>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></small>			
<ul style="list-style-type: none"> <li>HP Integrity Server support</li> <li>Cluster Lock LUN support</li> </ul>	N/A				N/A			

SG A.11.15 for HP-UX 11i v2 and 11iv2 Update 2 on <u>Integrity</u> COMPATIBILITY								Intro Date September 2003
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM
SG/SGeRAC A.11.15 Sept 2003 / Sept 2006	HP-UX 11i v2 HP-UX 11i v2 U2	Integrity	A.04.00.01	N/A	B.02.02	A.01.01 A.02.00	N/A	N/A
SG A.11.15 for HP-UX 11i v2 and HP-UX 11i v2 Update 2 on <u>Integrity</u> NEW FEATURES								Intro Date September 2003
SG New Features <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>		SGeRAC New Features <i>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a></i>			SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
<ul style="list-style-type: none"> <li>Supports only HP Integrity servers</li> <li>VPar support with SG on HP-UX 11iv2 May 2005 release on Integrity platforms only</li> </ul>		<ul style="list-style-type: none"> <li>Supports only HP Integrity servers</li> </ul>			N/A			

SG A.11.15 for HP-UX 11i v1 on <u>PARISC</u> COMPATIBILITY								
Intro Date June 2003								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at www.docs.hp.com</i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: http://docs.hp.com/en/5808/Servicegua rMgr.pdf</i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at http://docs.hp.com</i>	HPVM
SG/SGeRAC A.11.15 Jun 2003 / Jun 2006	HP-UX 11.i v1	PARISC	A.04.00 A.04.00.01	N/A	B.02.02	A.01.00 A.01.01 A.02.00 A.03.00	N/A	N/A
SG A.11.15 for HP-UX 11i v1 on <u>PARISC</u> NEW FEATURES								
Intro Date June 2003								
SG New Features <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>		SGeRAC New Features <i>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: http://docs.hp.com/en/6257/SGeRAC- SLVM-CVM_Support.pdf</i> <i>For information regarding Serviceguard support with VPairs see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at http://docs.hp.com/en/hpux11iv3.html</i>			SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</i>			
<ul style="list-style-type: none"> <li>• Ipv6 support</li> <li>• Quorum server as a package</li> <li>• Automatic probe of networks with cmrun commands</li> <li>• Can limit cmcheckconf connectivity checks for volume groups</li> </ul>		<ul style="list-style-type: none"> <li>• All New SG Features Plus:</li> <li>• Fast detection of Oracle instance failures,</li> <li>• DB and group membership displayed via SG Mgr</li> <li>• Rolling upgrade enabled for future versions</li> <li>• SG unbundled from SGeRAC</li> </ul>			N/A			

SG A.11.14.02 for Linux COMPATIBILITY <i>Intro Date December 2002</i>								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM
SG/LX A.11.14.02 Jul 2003 / Jul 2005 (SLES8), Jan 2003 / May 2009 (RedHat)	Linux –RH EL 2.1, SLES8	ProLiant	N/A	N/A	B.02.01.01	A.02.00 A.03.00	N/A	N/A
SG A.11.14.02 for Linux NEW FEATURES <i>Intro Date December 2002</i>								
SG New Features	SGeRAC New Features <i>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11v3.html">http://docs.hp.com/en/hpux11v3.html</a></i>				SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
<ul style="list-style-type: none"> <li>• ProLiant Server support,</li> <li>• 16 node cluster support</li> </ul>	N/A				N/A			

SG A.11.14.01 for HP-UX 11i v1.6 COMPATIBILITY									Intro Date July 2002
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM	
SG/SGeRAC A.11.14.01 Jul 2002 / Dec 2005	HP-UX 11i v1.6	Integrity	A.03.40	N/A	B.02.01	A.01.01 A.02.00 A.03.00	N/A	N/A	
SG A.11.14.01 for HP-UX 11i v1.6 NEW FEATURES									Intro Date July 2002
SG New Features <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>		SGeRAC New Features <i>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPar's see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a></i>			SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>				
<ul style="list-style-type: none"> <li>1st version supported on HP Integrity Servers, with some configuration limitations</li> </ul>		<ul style="list-style-type: none"> <li>All New SG Features Plus:</li> <li>New name for SG OPS: SGeRAC</li> <li>SG unbundled from SGeRAC</li> </ul>			N/A				

SG A.11.14 for HP-UX 11.0 and 11i v1 COMPATIBILITY								
Intro Date March 2002								
SG, SG OPS, SGeRAC Version Intro/End of Support Dates	OS Version	Hardware Platform	EMS & HA Monitors Version <i>Additional information can be found in the release notes at <a href="http://www.docs.hp.com">www.docs.hp.com</a></i>	SG Mgr Plug-in Version <i>For Serviceguard Manager standalone version information see: <a href="http://docs.hp.com/en/5808/Serviceguardmgr.pdf">http://docs.hp.com/en/5808/Serviceguardmgr.pdf</a></i>	COM Version	QS Version	SG SMS Version Intro/End of Support Dates <i>For specific naming conventions for the various SMS bundles please refer to the product release notes at <a href="http://docs.hp.com">http://docs.hp.com</a></i>	HPVM
SG/SG OPS A.11.14 Mar 2002 / Dec 2006	HP-UX 11.0  HP-UX 11.i v1	PARISC	EMS A.03.20  EMS A.03.20.01, EMS A.04.00, & EMS A.04.00.01	N/A	B.01.04 and B.01.04.01 w/patch PHSS_27991)  B.01.04 and B.01.04.01 w/patch PHSS_27991	A.01.00 A.01.01 A.02.00 A.03.00  A.01.00 A.01.01 A.02.00 A.03.00	N/A	N/A
SG A.11.14 for HP-UX 11.0 and 11i v1 NEW FEATURES								
Intro Date March 2002								
SG New Features <i>Note, Extended Distance Cluster (EDC) is a SG configuration and all SG compatibility should be assumed unless otherwise stated</i>		SGeRAC New Features <i>Number of nodes supported in SGeRAC for SLVM, CVM and CFS see: <a href="http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf">http://docs.hp.com/en/6257/SGeRAC-SLVM-CVM_Support.pdf</a> For information regarding Serviceguard support with VPairs see the document titled "HP-UX Virtual Partitions Ordering and Configuration Guide" at <a href="http://docs.hp.com/en/hpux11iv3.html">http://docs.hp.com/en/hpux11iv3.html</a></i>			SG SMS New Features <i>Additional detail for the Serviceguard SMS bundles can be found at <a href="http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf">http://docs.hp.com/en/7413/SGStorageMgmtSuite_WP.pdf</a></i>			
<ul style="list-style-type: none"> <li>SG Mgr admin support, includes Quorum Server support</li> <li>Performance Enhancements in control scripts</li> <li>Defect fixes</li> </ul> Support for up to 150 packages (note patch PHSS_26056 or later is required)		<ul style="list-style-type: none"> <li>All New SG Features</li> </ul>			N/A			

## Serviceguard and Integrity VM Support

Integrity VM Release	VM's as Serviceguard Packages <i>Serviceguard running on the HP-UX VM host</i>	VM's as HP-UX Serviceguard Nodes <i>Serviceguard running on the HP-UX VM guest</i>	VM's as Linux Serviceguard Nodes <i>Serviceguard running on the Linux VM guest</i>
<b>A.01.20</b>	Serviceguard release: - A.11.16 - A.11.17 - A.11.17 w/ SMS A.01.00 <sup>(1)</sup>	Serviceguard release: - Not supported	Serviceguard release: - Not supported
<b>A.02.00</b>	Serviceguard release: - A.11.16 - A.11.17 - A.11.17 w/ SMS A.01.00 <sup>(1)</sup>	Serviceguard release: - A.11.16 - A.11.17 - A.11.17 w/ SMS A.01.00 <sup>(1)</sup>	Serviceguard release: - Not supported
<b>A.03.00</b>	Serviceguard release: - A.11.16 - A.11.17 - A.11.17 w/ SMS A.01.00 <sup>(1)</sup> - A.11.18 - A.11.18 w/ SMS A.01.01 <sup>(1)</sup>	Serviceguard release: - A.11.16 - A.11.17 - A.11.17 w/ SMS A.01.00 <sup>(1)</sup> - A.11.17.01 (11i v3) - A.11.18 (11i v2, 11i v3) - A.11.18 w/ SMS A.01.01 (11i v2) <sup>(1)</sup>	Serviceguard release: - A.11.18 (Linux Red Hat Release 4 Update 4,5)
<b>A.03.50</b>	Serviceguard release: - A.11.16 - A.11.17 - A.11.17 w/ SMS A.01.00 <sup>(1)</sup> - A.11.18 - A.11.18 w/ SMS A.01.01 <sup>(1)</sup> - A.11.18 w/ SMS A.02.00 <sup>(1)</sup>	Serviceguard release: - A.11.16 - A.11.17 - A.11.17 w/ SMS A.01.00 <sup>(1,2)</sup> - A.11.17.01 (11i v3) - A.11.18 (11i v2, 11i v3) - A.11.18 w/ SMS A.01.01 (11i v2) <sup>(1,2)</sup> - A.11.18 w/ SMS A.02.00 (11i v2) <sup>(1,2)</sup> - A.11.18 w/ SMS A.02.00 (11i v3) <sup>(1,2)</sup>	Serviceguard release: - A.11.18 (Linux Red Hat Release 4 Update 4/5, SLES10 Update 1)
<b>B.04.00</b>	Serviceguard release: - A.11.18 - A.11.18 w/ SMS A.02.00 <sup>(1)</sup> - A.11.19 - A.11.19 w/ SMS A.02.01 <sup>(1)</sup>	Serviceguard release: - A.11.18 (11i v2, 11i v3) - A.11.18 w/ SMS A.02.00 (11i v2) <sup>(1,2)</sup> - A.11.18 w/ SMS A.02.00 (11i v3) <sup>(1,2)</sup> - A.11.19 (11iv2, 11iv3) - A.11.19 w/ SMS A.02.01 (11i v2) <sup>(1,2)</sup> - A.11.19 w/ SMS A.02.01 (11i v3) <sup>(1,2)</sup>	Serviceguard release: - A.11.18 (Linux Red Hat Release 4 Update 5, SLES10 Update 1/2) - A.11.19 (Linux SLES10 Update 1,2)
<b>B.04.10</b>	Serviceguard release: - A.11.18 - A.11.18 w/ SMS A.02.00 <sup>(1,3)</sup> - A.11.19 - A.11.19 w/ SMS A.02.01 <sup>(1)</sup>	Serviceguard release: - A.11.18 (11i v2, 11i v3) - A.11.18 w/ SMS A.02.00 (11i v2) <sup>(1,2)</sup> - A.11.18 w/ SMS A.02.00 (11i v3) <sup>(1,2)</sup> - A.11.19 (11iv2, 11iv3) - A.11.19 w/ SMS A.02.01 (11i v2) <sup>(1,2)</sup> - A.11.19 w/ SMS A.02.01 (11i v3) <sup>(1,2)</sup>	Serviceguard release: - A.11.18 (Linux Red Hat Release 4 Update 5, SLES10 Update 1,2) - A.11.19 (Linux SLES10 Update 1,2)

<sup>(1)</sup> Since Oracle RAC is not supported in VM guests, and Oracle single-instance and RAC is not recommended for use on VM hosts, support for the Serviceguard Storage Management Suite (SMS) A.01.00 / A.01.01 / A.02.00 with HP Integrity Virtual Machines is limited to the following bundles:

VM Hosts:

T2771xx HP Serviceguard Storage Management  
T2772xx HP Serviceguard Storage Management Premium  
T2775xx HP Serviceguard Cluster File System

VM Guests:

T2771xx HP Serviceguard Storage Management  
T2772xx HP Serviceguard Storage Management Premium  
T2773xx HP Serviceguard Storage Management for Oracle  
T2774xx HP Serviceguard Storage Management for Oracle Premium  
T2775xx HP Serviceguard Cluster File System  
T2776xx HP Serviceguard Cluster File System for Oracle

<sup>(2)</sup> The following Serviceguard Storage Management Suite (SMS) A.01.00 / A.01.01 / A.02.00 capabilities are not supported in HP Integrity VM guests:

- Cross Platform Data Sharing (CDS) disk format (VxVM disk groups must be created using the "cfs=off" option)  
- Enclosure Based Names (EBN)

<sup>(3)</sup> Only Serviceguard A.11.19 is supported with Integrity VM B.04.10 Online VM Migration

<sup>(4)</sup> Please reference the following document for device support information on Symantec products for use with HP Integrity Virtual Machines (<http://docs.hp.com/en/5992-4022/5992-4022.htm>)

**HP Integrity VM B.04.10 Host Support Matrix for  
Serviceguard Storage Management Suite (SMS) Version A.02.01  
Products Installed on VM Host**

HP Software Product (installed in VM host)	Serviceguard VM as Package Configurations <i>VM as Serviceguard package and VM as Serviceguard node configurations are supported running on the same VM hosts in separate Serviceguard clusters</i>	<b>VM as Serviceguard Node Configurations</b>  <i>VM as Serviceguard node configurations support only whole-disk backingstore virtual disks and cannot use any volume manager or file system features available on the VM host</i>  <i>VM as Serviceguard package and VM as Serviceguard node configurations are supported running on the same VM hosts in separate Serviceguard clusters</i>
T2771xx - HP Serviceguard Storage Management	Yes, VM as Serviceguard package configurations requiring only whole-disk backingstore virtual disks (e.g., VM guests using online VM migration) cannot use any volume manager or file system features available on the VM host	Yes
T2773xx - HP Serviceguard Storage Management for Oracle	Yes, VM as Serviceguard package configurations requiring only whole-disk backingstore virtual disks (e.g., VM guests using online VM migration) cannot use any volume manager or file system features available on the VM host Oracle single-instance DBs are not supported for use on VM hosts; however other Serviceguard Storage Management Suite functions (e.g., volume snapshots / checkpoints) are supported on the VM host	Yes, Oracle single-instance DBs are not supported for use on VM hosts; however other Serviceguard Storage Management Suite functions (e.g., volume snapshots / checkpoints) are supported on the VM host
T2774xx - HP Serviceguard Storage Management for Oracle Premium	Yes, VM as Serviceguard package configurations requiring only whole-disk backingstore virtual disks (e.g., VM guests using online VM migration) cannot use any volume manager or file system features available on the VM host Oracle single-instance DBs are not supported for use on VM hosts; however other Serviceguard Storage Management Suite functions (e.g., volume snapshots / checkpoints) are supported on the VM host	Yes, Oracle RAC DBs are not supported for use on VM hosts or VM guests
T2775xx - HP Serviceguard Cluster File System	Yes, VM as Serviceguard package configurations requiring only whole-disk backingstore virtual disks (e.g., VM guests using online VM migration) cannot use any volume manager or file system features available on the VM host	Yes
T2777xx - HP Serviceguard Cluster File System for RAC	No, Oracle RAC DBs are not supported for use on VM hosts or VM guests	No, Oracle RAC DBs are not supported for use on VM hosts or VM guests

**HP Integrity VM B.04.10 Guest Support Matrix for  
Serviceguard Storage Management Suite (SMS) Version A.02.01  
Products Installed in VM Guest**

<b>HP Software Product (installed in VM guest)</b>	<b>Online VM Migration - VM as Serviceguard Package</b> <i>VM as Serviceguard package configurations requiring only whole-disk backingstore virtual disks (e.g., VM guests using online VM migration) cannot use any volume manager or file system features available on the VM host</i>	<b>Online VM Migration – VM as Serviceguard Node</b>	<b>Offline Migration (hpvmigrate)</b>	<b>Offline Migration - VM as Serviceguard Package Failover</b> <i>VM as Serviceguard package configurations requiring only whole-disk backingstore virtual disks (e.g., VM guests using online VM migration) cannot use any volume manager or file system features available on the VM host</i>
T2771xx - HP Serviceguard Storage Management	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations	No, Online migration of VMs as Serviceguard node configurations is not supported at this time	Yes, Cross Platform Data Sharing (CDS) disk format (i.e., VxVM and CVM disk groups must be created using the "cds=off" option) and Enclosure Based Names (EBN) are not supported in VM guests	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations
T2773xx - HP Serviceguard Storage Management for Oracle	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations	No, Online migration of VMs as Serviceguard node configurations is not supported at this time	Yes, Cross Platform Data Sharing (CDS) disk format (i.e., VxVM and CVM disk groups must be created using the "cds=off" option) and Enclosure Based Names (EBN) are not supported in VM guests	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations
T2774xx - HP Serviceguard Storage Management for Oracle Premium	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations	No, Online migration of VMs as Serviceguard node configurations is not supported at this time	Yes, Cross Platform Data Sharing (CDS) disk format (i.e., VxVM and CVM disk groups must be created using the "cds=off" option) and Enclosure Based Names (EBN) are not supported in VM guests	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations
T2775xx - HP Serviceguard Cluster File System	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations	No, Online migration of VMs as Serviceguard node configurations is not supported at this time	Yes, Cross Platform Data Sharing (CDS) disk format (i.e., VxVM and CVM disk groups must be created using the "cds=off" option) and Enclosure Based Names (EBN) are not supported in VM guests	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations
T2777xx - HP Serviceguard Cluster File System for RAC	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations	No, Online migration of VMs as Serviceguard node configurations is not supported at this time	No, Oracle RAC DBs are not supported for use on VM hosts or VM guests	No, Serviceguard SMS requires Serviceguard running in the VM guest, which is not supported in VM as Serviceguard package configurations