Hitachi Vantara

Hitachi Dynamic Link Manager Software Interoperability Support Matrix

Note: This document contains support information for only the 3 most recent versions of Hitachi Dynamic Link Manager Advanced. If you require support for previous versions, please ask your Hitachi Vantara contact.

Contents

Recent Revision Level Information

Revision	Date	Description
50	January 31,2011	Additions and modifications...
51	February 28,2011	Additions and modifications...
52	April 28,2011	Additions and modifications...
52-1	May 30,2011	Additions and modifications...
52-2	JUNE 29,2011	Additions and modifications...
53	JULY 30,2011	Additions and modifications...
53-1	September 01,2011	Additions and modifications...
53-2	September 28,2011	Additions and modifications...
54	October 28,2011	Additions and modifications...
54-1	November 30,2011	Additions and modifications...
55	January 05,2012	Additions and modifications...
55-1	February 1,2012	Additions and modifications...

55-2	February 29,2012	Additions and modifications...
55-3	MARCH 30,2012	Additions and modifications...
55-4	April 27,2012	Additions and modifications...
56	May 31,2012	Additions and modifications...
56-1	Jun 29,2012	Additions and modifications...
57	Aug 1,2012	Additions and modifications...
57-1	Aug 31,2012	Additions and modifications...
57-2	Sep 28,2012	Additions and modifications...
58	Oct 31,2012	Additions and modifications...
58-1	Nov 30,2012	Additions and modifications...
58-2	Dec 27,2012	Additions and modifications...
59	Jan 31,2013	Additions and modifications...
59-1	Feb 28,2013	Additions and modifications...
59-2	Mar 29,2013	Additions and modifications...
60	Apr 26,2013	Additions and modifications...
60-1	Jun 21,2013	Additions and modifications...
60-2	Jun 28,2013	Additions and modifications...
60-3	July 31,2013	Additions and modifications...
60-4	Aug 30,2013	Additions and modifications...
61	Sep 30,2013	Additions and modifications...
61-1	Oct 30,2013	Additions and modifications...
61-2	Nov 29,2013	Additions and modifications...
61-3	Dec 26,2013	Additions and modifications...
61-4	Jan 31,2014	Additions and modifications...
62	Feb 28,2014	Additions and modifications...
63	Mar 31,2014	Additions and modifications...
63-1	Apr 25,2014	Additions and modifications...
63-2	May 30,2014	Additions and modifications...
63-3	Jun 30,2014	Additions and modifications...
64	July 31,2014	Additions and modifications...
64-1	Aug 29,2014	Additions and modifications...
65	Oct 6,2014	Additions and modifications...
65-1	Oct 31,2014	Additions and modifications...
66	Nov 28,2014	Additions and modifications...
66-1	Dec 26,2014	Additions and modifications...
67	Jan 30,2015	Additions and modifications...
67-1	Feb 27,2015	Additions and modifications...
68	Mar 31,2015	Additions and modifications...
69	Apr 28,2015	Additions and modifications...
69-1	May 29,2015	Additions and modifications...
70	Jun 30,2015	Additions and modifications...
70-1	July 31,2015	Additions and modifications...
70-2	Aug 31,2015	Additions and modifications...
70-3	Sep 30,2015	Additions and modifications...
71	Oct 30,2015	Additions and modifications...
71-1	Nov 30,2015	Additions and modifications...
71-2	Dec 28,2015	Additions and modifications...
72	Jan 29,2016	Additions and modifications...
72-1	Feb 29,2016	Additions and modifications...
72-2	Mar 31,2016	Additions and modifications...
73	Apr 28,2016	Additions and modifications...
73-1	May 31,2016	Additions and modifications...
73-2	Jun 30,2016	Additions and modifications...
73-3	July 29,2016	Additions and modifications...
73-4	Aug 31,2016	Additions and modifications...
74	Sep 30,2016	Additions and modifications...
74-1	Oct 31,2016	Additions and modifications...
74-2	Nov 30,2016	Additions and modifications...
74-3	Dec 28,2016	Additions and modifications...
75	Jan 31,2017	Additions and modifications...
75-1	Feb 28,2017	Additions and modifications...

75-2	Mar 31,2017	Additions and modifications...
76	Apr 27,2017	Additions and modifications...
76-1	May 31,2017	Additions and modifications...
76-2	Jun 30,2017	Additions and modifications...
76-3	July 31,2017	Additions and modifications...
76-4	Aug 31,2017	Additions and modifications...
77	Sep 29,2017	Additions and modifications...
77-1	Oct 31,2017	Additions and modifications...
77-2	Nov 30,2017	Additions and modifications...
77-3	Dec 27,2017	Additions and modifications...
77-4	Jan 31,2018	Additions and modifications...
78	Feb 28,2018	Additions and modifications...
79	Apr 11,2018	Additions and modifications...
80	May 31,2018	Additions and modifications...
80-1	Jun 29,2018	Additions and modifications...
80-2	July 31,2018	Additions and modifications...
80-3	Aug 31,2018	Additions and modifications...
81	Sep 28,2018	Additions and modifications...
81-1	Oct 31,2018	Additions and modifications...
81-2	Nov 30,2018	Additions and modifications...
82	Dec 27,2018	Additions and modifications...
82-1	Jan 31,2019	Additions and modifications...
82-2	Feb 28,2019	Additions and modifications...
83	Mar 29,2019	Additions and modifications...
83-1	Apr 26,2019	Additions and modifications...
83-2	May 31,2019	Additions and modifications...
83-3	Jun 28,2019	Additions and modifications...
84	July 31,2019	Additions and modifications...
84-1	Aug 30,2019	Additions and modifications...
85	Sep 30,2019	Additions and modifications...
85-1	Oct 31,2019	Additions and modifications...
86	Nov 29,2019	Additions and modifications...
86-1	Dec 26,2019	Additions and modifications...
86-2	Jan 31,2020	Additions and modifications...
87	Feb 28,2020	Additions and modifications...
88	Apr 20,2020	Additions and modifications...
88-1	May 29,2020	Additions and modifications...
89	Jun 30,2020	Additions and modifications...
89-1	July 31,2020	Additions and modifications...
89-2	Aug 31,2020	Additions and modifications...
90	Sep 30,2020	Additions and modifications...
90-1	Oct 30,2020	Additions and modifications...
91	Nov 30,2020	Additions and modifications...
92	Jan 29,2021	Additions and modifications...
92-1	Feb 26,2021	Additions and modifications...
92-2	Mar 31,2021	Additions and modifications...
92-3	Apr 28,2021	Additions and modifications...
92-4	May 31,2021	Additions and modifications...
92-5	Jun 30,2021	Additions and modifications...
93	July 30,2021	Additions and modifications...
93-1	Aug 31,2021	Additions and modifications...
94	Sep 30,2021	Additions and modifications...
94-1	Oct 29,2021	Additions and modifications...
94-2	Nov 30,2021	Additions and modifications...

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Supported Operating Systems for Multipathing

IMPORTANT NOTE

Security fix kernels can be supported without ISRs if their base kernels are supported and all of conditions below are met.
(1) The security fix kernels are for RHEL4.5/ SLES10 or later.
Boot disk environment of RHEL6.0 security fix kernels is not supported.
(2) Bundled driver versions of the security fix kernels are the same as the bundled driver versions of the supported base kernels.
If your requested security fix kernel is for RHEL4.4/SLES9 or before, or has a different bundled driver version from one of the base kernel, please contact appropriate person in Hitachi Vantara for an Interoperability Support Request (ISR).

Microsoft Windows				HDLM Version		
OS Name	Version	Service Pack	Architecture	8.7.6	8.8.0	8.8.1
Windows Server 2008	Standard Edition Enterprise Edition Datacenter Edition	No SP	IA32 / x86			
		SP2				
	Standard Edition Enterprise Edition Datacenter Edition	No SP	x64 / x86_64			
		SP2				
	Itanium-based Systems	No SP	IA64 / Itanium			
		SP2				
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition R2 Web Edition	No SP	x64 / x86_64			
		SP1	x64 / x86_64			
	R2 Itanium-based Systems	No SP	IA64 / Itanium			
		SP1	IA64 / Itanium			
Windows Server 2012	Essentials Edition Standard Edition Datacenter Edition	No SP	x64 / x86_64	37	37	37
	R2 Essentials Edition R2 Standard Edition R2 Datacenter Edition	No SP	x64 / x86_64	39	39	39
Windows Server 2016	Essentials Edition Standard Edition Datacenter Edition	No SP	x64 / x86_64	40	40	40
Windows Server 2019	Essentials Edition Standard Edition Datacenter Edition	No SP	x64 / x86_64	41	41	41

Supported	
Not Supported	

Notes	
35	In Windows Server 2008 Hyper-V, you can install and use HDLM on the guest OS of Hyper-V for the following environment: - Guest OSs that use Microsoft iSCSI Supported guest OSs: Windows Server 2008 Supported clusters: MSCS
36	SP can be applied to the multipath environment where HDLM is installed.
37	In Windows Server 2012 Hyper-V, you can install and use HDLM on the guest OS of Hyper-V for the following environments: - Guest OSs that use Microsoft iSCSI Supported guest OSs: Windows Server 2012, Windows Server 2008, and Windows Server 2008 R2 Supported clusters: MSCS - Virtual Fibre Channel Supported guest OSs: Windows Server 2012 Supported clusters: MSCS If you use virtual Fibre Channel, use WWN zoning in a FC-SW topology. Additionally, configure one virtual Fibre Channel adapter for each physical channel port.
38	In Windows Server 2008 R2 Hyper-V, you can install and use HDLM on the guest OS of Hyper-V for the following environment: - Guest OSs that use Microsoft iSCSI Supported guest OSs: Windows Server 2008 and Windows Server 2008 R2 Supported clusters: MSCS
39	In Windows Server 2012 R2 Hyper-V, you can install and use HDLM on the guest OS of Hyper-V for the following environments: - Guest OSs that use Microsoft iSCSI Supported guest OSs: Windows Server 2012, Windows 2012 R2, Windows Server 2008, and Windows Server 2008 R2 Supported clusters: MSCS - Virtual Fibre Channel Supported guest OSs: Windows Server 2012 and Windows 2012 R2 Supported clusters: MSCS If you use virtual Fibre Channel, use WWN zoning in a FC-SW topology. Additionally, configure one virtual Fibre Channel adapter for each physical channel port.
40	In Windows Server 2016 Hyper-V, you can install and use HDLM on the guest OS of Hyper-V for the following environments: - Guest OSs that use Microsoft iSCSI Supported guest OSs: Windows Server 2016, Windows Server 2012, Windows 2012 R2, Windows Server 2008, and Windows Server 2008 R2 Supported clusters: MSCS - Virtual Fibre Channel Supported guest OSs: Windows Server 2016, Windows Server 2012 and Windows 2012 R2 Supported clusters: MSCS If you use virtual Fibre Channel, use WWN zoning in a FC-SW topology. Additionally, configure one virtual Fibre Channel adapter for each physical channel port.
41	In Windows Server 2019 Hyper-V, you can install and use HDLM on the guest OS of Hyper-V for the following environments: - Guest OSs that use Microsoft iSCSI Supported guest OSs: Windows Server 2019, Windows Server 2016, Windows Server 2012, Windows 2012 R2, Windows Server 2008, and Windows Server 2008 R2 Supported clusters: MSCS - Virtual Fibre Channel Supported guest OSs: Windows Server 2019, Windows Server 2016, Windows Server 2012 and Windows 2012 R2 Supported clusters: MSCS If you use virtual Fibre Channel, use WWN zoning in a FC-SW topology. Additionally, configure one virtual Fibre Channel adapter for each physical channel port.

Solaris SPARC				HDLM Version		
OS Name	Version	Architecture	Kernel Mode	8.7.6	8.8.0	8.8.1
	10		64bit	4,5,7	4,5,7	4,5,7
	11		64bit	6,7,13	6,7,13	6,7,13

Solaris	11.1	SPARC	64bit	7,8,14,18	7,8,14,18	7,8,14,18
	11.2		64bit	7,8,9,10,11,15,18	7,8,9,10,11,15,18	7,8,9,10,11,15,18
	11.3		64bit	7,8,9,10,12,16,18	7,8,9,10,12,16,18	7,8,9,10,12,16,18
	11.4		64bit	7,8,9,10,12,17,18	7,8,9,10,12,17,18	7,8,9,10,12,17,18

Supported	
Not Supported	

Notes	
4	If you are using ZFS, use Solaris 10 6/06 or later.
5	If you are using a boot disk environment on ZFS, use Solaris 10 9/10 or later.
6	The SRU (Support Repository Updates) below is required. SRUs take the place of maintenance updates or patch bundles that are available for Solaris 10 releases. - SRU 6.6 or later
7	Up to 4096 LUs and up to 8192 paths are supported as HDLM management targets. If you use volume managers, clusterware, or virtualization, check the FRS to make sure the above numbers of LUs and paths are supported for your configuration. If support information is not included in the FRS, up to 256 LUs and up to 4096 paths are supported for the configuration.
8	A boot disk for which an EFI disk label is set supports only non-cluster configurations. Cluster configurations are not supported.
9	The Immutable Global Zones function supports only "None".
10	The Verified Boot function supports only "None".
11	If SRU 10.5 or later is used, perform an upgrade installation of HDLM 8.4.1 or later.
12	Configurations that use the boot pool function are not supported in a boot disk environment.
13	SRU 6.6 to 13.4 are supported.
14	SRU 21.4.1 or earlier are supported.
15	HDLM versions from 7.6.0 to 8.2.1 support SRU 1.5.0 to 9.5.0. If you use later versions of SRU, upgrade HDLM to version 8.4.1. HDLM 8.4.1 or later supports SRU 15.5.1 or earlier.
16	SRU 36.24.0 or earlier are supported. However, HDLM 8.4.0 does not support SRU 36.21.0 or later.
17	SRU 38.101.6 or earlier are supported.
18	If a boot disk is created with an HDLM physical device specified, the following operations fail: installation and updates of OS packages, and activation of the boot environment (BE). For details, see SD-EN-HDLM-234 （rev. 1).

AIX				**HDLM Version**		
OS Name	Version	Architecture	Kernel Mode	**8.7.8**	**8.8.0**	**8.8.1**
AIX	7.1	POWER	64bit	1,2	1,2	1,2
	7.2		64bit	1	1	1

Supported	
Not Supported	

Notes	
1	The Secure by Default functionality of AIX 6.1, AIX 7.1, and AIX 7.2 is not supported.
2	TL04 or later are supported.

HP-UX					**HDLM Version**		
OS Name	Version	Release	Architecture	Kernel Mode	**6.1.0**	**6.5.0**	**6.5.1**
HP-UX	11iV1		PA-RISC	64bit			
	11iV2	September 2004 May 2005 December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	Itanium	-			
		September 2004 May 2005 December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	PA-RISC	64bit			
	11iV3	There are no plans to support HDLM with HP-UX 11iV3 or later because HP-UX 11iV3 has implemented its own native multipathing solution. Additionally, HP does not recommend nor support 3rd party vendor multipathing on HP-UX 11iV3 or later. All issues relating to multipathing and HP-UX 11iV3 must be discussed directly with HP.					

Supported	
Not Supported	

Red Hat Linux					**HDLM Version**		
OS Name	Version	Update	Kernel	Architecture	**8.7.8**	**8.8.0**	**8.8.1**
	5	None	2.6.18-8.el5 2.6.18-8.el5PAE	Intel x86			
			2.6.18-8.el5	IA64 / Itanium			

Red Hat Linux ELAP or EL			2.6.18-8.el5	EM64T AMD64			
	5.1	None	2.6.18-53.el5 2.6.18-53.el5PAE	Intel x86			
			2.6.18-53.el5	IA64 / Itanium			
			2.6.18-53.el5	EM64T AMD64			
	5.2	None	2.6.18-92.el5 2.6.18-92.el5PAE	Intel x86			
			2.6.18-92.el5	IA64 / Itanium			
			2.6.18-92.el5	EM64T AMD64			
	5.3	None	2.6.18-128.el5 2.6.18-128.el5PAE	Intel x86			
			2.6.18-128.el5	IA64 / Itanium			
			2.6.18-128.el5	EM64T AMD64			
	5.4	None	2.6.18-164.el5 2.6.18-164.el5PAE	Intel x86			
			2.6.18-164.el5	IA64 / Itanium			
			2.6.18-164.el5	EM64T AMD64			
	5.5	None	2.6.18-194.el5 2.6.18-194.el5PAE	Intel x86			
			2.6.18-194.el5	IA64 / Itanium			
			2.6.18-194.el5	EM64T AMD64			
	5.6	None	2.6.18-238.el5 2.6.18-238.el5PAE	Intel x86			
			2.6.18-238.el5	IA64 / Itanium			
			2.6.18-238.el5	EM64T AMD64			
	5.7	None	2.6.18-274.el5 2.6.18-274.el5PAE	Intel x86			
			2.6.18-274.el5	IA64 / Itanium			
			2.6.18-274.el5	EM64T AMD64			
	5.8	None	2.6.18-308.el5 2.6.18-308.el5PAE	Intel x86			
			2.6.18-308.el5	IA64 / Itanium			
			2.6.18-308.el5	EM64T AMD64			
	5.9	None	2.6.18-348.el5 2.6.18-348.el5PAE	Intel x86			
			2.6.18-348.el5	IA64 / Itanium			
			2.6.18-348.el5	EM64T AMD64			
	5.9(Security Fix)	None	2.6.18-348.39.1.el5 2.6.18-348.39.1.el5PAE	Intel x86			
			2.6.18-348.39.1.el5	IA64 / Itanium			
			2.6.18-348.39.1.el5	EM64T AMD64			
	5.10	None	2.6.18-371.el5 2.6.18-371.el5PAE	Intel x86			
			2.6.18-371.el5	IA64 / Itanium			
			2.6.18-371.el5	EM64T AMD64			
	5.11	None	2.6.18-398.el5 2.6.18-398.el5PAE	Intel x86			
			2.6.18-398.el5	IA64 / Itanium			
			2.6.18-398.el5	EM64T AMD64			
	5.11(Security Fix)	None	2.6.18-416.el5 2.6.18-416.el5PAE	Intel x86			
			2.6.18-416.el5	IA64 / Itanium			
			2.6.18-416.el5	EM64T AMD64			
	5.11(Security Fix)	None	2.6.18-419.el5 2.6.18-419.el5PAE	Intel x86			
			2.6.18-419.el5	IA64 / Itanium			
			2.6.18-419.el5	EM64T AMD64			
	5.11(Security Fix)	None	2.6.18-426.el5 2.6.18-426.el5PAE	Intel x86			
			2.6.18-426.el5	IA64 / Itanium			
			2.6.18-426.el5	EM64T AMD64			
	5.11(Security Fix)	None	2.6.18-431.el5 2.6.18-431.el5PAE	Intel x86			
			2.6.18-431.el5	IA64 / Itanium			
			2.6.18-431.el5	EM64T AMD64			
Red Hat Linux EL	6	None	2.6.32-71.el6.i686	Intel x86	26,38,75	26,38,75	26,38,75
			2.6.32-71.el6.x86_64	EM64T AMD64	26,38,68,75	26,38,68,75	26,38,68,75
	6.1	None	2.6.32-131.0.15.el6.i686	Intel x86	26,38,66,75	26,38,66,75	26,38,66,75
			2.6.32-131.0.15.el6.x86_64	EM64T AMD64	26,38, 66,68,75	26,38, 66,68,75	26,38, 66,68,75
	6.2	None	2.6.32-220.el6.i686	Intel x86	26,38,75	26,38,75	26,38,75
			2.6.32-220.el6.x86_64	EM64T AMD64	26,38,68,75	26,38,68,75	26,38,68,75
	6.3	None	2.6.32-279.el6.i686	Intel x86	26,38,75	26,38,75	26,38,75
			2.6.32-279.el6.x86_64	EM64T AMD64	26,38,68,75	26,38,68,75	26,38,68,75
	6.4	None	2.6.32-358.el6.i686	Intel x86	26,38,71,75	26,38,71,75	26,38,71,75
			2.6.32-358.el6.x86_64	EM64T AMD64	26,38,68, 71,75,86	26,38,68, 71,75,86	26,38,68, 71,75,86
	6.5	None	2.6.32-431.el6.i686	Intel x86	26,38,71,75	26,38,71,75	26,38,71,75
			2.6.32-431.el6.x86_64	EM64T AMD64	26,38,68, 71,75,87	26,38,68, 71,75,87	26,38,68, 71,75,87
	6.6	None	2.6.32-504.el6.i686	Intel x86	26,38,71,75	26,38,71,75	26,38,71,75
			2.6.32-504.el6.x86_64	EM64T AMD64	26,38,68, 71,75,88	26,38,68, 71,75,88	26,38,68, 71,75,88
	6.7	None	2.6.32-573.el6.i686	Intel x86	26,38,71,75, 89	26,38,71,75, 89	26,38,71,75, 89
			2.6.32-573.el6.x86_64	EM64T AMD64	26,38,68, 71,75,90	26,38,68, 71,75,90	26,38,68, 71,75,90
	6.8	None	2.6.32-642.el6.i686	Intel x86	26,38,71,75	26,38,71,75	26,38,71,75
			2.6.32-642.el6.x86_64	EM64T AMD64	26,38,68, 71,75	26,38,68, 71,75	26,38,68, 71,75
	6.9	None	2.6.32-696.el6.i686	Intel x86	26,38,71,75, 91	26,38,71,75, 91	26,38,71,75, 91
			2.6.32-696.el6.x86_64	EM64T AMD64	26,38,68, 71,75,92	26,38,68, 71,75,92	26,38,68, 71,75,92
	6.10	None	2.6.32-754.el6.i686	Intel x86	26,38,71,75	26,38,71,75	26,38,71,75
			2.6.32-754.el6.x86_64	EM64T AMD64	26,38,68, 71,75	26,38,68, 71,75	26,38,68, 71,75
	7	None	3.10.0-123.el7.x86_64	EM64T AMD64	26,31, 70,71,75	26,31, 70,71,75	26,31, 70,71,75
	7.1	None	3.10.0-229.el7.x86_64	EM64T AMD64	26,31, 70,71,75	26,31, 70,71,75	26,31, 70,71,75

Red Hat Linux EL	7.2	None	3.10.0-327.el7.x86_64	EM64T AMD64	26,31, 70,71,75,93	26,31, 70,71,75,93	26,31, 70,71,75,93
	7.3	None	3.10.0-514.el7.x86_64	EM64T AMD64	26,31, 70,71,75,94	26,31, 70,71,75,94	26,31, 70,71,75,94
	7.4	None	3.10.0-693.el7.x86_64	EM64T AMD64	26,31, 70,71,75,95	26,31, 70,71,75,95	26,31, 70,71,75,95
	7.5	None	3.10.0-682.el7.x86_64	EM64T AMD64	26,31, 70,71,75	26,31, 70,71,75	26,31, 70,71,75
	7.6	None	3.10.0-957.el7.x86_64	EM64T AMD64	26,31, 70,71,75	26,31, 70,71,75	26,31, 70,71,75
	7.7	None	3.10.0-1062.el7.x86_64	EM64T AMD64	26,31, 70,71,75	26,31, 70,71,75	26,31, 70,71,75
	7.8	None	3.10.0-1127.el7.x86_64	EM64T AMD64	26,31, 70,71,75	26,31, 70,71,75	26,31, 70,71,75
	7.9	None	3.10.0-1160.el7.x86_64	EM64T AMD64	26,31, 70,71,75	26,31, 70,71,75	26,31, 70,71,75
Red Hat Linux EL	8	None	4.18.0-80.el8.x86_64	EM64T AMD64			
	8.1	None	4.18.0-147.el8.x86_64	EM64T AMD64	26,31, 71,75,97	26,31, 71,75,97	26,31, 71,75,97
	8.2	None	4.18.0-193.el8.x86_64	EM64T AMD64	26,31, 71,75,97	26,31, 71,75,97	26,31, 71,75,97
	8.3	None	4.18.0-240.el8.x86_64	EM64T AMD64	26,31, 71,75,97	26,31, 71,75,97	26,31, 71,75,97
	8.4	None	4.18.0-305.el8.x86_64	EM64T AMD64			26,31, 71,75,97

Supported	
Not Supported	

Notes	
26	XEN is not supported.
31	GFS and GFS2 are not supported.
34	In an EM64T/AMD64 environment, the RPM (Red Hat Package Manager) packages listed below are required. Install these RPM packages before installing HDLM: - libstdc++-RPM package version.i386.rpm - libgcc-RPM package version.i386.rpm - glibc-RPM package version.i686.rpm Note: RPM-package-version depends on the OS version you are using.
37	The following library is required: glibc-2.5-18.el5_1.1 or later
38	GFS is not supported.
64	Only the 64bit kernel mode is supported.
66	This is supported in HDLM 6.6.2-01 or later.
68	In an EM64T/AMD64 environment, the RPM (Red Hat Package Manager) packages listed below are required. Install these RPM packages before installing HDLM: - libstdc++-RPM package version.i686.rpm - libgcc-RPM package version.i686.rpm - glibc-RPM package version.i686.rpm Note: RPM-package-version depends on the OS version you are using.
70	An OS environment that was configured by selecting "Minimal Install", which was supported in RHEL 7, is also supported.
71	UEFI boot is supported.
75	UEFI Secure Boot is not supported.
76	The following kernel versions are not supported. 2.6.32-358.87.1.el6.x86_64 or later
77	The following kernel versions are not supported. 2.6.32-431.87.1.el6.x86_64 or later
78	The following kernel versions are not supported. 2.6.32-504.66.1.el6.x86_64 or later
79	The following kernel versions are not supported. 2.6.32-573.53.1.el6.i686 or later
80	The following kernel versions are not supported. 2.6.32-573.53.1.el6.x86_64 or later
81	The following kernel versions are not supported. 2.6.32-696.23.1.el6.i686 or later
82	The following kernel versions are not supported. 2.6.32-696.23.1.el6.x86_64 or later
83	The following kernel versions are not supported. 3.10.0-327.64.1.el7.x86_64 or later
84	The following kernel versions are not supported. 3.10.0-514.44.1.el7.x86_64 or later
85	The following kernel versions are not supported. 3.10.0-693.21.1.el7.x86_64 or later
86	The following kernel versions are supported in HDLM 8.6.2 or later. 2.6.32-358.87.1.el6.x86_64 or later
87	The following kernel versions are supported in HDLM 8.6.2 or later. 2.6.32-431.87.1.el6.x86_64 or later
88	The following kernel versions are supported in HDLM 8.6.2 or later. 2.6.32-504.66.1.el6.x86_64 or later
89	The following kernel versions are supported in HDLM 8.6.2 or later. 2.6.32-573.53.1.el6.i686 or later
90	The following kernel versions are supported in HDLM 8.6.2 or later. 2.6.32-573.53.1.el6.x86_64 or later
91	The following kernel versions are supported in HDLM 8.6.2 or later. 2.6.32-696.23.1.el6.i686 or later
92	The following kernel versions are supported in HDLM 8.6.2 or later. 2.6.32-696.23.1.el6.x86_64 or later
93	The following kernel versions are supported in HDLM 8.6.2 or later. 3.10.0-327.64.1.el7.x86_64 or later
94	The following kernel versions are supported in HDLM 8.6.2 or later. 3.10.0-514.44.1.el7.x86_64 or later
95	The following kernel versions are supported in HDLM 8.6.2 or later. 3.10.0-693.21.1.el7.x86_64 or later
96	This is supported in HDLM 8.6.2-02 or later.
97	An OS environment that was configured by selecting "Minimal Install", which was supported in RHEL 8, is also supported. The following RPM package is required for installing HDLM. tar-RPM package version.rpm RPM package version depends on the OS version you are using.

Oracle Unbreakable Enterprise Kernel					**HDLM Version**		
OS Name	Version	Update	Kernel	Architecture	**8.7.8**	**8.8.0**	**8.8.1**
	5.6	None	2.6.32-100.26.2.el5	EM64T AMD64			
	5.7	None	2.6.32-200.13.1.el5uek	Intel x86			
			2.6.32-300.27.1.el5uek	Intel x86			

Oracle Unbreakable Enterprise Kernel	5.7	None	2.6.32-200.13.1.el5uek	EM64T AMD64			
			2.6.32-300.27.1.el5uek	EM64T AMD64			
	5.8	None	2.6.32-300.39.2.el5uek	Intel x86			
			2.6.32-300.39.2.el5uek	EM64T AMD64			
	6.2	None	2.6.39-200.29.1.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-200.29.2.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-200.29.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-200.29.2.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.3	None	2.6.39-200.24.1.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-200.24.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.4(Security Fix)	None	2.6.39-400.211.1.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-400.211.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-400.264.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.5	None	2.6.39-400.211.1.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			3.8.13-16.2.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.5(Security Fix)	None	3.8.13-44.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.6	None	2.6.39-400.215.10.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			3.8.13-44.1.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.6(Security Fix)	None	3.8.13-68.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.6(Security Fix)	None	3.8.13-68.1.3.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.7	None	2.6.39-400.250.7.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			3.8.13-68.3.4.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.8	None	2.6.39-400.278.2.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			4.1.12-37.4.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.9	None	4.1.12-61.1.28.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.9(Security Fix)	None	4.1.12-94.2.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.10	None	4.1.12-124.16.4.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.10(Security Fix)	None	4.1.12-124.45.6.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	7	None	3.8.13-44.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.1	None	3.8.13-55.1.6.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.1(Security Fix)	None	3.8.13-68.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.1(Security Fix)	None	3.8.13-68.2.2.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.2	None	3.8.13-98.7.1.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.2(Security Fix)	None	3.8.13-118.10.2.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.3	None	4.1.12-61.1.18.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.3(Security Fix)	None	4.1.12-61.1.28.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.4	None	4.1.12-94.3.9.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.5	None	4.1.12-112.16.4.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.5(Security Fix)	None	4.1.12-124.16.4.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.5(Security Fix)	None	4.1.12-124.30.1.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.6	None	4.14.35-1818.3.3.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.7	None	4.14.35-1902.3.2.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.8	None	4.14.35-1902.300.11.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.8(Security Fix)	None	4.14.35-1902.301.1.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	7.9	None	5.4.17-2011.6.2.el7uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71

	8.2(Security Fix)	None	5.4.17-2011.5.3.el8uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	8.3	None	5.4.17-2011.7.4.el8uek.x86_64	EM64T AMD64	26, 38, 71	26, 38, 71	26, 38, 71
	8.4	None	5.4.17-2102.201.3.el8uek.x86_64	EM64T AMD64			26, 38, 71

Supported	
Not Supported	

Notes	
26	XEN is not supported.
34	In an EM64T/AMD64 environment, the RPM (Red Hat Package Manager) packages listed below are required. Install these RPM packages before installing HDLM: - libstdc++-RPM package version.i386.rpm - libgcc-RPM package version.i386.rpm - glibc-RPM package version.i686.rpm Note: RPM-package-version depends on the OS version you are using.
38	GFS is not supported.
68	In an EM64T/AMD64 environment, the RPM (Red Hat Package Manager) packages listed below are required. Install these RPM packages before installing HDLM: - libstdc++-RPM package version.i686.rpm - libgcc-RPM package version.i686.rpm - glibc-RPM package version.i686.rpm Note: RPM-package-version depends on the OS version you are using.
71	UEFI Secure Boot is not supported.

Oracle Enterprise Linux					**HDLM Version**		
OS Name	Version	Update	Kernel	Architecture	**8.7.8**	**8.8.0**	**8.8.1**
Oracle Enterprise Linux	5	1	2.6.18-53.el5 2.6.18-53.el5 PAE	Intel x86			
			2.6.18-53.el5	EM64T AMD64			
	5.4	None	2.6.18-164.el5 or 2.6.18-164.el5PAE	Intel x86			
			2.6.18-164.el5	EM64T AMD64			
	5.5	None	2.6.18-194.el5 or 2.6.18-194.el5PAE	Intel x86			
			2.6.18-194.el5	EM64T AMD64			
	5.6	None	2.6.18-238.el5 or 2.6.18-238.el5PAE	Intel x86			
			2.6.18-238.el5	EM64T AMD64			
	5.7	None	2.6.18-274.el5 or 2.6.18-274.el5PAE	Intel x86			
			2.6.18-274.el5	EM64T AMD64			
Oracle Linux	6.5	None	2.6.32-431.el6.i686	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.32-431.el6.x86_64	EM64T AMD64	26,38,72,73	26,38,72,73	26,38,72,73
	6.6	None	2.6.32-504.el6.i686	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.32-504.el6.x86_64	EM64T AMD64	26,38,72,73	26,38,72,73	26,38,72,73
	6.7	None	2.6.32-573.el6.i686	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.32-573.el6.x86_64	EM64T AMD64	26,38,72,73	26,38,72,73	26,38,72,73
	6.8	None	2.6.32-642.el6.i686	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.32-642.el6.x86_64	EM64T AMD64	26,38,72,73	26,38,72,73	26,38,72,73
	6.9	None	2.6.32-696.el6.i686	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.32-696.el6.x86_64	EM64T AMD64	26,38,72,73	26,38,72,73	26,38,72,73
	6.10	None	2.6.32-754.el6.i686	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.32-754.el6.x86_64	EM64T AMD64	26,38,72,73	26,38,72,73	26,38,72,73
	7	None	3.10.0-123.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.1	None	3.10.0-229.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.2	None	3.10.0-327.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.3	None	3.10.0-514.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.4	None	3.10.0-693.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.4(Security Fix)	None	3.10.0-693.11.6.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.5	None	3.10.0-862.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.6	None	3.10.0-957.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.7	None	3.10.0-1062.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.8	None	3.10.0-1127.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	7.9	None	3.10.0-1160.el7.x86_64	EM64T AMD64	26,31,70,73	26,31,70,73	26,31,70,73
	8.1	None	4.18.0-147.el8.x86_64	EM64T AMD64	26,31,73,75	26,31,73,75	26,31,73,75
	8.2	None	4.18.0-193.el8.x86_64	EM64T AMD64	26,31,73,75	26,31,73,75	26,31,73,75
	8.3	None	4.18.0-240.el8.x86_64	EM64T AMD64	26,31,73,75	26,31,73,75	26,31,73,75
	8.4	None	4.18.0-305.el8.x86_64	EM64T AMD64			26,31,73,75

Supported	
Not Supported	

Notes	
26	XEN is not supported.
31	GFS and GFS2 are not supported.
34	In an EM64T/AMD64 environment, the RPM (Red Hat Package Manager) packages listed below are required. Install these RPM packages before installing HDLM: - libstdc++-RPM package version.i386.rpm - libgcc-RPM package version.i386.rpm - glibc-RPM package version.i686.rpm Note: RPM-package-version depends on the OS version you are using.
38	GFS is not supported.
64	Only the 64bit kernel mode is supported.

70	To use HDLM in an RHEL 7 environment, the minimum configuration (the configuration set by selecting "Minimal Install" during OS setup) or a higher configuration is required.
72	In an EM64T/AMD64 environment, the RPM (Red Hat Package Manager) packages listed below are required. Install these RPM packages before installing HDLM: - libstdc++-RPM package version.i686.rpm - libgcc-RPM package version.i686.rpm - glibc-RPM package version.i686.rpm Note: RPM-package-version depends on the OS version you are using.
73	UEFI Secure Boot is not supported.
74	This is supported in HDLM 8.6.2-02 or later.
75	To use HDLM in an RHEL 8 environment, the minimum configuration (the configuration set by selecting "Minimal Install" during OS setup) or a higher configuration is required. The following RPM package is required for installing HDLM. tar-RPM package version.rpm RPM package version depends on the OS version you are using.

SUSE Linux					HDLM Version		
OS Name	Version	Update	Kernel	Architecture	8.7.8	8.8.0	8.8.1
SUSE Linux	10	None	2.6.16.21-0.8-default 2.6.16.21-0.8-smp 2.6.16.21-0.8-bigsmp	Intel x86			
			2.6.16.21-0.8-default	IA64 / Itanium			
			2.6.16.21-0.8-default 2.6.16.21-0.8-smp	EM64T AMD64			
		SP1 + Security Fix	2.6.16.46-0.14-default 2.6.16.46-0.14-smp 2.6.16.46-0.14-bigsmp	Intel x86			
			2.6.16.46-0.14-default	IA64 / Itanium			
			2.6.16.46-0.14-default 2.6.16.46-0.14-smp	EM64T AMD64			
		SP2	2.6.16.60-0.21-default 2.6.16.60-0.21-smp 2.6.16.60-0.21-bigsmp	Intel x86			
			2.6.16.60-0.21-xenpae	Intel x86			
			2.6.16.60-0.21-default	IA64 / Itanium			
			2.6.16.60-0.21-default 2.6.16.60-0.21-smp	EM64T AMD64			
			2.6.16.60-0.21-xen	EM64T AMD64			
		SP3	2.6.16.60-0.54.5-default 2.6.16.60-0.54.5-smp 2.6.16.60-0.54.5-bigsmp	Intel x86			
			2.6.16.60-0.54.5-xenpae	Intel x86			
			2.6.16.60-0.54.5-default	IA64 / Itanium			
			2.6.16.60-0.54.5-default 2.6.16.60-0.54.5-smp	EM64T AMD64			
			2.6.16.60-0.54.5-xen	EM64T AMD64			
		SP4	2.6.16.60-0.85.1-default 2.6.16.60-0.85.1-smp 2.6.16.60-0.85.1-bigsmp	Intel x86			
			2.6.16.60-0.85.1-xenpae	Intel x86			
			2.6.16.60-0.85.1-default	IA64 / Itanium			
			2.6.16.60-0.85.1-default 2.6.16.60-0.85.1-smp	EM64T AMD64			
			2.6.16.60-0.85.1-xen	EM64T AMD64			
	11	None+Security Fix	2.6.27.21-0.1.2-default 2.6.27.21-0.1.2-pae	Intel x86			
			2.6.27.21-0.1.2-xen	Intel x86 EM64T AMD64			
			2.6.27.21-0.1.2-default	IA64 / Itanium			
			2.6.27.21-0.1.2-default	EM64T AMD64			
		SP1	2.6.32.12-0.7.1-default 2.6.32.12-0.7.1-pae	Intel x86			
			2.6.32.12-0.7.1-xen	Intel x86 EM64T AMD64			
			2.6.32.12-0.7.1-default	IA64 / Itanium			
			2.6.32.12-0.7.1-default	EM64T AMD64			
		SP2	3.0.13-0.27-default 3.0.13-0.27-pae	Intel x86			
			3.0.13-0.27-default	IA64 / Itanium			
			3.0.13-0.27-default	EM64T AMD64			
		SP3	3.0.76-0.11-default 3.0.76-0.11-pae	Intel x86			
			3.0.76-0.11-default	IA64 / Itanium			
			3.0.76-0.11-default	EM64T AMD64			
			3.0.76-0.11-xen	EM64T AMD64			
		SP4	3.0.101-63.1-default 3.0.101-63.1-pae	Intel x86	26, 66	26, 66	26, 66
			3.0.101-63.1-default	IA64 / Itanium			
			3.0.101-63.1-default	EM64T AMD64	26, 66	26, 66	26, 66
			3.0.101-63.1-xen	EM64T AMD64	66	66	66
		SP4(Security Fix)	3.0.101-108.21-default 3.0.101-108.21-pae	Intel x86	26, 66	26, 66	26, 66
			3.0.101-108.21-default	IA64 / Itanium			
			3.0.101-108.21-default	EM64T AMD64	26, 66	26, 66	26, 66
			3.0.101-108.21-xen	EM64T AMD64	66	66	66
		SP4(Security Fix)	3.0.101-108.68-default 3.0.101-108.68-pae	Intel x86	26, 66	26, 66	26, 66
			3.0.101-108.68-default	EM64T AMD64	26, 66	26, 66	26, 66
			3.0.101-108.68-xen	EM64T AMD64	66	66	66
		None	3.12.28-4-default	EM64T AMD64	26, 66	26, 66	26, 66
			3.12.28-4-xen	EM64T AMD64	66	66	66
		SP1	3.12.59-60.45-default	EM64T AMD64	26, 66	26, 66	26, 66

	12	SP1	3.12.59-60.45-xen	EM64T AMD64	66	66	66
		SP1(Security Fix)	3.12.74-60.64.40-default	EM64T AMD64	26, 66	26, 66	26, 66
			3.12.74-60.64.40-xen	EM64T AMD64	66	66	66
		SP2	4.4.21-69-default	EM64T AMD64	66	66	66
		SP3	4.4.103-6.33-default	EM64T AMD64	66	66	66
		SP3(Security Fix)	4.4.114-94.14-default	EM64T AMD64	66	66	66
		SP4	4.12.14-94.41-default	EM64T AMD64	66	66	66
		SP5	4.12.14-120-default	EM64T AMD64	66	66	66
	15	None	4.12.14-23-default	EM64T AMD64	66	66	66
		SP1	4.12.14-195-default	EM64T AMD64	66	66	66
		SP2	5.3.18-22-default	EM64T AMD64	66	66	66

Supported	
Not Supported	

Notes	
26	XEN is not supported.
64	Only the 64bit kernel mode is supported.
66	UEFI Secure Boot is not supported.
67	This is supported in HDLM 8.6.2-01 or later.

VMware				HDLM Version		
Name	Version	Update	Architecture	**8.7.6**	**8.8.0**	**8.8.1**
VMware vSphere ESXi	6.0	None	EM64T or AMD64	1, 2	1, 2	1, 2
		1	EM64T or AMD64	1, 2	1, 2	1, 2
		2	EM64T or AMD64	1, 2	1, 2	1, 2
		3	EM64T or AMD64	1, 2	1, 2	1, 2
	6.5	None	EM64T or AMD64	1, 2	1, 2	1, 2
		1	EM64T or AMD64	1, 2	1, 2	1, 2
		2	EM64T or AMD64	1, 2	1, 2	1, 2
		3	EM64T or AMD64	1, 2	1, 2	1, 2
	6.7	None	EM64T or AMD64	1, 2	1, 2	1, 2
		1	EM64T or AMD64	1, 2	1, 2	1, 2
		2	EM64T or AMD64	1, 2	1, 2	1, 2
		3	EM64T or AMD64	1, 2	1, 2	1, 2
	7.0	None	EM64T or AMD64	1, 3	1, 3	1, 3
		1	EM64T or AMD64	1, 3	1, 3	1, 3
		2	EM64T or AMD64	1, 3, 4, 5	1, 3, 4, 5	1, 3, 4, 5

Supported	
Not Supported	

Notes	
1	According to the VMware ESXi 6.0/6.5/6.7/7.0 End User License Agreement (EULA), HDLM can be used on Enterprise, Enterprise Plus VMware ESXi Editions, and Standard, too.
2	This is supported if vSphere Command-Line Interface or VMware PowerCLI is used on a remote management client. For details, see "CLI used on a remote management client" on the "20. VMware" sheet.
3	This is supported if VMware PowerCLI is used on a remote management client. For details, see "CLI used on a remote management client" on the "20. VMware" sheet.
4	The following functionalities have restrictions. - dlmperfinfo utility - Linkage with HGLM
5	One of the following configurations, (a) or (b) is only supported as a remote management client configuration. (a)Windows 10 and VMware PowerCLI 12.3.0 are used. (b)Windows Server2019 and VMware PowerCLI 12.3.0 are used.

Microsoft Windows				HDLM Version		
				8.7.6	8.8.0	8.8.1
Product Modifications and Additional Functions	Manual Fail Over					
	Manual Fail Back					
	Automatic Fail Over					
	Automatic Fail Back					
	Load Balance (Round Robin)					
	Load Balance (Extended Round Robin)					
	Load Balance (Least I/O)					
	Load Balance (Extended Least I/O)					
	Load Balance (Least Blocks)					
	Load Balance (Extended Least Blocks)					
	Load Balance under MSCS					
	Automatic Discovery					
	Error Log					
	CLI			21	21	21
	GUI			14	14	14
	Path Blockade					
	Health check					
	Online(E)					
	Health check Time(1min to 24 hr)					
	Support HBA without restrained PnP option.					
	Dynamic Reconfiguration					
	Offline for each HBA (CLI)					
	Target Side Failover					
	HMDE support			2	2	2
	Boot Disk (FC SAN)			1	1	1
	Upgrade install			5, 8, 9	5, 8, 9	5, 8, 9
	Service Pack					
	Digital Signature					
	Boot Disk (iSCSI)			1	1	1
	Boot Disk (FCoE)			1	1	1
	internationalization environment					
	PGR reset utility					
	Unattended Installation					
	Audit Log					
	HDLM Component Install Utility					
	HDLM Component Uninstall Utility					
	HDLM Core Components Install (Non-Java)					
	Hyper-V					
	The function of displaying WWN of a HBA port					
	online/offline by HBA port WWN					
	High Availability Manager			22	22	22
	Dynamic I/O Path Control					
	Specifying the number of times the same path can be used for I/O					
	Specifying the number of times the same path can be used for random I/O					
	Storage System	Interface	Microcode version			
	Hitachi Lightning 9900V	Fibre Channel	21-02-21-XX/XX or later			
		iSCSI	21-11-01-XX/XX or later			
	Hitachi Universal Storage Platform	Fibre Channel	50-01-19-XX/XX or later			
		iSCSI	50-06-00-XX/XX			
	Hitachi Universal Storage Platform V	Fibre Channel	60-01-XX-XX/XX or later			
		Fibre Channel	60-06-10-XX/XX or later(*26)			
		Fibre Channel	60-07-11-XX/XX or later(*28)			
	Hitachi Universal Storage Platform VM	Fibre Channel	60-01-61-XX/XX or later			
		Fibre Channel	60-06-10-XX/XX or later(*26)			
		Fibre Channel	60-07-11-XX/XX or later(*28)			
	Hitachi Virtual Storage Platform	Fibre Channel	70-01-00-XX/XX or later			
		Fibre Channel	70-01-42-XX/XX or later(*26)			
		Fibre Channel	70-03-00-XX/XX or later(*28)			
		Fibre Channel over Ethernet	70-02-00-XX/XX or later			
	Hitachi Virtual Storage Platform	Fibre Channel	90-01-41-XX/XX or later			

	5100	iSCSI	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5100H	Fibre Channel	90-01-41-XX/XX or later			
		iSCSI	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5200	Fibre Channel	90-08-01-XX/XX or later			
		iSCSI	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5200H	Fibre Channel	90-08-01-XX/XX or later			
		iSCSI	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5500	Fibre Channel	90-01-41-XX/XX or later			
		iSCSI	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5500H	Fibre Channel	90-01-41-XX/XX or later			
		iSCSI	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5600	Fibre Channel	90-08-01-XX/XX or later			
		iSCSI	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5600H	Fibre Channel	90-08-01-XX/XX or later			
		iSCSI	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform G1500	Fibre Channel	80-05-0X-XX/XX or later			
		iSCSI	80-05-0X-XX/XX or later			
	Hitachi Virtual Storage Platform G1000	Fibre Channel	80-01-2X-XX/XX or later			
		Fibre Channel	80-01-4X-XX/XX or later(*19)			
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later(*19)			
		Fibre Channel	80-02-4X-XX/XX or later(*24)			
	Hitachi Virtual Storage Platform G200	Fibre Channel	83-01-01-20/XX or later			
		Fibre Channel	83-01-2X-20/XX or later(*19)			
		iSCSI	83-01-01-20/XX or later			
		iSCSI	83-01-2X-20/XX or later(*19)			
	Hitachi Virtual Storage Platform G350	Fibre Channel	88-01-03-20/XX or later			
		iSCSI	88-01-03-20/XX or later			
	Hitachi Virtual Storage Platform G370	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform G400	Fibre Channel	83-01-01-40/XX or later			
		Fibre Channel	83-01-2X-40/XX or later(*19)			
		iSCSI	83-01-01-40/XX or later			
		iSCSI	83-01-2X-40/XX or later(*19)			
	Hitachi Virtual Storage Platform G600	Fibre Channel	83-01-01-40/XX or later			
		Fibre Channel	83-01-2X-40/XX or later(*19)			
		iSCSI	83-01-01-40/XX or later			
		iSCSI	83-01-2X-40/XX or later(*19)			
	Hitachi Virtual Storage Platform G700	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform G800	Fibre Channel	83-01-2X-60/XX or later			
		iSCSI	83-01-2X-60/XX or later			
	Hitachi Virtual Storage Platform G900	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F1500	Fibre Channel	80-05-0X-XX/XX or later			
		iSCSI	80-05-0X-XX/XX or later			
	Hitachi Virtual Storage Platform F350	Fibre Channel	88-01-03-20/XX or later			
		iSCSI	88-01-03-20/XX or later			
	Hitachi Virtual Storage Platform F370	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F400	Fibre Channel	83-02-01-40/XX or later(*27)			
			83-03-01-40/XX or later			
		iSCSI	83-02-01-40/XX or later(*27)			
			83-03-01-40/XX or later			
	Hitachi Virtual Storage Platform F600	Fibre Channel	83-02-01-40/XX or later(*27)			
			83-03-01-40/XX or later			
		iSCSI	83-02-01-40/XX or later(*27)			
			83-03-01-40/XX or later			
ems	Hitachi Virtual Storage Platform F700	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			

Supported Storage Syste

Hitachi Virtual Storage Platform F800	Fibre Channel	83-02-01-60/XX or later(*27)			
		83-03-01-60/XX or later			
	iSCSI	83-02-01-60/XX or later(*27)			
		83-03-01-60/XX or later			
Hitachi Virtual Storage Platform F900	Fibre Channel	88-01-03-60/XX or later			
	iSCSI	88-01-03-60/XX or later			
Hitachi Virtual Storage Platform N400	Fibre Channel	83-06-01-40/XX or later			
	iSCSI	83-06-01-40/XX or later			
Hitachi Virtual Storage Platform N600	Fibre Channel	83-06-01-40/XX or later			
	iSCSI	83-06-01-40/XX or later			
Hitachi Virtual Storage Platform N800	Fibre Channel	83-06-01-60/XX or later			
	iSCSI	83-06-01-60/XX or later			
Hitachi Virtual Storage Platform E590	Fibre Channel	93-03-22-XX/XX or later			
	iSCSI	93-03-22-XX/XX or later			
Hitachi Virtual Storage Platform E590H	Fibre Channel	93-05-02-XX/XX or later			
	iSCSI	93-05-02-XX/XX or later			
Hitachi Virtual Storage Platform E790	Fibre Channel	93-03-22-XX/XX or later			
	iSCSI	93-03-22-XX/XX or later			
Hitachi Virtual Storage Platform E790H	Fibre Channel	93-05-02-XX/XX or later			
	iSCSI	93-05-02-XX/XX or later			
Hitachi Virtual Storage Platform E990	Fibre Channel	93-01-02-60/XX or later			
	iSCSI	93-01-02-60/XX or later			
Hitachi Unified Storage VM	Fibre Channel	73-01-0X-XX/XX or later			
	Fibre Channel	73-03-0X-XX/XX or later(*26)			
Hitachi Network Storage Controller NSC55	Fibre Channel	50-03-94-XX/XX or later			
	iSCSI	50-06-13-XX/XX or later			
Hitachi Thunder 9530V	Fibre Channel	0651/D or later			
Hitachi Thunder 9570V	Fibre Channel	0651/D or later			
Hitachi Thunder 9580V	Fibre Channel	1654/A or later			
Hitachi Adaptable Modular Storage AMS200 Hitachi Adaptable Modular Storage AMS500	Fibre Channel	0712/A or later			
	iSCSI	0732/A or later			
Hitachi Adaptable Modular Storage AMS1000	Fibre Channel	0712/A or later			
	iSCSI	0732/A or later			
Hitachi Adaptable Modular Storage AMS2100	Fibre Channel	0832/E or later			
	iSCSI	0846/A or later			
	Fibre Channel	08B8/D or later(*15)			
	iSCSI	08B8/D or later(*15)			
Hitachi Adaptable Modular Storage AMS2300	Fibre Channel	0832/E or later			
	iSCSI	0846/A or later			
	Fibre Channel	08B8/D or later(*15)			
	iSCSI	08B8/D or later(*15)			
Hitachi Adaptable Modular Storage AMS2500	Fibre Channel	0832/E or later			
	iSCSI	0846/A or later			
	Fibre Channel	08B8/D or later(*15)			
	iSCSI	08B8/D or later(*15)			
Hitachi Workgroup Modular Storage WMS100	Fibre Channel	0720/A or later			
	iSCSI	0732/A or later			
Hitachi Unified Storage 110	Fibre Channel	0915/A or later			
	iSCSI	0915/A or later			
Hitachi Unified Storage 130	Fibre Channel	0915/A or later			
	iSCSI	0915/A or later			
Hitachi Unified Storage 150	Fibre Channel	0915/A or later			
	iSCSI	0915/A or later			
SMS 100	Fibre Channel	1810/N or later			
	iSCSI				
	Fibre Channel	08B8/D or later(*15)			
	iSCSI	08B8/D or later(*15)			
EMC Symmetrix DMX Series	Fibre Channel				
EMC CLARiiON CX Series	Fibre Channel				
HP StorageWorks XP128 Disk Array	Fibre Channel	21-03-03-XX/XX or later			
HP StorageWorks XP1024 Disk Array	Fibre Channel	21-03-03-XX/XX or later			
HP StorageWorks XP10000 Disk Array	Fibre Channel	50-03-94-XX/XX or later			

	HP StorageWorks XP12000 Disk Array	Fibre Channel	50-03-94-XX/XX or later			
	HP StorageWorks XP20000 Disk Array	Fibre Channel	60-01-61-XX/XX or later			
		Fibre Channel	60-06-10-XX/XX or later(*26)			
		Fibre Channel	60-07-11-XX/XX or later(*28)			
	HP StorageWorks XP24000 Disk Array	Fibre Channel	60-01-XX-XX/XX or later			
		Fibre Channel	60-06-10-XX/XX or later(*26)			
		Fibre Channel	60-07-11-XX/XX or later(*28)			
	HP StorageWorks P9500 Disk Array	Fibre Channel	70-01-00-XX/XX or later			
		Fibre Channel	70-01-42-XX/XX or later(*26)			
		Fibre Channel	70-03-00-XX/XX or later(*28)			
		Fibre Channel over Ethernet	70-02-00-XX/XX or later			
	HP XP8 Storage	Fibre Channel	90-01-41-XX/XX or later			
	HP XP7 Storage	Fibre Channel	80-01-2X-XX/XX or later			
		Fibre Channel	80-01-4X-XX/XX or later(*20)			
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later(*20)			
		Fibre Channel	80-02-4X-XX/XX or later(*25)			
		Fibre Channel	80-05-0X-XX/XX or later			
	SVS	Fibre Channel	50-07-01-XX/XX or later			
	HP EVA Series	Fibre Channel				
Exclusive Products	Hitachi Path Manager			**7**	**7**	**7**
	VxVM-DMP			**7**	**7**	**7**
	PowerPath			**7**	**7**	**7**
	SDD			**7**	**7**	**7**
	HDLM for VMware					

Supported	
Not Supported	

Notes	
1	See the HBA vendor's support matrix to determine which HBAs and drivers support SAN Boot. HDLM supports all of the specified HBAs and drivers.
2	This is supported by the following OSs: - Windows 2000 SP4 (IA32 / x86) - Windows 2003 (x86 and x64) - Windows 2003 SP1 (IA32 / x86) with MSCS only - Windows 2003 R2 (x86 and x64) - Windows 2003 R2 SP2 (x64)
4	The evaluation of EMC DMX3000 has been completed in the following environments: OS: Windows 2003 SP1 and later (IA32 / x86) Windows 2003 SP1 and later (Itanium / IA64) Microcode version: 5670.83 Failover Mode: 1
5	Update installation is available in HDLM 5.5.0 or later.
7	This product is mutually exclusive with HDLM.
8	In Windows Server 2008, HDLM can be upgraded while multipath is configured.
9	In Windows Server 2003 SP1 or later (including R2), HDLM can be upgraded while multipath is configured.
10	The evaluation of EMC CX700 has been completed in the following environments: OS: Windows 2003 SP1 and later (IA32 / x86) Windows 2003 (x64) Windows 2003 SP1 and later (Itanium / IA64) Microcode version: 02.07.700.5.021 Failover Mode: 1 When using the EMC CX series with Failover Mode 1, connect only one storage system port to the switch, and then connect the switch to the server in a multipath configuration.

11	The evaluation of EMC CX3-10 with Failover Mode 2 has been completed in the following environments: OS: Windows 2003 SP2 (x64) Microcode version: 03.26.010.5.019 Failover Mode: 2 The evaluation of EMC CX3-10 with Failover Mode 1 has been completed in the following environments: OS: Windows 2008 (IA32 / x86) Windows 2008 (x64) Windows 2008 (Itanium / IA64) Microcode version: 03.26.010.5.019 Failover Mode: 1 When using the EMC CX series with Failover Mode 1, connect only one storage system port to the switch, and then connect the switch to the server in a multipath configuration.
12	The evaluation of HP EVA8000 has been completed in the following environments: OS: Windows 2003 SP1 and later (IA32 / x86) Windows 2003 (x64) Windows 2003 SP1 and later (Itanium / IA64)
14	HDLM 6.6.0 or later is required for the disk number display.
15	When you set the Dynamic I/O Path Control function, use this version.
16	Supported with some conditions customer-by-customer basis (SUI 044226). Please contact appropriate person in Hitachi Vantara.
17	The evaluation of HP EVA6400/4400 has been completed in the following environments: OS: Windows 2008 R2 x64 Windows 2008 R2 x64 SP1
19	When you use global-active device, use this version.
20	When you use High Availability, use this version.
21	A refresh operation that reflects the setting of the non-preferred path option to HDLM is supported when a global-active device (called the High Availability feature in the case of XP7) is used.
22	This is supported in an HAM environment by the following OSs: Windows Server 2008(x86/x64/IPF) Windows Server 2008 R2(x64/IPF) Windows Server 2012(x64) Windows Server 2012 R2(x64) This is supported in an HAM environment by the following cluster software: Windows Server 2008(x86/x64) SP2 Microsoft Failover Cluster Windows Server 2008 R2(x64/IPF) NoSP/SP1 Microsoft Failover Cluster Windows Server 2012 (x64) NoSP Microsoft Failover Cluster (*1) Windows Server 2012 R2 (x64) NoSP Microsoft Failover Cluster (*1) *1: A Cluster Shared Volume (CSV) is not supported. For information about functional restrictions, see the HAM User Guide.
23	Apply this version when a global-active device is used.
24	When you use a normal VOL as a global-active device pair VOL, use this version.
25	When you use a normal VOL as a High Availability pair VOL, use this version.
26	When you use the HAM functionality, use this version.
27	The dlnkmgr command, HDLM GUI and HGLM display "VSP_Gx00" as the model ID of the storage system.
28	When you use the HAM functionality with Microsoft Failover Cluster, use this version.
29	When you set the Dynamic I/O Path Control function, use this version.

IMPORTANT NOTE

HDLM is dependent only on the driver version, not the HBA model. For this reason, specific HBA models are no longer listed, just driver versions. So if the HBA driver version is supported, then HDLM is supported. This also means that OEM versions are supported, as long as the driver is supported.

All drivers applied to Hitachi HBA cards are supported.

Windows 2008 (IA32 / x86)				HDLM Version		
OS	HBA		Driver	8.7.6	8.8.0	8.8.1
Windows 2008 (IA32 / x86)	Fibre Channel	Emulex	STOR Miniport 2.00a12			
			STOR Miniport 2.01a4			
			STOR Miniport 2.10a7			
			STOR Miniport 2.20.006			
			STOR Miniport 2.03.20			
			STOR Miniport 2.32.002			
			STOR Miniport 2.33.008			
			STOR Miniport 2.41.003			
			STOR Miniport 2.50.007			
			STOR Miniport 2.74.014.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.124.0			
		QLogic	Bundle			
			STOR Miniport 3.2.4.0			
			STOR Miniport 9.1.7.16			
			STOR Miniport 9.1.7.18			
			STOR Miniport 9.1.8.17			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.24			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.21			
			STOR Miniport 9.1.13.20			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.2.1.20			
		HP	STOR Miniport 2.74.014.001			
			STOR Miniport 9.1.7.17			
			STOR Miniport 9.1.8.27			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 11.1.145.16			
		Hitachi	Bundle			
		Brocade	1.0.0-06			
			1.1.0.1			
			2.2.0.0			
			STOR Miniport 3.2.4.0			
	iSCSI	Microsoft	Bundle			
	iSCSI HBA/CNA	Emulex	4.1.334.0			
			4.9.160.0			
			10.0.732.0			
			10.2.370.9			
			STOR Miniport 10.2.421.0			
			STOR Miniport 10.4.245.0			

		QLogic	2.1.5.15			
			STOR Miniport 2.1.6.10			
	Fibre Channel over Ethernet	Emulex	STOR Miniport 2.10a7			
			STOR Miniport 2.32.002			
			STOR Miniport 2.70.018			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
		QLogic	STOR Miniport 2.1.4.19			
			STOR Miniport 9.1.7.18			
			STOR Miniport 9.1.9.15			
			STOR Miniport 9.1.11.16			
			STOR Miniport 9.1.12.10			
		HP	STOR Miniport 10.4.246.0			
			STOR Miniport 11.1.145.16			
		Brocade	STOR Miniport 2.2.0.0			

Supported	
Not Supported	

Windows 2008 (IA64 / Itanium)				HDLM Version		
OS	HBA		Driver	8.7.6	8.8.0	8.8.1
Windows 2008 (IA64 / Itanium)	Fibre Channel	Emulex	STOR Miniport 2.00a12			
			STOR Miniport 2.10a7			
		QLogic	Bundle			
			STOR Miniport 9.1.8.16			
	iSCSI	Microsoft	Bundle			

Supported	
Not Supported	

Windows 2008 (x64 / x86_64)				HDLM Version		
OS	HBA		Driver	8.7.6	8.8.0	8.8.1
		Emulex	STOR Miniport 2.00a12			
			STOR Miniport 2.01a4			
			STOR Miniport 2.10a7			
			STOR Miniport 2.20.006			
			STOR Miniport 2.32.002			
			STOR Miniport 2.33.008			
			STOR Miniport 2.41.003			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.014			
			STOR Miniport 2.70.018			
			STOR Miniport 2.70.019			
			STOR Miniport 2.72.012.001			
			STOR Miniport 2.74.014.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			Bundle			

Windows 2008 (x64 / x86_64)	**Fibre Channel**	**QLogic**	STOR Miniport 9.1.7.16			
			STOR Miniport 9.1.7.18			
			STOR Miniport 9.1.8.16			
			STOR Miniport 9.1.8.17			
			STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.9.25			
			STOR Miniport 9.1.9.26			
			STOR Miniport 9.1.9.27			
			STOR Miniport 9.1.9.47			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.10.26			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.21			
			STOR Miniport 9.1.13.20			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.2.1.20			
		Hitachi	Bundle			
		HP	STOR Miniport 2.70.018			
			STOR Miniport 2.70.019			
			STOR Miniport 2.74.014.001			
			STOR Miniport 9.1.7.17			
			STOR Miniport 9.1.8.17			
			STOR Miniport 9.1.9.26			
			STOR Miniport 9.1.9.45			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
		Brocade	1.0.0-06			
			1.1.0.1			
			2.2.0.0			
	iSCSI	**Microsoft**	Bundle			
	iSCSI HBA/CNA	**Emulex**	4.1.334.0			
			4.9.160.0			
			10.0.732.0			
			10.2.370.9			
			STOR Miniport 10.2.421.0			
			STOR Miniport 10.4.245.0			
		QLogic	2.1.5.15			
			STOR Miniport 2.1.6.10			
	Fibre Channel over Ethernet	**Emulex**	STOR Miniport 2.10a7			
			STOR Miniport 2.32.002			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.018			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
		QLogic	STOR Miniport 2.1.4.19			
			STOR Miniport 9.1.7.18			
			STOR Miniport 9.1.8.26			
			STOR Miniport 9.1.9.15			
			STOR Miniport 9.1.11.16			
			STOR Miniport 9.1.12.10			
			STOR Miniport 2.42.002			

		HP	STOR Miniport 2.50.007			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
		Brocade	STOR Miniport 2.2.0.0			

Supported	
Not Supported	

Windows 2008 SP2 (IA32 / x86)				HDLM Version		
				8.7.6	8.8.0	8.8.1
OS	**HBA**		**Driver**			
Windows 2008 SP2 (IA32 / x86)	Fibre Channel	Emulex	STOR Miniport 2.01a4			
			STOR Miniport 2.10a7			
			STOR Miniport 2.20.006			
			STOR Miniport 2.30.020			
			STOR Miniport 2.32.002			
			STOR Miniport 2.33.008			
			STOR Miniport 2.41.002			
			STOR Miniport 2.41.003			
			STOR Miniport 2.50.007			
			STOR Miniport 2.74.014.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.124.0			
		QLogic	STOR Miniport 3.2.4.0			
			STOR Miniport 9.1.8.17			
			STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.9.25			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.10.27			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.24			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.21			
			STOR Miniport 9.1.13.20			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.2.1.20			
			STOR Miniport 9.2.3.20			
		Hitachi	Bundle			
		Brocade	1.0.0-06			
			1.1.0.1			
			2.2.0.0			
			STOR Miniport 3.2.4.0			
		HP	STOR Miniport 2.74.014.001			
			STOR Miniport 9.1.8.27			
			STOR Miniport 9.1.8.28			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 11.1.145.16			
		IBM	STOR Miniport 9.1.7.55			
			STOR Miniport 9.1.9.25			
	iSCSI	Microsoft	Bundle			
			4.1.334.0			
			4.9.160.0			

	iSCSI HBA/CNA	Emulex	10.0.732.0			
			10.2.370.9			
			STOR Miniport 10.2.421.0			
			STOR Miniport 10.4.245.0			
			STOR Miniport 10.6.116.0			
			STOR Miniport 11.0.271.0			
			STOR Miniport 11.1.185.0			
			STOR Miniport 11.2.1099.0			
		QLogic	STOR Miniport 2.1.6.10			
	Fibre Channel over Ethernet	Emulex	STOR Miniport 2.32.002			
			STOR Miniport 2.70.018			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.1120.0			
		QLogic	STOR Miniport 9.1.9.15			
			STOR Miniport 9.1.11.16			
			STOR Miniport 9.1.12.10			
			STOR Miniport 9.1.13.10			
		HP	STOR Miniport 10.4.246.0			
			STOR Miniport 11.1.145.16			
		Brocade	STOR Miniport 2.2.0.0			
		Cisco	STOR Miniport 2.1.0.11			

Supported	
Not Supported	

Windows 2008 SP2 (IA64 / Itanium)				HDLM Version		
OS	HBA		Driver	8.7.6	8.8.0	8.8.1
Windows 2008 SP2 (IA64 / Itanium)	Fibre Channel	Emulex	STOR Miniport 2.10a7			
		QLogic	STOR Miniport 9.1.8.16			
	iSCSI	Microsoft	Bundle			

Supported	
Not Supported	

Windows 2008 SP2 (x64 / x86_64)				HDLM Version		
OS	HBA		Driver	8.7.6	8.8.0	8.8.1
		Emulex	STOR Miniport 2.01a4			
			STOR Miniport 2.10a7			
			STOR Miniport 2.20.006			
			STOR Miniport 2.30.020			
			STOR Miniport 2.32.002			
			STOR Miniport 2.33.008			
			STOR Miniport 2.41.002			
			STOR Miniport 2.41.003			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.014			
			STOR Miniport 2.70.018			
			STOR Miniport 2.70.019			
			STOR Miniport 2.72.012.001			
			STOR Miniport 2.74.009.001			
			STOR Miniport 2.74.014.001			
			STOR Miniport 2.76.003.001			

Windows 2008 SP2 (x64 / x86_64)	Fibre Channel		STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.124.0			
		QLogic	STOR Miniport 9.1.7.18			
			STOR Miniport 9.1.8.16			
			STOR Miniport 9.1.8.17			
			STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.9.25			
			STOR Miniport 9.1.9.26			
			STOR Miniport 9.1.9.27			
			STOR Miniport 9.1.9.47			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.10.26			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.21			
			STOR Miniport 9.1.13.20			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.1.18.20			
			STOR Miniport 9.2.1.20			
			STOR Miniport 9.2.3.20			
		Hitachi	Bundle			
		IBM	STOR Miniport 9.1.7.55			
			STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.9.49			
		HP	STOR Miniport 2.70.018			
			STOR Miniport 2.70.019			
			STOR Miniport 2.74.009.001			
			STOR Miniport 2.74.014.001			
			STOR Miniport 9.1.7.17			
			STOR Miniport 9.1.8.17			
			STOR Miniport 9.1.8.19			
			STOR Miniport 9.1.9.25			
			STOR Miniport 9.1.9.26			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
		Brocade	1.0.0-06			
			1.1.0.1			
			2.2.0.0			
	iSCSI	Microsoft	Bundle			
	iSCSI HBA/CNA	Emulex	4.1.334.0			
			4.9.160.0			
			10.0.732.0			
			10.2.370.9			
			STOR Miniport 10.2.421.0			
			STOR Miniport 10.4.245.0			
			STOR Miniport 10.6.116.0			
			STOR Miniport 11.0.271.0			
			STOR Miniport 11.1.185.0			
			STOR Miniport 11.2.1099.0			
		QLogic	STOR Miniport 2.1.6.10			
			STOR Miniport 2.32.002			
			STOR Miniport 2.50.007			

	Fibre Channel over Ethernet	Emulex	STOR Miniport 2.70.018			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.1120.0			
		QLogic	STOR Miniport 9.1.8.26			
			STOR Miniport 9.1.9.15			
			STOR Miniport 9.1.11.16			
			STOR Miniport 9.1.12.10			
			STOR Miniport 9.1.13.10			
		Brocade	STOR Miniport 2.2.0.0			
		HP	STOR Miniport 2.33.008			
			STOR Miniport 2.42.002			
			STOR Miniport 2.50.007			
			STOR Miniport 2.76.003.001			
			STOR Miniport 7.13.4.0			
			STOR Miniport 7.14.0.0 or later			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
		Cisco	STOR Miniport 2.1.0.25			

Supported	
Not Supported	

Windows 2008 R2 (x64 / x86_64)				**HDLM Version**		
				8.7.6	**8.8.0**	**8.8.1**
OS	**HBA**		**Driver**			
		Emulex	STOR Miniport 2.20.006			
			STOR Miniport 2.30.018			
			STOR Miniport 2.30.020			
			STOR Miniport 2.32.002			
			STOR Miniport 2.40.005			
			STOR Miniport 2.41.002			
			STOR Miniport 2.41.003			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.018			
			STOR Miniport 2.72.012.001			
			STOR Miniport 2.74.009.001			
			STOR Miniport 2.74.014.001			
			STOR Miniport 2.74.016.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 3.2.5.0			
			STOR Miniport 9.1.8.17			
			STOR Miniport 9.1.8.19			
			STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.8.27			
			STOR Miniport 9.1.8.28			
			STOR Miniport 9.1.8.38			
			STOR Miniport 9.1.9.25			
			STOR Miniport 9.1.9.26			
			STOR Miniport 9.1.9.27			
			STOR Miniport 9.1.9.47			
			STOR Miniport 9.1.9.49			

Windows 2008 R2 (x64 / x86_64)	Fibre Channel	QLogic	STOR Miniport 9.1.10.26			
			STOR Miniport 9.1.10.27			
			STOR Miniport 9.1.10.28			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.24			
			STOR Miniport 9.1.11.26			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.21			
			STOR Miniport 9.1.13.20			
			STOR Miniport 9.1.15.20			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.2.1.20			
		Hitachi	Bundle			
		HP	STOR Miniport 2.33.005			
			STOR Miniport 2.33.008			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.018			
			STOR Miniport 2.70.019			
			STOR Miniport 2.74.014.001			
			STOR Miniport 9.1.8.17			
			STOR Miniport 9.1.9.26			
			STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.9.45			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.10.27			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.22			
			STOR Miniport 9.1.14.22			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.25			
		IBM	STOR Miniport 9.1.7.55			
			STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.8.26			
			STOR Miniport 9.1.9.36			
			STOR Miniport 9.1.11.24			
		Brocade	2.1.0.0			
			2.2.0.0			
			3.0.0.0			
			3.1.0.0			
			3.1.0.1			
			3.2.0.0			
			STOR Miniport 3.2.4.0			
			STOR Miniport 3.2.4.1			
			STOR Miniport 3.2.5.0			
	iSCSI	Microsoft	Bundle			
	iSCSI HBA/CNA	Emulex	4.1.334.0			
			STOR Miniport 4.9.160.0			
			STOR Miniport 10.0.732.0			
			STOR Miniport 10.2.370.9			
			STOR Miniport 10.2.421.0			
		QLogic	STOR Miniport 2.1.6.10			
		HP	4.1.334.0			
		Emulex	STOR Miniport 2.32.002			
			STOR Miniport 2.41.002			
			STOR Miniport 2.42.002			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.018			
			STOR Miniport 2.70.019			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			

	Fibre Channel over Ethernet		STOR Miniport 10.2.370.8			
		QLogic	STOR Miniport 3.2.5.0			
			STOR Miniport 9.1.8.26			
			STOR Miniport 9.1.8.27			
			STOR Miniport 9.1.9.15			
			STOR Miniport 9.1.11.16			
			STOR Miniport 9.1.12.10			
		HP	STOR Miniport 2.42.002			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.019			
			STOR Miniport 2.74.009.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.2.261.4			
		IBM	STOR Miniport 9.1.8.26			
			STOR Miniport 9.1.9.36			
		Brocade	STOR Miniport 2.2.0.0			
			STOR Miniport 2.3.0.2			
			3.0.0.0			
			STOR Miniport 3.2.4.0			
			STOR Miniport 3.2.5.0			
		Cisco	STOR Miniport 2.1.0.11			
			STOR Miniport 9.1.8.27			
		Intel	STOR Miniport 1.16.0.0			

Supported	
Not Supported	

Windows 2008 R2 (IA64 / Itanium)				**HDLM Version**		
				8.7.6	**8.8.0**	**8.8.1**
OS	**HBA**		**Driver**			
Windows 2008 R2 (IA64 / Itanium)	**Fibre Channel**	**Emulex**	STOR Miniport 2.20.006			
		HP	STOR Miniport 2.50.007			
	iSCSI	**Microsoft**	Bundle			

Supported	
Not Supported	

Windows 2008 R2 SP1 (x64 / x86_64)				**HDLM Version**		
				8.7.6	**8.8.0**	**8.8.1**
OS	**HBA**		**Driver**			
		Emulex	STOR Miniport 2.20.006			
			STOR Miniport 2.30.018			
			STOR Miniport 2.30.020			
			STOR Miniport 2.32.002			
			STOR Miniport 2.40.005			
			STOR Miniport 2.41.002			
			STOR Miniport 2.41.003			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.018			
			STOR Miniport 2.74.009.001			
			STOR Miniport 2.74.014.001			
			STOR Miniport 2.74.016.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			

Windows 2008 R2 SP1 (x64 / x86_64)	Fibre Channel		STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.124.0			
		QLogic	STOR Miniport 3.2.3.0			
			STOR Miniport 3.2.5.0			
			STOR Miniport 3.2.6.0			
			STOR Miniport 9.1.8.19			
			STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.8.27			
			STOR Miniport 9.1.9.25			
			STOR Miniport 9.1.9.26			
			STOR Miniport 9.1.9.27			
			STOR Miniport 9.1.9.47			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.10.26			
			STOR Miniport 9.1.10.27			
			STOR Miniport 9.1.10.28			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.24			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.21			
			STOR Miniport 9.1.13.20			
			STOR Miniport 9.1.15.20			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.22			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.1.18.20			
			STOR Miniport 9.2.1.20			
			STOR Miniport 9.2.2.20			
			STOR Miniport 9.2.3.20			
		Hitachi	Bundle			
		HP	STOR Miniport 9.1.8.25			
			STOR Miniport 9.1.8.28			
			STOR Miniport 2.33.005			
			STOR Miniport 2.50.007			
			STOR Miniport 2.70.018			
			STOR Miniport 2.70.019			
			STOR Miniport 2.74.009.001			
			STOR Miniport 2.74.014.001			
			STOR Miniport 3.0.0.0			
			STOR Miniport 9.1.9.25			
			STOR Miniport 9.1.9.45			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.10.26			
			STOR Miniport 9.1.10.27			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.22			
			STOR Miniport 9.1.14.22			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.22			
			STOR Miniport 9.1.17.25			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
		Brocade	STOR Miniport 2.2.0.0			
			STOR Miniport 2.3.0.1			
			STOR Miniport 2.3.0.2			
			STOR Miniport 3.0.0.0			
			STOR Miniport 3.1.0.0			
			STOR Miniport 3.1.0.1			
			STOR Miniport 3.2.0.0			

			STOR Miniport 3.2.3.0			
			STOR Miniport 3.2.4.0			
			STOR Miniport 3.2.4.1			
			STOR Miniport 3.2.5.0			
			STOR Miniport 3.2.6.0			
		IBM	STOR Miniport 2.70.018			
			STOR Miniport 9.1.9.25			
			STOR Miniport 9.1.9.27			
			STOR Miniport 9.1.9.49			
			STOR Miniport 9.1.10.26			
			STOR Miniport 9.1.11.24			
	iSCSI	**Microsoft**	Bundle			
	iSCSI HBA/CNA	**Emulex**	4.1.334.0			
			STOR Miniport 4.9.160.0			
			STOR Miniport 10.0.732.0			
			STOR Miniport 10.2.370.9			
			STOR Miniport 10.2.421.0			
			STOR Miniport 10.4.245.0			
			STOR Miniport 10.6.116.0			
			STOR Miniport 11.0.271.0			
			STOR Miniport 11.1.185.0			
			STOR Miniport 11.2.1099.0			
		QLogic	STOR Miniport 2.1.6.10			
		HP	4.1.334.0			
	Fibre Channel over Ethernet	**Cisco**	STOR Miniport 2.1.0.11			
			STOR Miniport 2.1.0.17			
			STOR Miniport 2.1.0.20			
			STOR Miniport 2.1.0.25			
			STOR Miniport 2.1.0.27			
			STOR Miniport 2.1.0.31			
			STOR Miniport 9.1.8.27			
		Emulex	STOR Miniport 2.50.007			
			STOR Miniport 2.70.018			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.1120.0			
		QLogic	STOR Miniport 3.2.5.0			
			STOR Miniport 9.1.11.16			
			STOR Miniport 9.1.12.10			
			STOR Miniport 9.1.13.10			
		HP	STOR Miniport 2.50.007			
			STOR Miniport 2.70.018			
			STOR Miniport 2.70.019			
			STOR Miniport 2.74.009.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 7.12.4.0			
			STOR Miniport 7.12.41.0			
			STOR Miniport 7.13.4.0			
			STOR Miniport 7.14.0.0 or later			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
		Brocade	STOR Miniport 3.2.4.0			
			STOR Miniport 3.2.5.0			
		Intel	STOR Miniport 1.16.0.0			

Supported	

Not Supported	

Windows 2008 R2 SP1 (IA64 / Itanium)				HDLM Version		
OS	HBA		Driver	8.7.6	8.8.0	8.8.1
Windows 2008 R2 SP1 (IA64 / Itanium)	Fibre Channel	Emulex	STOR Miniport 2.20.006			
			STOR Miniport 2.40.005			
	iSCSI	Microsoft	Bundle			

Supported	
Not Supported	

Windows 2012 (x64 / x86_64)				HDLM Version		
OS	HBA		Driver	8.7.6	8.8.0	8.8.1
	Fibre Channel	Emulex	STOR Miniport 2.72.205.004			
			STOR Miniport 2.72.012.001			
			STOR Miniport 2.74.009.001			
			STOR Miniport 2.74.014.001			
			STOR Miniport 2.74.016.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.139.0			
			STOR Miniport 11.4.142.11			
			STOR Miniport 11.4.204.8			
			STOR Miniport 12.0.193.13			
			STOR Miniport 12.0.257.9			
			STOR Miniport 12.0.367.0			
			STOR Miniport 12.2.207.0			
			STOR Miniport 12.2.284.0			
			STOR Miniport 12.4.243.4			
			STOR Miniport 12.6.165.0			
			STOR Miniport 12.8.334.6			
		QLogic	STOR Miniport 3.2.5.0			
			STOR Miniport 9.1.9.205			
			STOR Miniport 9.1.10.26			
			STOR Miniport 9.1.10.27			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.24			
			STOR Miniport 9.1.11.26			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.21			
			STOR Miniport 9.1.13.20			
			STOR Miniport 9.1.15.20			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.22			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.1.18.20			
			STOR Miniport 9.2.1.20			
			STOR Miniport 9.2.2.20			
			STOR Miniport 9.2.3.20			

Windows 2012 (x64 / x86_64)			STOR Miniport 9.2.4.21			
			STOR Miniport 9.2.6.20			
			STOR Miniport 9.2.6.22			
			STOR Miniport 9.2.8.20			
			STOR Miniport 9.2.9.20			
			STOR Miniport 9.2.9.23			
			STOR Miniport 9.4.1.20	**2**	**2**	**2**
		Hitachi	Bundle	**1**	**1**	**1**
		Brocade	STOR Miniport 3.0.2.21			
			STOR Miniport 3.1.0.1			
			STOR Miniport 3.2.4.0			
			STOR Miniport 3.2.5.0			
		HP	STOR Miniport 2.74.009.001			
			STOR Miniport 9.1.10.27			
			STOR Miniport 9.1.11.20			
			STOR Miniport 9.1.11.24			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.22			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.2.4.21			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
	iSCSI	**Microsoft**	Bundle			
	iSCSI HBA/CNA	**Emulex**	STOR Miniport 4.9.160.0			
			STOR Miniport 10.0.732.0			
			STOR Miniport 10.2.370.9			
			STOR Miniport 10.2.421.0			
			STOR Miniport 10.4.245.0			
			STOR Miniport 10.6.116.0			
			STOR Miniport 11.0.271.0			
			STOR Miniport 11.1.185.0			
			STOR Miniport 11.2.1153.23			
			STOR Miniport 11.4.1174.0			
		QLogic	STOR Miniport 2.1.6.10			
	Fibre Channel over Ethernet	**Emulex**	STOR Miniport 2.72.012.001			
			STOR Miniport 2.72.205.004			
			STOR Miniport 2.74.014.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.1135.0			
			STOR Miniport 11.4.1162.0			
		QLogic	STOR Miniport 3.2.5.0			
			STOR Miniport 9.1.10.15			
			STOR Miniport 9.1.11.16			
			STOR Miniport 9.1.12.10			
			STOR Miniport 9.1.13.10			
		Brocade	STOR Miniport 3.2.4.0			
			STOR Miniport 3.2.5.0			
		HP	STOR Miniport 2.74.014.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 7.13.4.0			
			STOR Miniport 7.14.0.0 or later			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			

		Cisco	STOR Miniport 2.3.0.12			
			STOR Miniport 2.4.0.11			
			STOR Miniport 2.4.0.19			

Supported	
Not Supported	

Notes	
1	All drivers applied to Hitachi HBA cards are supported.
2	For 2700 series adapters and 2800 series adapters, when a failed path is recovered while the server is stopped, and the host is restarted, a disconnection error might occur. A server restart is required to recover the path.

Windows 2012 R2 (x64 / x86_64)				**HDLM Version**		
				8.7.6	**8.8.0**	**8.8.1**
OS	**HBA**		**Driver**			
	Fibre Channel	**Emulex**	STOR Miniport 2.74.214			
			STOR Miniport 2.76.002.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.139.0			
			STOR Miniport 11.4.142.11			
			STOR Miniport 11.4.204.8			
			STOR Miniport 12.0.193.13			
			STOR Miniport 12.0.257.9			
			STOR Miniport 12.0.318.0			
			STOR Miniport 12.0.367.0			
			STOR Miniport 12.2.207.0			
			STOR Miniport 12.2.284.0			
			STOR Miniport 12.4.243.4			
			STOR Miniport 12.6.165.0			
			STOR Miniport 12.8.334.6			
		QLogic	STOR Miniport 3.2.5.0			
			STOR Miniport 9.1.11.3			
			STOR Miniport 9.1.11.24			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.21			
			STOR Miniport 9.1.13.20			
			STOR Miniport 9.1.15.20			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.21			
			STOR Miniport 9.1.17.22			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.1.18.20			
			STOR Miniport 9.2.1.20			
			STOR Miniport 9.2.2.20			
			STOR Miniport 9.2.3.20			
			STOR Miniport 9.2.4.21			
			STOR Miniport 9.2.5.20			
			STOR Miniport 9.2.5.21			
			STOR Miniport 9.2.6.20			
			STOR Miniport 9.2.6.22			
			STOR Miniport 9.2.8.20			
			STOR Miniport 9.2.9.20			
			STOR Miniport 9.2.9.22			
			STOR Miniport 9.2.9.23			
			STOR Miniport 9.3.3.20			

Windows 2012 R2 (x64 / x86_64)			STOR Miniport 9.4.1.20	2	2	2
		Hitachi	Bundle	1	1	1
			STOR Miniport 4.4.8.2280			
		Brocade	STOR Miniport 3.2.4.0			
			STOR Miniport 3.2.5.0			
		HP	STOR Miniport 9.1.11.24			
			STOR Miniport 9.1.11.28			
			STOR Miniport 9.1.12.22			
			STOR Miniport 9.1.14.22			
			STOR Miniport 9.1.15.21			
			STOR Miniport 9.1.17.22			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.2.4.21			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
	iSCSI	Microsoft	Bundle			
		QLogic	2.1.5.38			
	iSCSI HBA/CNA	Emulex	STOR Miniport 4.9.160.0			
			STOR Miniport 10.0.732.0			
			STOR Miniport 10.2.370.9			
			STOR Miniport 10.2.421.0			
			STOR Miniport 10.4.245.0			
			STOR Miniport 10.6.116.0			
			STOR Miniport 11.0.271.0			
			STOR Miniport 11.1.185.0			
			STOR Miniport 11.2.1153.23			
			STOR Miniport 11.4.1174.0			
		QLogic	STOR Miniport 2.1.6.10			
	Fibre Channel over Ethernet	Emulex	STOR Miniport 2.76.002.001			
			STOR Miniport 2.76.003.001			
			STOR Miniport 10.0.720.0			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.2.370.8			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.6.114.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.1135.0			
			STOR Miniport 11.4.1162.0			
		Qlogic	STOR Miniport 3.2.5.0			
			9.1.11.12			
			STOR Miniport 9.1.11.16			
			STOR Miniport 9.1.12.10			
			STOR Miniport 9.1.13.10			
		Brocade	3.2.3.1			
			STOR Miniport 3.2.4.0			
			STOR Miniport 3.2.5.0			
		HP	STOR Miniport 2.76.003.001			
			STOR Miniport 7.10.39.0			
			STOR Miniport 7.12.41.0			
			STOR Miniport 7.13.4.0			
			STOR Miniport 7.14.0.0 or later			
			STOR Miniport 10.2.261.4			
			STOR Miniport 10.4.246.0			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.1.145.16			
		Cisco	STOR Miniport 2.3.0.20			
			STOR Miniport 2.4.0.8			
			STOR Miniport 2.4.0.9			
			STOR Miniport 2.4.0.11			

			STOR Miniport 2.4.0.13			
			STOR Miniport 2.4.0.19			
			STOR Miniport 2.4.0.20			

Supported	
Not Supported	

Notes	
1	All drivers applied to Hitachi HBA cards are supported.
2	For 2700 series adapters and 2800 series adapters, when a failed path is recovered while the server is stopped, and the host is restarted, a disconnection error might occur. A server restart is required to recover the path.

Windows 2016 (x64 / x86_64)				**HDLM Version**		
				8.7.6	**8.8.0**	**8.8.1**
OS	**HBA**		**Driver**			
Windows 2016 (x64 / x86_64)	**Fibre Channel**	**Emulex**	STOR Miniport 11.0.247.8000			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.139.0			
			STOR Miniport 11.4.142.11			
			STOR Miniport 11.4.204.8			
			STOR Miniport 11.4.334.7			
			STOR Miniport 12.0.193.13			
			STOR Miniport 12.0.257.9			
			STOR Miniport 12.0.318.0			
			STOR Miniport 12.0.367.0			
			STOR Miniport 12.2.207.0			
			STOR Miniport 12.2.284.0			
			STOR Miniport 12.4.243.4			
			STOR Miniport 12.6.165.0			
			STOR Miniport 12.8.334.6			
		Qlogic	9.1.15.1			
			STOR Miniport 9.1.17.25			
			STOR Miniport 9.2.2.20			
			STOR Miniport 9.2.3.20			
			STOR Miniport 9.2.4.21			
			STOR Miniport 9.2.5.20			
			STOR Miniport 9.2.5.21			
			STOR Miniport 9.2.6.20			
			STOR Miniport 9.2.6.22			
			STOR Miniport 9.2.8.20			
			STOR Miniport 9.2.9.20			
			STOR Miniport 9.2.9.22			
			STOR Miniport 9.2.9.23			
			STOR Miniport 9.3.3.20			
			STOR Miniport 9.4.1.20	**2**	**2**	**2**
			STOR Miniport 9.4.2.20	**2**	**2**	**2**
		HP	STOR Miniport 9.1.17.25			
			STOR Miniport 9.2.4.21			
			STOR Miniport 11.1.145.16			
		Hitachi	Bundle	**1**	**1**	**1**
	iSCSI	**Microsoft**	Bundle			
		Emulex	STOR Miniport 11.1.185.0			
			STOR Miniport 11.2.1153.23			
			STOR Miniport 11.4.1174.0			
		Qlogic	STOR Miniport 2.1.6.10			
	Fibre Channel over Ethernet	**Emulex**	STOR Miniport 11.0.247.8000			
			STOR Miniport 11.1.145.16			
			STOR Miniport 11.2.1135.0			
			STOR Miniport 11.4.1162.0			
		Qlogic	9.1.11.3			
		HP	STOR Miniport 7.14.0.0 or later			
			STOR Miniport 11.1.145.16			

		Cisco	STOR Miniport 3.0.0.7			
			STOR Miniport 3.0.0.8			
			STOR Miniport 3.1.0.11			
			STOR Miniport 3.2.0.14			

Supported	
Not Supported	

Notes	
1	All drivers applied to Hitachi HBA cards are supported.
2	For 2700 series adapters and 2800 series adapters, when a failed path is recovered while the server is stopped, and the host is restarted, a disconnection error might occur. A server restart is required to recover the path.

Windows 2019 (x64 / x86_64)				**HDLM Version**		
				8.7.6	**8.8.0**	**8.8.1**
OS	**HBA**		**Driver**			
Windows 2019 (x64 / x86_64)	**Fibre Channel**	**Emulex**	STOR Miniport 11.4.225.8009			
			STOR Miniport 12.0.298.0			
			STOR Miniport 12.0.318.0			
			STOR Miniport 12.0.367.0			
			STOR Miniport 12.2.207.0			
			STOR Miniport 12.2.284.0			
			STOR Miniport 12.4.243.4			
			STOR Miniport 12.6.165.0			
			STOR Miniport 12.8.334.6			
		Qlogic	STOR Miniport 9.1.15.1			
			STOR Miniport 9.2.8.21			
			STOR Miniport 9.2.9.22			
			STOR Miniport 9.2.9.23			
			STOR Miniport 9.3.3.20			
			STOR Miniport 9.4.1.20	**1**	**1**	**1**
			STOR Miniport 9.4.2.20	**1**	**1**	**1**
	iSCSI	**Microsoft**	Bundle			
	Fibre Channel over Ethernet	**Emulex**	STOR Miniport 11.0.247.8000			
		Qlogic	STOR Miniport 7.14.15.2			

Supported	
Not Supported	

Notes	
1	For 2700 series adapters and 2800 series adapters, when a failed path is recovered while the server is stopped, and the host is restarted, a disconnection error might occur. A server restart is required to recover the path.

Supported GPT Versions				
OS	Architecture	HDLM Version		
		8.7.6	8.8.0	8.8.1
Windows 2008	IA32 / x86			
	Itanium / IA64			
	X64 / x86_64			
Windows 2008 SP2	IA32 / x86			
	Itanium / IA64			
	X64 / x86_64			
Windows 2008 R2	X64 / x86_64			
	Itanium / IA64			
Windows 2008 R2 SP1	X64 / x86_64			
	Itanium / IA64			
Windows 2012	X64 / x86_64	2	2	2
Windows 2012 R2	X64 / x86_64	2	2	2
Windows 2016	X64 / x86_64	2	2	2
Windows 2019	X64 / x86_64	2	2	2

Supported	
Not Supported	

Notes	
1	SAN boot configurations with GPT are not supported.
2	GPT boot depends on supported servers and HBAs.

Sun Solaris SPARC				HDLM Version		
				8.7.6	8.8.0	8.8.1
Product Modifications and Additional Functions	Manual/Automatic Fail Over					
	Manual/Automatic Fail Back					
	Load Balance (Round Robin)					
	Load Balance (Extended Round Robin)					
	Load Balance (Least I/O)					
	Load Balance (Extended Least I/O)					
	Load Balance (Least Blocks)					
	Load Balance (Extended Least Blocks)					
	Load Balance for 3 Nodes Or More With Sun Cluster			4	4	4
	Load balance with VCS					
	Automatic Discovery					
	Dynamic Configuration of HDLM Devices					
	Error Log					
	CLI			25	25	25
	GUI					
	GUI browser					
	Path Blockade/Health Check					
	Health check Time (1min to 24 hr)					
	Dynamic Reconfiguration of Disk Devices		Add LU	36		
			Delete LU	9, 10	9, 10	9, 10
			Add Path of Existing LU			
			Delete Path of Existing LU	9	9	9
			Add new HBA	9	9	9
			Delete HBA	9	9	9
	Online(E)					
	Integration with HDvM					
	Offline For Each HBA (CLI)					
	Target Side Failover					
	HMDE Support			1	1	1
	Boot Disk			33	33	33
	Upgrade Install					
	Service Pack					
	Internationalization					
	Advanced Patch check					
	Support for > 1 TB Volumes (EFI Label)			6	6	6
	ZFS filesystem support			2, 3	2, 3	2, 3
	Support For Up To 256 LUs			5	5	5
	Display of HBA Information					
	Improved Online/Offline Commands					
	Periodic Display Of Performance Information					
	License key can be entered during installation					
	Support for ZFS fiilesystem					
	Audit Log					
	HDLM Component Install Utility					
	online/offline path by SCSI device name					
	High Availability Manager			26	26	26
	Oracle Solaris Containers(Global zone)			9, 14	9, 14	9, 14
	Oracle VM Server(LDoms)			15, 16, 22,32,34	15, 16, 22,32,34	15, 16, 22,32,34
	Dynamic I/O Path Control			18	18	18
	Specifying the number of times the same path can be used for I/O operations when the load balancing is used.					
	Specifying the number of times the same path can be used for random I/O operations when extended load balancing is used.					
	Storage System	Interface	Microcode version			
	Hitachi Lightning 9900V	Fibre Channel	21-02-23-XX/XX or later			
	Hitachi Universal Storage Platform V	Fibre Channel	60-01-XX-XX/XX or later			
		Fibre Channel	60-06-10-XX/XX or later(*31)			
	Hitachi Universal Storage Platform VM	Fibre Channel	60-01-61-XX/XX or later			
		Fibre Channel	60-06-10-XX/XX or later(*31)			
	Hitachi Virtual Storage Platform	Fibre Channel	70-01-00-XX/XX or later			
		Fibre Channel	70-01-42-XX/XX or later(*31)			
	Hitachi Virtual Storage Platform 5100	Fibre Channel	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5100H	Fibre Channel	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5200	Fibre Channel	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5200H	Fibre Channel	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5500	Fibre Channel	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5500H	Fibre Channel	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5600	Fibre Channel	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5600H	Fibre Channel	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform G1500	Fibre Channel	80-05-0X-XX/XX or later			
	Hitachi Virtual Storage Platform G1000	Fibre Channel	80-01-2X-XX/XX or later	23	23	23
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later	23	23	23
		Fibre Channel	80-02-4X-XX/XX or later	28	28	28

Supported Storage Systems	Hitachi Virtual Storage Platform G200	Fibre Channel	83-01-01-20/XX or later			
		Fibre Channel	83-01-2X-20/XX or later(*27)			
	Hitachi Virtual Storage Platform G350	Fibre Channel	88-01-03-20/XX or later			
	Hitachi Virtual Storage Platform G370	Fibre Channel	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform G400	Fibre Channel	83-01-01-40/XX or later			
		Fibre Channel	83-01-2X-40/XX or later(*27)			
	Hitachi Virtual Storage Platform G600	Fibre Channel	83-01-01-40/XX or later			
		Fibre Channel	83-01-2X-40/XX or later(*27)			
	Hitachi Virtual Storage Platform G700	Fibre Channel	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform G800	Fibre Channel	83-01-2X-60/XX or later			
	Hitachi Virtual Storage Platform G900	Fibre Channel	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F1500	Fibre Channel	80-05-0X-XX/XX or later			
	Hitachi Virtual Storage Platform F350	Fibre Channel	88-01-03-20/XX or later			
	Hitachi Virtual Storage Platform F370	Fibre Channel	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F400	Fibre Channel	83-02-01-40/XX or later	**30**	**30**	**30**
			83-03-01-40/XX or later			
	Hitachi Virtual Storage Platform F600	Fibre Channel	83-02-01-40/XX or later	**30**	**30**	**30**
			83-03-01-40/XX or later			
	Hitachi Virtual Storage Platform F700	Fibre Channel	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F800	Fibre Channel	83-02-01-60/XX or later	**30**	**30**	**30**
			83-03-01-60/XX or later			
	Hitachi Virtual Storage Platform F900	Fibre Channel	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform N400	Fibre Channel	83-06-01-40/XX or later			
	Hitachi Virtual Storage Platform N600	Fibre Channel	83-06-01-40/XX or later			
	Hitachi Virtual Storage Platform N800	Fibre Channel	83-06-01-60/XX or later			
	Hitachi Virtual Storage Platform E590	Fibre Channel	93-03-22-XX/XX or later			
	Hitachi Virtual Storage Platform E590H	Fibre Channel	93-05-02-XX/XX or later			
	Hitachi Virtual Storage Platform E790	Fibre Channel	93-03-22-XX/XX or later			
	Hitachi Virtual Storage Platform E790H	Fibre Channel	93-05-02-XX/XX or later			
	Hitachi Virtual Storage Platform E990	Fibre Channel	93-01-02-60/XX or later			
	Hitachi Unified Storage VM	Fibre Channel	73-01-0X-XX/XX or later			
		Fibre Channel	73-03-0X-XX/XX or later(*31)			
	Hitachi Universal Storage Platform	Fibre Channel	50-01-19-XX/XX or later			
	Hitachi Network Storage Controller NSC55	Fibre Channel	50-03-94-XX/XX or later			
	Hitachi Thunder 9530V	Fibre Channel	0651/D or later			
	Hitachi Thunder 9570V	Fibre Channel	0651/D or later			
	Hitachi Thunder 9580V	Fibre Channel	1654/A or later			
	Hitachi Adaptable Modular Storage AMS 200	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS 500	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS1000	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS2100	Fibre Channel	0832/E or later			
	Hitachi Adaptable Modular Storage AMS2300	Fibre Channel	0832/E or later			
	Hitachi Adaptable Modular Storage AMS2500	Fibre Channel	0832/E or later			
	Hitachi Workgroup Modular Storage WMS100	Fibre Channel	0720/A or later			
	Hitachi Unified Storage 110	Fibre Channel	0915/A or later			
	Hitachi Unified Storage 130	Fibre Channel	0915/A or later			
	Hitachi Unified Storage 150	Fibre Channel	0915/A or later			
	SMS 100	Fibre Channel	1810/N or later			
	HP StorageWorks XP1024 / XP128 Disk Array	Fibre Channel	21-01-24-XX/XX or later			
	HP StorageWorks XP512 / XP48 Disk Array	Fibre Channel	01-10-00-XX/XX or later			
	HP StorageWorks XP12000 Disk Array	Fibre Channel	50-01-19-XX/XX or later			
	HP StorageWorks XP20000 Disk Array	Fibre Channel	60-01-61-XX/XX or later			
		Fibre Channel	60-06-10-XX/XX or later(*31)			
	HP StorageWorks XP24000 Disk Array	Fibre Channel	60-01-XX-XX/XX or later			
		Fibre Channel	60-06-10-XX/XX or later(*31)			
	HP StorageWorks P9500 Disk Array	Fibre Channel	70-01-00-XX/XX or later			
		Fibre Channel	70-01-42-XX/XX or later(*31)			
	HPE XP8 Storage	Fibre Channel	90-01-41-XX/XX or later	**24**	**24**	**24**
	HP XP7 Storage	Fibre Channel	80-01-2X-XX/XX or later	**24**	**24**	**24**
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later	**24**	**24**	**24**
		Fibre Channel	80-02-4X-XX/XX or later	**29**	**29**	**29**
		Fibre Channel	80-05-0X-XX/XX or later			
	SVS	Fibre Channel	50-07-01-XX/XX or later			
xclusive roducts	Hitachi Path Manager			**11**	**11**	**11**
	Sun StorEdge[TM] RAID Manager			**11**	**11**	**11**
	VxVM-DMP			**11**	**11**	**11**
	MPxIO[Sun StorEdge Traffic Manager Software]			**13**	**13**	**13**

EP	PowerPath	12	12	12
	SDD	12	12	12

Supported	
Not Supported	

Notes	
1	The following OS versions are supported: - Solaris 10 (SPARC) (64bit)
2	ZFS cannot be used on an LU that is managed by a volume manager.
3	ZFS is supported only in Solaris 10 or Solaris 11.x.
4	Load balancing is not available for LUs that are using SCSI-2 reserves in Sun Cluster 2-node configurations.
5	As prerequisites for supporting configurations with 256 or more LUNs, all of the following components; the storage system, the HBA, and the HBA driver, must support the configurations. For the information, refer to documents or data sheet provided by each vendor.
6	For supported cluster configurations, see the [20. Clusters and VMs] sheet.
9	This is supported only in Solaris 10 or Solaris 11.x.
10	Configurations that use Clusterware are not supported.
11	This product is mutually exclusive with HDLM.
12	HDLM and other path management software may be able to coexist if they manage separate storage systems. Please contact appropriate person in Hitachi Vantara.
13	Solaris MPxIO and HDLM can coexist only if all of the following conditions are met: - Solaris MPxIO and HDLM manage separate storage systems. - Solaris MPxIO and HDLM use separate HBAs.
14	HDLM is supported only in environments installed in a Global Zone, and is not supported in environments installed in a Non-Global Zone. HDLM can manage paths only from a Global Zone. To use HDLM devices in a Non-Global Zone, allocate the HDLM devices of LUs or controllers from a Global Zone to a Non-Global Zone.
15	The following Oracle VM Server versions are supported on Solaris 10: Oracle VM Server 1.2, 1.3, 2.0, 2.1, 2.2,3.1 The following Oracle VM Servers versions are supported on Solaris 11: Oracle VM Server 2.1, 2.2 The following Oracle VM Servers versions are supported on Solaris 11.1: Oracle VM Server 3.0, 3.1,3.1.1 The following Oracle VM Servers versions are supported on Solaris 11.2: Oracle VM Server 3.1.1 The following Oracle VM Servers versions are supported on Solaris 11.2: Oracle VM Server 3.2 The following Oracle VM Servers versions are supported on Solaris 11.3: Oracle VM Server 3.4 The following Oracle VM Servers versions are supported on Solaris 11.3: Oracle VM Server 3.5 The following Oracle VM Servers versions are supported on Solaris 11.4: Oracle VM Server 3.6, 3.6.1,3.6.2
16	To use Oracle VM Server for Solaris, all of the following conditions must be met: - The domain in which HDLM is to be installed is an I/O domain. - If a cluster configuration is used for primary domains, the cluster version must be supported. (The configuration must be one of the supported configurations described on the sheet "22. Clusters and VMs".) -If a cluster configuration is used for guest domains, Oracle Solaris Cluster and VCS are supported. You can use an HDLM device that has been exported from an I/O domain to a guest domain. To do this, make sure that you set the AFB function of HDLM in the I/O domain to ON.
18	Microprogram version 08B8/D or later is required for using Dynamic I/O Path Control on the Hitachi AMS2000 series/Hitachi SMS series.
19	Supported with some conditions customer-by-customer basis (SUI 044226). Please contact appropriate person in Hitachi Vantara.
22	SR-IOV (single root I/O virtualization) is supported when using the following product: Solaris Sun Storage 16 Gb Fibre Channel PCIe Universal Host Bus Adapter, QLogic. However, the supported OS versions are Solaris 11.2 or later.
23	Global-active devices are supported.
24	High Availability is supported.
25	A refresh operation that reflects the setting of the non-preferred path option to HDLM is supported when a global-active device (called the High Availability feature in the case of XP7) is used.
26	This is supported in an HAM environment by the following OSs: Solaris 10 HDLM for Solaris does not support cluster software in an HAM environment. For information about functional restrictions, see the HAM User Guide.
27	Apply this version when a global-active device is used.
28	When you use a normal VOL as a global-active device pair VOL, use this version.
29	When you use a normal VOL as a High Availability pair VOL, use this version.
30	The dlnkmgr command and HGLM display "VSP_Gx00" as the model ID of the storage system.
31	Apply this version when an HAM environment is used.
32	Note the following when you use the virtual SCSI HBA functionality that is a new feature of OVM3.4. When you use the virtual SCSI HBA functionality for guest domains from I/O domains, HBA can be assigned, but HDLM devices cannot be configured even if HDLM is installed in the guest domain. HDLM devices can be configured in the I/O domain as before.
33	When you configure a SAN boot environment in Oracle Solaris 11 and the configuration consists of only the boot disk, and the configuration consists of only the boot disk, the OS hangs due to a defect in HDLM. Specify at least one data disk to be managed by HDLM before configuring the SAN boot environment. For details, see EN-277. This restriction is lifted in HDLM 8.6.0-02 or later versions.
34	Oracle VM Manager is not supported.
35	In a SAN boot environment, the configuration of paths cannot be changed (paths cannot be added or deleted) for the boot disk.

36	In Solaris11.3 or Solaris11.4, a dynamic reconfiguration after a new LU is added is not supported. This is supported in 8.7.6-03 and later versions. Reason: When a new LU is added and then a dynamic reconfiguration is performed, HDLM might use controller number c10, which is already reserved by the system. Because of this, the system might be unable to create a new OS device.

IMPORTANT NOTE

HDLM is dependent only on the driver version, not the HBA model. For this reason, specific HBA models are no longer listed, just driver versions. So if the HBA driver version is supported, then HDLM is supported. This also means that OEM versions are supported, as long as the driver is supported.

Solaris 10 SPARC				HDLM Version		
				8.7.6	8.8.0	8.8.1
OS	HBA		Driver			
Solaris 10 SPARC	Fibre Channel	SUN	Solaris 10 Bundle	B 4,5,9,20,23	B 4,5,9,20,23	B 4,5,9,20,23
		Emulex	6.02f	2,23	2,23	2,23
			6.02h	2,23	2,23	2,23
			6.11c	2,23	2,23	2,23
			6.11cx2	2,23	2,23	2,23
			6.21g	2,23	2,23	2,23
		QLogic	5.03	7	7	7
			5.04	7	7	7
		Fujitsu	3.0 + Update1			
			4.0	B, 17	B, 17	B, 17
			4.0 + Update1	B, 17	B, 17	B, 17
			4.0 + Update2	B, 17	B, 17	B, 17
		Brocade	bfa 1.1.0.4	18	18	18
			bfa 2.1.0.1	18	18	18
	Fibre Channel over Ethernet	SUN	Solaris 10 Bundle	B,4,5,9,20,2 2,23	B,4,5,9,20,2 2,23	B,4,5,9,20,2 2,23
		Brocade	bfa 2.3.0.6	18	18	18

Supported	
Not Supported	

Notes	
HDLM is not supported on x86 for any Solaris version.	
B	SAN boot is supported.
2	Edit and set the /kernel/drv/lpfc.conf file as follows: - no-device-delay=0 - nodev-holdio=0 - Set nodev-tmo to 30 or greater. - When connecting to storage system either directly via an FC HUB (loop mode only): topology=4 - When connecting to storage system via an FC Switching HUB (point-to-point mode only): topology=2
4	Please refer to the below document at My Oracle Support website (https://support.oracle.com/) Bug ID: 4897065 Bug ID: 6288500
5	Requires Solaris 10 attachment driver.
7	Set the /kernel/drv/qla2200.conf file or /kernel/drv/qla2300.conf file as follows: - hbaX-link-down-error=1 - hbaX-fast-error-reporting=1 (Specify this only for HBA driver versions that support this parameter.) Note: "X"refers to the HBA driver instance.
9	In case of using this HBA driver, the phenomenon of the followings reported by BugID 15354368(SUNBT6479229) at the My Oracle Support website (https://support.oracle.com/) may occur. - Re-instating function and FailFast probe function are uN/Available.

17	Edit and set the /kernel/drv/fjpfca.conf file as follows: - failover_function=1
18	Apply the following patches: 119130-33 (or later) SunOS 5.10: Sun Fibre Channel Device Drivers 119974-09 (or later) SunOS 5.10: fp plug-in for cfgadm 120346-09 (or later) SunOS 5.10: Common Fibre Channel HBA API and Host Bus Adapter Libraries
19	If the server is started with a disconnected path, and then the path is connected and recovered, execute the cfgadm -c configure command before entering the dlnkmgr online command, to make Solaris recognize the storage system. In a Solaris 10 environment, even when the cfgadm -c configure command is executed, the host might not always recognize the storage system. If this happens, after the path is recovered, reboot the host so that it recognizes the storage system.
20	Apply the following patches:

(1) The following HBA models provided by Oracle:
- X6727A, X6748A, X6757A, X6799A, SG-XPCI1FC-QF2<X6767A>, SG-XPCI2FC-QF2<X6768A>, SG-XPCI2FC-QF2-Z, SG-XPCI1FC-QL2, SG-XPCI1FC-QF4, SG-XPCI2FC-QF4, SG-XPCIE1FC-QF4, and SG-XPCIE2FC-QF4

(2) The following HBA models provided by QLogic:
- QLA2300F, QLA2310F, QLA2332, QLA2340, QLA2342, QLA2344, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464, QCP2332, QCP2330, QCP2340, and QCP2342

Patches to be applied in the case of (1) or (2):
119130-22 (or later) SunOS 5.10: Sun Fibre Channel Device Drivers
119974-04 (or later) SunOS 5.10: fp plug-in for cfgadm
120182-02 (or later) SunOS 5.10: Sun Fibre Channel Host Bus Adapter Library
120346-04 (or later) SunOS 5.10: Common Fibre Channel HBA API Library

(3) The following HBA models provided by Oracle:
- SG-XPCI1FC-EM2, SG-XPCI2FC-EM2, SG-XPCI1FC-EM4-Z, SG-XPCI2FC-EM4-Z, SG-XPCIE1FC-EM4, and SG-XPCIE2FC-EM4

(4) The following HBA models provided by Emulex:
- LP9002, LP9802, LP10000, LP10000DC, LP11000, LP11002, LPe11000, and LPe11002

Patches to be applied in the case of (3) or (4):
119130-22 (or later) SunOS 5.10: Sun Fibre Channel Device Drivers
119974-04 (or later) SunOS 5.10: fp plug-in for cfgadm
120182-02 (or later) SunOS 5.10: Sun Fibre Channel Host Bus Adapter Library
120222-11 (or later) SunOS 5.10: Emulex-Sun LightPulse Fibre Channel Adapter driver
120346-04 (or later) SunOS 5.10: Common Fibre Channel HBA API Library

(5) The following HBA models provided by Oracle:
- SG-XPCIE1FC-QF8-Z, SG-XPCIE2FC-QF8-Z, and SG-XPCIE2FC-QB4-Z

(6) The following HBA models provided by QLogic:
- QLE2560, QLE2562, and QEM2462

Patches to be applied in the case of (5) or (6):
119130-33 (or later) SunOS 5.10: Sun Fibre Channel Device Driver
119974-09 (or later) SunOS 5.10: fp plug-in for cfgadm
120346-09 (or later) SunOS 5.10: Common Fibre Channel HBA API and Host Bus Adapter Libraries
125166-10 (or later) SunOS 5.10: QLogic ISP Fibre Channel Device Driver

	(7)The following HBA models provided by Oracle: - SG-XPCIE1FC-EM8-Z, SG-XPCIE2FC-EM8-Z, and SG-XPCIE2FC-EB4-Z (8) The following HBA models provided by Emulex: - LPe12000 and LPe12002 Patches to be applied in the case of (7) or (8): 119130-33 (or later) SunOS 5.10: Sun Fibre Channel Device Drivers 119974-09 (or later) SunOS 5.10: fp plug-in for cfgadm 120222-27 (or later) SunOS 5.10: Emulex-Sun LightPulse Fibre Channel Adapter driver 120346-09 (or later) SunOS 5.10: Common Fibre Channel HBA API and Host Bus Adapter Libraries
	(9) The following HBA model provided by Oracle: - SG-XPCIE2FCGBE-Q-Z Patches to be applied in the case of (9): 119130-33 (or later) SunOS 5.10: Sun Fibre Channel Device Drivers 119974-09 (or later) SunOS 5.10: fp plug-in for cfgadm 120346-09 (or later) SunOS 5.10: Common Fibre Channel HBA API and Host Bus Adapter Libraries 125166-12 (or later) SunOS 5.10: QLogic ISP Fibre Channel Device Driver
	(10) The following HBA model provided by Oracle: - SG-XPCIE2FCGBE-E-Z Patches to be applied in the case of (10): 119130-33 (or later) SunOS 5.10: Sun Fibre Channel Device Drivers 119974-09 (or later) SunOS 5.10: fp plug-in for cfgadm 120222-29 (or later) SunOS 5.10: Emulex-Sun LightPulse Fibre Channel Adapter driver 120346-09 (or later) SunOS 5.10: Common Fibre Channel HBA API and Host Bus Adapter Libraries
	(11) The following CNA models provided by Emulex: - LP21000, LP21002, OCe10102, and OCe11102 Patches to be applied in the case of (11): 145096-03 (or later) SunOS 5.10: oce driver patch 145098-04 (or later) SunOS 5.10: emlxs driver patch
	(12)The following CNA models provided by QLogic ・QLE8140, QLE8142 The patches which should be applied in the case of (12) 143957-05 (or later) SunOS 5.10: qlc patch
22	SAN boot is not supported when using CNA provided by Emulex.
23	Sun Storage 16 Gb Fibre Channel PCIe Host Bus Adapter, Emulex (7101684) is used. If you use the I/O fencing function of VCS, enable the automatic failback function because a path might be placed in the Offline(E) status by node switchover.

Solaris 11 SPARC				**HDLM Version**		
OS	**HBA**		**Driver**	**8.7.6**	**8.8.0**	**8.8.1**
Solaris 11 SPARC	**Fibre Channel**	**SUN**	Solaris 11 Bundle	**B,1,4**	**B,1,4**	**B,1,4**
	Fibre Channel over Ethernet	**SUN**	Solaris 11 Bundle	**B,1,2,4**	**B,1,2,4**	**B,1,2,4**

Solaris 11.1 SPARC	**Fibre Channel**	**SUN**	Solaris 11 Bundle	**B,1,4**	**B,1,4**	**B,1,4**
	Fibre Channel over Ethernet	**SUN**	Solaris 11 Bundle	**1,3,4**	**1,3,4**	**1,3,4**
Solaris 11.2 SPARC	**Fibre Channel**	**SUN**	Solaris 11 Bundle	**B,1,4**	**B,1,4**	**B,1,4**
	Fibre Channel over Ethernet	**SUN**	Solaris 11 Bundle	**1,3,4**	**1,3,4**	**1,3,4**
Solaris 11.3 SPARC	**Fibre Channel**	**SUN**	Solaris 11 Bundle	**B,1,4**	**B,1,4**	**B,1,4**
	Fibre Channel over Ethernet	**SUN**	Solaris 11 Bundle	**1,3,4**	**1,3,4**	**1,3,4**
Solaris 11.4 SPARC	**Fibre Channel**	**SUN**	Solaris 11 Bundle	**B,1,4**	**B,1,4**	**B,1,4**
	Fibre Channel over Ethernet	**SUN**	Solaris 11 Bundle	**1,3,4**	**1,3,4**	**1,3,4**

Supported	
Not Supported	

Notes	
HDLM is not supported on x86 for any Solaris version.	
B	SAN boot is supported.
1	Requires Solaris 11 attachment driver.
2	SAN boot is not supported when using CNA provided by Emulex.
3	SAN boot configurations are not supported.
4	Sun Storage 16 Gb Fibre Channel PCIe Host Bus Adapter, Emulex (7101684) is used. If you use the I/O fencing function of VCS, enable the automatic failback function because a path might be placed in the Offline(E) status by node switchover.

Red Hat & SuSE Enterprise Linux				HDLM Version		
				8.7.8	8.8.0	8.8.1
Product Modifications and Additional Functions	Manual Fail Over					
	Manual Fail Back					
	Automatic Fail Over					
	Automatic Fail Back					
	Load Balance (Round Robin)					
	Load Balance (Extended Round Robin)					
	Load Balance (Least I/O)					
	Load Balance (Extended Least I/O)					
	Load Balance (Least Blocks)					
	Load Balance (Extended Least Blocks)					
	Load Balance Under Cluster					
	Automatic Discovery					
	Error Log					
	CLI			**45**	**45**	**45**
	Path Blockade					
	Health Check					
	Online(E)					
	Health Check Time (1 min to 24 hr)					
	Dynamic Reconfiguration					
	Offline For Each HBA (CLI)					
	Target Side Failover					
	Boot Disk			**29**	**29**	**29**
	Upgrade Install					
	Service Pack					
	Persistent Reserve Clear Utility					
	Internationalization Environment					
	Support for LUN256 or Higher					
	Support for UDEV					
	SCSI Inquiry Timeout Setup					
	Install Log Output / Collect					
	Unattended Installation and Configuration					
	Audit Log					
	Silent installation					
	GFS2 filesystem					
	System Script Update Utility (dlmupdatesysinit)					
	The function of displaying WWN of a HBA					
	Xen (virtualization)					
	LUKS of RHEL5.3 or later					
	KVM of RHEL5.4 or later					
	online/offline path by SCSI device name					
	High Availability Manager			**46**	**46**	**46**
	iSCSI with AMS 2000 Series					
	Dynamic I/O Path Control			**41**	**41**	**41**
	Specifying the number of times the same path can be used for I/O operations when the load balancing is used.					
	Specifying the number of times the same path can be used for random I/O operations when extended load balancing is used.					
	md devices of RHEL5/RHEL6 or later					
	Storage System	Interface	Microcode version			
	Hitachi Thunder 9530V	Fibre Channel	0653/B or later			
	Hitachi Thunder 9570V	Fibre Channel	0653/B or later			
	Hitachi Thunder 9580V	Fibre Channel	1654/A or later			
	Hitachi Adaptable Modular Storage AMS200	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS500	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS1000	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS2100	Fibre Channel	0832/E or later			
		iSCSI	0846/A or later			
	Hitachi Adaptable Modular Storage	Fibre Channel	0832/E or later			

Supported Storage Systems	AMS2300	iSCSI	0846/A or later			
	Hitachi Adaptable Modular Storage AMS2500	Fibre Channel	0832/E or later			
		iSCSI	0846/A or later			
	Hitachi Unified Storage 110	Fibre Channel	0915/A or later			
		iSCSI	0915/A or later			
	Hitachi Unified Storage 130	Fibre Channel	0915/A or later			
		iSCSI	0915/A or later			
	Hitachi Unified Storage 150	Fibre Channel	0915/A or later			
		iSCSI	0915/A or later			
	Hitachi Workgroup Modular Storage WMS100	Fibre Channel	0720/A or later			
	Hitachi Lightning 9900V	Fibre Channel	21-05-00-XX/XX or later			
	Hitachi Universal Storage Platform V	Fibre Channel	60-00-05-XX/XX or later			
		Fibre Channel	60-06-05-XX/XX or later(*52)			
	Hitachi Universal Storage Platform VM	Fibre Channel	60-01-61-XX/XX or later			
		Fibre Channel	60-06-05-XX/XX or later(*52)			
	Hitachi Universal Storage Platform	Fibre Channel	50-01-19-XX/XX or later			
	Hitachi Virtual Storage Platform	Fibre Channel	70-01-00-XX/XX or later			
		Fibre Channel	70-01-42-XX/XX or later(*52)(*53)			
		Fibre Channel over Ethernet	70-02-5X-XX/XX or later			
	Hitachi Virtual Storage Platform 5100	Fibre Channel	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5100H	Fibre Channel	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5200	Fibre Channel	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5200H	Fibre Channel	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5500	Fibre Channel	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5500H	Fibre Channel	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5600	Fibre Channel	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5600H	Fibre Channel	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform G1500	Fibre Channel	80-05-0X-XX/XX or later			
	Hitachi Virtual Storage Platform G1000	Fibre Channel	80-01-2X-XX/XX or later	**43**	**43**	**43**
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later	**43**	**43**	**43**
		Fibre Channel	80-02-4X-XX/XX or later	**49**	**49**	**49**
	Hitachi Virtual Storage Platform G200	Fibre Channel	83-01-01-20/XX or later			
		Fibre Channel	83-01-2X-20/XX or later(*48)			
		iSCSI	83-01-01-20/XX or later			
	Hitachi Virtual Storage Platform G350	Fibre Channel	88-01-03-20/XX or later			
		iSCSI	88-01-03-20/XX or later			
	Hitachi Virtual Storage Platform G370	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform G400	Fibre Channel	83-01-01-40/XX or later			
		Fibre Channel	83-01-2X-40/XX or later(*48)			
		iSCSI	83-01-01-40/XX or later			
	Hitachi Virtual Storage Platform G600	Fibre Channel	83-01-01-40/XX or later			
		Fibre Channel	83-01-2X-40/XX or later(*48)			
		iSCSI	83-01-01-40/XX or later			
	Hitachi Virtual Storage Platform G700	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform G800	Fibre Channel	83-01-2X-60/XX or later			
		iSCSI	83-01-2X-60/XX or later			
	Hitachi Virtual Storage Platform G900	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F1500	Fibre Channel	80-05-0X-XX/XX or later			
	Hitachi Virtual Storage Platform F350	Fibre Channel	88-01-03-20/XX or later			
		iSCSI	88-01-03-20/XX or later			
	Hitachi Virtual Storage Platform F370	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F400	Fibre Channel	83-02-01-40/XX or later	**51**	**51**	**51**
			83-03-01-40/XX or later			
	Hitachi Virtual Storage Platform F600	Fibre Channel	83-02-01-40/XX or later	**51**	**51**	**51**
			83-03-01-40/XX or later			
	Hitachi Virtual Storage Platform F700	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F800	Fibre Channel	83-02-01-60/XX or later	**51**	**51**	**51**

	[illegible]	[illegible]	83-03-01-60/XX or later			
	Hitachi Virtual Storage Platform F900	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform N400	Fibre Channel	83-06-01-40/XX or later			
		iSCSI	83-06-01-40/XX or later			
	Hitachi Virtual Storage Platform N600	Fibre Channel	83-06-01-40/XX or later			
		iSCSI	83-06-01-40/XX or later			
	Hitachi Virtual Storage Platform N800	Fibre Channel	83-06-01-60/XX or later			
		iSCSI	83-06-01-60/XX or later			
	Hitachi Virtual Storage Platform E590	Fibre Channel	93-03-22-XX/XX or later			
		iSCSI	93-03-22-XX/XX or later			
	Hitachi Virtual Storage Platform E590H	Fibre Channel	93-05-02-XX/XX or later			
		iSCSI	93-05-02-XX/XX or later			
	Hitachi Virtual Storage Platform E790	Fibre Channel	93-03-22-XX/XX or later			
		iSCSI	93-03-22-XX/XX or later			
	Hitachi Virtual Storage Platform E790H	Fibre Channel	93-05-02-XX/XX or later			
		iSCSI	93-05-02-XX/XX or later			
	Hitachi Virtual Storage Platform E990	Fibre Channel	93-01-02-60/XX or later			
		iSCSI	93-01-02-60/XX or later			
	Hitachi Unified Storage VM	Fibre Channel	73-01-0X-XX/XX or later	**47**		
		Fibre Channel	73-03-0X-XX/XX or later(*52)			
	Hitachi Network Storage Controller NSC55	Fibre Channel	50-01-19-XX/XX or later			
	SMS 100	Fibre Channel	1810/N or later			
	HP StorageWorks XP 1024 / XP128 Disk Array	Fibre Channel	21-13-02-XX/XX or later			
	HP StorageWorks XP12000 Disk Array	Fibre Channel	50-08-05-XX/XX or later			
	HP StorageWorks XP20000 Disk Array	Fibre Channel	60-01-61-XX/XX or later	**8**		
		Fibre Channel	60-06-05-XX/XX or later(*52)			
	HP StorageWorks XP24000 Disk Array	Fibre Channel	60-01-24-XX/XX or later	**8**		
		Fibre Channel	60-06-05-XX/XX or later(*52)			
	HP StorageWorks P9500 Disk Array	Fibre Channel	70-01-00-XX/XX or later	**8**		
		Fibre Channel	70-01-42-XX/XX or later(*52)(*53)			
		Fibre Channel over Ethernet	70-02-5X-XX/XX or later	**8**		
	HPE XP8 Storage	Fibre Channel	90-01-41-XX/XX or later	**8,44**	**8,44**	**8,44**
	HP XP7 Storage	Fibre Channel	80-01-2X-XX/XX or later	**8,44**	**8,44**	**8,44**
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later	**8,44**	**8,44**	**8,44**
		Fibre Channel	80-02-4X-XX/XX or later	**50**	**50**	**50**
		Fibre Channel	80-05-0X-XX/XX or later			
	SVS	Fibre Channel	50-07-63-XX/XX			
Exclusive Products	Hitachi Path Manager					
	VxVM-DMP			**31**	**31**	**31**
	PowerPath					
	DeviceMapper-Multipath					

Supported	
Not Supported	

Notes	
7	This is only supported in Red Hat Enterprise AS3/ES3 and AS4/ES4.
8	Not supported in conjunction with Hitachi Compute Blade
29	For details on Red Hat SAN boot support, see "9-1. Red Hat Linux HBA". For details on SuSE SAN boot support, see "9-2. Oracle Unbreakable HBA ". For details on SuSE SAN boot support, see "10. SuSE Linux HBA".
31	HDLM and other path management software may be able to coexist if they manage separate storage systems. Please contact appropriate person in Hitachi Vantara.
41	Microprogram version 08B8/D or later is required for using Dynamic I/O Path Control on Hitachi AMS2000 series/Hitachi SMS series.
42	Supported with some conditions customer-by-customer basis (SUI 044226). Please contact appropriate person in Hitachi Vantara.
43	Global-active devices are supported.
44	High Availability is supported.
45	A refresh operation that reflects the setting of the non-preferred path option to HDLM is supported when a global-active device (called the High Availability feature in the case of XP7) is used.

46	This is supported in an HAM environment by the following OSs: Red Hat Enterprise Linux 5(x86/x64/IPF) Red Hat Enterprise Linux 6(x86/x64) SUSE LINUX Enterprise Server 10(x86/x64/IPF) HDLM for Linux does not support cluster software in an HAM environment. For information about functional restrictions, see the HAM User Guide.
47	Expand V-VOLs are available for use. However, make sure to exclude all managed HDLM devices from the management targets before using the Expand V-VOLs. After using the Expand V-VOLs, change the HDLM devices not managed by HDLM into them managed by HDLM.
48	Apply this version when a global-active device is used.
49	When you use a normal VOL as a global-active device pair VOL, use this version.
50	When you use a normal VOL as a High Availability pair VOL, use this version.
51	The dlnkmgr command and HGLM display "VSP_Gx00" as the model ID of the storage system.
52	Apply this version when an HAM environment is used.
53	When you use the HAM functionality with USP V or XP24000, apply 70-03-00-XX/XX or later.

IMPORTANT NOTE

Security fix kernels can be supported without ISRs if their base kernels are supported and all of conditions below are met.
(1) The security fix kernels are for RHEL4.5/ SLES10 or later.
(2) Bundled driver versions of the security fix kernels are the same as the bundled driver versions of the supported base kernels.
If your requested security fix kernel is for RHEL4.4/SLES9 or before, or has a different bundled driver version from one of the base kernel, please contact appropriate person in Hitachi Vantara for an Interoperability Support Request (ISR).

HDLM is dependent only on the driver version, not the HBA model. For this reason, specific HBA models are no longer listed, just driver versions. So if the HBA driver version is supported, then HDLM is supported. This also means that OEM versions are supported, as long as the driver is supported.

All drivers applied to Hitachi HBA cards are supported.

Red Hat Enterprise Linux				HDLM Version		
				8.7.8	8.8.0	8.8.1
OS	**HBA**		**Driver**			
Red Hat Enterprise Linux 5 IA32 / x86 Processors Kernel 2.6.18-8.el5 2.6.18-8.el5PAE	Fibre Channel	QLogic	8.01.07-k1			
			8.02.08			
		Emulex	8.1.10.3			
			8.1.10.12			
			8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
			8.2.0.22			
		HP	8.1.10.11			
			8.2.0.33.3p			
		IBM	8.02.12			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
Red Hat Enterprise Linux 5 Itanium / IA64 Processors Kernel 2.6.18-8.el5	Fibre Channel	QLogic	8.01.07-k1			
			8.02.08			
		Emulex	8.1.10.3			
			8.1.10.12			
			8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
		IBM	8.02.12			
		HP	8.2.0.33.3p			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
	Fibre Channel	QLogic	8.01.07-k1			
			8.02.08			
		Emulex	8.1.10.3			
			8.1.10.12			
			8.2.0.22			

Red Hat Enterprise Linux 5 X64 / x86_64 Processors Kernel 2.6.18-8.el5	Fibre C		8.2.0.29			
			8.2.0.33.3p			
		HP	8.1.10.11			
			8.2.0.33.3p			
		IBM	8.02.12			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
Red Hat Enterprise Linux 5.1 IA32 / x86 Processors Kernel 2.6.18-53.el5 2.6.18-53.el5PAE	Fibre Channel	QLogic	8.01.07-k7			
			8.02.14			
		Emulex	8.1.10.9			
			8.1.10.12			
			8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
		HP	8.02.11			
			8.01.07.25			
			8.01.07.25			
			8.2.0.33.3p			
			8.01.07.25-2			
		Hitachi	Bundle			
		IBM	8.1.10.9			
			8.02.12			
			8.02.14			
		Brocade	1.0.0.3			
			1.1.0.1			
			1.1.0.6			
			2.1.0.0			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
		Brocade	2.1.0.0			
Red Hat Enterprise Linux 5.1 Itanium / IA64 Processors Kernel 2.6.18-53.el5	Fibre Channel	QLogic	8.01.07-k7			
			8.02.14			
		Emulex	8.1.10.9			
			8.1.10.12			
			8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
		IBM	8.1.10.9			
			8.02.12			
			8.02.14			
		Brocade	1.1.0.1			
			1.1.0.6			
			2.1.0.0			

		HP	8.2.0.33.3p			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
		Brocade	2.1.0.0			
Red Hat Enterprise Linux 5.1 X64 / x86_64 Processors Kernel 2.6.18-53.el5	Fibre Channel	QLogic	8.01.07-k7			
			8.02.14			
		Emulex	8.1.10.12			
			8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
			8.1.10.9			
		Hitachi	Bundle			
		HP	8.02.11			
			8.01.07.25			
			8.01.07.25			
			8.2.0.33.3p			
			8.01.07.25-2			
		IBM	8.1.10.9			
			8.02.12			
			8.02.14			
		Brocade	1.0.0.3			
			1.1.0.1			
			1.1.0.6			
			2.1.0.0			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
		Brocade	2.1.0.0			
Red Hat Enterprise Linux 5.2 IA32 / x86 Processors Kernel 2.6.18-92.el5 2.6.18-92.el5PAE	Fibre Channel	QLogic	8.02.00-k5			
			8.02.14			
			8.02.23			
		Emulex	8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
		HP	8.02.11			
			8.01.07.25			
			8.01.07.25			
			8.2.0.22_p1			
			8.2.0.33.3p			
		IBM	8.02.12			
			8.02.14			

		Hitachi	Bundle			
		Brocade	1.0.0.3			
			1.1.0.1			
			1.1.0.6			
			2.1.0.0			
			2.1.0.2			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
		Brocade	2.1.0.0			
Red Hat Enterprise Linux 5.2 Itanium / IA64 Processors Kernel 2.6.18-92.el5	Fibre Channel	QLogic	8.02.00-k5			
			8.02.14			
			8.02.23			
		Emulex	8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
		IBM	8.02.12			
			8.02.14			
		Brocade	1.1.0.1			
		HP	8.2.0.33.3p			
		Brocade	1.1.0.1			
			1.1.0.6			
			2.1.0.0			
			2.1.0.2			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
		Brocade	2.1.0.0			
	re Channel	QLogic	8.02.00-k5			
			8.02.14			
			8.02.23			
		Emulex	8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
		HP	8.02.11			
			8.01.07.25			
			8.01.07.25			
			8.2.0.22_p1			

Red Hat Enterprise Linux 5.2 X64 / x86_64 Processors Kernel 2.6.18-92.el5	Fibr		8.2.0.33.3p			
		IBM	8.02.12			
			8.02.14			
		Brocade	1.0.0.3			
			1.1.0.1			
			1.1.0.6			
			2.1.0.0			
			2.1.0.2			
		Hitachi	Bundle			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
		Brocade	2.1.0.0			
Red Hat Enterprise Linux 5.3 IA32 / x86 Processors Kernel 2.6.18-128.el5 2.6.18-128.el5PAE	Fibre Channel	QLogic	8.02.00.06.05.03-k			
			8.02.23			
			8.02.00.51			
			8.03.01.06			
		Emulex	8.2.0.33.3p			
		Hitachi	Bundle			
		Brocade	1.1.0.6			
			2.1.0.0			
			2.1.0.2			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
		HP	8.2.0.33.3p			
		IBM	8.02.00.51			
			8.03.01.06			
	Fibre Channel over Ethernet	QLogic	8.03.00.09			
		Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
		QLogic	8.02.00.06.05.03-k			
			8.02.23			

Red Hat Enterprise Linux 5.3 Itanium / IA64 Processors Kernel 2.6.18-128.el5	Fibre Channel	Emulex	8.2.0.33.3p			
		Brocade	1.1.0.6			
			2.1.0.0			
			2.1.0.2			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
		HP	8.2.0.33.3p			
	Fibre Channel over Ethernet	QLogic	8.03.00.09			
		Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
Red Hat Enterprise Linux 5.3 X64 / x86_64 Processors Kernel 2.6.18-128.el5	Fibre Channel	QLogic	8.02.00.06.05.03-k			
			8.02.23			
			8.02.00.51			
			8.03.01.06			
		Emulex	8.2.0.33.3p			
		Brocade	1.1.0.6			
			2.1.0.0			
			2.1.0.2			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
		HP	8.2.0.33.3p			
		IBM	8.02.00.51			
			8.03.01.06			
		Hitachi	Bundle			
	Fibre Channel over Ethernet	QLogic	8.03.00.09			
		Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
			8.03.00.10.05.04-k			

Red Hat Enterprise Linux 5.4 IA32 / x86 Processors Kernel 2.6.18-164.el5 2.6.18-164.el5PAE	Fibre Channel	QLogic	8.03.00.1.05.05-k			
			8.03.01.06			
			8.03.03.15.05.06			
		Emulex	8.2.0.48.2p			
			8.2.0.48.3p			
		HP	8.03.00.10.05.04-k			
			8.03.00.1.05.05-k			
			8.03.01.05.05.06-k			
			8.2.0.48.2p			
			8.2.0.48.3p			
			8.03.03.15.05.06			
		IBM	8.03.00.10.05.04-k			
			8.03.00.1.05.05-k			
			8.03.01.06			
		Brocade	2.1.0.0			
			2.1.0.2			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
		Hitachi	Bundle			
	Fibre Channel over Ethernet	Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
		QLogic	8.03.03.15.05.06			
			Bundle			
		Emulex	8.2.0.71			
	Fibre Channel	QLogic	8.03.00.10.05.04-k			
			8.03.00.1.05.05-k			
		Emulex	8.2.0.48.2p			
			8.2.0.48.3p			
		HP	8.2.0.48.2p			
			8.2.0.48.3p			
			8.03.01.05.05.06-k			

Red Hat Enterprise Linux 5.4 Itanium / IA64 Processors Kernel 2.6.18-164.el5		Brocade	2.1.0.0			
			2.1.0.2			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
	Fibre Channel over Ethernet	Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
		QLogic	Bundle			
		Emulex	8.2.0.71			
Red Hat Enterprise Linux 5.4 X64 / x86_64 Processors Kernel 2.6.18-164.el5	Fibre Channel	QLogic	8.03.00.10.05.04-k			
			8.03.00.1.05.05-k			
			8.03.01.06			
			8.03.03.15.05.06			
		Emulex	8.2.0.48.2p			
			8.2.0.48.3p			
		HP	8.03.00.10.05.04-k			
			8.03.00.1.05.05-k			
			8.03.01.05.05.06-k			
			8.2.0.48.2p			
			8.2.0.48.3p			
			8.03.03.15.05.06			
		IBM	8.03.00.10.05.04-k			
			8.03.00.1.05.05-k			
			8.03.01.06			
		Brocade	2.1.0.0			
			2.1.0.2			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
		Hitachi	Bundle			
	r Ethernet	Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			

	Fibre Channel ove	QLogic	8.03.03.15.05.06			
			Bundle			
		Emulex	8.2.0.71			
Red Hat Enterprise Linux 5.5 IA32 / x86 Processors Kernel 2.6.18-194.el5 2.6.18-194.el5PAE	Fibre Channel	QLogic	8.03.01.04.05.05-k			
			8.03.01.06			
			8.03.03.15.05.06			
			8.03.07.03.5.6-k			
			8.03.07.05.5.6-k-sw1			
		Emulex	8.2.0.63.3p			
			8.2.0.63.3p			
		HP	8.03.01.04.05.05-k			
			8.2.0.63.3p			
			8.03.03.15.05.06			
			8.03.07.03.5.6			
			8.2.0.106-1			
			8.2.0.134			
		IBM	8.03.01.04.05.05-k			
			8.03.01.04.05.05-k			
			8.03.01.06			
		Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
	Fibre Channel over Ethernet	Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
		QLogic	8.03.03.15.05.06			
			Bundle			
		Emulex	8.2.0.71			
			8.2.0.96			
			8.2.0.126			
		QLogic	8.03.01.04.05.05-k			

Red Hat Enterprise Linux 5.5 Itanium / IA64 Processors Kernel 2.6.18-194.el5	Fibre Channel	Emulex	8.2.0.63.3p			
		HP	8.2.0.63.3p			
			8.2.0.106-1			
			8.2.0.134			
		Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
	Fibre Channel over Ethernet	Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
		QLogic	Bundle			
		Emulex	8.2.0.71			
			8.2.0.126			
Red Hat Enterprise Linux 5.5 X64 / x86_64 Processors Kernel 2.6.18-194.el5	Fibre Channel	QLogic	8.03.01.04.05.05-k			
			8.03.01.06			
			8.03.03.15.05.06			
			8.03.07.03.5.6-k			
			8.03.07.05.5.6-k-sw1			
		Emulex	8.2.0.63.3p			
		HP	8.03.01.04.05.05-k			
			8.2.0.63.3p			
			8.03.03.15.05.06			
			8.03.07.03.5.6			
			8.2.0.106-1			
			8.2.0.134			
		IBM	8.03.01.04.05.05-k			
			8.03.01.04.05.05-k			
			8.03.01.06			
		Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
			3.0.0.0			
		Cisco	1.4.0.145			

	Fibre Channel over Ethernet	Brocade	2.1.0.0			
			2.2.0.0			
			2.3.0.0			
		QLogic	8.03.03.15.05.06			
			Bundle			
		Emulex	8.2.0.71			
			8.2.0.96			
			8.2.0.126			
		Cisco	1.5.0.1			
Red Hat Enterprise Linux 5.6 **IA32 / x86 Processors** Kernel 2.6.18-238.el5 2.6.18-238.el5PAE	Fibre Channel	QLogic	8.03.01.05.05.06-k			
			8.03.07.03.5.6-k			
		Emulex	8.2.0.87.1p			
		HP	8.03.07.03.5.6			
			8.2.0.106-1			
			8.2.0.134			
		Brocade	3.0.0.0			
		Hitachi	Bundle			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Emulex	8.2.0.96			
			8.2.0.126			
	iSCSI	Red Hat	Bundle			
	ibre Channel	QLogic	8.03.01.05.05.06-k			
		Emulex	8.2.0.87.1p			
		HP	8.2.0.106-1			

Red Hat Enterprise Linux 5.6 Itanium / IA64 Processors Kernel 2.6.18-238.el5	Fi	HP	8.2.0.134			
		Brocade	3.0.0.0			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Emulex	8.2.0.126			
	iSCSI HBA/CNA	Red Hat	Bundle			
Red Hat Enterprise Linux 5.6 X64 / x86_64 Processors Kernel 2.6.18-238.el5	Fibre Channel	QLogic	8.03.01.05.05.06-k			
			8.03.07.03.5.6-k			
		Emulex	8.2.0.87.1p			
		HP	8.03.07.03.5.6			
			8.2.0.106-1			
			8.2.0.134			
		Brocade	3.0.0.0			
		Hitachi	Bundle			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Emulex	8.2.0.96			
			8.2.0.126			
		Cisco	1.4.0.145			
			1.5.0.1			
	iSCSI	Red Hat	Bundle			
	Fibre Channel	QLogic	8.03.07.03.05.07-k			
		Emulex	8.2.0.96.2p			
		Hitachi	Bundle			
			8.2.0.134			

Red Hat Enterprise Linux 5.7 IA32 / x86 Processors Kernel 2.6.18-274.el5 2.6.18-274.el5PAE		HP	8.03.07.03.5.6			
			8.03.07.15.5.6			
	Fibre Channel over Ethernet	QLogic	8.03.07.03.05.07-k			
			Bundle			
		Emulex	8.2.0.126			
		HP	8.2.0.136			
	iSCSI	Red Hat	Bundle			
Red Hat Enterprise Linux 5.7 Itanium / IA64 Processors Kernel 2.6.18-274.el5	Fibre Channel	QLogic	8.03.07.03.05.07-k			
		Emulex	8.2.0.96.2p			
		HP	8.2.0.134			
	Fibre Channel over Ethernet	QLogic	8.03.07.03.05.07-k			
			Bundle			
		Emulex	8.2.0.126			
	iSCSI	Red Hat	Bundle			
Red Hat Enterprise Linux 5.7 X64 / x86_64 Processors Kernel 2.6.18-274.el5	Fibre Channel	QLogic	8.03.07.03.05.07-k			
		Emulex	8.2.0.33.3p-1.6.1-MCL			
			8.2.0.96.2p			
		Hitachi	Bundle			
		HP	8.2.0.134			
			8.03.07.03.5.6			
			8.03.07.15.5.6			
	rnet	QLogic	8.03.07.03.05.07-k			
			Bundle			

	Fibre Channel over Ethe	Emulex	8.2.0.126			
		HP	8.2.0.136			
		Cisco	1.5.0.1			
			1.5.0.20			
	iSCSI	Red Hat	Bundle			
Red Hat Enterprise Linux 5.8 IA32 / x86 Processors Kernel 2.6.18-308.el5 2.6.18-308.el5PAE	Fibre Channel	QLogic	8.03.07.09.05.08-k			
			8.06.00.11.5.6-k			
		Emulex	8.2.0.108.4p			
		HP	8.2.0.134			
			8.03.07.15.5.6			
			8.04.00.10.5.6			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Emulex	8.2.0.108.4p			
		HP	8.2.0.136			
	iSCSI	Red Hat	Bundle			
Red Hat Enterprise Linux 5.8 Itanium / IA64 Processors Kernel 2.6.18-308.el5	Fibre Channel	QLogic	8.03.07.09.05.08-k			
		Emulex	8.2.0.108.4p			
		HP	8.2.0.134			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Emulex	8.2.0.108.4p			
	iSCSI	Red Hat	Bundle			
		QLogic	8.03.07.09.05.08-k			
			8.06.00.11.5.6-k			

Red Hat Enterprise Linux 5.8 X64 / x86_64 Processors Kernel 2.6.18-308.el5	Fibre Channel	Emulex	8.2.0.108.4p			
		HP	8.2.0.134			
			8.03.07.15.5.6			
			8.04.00.10.5.6			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Emulex	8.2.0.108.4p			
		HP	8.2.0.136			
		Cisco	1.5.0.1			
	iSCSI HBA/CNA	Red Hat	Bundle			
Red Hat Enterprise Linux 5.9 IA32 / x86 Processors Kernel 2.6.18-348.el5 2.6.18-348.el5PAE	Fibre Channel	QLogic	8.03.07.15.05.09-k			
			8.06.00.11.5.6-k			
		Emulex	8.2.0.128.3p			
		HP	8.04.00.10.5.6			
		Hitachi	Bundle			
	Fibre Channel over Ethernet	QLogic	Bundle			
	iSCSI	Red Hat	Bundle			
Red Hat Enterprise Linux 5.9 Itanium / IA64 Processors Kernel 2.6.18-348.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
		HP	8.04.00.10.5.6			
	Fibre Channel over Ethernet	QLogic	Bundle			
	iSCSI	Red Hat	Bundle			
		QLogic	8.03.07.15.05.09-k			
			8.06.00.11.5.6-k			

Red Hat Enterprise Linux 5.9 X64 / x86_64 Processors Kernel 2.6.18-348.el5	Fibre Channel	Emulex	8.2.0.128.3p			
		HP	8.04.00.10.5.6			
		Hitachi	Bundle			
		Cisco	1.6.0.12b			
			1.6.0.18			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.12			
	iSCSI	Red Hat	Bundle			
Red Hat Enterprise Linux 5.9 IA32 / x86 Processors Kernel (Security Fix) 2.6.18-348.39.1.el5 2.6.18-348.39.1.el5PAE	Fibre Channel	QLogic	8.03.07.15.05.09-k			
			8.06.00.11.5.6-k			
		Emulex	8.2.0.128.3p			
		HP	8.04.00.10.5.6			
		Hitachi	Bundle			
	Fibre Channel over Ethernet	QLogic	Bundle			
	iSCSI	Red Hat	Bundle			
Red Hat Enterprise Linux 5.9 Itanium / IA64 Processors Kernel (Security Fix) 2.6.18-348.39.1.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
		HP	8.04.00.10.5.6			
	Fibre Channel over Ethernet	QLogic	Bundle			
	iSCSI	Red Hat	Bundle			
	el	QLogic	8.03.07.15.05.09-k			
			8.06.00.11.5.6-k			
		Emulex	8.2.0.128.3p			

Red Hat Enterprise Linux 5.9 X64 / x86_64 Processors Kernel (Security Fix) 2.6.18-348.39.1.el5	Fibre Chann	HP	8.04.00.10.5.6			
		Hitachi	Bundle			
		Cisco	1.6.0.12b			
			1.6.0.18			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.12			
	iSCSI	Red Hat	Bundle			
Red Hat Enterprise Linux 5.10 IA32 / x86 Processors Kernel 2.6.18-371.el5 2.6.18-371.el5PAE	Fibre Channel	QLogic	8.03.07.15.05.09-k			
			8.06.00.11.5.6-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.10 Itanium / IA64 Processors Kernel 2.6.18-371.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.10 X64 / x86_64 Processors Kernel 2.6.18-371.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
			8.06.00.11.5.6-k			
		Emulex	8.2.0.128.3p			
		HP	8.04.00.12.5.6-k2			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.23			
			1.6.0.25			
Red Hat Enterprise Linux 5.11 IA32 / x86 Processors Kernel 2.6.18-398.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			

2.6.18-398.el5PAE	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11 Itanium / IA64 Processors Kernel 2.6.18-398.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11 X64 / x86_64 Processors Kernel 2.6.18-398.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
			8.2.2.33			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.25			
Red Hat Enterprise Linux 5.11 IA32 / x86 Processors Kernel (Security Fix) 2.6.18-416.el5 2.6.18-416.el5PAE	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11 Itanium / IA64 Processors Kernel (Security Fix) 2.6.18-416.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11 X64 / x86_64 Processors Kernel (Security Fix) 2.6.18-416.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
			8.2.2.33			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.25			
Red Hat Enterprise Linux 5.11 IA32 / x86 Processors Kernel (Security Fix) 2.6.18-419.el5 2.6.18-419.el5PAE	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			

Red Hat Enterprise Linux 5.11 Itanium / IA64 Processors Kernel (Security Fix) 2.6.18-419.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11 X64 / x86_64 Processors Kernel (Security Fix) 2.6.18-419.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
			8.2.2.33			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.25			
Red Hat Enterprise Linux 5.11 IA32 / x86 Processors Kernel (Security Fix) 2.6.18-426.el5 2.6.18-426.el5PAE	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11 Itanium / IA64 Processors Kernel (Security Fix) 2.6.18-426.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11 X64 / x86_64 Processors Kernel (Security Fix) 2.6.18-426.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
			8.2.2.33			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.25			
Red Hat Enterprise Linux 5.11 IA32 / x86 Processors Kernel (Security Fix) 2.6.18-431.el5 2.6.18-431.el5PAE	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11	Channel	QLogic	8.03.07.15.05.09-k			

Itanium / IA64 Processors **Kernel** **(Security Fix)** 2.6.18-431.el5	Fibre C	Emulex	8.2.0.128.3p			
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 5.11 X64 / x86_64 Processors **Kernel** **(Security Fix)** 2.6.18-431.el5	Fibre Channel	QLogic	8.03.07.15.05.09-k			
		Emulex	8.2.0.128.3p			
			8.2.2.33			
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.25			
Red Hat Enterprise Linux 6 IA32 / x86 Processors Kernel 2.6.32-71.el6.i686	Fibre Channel	QLogic	8.03.01.05.06.0-k8	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.5.17	**B, 32**	**B, 32**	**B, 32**
		Brocade	2.3.0.0	**B, 32**	**B, 32**	**B, 32**
	Fibre Channel over Ethernet	Brocade	2.3.0.0	**B, 32**	**B, 32**	**B, 32**
		QLogic	8.03.04.12.06.0-k0	**32**	**32**	**32**
			Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	8.3.5.65	**B, 32**	**B, 32**	**B, 32**
Red Hat Enterprise Linux 6 X64 / x86_64 Processors Kernel 2.6.32-71.el6.x86_64	Fibre Channel	QLogic	8.03.01.05.06.0-k8	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.5.17	**B, 32**	**B, 32**	**B, 32**
		Brocade	2.3.0.0	**B, 32**	**B, 32**	**B, 32**
	Fibre Channel over Ethernet	Brocade	2.3.0.0	**B, 32**	**B, 32**	**B, 32**
		QLogic	8.03.04.12.06.0-k0	**32**	**32**	**32**
			Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	8.3.5.65	**B, 32**	**B, 32**	**B, 32**
		Cisco	1.5.0.1	**32, 76**	**32, 76**	**32, 76**
	Fibre Channel	QLogic	8.03.07.03.06.1-k	**B, 32**	**B, 32**	**B, 32**
			8.03.07.13.06.0-k	**32**	**32**	**32**
		Emulex	8.3.5.30.1p	**B, 32**	**B, 32**	**B, 32**
		Brocade	3.0.0.0	**B, 32**	**B, 32**	**B, 32**

Red Hat Enterprise Linux 6.1 IA32 / x86 Processors Kernel 2.6.32-131.0.15.el6.i686		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	8.3.5.30.1p	**32**	**32**	**32**
			8.3.5.65	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
Red Hat Enterprise Linux 6.1 X64 / x86_64 Processors Kernel 2.6.32-131.0.15.el6.x86_64	Fibre Channel	QLogic	8.03.07.03.06.1-k	**B, 32**	**B, 32**	**B, 32**
			8.03.07.13.06.0-k	**32**	**32**	**32**
		Emulex	8.3.5.30.1p	**B, 32**	**B, 32**	**B, 32**
			8.3.7.18-1	**32**	**32**	**32**
		Brocade	3.0.0.0	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	8.3.5.30.1p	**32**	**32**	**32**
			8.3.5.65	**B, 32**	**B, 32**	**B, 32**
		HP	8.3.5.77.1p	**32**	**32**	**32**
		Cisco	1.5.0.1	**32, 76**	**32, 76**	**32, 76**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
Red Hat Enterprise Linux 6.2 IA32 / x86 Processors Kernel 2.6.32-220.el6.i686	Fibre Channel	QLogic	8.03.07.05.06.2-k	**B, 32**	**B, 32**	**B, 32**
			8.03.07.13.06.0-k	**32**	**32**	**32**
			8.04.00.06.06.0-k	**32**	**32**	**32**
			8.06.00.10.06.0-k	**32, 73**	**32, 73**	**32, 73**
		Emulex	8.3.5.45.4p	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**

2.6.32-220.el6.i686	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	8.3.5.65	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Red Hat	Bundle	**B, 32, 74, 75**	**B, 32, 74, 75**	**B, 32, 74, 75**
	iSCSI HBA/CNA	Emulex	4.1.334.15	**32, 73**	**32, 73**	**32, 73**
			4.2.374.0	**32, 77**	**32, 77**	**32, 77**
Red Hat Enterprise Linux 6.2 X64 / x86_64 Processors Kernel 2.6.32-220.el6.x86_64	Fibre Channel	QLogic	8.03.07.05.06.2-k	**B, 32**	**B, 32**	**B, 32**
			8.03.07.13.06.0-k	**32**	**32**	**32**
			8.04.00.06.06.0-k	**32**	**32**	**32**
			8.06.00.10.06.0-k	**32, 73**	**32, 73**	**32, 73**
		Emulex	8.3.5.45.4p	**B, 32**	**B, 32**	**B, 32**
			8.3.7.18-1	**32**	**32**	**32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
		HP	8.04.00.09.06.0-k	**B, 32**	**B, 32**	**B, 32**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	8.3.5.65	**B, 32**	**B, 32**	**B, 32**
		HP	8.3.5.77.1p	**32**	**32**	**32**
		Cisco	1.5.0.1	**32, 76**	**32, 76**	**32, 76**
	iSCSI	Red Hat	Bundle	**B, 32, 74, 75**	**B, 32, 74, 75**	**B, 32, 74, 75**
	iSCSI HBA/CNA	Emulex	4.1.334.15	**32, 73**	**32, 73**	**32, 73**
			4.2.374.0	**32, 77**	**32, 77**	**32, 77**
	Channel	QLogic	8.04.00.08.06.4-k	**B, 32**	**B, 32**	**B, 32**
			8.05.00.03.06.0-k	**32**	**32**	**32**

Red Hat Enterprise Linux 6.3 IA32 / x86 Processors Kernel 2.6.32-279.el6.i686	Fibre C		8.06.00.10.06.0-k	**32, 73**	**32, 73**	**32, 73**
		Emulex	8.3.5.68.5p	**B, 32**	**B, 32**	**B, 32**
	Fibre Channel over Ethernet	QLogic	8.04.00.04.06.3-k	**32**	**32**	**32**
			Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
Red Hat Enterprise Linux 6.3 X64 / x86_64 Processors Kernel 2.6.32-279.el6.x86_64	Fibre Channel	QLogic	8.04.00.08.06.4-k	**B, 32**	**B, 32**	**B, 32**
			8.05.00.03.06.0-k	**32**	**32**	**32**
			8.06.00.10.06.0-k	**32, 73**	**32, 73**	**32, 73**
		Emulex	8.3.5.68.5p	**B, 32**	**B, 32**	**B, 32**
			8.3.7.18-1	**32**	**32**	**32**
	Fibre Channel over Ethernet	QLogic	8.04.00.04.06.3-k	**32**	**32**	**32**
			Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
Red Hat Enterprise Linux 6.4 IA32 / x86 Processors Kernel 2.6.32-358.el6.i686	Fibre Channel	QLogic	8.04.00.08.06.4-k	**B, 32**	**B, 32**	**B, 32**
			8.05.00.03.06.0-k	**32**	**32**	**32**
			8.06.00.10.06.0-k	**32, 73**	**32, 73**	**32, 73**
			8.07.00.08.06.0-k	**32, 73**	**32, 73**	**32, 73**
		Emulex	8.3.5.86.1p	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
		IBM	8.3.7.29-1	**32**	**32**	**32**

	Fibre Channel over Ethernet	QLogic	8.07.00.08.06.0-k	**32,73**	**32,73**	**32,73**
			Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
	iSCSI HBA/CNA	Emulex	4.2.374.0	**32, 77**	**32, 77**	**32, 77**
Red Hat Enterprise Linux 6.4 X64 / x86_64 Processors Kernel 2.6.32-358.el6.x86_64	Fibre Channel	QLogic	8.04.00.08.06.4-k	**B, 32**	**B, 32**	**B, 32**
			8.05.00.03.06.0-k	**32**	**32**	**32**
			8.06.00.10.06.0-k	**32, 73**	**32, 73**	**32, 73**
			8.07.00.08.06.0-k	**32, 73**	**32, 73**	**32, 73**
		Emulex	8.3.5.86.1p	**B, 32**	**B, 32**	**B, 32**
			8.3.7.18-1	**32**	**32**	**32**
		HP	8.04.00.12.06.0-k2	**32**	**32**	**32**
			8.07.00.08.06.0-k	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
		IBM	8.3.7.29-1	**32**	**32**	**32**
	Fibre Channel over Ethernet	QLogic	8.07.00.08.06.0-k	**32,73**	**32,73**	**32,73**
			Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Cisco	1.5.0.45	**32,73**	**32,73**	**32,73**
			1.6.0.12b	**32,73**	**32,73**	**32,73**
			1.6.0.18	**32,73**	**32,73**	**32,73**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**

	iSCSI HBA/CNA	Emulex	4.2.374.0	**32, 77**	**32, 77**	**32, 77**
Red Hat Enterprise Linux 6.5 IA32 / x86 Processors Kernel 2.6.32-431.el6.i686	Fibre Channel	QLogic	8.05.00.03.06.5-k2	**B, 32**	**B, 32**	**B, 32**
			8.07.00.08.06.0-k	**32, 73**	**32, 73**	**32, 73**
		Emulex	8.3.7.21.4p	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
	Fibre Channel over Ethernet	QLogic	8.07.00.08.06.0-k	**32,73**	**32,73**	**32,73**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	10.2.370.12	**32, 73**	**32, 73**	**32, 73**
	iSCSI HBA/CNA	Emulex	Bundle	**32, 77**	**32, 77**	**32, 77**
Red Hat Enterprise Linux 6.5 X64 / x86_64 Processors Kernel 2.6.32-431.el6.x86_64	Fibre Channel	QLogic	8.05.00.03.06.5-k2	**B, 32**	**B, 32**	**B, 32**
			8.07.00.08.06.0-k	**32, 73**	**32, 73**	**32, 73**
		Emulex	8.3.7.21.4p	**B, 32**	**B, 32**	**B, 32**
			8.3.7.39	**32**	**32**	**32**
			10.0.803.24	**32, 73**	**32, 73**	**32, 73**
			10.2.340.16	**32, 73**	**32, 73**	**32, 73**
			10.6.144.21	**B, 32**	**B, 32**	**B, 32**
			11.0.240.0	**32**	**32**	**32**
		HP	8.07.00.23.06.0-k2	**32, 73**	**32, 73**	**32, 73**
			10.2.340.16	**32, 73**	**32, 73**	**32, 73**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**

	iSCSI HBA/CNA	Emulex	Bundle	**32, 77**	**32, 77**	**32, 77**
	Fibre Channel over Ethernet	QLogic	8.07.00.08.06.0-k	**32,73**	**32,73**	**32,73**
			Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	10.2.370.12	**32, 73**	**32, 73**	**32, 73**
		Cisco	1.5.0.45	**B, 32**	**B, 32**	**B, 32**
Red Hat Enterprise Linux 6.6 IA32 / x86 Processors Kernel 2.6.32-504.el6.i686	Fibre Channel	QLogic	8.07.00.08.06.6-k1	**B, 32**	**B, 32**	**B, 32**
		Emulex	10.2.8020.1	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
	iSCSI HBA/CNA	Emulex	Bundle	**32, 77**	**32, 77**	**32, 77**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	10.2.273.0r	**32, 73**	**32, 73**	**32, 73**
Red Hat Enterprise Linux 6.6 X64 / x86_64 Processors Kernel 2.6.32-504.el6.x86_64	Fibre Channel	QLogic	8.07.00.08.06.6-k1	**B, 32**	**B, 32**	**B, 32**
		Emulex	10.2.8020.1	**B, 32**	**B, 32**	**B, 32**
			10.2.469.0	**32**	**32**	**32**
			10.6.144.21	**B, 32**	**B, 32**	**B, 32**
		Cisco	1.6.0.12b	**B, 32**	**B, 32**	**B, 32**
			1.6.0.18	**B, 32**	**B, 32**	**B, 32**
			1.6.0.23	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
		HP	8.07.00.28.06.0-k1	**32, 73**	**32, 73**	**32, 73**

	iSCSI HBA/CNA	Emulex	Bundle	**32, 77**	**32, 77**	**32, 77**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	10.2.273.0r	**32, 73**	**32, 73**	**32, 73**
Red Hat Enterprise Linux 6.7 IA32 / x86 Processors Kernel 2.6.32-573.el6.i686	Fibre Channel	QLogic	8.07.00.16.06.7-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	10.6.0.20	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
Red Hat Enterprise Linux 6.7 X64 / x86_64 Processors Kernel 2.6.32-573.el6.x86_64	Fibre Channel	QLogic	8.07.00.16.06.7-k	**B, 32**	**B, 32**	**B, 32**
			8.07.00.29.06.0-k1	**32, 73**	**32, 73**	**32, 73**
		Emulex	10.6.0.20	**B, 32**	**B, 32**	**B, 32**
			10.6.144.21	**B, 32**	**B, 32**	**B, 32**
			11.1.38.64	**32, 73**	**32, 73**	**32, 73**
			11.1.172.22	**B, 32**	**B, 32**	**B, 32**
		HP	8.07.00.28.06.0-k1	**32, 73**	**32, 73**	**32, 73**
			8.07.00.42.06.0-k1	**32, 73**	**32, 73**	**32, 73**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
	el	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**

Red Hat Enterprise Linux 6.8 IA32 / x86 Processors Kernel 2.6.32-642.el6.i686	Fibre Chann	Emulex	11.0.0.4	**B, 32**	**B, 32**	**B, 32**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
Red Hat Enterprise Linux 6.8 X64 / x86_64 Processors Kernel 2.6.32-642.el6.x86_64	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.0.4	**B, 32**	**B, 32**	**B, 32**
		HP	8.07.00.34.06.0-k1	**32, 73**	**32, 73**	**32, 73**
		Hitachi	Bundle	**B, 6, 32, 69**	**B, 6, 32, 69**	**B, 6, 32, 69**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Cisco	1.6.0.27	**B, 32**	**B, 32**	**B, 32**
Red Hat Enterprise Linux 6.9 IA32 / x86 Processors Kernel 2.6.32-696.el6.i686	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.0.5	**B, 32**	**B, 32**	**B, 32**
		HP	8.07.00.50.06.0-k7	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
Red Hat Enterprise Linux 6.9 X64 / x86_64 Processors	ibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
			8.07.00.50.06.0-k4	**B, 32**	**B, 32**	**B, 32**
			8.08.00.07.06.0-k1	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.0.5	**B, 32**	**B, 32**	**B, 32**
			11.2.156.18	**B, 32**	**B, 32**	**B, 32**

Kernel 2.6.32-696.el6.x86_64	Fi	Emulex	11.2.307.13	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
			11.4.142.26	**32**	**32**	**32**
		HP	8.07.00.50.06.0-k7	**B, 32**	**B, 32**	**B, 32**
			8.08.00.08.06.0-k1	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
Red Hat Enterprise Linux 6.10 IA32 / x86 Processors Kernel 2.6.32-754.el6.i686	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.1.6	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
Red Hat Enterprise Linux 6.10 X64 / x86_64 Processors Kernel 2.6.32-754.el6.x86_64	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.1.6	**B, 32**	**B, 32**	**B, 32**
		HP	8.08.00.08.06.0-k1	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Red Hat	Bundle	**32, 73, 74, 75**	**32, 73, 74, 75**	**32, 73, 74, 75**
Red Hat Enterprise Linux 7 X64 / x86_64 Processors Kernel 3.10.0-123.el7.x86_64	Fibre Channel	QLogic	8.06.00.08.07.0-k2	**B, 31**	**B, 31**	**B, 31**
			8.06.00.08.07.0-k3	**B, 31, 78**	**B, 31, 78**	**B, 31, 78**
		Emulex	8.3.7.34.3p	**B, 31**	**B, 31**	**B, 31**
			10.2.340.16	**31, 73**	**31, 73**	**31, 73**
		HP	8.07.00.28.07.0_k1	**31, 73**	**31, 73**	**31, 73**
			10.2.340.16	**31, 73**	**31, 73**	**31, 73**
	iSCSI	Red Hat	Bundle	**31, 73, 74, 75**	**31, 73, 74, 75**	**31, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**

Red Hat Enterprise Linux 7.1 X64 / x86_64 Processors Kernel 3.10.0-229.el7.x86_64	Fibre Channel	QLogic	8.07.00.08.07.1-k2	**B, 31**	**B, 31**	**B, 31**
			8.07.00.39.07.0-k	**31, 73**	**31, 73**	**31, 73**
		Emulex	10.2.8021.1	**B, 31**	**B, 31**	**B, 31**
			10.6.193.12	**B, 31**	**B, 31**	**B, 31**
			11.1.172.22	**B, 31**	**B, 31**	**B, 31**
		Hitachi	Bundle	**B, 6, 31, 69**	**B, 6, 31, 69**	**B, 6, 31, 69**
		HP	8.07.00.28.07.0_k1	**31, 73**	**31, 73**	**31, 73**
	iSCSI	Red Hat	Bundle	**31, 73, 74, 75, 79**	**31, 73, 74, 75, 79**	**31, 73, 74, 75, 79**
	iSCSI HBA/CNA	Emulex	Bundle	**31, 77**	**31, 77**	**31, 77**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		Emulex	10.2.8021.1	**31, 73**	**31, 73**	**31, 73**
Red Hat Enterprise Linux 7.2 X64 / x86_64 Processors Kernel 3.10.0-327.el7.x86_64	Fibre Channel	QLogic	8.07.00.18.07.2-k	**B, 31**	**B, 31**	**B, 31**
			8.07.00.29.07.0-k1	**31, 73**	**31, 73**	**31, 73**
			8.07.00.39.07.0-k	**31, 73**	**31, 73**	**31, 73**
		Emulex	10.6.193.21	**B, 31**	**B, 31**	**B, 31**
			10.7.0.1	**B, 31**	**B, 31**	**B, 31**
			11.1.172.22	**B, 31**	**B, 31**	**B, 31**
		Hitachi	Bundle	**B, 6, 31, 69**	**B, 6, 31, 69**	**B, 6, 31, 69**
		HP	8.07.00.28.07.0_k1	**31, 73**	**31, 73**	**31, 73**
			8.07.00.34.07.0-k1	**31, 73**	**31, 73**	**31, 73**

			8.07.00.50.07.0-k3	**31, 73**	**31, 73**	**31, 73**
		Cisco	1.6.0.17	**B, 31**	**B, 31**	**B, 31**
	iSCSI	Red Hat	Bundle	**31, 73, 74, 75, 79**	**31, 73, 74, 75, 79**	**31, 73, 74, 75, 79**
	iSCSI HBA/CNA	Emulex	Bundle	**31, 73**	**31, 73**	**31, 73**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
Red Hat Enterprise Linux 7.3 X64 / x86_64 Processors Kernel 3.10.0-514.el7.x86_64	Fibre Channel	QLogic	8.07.00.33.07.3-k1	**B, 31**	**B, 31**	**B, 31**
			8.07.00.39.07.0-k	**31, 73**	**31, 73**	**31, 73**
			8.07.00.50.07.0-k4	**B, 31**	**B, 31**	**B, 31**
		Emulex	11.1.0.2	**B, 31**	**B, 31**	**B, 31**
			11.1.0.2-3.1.1-MCL	**B, 31**	**B, 31**	**B, 31**
			11.2.307.13	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		HP	8.07.00.42.07.0-k1	**31, 73**	**31, 73**	**31, 73**
			8.07.00.50.07.0-k7	**B, 31**	**B, 31**	**B, 31**
			11.4.142.26	**B, 31**	**B, 31**	**B, 31**
		Hitachi	Bundle	**B, 6, 31, 69**	**B, 6, 31, 69**	**B, 6, 31, 69**
	iSCSI	Red Hat	Bundle	**31, 73, 74, 75**	**31, 73, 74, 75**	**31, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle	**B, 32, 80**	**B, 32, 80**	**B, 32, 80**
		QLogic	8.07.00.38.07.4-k1	**B, 31**	**B, 31**	**B, 31**
			8.07.00.50.07.0-k4	**B, 31**	**B, 31**	**B, 31**
			8.08.00.07.07.0-k1	**B, 31**	**B, 31**	**B, 31**

Red Hat Enterprise Linux 7.4 X64 / x86_64 Processors Kernel 3.10.0-693.el7.x86_64	Fibre Channel	Emulex	11.2.0.6	**B, 31**	**B, 31**	**B, 31**
			11.2.156.38	**B, 31**	**B, 31**	**B, 31**
			11.2.307.13	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
			11.4.334.26	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle	**B, 6, 31, 69**	**B, 6, 31, 69**	**B, 6, 31, 69**
		HP	8.07.00.50.07.0-k6	**B, 31**	**B, 31**	**B, 31**
			8.07.00.50.07.0-k7	**B, 31**	**B, 31**	**B, 31**
			8.08.00.08.07.0-k1	**B, 31**	**B, 31**	**B, 31**
	iSCSI	Red Hat	Bundle	**31, 73, 74, 75**	**31, 73, 74, 75**	**31, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 7.5 X64 / x86_64 Processors Kernel 3.10.0-862.el7.x86_64	Fibre Channel	QLogic	8.08.00.07.07.5-k1	**B, 31**	**B, 31**	**B, 31**
			9.00.00.00.07.5-k1	**B, 31**	**B, 31**	**B, 31**
		Emulex	11.4.0.4	**B, 31**	**B, 31**	**B, 31**
			11.4.334.26	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle	**B, 6, 31, 69**	**B, 6, 31, 69**	**B, 6, 31, 69**
		HP	8.08.00.08.07.5-k1	**B, 31**	**B, 31**	**B, 31**
	iSCSI	Red Hat	Bundle	**31, 73, 74, 75**	**31, 73, 74, 75**	**31, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.34	**B, 31**	**B, 31**	**B, 31**
			10.00.00.06.07.6-k	**B, 31**	**B, 31**	**B, 31**

Red Hat Enterprise Linux 7.6 X64 / x86_64 Processors Kernel 3.10.0-957.el7.x86_64	Fibre Channel	QLogic	10.01.00.33.07.6-k2	**B, 31**	**B, 31**	**B, 31**
			10.01.00.52.07.6-k1	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.0.0.5	**B, 31**	**B, 31**	**B, 31**
			12.0.346.15	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
			12.0.384.0.4fts	**B, 31**	**B, 31**	**B, 31**
			12.4.270.3	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle	**B, 6, 31, 69**	**B, 6, 31, 69**	**B, 6, 31, 69**
		HP	10.01.00.57.07.6-k1	**B, 31**	**B, 31**	**B, 31**
			10.01.00.64.07.6-k1a	**B, 31**	**B, 31**	**B, 31**
	iSCSI	Red Hat	Bundle	**31, 73, 74, 75**	**31, 73, 74, 75**	**31, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle			
		Cisco	1.6.0.47	**B, 31**	**B, 31**	**B, 31**
Red Hat Enterprise Linux 7.7 X64 / x86_64 Processors Kernel 3.10.0-1062.el7.x86_64	Fibre Channel	QLogic	10.00.00.12.07.7-k	**B, 31**	**B, 31**	**B, 31**
			10.01.00.52.07.6-k1	**B, 31**	**B, 31**	**B, 31**
			10.01.00.64.07.6-k1a	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Emulex	12.0.0.10	**B, 31**	**B, 31**	**B, 31**
			12.4.270.3	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle	**B, 31**	**B, 31**	**B, 31**
		HP	10.01.00.57.07.6-k1	**B, 31**	**B, 31**	**B, 31**
	iSCSI	Red Hat	Bundle	**31, 73, 74**	**31, 73, 74**	**31, 73, 74**

	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 7.8 X64 / x86_64 Processors Kernel 3.10.0-1127.el7.x86_64	Fibre Channel	QLogic	10.01.00.20.07.8-k	**B, 31**	**B, 31**	**B, 31**
			10.01.00.64.07.6-k1a	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Emulex	12.0.0.13	**B, 31**	**B, 31**	**B, 31**
			12.6.275.14	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
			12.8.352.11	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle	**B, 31**	**B, 31**	**B, 31**
	iSCSI	Red Hat	Bundle	**31, 73, 74**	**31, 73, 74**	**31, 73, 74**
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 7.9 X64 / x86_64 Processors Kernel 3.10.0-1160.el7.x86_64	Fibre Channel	QLogic	10.01.00.22.07.9-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.0.0.13	**B, 31**	**B, 31**	**B, 31**
			12.8.352.11	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle			
	iSCSI	Red Hat	Bundle	**31, 73, 74**	**31, 73, 74**	**31, 73, 74**
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 8 X64 / x86_64 Processors Kernel 4.18.0-80.el8.x86_64	Fibre Channel	QLogic	10.00.00.07.08.0-k1			
		Emulex	12.0.0.6			
		Hitachi	Bundle			
	iSCSI	Red Hat	Bundle			
	Fibre Channel over Ethernet	QLogic	Bundle			

Red Hat Enterprise Linux 8.1 X64 / x86_64 Processors Kernel 4.18.0-147.el8.x86_64	Fibre Channel	QLogic	10.01.00.15.08.1-k1			
			10.01.00.64.08.0-k1	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Emulex	12.2.0.3	**B, 31**	**B, 31**	**B, 31**
			12.6.275.14	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle	**B, 31**	**B, 31**	**B, 31**
	iSCSI	Red Hat	Bundle	**31, 73, 74, 75**	**31, 73, 74, 75**	**31, 73, 74, 75**
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 8.2 X64 / x86_64 Processors Kernel 4.18.0-193.el8.x86_64	Fibre Channel	QLogic	10.01.00.21.08.2-k	**B, 31**	**B, 31**	**B, 31**
			10.01.00.64.08.0-k1	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
			10.02.01.00.a14-k1	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Emulex	12.6.0.2	**B, 31**	**B, 31**	**B, 31**
			12.6.275.14	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
			12.8.352.11	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle	**B, 31**	**B, 31**	**B, 31**
	iSCSI	Red Hat	Bundle	**31, 73, 74**	**31, 73, 74**	**31, 73, 74**
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 8.3 X64 / x86_64 Processors Kernel 4.18.0-240.el8.x86_64	Fibre Channel	QLogic	10.01.00.25.08.3-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.6.0.3	**B, 31**	**B, 31**	**B, 31**
			12.8.352.11	**B, 31, 82**	**B, 31, 82**	**B, 31, 82**
		Hitachi	Bundle	**B, 31**	**B, 31**	**B, 31**

	iSCSI	Red Hat	Bundle	**31, 73, 74**	**31, 73, 74**	**31, 73, 74**
	Fibre Channel over Ethernet	QLogic	Bundle			
Red Hat Enterprise Linux 8.4 X64 / x86_64 Processors Kernel 4.18.0-305.el8.x86_64	Fibre Channel	QLogic	10.02.00.104-k			**B, 31**
		Emulex	12.8.0.5			**B, 31**
		Hitachi	Bundle			**B, 31**
	iSCSI	Red Hat	Bundle			**31, 73, 74**
	Fibre Channel over Ethernet	QLogic	Bundle			

Supported		
Not Supported		

Notes	
B	SAN boot is supported.
6	This is only supported in environments in combination with Hitachi Compute Blade.
7	Only the kernel package kernel-2.4.21-20.EL.IA32 / x86e.rpm is supported.
8	Only the kernel package kernel-2.4.21-27.EL.IA32 / x86e.rpm is supported.
31	GFS and GFS2 are not supported.
32	GFS is not supported. For details on GFS2 support, see "8. Linux".
45	When using GGX-CC9MZFC1, use the 1.16.136 or later driver, or the 4.1.6.136 or later driver.
60	The default setting of these drivers is "Failover". If you want to change the setting to "Disable", set the following in the /etc/modprobe.conf file: options qla2xxx ql2xfailover=0
61	Only Red Hat Enterprise Linux AS kernel is supported.
62	SAN boot is supported by kernel 2.6.18-53.1.21 or later.
63	Supported by kernel 2.6.9-89.0.20 or later.
64	Supported by kernel 2.6.18-164.11.1 or later.
65	Supported by kernel 2.6.18-164.9.1 or later.
66	The following HBA model is supported: 44X1945
67	The following HBA models are supported: FC2143, FC2243, FC2142SR, FC2242SR
68	The following HBA model is supported: 403621-B21
69	All drivers applied to Hitachi HBA cards are supported.
70	Supported by kernel 2.6.9-89.0.25 or later.
71	Supported by HDLM 6.6.2-01 or later.
73	Boot disk environment configurations are not supported.
74	iSCSI HBA/CNA is not supported.
75	10GbE NIC is not supported.
76	Only using an HDLM device as the boot disk is supported.
77	CNA F/W 4.2.433.604 or later is required.
78	Supported by kernel 3.10.0-123.13.2 or later.
79	Disable the iscsi script of NetworkManager-dispatcher.service. Using an editor such as vi, comment out "/bin/systemctl --no-block reload iscsi.service || :" in the file /etc/NetworkManager/dispatcher.d/04-iscsi. Before correction: ... case "$2" in up|vpn-up) /bin/systemctl --no-block reload iscsi.service || : ;; esac After correction: ... case "$2" in up|vpn-up) #/bin/systemctl --no-block reload iscsi.service || : ;; esac
80	QLogic 8400 Series are supported.
81	This is supported in HDLM 8.6.2-02 or later.
82	HP HBA drivers are supported.

Oracle Enterprise Linux Server				HDLM Version		
				8.7.8	8.8.0	8.8.1
OS	HBA		Driver			
Oracle Enterprise Linux 5 (Update 1) IA32 / x86 Processors Kernel 2.6.18-53.el5 or 2.6.18-53.el5PAE	Fibre Channel	QLogic	8.01.07-k7			
		Emulex	8.1.10.9			
Oracle Enterprise Linux 5 (Update 1) X64 / x86_64 Processors Kernel 2.6.18-53.el5 or 2.6.18-53.el5PAE	Fibre Channel	QLogic	8.01.07-k7			
		Emulex	8.1.10.9			
Oracle Enterprise Linux 5.4 IA32 / x86 Processors Kernel 2.6.18-164.el5 or 2.6.18-164.el5PAE	Fibre Channel	QLogic	8.03.00.10.05.04-k			
		Emulex	8.2.0.48.2p			
Oracle Enterprise Linux 5.4 X64 / x86_64 Processors Kernel 2.6.18-53.el5	Fibre Channel	QLogic	8.03.00.10.05.04-k			
		Emulex	8.2.0.48.2p			
Oracle Enterprise Linux 5.5 IA32 / x86 Processors Kernel 2.6.18-194.el5 or 2.6.18-194.el5PAE	Fibre Channel	QLogic	8.03.01.04.05.05-k			
		Emulex	8.2.0.63.3p			
Oracle Enterprise Linux 5.5 X64 / x86_64 Processors Kernel 2.6.18-194.el5	Fibre Channel	QLogic	8.03.01.04.05.05-k			
		Emulex	8.2.0.63.3p			
Oracle Enterprise Linux 5.6 IA32 / x86 Processors Kernel 2.6.18-238.el5 or 2.6.18-238.el5PAE	Fibre Channel	QLogic	8.03.01.05.05.06-k			
		Emulex	8.2.0.87.1p			
Oracle Enterprise Linux 5.6 X64 / x86_64 Processors Kernel 2.6.18-238.el5	Fibre Channel	QLogic	8.03.01.05.05.06-k			
		Emulex	8.2.0.87.1p			
Oracle Enterprise Linux 5.7 IA32 / x86 Processors Kernel 2.6.18-274.el5 or 2.6.18-274.el5PAE	Fibre Channel	QLogic	8.03.07.03.05.07-k			
		Emulex	8.2.0.96.2p			
Oracle Enterprise Linux 5.7 X64 / x86_64 Processors Kernel 2.6.18-274.el5	Fibre Channel	QLogic	8.03.07.03.05.07-k			
		Emulex	8.2.0.96.2p			
Oracle Linux 6.5 IA32 / x86 Processors Kernel 2.6.32-431.el6.i686	Fibre Channel	QLogic	8.05.00.03.06.5-k2	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.7.21.4p	**B, 32**	**B, 32**	**B, 32**

Oracle Linux 6.5 **X64 / x86_64 Processors** Kernel 2.6.32-431.el6.x86_64	Fibre Channel	QLogic	8.05.00.03.06.5-k2	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.7.21.4p	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.6 **IA32 / x86 Processors** Kernel 2.6.32-504.el6.i686	Fibre Channel	QLogic	8.07.00.08.06.6-k1	**B, 32**	**B, 32**	**B, 32**
		Emulex	10.2.8020.1	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.6 **X64 / x86_64 Processors** Kernel 2.6.32-504.el6.x86_64	Fibre Channel	QLogic	8.07.00.08.06.6-k1	**B, 32**	**B, 32**	**B, 32**
		Emulex	10.2.8020.1	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.7 **IA32 / x86 Processors** Kernel 2.6.32-573.el6.i686	Fibre Channel	QLogic	8.07.00.16.06.7-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	10.6.0.20	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.7 **X64 / x86_64 Processors** Kernel 2.6.32-573.el6.x86_64	Fibre Channel	QLogic	8.07.00.16.06.7-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	10.6.0.20	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.8 **IA32 / x86 Processors** Kernel 2.6.32-642.el6.i686	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.0.4	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.8 **X64 / x86_64 Processors** Kernel 2.6.32-642.el6.x86_64	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.0.4	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.9 **IA32 / x86 Processors** Kernel 2.6.32-696.el6.i686	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.0.5	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.9 **X64 / x86_64 Processors** Kernel 2.6.32-696.el6.x86_64	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.0.5	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.10 **IA32 / x86 Processors** Kernel 2.6.32-754.el6.i686	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.1.6	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 6.10 **X64 / x86_64 Processors** Kernel 2.6.32-754.el6.x86_64	Fibre Channel	QLogic	8.07.00.26.06.8-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	11.0.1.6	**B, 32**	**B, 32**	**B, 32**
Oracle Linux 7 **X64 / x86_64 Processors**	Channel	QLogic	8.06.00.08.07.0-k2	**B, 31**	**B, 31**	**B, 31**

Kernel 3.10.0-123.el7.x86_64	Fibre C	Emulex	8.3.7.34.3p	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.1 **X64 / x86_64 Processors** Kernel 3.10.0-229.el7.x86_64	Fibre Channel	QLogic	8.07.00.08.07.1-k2	**B, 31**	**B, 31**	**B, 31**
		Emulex	10.2.8021.1	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.2 **X64 / x86_64 Processors** Kernel 3.10.0-327.el7.x86_64	Fibre Channel	QLogic	8.07.00.18.07.2-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	10.7.0.1	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.3 **X64 / x86_64 Processors** Kernel 3.10.0-514.el7.x86_64	Fibre Channel	QLogic	8.07.00.33.07.3-k1	**B, 31**	**B, 31**	**B, 31**
		Emulex	11.1.0.2	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.4 **X64 / x86_64 Processors** Kernel 3.10.0-693.el7.x86_64	Fibre Channel	QLogic	8.07.00.38.07.4-k1	**B, 31**	**B, 31**	**B, 31**
		Emulex	11.2.0.6	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.4 **X64 / x86_64 Processors** Kernel (Security Fix) 3.10.0-693.11.6.el7.x86_64	Fibre Channel	QLogic	8.07.00.38.07.4-k1	**B, 31**	**B, 31**	**B, 31**
		Emulex	11.2.0.6	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.5 **X64 / x86_64 Processors** Kernel 3.10.0-862.el7.x86_64	Fibre Channel	QLogic	9.00.00.00.07.5-k1	**B, 31**	**B, 31**	**B, 31**
		Emulex	11.4.0.4	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.6 **X64 / x86_64 Processors** Kernel 3.10.0-957.el7.x86_64	Fibre Channel	QLogic	10.00.00.06.07.6-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.0.0.5	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.7 **X64 / x86_64 Processors** Kernel 3.10.0-1062.el7.x86_64	Fibre Channel	QLogic	10.00.00.12.07.7-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.0.0.10	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.8 **X64 / x86_64 Processors** Kernel 3.10.0-1127.el7.x86_64	Fibre Channel	QLogic	10.01.00.20.07.8-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.0.0.13	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 7.9 **X64 / x86_64 Processors** Kernel 3.10.0-1160.el7.x86_64	Fibre Channel	QLogic	10.01.00.22.07.9-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.0.0.13	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 8.1 **X64 / x86_64 Processors** Kernel 4.18.0-147.el8.x86_64	Fibre Channel	QLogic	10.01.00.15.08.1-k1			
		Emulex	12.2.0.3	**B, 31**	**B, 31**	**B, 31**

Oracle Linux 8.2 **X64 / x86_64 Processors** Kernel 4.18.0-193.el8.x86_64	Fibre Channel	QLogic	10.01.00.21.08.2-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.6.0.2	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 8.3 **X64 / x86_64 Processors** Kernel 4.18.0-240.el8.x86_64	Fibre Channel	QLogic	10.01.00.25.08.3-k	**B, 31**	**B, 31**	**B, 31**
		Emulex	12.6.0.3	**B, 31**	**B, 31**	**B, 31**
Oracle Linux 8.4 **X64 / x86_64 Processors** Kernel 4.18.0-305.el8.x86_64	Fibre Channel	QLogic	10.02.00.104-k			**B, 31**
		Emulex	12.8.0.5			**B, 31**

Supported		
Not Supported		

Notes	
B	SAN boot is supported.
31	GFS and GFS2 are not supported.
32	GFS is not supported. For details on GFS2 support, see "8. Linux".
33	This is supported in HDLM 8.6.2-02 or later.

IMPORTANT NOTE

Security fix kernels can not be supported. Please contact appropriate person in Hitachi Vantara for an Interoperability Support Request (ISR).

HDLM is dependent only on the driver version, not the HBA model. For this reason, specific HBA models are no longer listed, just driver versions. So if the HBA driver version is supported, then HDLM is supported. This also means that OEM versions are supported, as long as the driver is supported.

Oracle Unbreakable Enterprise Kernel				HDLM Version		
				8.7.8	8.8.0	8.8.1
OS	HBA		Driver			
Oracle Unbreakable Enterprise Kernel 5.6 X64 / x86_64 Processors Kernel 2.6.32-100.26.2.el5	Fibre Channel	QLogic	8.03.01.02.32.1-k9			
		Emulex	8.3.18			
	iSCSI	Oracle	Bundle			
Oracle Unbreakable Enterprise Kernel 5.7 IA32 / x86 Processors Kernel 2.6.32-200.13.1.el5uek	Fibre Channel	QLogic	8.03.07.04.32.1-k			
		Emulex	8.3.5.44			
	iSCSI	Oracle	Bundle			
Oracle Unbreakable Enterprise Kernel 5.7 IA32 / x86 Processors Kernel 2.6.32-300.27.1.el5uek	Fibre Channel	QLogic	8.03.07.08.32.1-k			
		Emulex	8.3.5.45.4p			
	iSCSI	Oracle	Bundle			
Oracle Unbreakable Enterprise Kernel 5.7 X64 / x86_64 Processors Kernel 2.6.32-200.13.1.el5uek	Fibre Channel	QLogic	8.03.07.04.32.1-k			
		Emulex	8.3.5.44			
	iSCSI	Oracle	Bundle			
Oracle Unbreakable Enterprise Kernel 5.7 X64 / x86_64 Processors Kernel 2.6.32-300.27.1.el5uek	Fibre Channel	QLogic	8.03.07.08.32.1-k			
		Emulex	8.3.5.45.4p			
	iSCSI	Oracle	Bundle			
Oracle Unbreakable Enterprise Kernel 5.8 IA32 / x86 Processors Kernel 2.6.32-300.39.2.el5uek	Fibre Channel	QLogic	8.03.07.08.32.1-k			
		Emulex	8.3.5.45.4p			
	iSCSI	Oracle	Bundle			
	Fibre Channel	QLogic	8.03.07.08.32.1-k			

Oracle Unbreakable Enterprise Kernel 5.8 X64 / x86_64 Processors Kernel 2.6.32-300.39.2.el5uek	Fibre C	Emulex	8.3.5.45.4p			
	iSCSI	Oracle	Bundle			
Oracle Unbreakable Enterprise Kernel 6.2 IA32 / x86 Processors Kernel 2.6.39-200.29.1.el6uek.i686	Fibre Channel	QLogic	8.04.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.5.68.6p	**B, 32**	**B, 32**	**B, 32**
		QLogic	8.04.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.2 IA32 / x86 Processors Kernel 2.6.39-200.29.2.el6uek.i686	Fibre Channel	QLogic	8.04.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.5.68.6p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors Kernel 2.6.39-200.29.1.el6uek.x86_64	Fibre Channel	QLogic	8.04.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.5.68.6p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors Kernel 2.6.39-200.29.2.el6uek.x86_64	Fibre Channel	QLogic	8.04.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.5.68.6p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.3 IA32 / x86 Processors Kernel 2.6.39-200.24.1.el6uek.i686	Fibre Channel	QLogic	8.04.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.5.68.6p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**

Oracle Unbreakable Enterprise Kernel 6.3 X64 / x86_64 Processors Kernel 2.6.39-200.24.1.el6uek.x86_64	Fibre Channel	QLogic	8.04.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.5.68.6p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.4 (Security Fix) IA32 / x86 Processors Kernel 2.6.39-400.211.1.el6uek.i686	Fibre Channel	QLogic	8.05.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.7.26.3p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.4 (Security Fix) X64 / x86_64 Processors Kernel 2.6.39-400.211.1.el6uek.x86_64	Fibre Channel	QLogic	8.05.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.7.26.3p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.4 (Security Fix) X64 / x86_64 Processors Kernel 2.6.39-400.264.1.el6uek.x86_64	Fibre Channel	QLogic	8.05.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.7.26.3p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.5 IA32 / x86 Processors Kernel 2.6.39-400.211.1.el6uek.i686	Fibre Channel	QLogic	8.05.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.7.26.3p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.5 X64 / x86_64 Processors Kernel 3.8.13-16.2.1.el6uek.x86_64	Fibre Channel	QLogic	8.05.00.03.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	8.3.7.26.2p	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**B, 33**	**B, 33**	**B, 33**

	iSCSI HBA/CNA	Emulex	Bundle	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 6.5 (Security Fix) **X64 / x86_64 Processors** Kernel 3.8.13-44.el6uek.x86_64	Fibre Channel	QLogic	8.07.00.08.39.0-k1	**B, 33**	**B, 33**	**B, 33**
		Emulex	8.3.7.34.4p	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**B, 33**	**B, 33**	**B, 33**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 6.6 **IA32 / x86 Processors** Kernel 2.6.39-400.215.10.el6uek.i686	Fibre Channel	QLogic	8.05.00.03.39.0-k	**B, 32**	**B, 32**	**B, 32**
		Emulex	8.3.7.26.3p	**B, 32**	**B, 32**	**B, 32**
	iSCSI	Oracle	Bundle	**B, 32**	**B, 32**	**B, 32**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 32**	**B, 32**	**B, 32**
Oracle Unbreakable Enterprise Kernel 6.6 **X64 / x86_64 Processors** Kernel 3.8.13-44.1.1.el6uek.x86_64	Fibre Channel	QLogic	8.07.00.08.39.0-k1	**B, 33**	**B, 33**	**B, 33**
		Emulex	8.3.7.34.4p	**B, 33**	**B, 33**	**B, 33**
	Fibre Channel over Ethernet	Emulex	8.3.7.34.4p	**33, 34**	**33, 34**	**33, 34**
	iSCSI	Oracle	Bundle	**B, 33**	**B, 33**	**B, 33**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 6.6 (Security Fix) **X64 / x86_64 Processors** Kernel 3.8.13-68.el6uek.x86_64	Fibre Channel	QLogic	8.07.00.16.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	10.6.61.0	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**B, 33**	**B, 33**	**B, 33**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 6.6 (Security Fix) **X64 / x86_64 Processors** Kernel 3.8.13-68.1.3.el6uek.x86_64	Fibre Channel	QLogic	8.07.00.16.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	10.6.61.0	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**B, 33**	**B, 33**	**B, 33**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 33**	**B, 33**	**B, 33**
	hannel	QLogic	8.05.00.03.39.0-k	**B, 33**	**B, 33**	**B, 33**

Oracle Unbreakable Enterprise Kernel 6.7 IA32 / x86 Processors Kernel 2.6.39-400.250.7.el6uek.i686	Fibre C	Emulex	8.3.7.26.3p	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**B, 33**	**B, 33**	**B, 33**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 6.7 (Security Fix) X64 / x86_64 Processors Kernel 3.8.13-68.3.4.el6uek.x86_64	Fibre Channel	QLogic	8.07.00.16.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	10.6.61.0	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**B, 33**	**B, 33**	**B, 33**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 6.8 IA32 / x86 Processors Kernel 2.6.39-400.278.2.el6uek.i686	Fibre Channel	QLogic	8.05.00.03.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	8.3.7.26.3p	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**B, 33**	**B, 33**	**B, 33**
	iSCSI HBA/CNA	Emulex	Bundle	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 6.8 X64 / x86_64 Processors Kernel 4.1.12-37.4.1.el6uek.x86_64	Fibre Channel	QLogic	8.07.00.33.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.0.0.13	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 6.9 X64 / x86_64 Processors Kernel 4.1.12-61.1.28.el6uek.x86_64	Fibre Channel	QLogic	8.07.00.38.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.1.0.4	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 6.9 (Security Fix) X64 / x86_64 Processors Kernel 4.1.12-94.2.1.el6uek.x86_64	Fibre Channel	QLogic	8.07.00.38.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.2.0.5	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 6.10 X64 / x86_64 Processors Kernel 4.1.12-124.16.4.el6uek.x86_64	Fibre Channel	QLogic	9.00.00.00.40.0-k1	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.4.0.7	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**

Oracle Unbreakable Enterprise Kernel 6.10 (Security Fix) X64 / x86_64 Processors Kernel 4.1.12-124.45.6.el6uek.x86_64	Fibre Channel	QLogic	9.00.00.00.42.0-k1-v3	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.4.0.8	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7 X64 / x86_64 Processors Kernel 3.8.13-44.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.08.39.0-k1	**B, 33**	**B, 33**	**B, 33**
		Emulex	8.3.7.34.4p	**B, 33**	**B, 33**	**B, 33**
	Fibre Channel over Ethernet	Cisco	1.6.0.27	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33, 34**	**33, 34**	**33, 34**
Oracle Unbreakable Enterprise Kernel 7.1 X64 / x86_64 Processors Kernel 3.8.13-55.1.6.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.16.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	10.2.8061.0	**B, 33**	**B, 33**	**B, 33**
	Fibre Channel over Ethernet	Emulex	10.2.8061.0	**33, 34**	**33, 34**	**33, 34**
		Cisco	1.6.0.27	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33, 34**	**33, 34**	**33, 34**
	iSCSI HBA/CNA	Emulex	Bundle	**33, 34**	**33, 34**	**33, 34**
Oracle Unbreakable Enterprise Kernel 7.1 (Security Fix) X64 / x86_64 Processors Kernel 3.8.13-68.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.16.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	10.6.61.0	**B, 33**	**B, 33**	**B, 33**
	Fibre Channel over Ethernet	Cisco	1.6.0.27	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33, 34**	**33, 34**	**33, 34**
	iSCSI HBA/CNA	Emulex	Bundle	**33, 34**	**33, 34**	**33, 34**
Oracle Unbreakable Enterprise Kernel 7.1 (Security Fix) X64 / x86_64 Processors Kernel 3.8.13-68.2.2.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.16.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	10.6.61.0	**B, 33**	**B, 33**	**B, 33**
	Fibre Channel over Ethernet	Cisco	1.6.0.27	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33, 34**	**33, 34**	**33, 34**
	iSCSI HBA/CNA	Emulex	Bundle	**33, 34**	**33, 34**	**33, 34**

Oracle Unbreakable Enterprise Kernel 7.2 X64 / x86_64 Processors Kernel 3.8.13-98.7.1.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.18.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	10.6.61.0	**B, 33**	**B, 33**	**B, 33**
	Fibre Channel over Ethernet	Cisco	1.6.0.27	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 7.2 (Security Fix) X64 / x86_64 Processors Kernel 3.8.13-118.10.2.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.26.39.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.0.0.1	**B, 33**	**B, 33**	**B, 33**
	Fibre Channel over Ethernet	Cisco	1.6.0.27	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 7.3 X64 / x86_64 Processors Kernel 4.1.12-61.1.18.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.38.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.1.0.4	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7.3 (Security Fix) X64 / x86_64 Processors Kernel 4.1.12-61.1.28.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.38.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.1.0.4	**B, 33**	**B, 33**	**B, 33**
			11.1.0.4-3.0.0-ol-MCL	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7.4 X64 / x86_64 Processors Kernel 4.1.12-94.3.9.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.38.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.2.0.5	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
	Fibre Channel over Ethernet	Cisco	1.6.0.24	**B, 33**	**B, 33**	**B, 33**
Oracle Unbreakable Enterprise Kernel 7.5 X64 / x86_64 Processors Kernel 4.1.12-112.16.4.el7uek.x86_64	Fibre Channel	QLogic	9.00.00.00.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.4.0.2	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7.5 (Security Fix) X64 / x86_64 Processors Kernel 4.1.12-124.16.4.el7uek.x86_64	Fibre Channel	QLogic	9.00.00.00.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.4.0.2	**B, 33**	**B, 33**	**B, 33**
			11.4.0.7-3.1.0-ol-MCL	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**

Oracle Unbreakable Enterprise Kernel 7.5 (Security Fix) **X64 / x86_64 Processors** Kernel 4.1.12-124.30.1.el7uek.x86_64	Fibre Channel	QLogic	9.00.00.00.40.0-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	11.4.0.2	**B, 33**	**B, 33**	**B, 33**
			11.4.0.7-3.1.1-ol-MCL	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7.6 (Security Fix) **X64 / x86_64 Processors** **Kernel** **4.14.35-1818.3.3.el7uek.x86_64**	Fibre Channel	QLogic	10.00.00.07-k1	**B, 33**	**B, 33**	**B, 33**
		Emulex	12.0.0.5	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7.7 (Security Fix) **X64 / x86_64 Processors** **Kernel** 4.14.35-1902.3.2.el7uek.x86_64	Fibre Channel	QLogic	10.00.00.13-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	12.0.0.10	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7.8 (Security Fix) **X64 / x86_64 Processors** **Kernel** 4.14.35-1902.300.11.el7uek.x86_64	Fibre Channel	QLogic	10.00.00.13-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	12.0.0.13	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7.8 (Security Fix) **X64 / x86_64 Processors** **Kernel** 4.14.35-1902.301.1.el7uek.x86_64	Fibre Channel	QLogic	10.00.00.13-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	12.0.0.13	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 7.9 **X64 / x86_64 Processors** **Kernel** 5.4.17-2011.6.2.el7uek.x86_64	Fibre Channel	QLogic	10.01.00.25-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	12.6.0.3	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 8.2 (Security Fix) **X64 / x86_64 Processors** **Kernel** 5.4.17-2011.5.3.el8uek.x86_64	Fibre Channel	QLogic	10.01.00.25-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	12.6.0.3	**B, 33**	**B, 33**	**B, 33**
	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 8.3 **X64 / x86_64 Processors** **Kernel**	Fibre Channel	QLogic	10.01.00.25-k	**B, 33**	**B, 33**	**B, 33**
		Emulex	12.6.0.3	**B, 33**	**B, 33**	**B, 33**

5.4.17-2011.7.4.el8uek.x86_64	iSCSI	Oracle	Bundle	**33**	**33**	**33**
Oracle Unbreakable Enterprise Kernel 8.4 X64 / x86_64 Processors Kernel 5.4.17-2102.201.3.el8uek.x86_64	Fibre Channel	QLogic	10.02.00.103-k			**B, 33**
		Emulex	12.8.0.5			**B, 33**
	iSCSI	Oracle	Bundle			**33**

Supported		
Not Supported		

Notes	
B	SAN boot is supported.
32	GFS is not supported. For details on GFS2 support, see "8. Linux".
33	GFS and GFS2 are not supported.
34	Boot disk environment configurations are not supported.

IMPORTANT NOTE

Security fix kernels can be supported without ISRs if their base kernels are supported and all of conditions below are met.
(1) The security fix kernels are for RHEL4.5/ SLES10 or later.
(2) Bundled driver versions of the security fix kernels are the same as the bundled driver versions of the supported base kernels.
If your requested security fix kernel is for RHEL4.4/SLES9 or before, or has a different bundled driver version from one of the base kernel, please contact appropriate person in Hitachi Vantara for an Interoperability Support Request (ISR).

HDLM is dependent only on the driver version, not the HBA model. For this reason, specific HBA models are no longer listed, just driver versions. So if the HBA driver version is supported, then HDLM is supported. This also means that OEM versions are supported, as long as the driver is supported.

All drivers applied to Hitachi HBA cards are supported.

SUSE Linux Enterprise Server				HDLM Version		
				8.7.8	8.8.0	8.8.1
OS	**HBA**		**Driver**			
SUSE Linux Enterprise Server 10 IA32 / x86 Processors Kernel 2.6.16.21-0.8-default 2.6.16.21-0.8-smp 2.6.16.21-0.8-bigsmp	Fibre Channel	QLogic	8.01.04-k			
		Emulex	8.1.6			
			8.1.6.6			
		IBM	8.1.6.6			
SUSE Linux Enterprise Server 10 Itanium / IA64 Processors Kernel 2.6.16.21-0.8-default	Fibre Channel	QLogic	8.01.04-k			
		Emulex	8.1.6			
			8.1.6.6			
		IBM	8.1.6.6			
SUSE Linux Enterprise Server 10 EM64T/AMD64 Processors Kernel 2.6.16.21-0.8-default 2.6.16.21-0.8-smp	Fibre Channel	QLogic	8.01.04-k			
		Emulex	8.1.6			
			8.1.6.6			
		IBM	8.1.6.6			
SUSE Linux Enterprise Server 10 (Service Pack 1 Errata) IA32 / x86 Processors Kernel 2.6.16.46-0.14-default 2.6.16.46-0.14-smp 2.6.16.46-0.14-bigsmp	Fibre Channel	QLogic	8.01.07-k3			
			8.02.14			
		Emulex	8.1.10.3			
			8.1.10.12			
		HP	8.01.07-k3			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
SUSE Linux Enterprise Server 10 (Service Pack 1 Errata) Itanium / IA64 Processors Kernel 2.6.16.46-0.14-default	Fibre Channel	QLogic	8.01.07-k3			
			8.02.14			
		Emulex	8.1.10.3			
			8.1.10.12			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
SUSE Linux Enterprise Server 10 (Service Pack 1 Errata) EM64T/AMD64 Processors Kernel	Fibre Channel	QLogic	8.01.07-k3			
			8.02.14			
		Emulex	8.1.10.3			
			8.1.10.12			
		Hitachi	Bundle			
		HP	8.01.07-k3			

2.6.16.46-0.14-default 2.6.16.46-0.14-smp	Fibre Channel over Ethernet	Emulex	8.2.0.29			
SUSE Linux Enterprise Server 10 (Service Pack 2) IA32 / x86 Processors Kernel 2.6.16.60-0.21-default 2.6.16.60-0.21-smp 2.6.16.60-0.21-bigsmp	Fibre Channel	QLogic	8.02.00-k6			
			8.02.14			
		Emulex	8.2.0.22			
		Brocade	1.0.0.2			
			1.0.0.3			
			1.1.0.1			
			2.1.0.0			
			2.2.0.0			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
			8.2.0.96			
		QLogic	8.03.00.08			
		Brocade	2.1.0.0			
SUSE Linux Enterprise Server 10 (Service Pack 2) IA32 / x86 Processors Kernel 2.6.16.60-0.21-xenpae	Fibre Channel	QLogic	8.02.00-k6			
		Emulex	8.2.0.22			
	Fibre Channel over Ethernet	Emulex	8.2.0.96			
SUSE Linux Enterprise Server 10 (Service Pack 2) Itanium / IA64 Processors Kernel 2.6.16.60-0.21-default	Fibre Channel	QLogic	8.02.00-k6			
			8.02.14			
		Emulex	8.2.0.22			
		Brocade	1.0.0.2			
			1.0.0.3			
			1.1.0.1			
			2.1.0.0			
			2.2.0.0			
	Fibre Channel over Ethernet	Emulex	8.2.0.29			
		Brocade	2.1.0.0			
SUSE Linux Enterprise Server 10 (Service Pack 2) EM64T/AMD64 Processors Kernel 2.6.16.60-0.21-default 2.6.16.60-0.21-smp	Fibre Channel	QLogic	8.02.00-k6			
			8.02.14			
		Emulex	8.2.0.22			
		Brocade	1.0.0.2			
			1.0.0.3			
			1.1.0.1			
			2.1.0.0			
			2.2.0.0			
	Fibre Channel over Ethernet	QLogic	8.03.00.08			
		Emulex	8.2.0.29			
			8.2.0.96			
		Brocade	2.1.0.0			
SUSE Linux Enterprise Server 10 (Service Pack 2) EM64T/AMD64 Processors	Fibre Channel	QLogic	8.02.00-k6			
		Emulex	8.2.0.22			

EM64T/AMD64 Processors Kernel 2.6.16.60-0.21-xen	Fibre Channel over Ethernet	Emulex	8.2.0.96			
SUSE Linux Enterprise Server 10 (Service Pack 3) **IA32 / x86 Processors** Kernel 2.6.16.60-0.54.5-default 2.6.16.60-0.54.5-smp 2.6.16.60-0.54.5-bigsmp	Fibre Channel	QLogic	8.03.00.10.10.3-k4			
		Emulex	8.2.0.48.2p			
		Brocade	2.2.0.0			
			2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
		QLogic	8.03.01.13.10.3-k4			
		Emulex	8.2.0.96			
SUSE Linux Enterprise Server 10 (Service Pack 3) **IA32 / x86 Processors** Kernel 2.6.16.60-0.54.5-xenpae	Fibre Channel	QLogic	8.03.00.10.10.3-k4			
		Emulex	8.2.0.48.2p			
		Brocade	2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
		QLogic	8.03.01.13.10.3-k4			
		Emulex	8.2.0.96			
SUSE Linux Enterprise Server 10	Channel	QLogic	8.03.00.10.10.3-k4			
		Emulex	8.2.0.48.2p			

SUSE Linux Enterprise Server 10 (Service Pack 3) Itanium / IA64 Processors Kernel 2.6.16.60-0.54.5-default	Fibre C	Brocade	2.2.0.0			
			2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
SUSE Linux Enterprise Server 10 (Service Pack 3) EM64T/AMD64 Processors Kernel 2.6.16.60-0.54.5-default	Fibre Channel	QLogic	8.03.00.10.10.3-k4			
		Emulex	8.2.0.48.2p			
		Brocade	2.2.0.0			
			2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
		QLogic	8.03.01.13.10.3-k4			
		Emulex	8.2.0.96			
SUSE Linux Enterprise Server 10 (Service Pack 3) EM64T/AMD64 Processors Kernel 2.6.16.60-0.54.5-xen	Fibre Channel	QLogic	8.03.00.10.10.3-k4			
		Emulex	8.2.0.48.2p			
		Brocade	2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
		QLogic	8.03.01.13.10.3-k4			

		Emulex	8.2.0.96			
SUSE Linux Enterprise Server 10 (Service Pack 4) IA32 / x86 Processors Kernel 2.6.16.60-0.85.1-default 2.6.16.60-0.85.1-smp 2.6.16.60-0.85.1-bigsmp	Fibre Channel	QLogic	8.03.01.12.10.3-k4			
		Emulex	8.2.0.92.1p			
SUSE Linux Enterprise Server 10 (Service Pack 4) IA32 / x86 Processors Kernel 2.6.16.60-0.85.1-xenpae	Fibre Channel	QLogic	8.03.01.12.10.3-k4			
		Emulex	8.2.0.92.1p			
SUSE Linux Enterprise Server 10 (Service Pack 4) Itanium / IA64 Processors Kernel 2.6.16.60-0.85.1-default	Fibre Channel	QLogic	8.03.01.12.10.3-k4			
		Emulex	8.2.0.92.1p			
SUSE Linux Enterprise Server 10 (Service Pack 4) EM64T/AMD64 Processors Kernel 2.6.16.60-0.85.1-default 2.6.16.60-0.85.1-smp	Fibre Channel	QLogic	8.03.01.12.10.3-k4			
		Emulex	8.2.0.92.1p			
SUSE Linux Enterprise Server 10 (Service Pack 4) EM64T/AMD64 Processors Kernel 2.6.16.60-0.85.1-xen	Fibre Channel	QLogic	8.03.01.12.10.3-k4			
		Emulex	8.2.0.92.1p			
SUSE Linux Enterprise Server 11 (Security Fix) IA32 / x86 Processors Kernel 2.6.27.21-0.1.2-default 2.6.27.21-0.1.2-pae	Fibre Channel	QLogic	8.02.01.03.11.0-k9			
		Emulex	8.2.8.14			
		Brocade	2.1.0.0			
			2.2.0.0			
	Fibre Channel over Ethernet	Brocade	2.1.0.0			
		QLogic	8.03.01.15.11.0-k4			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Security Fix) IA32 / x86 Processors Kernel 2.6.27.21-0.1.2-xen	Fibre Channel	QLogic	8.02.01.03.11.0-k9			
		Emulex	8.2.8.14			
	Fibre Channel over Ethernet	QLogic	8.03.01.15.11.0-k4			
	iSCSI	Novell	Bundle			

SUSE Linux Enterprise Server 11 (Security Fix) Itanium / IA64 Processors Kernel 2.6.27.21-0.1.2-default	Fibre Channel	QLogic	8.02.01.03.11.0-k9			
		Emulex	8.2.8.14			
		Brocade	2.1.0.0			
			2.2.0.0			
	Fibre Channel over Ethernet	Brocade	2.1.0.0			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Security Fix) EM64T/AMD64 Processors Kernel 2.6.27.21-0.1.2-default	Fibre Channel	QLogic	8.02.01.03.11.0-k9			
		Emulex	8.2.8.14			
		Brocade	2.1.0.0			
			2.2.0.0			
	Fibre Channel over Ethernet	Brocade	2.1.0.0			
		QLogic	8.03.01.15.11.0-k4			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Security Fix) EM64T/AMD64 Processors Kernel 2.6.27.21-0.1.2-xen	Fibre Channel	QLogic	8.02.01.03.11.0-k9			
		Emulex	8.2.8.14			
	Fibre Channel over Ethernet	QLogic	8.03.01.15.11.0-k4			
	iSCSI	Novell	Bundle			
			8.03.01.06.11.1-k8			

SUSE Linux Enterprise Server 11 (Service Pack 1) IA32 / x86 Processors Kernel 2.6.32.12-0.7.1-default 2.6.32.12-0.7.1-pae	Fibre Channel	QLogic	8.03.01.08.11.1-k8			
			8.03.07.13.11.1-k			
			8.03.04.14.11.1-k0			
		Emulex	8.3.5.8.1p			
			8.3.5.8.2p			
		Brocade	2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
		QLogic	8.03.04.14.11.1-k0			
		Emulex	8.3.5.35			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Service Pack 1) IA32 / x86 Processors Kernel 2.6.32.12-0.7.1-xen	Fibre Channel	QLogic	8.03.01.06.11.1-k8			
			8.03.01.08.11.1-k8			
			8.03.07.13.11.1-k			
			8.03.04.14.11.1-k0			
		Emulex	8.3.5.8.1p			
			8.3.5.8.2p			
		Brocade	2.3.0.0			
	annel over Ethernet	Brocade	2.3.0.0			
		QLogic	8.03.04.14.11.1-k0			

	Fibre Ch	Emulex	8.3.5.35			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Service Pack 1) Itanium / IA64 Processors Kernel 2.6.32.12-0.7.1-default	Fibre Channel	QLogic	8.03.01.06.11.1-k8			
			8.03.01.08.11.1-k8			
		Emulex	8.3.5.8.1p			
			8.3.5.8.2p			
		Brocade	2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Service Pack 1) EM64T/AMD64 Processors Kernel 2.6.32.12-0.7.1-default	Fibre Channel	QLogic	8.03.01.06.11.1-k8			
			8.03.01.08.11.1-k8			
			8.03.07.13.11.1-k			
			8.03.04.14.11.1-k0			
		Emulex	8.3.5.8.1p			
			8.3.5.8.2p			
		Brocade	2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
		QLogic	8.03.04.14.11.1-k0			
		Emulex	8.3.5.35			

	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Service Pack 1) EM64T/AMD64 Processors Kernel 2.6.32.12-0.7.1-xen	Fibre Channel	QLogic	8.03.01.06.11.1-k8			
			8.03.01.08.11.1-k8			
			8.03.07.13.11.1-k			
			8.03.04.14.11.1-k0			
		Emulex	8.3.5.8.1p			
			8.3.5.8.2p			
		Brocade	2.3.0.0			
	Fibre Channel over Ethernet	Brocade	2.3.0.0			
		QLogic	8.03.04.14.11.1-k0			
		Emulex	8.3.5.35			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Service Pack 2) IA32 / x86 Processors Kernel 3.0.13-0.27-default 3.0.13-0.27-pae	Fibre Channel	QLogic	8.03.07.07-k			
		Emulex	8.3.5.48.2p			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Service Pack 2) Itanium / IA64 Processors Kernel 3.0.13-0.27-default	Fibre Channel	QLogic	8.03.07.07-k			
		Emulex	8.3.5.48.2p			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11	Channel	QLogic	8.03.07.07-k			

(Service Pack 2) **EM64T/AMD64 Processors** Kernel 3.0.13-0.27-default	Fibre C	Emulex	8.3.5.48.2p			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 **(Service Pack 3)** **IA32 / x86 Processors** Kernel 3.0.76-0.11-default 3.0.76-0.11-pae	Fibre Channel	QLogic	8.04.00.13.11.3-k			
		Emulex	8.3.7.10.6p			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 **(Service Pack 3)** **Itanium / IA64 Processors** Kernel 3.0.76-0.11-default	Fibre Channel	QLogic	8.04.00.13.11.3-k			
		Emulex	8.3.7.10.6p			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 **(Service Pack 3)** **EM64T/AMD64 Processors** Kernel 3.0.76-0.11-default	Fibre Channel	QLogic	8.04.00.13.11.3-k			
		Emulex	8.3.7.10.6p			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 **(Service Pack 3)** **EM64T/AMD64 Processors** Kernel 3.0.76-0.11-xen	Fibre Channel	QLogic	8.04.00.13.11.3-k			
		Emulex	8.3.7.10.6p			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 **(Service Pack 4)** **IA32 / x86 Processors** Kernel 3.0.101-63.1-default 3.0.101-63.1-pae	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.4.8000.0	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
SUSE Linux Enterprise Server 11 **(Service Pack 4)** **Itanium / IA64 Processors** Kernel 3.0.101-63.1-default	Fibre Channel	QLogic	8.07.00.18-k			
		Emulex	10.4.8000.0			

3.0.101-63.1-default	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Service Pack 4) EM64T/AMD64 Processors Kernel 3.0.101-63.1-default	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.4.8000.0	**B, 26**	**B, 26**	**B, 26**
			11.2.216.8	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
SUSE Linux Enterprise Server 11 (Service Pack 4) EM64T/AMD64 Processors Kernel 3.0.101-63.1-xen	Fibre Channel	QLogic	8.07.00.18-k	**B**	**B**	**B**
		Emulex	10.4.8000.0	**B**	**B**	**B**
			11.2.216.8	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 11 (Service Pack 4) IA32 / x86 Processors Kernel (Security Fix) 3.0.101-108.21-default 3.0.101-108.21-pae	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.4.8000.0	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
SUSE Linux Enterprise Server 11 (Service Pack 4) Itanium / IA64 Processors Kernel (Security Fix) 3.0.101-108.21-default	Fibre Channel	QLogic	8.07.00.18-k			
		Emulex	10.4.8000.0			
	iSCSI	Novell	Bundle			
SUSE Linux Enterprise Server 11 (Service Pack 4) EM64T/AMD64 Processors Kernel (Security Fix) 3.0.101-108.21-default	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.4.8000.0	**B, 26**	**B, 26**	**B, 26**
			11.2.216.8	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**

SUSE Linux Enterprise Server 11 (Service Pack 4) EM64T/AMD64 Processors Kernel (Security Fix) 3.0.101-108.21-xen	Fibre Channel	QLogic	8.07.00.18-k	**B**	**B**	**B**
		Emulex	10.4.8000.0	**B**	**B**	**B**
			11.2.216.8	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 11 (Service Pack 4) IA32 / x86 Processors Kernel (Security Fix) 3.0.101-108.68-default 3.0.101-108.68-pae	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.4.8000.0	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
SUSE Linux Enterprise Server 11 (Service Pack 4) EM64T/AMD64 Processors Kernel (Security Fix) 3.0.101-108.68-default	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.4.8000.0	**B, 26**	**B, 26**	**B, 26**
			11.2.216.8	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
SUSE Linux Enterprise Server 11 (Service Pack 4) EM64T/AMD64 Processors Kernel (Security Fix) 3.0.101-108.68-xen	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.4.8000.0	**B, 26**	**B, 26**	**B, 26**
			11.2.216.8	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
SUSE Linux Enterprise Server 12 EM64T/AMD64 Processors Kernel 3.12.28-4-default	Fibre Channel	QLogic	8.07.00.08.12.0-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.2.8040.1	**26, 65**	**26, 65**	**26, 65**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
	Channel	QLogic	8.07.00.08.12.0-k	**B**	**B**	**B**

SUSE Linux Enterprise Server 12 EM64T/AMD64 Processors Kernel 3.12.28-4-xen	Fibre C	Emulex	10.2.8040.1	**65**	**65**	**65**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 12 (Service Pack 1) EM64T/AMD64 Processors Kernel 3.12.59-60.45-default	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.5.0.2	**26, 65**	**26, 65**	**26, 65**
			11.2.216.8	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
SUSE Linux Enterprise Server 12 (Service Pack 1) EM64T/AMD64 Processors Kernel 3.12.59-60.45-xen	Fibre Channel	QLogic	8.07.00.18-k	**B**	**B**	**B**
		Emulex	10.5.0.2	**65**	**65**	**65**
			11.2.216.8	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 12 (Service Pack 1) EM64T/AMD64 Processors Kernel (Security Fix) 3.12.74-60.64.40-default	Fibre Channel	QLogic	8.07.00.18-k	**B, 26**	**B, 26**	**B, 26**
		Emulex	10.5.0.2	**26, 65**	**26, 65**	**26, 65**
			11.2.216.8	**B, 26**	**B, 26**	**B, 26**
	iSCSI	Novell	Bundle	**26, 65, 66, 67**	**26, 65, 66, 67**	**26, 65, 66, 67**
SUSE Linux Enterprise Server 12 (Service Pack 1) EM64T/AMD64 Processors Kernel (Security Fix) 3.12.74-60.64.40-xen	Fibre Channel	QLogic	8.07.00.18-k	**B**	**B**	**B**
		Emulex	10.5.0.2	**65**	**65**	**65**
			11.2.216.8	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 12	Channel	QLogic	8.07.00.33-k	**B**	**B**	**B**

(Service Pack 2) **EM64T/AMD64 Processors** Kernel 4.4.21-69-default	Fibre C	Emulex	11.1.0.1	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 12 **(Service Pack 3)** **EM64T/AMD64 Processors** Kernel 4.4.103-6.33-default	Fibre Channel	QLogic	9.00.00.00-k	**B**	**B**	**B**
		Emulex	11.4.0.5	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 12 **(Service Pack 3)** **EM64T/AMD64 Processors** Kernel (Security Fix) 4.4.114-94.14-default	Fibre Channel	QLogic	9.00.00.00-k	**B**	**B**	**B**
		Emulex	11.4.0.5	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 12 **(Service Pack 4)** **EM64T/AMD64 Processors** Kernel 4.12.14-94.41-default	Fibre Channel	QLogic	10.00.00.11-k	**B**	**B**	**B**
		Emulex	12.0.0.6	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 12 **(Service Pack 5)** **EM64T/AMD64 Processors** Kernel 4.12.14-120-default	Fibre Channel	QLogic	10.01.00.18-k	**B**	**B**	**B**
		Emulex	12.4.0.0	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 15 **EM64T/AMD64 Processors** Kernel 4.12.14-23-default	Fibre Channel	QLogic	10.00.00.06-k	**B**	**B**	**B**
		Emulex	12.0.0.1	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 15 **(Service Pack 1)** **EM64T/AMD64 Processors** Kernel 4.12.14-195-default	Fibre Channel	QLogic	10.00.00.13-k	**B**	**B**	**B**
		Emulex	12.2.0.0	**B**	**B**	**B**

4.12.14-195-default	iSCSI	Novell	Bundle	**65, 66, 67**	**65, 66, 67**	**65, 66, 67**
SUSE Linux Enterprise Server 15 (Service Pack 2) EM64T/AMD64 Processors Kernel 5.3.18-22-default	Fibre Channel	QLogic	10.01.00.25-k	**B**	**B**	**B**
		Emulex	12.8.0.0	**B**	**B**	**B**
	iSCSI	Novell	Bundle	**65, 66**	**65, 66**	**65, 66**

Supported	
Not Supported	

Notes	
B	SAN boot is supported.
26	XEN is not supported.
46	Bundled with SUSE Linux ES 10 (kernel 2.6.16.21-08-defaults/2.6.16.21-08-smp/2.6.16.21-08-bigsmp).
51	Bundled with SUSE Linux ES 10 (Kernel 2.6.16.27-0.9-defaults/2.6.16.27-0.9-smp/2.6.16.27-0.9-bigsmp).
60	The settings of these drivers are failover. If you want to change the setting of failover to invalid, set the following in /etc/modprobe.conf file.
61	All drivers applied to Hitachi HBA cards are supported.
62	The default setting of these drivers is "Failover". If you want to change the setting to "Disable", set the following in the /etc/modprobe.conf file: options qla2xxx ql2xfailover=0
63	Supported by kernel 2.6.32.24-0.2.1 or later.
64	Supported by kernel 2.6.32.36-0.5.2 or later.
65	Boot disk environment configurations are not supported.
66	iSCSI HBA/CNA is not supported.
67	10GbE NIC is not supported.
68	This is supported in HDLM 8.6.2-01 or later.

IMPORTANT NOTE

There are no plans to support HDLM with HP-UX 11iV3 or later because HP-UX 11iV3 has implemented its own native multipathing solution. Additionally, HP does not recommend nor support 3rd party vendor multipathing on HP-UX 11iV3 or later. All issues relating to multipathing and HP-UX 11iV3 must be discussed directly with HP.

	Hewlett-Packard HP-UX			HDLM Version		
				6.1.0	6.5.0	6.5.1
Product Modifications and Additional Functions	Manual Fail Over					
	Manual Fail Back					
	Automatic Fail Over					
	Automatic Fail Back					
	Load balance (Round Robin)					
	Load balance (Extended Round Robin)					
	Load Balance (Least I/O)					
	Load Balance (Extended Least I/O)					
	Load Balance (Least Blocks)					
	Load Balance (Extended Least Blocks)					
	Load balance under Serviceguard(MC/SG)					
	Automatic Discovery					
	Error Log					
	CLI					
	GUI					
	GUI browser					
	Path Blockade					
	Health check					
	Health check Time					
	Online(E)					
	Integration with HDvM					
	Dynamic Reconfiguration (Adding LU)					
	Offline for each HBA(CLI)					
	Target Side Failover					
	HMDE Support			1	1	1
	Boot Disk					
	Upgrade install					
	Service Pack					
	HBA hot swap					
	Internationalization Environment					
	Support for LUN256 or Higher					
	HP Integrity Virutal Machines (IVM)			10	10	10
	Audit Log					
	HDLM Component Install Utility					
	The function of displaying WWN of a HBA port					
	online/offline path by SCSI device name					
stems	Storage Subsystem	Interface	Microcode version			
	Hitachi Lightning 9900V	Fibre Channel	21-01-25-XX/XX or later			
	Hitachi Universal Storage Platform V	Fibre Channel	60-01-XX-XX/XX or later			
	Hitachi Universal Storage Platform VM	Fibre Channel	60-01-61-XX/XX or later			
	Hitachi Universal Storage Platform	Fibre Channel	50-01-19-XX/XX or later			
	Hitachi Virtual Storage Platform	Fibre Channel	70-01-00-XX/XX or later			
	Hitachi Unified Storage VM	Fibre Channel	73-01-0X-XX/XX or later			
	Hitachi Network Storage Controller NSC55	Fibre Channel	50-03-94-XX/XX or later			

Supported Storage Sys	Hitachi Thunder 9530V	Fibre Channel	0651/D or later			
	Hitachi Thunder 9570V	Fibre Channel	0651/D or later			
	Hitachi Thunder 9580V	Fibre Channel	1654/A or later			
	Hitachi Workgroup Modular Storage WMS100	Fibre Channel	0720/A or later			
	Hitachi Adaptable Modular Storage AMS200	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS500	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS1000	Fibre Channel	0712/A or later			
	Hitachi Adaptable Modular Storage AMS2100	Fibre Channel	0832/E or later			
	Hitachi Adaptable Modular Storage AMS2300	Fibre Channel	0832/E or later			
	Hitachi Adaptable Modular Storage AMS2500	Fibre Channel	0832/E or later			
	SMS 100	Fibre Channel	1810/N or later			
Exclusive Products	Hitachi Path Manager			**11**	**11**	**11**
	VxVM-DMP			**11**	**11**	**11**
	PV-Link(AltLink) (HP-UX bundled)			**12**	**12**	**12**
	PowerPath					
	SDD					
	HP StorageWorks Secure Path					

Supported	
Not Supported	

Notes	
1	The prerequisite OS is HP-UX11i v1 or HP-UX11i v2 (IPF).
10	HP Integrity Virtual Machines (abbreviated hereafter to IVM) is only supported in configurations that meet all of the following conditions: - HDLM is installed only on the host OS. - Only HP-UX 11iV2 is installed on the guest OS. Additionally, the following configurations and IVM commands are not supported: - Any cluster running on the Host OS - The hpvmmigrate command
11	This product is mutually exclusive with HDLM.
12	HDLM and other path management software may be able to coexist if they manage separate storage systems. Please contact appropriate person in Hitachi Vantara.

IMPORTANT NOTE

There are no plans to support HDLM with HP-UX 11iV3 or later because HP-UX 11iV3 has implemented its own native multipathing solution. Additionally, HP does not recommend nor support 3rd party vendor multipathing on HP-UX 11iV3 or later. All issues relating to multipathing and HP-UX 11iV3 must be discussed directly with HP.

HDLM is dependent only on the driver version, not the HBA model. For this reason, specific HBA models are no longer listed, just driver versions. So if the HBA driver version is supported, then HDLM is supported. This also means that OEM versions are supported, as long as the driver is supported.

HP-UX 11i V1.0					HDLM Version		
	HBA		Bus	Driver	6.1.0	6.5.0	6.5.1
HP-UX 11i V1.0	Fibre Channel	HP	PCI	HP-UX Bundle			

Supported	
Not Supported	

HP-UX 11i V2 (PA-RISC and Itanium / IA64)					HDLM Version		
OS	HBA		Bus	Driver	6.1.0	6.5.0	6.5.1
HP-UX 11i V2 (PA-RISC and Itanium / IA64) Sep 2004, May 2005, Dec 2005, March 2006, June 2006, Sep 2006, June 2007, December 2007, June 2008	Fibre Channel	HP	PCI	HP-UX Bundle			

Supported	
Not Supported	

IMPORTANT NOTE

There are no plans to support HDLM with HP-UX 11iV3 or later because HP-UX 11iV3 has implemented its own native multipathing solution. Additionally, HP does not recommend nor support 3rd party vendor multipathing on HP-UX 11iV3 or later. All issues relating to multipathing and HP-UX 11iV3 must be discussed directly with HP.

HP-UX 11iV2 IVM Support

Release	IVM Version	HDLM Version		
		6.1.0	6.5.0	6.5.1
May 2005 December 2005 March 2006 June 2006	2.0	1	1	1
September 2006 June 2007	2.0	1	1	1
December 2007 June 2008	3.0	1	1	1
December 2007 June 2008	3.5	1	1	1

Supported	
Not Supported	

Notes	
1	HP Integrity Virtual Machines (abbreviated hereafter to IVM) are supported only in configurations that meet all of the following conditions: - Configurations that have HDLM installed only on the host OS - Configurations that use HP-UX 11i V2 only on the guest OS Additionally, the following configurations and IVM commands are not supported: - Any cluster running on the Host OS - The hpvmmigrate command

IBM AIX		HDLM Version		
		8.7.8	8.8.0	8.8.1
Product Modifications and Additional Functions	Manual Fail Over			
	Manual Fail Back			
	Automatic Fail Over			
	Automatic Fail Back			
	Load balance (Round Robin)			
	Load balance (Extended Round Robin)			
	Load Balance (Least I/O)			
	Load Balance (Extended Least I/O)			
	Load Balance (Least Blocks)			
	Load Balance (Extended Least Blocks)			
	Load balance under HACMP			
	Support Persistent Group Reserve			
	Automatic Discovery			
	Error Log			
	CLI	**47**	**47**	**47**
	Path Blockade			
	Health check			
	Health check Time (1min to 24 hr)			
	Online(E)			
	Dynamic Reconfiguration			
	Offline for each HBA(CLI)			
	Target Side Failover			
	HMDE support			
	Boot Disk	**14,25, 27**	**14,25, 27**	**14,25,2 7**
	Long time failover			
	Upgrade install	**22,23**	**22,23**	**22,23**
	Service Pack			
	HBA hot swap			
	Dynamic Tracking			
	Virtual I/O	**5**	**5**	**5**
	internationalization environment			
	Silent Install Utility			
	PGR Reset Utility			
	Installation Configuration support utility			
	Support for unique_id Attribute			
	Support for LUN256 or Higher			
	Per LU Reservation Facility	**21**	**21**	**21**
	iostat Command Support			
	Unattended Installation & Configuration			
	Audit Log			
	HDLM Component Install Utility			
	MPIO Device	**21**	**21**	**21**
	The function of displaying WWN of a HBA port			
	HDLM Restoration Support Utility			
	online/offline by host device name and OS management path ID.			
	High Availability Manager			
	Priority of switching destination paths			
	Update installations of HDLM on alternate disk.			
	nimadm support			
	HDLM 6.4.0 and later will retry the I/O that had a SCSI_TRANSPORT_FAULT using the same path.			
	rendev command support			

Dynamic I/O Path Controll			**43**	**43**	**43**
Specifying the number of times the same path can be used for I/O operations when the load balancing is used.					
Specifying the number of times the same path can be used for random I/O operations when extended load balancing is used.					
Update installations of HDLM by multibos command.					
reserve_policy=PR_shared support					
system backup by mkcd/mkdvd/backupios command in boot disk environment					
HDLM log output to OS error log					
Storage System	Interface	Microcode version			
Hitachi Universal Storage Platform V	Fibre Channel	60-01-XX-XX/XX or later	**6**		
	Fibre Channel	60-06-10-XX/XX or later(*54)			
Hitachi Universal Storage Platform VM	Fibre Channel	60-01-61-XX/XX or later	**6**		
	Fibre Channel	60-06-10-XX/XX or later(*54)			
Hitachi Virtual Storage Platform	Fibre Channel	70-01-00-XX/XX or later	**3,6**		
	Fibre Channel	70-01-42-XX/XX or later(*54)(*55)			
	Fibre Channel over Ethernet	70-02-5X-XX/XX or later	**3,6**		
Hitachi Virtual Storage Platform 5100	Fibre Channel	90-01-41-XX/XX or later			
Hitachi Virtual Storage Platform 5100H	Fibre Channel	90-01-41-XX/XX or later			
Hitachi Virtual Storage Platform 5200	Fibre Channel	90-08-01-XX/XX or later			
Hitachi Virtual Storage Platform 5200H	Fibre Channel	90-08-01-XX/XX or later			
Hitachi Virtual Storage Platform 5500	Fibre Channel	90-01-41-XX/XX or later			
Hitachi Virtual Storage Platform 5500H	Fibre Channel	90-01-41-XX/XX or later			
Hitachi Virtual Storage Platform 5600	Fibre Channel	90-08-01-XX/XX or later			
Hitachi Virtual Storage Platform 5600H	Fibre Channel	90-08-01-XX/XX or later			
Hitachi Virtual Storage Platform G1500	Fibre Channel	80-05-0X-XX/XX or later			
Hitachi Virtual Storage Platform G1000	Fibre Channel	80-01-2X-XX/XX or later	**6,45, 49**	**6,45, 49**	**6,45, 49**
	Fibre Channel over Ethernet	80-02-0X-XX/XX or later	**6,45, 49**	**6,45, 49**	**6,45, 49**
	Fibre Channel	80-02-4X-XX/XX or later	**51**	**51**	**51**
Hitachi Virtual Storage Platform G200	Fibre Channel	83-01-01-20/XX or later			
	Fibre Channel	83-01-2X-20/XX or later(*50)			
Hitachi Virtual Storage Platform G350	Fibre Channel	88-01-03-20/XX or later			
Hitachi Virtual Storage Platform G370	Fibre Channel	88-01-03-60/XX or later			
Hitachi Virtual Storage Platform G400	Fibre Channel	83-01-01-40/XX or later			
	Fibre Channel	83-01-2X-40/XX or later(*50)			
Hitachi Virtual Storage Platform G600	Fibre Channel	83-01-01-40/XX or later			
	Fibre Channel	83-01-2X-40/XX or later(*50)			

Supported Storage Systems

Hitachi Virtual Storage Platform G700	Fibre Channel	88-01-03-60/XX or later			
Hitachi Virtual Storage Platform G800	Fibre Channel	83-01-2X-60/XX or later			
Hitachi Virtual Storage Platform G900	Fibre Channel	88-01-03-60/XX or later			
Hitachi Virtual Storage Platform F1500	Fibre Channel	80-05-0X-XX/XX or later			
Hitachi Virtual Storage Platform F350	Fibre Channel	88-01-03-20/XX or later			
Hitachi Virtual Storage Platform F370	Fibre Channel	88-01-03-60/XX or later			
Hitachi Virtual Storage Platform F400	Fibre Channel	83-02-01-40/XX or later	**53**	**53**	**53**
		83-03-01-40/XX or later			
Hitachi Virtual Storage Platform F600	Fibre Channel	83-02-01-40/XX or later	**53**	**53**	**53**
		83-03-01-40/XX or later			
Hitachi Virtual Storage Platform F700	Fibre Channel	88-01-03-60/XX or later			
Hitachi Virtual Storage Platform F800	Fibre Channel	83-02-01-60/XX or later	**53**	**53**	**53**
		83-03-01-60/XX or later			
Hitachi Virtual Storage Platform F900	Fibre Channel	88-01-03-60/XX or later			
Hitachi Virtual Storage Platform N400	Fibre Channel	83-06-01-40/XX or later			
Hitachi Virtual Storage Platform N600	Fibre Channel	83-06-01-40/XX or later			
Hitachi Virtual Storage Platform N800	Fibre Channel	83-06-01-60/XX or later			
Hitachi Virtual Storage Platform E590	Fibre Channel	93-03-22-XX/XX or later			
Hitachi Virtual Storage Platform E590H	Fibre Channel	93-05-02-XX/XX or later			
Hitachi Virtual Storage Platform E790	Fibre Channel	93-03-22-XX/XX or later			
Hitachi Virtual Storage Platform E790H	Fibre Channel	93-05-02-XX/XX or later			
Hitachi Virtual Storage Platform E990	Fibre Channel	93-01-02-60/XX or later			
Hitachi Unified Storage VM	Fibre Channel	73-01-0X-XX/XX or later	**4,6**		
	Fibre Channel	73-03-0X-XX/XX or later(*54)			
Hitachi Adaptable Modular Storage AMS2100	Fibre Channel	0832/E or later			
Hitachi Adaptable Modular Storage AMS2300	Fibre Channel	0832/E or later			
Hitachi Adaptable Modular Storage AMS2500	Fibre Channel	0832/E or later			
Hitachi Unified Storage 110	Fibre Channel	0915/A or later	**9**	**9**	**9**
Hitachi Unified Storage 130	Fibre Channel	0915/A or later	**9**	**9**	**9**
Hitachi Unified Storage 150	Fibre Channel	0915/A or later	**9**	**9**	**9**
SMS 100	Fibre Channel	1810/N or later			
HP StorageWorks XP20000 Disk Array	Fibre Channel	60-01-61-XX/XX or later	**6**		
	Fibre Channel	60-06-10-XX/XX or later(*54)			
HP StorageWorks XP24000 Disk Array	Fibre Channel	60-01-XX-XX/XX or later	**6**		
	Fibre Channel	60-06-10-XX/XX or later(*54)			

	HP StorageWorks P9500 Disk Array	Fibre Channel	70-01-00-XX/XX or later	**6**		
		Fibre Channel	70-01-42-XX/XX or later(*54)(*55)			
		Fibre Channel over Ethernet	70-02-5X-XX/XX or later	**3,6**		
	HPE XP8 Storage	Fibre Channel	90-01-41-XX/XX or later	**6,46, 49**	**6,46, 49**	**6,46, 49**
	HP XP7 Storage	Fibre Channel	80-01-2X-XX/XX or later	**6,46, 49**	**6,46, 49**	**6,46, 49**
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later	**6,46, 49**	**6,46, 49**	**6,46, 49**
		Fibre Channel	80-02-4X-XX/XX or later	**52**	**52**	**52**
		Fibre Channel	80-05-0X-XX/XX or later			
Exclusive Products	Hitachi Path Manager			**28**	**28**	**28**
	AutoPath			**28**	**28**	**28**
	VxVM-DMP			**29**	**29**	**29**
	PowerPath			**34,35, 36**	**34,35, 36**	**34,35,3 6**
	SDD			**33**	**33**	**33**
	RDAC			**29**	**29**	**29**
	AIX 5.2 ML01 or later bundle MPIO			**1**	**1**	**1**
	HTC_MPIO_ODM			**28**	**28**	**28**
	XP_MPIO_ODM			**28**	**28**	**28**
	HTC_MPIO_Modular_ODM			**28**	**28**	**28**
	Other path management product which corresponds to MPIO			**1**	**1**	**1**

Supported	
Not Supported	

ODM in HDLM media	**HDLM Version**		
	8.7.8	**8.8.0**	**8.8.1**
HTC_ODM and XP_ODM versions	**5.0.52.3**	**5.0.52.3**	**5.0.52.3**

Notes	
1	HBA FC-port sharing is supported in OS bundled MPIO or SDD-PCM. HBA FC-port sharing is not supported in path management products other than OS bundled MPIO and SDD-PCM.
3	When you set the reserve_policy attribute for hdisk to PR_shared, use a microprogram version 70-04-3X-XX/XX(X: voluntary number) or later.
4	When you set the reserve_policy attribute for hdisk to PR_shared, use a microprogram version 73-01-3X-XX/XX(X: voluntary number) or later.
5	i5/OS and Linux on Power can be used as virtual I/O clients. For details, contact IBM.
6	Select Host Mode Option 2.
9	When using simple settings in the Edit Host Group window, select [VCS] from the [Middleware] pulldown menu. When using additional settings in the Edit Host Group window, select the [Unique Reserve Mode 1] check box.
14	Confirm the storage support status with appropriate person in Hitachi Vantara for Storage Systems support status.

21	Use HTC-ODM version 5.0.52.1 or later if you are using any of the following storage systems: - Hitachi AMS2000/AMS/WMS/SMS series - Hitachi USP (excluding the HP XP series) - Lightning 9900V series (excluding the HP XP series) - Thunder 9500V series - Universal Storage Platform V/VM (excluding HP XP20000 and HP XP24000) - Hitachi Virtual Storage Platform (excluding P9500) - VSP G1000(excluding XP7) - HUS100 - HUS VM Use XP-ODM version 5.0.52.1 or later if you are using any of the following storage systems: - HP XP series - P9500 - HP XP7
22	An update cannot be performed if the currently installed version of HDLM is 5.8.1 or earlier.
23	You can use the alt_disk_copy and nim commands to perform HDLM upgrade installation to alternate disks.
25	Boot disks that use virtual SCSI disks in a virtual I/O client partition can be managed by HDLM in a virtual I/O server partition.
27	Boot disks that use virtual HBA through the NPIV functionality in a virtual I/O client partition can be managed by HDLM in a virtual I/O client partition.
28	This product is mutually exclusive with HDLM.
29	HDLM and other path management software may be able to coexist if they manage separate storage systems. Please contact appropriate person in Hitachi Vantara.
33	Coexistence with SDD is possible. However, storage system managed by SDD and storage system managed by HDLM are only supported in configurations that are connected by using a different instance of HBA or a separate switch.
34	You cannot share HBAs used by HDLM.
35	Applies to PowerPath 4.5.3 and later.
36	Before introducing HDLM, remove storage system devices of Hitachi products from PowerPath management.
43	Microprogram version 08B8/D or later is required for using Dynamic I/O Path Control on Hitachi AMS2000 series/Hitachi SMS series.
45	Global-active devices are supported.
46	High Availability is supported.
47	A refresh operation that reflects the setting of the non-preferred path option to HDLM is supported when a global-active device (called the High Availability feature in the case of XP7) is used.
49	Set the reserve_policy attribute of an hdisk that is to become a global-active device pair volume to no_reserve.
50	Apply this version when a global-active device is used.
51	When you use a normal VOL as a global-active device pair VOL, use this version.
52	When you use a normal VOL as a High Availability pair VOL, use this version.
53	The dlnkmgr command and HGLM display "VSP_Gx00" as the model ID of the storage
54	Apply this version when an HAM environment is used.
55	When you use the HAM functionality with USP V or XP24000, apply 70-03-00-XX/XX or later.

IMPORTANT NOTE

HDLM is dependent only on the driver version, not the HBA model. For this reason, specific HBA models are no longer listed, just driver versions. So if the HBA driver version is supported, then HDLM is supported. This also means that OEM versions are supported, as long as the driver is supported.

AIX 7.1					HDLM Version		
OS	HBA/CNA			Driver	8.7.8	8.8.0	8.8.1
AIX 7.1	Fibre Channel	IBM	-	AIX Bundle			
		QLogic	QMI2472	AIX Bundle	8	8	8
			QMI2572	AIX Bundle	8	8	8
	Fibre Channel over Ethernet	IBM	FC5708	AIX Bundle			

Supported	
Not Supported	

Notes	
8	HBA hot swap is not supported for this HBA because this HBA does not support hot plug.

AIX 7.2					HDLM Version		
OS	HBA/CNA			Driver	8.7.8	8.8.0	8.8.1
AIX 7.2	Fibre Channel	IBM	-	AIX Bundle			
		QLogic	QMI2472	AIX Bundle	8	8	8
			QMI2572	AIX Bundle	8	8	8
	Fibre Channel over Ethernet	IBM	FC5708	AIX Bundle			

Supported	
Not Supported	

Notes	
8	HBA hot swap is not supported for this HBA because this HBA does not support hot plug.

AIX Maintenance Levels

OS		HDLM Version		
Version	ML	8.7.8	8.8.0	8.8.1
7.1	No TL			
	TL01			
	TL02			
	TL03			
	TL04	**SP1 or later are supported,3**	**SP1 or later are supported,3**	**SP1 or later are supported,3**
	TL05	**3**	**3**	**3**
7.2	No TL	**3,5,6**	**3,5,6**	**3,5,6**
	TL01	**SP1 or later are supported,3,5,6**	**SP1 or later are supported,3,5,6**	**SP1 or later are supported,3,5,6**
	TL02	**3,5,6**	**3,5,6**	**3,5,6**
	TL03	**5,6**	**5,6**	**5,6**
	TL04	**5,6, APAR IJ22290**	**5,6, APAR IJ22290**	**5,6, APAR IJ22290**
	TL05			

Supported	
Not Supported	

Notes	
All SPs are supported unless otherwise specified.	
SPx or later are supported.	Apply specified SP or later version.
3	An error might be detected due to a problem with APAR IJ05687 even if an online path exists when some of the paths have an error on the following OSs: Affected OS: AIX 6.1 TL09 SP10, SP11 AIX 7.1 TL04 SP5, SP6 AIX 7.1 TL05 SP1, SP2 AIX 7.2 TL00 SP5, SP6 AIX 7.2 TL01 SP3, SP4 AIX 7.2 TL02 SP0, SP1, SP2 If you use either of the above OSs, perform the following to avoid this problem. Before configuring an hdisk device, execute the dlmodmset utility for setting the HDLM execution environment ODM to specify on for the LUN RESET option. If an hdisk device is already configured, specify on for the LUN RESET option, and then reconfigure the hdisk device or restart the host.
5	If you want to run Live Update while a Hitachi storage system is connected, you must apply APAR IJ08437 in advance.
6	If using HDLM in the boot disk environment, if "PR_exclusive" is specified for the "reserved_policy" attribute of hdisk used for rootvg, you must apply APAR IJ08438 in advance. If APAR IJ08438 is not applied, To prevent the problem of AIX from occurring, before running Live Update, specify "no_reserve" for the "reserve_policy" attribute for the hdisk that is currently used as the rootvg.
APAR IJ22290	Apply APAR IJ22290. You might have to request this of IBM directly if it is not publicly available. All SPs are supported

AIX VIO Support

VIOS		HDLM Version		
Name	Version	8.7.8	8.8.0	8.8.1
VIOS	2.2.0.xx			
	2.2.1.xx			
	2.2.2.xx			
	2.2.3.xx			
	2.2.4.xx			
	2.2.5.xx			
	2.2.6.xx			
	3.1.0.xx	**13,19**	**13,19**	**13,19**
	3.1.1.xx	**13,19**	**13,19**	**13,19**
	3.1.2.xx	**13,19**	**13,19**	**13,19**

Supported	
Not Supported	

Notes	
In environments that do not use the VIOS NPIV functionality, use of HDLM in a client partition is not supported. Use HDLM only in a server partition.	
HDLM supports the IBM PowerVM Live Partition Mobility functionality.	
When using the ioslevel NPIV (N-Port ID Virtualization) functionality, HDLM can be installed to a client partition, and can manage paths by using virtual Fibre Channel from the client partition. In this case, the procedures and requirments for using HDLM are the same as for using HDLM in a environment where a virtual I/O server is not used.	
13	If you are using the Disk Fencing functionality of the quarantine policy, be sure to stop the cluster system before adding a path.
18	An error might be detected due to a problem with APAR IJ05687 even if an online path exists when some of the paths have an error on the following OSs: Affected OS: VIOS 2.2.4.50, 2.2.4.60 VIOS 2.2.5.30, 2.2.5.40 VIOS 2.2.6.0 or later If you use either of the above VIOSs, perform the following to avoid this problem. Before configuring an hdisk device, execute the dlmodmset utility for setting the HDLM execution environment ODM to specify on for the LUN RESET option. If an hdisk device is already configured, specify on for the LUN RESET option, and then reconfigure the hdisk device or restart the host.
19	In environment that use HDLM, viosupgrade command of VIOS is not supported.

Supported AIX GPFS and Cluster Configurations				
AIX	GPFS	HDLM Version		
		8.7.8	8.8.0	8.8.1
7.1	3.4			
	3.5			
	4.1/4.2			
	5.0			
7.2	3.4			
	3.5			
	4.1/4.2			
	5.0			

Supported	
Not Supported	

Notes	
4	Set the NSD option [usePersistentReserve] to "no".

VMware vSphere ESXi				HDLM Version		
				8.7.6	8.8.0	8.8.1
Product Modifications and Additional Functions	Remote Management Client		Windows	7,22	7,22	7,22
	CLI			17	17	17
	Manual Fail Over (CLI)		HBA port WWN designation			
			per CHA			
	Manual Fail Back (CLI)		HBA port WWN designation			
			per CHA			
	Automatic Fail Over					
	Automatic Fail Back			1, 2	1, 2	1, 2
	Health Check			1, 2	1, 2	1, 2
	Path Blockade					
	Target Side Failover					
	Load Balance (Round Robin)			3	3	3
	Load Balance (Extended Round Robin)					
	Load Balance (Extended Least I/O)					
	Load Balance (Extended Least Blocks)					
	Automatic Discovery					
	Dynamic Reconfiguration (LU addition/deletion)					
	Error Log					
	Upgrade Install					
	Service Pack					
	HBA I/F		FC	5	5	5
			iSCSI	5	5	5
			FCoE	5	5	5
	Boot Disk		FC	5	5	5
			iSCSI	5	5	5
			FCoE	5	5	5
	RAID Manager Command Device					
	HBA port WWN Display					
	Combination with ESXi-bundled PSP			4	4	4
	Guest OS			6	6	6
	Combination with HGLM			12	12	12
	High Availability Manager			18	18	18
	Dynamic I/O Path Control			13	13	13
	Specifying the number of times the same path can be used for I/O operations when the load balancing is used.					
	Specifying the number of times the same path can be used for random I/O operations when extended load balancing is used.					
	VMware vSphere High Availability					
	VMware vSphere Virtual Volumes					
Systems	Storage System	Interface	Microcode version			
	Hitachi Adaptable Modular Storage AMS200	Fibre Channel	0786/F or later			
		iSCSI	0786/F or later			
	Hitachi Adaptable Modular Storage AMS500	Fibre Channel	0786/F or later			
		iSCSI	0786/F or later			
	Hitachi Adaptable Modular Storage AMS1000	Fibre Channel	0786/F or later			
		iSCSI	0786/F or later			
	Hitachi Workgroup Modular Storage WMS100	Fibre Channel	0786/F or later			
		iSCSI	0786/F or later			
	Hitachi Adaptable Modular Storage AMS2100	Fibre Channel	08B3/A or later			
		iSCSI	08B3/A or later			
	Hitachi Adaptable Modular Storage AMS2300	Fibre Channel	08B3/A or later			
		iSCSI	08B3/A or later			
	Hitachi Adaptable Modular Storage AMS2500	Fibre Channel	08B3/A or later			
		iSCSI	08B3/A or later			
	Hitachi Unified Storage 110	Fibre Channel	0915/A or later			
		iSCSI	0915/A or later			
	Hitachi Unified Storage 130	Fibre Channel	0915/A or later			
		iSCSI	0915/A or later			
	Hitachi Unified Storage 150	Fibre Channel	0915/A or later			
		iSCSI	0915/A or later			
	SMS 100	Fibre Channel	08B3/A or later			
	Hitachi Universal Storage Platform V	Fibre Channel	60-08-xx or later			
	Hitachi Universal Storage Platform VM	Fibre Channel	60-08-xx or later			
	Hitachi Virtual Storage Platform	Fibre Channel	70-02-xx or later			
		Fibre Channel	70-03-xx or later(*24)(*25)			
	Hitachi Virtual Storage Platform 5100	Fibre Channel	90-01-41-XX/XX or later			
		iSCSI	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5100H	Fibre Channel	90-01-41-XX/XX or later			
		iSCSI	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5200	Fibre Channel	90-08-01-XX/XX or later			
		iSCSI	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5200H	Fibre Channel	90-08-01-XX/XX or later			
		iSCSI	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5500	Fibre Channel	90-01-41-XX/XX or later			
		iSCSI	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5500H	Fibre Channel	90-01-41-XX/XX or later			
		iSCSI	90-01-41-XX/XX or later			
	Hitachi Virtual Storage Platform 5600	Fibre Channel	90-08-01-XX/XX or later			
		iSCSI	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform 5600H	Fibre Channel	90-08-01-XX/XX or later			
		iSCSI	90-08-01-XX/XX or later			
	Hitachi Virtual Storage Platform G1500	Fibre Channel	80-05-0X-XX/XX or later			
		iSCSI	80-05-0X-XX/XX or later			
	Hitachi Virtual Storage Platform G1000	Fibre Channel	80-01-2X-XX/XX or later	15	15	15
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later	15	15	15
		Fibre Channel	80-02-4X-XX/XX or later	20	20	20
	Hitachi Virtual Storage Platform G200	Fibre Channel	83-01-01-20/XX or later			
		Fibre Channel	83-01-2X-20/XX or later(*19)			
		iSCSI	83-01-01-20/XX or later			
	Hitachi Virtual Storage Platform G350	Fibre Channel	88-01-03-20/XX or later			
		iSCSI	88-01-03-20/XX or later			
	Hitachi Virtual Storage Platform G370	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform G400	Fibre Channel	83-01-01-40/XX or later			
		Fibre Channel	83-01-2X-40/XX or later(*19)			

Supported Storage	G400	iSCSI	83-01-01-40/XX or later			
	Hitachi Virtual Storage Platform G600	Fibre Channel	83-01-01-40/XX or later			
		Fibre Channel	83-01-2X-40/XX or later(*19)			
		iSCSI	83-01-01-40/XX or later			
	Hitachi Virtual Storage Platform G700	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform G800	Fibre Channel	83-01-2X-60/XX or later			
		iSCSI	83-01-2X-60/XX or later			
	Hitachi Virtual Storage Platform G900	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F1500	Fibre Channel	80-05-0X-XX/XX or later			
		iSCSI	80-05-0X-XX/XX or later			
	Hitachi Virtual Storage Platform F350	Fibre Channel	88-01-03-20/XX or later			
		iSCSI	88-01-03-20/XX or later			
	Hitachi Virtual Storage Platform F370	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F400	Fibre Channel	83-02-01-40/XX or later	**23**	**23**	**23**
			83-03-01-40/XX or later			
		iSCSI	83-02-01-40/XX or later	**23**	**23**	**23**
			83-03-01-40/XX or later			
	Hitachi Virtual Storage Platform F600	Fibre Channel	83-02-01-40/XX or later	**23**	**23**	**23**
			83-03-01-40/XX or later			
		iSCSI	83-02-01-40/XX or later	**23**	**23**	**23**
			83-03-01-40/XX or later			
	Hitachi Virtual Storage Platform F700	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F800	Fibre Channel	83-02-01-60/XX or later	**23**	**23**	**23**
			83-03-01-60/XX or later			
		iSCSI	83-02-01-60/XX or later	**23**	**23**	**23**
			83-03-01-60/XX or later			
	Hitachi Virtual Storage Platform F900	Fibre Channel	88-01-03-60/XX or later			
		iSCSI	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform N400	Fibre Channel	83-06-01-40/XX or later			
		iSCSI	83-06-01-40/XX or later			
	Hitachi Virtual Storage Platform N600	Fibre Channel	83-06-01-40/XX or later			
		iSCSI	83-06-01-40/XX or later			
	Hitachi Virtual Storage Platform N800	Fibre Channel	83-06-01-60/XX or later			
		iSCSI	83-06-01-60/XX or later			
	Hitachi Virtual Storage Platform E590	Fibre Channel	93-03-22-XX/XX or later			
		iSCSI	93-03-22-XX/XX or later			
	Hitachi Virtual Storage Platform E590H	Fibre Channel	93-05-02-XX/XX or later			
		iSCSI	93-05-02-XX/XX or later			
	Hitachi Virtual Storage Platform E790	Fibre Channel	93-03-22-XX/XX or later			
		iSCSI	93-03-22-XX/XX or later			
	Hitachi Virtual Storage Platform E790H	Fibre Channel	93-05-02-XX/XX or later			
		iSCSI	93-05-02-XX/XX or later			
	Hitachi Virtual Storage Platform E990	Fibre Channel	93-01-02-60/XX or later			
		iSCSI	93-01-02-60/XX or later			
	Hitachi Unified Storage VM	Fibre Channel	73-01-0X-XX/XX or later			
		Fibre Channel	73-03-0X-XX/XX or later(*24)			
	HP StorageWorks XP20000 Disk Array	Fibre Channel	60-08-xx or later			
	HP StorageWorks XP24000 Disk Array	Fibre Channel	60-08-xx or later			
	HP StorageWorks P9500 Disk Array	Fibre Channel	60-02-xx or later			
		Fibre Channel	70-03-xx or later(*24)(*25)			
	HPE XP8 Storage	Fibre Channel	90-01-41-XX/XX or later	**16**	**16**	**16**
	HP XP7 Storage	Fibre Channel	80-01-2X-XX/XX or later	**16**	**16**	**16**
		Fibre Channel over Ethernet	80-02-0X-XX/XX or later	**16**	**16**	**16**
		Fibre Channel	80-02-4X-XX/XX or later	**21**	**21**	**21**
		Fibre Channel	80-05-0X-XX/XX or later			
Exclusive Products	HDLM for Windows			**8**	**8**	**8**

Supported	
Not Supported	

	Notes
1	This functionality cannot be disabled because the OS-provided functionality is used.
2	The check interval cannot be changed because the OS-provided functionality is used.
3	You can use Round Robin by setting "vmwrr" for load balancing from HDLM Remote Management Client.
4	You can use the following Path Selection Plugins (PSPs) provided by VMware: - VMW_PSP_MRU - VMW_PSP_RR
5	You can use the following HBAs and HBA drivers: - Inbox drivers for ESXi 6.0/6.5/6.7/7.0 or HBA drivers that support ESXi 6.0/6.5/6.7/7.0 as listed in the VMware Compatibility Guide (https://www.vmware.com/resources/compatibility/search.php). - HBAs and HBA drivers for Hitachi Compute Blade that support ESXi 6.0/6.5/6.7/7.0 as listed in the VMware Compatibility Guide.
6	Contact VMware for details about the supported guest OSs. Note that precautions related to NMP also apply to HDLM environments.
7	For VMware, a remote management client, separate from ESXi 6.0/6.5/6.7/7.0 that is connected to storage system, is required for CLI multipath management. The supported OS versions for remote management clients are shown in the table "Supported OS versions for remote management clients" below.
8	Do not install HDLM for Windows on a host that is used as a remote management client for HDLM for VMware.
12	To link with HGLM, use an OS other than Windows Vista for the remote management client.
13	Microprogram version 08B8/D or later is required for using Dynamic I/O Path Control on Hitachi AMS2000 series/Hitachi SMS series.
14	Supported with some conditions customer-by-customer basis (SUI 044226). Please contact appropriate person in Hitachi Vantara.
15	Global-active devices are supported.
16	High Availability is supported.
17	A refresh operation that reflects the setting of the non-preferred path option to HDLM is supported when a global-active device (called the High Availability feature in the case of XP7) is used.
18	This is supported in an HAM environment by the following OSs: VMware vSphere ESXi 6.0 Update 2 VMware vSphere ESXi 6.5 VMware vSphere ESXi 6.5 Update 3 For information about functional restrictions, see the HAM User Guide.
19	Apply this version when a global-active device is used.
20	When you use a normal VOL as a global-active device pair VOL, use this version.
21	When you use a normal VOL as a High Availability pair VOL, use this version.

22	For an ESXi host, install HDLM whose version is the same as or earlier than the version of HDLM installed on the remote management client. When installing HDLM whose version is earlier than the version of HDLM installed on the ESXi host, note the following restrictions: - Install HDLM version 8.0.0 or later on the ESXi host. - Do not preform operations using HDLM commands if those operations are not supported by the earlier HDLM version. - When you use the following combination of versions, an operation to refresh the host information fails in HGLM. Use HGLM version 8.5.1 or later, or use HDLM version 8.5.1 or later on the remote management client. HGLM 8.5.0, HDLM 8.5.0 on the remote management client, and a version from 8.0.0 to 8.4.0 of HDLM on the ESXi host
23	The dlnkmgr command and HGLM display "VSP_Gx00" as the model ID of the storage system.
24	Apply this version when an HAM environment is used.
25	When you use the vStorage APIs for Array Integration with HAM, apply 70-05-00-XX/XX or later.

Supported OS versions for remote management clients

Windows

Version	Architecture	CLI used on a remote management client	Version of the CLI used on a remote management client	HDLM Version 8.7.6	8.8.0	8.8.1
Windows 7 No SP	IA32 / x86	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
Windows 7 SP1	IA32 / x86	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
Windows 8 No SP	IA32 / x86	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
			6.5			
Windows 10 No SP	x64 / x86_64	vSphere Command-Line Interface	6.5			
			6.7			
		VMware PowerCLI(*2)	11.3.0			
			11.4.0			
			11.5.0			
			12.0.0			
			12.3.0	1	1	1
Windows 2008 No SP	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
			6.5			
			6.7			
Windows 2008 SP2	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
			6.5			
			6.7			
Windows 2008 R2 SP1	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
			6.5			
			6.7			
Windows 2012 R2 No SP	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
			6.5			
			6.7			
		VMware PowerCLI(*2)	11.3.0			
			11.4.0			
			11.5.0			
			12.0.0			
			12.3.0	1	1	1
Windows 2016	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
			6.5			
			6.7			
		VMware PowerCLI(*2)	11.3.0			
			11.4.0			
			11.5.0			
			12.0.0			
			12.3.0	1	1	1
Windows 2019	x64 / x86_64	vSphere Command-Line Interface	6.0/6.0u1/6.0u2			
			6.5			
			6.7			
		VMware PowerCLI(*2)	11.3.0			
			11.4.0			
			11.5.0			
			12.0.0			
			12.3.0	1	1	1

Supported	
Not Supported	

Notes	
1	The following functionalities have restrictions. - dlmperfinfo utility - Linkage with HGLM
2	When you use ESXi6.x on the ESXi host, use PowerCLI version from 11.3.0 to 11.5.0 to be installed on the remote management client. When you use ESXi7 or ESXi7 update1 on the ESXi host, use PowerCLI version 12.0.0 to be installed on the remote management client. When you use ESXi7 update2 on the ESXi host, use PowerCLI version 12.3.0 to be installed on the remote management client.

Supported JRE Versions

Windows

Version	Architecture	JRE Version	HDLM Version 8.7.6	HDLM Version 8.8.0	HDLM Version 8.8.1
Windows 2008	IA32 / x86	6.0_17			
		1.6.0			
		1.7.0			
		1.8.0			
	Itanium / IA64	6.0_17			
		1.6.0			
		1.7.0			
		1.8.0			
	x64 / x86_64	6.0_17			
		1.6.0			
		1.7.0			
		1.8.0			
Windows 2008 SP2	IA32 / x86	6.0_17			
		1.6.0			
		7.0_01			
		1.7.0			
		1.8.0			
	Itanium / IA64	6.0_17			
		1.6.0			
		1.7.0			
		1.8.0			
	x64 / x86_64	6.0_17			
		1.6.0			
		7.0_01			
		1.7.0			
		1.8.0			
Windows 2008 R2	Itanium / IA64	1.6.0			
		1.7.0			
		1.8.0			
	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0			
Windows 2008 R2 SP1	Itanium / IA64	1.6.0			
	x64 / x86_64	1.6.0			
		7.0_01			
		1.7.0			
		1.8.0			
Windows 2012	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0	2, 3, 4	2, 3, 4	2, 3, 4
Windows 2012 R2	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0	2, 3, 4	2, 3, 4	2, 3, 4
Windows 2016	x64 / x86_64	1.8.0	2, 3, 4	2, 3, 4	2, 3, 4
Windows 2019	x64 / x86_64	1.8.0	2, 3, 4	2, 3, 4	2, 3, 4

Supported	
Not Supported	

Notes	
2	Only the 32-bit version is supported.
3	The JRE is included in the HDLM package and is installed simultaneously with HDLM.

4	To change the JRE, execute the command javapath_set. For information about the command javapath_set, see the Hitachi Command Suite Administrator Guide. If you use a JRE that is not bundled in HDLM, note that only the JRE from Oracle Corporation is supported.
8	This version is supported only when an HDLM upgrade installation is performed.

Solaris

Version	Architecture	JRE Version	HDLM Version		
			8.7.6	8.8.0	8.8.1
8, 9	SPARC	1.4.2_15 or later			
		5.0_11 or later			
		6.0_17 or later			
10	SPARC	1.4.2_15 or later			
		5.0_11 or later			
		6.0_17 or later			
		7.0 or later			
		8.0 or later	1,5	1,5	1,5
11	SPARC	6.0_17 or later			
		7.0 or later			
		8.0 or later	1,5	1,5	1,5

Supported	
Not Supported	

Notes	
1	Required for the HDLM Advanced functionality Note that, for the JRE to be used, only the JRE from Oracle Corporation is supported.
2	Only the 32-bit version is supported.
5	The 64bit version is supported.
8	This version is supported only when an HDLM upgrade installation is performed.

AIX

Version	Architecture	JRE Version	HDLM Version		
			8.7.8	8.8.0	8.8.1
7.1	POWER	8 32-bit (build ppc-32 20150116_231420) or later	1,2	1,2	1,2
7.2	POWER	8 32-bit (build ppc-32 20150116_231420) or later	1,2	1,2	1,2

Supported	
Not Supported	

Notes

1	Required for the HDLM Advanced functionality Note that, for the JRE to be used, only the JRE from IBM is supported.
2	Only the 32-bit version is supported.
8	This version is supported only when an HDLM upgrade installation is performed.

HP-UX

OS	Architecture	JRE Version	HDLM Version 6.1.0	6.5.0	6.5.1
11iV1	PA-RISC	1.4.2_17 or later	1	1	1
		5.0_11 or later	1	1	1
		6.0_17 or later		1	1
11iV2 Sept. 2004 May 2005 Dec. 2005 Mar. 2006 June 2006 Sept. 2006 June 2007 Dec. 2007 June 2008	PA-RISC and Itanium	1.4.2_17 or later	1	1	1
		5.0_11 or later	1	1	1
		6.0_17 or later		1	1

Supported	
Not Supported	

Notes	
1	Required for the HDLM Advanced functionality

Red Hat Linux

Version	Architecture	JRE Version	HDLM Version 8.7.8	8.8.0	8.8.1
5.5 or later	Intel x86	5.0			
		1.8.0			
	IA64 / Itanium	5.0			
		1.8.0			
	EM64T AMD64	5.0			
		1.8.0			
6.0 or later	Intel x86	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
	EM64T AMD64	5.0	6	6	6
		1.8.0	4, 5	4, 5	4, 5
7.0 or later	EM64T AMD64	1.7.0			
		1.8.0	4, 5, 6	4, 5, 6	4, 5, 6

Supported	
Not Supported	

Notes	
2	Only the 32-bit version is supported.

4	To change the JRE, execute the command javapath_set. For information about the command javapath_set, see the Hitachi Command Suite Administrator Guide. If you use a JRE that is not bundled in HDLM, note that only the JRE from Oracle Corporation is supported.
5	The 64bit version is supported.
6	By default, the JRE included in the HDLM package is used for the functions of HDLM Advanced.

Oracle Unbreakable Enterprise Kernel

Version	Architecture	JRE Version	HDLM Version		
			8.7.8	8.8.0	8.8.1
6.2 to 6.5	Intel x86	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
	EM64T AMD64	5.0	6	6	6
		1.8.0	4, 5	4, 5	4, 5
6.6 or later	EM64T AMD64	5.0	6	6	6
		1.8.0	4, 5	4, 5	4, 5
7.0 or later	EM64T AMD64	1.7.0			
		1.8.0	4, 5, 6	4, 5, 6	4, 5, 6

Supported	
Not Supported	

Notes	
2	Only the 32-bit version is supported.
4	To change the JRE, execute the command javapath_set. For information about the command javapath_set, see the Hitachi Command Suite Administrator Guide. If you use a JRE that is not bundled in HDLM, note that only the JRE from Oracle Corporation is supported.
5	The 64bit version is supported.
6	By default, the JRE included in the HDLM package is used for the functions of HDLM Advanced.

Oracle Linux

Version	Architecture	JRE Version	HDLM Version		
			8.7.8	8.8.0	8.8.1
6.5 or later	Intel x86	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
	EM64T AMD64	5.0	6	6	6
		1.8.0	4, 5	4, 5	4, 5
7.0 or later	EM64T AMD64	1.7.0			
		1.8.0	4, 5, 6	4, 5, 6	4, 5, 6

Supported	
Not Supported	

Notes	
2	Only the 32-bit version is supported.

4	To change the JRE, execute the command javapath_set. For information about the command javapath_set, see the Hitachi Command Suite Administrator Guide. If you use a JRE that is not bundled in HDLM, note that only the JRE from Oracle Corporation is supported.
5	The 64bit version is supported.
6	By default, the JRE included in the HDLM package is used for the functions of HDLM Advanced.

SUSE Linux

Version	Architecture	JRE Version	HDLM Version 8.7.8	HDLM Version 8.8.0	HDLM Version 8.8.1
10 (SP2 or later)	Intel x86	5.0			
		1.8.0			
	IA64 / Itanium	5.0			
		1.8.0			
	EM64T AMD64	5.0			
		1.8.0			
11	Intel x86	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
	IA64 / Itanium	5.0			
		1.8.0			
	EM64T AMD64	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
12	EM64T AMD64	1.7.0			
		1.8.0	4, 5, 6	4, 5, 6	4, 5, 6
15	EM64T AMD64	1.8.0	4, 5, 6	4, 5, 6	4, 5, 6

Supported	
Not Supported	

Notes	
2	Only the 32-bit version is supported.
4	To change the JRE, execute the command javapath_set. For information about the command javapath_set, see the Hitachi Command Suite Administrator Guide. If you use a JRE that is not bundled in HDLM, note that only the JRE from Oracle Corporation is supported.
5	The 64bit version is supported.
6	By default, the JRE included in the HDLM package is used for the functions of HDLM Advanced.

VMware (*7)

Version	Architecture	JRE Version	HDLM Version 8.7.6	HDLM Version 8.8.0	HDLM Version 8.8.1
Windows Vista SP1	IA32 / x86	1.6.0			
		1.7.0			
		1.8.0			
	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0			
Windows Vista SP2	IA32 / x86	1.6.0			
		1.7.0			
		1.8.0			
		1.6.0			

	x64 / x86_64	1.7.0			
		1.8.0			
Windows 7 No SP	IA32 / x86	1.6.0			
		1.7.0			
		1.8.0			
	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0			
Windows 7 SP1	IA32 / x86	1.6.0			
		1.7.0			
		1.8.0			
	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0			
Windows 8 No SP	IA32 / x86	1.6.0			
		1.7.0			
		1.8.0	2,4,6	2,4,6	2,4,6
	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0	2,4,6	2,4,6	2,4,6
Windows 10 No SP	x64	1.8.0	2,4,6	2,4,6	2,4,6
Windows 2008 No SP	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0			
Windows 2008 SP2	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0			
Windows 2008 R2 SP1	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0			
Windows 2012 R2 No SP	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0	2,4,6	2,4,6	2,4,6
Windows 2016	x64 / x86_64	1.8.0	2,4,6	2,4,6	2,4,6

Supported	
Not Supported	

Notes	
2	Only the 32-bit version is supported.
4	To change the JRE, execute the command javapath_set. For information about the command javapath_set, see the Hitachi Command Suite Administrator Guide. If you use a JRE that is not bundled in HDLM, note that only the JRE from Oracle Corporation is supported.
6	By default, the JRE included in the HDLM package is used for the functions of HDLM Advanced.
7	JRE is used on a remote management client.

Supported Cluster Configurations and Volume Managers								
Operating System		Cluster (*66)		Volume Manager		HDLM 8.7.6	HDLM 8.8.0	HDLM 8.8.1
Windows 2008	IA32 / x86	No Cluster		No VM				
		MSCS						
	Itanium / IA64	No Cluster		No VM				
		MSCS						
	X64 / x86_64	No Cluster		No VM				
		MSCS		No VM				
Windows 2008 Service Pack 2	IA32 / x86	No Cluster		No VM				
		MSCS						
	Itanium / IA64	No Cluster		No VM				
		MSCS						
	X64 / x86_64	No Cluster		No VM				
		MSCS		No VM				
		Symantec VCS	5.1	Symantec VxVM	5.1			
Windows 2008 R2	Itanium / IA64	No Cluster		No VM				
		MSCS						
	X64 / x86_64	No Cluster		No VM				
		MSCS		No VM				
		Lifekeeper	7.0	No VM				
Windows 2008 R2 Service Pack 1	Itanium / IA64	No Cluster		No VM				
		MSCS						
	X64 / x86_64	No Cluster		No VM				
		MSCS						
		Symantec VCS	6.1	Symantec VxVM	6.1			
Windows 2012	X64 / x86_64	No Cluster		No VM				
		MSCS		No VM				
		Lifekeeper	8.0.1	No VM				
Windows 2012 R2	X64 / x86_64	No Cluster		No VM				
		MSCS		No VM				
		Lifekeeper	8.2.1	No VM				
			8.3.0	No VM				
Windows 2016	X64 / x86_64	No Cluster		No VM				
		MSCS		No VM				
Windows 2019	X64 / x86_64	No Cluster		No VM				
		MSCS		No VM				

Supported	
Not Supported	

Notes	
65	Maintenance Pack 1 (MP1) is required.
66	The following lists the reserve functionalities that HDLM supports for each OS cluster:

OS	Cluster Name	Reserve Functionality	Remarks
Windows	MSFC	Used regularly	
	VCS	Used regularly	
	LifeKeeper	(Used without reserve)	

OS		Cluster (*25)		Volume Manager		HDLM 8.7.6	HDLM 8.8.0	HDLM 8.8.1
		No Cluster		No VM				
				SVM		5,11,13	5,11,13	5,11,13
				Symantec VxVM	4.1			
					5.0			
					5.1	18	18	18
		SunCluster	3.1 (8/05)	No VM				
				SVM				
				Symantec VxVM	4.1			
			3.2	No VM				
				SVM				
				VxVM	5.0			
			3.2 (2/08)	No VM				
				SVM				
				VxVM	5.0			
			3.2(1/09)	No VM				
				SVM				
				VxVM	5.0			

Solaris SPARC	10 (64 bit)			VxVM	5.1			
			3.2(11/09)	No VM				
				SVM				
				VxVM	5.0			
					5.1			
		SolarisCluster	3.3	No VM		10	10	10
				SVM		6,10,13,18	6,10,13,18	6,10,13,18
				VxVM	5.1	10,18	10,18	10,18
			3.3(5/11)	No VM		10	10	10
				SVM		6,10,13,18	6,10,13,18	6,10,13,18
				VxVM	5.1	10,18	10,18	10,18
			3.3(3/13)	No VM		10	10	10
				SVM		6,10,13,18	6,10,13,18	6,10,13,18
				VxVM	5.1	10,18	10,18	10,18
		Symantec VCS	4.1	No VM				
				SVM				
			5.0	No VM				
				Symantec VxVM	5.0			
			5.1	No VM		1,2,7,14,21,28	1,2,7,14,21,28	1,2,7,14,21,28
				Symantec VxVM	5.1	1,2,14,15,18,19,28	1,2,14,15,18,19,28	1,2,14,15,18,19,28
			6.0	No VM		1,2,7,23,28	1,2,7,23,28	1,2,7,23,28
				Symantec VxVM	6.0	1,2,7,18,23,28	1,2,7,18,23,28	1,2,7,18,23,28
			6.0.3	No VM		1,2,7,23,28	1,2,7,23,28	1,2,7,23,28
				Symantec VxVM	6.0.3	1,2,7,18,23,28	1,2,7,18,23,28	1,2,7,18,23,28
		Veritas Infoscale	7.1	No VM		1,2,7,23,28	1,2,7,23,28	1,2,7,23,28
				VxVM	7.1	1,2,7,18,23,28	1,2,7,18,23,28	1,2,7,18,23,28
	11(64bit)	SolarisCluster	4.0	No VM		13,18,22	13,18,22	13,18,22
				SVM		13,18,22	13,18,22	13,18,22
		Symantec VCS	6.0	No VM		1,2,21,28	1,2,21,28	1,2,21,28
				Symantec VxVM	6.0	1,2,11,21,28	1,2,11,21,28	1,2,11,21,28
	11.1(64bit)	SolarisCluster	4.1	No VM		13,18,22	13,18,22	13,18,22
				SVM		13,18,22	13,18,22	13,18,22
		Symantec VCS	6.0.3	No VM		1,2,7,11,28	1,2,7,11,28	1,2,7,11,28
				Symantec VxVM	6.0.3	1,2,7,11,21,28	1,2,7,11,21,28	1,2,7,11,21,28
			6.1.1	No VM		1,2,7,11,28	1,2,7,11,28	1,2,7,11,28
				Symantec VxVM	6.1.1	1,2,7,11,21,28	1,2,7,11,21,28	1,2,7,11,21,28
			6.2.0	No VM		1,2,7,11,28	1,2,7,11,28	1,2,7,11,28
				Symantec VxVM	6.2.0	1,2,7,11,21,28	1,2,7,11,21,28	1,2,7,11,21,28
	11.2(64bit)	SolarisCluster	4.2	No VM		13,18,22,24	13,18,22,24	13,18,22,24
				SVM		13,18,22,24	13,18,22,24	13,18,22,24
		Symantec VCS	-	No VM				
				Symantec VxVM	-			
			6.2.1	No VM				
				Symantec VxVM	-	11,13,22,24,28	11,13,22,24,28	11,13,22,24,28
	11.3(64bit)	SolarisCluster	4.3	No VM		13,18,22,24	13,18,22,24	13,18,22,24
				SVM		13,18,22,24	13,18,22,24	13,18,22,24
		Symantec VCS	6.2.1	No VM		11,13,22,24,28	11,13,22,24,28	11,13,22,24,28
				Symantec VxVM	-	11,13,22,24,28	11,13,22,24,28	11,13,22,24,28
		Veritas Infoscale	7.1	No VM		11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
				VxVM	-	11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
			7.2	No VM		11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
				VxVM	-	11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
			7.3 7.3.1	No VM		11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
				VxVM	-	11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
			7.4	No VM		11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
				VxVM	-	11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
	11.4(64bit)	SolarisCluster	4.4	No VM		13,18,22,24	13,18,22,24	13,18,22,24
				SVM		13,18,22,24	13,18,22,24	13,18,22,24
		Veritas Infoscale	7.4.1	No VM		11,13,22,24,26,28	11,13,22,24,26,28	11,13,22,24,26,28
				VxVM	-	11,13,22,24,26 27,28	11,13,22,24,26 27,28	11,13,22,24,26 27,28

Supported	
Not Supported	

	Notes
1	The functionality for linking with SFVS (Storage Foundation Volume Server) in VCS5.0 is not supported.
2	The Disk Reservation Agent functionality of VCS is not supported.
3	I/O fencing is not supported on VCS.
4	The following SVM features are not supported: - Disks with greater than 1 TB capacity - Multi-owner disk sets - Importing of disk sets - Automatic (top-down) volume creation
5	In a configuration that uses a driver other than the Oracle HBA driver (other than the qlc or emlxs driver), the SVM shared diskset cannot use disks managed by HDLM.
6	When the SVM shared diskset uses disks managed by HDLM in a configuration that uses a driver other than the Oracle HBA driver (other than the qlc or emlxs driver), use Oracle Solaris Cluster device IDs (logical device files under /dev/did/dsk). The SVM shared diskset cannot use HDLM logical device names.

7	VCS I/O fencing is supported when using the storage system devices below. The failover service group is the only supported service group. Neither the parallel service group nor the hybrid service group is supported. - USP/NSC/USP V/USP VM/VSP - VP9500 - HP XP10000/XP12000/XP20000/XP24000/SVS/P9500 When using I/O fencing, enable [host mode option 02 (VERITAS Database Edition/Advanced Cluster)] on the storage system. When not using I/O fencing, do not enable [host mode option 02 (VERITAS Database Edition/Advanced Cluster)] on the storage system. Also, set hosts that do and do not use I/O fencing to different host groups.
9	When using I/O fencing, you must apply MP2 or later.
10	Only two-node configurations are supported. Only pathcount is supported in the SCSI protocol (fencing protocol) settings for storage system devices. For details on how to configure the SCSI protocol (fencing protocol) settings for storage devices, see the Oracle Solaris Cluster documentation.
11	ZFS is not supported.
12	EFI labels are not supported.
13	The following SVM features are not supported: - Multi-owner disk sets - Importing of disk sets - Automatic (top-down) volume creation
14	There are no limits on the MP version except when using I/O fencing.
15	When using I/O fencing, you must apply MP1 or later.
16	In two-node configurations, only pathcount is supported in the SCSI protocol (fencing protocol) settings for storage system devices. For details on how to configure the SCSI protocol (fencing protocol) settings for storage system devices, see the Oracle Solaris Cluster documentation.
17	EFI labels and ZFS are supported in two-node configurations only.
18	EFI labels and ZFS are not supported.
19	Support VCS I/O fencing when using the following storage systems. Parallel service group is the only supported service group. Neither failover service group nor hybrid service group is supported. - USP/NSC/USP V/USP VM - HP XP10000/XP12000/XP20000/XP24000/SVS When using the I/O fencing function, enable "host mode option 02(VERITAS Database Edition/Advanced Cluster)" on the storage system. When not using the I/O fencing function, do not enable "host mode option 02(VERITAS Database Edition/Advanced Cluster)" on the storage system. Also, set the host using the I/O fencing function and the host not using the I/O fencing to different host groups.
20	The following storage system devices are supported: - Hitachi Adaptable Modular Storage AMS series. (Microcode version 0880/A and later) - Hitachi Universal Storage Platform V /VM (Microcode version 60-06-05-00/00 and later)
21	VCS I/O fencing is supported when using the storage system device below. The failover service group is the only supported service group. Neither the parallel service group nor the hybrid service group is supported. - AMS2000 When using I/O fencing, enable [Special Reserve Mode 1] on the storage system. When not using I/O fencing, do not enable [Special Reserve Mode 1] on the storage system. Also, set hosts that do and do not use I/O fencing to different host groups.
22	Only "prefer3(SCSI-3)" is supported for the SCSI protocol (fencing protocol) setting of storage system devices.
23	Up to 4096 LUs and up to 8192 paths are supported as HDLM management targets..
24	Linking with Global Link Manager is not supported.
25	The following lists the reserve functionalities that HDLM supports for each OS cluster:

OS	Cluster Name	Reserve Functionality	Remarks
Solaris	VCS	I/O fencing	
	Solaris Cluster	Fencing	

26	Auto refresh of fencing registrations on the coordination points is not supported.
27	Only environments where a new installation of Solaris 11.4 has been performed are supported. Environments where an upgrade installation from Solaris 11.3 has been performed are not supported.
28	Sun Storage 16 Gb Fibre Channel PCIe Host Bus Adapter, Emulex (7101684) is used. If you use the I/O fencing function of VCS, enable the automatic failback function because a path might be placed in the Offline(E) status by node switchover.

OS		Cluster (*3)		Volume Manager	HDLM 8.7.8	HDLM 8.8.0	HDLM 8.8.1
AIX	7.1 (64 bit)	No Cluster		LVM or No LVM			
		HACMP/PowerHA	6.1	LVM			
			7.1				
			7.1.1				
			7.1.2				
			7.1.3				
			7.2		1,4	1,4	1,4
			7.2.1		1,4	1,4	1,4
			7.2.2		1,4	1,4	1,4
			7.2.3		1,4	1,4	1,4
			7.2.4		1,4	1,4	1,4
			7.2.5		1,4	1,4	1,4
		DB2 pureScale	9.8	LVM or No LVM	2	2	2
			10.1		2	2	2
			10.5		2	2	2
			11.1		2	2	2
		No Cluster		LVM or No LVM			
			6.1				
			7.1				
			7.1.1				
			7.1.2				
			7.1.3				

	7.2 (64 bit)	HACMP/PowerHA	7.2	LVM	**1,4**	**1,4**	**1,4**
			7.2.1		**1,4**	**1,4**	**1,4**
			7.2.2		**1,4**	**1,4**	**1,4**
			7.2.3		**1,4**	**1,4**	**1,4**
			7.2.4		**1,4**	**1,4**	**1,4**
			7.2.5		**1,4**	**1,4**	**1,4**
		DB2 pureScale	9.8	LVM or No LVM	**2**	**2**	**2**
			10.1		**2**	**2**	**2**
			10.5		**2**	**2**	**2**
			11.1		**2**	**2**	**2**
			11.5		**2**	**2**	**2**

Supported	
Not Supported	

Notes	
1	To use the Disk Fencing functionality of the quarantine policy, PowerHA
2	If Fast I/O Fencing is not used, use HGLM to set the LB setting of the Tie Breaker Disk to OFF.
3	The following lists the reserve functionalities that HDLM supports for each OS cluster:

OS	Cluster Name	Reserve Functionality	Remarks
AIX	PowerHA	When setting disk fencing for the quarantine policy	
	GPFS	When setting the usePersistentReserve parameter to	
	DB2 PureScale	I/O fencing	

4	If you are using the Disk Fencing functionality of the quarantine policy, be sure to stop the cluster system before adding a path.

OS		**Cluster**		**Volume Manager**	**HDLM**		
					6.1.0	**6.5.0**	**6.5.1**
HP-UX		No Cluster		No VM			
				LVM			
	11i V1.0 PA-RISC	MC/ServiceGuard	A.11.13/14	LVM	**1**		
			A.11.15		**1**		
		Serviceguard	A.11.16				
	11i V2.0 (PA-RISC and Itanium / IA64) September 2004 May 2005 December 2005	No Cluster		No VM			
				LVM			
		Serviceguard	A.11.16	LVM			
			A.11.17			**2**	**2**
			A.11.18				
	11i V2.0 (PA-RISC and Itanium / IA64) March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	No Cluster		No VM			
				LVM			
		Serviceguard	A.11.16	LVM			
			A.11.17			**2**	**2**
			A.11.18				
			A.11.19				

Supported	
Not Supported	

Notes	
1	Lock disks of MC/ServiceGuard A.11.13, A.11.14, A.11.15 are not supported.
2	Only the Itanium/IA64 is supported

OS	**Cluster (*128)**		**Volume Manager**		**HDLM**		
					8.7.8	**8.8.0**	**8.8.1**
	No Cluster		No VM				
			LVM	2.02.16-3.el5			
	RedHat Cluster Suite	1.0.39-1.0	No VM				
			LVM	2.02.16-3.el5			
		6.1					
		6.2					
		6.3					
		6.4					
		7.0					
		7.1					
		7.2					
		7.3					
		7.4					
		7.5					
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					

Red Hat Enterprise Linux 5 IA32 / x86 Processors 2.6.18-8.el5 2.6.18-8.el5PAE	Lifekeeper (*114)	8.3.1	No VM - OR - 2.02.16-3.el5			
		8.3.2				
		8.4.0				
		8.4.1				
		9.0.0				
		9.0.1				
		9.0.2				
		9.1				
		9.1.1				
		9.1.2				
		9.2				
		9.2.1				
		9.2.2				
Red Hat Enterprise Linux 5 Itanium / IA64 Processors 2.6.18-8.el5	No Cluster		No VM			
			LVM	2.02.16-3.el5		
	RedHat Cluster Suite	1.0.39-1.0	No VM			
			LVM	2.02.16-3.el5		
Red Hat Enterprise Linux 5 AMD64 and EM64T Processors 2.6.18-8.el5	No Cluster		No VM			
			LVM	2.02.16-3.el5		
	RedHat Cluster Suite	1.0.39-1.0	No VM			
			LVM	2.02.16-3.el5		
	Lifekeeper (*114)	6.1	No VM - OR - 2.02.16-3.el5			
		6.2				
		6.3				
		6.4				
		7.0				
		7.1				
		7.2				
		7.3				
		7.4				
		7.5				
		8				
		8.1.1				
		8.1.2				
		8.2.0				
		8.2.1				
		8.3.0				

		8.3.1			
		8.3.2			
		8.4.0			
		8.4.1			
		9.0.0			
		9.0.1			
		9.0.2			
		9.1			
		9.1.1			
		9.1.2			
		9.2			
		9.2.1			
		9.2.2			
Red Hat Enterprise Linux 5.1 IA32 / x86 Processors 2.6.18-53.el5 2.6.18-53.el5PAE	No Cluster		No VM		
			LVM	2.02.16-3.el5	
	RedHat Cluster Suite	1.0.50-1.3	No VM		
			LVM	2.02.26-3.el5	
	Lifekeeper (*114)	6.1	No VM - OR - 2.02.26-3.el5		
		6.2			
		6.3			
		6.4			
		7.0			
		7.1			
		7.2			
		7.3			
		7.4			
		7.5			
		8			
		8.1.1			
		8.1.2			
		8.2.0			
		8.2.1			
		8.3.0			
		8.3.1			

		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.1 Itanium / IA64 Processors 2.6.18-53.el5	No Cluster		No VM				
			LVM	2.02.26-3.el5			
	RedHat Cluster Suite	1.0.50-1.3	No VM				
			LVM	2.02.26-3.el5			
Red Hat Enterprise Linux 5.1 AMD64 and EM64T Processors 2.6.18-53.el5	No Cluster		No VM				
			LVM	2.02.26-3.el5			
	RedHat Cluster Suite	1.0.50-1.3	No VM				
			LVM	2.02.26-3.el5			
	Lifekeeper (*114)	6.1	No VM - OR - 2.02.26-3.el5				
		6.2					
		6.3					
		6.4					
		7.0					
		7.1					
		7.2					
		7.3					
		7.4					
		7.5					
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					

		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.2 IA32 / x86 Processors 2.6.18-92.el5 2.6.18-92.el5PAE	No Cluster		No VM				
			LVM	2.02.32-4.el5			
	RedHat Cluster Suite	2.0.84-2	No VM				
			LVM	2.02.32-4.el5			
	Lifekeeper (*114)	6.3	No VM - OR - 2.02.32-4.el5				
		6.4					
		7.0					
		7.1					
		7.2					
		7.3					
		7.4					
		7.5					
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					

		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.2 Itanium / IA64 Processors 2.6.18-92.el5	No Cluster		No VM				
			LVM	2.02.32-4.el5			
	RedHat Cluster Suite	2.0.84-2	No VM				
			LVM	2.02.32-4.el5			
Red Hat Enterprise Linux 5.2 AMD64 and EM64T Processors 2.6.18-92.el5	No Cluster		No VM				
			LVM	2.02.32-4.el5			
	RedHat Cluster Suite	2.0.84-2	No VM				
			LVM	2.02.32-4.el5			
	Lifekeeper (*114)	6.3	No VM - OR - 2.02.32-4.el5				
		6.4					
		7.0					
		7.1					
		7.2					
		7.3					
		7.4					
		7.5					
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					

		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.3 IA32 / x86 Processors 2.6.18-128.el5 2.6.18-128.el5PAE	No Cluster		No VM				
			LVM	2.02.40-6.el5			
	RedHat Cluster Suite	2.0.98-1	No VM				
			LVM	2.02.40-6.el5			
	Lifekeeper (*114)	6.4	No VM - OR - 2.02.40-6.el5				
		7.0					
		7.1					
		7.2					
		7.3					
		7.4					
		7.5					
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
	No Cluster		No VM				
			LVM	2.02.40-6.el5			
	RedHat Cluster Suite	2.0.98-1	No VM				
			LVM	2.02.40-6.el5			

Red Hat Enterprise Linux 5.3 AMD64 and EM64T Processors 2.6.18-128.el5	Lifekeeper (*114)	6.4	No VM - OR - 2.02.40-6.el5		
		7.0			
		7.1			
		7.2			
		7.3			
		7.4			
		7.5			
		8			
		8.1.1			
		8.1.2			
		8.2.0			
		8.2.1			
		8.3.0			
		8.3.1			
		8.3.2			
		8.4.0			
		8.4.1			
		9.0.0			
		9.0.1			
		9.0.2			
		9.1			
		9.1.1			
		9.1.2			
		9.2			
		9.2.1			
		9.2.2			
Red Hat Enterprise Linux 5.3 Itanium / IA64 Processors 2.6.18-128.el5	No Cluster		No VM		
			LVM	2.02.40-6.el5	
	RedHat Cluster Suite	2.0.98-1	No VM		
			LVM	2.02.40-6.el5	
	No Cluster		No VM		
			LVM	2.02.46-8.el5	
	RedHat Cluster Suite	2.0.115-1	No VM		
			LVM	2.02.46-8.el5	
		6.4			
		7.0			
		7.1			
		7.2			
		7.3			
		7.4			

Red Hat Enterprise Linux 5.4 IA32 / x86 Processors 2.6.18-164.el5 2.6.18-164.el5PAE	Lifekeeper (*114)	7.5	No VM - OR - 2.02.46-8.el5					
		8						
		8.1.1						
		8.1.2						
		8.2.0						
		8.2.1						
		8.3.0						
		8.3.1						
		8.3.2						
		8.4.0						
		8.4.1						
		9.0.0						
		9.0.1						
		9.0.2						
		9.1						
		9.1.1						
		9.1.2						
		9.2						
		9.2.1						
		9.2.2						
Red Hat Enterprise Linux 5.4 Itanium / IA64 Processors 2.6.18-164.el5	No Cluster		No VM					
			LVM	2.02.46-8.el5				
	RedHat Cluster Suite	2.0.115-1	No VM					
			LVM	2.02.46-8.el5				
Red Hat Enterprise Linux 5.4 AMD64 and EM64T Processors 2.6.18-164.el5	No Cluster		No VM					
			LVM	2.02.46-8.el5				
	RedHat Cluster Suite	2.0.115-1	No VM					
			LVM	2.02.46-8.el5				
		6.4						
		7.0						
		7.1						
		7.2						
		7.3						
		7.4						
		7.5						
		8						
		8.1.1						
		8.1.2						
		8.2.0						
		8.2.1						

	Lifekeeper (*114)	8.3.0	No VM - OR - 2.02.46-8.el5			
		8.3.1				
		8.3.2				
		8.4.0				
		8.4.1				
		9.0.0				
		9.0.1				
		9.0.2				
		9.1				
		9.1.1				
		9.1.2				
		9.2				
		9.2.1				
		9.2.2				
Red Hat Enterprise Linux 5.5 IA32 / x86 Processors 2.6.18-194.el5 2.6.18-194.el5PAE	No Cluster		No VM			
			LVM	2.02.56-8.el5		
	Lifekeeper (*114)	6.4	No VM - OR - 2.02.56-8.el5			
		7.0				
		7.1				
		7.2				
		7.3				
		7.4				
		7.5				
		8				
		8.1.1				
		8.1.2				
		8.2.0				
		8.2.1				
		8.3.0				
		8.3.1				
		8.3.2				
		8.4.0				
		8.4.1				
		9.0.0				
		9.0.1				
		9.0.2				
		9.1				
		9.1.1				
		9.1.2				

		9.2				
		9.2.1				
		9.2.2				
	RedHat Cluster Suite		No VM			
			LVM	2.02.56-8.el5		
Red Hat Enterprise Linux 5.5 Itanium / IA64 Processors 2.6.18-194.el5	No Cluster		No VM			
			LVM	2.02.56-8.el5		
	RedHat Cluster Suite		No VM			
			LVM	2.02.56-8.el5		
Red Hat Enterprise Linux 5.5 AMD64 and EM64T Processors 2.6.18-194.el5	No Cluster		No VM			
			LVM	2.02.56-8.el5		
	Lifekeeper (*114)	6.4	No VM - OR - 2.02.56-8.el5			
		7.0				
		7.1				
		7.2				
		7.3				
		7.4				
		7.5				
		8				
		8.1.1				
		8.1.2				
		8.2.0				
		8.2.1				
		8.3.0				
		8.3.1				
		8.3.2				
		8.4.0				
		8.4.1				
		9.0.0				
		9.0.1				
		9.0.2				
		9.1				
		9.1.1				
		9.1.2				
		9.2				
		9.2.1				
		9.2.2				
	RedHat Cluster Suite		No VM			
			LVM	2.02.56-8.el5		
			No VM			

Red Hat Enterprise Linux 5.6 IA32 / x86 Processors 2.6.18-238.el5 2.6.18-238.el5PAE	No Cluster		LVM	2.02.74-5.el5			
				2.02.84-3.el5			
	RedHat Cluster Suite		No VM				
			LVM	2.02.74-5.el5			
	Lifekeeper (*114)	6.4	No VM - OR - 2.02.74-5.el5				
		7.0					
		7.1					
		7.2					
		7.3					
		7.4					
		7.5					
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.6 Itanium / IA64 Processors 2.6.18-238.el5	No Cluster		No VM				
			LVM	2.02.74-5.el5			
				2.02.84-3.el5			
	RedHat Cluster Suite		No VM				
			LVM	2.02.74-5.el5			
	No Cluster		No VM				
			LVM	2.02.74-5.el5			
				2.02.84-3.el5			
	RedHat Cluster Suite		No VM				
			LVM	2.02.74-5.el5			
		6.4					
		7.0					
		7.1					
		7.2					
		7.3					
		7.4					
		7.5					
		8					

Red Hat Enterprise Linux 5.6 AMD64 and EM64T Processors 2.6.18-238.el5	Lifekeeper (*114)	8.1.1	No VM - OR - 2.02.74-5.el5				
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.7 IA32 / x86 Processors 2.6.18-274.el5 2.6.18-274.el5PAE	No Cluster		No VM				
			LVM	2.02.84-6.el5			
	RedHat Cluster Suite	2.0.115-85	No VM				
			LVM	2.02.84-6.el5			
	Lifekeeper (*114)	7.3	LVM	2.02.84-6.el5			
		7.4					
		7.5					
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.7 Itanium / IA64 Processors 2.6.18-274.el5	No Cluster		No VM				
			LVM	2.02.84-6.el5			
	RedHat Cluster Suite	2.0.115-85	No VM				
			LVM	2.02.84-6.el5			

<table>
<tr><td rowspan="30">Red Hat Enterprise Linux 5.7
AMD64 and EM64T Processors
2.6.18-274.el5</td><td colspan="2" rowspan="2">No Cluster</td><td colspan="2">No VM</td></tr>
<tr><td>LVM</td><td>2.02.84-6.el5</td></tr>
<tr><td rowspan="2">RedHat Cluster Suite</td><td rowspan="2">2.0.115-85</td><td colspan="2">No VM</td></tr>
<tr><td>LVM</td><td>2.02.84-6.el5</td></tr>
<tr><td rowspan="26">Lifekeeper (*114)</td><td>7.3</td><td rowspan="26">LVM</td><td rowspan="26">2.02.84-6.el5</td></tr>
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<tr><td>8.2.1</td></tr>
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<tr><td>8.4.1</td></tr>
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<tr><td>9.1.1</td></tr>
<tr><td>9.1.2</td></tr>
<tr><td>9.2</td></tr>
<tr><td>9.2.1</td></tr>
<tr><td>9.2.2</td></tr>
<tr><td rowspan="30">Red Hat Enterprise Linux 5.8
IA32 / x86 Processors
2.6.18-308.el5
2.6.18-308.el5PAE</td><td colspan="2" rowspan="2">No Cluster</td><td colspan="2">No VM</td></tr>
<tr><td>LVM</td><td>2.02.88-7.el5</td></tr>
<tr><td rowspan="2">RedHat Cluster Suite</td><td rowspan="2">2.0.115-96</td><td colspan="2">No VM</td></tr>
<tr><td>LVM</td><td>2.02.88-7.el5</td></tr>
<tr><td rowspan="26">Lifekeeper (*114)</td><td>7.5</td><td rowspan="26" colspan="2">No VM
- OR -
2.02.88-7.el5</td></tr>
<tr><td>8</td></tr>
<tr><td>8.1.1</td></tr>
<tr><td>8.1.2</td></tr>
<tr><td>8.2.0</td></tr>
<tr><td>8.2.1</td></tr>
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<tr><td>8.4.1</td></tr>
<tr><td>9.0.0</td></tr>
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		9.2.1			
		9.2.2			
Red Hat Enterprise Linux 5.8 Itanium / IA64 Processors 2.6.18-308.el5	No Cluster		No VM		
			LVM	2.02.88-7.el5	
	RedHat Cluster Suite	2.0.115-96	No VM		
			LVM	2.02.88-7.el5	
Red Hat Enterprise Linux 5.8 AMD64 and EM64T Processors 2.6.18-308.el5	No Cluster		No VM		
			LVM	2.02.88-7.el5	
	RedHat Cluster Suite	2.0.115-96	No VM		
			LVM	2.02.88-7.el5	
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-7.el5		
		8			
		8.1.1			
		8.1.2			
		8.2.0			
		8.2.1			
		8.3.0			
		8.3.1			
		8.3.2			
		8.4.0			
		8.4.1			
		9.0.0			
		9.0.1			
		9.0.2			
		9.1			
		9.1.1			
		9.1.2			
		9.2			
		9.2.1			
		9.2.2			
Red Hat Enterprise Linux 5.9 IA32 / x86 Processors 2.6.18-348.el5 2.6.18-348.el5PAE	No Cluster		No VM		
			LVM	2.02.88-10.el5	
	RedHat Cluster Suite	2.0.115-109	No VM		
			LVM	2.02.88-10.el5	
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-10.el5		
		8			
		8.1.1			
		8.1.2			
		8.2.0			
		8.2.1			
		8.3.0			
		8.3.1			
		8.3.2			
		8.4.0			
		8.4.1			
		9.0.0			
		9.0.1			
		9.0.2			

		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.9 Itanium / IA64 Processors 2.6.18-348.el5	No Cluster		No VM				
			LVM	2.02.88-10.el5			
	RedHat Cluster Suite	2.0.115-109	No VM				
			LVM	2.02.88-10.el5			
Red Hat Enterprise Linux 5.9 AMD64 and EM64T Processors 2.6.18-348.el5	No Cluster		No VM				
			LVM	2.02.88-10.el5			
	RedHat Cluster Suite	2.0.115-109	No VM				
			LVM	2.02.88-10.el5			
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-10.el5				
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.9 (Security Fix) IA32 / x86 Processors 2.6.18-348.39.1.el5 2.6.18-348.39.1.el5PAE	No Cluster		No VM				
			LVM	2.02.88-10.el5			
	RedHat Cluster Suite	2.0.115-109	No VM				
			LVM	2.02.88-10.el5			
	Lifekeeper (*114)	7.5	No VM - OR -				
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					

	Lifekeeper (*114)	8.4.1	- OR - 2.02.88-10.el5				
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.9 (Security Fix) Itanium / IA64 Processors 2.6.18-348.39.1.el5	No Cluster		No VM				
			LVM	2.02.88-10.el5			
	RedHat Cluster Suite	2.0.115-109	No VM				
			LVM	2.02.88-10.el5			
Red Hat Enterprise Linux 5.9 (Security Fix) AMD64 and EM64T Processors 2.6.18-348.39.1.el5	No Cluster		No VM				
			LVM	2.02.88-10.el5			
	RedHat Cluster Suite	2.0.115-109	No VM				
			LVM	2.02.88-10.el5			
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-10.el5				
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
	No Cluster		No VM				
			LVM	2.02.88-12.el5			
	RedHat Cluster Suite	2.0.115-118	No VM				
			LVM	2.02.88-12.el5			
		7.5					
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					

Red Hat Enterprise Linux 5.10 IA32 / x86 Processors 2.6.18-371.el5 2.6.18-371.el5PAE	Lifekeeper (*114)	8.3.0	No VM - OR - 2.02.88-12.el5				
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.10 Itanium / IA64 Processors 2.6.18-371.el5	No Cluster		No VM				
			LVM	2.02.88-12.el5			
	RedHat Cluster Suite	2.0.115-118	No VM				
			LVM	2.02.88-12.el5			
Red Hat Enterprise Linux 5.10 AMD64 and EM64T Processors 2.6.18-371.el5	No Cluster		No VM				
			LVM	2.02.88-12.el5			
	RedHat Cluster Suite	2.0.115-118	No VM				
			LVM	2.02.88-12.el5			
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-12.el5				
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
	No Cluster		No VM				
			LVM	2.02.88-13.el5			
	RedHat Cluster Suite	2.0.115-124	No VM				
			LVM	2.02.88-13.el5			
		7.5					
		8					

Red Hat Enterprise Linux 5.11 IA32 / x86 Processors 2.6.18-398.el5 2.6.18-398.el5PAE	Lifekeeper (*114)	8.1.1	No VM - OR - 2.02.88-13.el5		
		8.1.2			
		8.2.0			
		8.2.1			
		8.3.0			
		8.3.1			
		8.3.2			
		8.4.0			
		8.4.1			
		9.0.0			
		9.0.1			
		9.0.2			
		9.1			
		9.1.1			
		9.1.2			
		9.2			
		9.2.1			
		9.2.2			
Red Hat Enterprise Linux 5.11 Itanium / IA64 Processors 2.6.18-398.el5	No Cluster		No VM		
			LVM	2.02.88-13.el5	
	RedHat Cluster Suite	2.0.115-124	No VM		
			LVM	2.02.88-13.el5	
Red Hat Enterprise Linux 5.11 AMD64 and EM64T Processors 2.6.18-398.el5	No Cluster		No VM		
			LVM	2.02.88-13.el5	
	RedHat Cluster Suite	2.0.115-124	No VM		
			LVM	2.02.88-13.el5	
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-13.el5		
		8			
		8.1.1			
		8.1.2			
		8.2.0			
		8.2.1			
		8.3.0			
		8.3.1			
		8.3.2			
		8.4.0			
		8.4.1			
		9.0.0			
		9.0.1			
		9.0.2			
		9.1			
		9.1.1			
		9.1.2			
		9.2			
		9.2.1			
		9.2.2			
	No Cluster		No VM		
			LVM	2.02.88-13.el5	

Red Hat Enterprise Linux 5.11 (Security Fix) IA32 / x86 Processors 2.6.18-416.el5 2.6.18-416.el5PAE	RedHat Cluster Suite	2.0.115-124	No VM				
			LVM	2.02.88-13.el5			
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-13.el5				
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.11 (Security Fix) Itanium / IA64 Processors 2.6.18-416.el5	No Cluster		No VM				
			LVM	2.02.88-13.el5			
	RedHat Cluster Suite	2.0.115-124	No VM				
			LVM	2.02.88-13.el5			
Red Hat Enterprise Linux 5.11 (Security Fix) AMD64 and EM64T Processors 2.6.18-416.el5	No Cluster		No VM				
			LVM	2.02.88-13.el5			
	RedHat Cluster Suite	2.0.115-124	No VM				
			LVM	2.02.88-13.el5			
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-13.el5				
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					

		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.11 (Security Fix) IA32 / x86 Processors 2.6.18-419.el5 2.6.18-419.el5PAE	No Cluster		No VM				
			LVM	2.02.88-13.el5			
	RedHat Cluster Suite	2.0.115-124	No VM				
			LVM	2.02.88-13.el5			
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-13.el5				
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					
		9.1					
		9.1.1					
		9.1.2					
		9.2					
		9.2.1					
		9.2.2					
Red Hat Enterprise Linux 5.11 (Security Fix) Itanium / IA64 Processors 2.6.18-419.el5	No Cluster		No VM				
			LVM	2.02.88-13.el5			
	RedHat Cluster Suite	2.0.115-124	No VM				
			LVM	2.02.88-13.el5			
Red Hat Enterprise Linux 5.11 (Security Fix) AMD64 and EM64T Processors 2.6.18-419.el5	No Cluster		No VM				
			LVM	2.02.88-13.el5			
	RedHat Cluster Suite	2.0.115-124	No VM				
			LVM	2.02.88-13.el5			
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-13.el5				
		8					
		8.1.1					
		8.1.2					
		8.2.0					
		8.2.1					
		8.3.0					
		8.3.1					
		8.3.2					
		8.4.0					
		8.4.1					
		9.0.0					
		9.0.1					
		9.0.2					

		9.1						
		9.1.1						
		9.1.2						
		9.2						
		9.2.1						
		9.2.2						
Red Hat Enterprise Linux 5.11 (Security Fix) IA32 / x86 Processors 2.6.18-426.el5 2.6.18-426.el5PAE	No Cluster		No VM					
			LVM	2.02.88-13.el5				
	RedHat Cluster Suite	2.0.115-124	No VM					
			LVM	2.02.88-13.el5				
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-13.el5					
		8						
		8.1.1						
		8.1.2						
		8.2.0						
		8.2.1						
		8.3.0						
		8.3.1						
		8.3.2						
		8.4.0						
		8.4.1						
		9.0.0						
		9.0.1						
		9.0.2						
		9.1						
		9.1.1						
		9.1.2						
		9.2						
		9.2.1						
		9.2.2						
Red Hat Enterprise Linux 5.11 (Security Fix) Itanium / IA64 Processors 2.6.18-426.el5	No Cluster		No VM					
			LVM	2.02.88-13.el5				
	RedHat Cluster Suite	2.0.115-124	No VM					
			LVM	2.02.88-13.el5				
Red Hat Enterprise Linux 5.11 (Security Fix) AMD64 and EM64T Processors 2.6.18-426.el5	No Cluster		No VM					
			LVM	2.02.88-13.el5				
	RedHat Cluster Suite	2.0.115-124	No VM					
			LVM	2.02.88-13.el5				
	Lifekeeper (*114)	7.5	No VM - OR -					
		8						
		8.1.1						
		8.1.2						
		8.2.0						
		8.2.1						
		8.3.0						
		8.3.1						
		8.3.2						
		8.4.0						

	Lifekeeper (*114)	8.4.1	- OR - 2.02.88-13.el5		
		9.0.0			
		9.0.1			
		9.0.2			
		9.1			
		9.1.1			
		9.1.2			
		9.2			
		9.2.1			
		9.2.2			
Red Hat Enterprise Linux 5.11 (Security Fix) IA32 / x86 Processors 2.6.18-431.el5 2.6.18-431.el5PAE	No Cluster		No VM		
			LVM	2.02.88-13.el5	
	RedHat Cluster Suite	2.0.115-124	No VM		
			LVM	2.02.88-13.el5	
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.88-13.el5		
		8			
		8.1.1			
		8.1.2			
		8.2.0			
		8.2.1			
		8.3.0			
		8.3.1			
		8.3.2			
		8.4.0			
		8.4.1			
		9.0.0			
		9.0.1			
		9.0.2			
		9.1			
		9.1.1			
		9.1.2			
		9.2			
		9.2.1			
		9.2.2			
Red Hat Enterprise Linux 5.11 (Security Fix) Itanium / IA64 Processors 2.6.18-431.el5	No Cluster		No VM		
			LVM	2.02.88-13.el5	
	RedHat Cluster Suite	2.0.115-124	No VM		
			LVM	2.02.88-13.el5	
	No Cluster		No VM		
			LVM	2.02.88-13.el5	
	RedHat Cluster Suite	2.0.115-124	No VM		
			LVM	2.02.88-13.el5	
		7.5			
		8			
		8.1.1			
		8.1.2			
		8.2.0			
		8.2.1			

Red Hat Enterprise Linux 5.11 (Security Fix) AMD64 and EM64T Processors 2.6.18-431.el5	Lifekeeper (*114)	8.3.0	No VM - OR - 2.02.88-13.el5			
		8.3.1				
		8.3.2				
		8.4.0				
		8.4.1				
		9.0.0				
		9.0.1				
		9.0.2				
		9.1				
		9.1.1				
		9.1.2				
		9.2				
		9.2.1				
		9.2.2				
Red Hat Enterprise Linux 6 IA32 / x86 Processors 2.6.32-71.el6.i686	No Cluster		No VM			
			LVM	2.02.72-8.el6	**117, 139**	**117, 139**	**117, 139**
	RedHat Cluster Suite		No VM			
			LVM	2.02.72-8.el6	**117, 139**	**117, 139**	**117, 139**
	Lifekeeper (*114)	7.3	No VM - OR - 2.02.72-8.el6		**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		7.4			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		7.5			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8.1.1			**101, 104,117,139**	**101, 104,117,139**	**101, 104,117,139**
		8.1.2			**101, 105,117,139**	**101, 105,117,139**	**101, 105,117,139**
		8.2.0			**101, 107,117,139**	**101, 107,117,139**	**101, 107,117,139**
		8.2.1			**101, 108,117,139**	**101, 108,117,139**	**101, 108,117,139**
		8.3.0			**101, 109,117,139**	**101, 109,117,139**	**101, 109,117,139**
		8.3.1			**101, 110,117,139**	**101, 110,117,139**	**101, 110,117,139**
		8.3.2			**101, 111,117,139**	**101, 111,117,139**	**101, 111,117,139**
		8.4.0			**101, 112,117,139**	**101, 112,117,139**	**101, 112,117,139**
		8.4.1			**101, 113,117,139**	**101, 113,117,139**	**101, 113,117,139**
		9.0.0			**101, 115,117,139**	**101, 115,117,139**	**101, 115,117,139**
		9.0.1			**101, 116,117,139**	**101, 116,117,139**	**101, 116,117,139**
		9.0.2			**101, 118, 139**	**101, 118, 139**	**101, 118, 139**
		9.1			**101, 121, 139**	**101, 121, 139**	**101, 121, 139**
		9.1.1			**101, 126, 139**	**101, 126, 139**	**101, 126, 139**
		9.1.2			**101, 129, 139**	**101, 129, 139**	**101, 129, 139**
		9.2			**101, 130, 139**	**101, 130, 139**	**101, 130, 139**
		9.2.1			**101, 131, 139**	**101, 131, 139**	**101, 131, 139**
		9.2.2			**101, 133, 139**	**101, 133, 139**	**101, 133, 139**
		9.3			**101, 135, 139**	**101, 135, 139**	**101, 135, 139**
		9.3.1			**101, 137, 139**	**101, 137, 139**	**101, 137, 139**
		9.3.2			**101, 139, 140**	**101, 139, 140**	**101, 139, 140**
		9.4.0			**101, 139, 143**	**101, 139, 143**	**101, 139, 143**
		9.4.1			**101, 139, 144**	**101, 139, 144**	**101, 139, 144**
		9.5.0			**101, 139, 145**	**101, 139, 145**	**101, 139, 145**
	No Cluster		No VM			
			LVM	2.02.72-8.el6	**117, 139**	**117, 139**	**117, 139**

Red Hat Enterprise Linux 6 AMD64 and EM64T Processors 2.6.32-71.el6.x86_64	RedHat Cluster Suite		No VM				
			LVM	2.02.72-8.el6	**117, 139**	**117, 139**	**117, 139**
	Lifekeeper (*114)	7.3	No VM - OR - 2.02.72-8.el6		**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		7.4			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		7.5			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8.1.1			**101, 104,117,139**	**101, 104,117,139**	**101, 104,117,139**
		8.1.2			**101, 105,117,139**	**101, 105,117,139**	**101, 105,117,139**
		8.2.0			**101, 107,117,139**	**101, 107,117,139**	**101, 107,117,139**
		8.2.1			**101, 108,117,139**	**101, 108,117,139**	**101, 108,117,139**
		8.3.0			**101, 109,117,139**	**101, 109,117,139**	**101, 109,117,139**
		8.3.1			**101, 110,117,139**	**101, 110,117,139**	**101, 110,117,139**
		8.3.2			**101, 111,117,139**	**101, 111,117,139**	**101, 111,117,139**
		8.4.0			**101, 112,117,139**	**101, 112,117,139**	**101, 112,117,139**
		8.4.1			**101, 113,117,139**	**101, 113,117,139**	**101, 113,117,139**
		9.0.0			**101, 115,117,139**	**101, 115,117,139**	**101, 115,117,139**
		9.0.1			**101, 116,117,139**	**101, 116,117,139**	**101, 116,117,139**
		9.0.2			**101, 117, 118, 139**	**101, 117, 118, 139**	**101, 117, 118, 139**
		9.1			**101, 117, 121, 139**	**101, 117, 121, 139**	**101, 117, 121, 139**
		9.1.1			**101, 117, 126, 139**	**101, 117, 126, 139**	**101, 117, 126, 139**
		9.1.2			**101, 117, 129, 139**	**101, 117, 129, 139**	**101, 117, 129, 139**
		9.2			**101, 117, 130, 139**	**101, 117, 130, 139**	**101, 117, 130, 139**
		9.2.1			**101, 117, 131, 139**	**101, 117, 131, 139**	**101, 117, 131, 139**
		9.2.2			**101, 117, 133, 139**	**101, 117, 133, 139**	**101, 117, 133, 139**
		9.3			**101, 117, 135, 139**	**101, 117, 135, 139**	**101, 117, 135, 139**
		9.3.1			**101, 117, 137, 139**	**101, 117, 137, 139**	**101, 117, 137, 139**
		9.3.2			**101, 117, 139, 140**	**101, 117, 139, 140**	**101, 117, 139, 140**
		9.4.0			**101, 117, 139, 143**	**101, 117, 139, 143**	**101, 117, 139, 143**
		9.4.1			**101, 117, 139, 144**	**101, 117, 139, 144**	**101, 117, 139, 144**
		9.5.0			**101, 117, 139, 145**	**101, 117, 139, 145**	**101, 117, 139, 145**
Red Hat Enterprise Linux 6.1 IA32 / x86 Processors 2.6.32-131.0.15.el6.i686	No Cluster		No VM				
			LVM	2.02.83-3.el6	**117, 139**	**117, 139**	**117, 139**
	RedHat Cluster Suite		No VM				
			LVM	2.02.83-3.el6	**117, 139**	**117, 139**	**117, 139**
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.83-3.el6		**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8.1.1			**101, 104,117,139**	**101, 104,117,139**	**101, 104,117,139**
		8.1.2			**101, 105,117,139**	**101, 105,117,139**	**101, 105,117,139**
		8.2.0			**101, 107,117,139**	**101, 107,117,139**	**101, 107,117,139**
		8.2.1			**101, 108,117,139**	**101, 108,117,139**	**101, 108,117,139**
		8.3.0			**101, 109,117,139**	**101, 109,117,139**	**101, 109,117,139**
		8.3.1			**101, 110,117,139**	**101, 110,117,139**	**101, 110,117,139**
		8.3.2			**101, 111,117,139**	**101, 111,117,139**	**101, 111,117,139**
		8.4.0			**101, 112,117,139**	**101, 112,117,139**	**101, 112,117,139**
		8.4.1			**101, 113,117,139**	**101, 113,117,139**	**101, 113,117,139**
		9.0.0			**101, 115,117,139**	**101, 115,117,139**	**101, 115,117,139**
		9.0.1			**101, 116,117,139**	**101, 116,117,139**	**101, 116,117,139**
		9.0.2			**101, 117, 118, 139**	**101, 117, 118, 139**	**101, 117, 118, 139**

		9.1			101, 117, 121, 139	101, 117, 121, 139	101, 117, 121, 139
		9.1.1			101, 117, 126, 139	101, 117, 126, 139	101, 117, 126, 139
		9.1.2			101, 117, 129, 139	101, 117, 129, 139	101, 117, 129, 139
		9.2			101, 117, 130, 139	101, 117, 130, 139	101, 117, 130, 139
		9.2.1			101, 117, 131, 139	101, 117, 131, 139	101, 117, 131, 139
		9.2.2			101, 117, 133, 139	101, 117, 133, 139	101, 117, 133, 139
		9.3			101, 117, 135, 139	101, 117, 135, 139	101, 117, 135, 139
		9.3.1			101, 117, 137, 139	101, 117, 137, 139	101, 117, 137, 139
		9.3.2			101, 117, 139, 140	101, 117, 139, 140	101, 117, 139, 140
		9.4.0			101, 117, 139, 143	101, 117, 139, 143	101, 117, 139, 143
		9.4.1			101, 117, 139, 144	101, 117, 139, 144	101, 117, 139, 144
		9.5.0			101, 117, 139, 145	101, 117, 139, 145	101, 117, 139, 145
Red Hat Enterprise Linux 6.1 AMD64 and EM64T Processors 2.6.32-131.0.15.el6.x86_64	No Cluster		No VM				
			LVM	2.02.83-3.el6	117, 139	117, 139	117, 139
	RedHat Cluster Suite		No VM				
			LVM	2.02.83-3.el6	117, 139	117, 139	117, 139
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.83-3.el6		97, 101,117,139	97, 101,117,139	97, 101,117,139
		8			97, 101,117,139	97, 101,117,139	97, 101,117,139
		8.1.1			101, 104,117,139	101, 104,117,139	101, 104,117,139
		8.1.2			101, 105,117,139	101, 105,117,139	101, 105,117,139
		8.2.0			101, 107,117,139	101, 107,117,139	101, 107,117,139
		8.2.1			101, 108,117,139	101, 108,117,139	101, 108,117,139
		8.3.0			101, 109,117,139	101, 109,117,139	101, 109,117,139
		8.3.1			101, 110,117,139	101, 110,117,139	101, 110,117,139
		8.3.2			101, 111,117,139	101, 111,117,139	101, 111,117,139
		8.4.0			101, 112,117,139	101, 112,117,139	101, 112,117,139
		8.4.1			101, 113,117,139	101, 113,117,139	101, 113,117,139
		9.0.0			101, 115,117,139	101, 115,117,139	101, 115,117,139
		9.0.1			101, 116,117,139	101, 116,117,139	101, 116,117,139
		9.0.2			101, 117, 118, 139	101, 117, 118, 139	101, 117, 118, 139
		9.1			101, 117, 121, 139	101, 117, 121, 139	101, 117, 121, 139
		9.1.1			101, 117, 126, 139	101, 117, 126, 139	101, 117, 126, 139
		9.1.2			101, 117, 129, 139	101, 117, 129, 139	101, 117, 129, 139
		9.2			101, 117, 130, 139	101, 117, 130, 139	101, 117, 130, 139
		9.2.1			101, 117, 131, 139	101, 117, 131, 139	101, 117, 131, 139
		9.2.2			101, 117, 133, 139	101, 117, 133, 139	101, 117, 133, 139
		9.3			101, 117, 135, 139	101, 117, 135, 139	101, 117, 135, 139
		9.3.1			101, 117, 137, 139	101, 117, 137, 139	101, 117, 137, 139
		9.3.2			101, 117, 139, 140	101, 117, 139, 140	101, 117, 139, 140
		9.4.0			101, 117, 139, 143	101, 117, 139, 143	101, 117, 139, 143
		9.4.1			101, 117, 139, 144	101, 117, 139, 144	101, 117, 139, 144
		9.5.0			101, 117, 139, 145	101, 117, 139, 145	101, 117, 139, 145
	No Cluster		No VM				
			LVM	2.02.87-6.el6	117, 139	117, 139	117, 139
	RedHat Cluster Suite		No VM				
			LVM	2.02.87-6.el6	117, 139	117, 139	117, 139
		7.5			97, 101,117,139	97, 101,117,139	97, 101,117,139
		8			97, 101,117,139	97, 101,117,139	97, 101,117,139

Red Hat Enterprise Linux 6.2 IA32 / x86 Processors 2.6.32-220.el6.i686	Lifekeeper (*114)	8.1.1	No VM - OR - 2.02.87-6.el6		**101, 104,117,139**	**101, 104,117,139**	**101, 104,117,139**
		8.1.2			**101, 105,117,139**	**101, 105,117,139**	**101, 105,117,139**
		8.2.0			**101, 107,117,139**	**101, 107,117,139**	**101, 107,117,139**
		8.2.1			**101, 108,117,139**	**101, 108,117,139**	**101, 108,117,139**
		8.3.0			**101, 109,117,139**	**101, 109,117,139**	**101, 109,117,139**
		8.3.1			**101, 110,117,139**	**101, 110,117,139**	**101, 110,117,139**
		8.3.2			**101, 111,117,139**	**101, 111,117,139**	**101, 111,117,139**
		8.4.0			**101, 112,117,139**	**101, 112,117,139**	**101, 112,117,139**
		8.4.1			**101, 113,117,139**	**101, 113,117,139**	**101, 113,117,139**
		9.0.0			**101, 115,117,139**	**101, 115,117,139**	**101, 115,117,139**
		9.0.1			**101, 116,117,139**	**101, 116,117,139**	**101, 116,117,139**
		9.0.2			**101, 117, 118, 139**	**101, 117, 118, 139**	**101, 117, 118, 139**
		9.1			**101, 117, 121, 139**	**101, 117, 121, 139**	**101, 117, 121, 139**
		9.1.1			**101, 117, 126, 139**	**101, 117, 126, 139**	**101, 117, 126, 139**
		9.1.2			**101, 117, 129, 139**	**101, 117, 129, 139**	**101, 117, 129, 139**
		9.2			**101, 117, 130, 139**	**101, 117, 130, 139**	**101, 117, 130, 139**
		9.2.1			**101, 117, 131, 139**	**101, 117, 131, 139**	**101, 117, 131, 139**
		9.2.2			**101, 117, 133, 139**	**101, 117, 133, 139**	**101, 117, 133, 139**
		9.3			**101, 117, 135, 139**	**101, 117, 135, 139**	**101, 117, 135, 139**
		9.3.1			**101, 117, 137, 139**	**101, 117, 137, 139**	**101, 117, 137, 139**
		9.3.2			**101, 117, 139, 140**	**101, 117, 139, 140**	**101, 117, 139, 140**
		9.4.0			**101, 117, 139, 143**	**101, 117, 139, 143**	**101, 117, 139, 143**
		9.4.1			**101, 117, 139, 144**	**101, 117, 139, 144**	**101, 117, 139, 144**
		9.5.0			**101, 117, 139, 145**	**101, 117, 139, 145**	**101, 117, 139, 145**
	No Cluster		No VM				
			LVM	2.02.87-6.el6	**117, 139**	**117, 139**	**117, 139**
	RedHat Cluster Suite		No VM				
			LVM	2.02.87-6.el6	**117, 139**	**117, 139**	**117, 139**
Red Hat Enterprise Linux 6.2 AMD64 and EM64T Processors 2.6.32-220.el6.x86_64	Lifekeeper (*114)	7.5	No VM - OR - 2.02.87-6.el6		**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8.1.1			**101, 104,117,139**	**101, 104,117,139**	**101, 104,117,139**
		8.1.2			**101, 105,117,139**	**101, 105,117,139**	**101, 105,117,139**
		8.2.0			**101, 107,117,139**	**101, 107,117,139**	**101, 107,117,139**
		8.2.1			**101, 108,117,139**	**101, 108,117,139**	**101, 108,117,139**
		8.3.0			**101, 109,117,139**	**101, 109,117,139**	**101, 109,117,139**
		8.3.1			**101, 110,117,139**	**101, 110,117,139**	**101, 110,117,139**
		8.3.2			**101, 111,117,139**	**101, 111,117,139**	**101, 111,117,139**
		8.4.0			**101, 112,117,139**	**101, 112,117,139**	**101, 112,117,139**
		8.4.1			**101, 113,117,139**	**101, 113,117,139**	**101, 113,117,139**
		9.0.0			**101, 115,117,139**	**101, 115,117,139**	**101, 115,117,139**
		9.0.1			**101, 116,117,139**	**101, 116,117,139**	**101, 116,117,139**
		9.0.2			**101, 117, 118, 139**	**101, 117, 118, 139**	**101, 117, 118, 139**
		9.1			**101, 117, 121, 139**	**101, 117, 121, 139**	**101, 117, 121, 139**
		9.1.1			**101, 117, 126, 139**	**101, 117, 126, 139**	**101, 117, 126, 139**
		9.1.2			**101, 117, 129, 139**	**101, 117, 129, 139**	**101, 117, 129, 139**
		9.2			**101, 117, 130, 139**	**101, 117, 130, 139**	**101, 117, 130, 139**
		9.2.1			**101, 117, 131, 139**	**101, 117, 131, 139**	**101, 117, 131, 139**
		9.2.2			**101, 117, 133, 139**	**101, 117, 133, 139**	**101, 117, 133, 139**

		9.3			**101, 117, 135, 139**	**101, 117, 135, 139**	**101, 117, 135, 139**
		9.3.1			**101, 117, 137, 139**	**101, 117, 137, 139**	**101, 117, 137, 139**
		9.3.2			**101, 117, 139, 140**	**101, 117, 139, 140**	**101, 117, 139, 140**
		9.4.0			**101, 117, 139, 143**	**101, 117, 139, 143**	**101, 117, 139, 143**
		9.4.1			**101, 117, 139, 144**	**101, 117, 139, 144**	**101, 117, 139, 144**
		9.5.0			**101, 117, 139, 145**	**101, 117, 139, 145**	**101, 117, 139, 145**
Red Hat Enterprise Linux 6.3 IA32 / x86 Processors 2.6.32-279.el6.i686	No Cluster		No VM				
			LVM	2.02.95-10.el6	**117, 139**	**117, 139**	**117, 139**
	RedHat Cluster Suite		No VM				
			LVM	2.02.95-10.el6	**117, 139**	**117, 139**	**117, 139**
	Lifekeeper (*114)	7.5	No VM - OR - 2.02.95-10.el6		**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8.1.1			**101, 104,117,139**	**101, 104,117,139**	**101, 104,117,139**
		8.1.2			**101, 105,117,139**	**101, 105,117,139**	**101, 105,117,139**
		8.2.0			**101, 107,117,139**	**101, 107,117,139**	**101, 107,117,139**
		8.2.1			**101, 108,117,139**	**101, 108,117,139**	**101, 108,117,139**
		8.3.0			**101, 109,117,139**	**101, 109,117,139**	**101, 109,117,139**
		8.3.1			**101, 110,117,139**	**101, 110,117,139**	**101, 110,117,139**
		8.3.2			**101, 111,117,139**	**101, 111,117,139**	**101, 111,117,139**
		8.4.0			**101, 112,117,139**	**101, 112,117,139**	**101, 112,117,139**
		8.4.1			**101, 113,117,139**	**101, 113,117,139**	**101, 113,117,139**
		9.0.0			**101, 115,117,139**	**101, 115,117,139**	**101, 115,117,139**
		9.0.1			**101, 116,117,139**	**101, 116,117,139**	**101, 116,117,139**
		9.0.2			**101, 117, 118, 139**	**101, 117, 118, 139**	**101, 117, 118, 139**
		9.1			**101, 117, 121, 139**	**101, 117, 121, 139**	**101, 117, 121, 139**
		9.1.1			**101, 117, 126, 139**	**101, 117, 126, 139**	**101, 117, 126, 139**
		9.1.2			**101, 117, 129, 139**	**101, 117, 129, 139**	**101, 117, 129, 139**
		9.2			**101, 117, 130, 139**	**101, 117, 130, 139**	**101, 117, 130, 139**
		9.2.1			**101, 117, 131, 139**	**101, 117, 131, 139**	**101, 117, 131, 139**
		9.2.2			**101, 117, 133, 139**	**101, 117, 133, 139**	**101, 117, 133, 139**
		9.3			**101, 117, 135, 139**	**101, 117, 135, 139**	**101, 117, 135, 139**
		9.3.1			**101, 117, 137, 139**	**101, 117, 137, 139**	**101, 117, 137, 139**
		9.3.2			**101, 117, 139, 140**	**101, 117, 139, 140**	**101, 117, 139, 140**
		9.4.0			**101, 117, 139, 143**	**101, 117, 139, 143**	**101, 117, 139, 143**
		9.4.1			**101, 117, 139, 144**	**101, 117, 139, 144**	**101, 117, 139, 144**
		9.5.0			**101, 117, 139, 145**	**101, 117, 139, 145**	**101, 117, 139, 145**
	No Cluster		No VM				
			LVM	2.02.95-10.el6	**117, 139**	**117, 139**	**117, 139**
	RedHat Cluster Suite		No VM				
			LVM	2.02.95-10.el6	**117, 139**	**117, 139**	**117, 139**
		7.5			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8			**97, 101,117,139**	**97, 101,117,139**	**97, 101,117,139**
		8.1.1			**101, 104,117,139**	**101, 104,117,139**	**101, 104,117,139**
		8.1.2			**101, 105,117,139**	**101, 105,117,139**	**101, 105,117,139**
		8.2.0			**101, 107,117,139**	**101, 107,117,139**	**101, 107,117,139**
		8.2.1			**101, 108,117,139**	**101, 108,117,139**	**101, 108,117,139**
		8.3.0			**101, 109,117,139**	**101, 109,117,139**	**101, 109,117,139**
		8.3.1			**101, 110,117,139**	**101, 110,117,139**	**101, 110,117,139**

Red Hat Enterprise Linux 6.3 AMD64 and EM64T Processors 2.6.32-279.el6.x86_64	Lifekeeper (*114)	8.3.2	No VM - OR - 2.02.95-10.el6		**101, 111,117,139**	**101, 111,117,139**	**101, 111,117,139**
		8.4.0			**101, 112,117,139**	**101, 112,117,139**	**101, 112,117,139**
		8.4.1			**101, 113,117,139**	**101, 113,117,139**	**101, 113,117,139**
		9.0.0			**101, 115,117,139**	**101, 115,117,139**	**101, 115,117,139**
		9.0.1			**101, 116,117,139**	**101, 116,117,139**	**101, 116,117,139**
		9.0.2			**101, 117, 118, 139**	**101, 117, 118, 139**	**101, 117, 118, 139**
		9.1			**101, 117, 121, 139**	**101, 117, 121, 139**	**101, 117, 121, 139**
		9.1.1			**101, 117, 126, 139**	**101, 117, 126, 139**	**101, 117, 126, 139**
		9.1.2			**101, 117, 129, 139**	**101, 117, 129, 139**	**101, 117, 129, 139**
		9.2			**101, 117, 130, 139**	**101, 117, 130, 139**	**101, 117, 130, 139**
		9.2.1			**101, 117, 131, 139**	**101, 117, 131, 139**	**101, 117, 131, 139**
		9.2.2			**101, 117, 133, 139**	**101, 117, 133, 139**	**101, 117, 133, 139**
		9.3			**101, 117, 135, 139**	**101, 117, 135, 139**	**101, 117, 135, 139**
		9.3.1			**101, 117, 137, 139**	**101, 117, 137, 139**	**101, 117, 137, 139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
	GPFS	3.5.0.9	No VM				
Red Hat Enterprise Linux 6.4 IA32 / x86 Processors 2.6.32-358.el6.i686	No Cluster		No VM				
			LVM	2.02.98-9.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM				
			LVM	2.02.98-9.el6	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
	Lifekeeper (*114)	8.1.2	No VM - OR - 2.02.98-9.el6		**101, 105,117, 124,139**	**101, 105,117, 124,139**	**101, 105,117, 124,139**
		8.2.0			**101, 107,117, 124,139**	**101, 107,117, 124,139**	**101, 107,117, 124,139**
		8.2.1			**101, 108,117, 124,139**	**101, 108,117, 124,139**	**101, 108,117, 124,139**
		8.3.0			**101, 109,117, 124,139**	**101, 109,117, 124,139**	**101, 109,117, 124,139**
		8.3.1			**101, 110,117, 124,139**	**101, 110,117, 124,139**	**101, 110,117, 124,139**
		8.3.2			**101, 111,117, 124,139**	**101, 111,117, 124,139**	**101, 111,117, 124,139**
		8.4.0			**101, 112,117, 124,139**	**101, 112,117, 124,139**	**101, 112,117, 124,139**
		8.4.1			**101, 113,117, 124,139**	**101, 113,117, 124,139**	**101, 113,117, 124,139**
		9.0.0			**101, 115,117, 124,139**	**101, 115,117, 124,139**	**101, 115,117, 124,139**
		9.0.1			**101, 116,117, 124,139**	**101, 116,117, 124,139**	**101, 116,117, 124,139**
		9.0.2			**101, 117,118, 124,139**	**101, 117,118, 124,139**	**101, 117,118, 124,139**
		9.1			**101, 117, 121, 124,139**	**101, 117, 121, 124,139**	**101, 117, 121, 124,139**
		9.1.1			**101, 117, 124,126,139**	**101, 117, 124,126,139**	**101, 117, 124,126,139**
		9.1.2			**101, 117, 124,129,139**	**101, 117, 124,129,139**	**101, 117, 124,129,139**
		9.2			**101, 117, 124,130,139**	**101, 117, 124,130,139**	**101, 117, 124,130,139**
		9.2.1			**101, 117, 124,131,139**	**101, 117, 124,131,139**	**101, 117, 124,131,139**
		9.2.2			**101, 117, 124,133,139**	**101, 117, 124,133,139**	**101, 117, 124,133,139**
		9.3			**101, 117, 124,135,139**	**101, 117, 124,135,139**	**101, 117, 124,135,139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
	No Cluster		No VM				
			LVM	2.02.98-9.el6	**117,124,139**	**117,124,139**	**117,124,139**

Red Hat Enterprise Linux 6.4 AMD64 and EM64T Processors 2.6.32-358.el6.x86_64	RedHat Cluster Suite		No VM				
			LVM	2.02.98-9.el6	**101,117,124,139**	**101,117,124,139**	**101,117,124,139**
	Lifekeeper (*114)	8.1.2	No VM - OR - 2.02.98-9.el6		**101, 105,117,124,139**	**101, 105,117,124,139**	**101, 105,117,124,139**
		8.2.0			**101, 107,117,124,139**	**101, 107,117,124,139**	**101, 107,117,124,139**
		8.2.1			**101, 108,117,124,139**	**101, 108,117,124,139**	**101, 108,117,124,139**
		8.3.0			**101, 109,117,124,139**	**101, 109,117,124,139**	**101, 109,117,124,139**
		8.3.1			**101, 110,117,124,139**	**101, 110,117,124,139**	**101, 110,117,124,139**
		8.3.2			**101, 111,117,124,139**	**101, 111,117,124,139**	**101, 111,117,124,139**
		8.4.0			**101, 112,117,124,139**	**101, 112,117,124,139**	**101, 112,117,124,139**
		8.4.1			**101, 113,117,124,139**	**101, 113,117,124,139**	**101, 113,117,124,139**
		9.0.0			**101, 115,117,124,139**	**101, 115,117,124,139**	**101, 115,117,124,139**
		9.0.1			**101, 116,117,124,139**	**101, 116,117,124,139**	**101, 116,117,124,139**
		9.0.2			**101, 117,118,124,139**	**101, 117,118,124,139**	**101, 117,118,124,139**
		9.1			**101, 117, 121,124,139**	**101, 117, 121,124,139**	**101, 117, 121,124,139**
		9.1.1			**101, 117,124,126,139**	**101, 117,124,126,139**	**101, 117,124,126,139**
		9.1.2			**101, 117,124,129,139**	**101, 117,124,129,139**	**101, 117,124,129,139**
		9.2			**101, 117,124,130,139**	**101, 117,124,130,139**	**101, 117,124,130,139**
		9.2.1			**101, 117,124,131,139**	**101, 117,124,131,139**	**101, 117,124,131,139**
		9.2.2			**101, 117,124,133,139**	**101, 117,124,133,139**	**101, 117,124,133,139**
		9.3			**101, 117,124,135,139**	**101, 117,124,135,139**	**101, 117,124,135,139**
		9.3.1			**101, 117,124,137,139**	**101, 117,124,137,139**	**101, 117,124,137,139**
		9.3.2			**101, 117,124,139,140**	**101, 117,124,139,140**	**101, 117,124,139,140**
		9.4.0			**101, 117,124,139,143**	**101, 117,124,139,143**	**101, 117,124,139,143**
		9.4.1			**101, 117,124,139,144**	**101, 117,124,139,144**	**101, 117,124,139,144**
		9.5.0			**101, 117,124,139,145**	**101, 117,124,139,145**	**101, 117,124,139,145**
Red Hat Enterprise Linux 6.5 IA32 / x86 Processors 2.6.32-431.el6.i686	No Cluster		No VM				
			LVM	2.02.100-8.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.100-8.el6	**101,117,124,139**	**101,117,124,139**	**101,117,124,139**
	Lifekeeper (*114)	8.2.1	No VM - OR - 2.02.100-8.el6		**101, 108,117,124,139**	**101, 108,117,124,139**	**101, 108,117,124,139**
		8.3.0			**101, 109,117,124,139**	**101, 109,117,124,139**	**101, 109,117,124,139**
		8.3.1			**101, 110,117,124,139**	**101, 110,117,124,139**	**101, 110,117,124,139**
		8.3.2			**101, 111,117,124,139**	**101, 111,117,124,139**	**101, 111,117,124,139**
		8.4.0			**101, 112,117,124,139**	**101, 112,117,124,139**	**101, 112,117,124,139**
		8.4.1			**101, 113,117,124,139**	**101, 113,117,124,139**	**101, 113,117,124,139**
		9.0.0			**101, 115,117,124,139**	**101, 115,117,124,139**	**101, 115,117,124,139**
		9.0.1			**101, 116,117,124,139**	**101, 116,117,124,139**	**101, 116,117,124,139**
		9.0.2			**101, 117,118,124,139**	**101, 117,118,124,139**	**101, 117,118,124,139**
		9.1			**101, 117, 121,124,139**	**101, 117, 121,124,139**	**101, 117, 121,124,139**
		9.1.1			**101, 117,124,126,139**	**101, 117,124,126,139**	**101, 117,124,126,139**
		9.1.2			**101, 117,124,129,139**	**101, 117,124,129,139**	**101, 117,124,129,139**
		9.2			**101, 117,124,130,139**	**101, 117,124,130,139**	**101, 117,124,130,139**
		9.2.1			**101, 117,124,131,139**	**101, 117,124,131,139**	**101, 117,124,131,139**
		9.2.2			**101, 117,124,133,139**	**101, 117,124,133,139**	**101, 117,124,133,139**
		9.3			**101, 117,124,135,139**	**101, 117,124,135,139**	**101, 117,124,135,139**
		9.3.1			**101, 117,124,137,139**	**101, 117,124,137,139**	**101, 117,124,137,139**
		9.3.2			**101, 117,124,139,140**	**101, 117,124,139,140**	**101, 117,124,139,140**
		9.4.0			**101, 117,124,139,143**	**101, 117,124,139,143**	**101, 117,124,139,143**

		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
Red Hat Enterprise Linux 6.5 AMD64 and EM64T Processors 2.6.32-431.el6.x86_64	No Cluster		No VM				
			LVM	2.02.100-8.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.100-8.el6	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
	Lifekeeper (*114)	8.2.1	No VM - OR - 2.02.100-8.el6		**101, 108,117, 124,139**	**101, 108,117, 124,139**	**101, 108,117, 124,139**
		8.3.0			**101, 109,117, 124,139**	**101, 109,117, 124,139**	**101, 109,117, 124,139**
		8.3.1			**101, 110,117, 124,139**	**101, 110,117, 124,139**	**101, 110,117, 124,139**
		8.3.2			**101, 111,117, 124,139**	**101, 111,117, 124,139**	**101, 111,117, 124,139**
		8.4.0			**101, 112,117, 124,139**	**101, 112,117, 124,139**	**101, 112,117, 124,139**
		8.4.1			**101, 113,117, 124,139**	**101, 113,117, 124,139**	**101, 113,117, 124,139**
		9.0.0			**101, 115,117, 124,139**	**101, 115,117, 124,139**	**101, 115,117, 124,139**
		9.0.1			**101, 116,117, 124,139**	**101, 116,117, 124,139**	**101, 116,117, 124,139**
		9.0.2			**101, 117,118, 124,139**	**101, 117,118, 124,139**	**101, 117,118, 124,139**
		9.1			**101, 117, 121, 124,139**	**101, 117, 121, 124,139**	**101, 117, 121, 124,139**
		9.1.1			**101, 117, 124,126,139**	**101, 117, 124,126,139**	**101, 117, 124,126,139**
		9.1.2			**101, 117, 124,129,139**	**101, 117, 124,129,139**	**101, 117, 124,129,139**
		9.2			**101, 117, 124,130,139**	**101, 117, 124,130,139**	**101, 117, 124,130,139**
		9.2.1			**101, 117, 124,131,139**	**101, 117, 124,131,139**	**101, 117, 124,131,139**
		9.2.2			**101, 117, 124,133,139**	**101, 117, 124,133,139**	**101, 117, 124,133,139**
		9.3			**101, 117, 124,135,139**	**101, 117, 124,135,139**	**101, 117, 124,135,139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
Red Hat Enterprise Linux 6.6 IA32 / x86 Processors 2.6.32-504.el6.i686	No Cluster		No VM				
			LVM	2.02.111-2.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.111-2.el6	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
	Lifekeeper (*114)	8.3.2	No VM - OR - 2.02.111-2.el6		**101, 111,117, 124,139**	**101, 111,117, 124,139**	**101, 111,117, 124,139**
		8.4.0			**101, 112,117, 124,139**	**101, 112,117, 124,139**	**101, 112,117, 124,139**
		8.4.1			**101, 113,117, 124,139**	**101, 113,117, 124,139**	**101, 113,117, 124,139**
		9.0.0			**101, 115,117, 124,139**	**101, 115,117, 124,139**	**101, 115,117, 124,139**
		9.0.1			**101, 116,117, 124,139**	**101, 116,117, 124,139**	**101, 116,117, 124,139**
		9.0.2			**101, 117,118, 124,139**	**101, 117,118, 124,139**	**101, 117,118, 124,139**
		9.1			**101, 117, 121, 124,139**	**101, 117, 121, 124,139**	**101, 117, 121, 124,139**
		9.1.1			**101, 117, 124,126,139**	**101, 117, 124,126,139**	**101, 117, 124,126,139**
		9.1.2			**101, 117, 124,129,139**	**101, 117, 124,129,139**	**101, 117, 124,129,139**
		9.2			**101, 117, 124,130,139**	**101, 117, 124,130,139**	**101, 117, 124,130,139**
		9.2.1			**101, 117, 124,131,139**	**101, 117, 124,131,139**	**101, 117, 124,131,139**
		9.2.2			**101, 117, 124,133,139**	**101, 117, 124,133,139**	**101, 117, 124,133,139**
		9.3			**101, 117, 124,135,139**	**101, 117, 124,135,139**	**101, 117, 124,135,139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**

		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
Red Hat Enterprise Linux 6.6 AMD64 and EM64T Processors 2.6.32-504.el6.x86_64	No Cluster		No VM				
			LVM	2.02.111-2.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.111-2.el6	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
	Lifekeeper (*114)	8.3.2	No VM - OR - 2.02.111-2.el6		**101, 111,117, 124,139**	**101, 111,117, 124,139**	**101, 111,117, 124,139**
		8.4.0			**101, 112,117, 124,139**	**101, 112,117, 124,139**	**101, 112,117, 124,139**
		8.4.1			**101, 113,117, 124,139**	**101, 113,117, 124,139**	**101, 113,117, 124,139**
		9.0.0			**101, 115,117, 124,139**	**101, 115,117, 124,139**	**101, 115,117, 124,139**
		9.0.1			**101, 116,117, 124,139**	**101, 116,117, 124,139**	**101, 116,117, 124,139**
		9.0.2			**101, 117,118, 124,139**	**101, 117,118, 124,139**	**101, 117,118, 124,139**
		9.1			**101, 117, 121, 124,139**	**101, 117, 121, 124,139**	**101, 117, 121, 124,139**
		9.1.1			**101, 117, 124,126,139**	**101, 117, 124,126,139**	**101, 117, 124,126,139**
		9.1.2			**101, 117, 124,129,139**	**101, 117, 124,129,139**	**101, 117, 124,129,139**
		9.2			**101, 117, 124,130,139**	**101, 117, 124,130,139**	**101, 117, 124,130,139**
		9.2.1			**101, 117, 124,131,139**	**101, 117, 124,131,139**	**101, 117, 124,131,139**
		9.2.2			**101, 117, 124,133,139**	**101, 117, 124,133,139**	**101, 117, 124,133,139**
		9.3			**101, 117, 124,135,139**	**101, 117, 124,135,139**	**101, 117, 124,135,139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
Red Hat Enterprise Linux 6.7 **IA32 / x86 Processors** Kernel 2.6.32-573.el6.i686	No Cluster		No VM				
			LVM	2.02.118-2.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.118-2.el6	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
	Lifekeeper (*114)	8.3.2	No VM - OR - 2.02.118-2.el6		**101, 111,117, 124,139**	**101, 111,117, 124,139**	**101, 111,117, 124,139**
		8.4.0			**101, 112,117, 124,139**	**101, 112,117, 124,139**	**101, 112,117, 124,139**
		8.4.1			**101, 113,117, 124,139**	**101, 113,117, 124,139**	**101, 113,117, 124,139**
		9.0.0			**101, 115,117, 124,139**	**101, 115,117, 124,139**	**101, 115,117, 124,139**
		9.0.1			**101, 116,117, 124,139**	**101, 116,117, 124,139**	**101, 116,117, 124,139**
		9.0.2			**101, 117,118, 124,139**	**101, 117,118, 124,139**	**101, 117,118, 124,139**
		9.1			**101, 117, 121, 124,139**	**101, 117, 121, 124,139**	**101, 117, 121, 124,139**
		9.1.1			**101, 117, 124,126,139**	**101, 117, 124,126,139**	**101, 117, 124,126,139**
		9.1.2			**101, 117, 124,129,139**	**101, 117, 124,129,139**	**101, 117, 124,129,139**
		9.2			**101, 117, 124,130,139**	**101, 117, 124,130,139**	**101, 117, 124,130,139**
		9.2.1			**101, 117, 124,131,139**	**101, 117, 124,131,139**	**101, 117, 124,131,139**
		9.2.2			**101, 117, 124,133,139**	**101, 117, 124,133,139**	**101, 117, 124,133,139**
		9.3			**101, 117, 124,135,139**	**101, 117, 124,135,139**	**101, 117, 124,135,139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
	No Cluster		No VM				
			LVM	2.02.118-2.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**

	RedHat Cluster Suite		LVM	2.02.118-2.el6	101,117,124,139	101,117,124,139	101,117,124,139
Red Hat Enterprise Linux 6.7 X64 / x86_64 Processors Kernel 2.6.32-573.el6.x86_64	Lifekeeper (*114)	8.3.2	No VM - OR - 2.02.118-2.el6		101, 111,117, 124,139	101, 111,117, 124,139	101, 111,117, 124,139
		8.4.0			101, 112,117, 124,139	101, 112,117, 124,139	101, 112,117, 124,139
		8.4.1			101, 113,117, 124,139	101, 113,117, 124,139	101, 113,117, 124,139
		9.0.0			101, 115,117, 124,139	101, 115,117, 124,139	101, 115,117, 124,139
		9.0.1			101, 116,117, 124,139	101, 116,117, 124,139	101, 116,117, 124,139
		9.0.2			101, 117,118, 124,139	101, 117,118, 124,139	101, 117,118, 124,139
		9.1			101, 117, 121, 124,139	101, 117, 121, 124,139	101, 117, 121, 124,139
		9.1.1			101, 117, 124,126,139	101, 117, 124,126,139	101, 117, 124,126,139
		9.1.2			101, 117, 124,129,139	101, 117, 124,129,139	101, 117, 124,129,139
		9.2			101, 117, 124,130,139	101, 117, 124,130,139	101, 117, 124,130,139
		9.2.1			101, 117, 124,131,139	101, 117, 124,131,139	101, 117, 124,131,139
		9.2.2			101, 117, 124,133,139	101, 117, 124,133,139	101, 117, 124,133,139
		9.3			101, 117, 124,135,139	101, 117, 124,135,139	101, 117, 124,135,139
		9.3.1			101, 117, 124,137,139	101, 117, 124,137,139	101, 117, 124,137,139
		9.3.2			101, 117, 124,139,140	101, 117, 124,139,140	101, 117, 124,139,140
		9.4.0			101, 117, 124,139,143	101, 117, 124,139,143	101, 117, 124,139,143
		9.4.1			101, 117, 124,139,144	101, 117, 124,139,144	101, 117, 124,139,144
		9.5.0			101, 117, 124,139,145	101, 117, 124,139,145	101, 117, 124,139,145
Red Hat Enterprise Linux 6.8 IA32 / x86 Processors Kernel 2.6.32-642.el6.i686	No Cluster		No VM				
			LVM	2.02.143-7.el6	117,124,139	117,124,139	117,124,139
	RedHat Cluster Suite		No VM		101,127	101,127	101,127
			LVM	2.02.143-7.el6	101,117,124,139	101,117,124,139	101,117,124,139
	Lifekeeper (*114)	8.3.2	No VM - OR - 2.02.143-7.el6		101, 111,117, 124,139	101, 111,117, 124,139	101, 111,117, 124,139
		8.4.0			101, 112,117, 124,139	101, 112,117, 124,139	101, 112,117, 124,139
		8.4.1			101, 113,117, 124,139	101, 113,117, 124,139	101, 113,117, 124,139
		9.0.0			101, 115,117, 124,139	101, 115,117, 124,139	101, 115,117, 124,139
		9.0.1			101, 116,117, 124,139	101, 116,117, 124,139	101, 116,117, 124,139
		9.0.2			101, 117,118, 124,139	101, 117,118, 124,139	101, 117,118, 124,139
		9.1			101, 117, 121, 124,139	101, 117, 121, 124,139	101, 117, 121, 124,139
		9.1.1			101, 117, 124,126,139	101, 117, 124,126,139	101, 117, 124,126,139
		9.1.2			101, 117, 124,129,139	101, 117, 124,129,139	101, 117, 124,129,139
		9.2			101, 117, 124,130,139	101, 117, 124,130,139	101, 117, 124,130,139
		9.2.1			101, 117, 124,131,139	101, 117, 124,131,139	101, 117, 124,131,139
		9.2.2			101, 117, 124,133,139	101, 117, 124,133,139	101, 117, 124,133,139
		9.3			101, 117, 124,135,139	101, 117, 124,135,139	101, 117, 124,135,139
		9.3.1			101, 117, 124,137,139	101, 117, 124,137,139	101, 117, 124,137,139
		9.3.2			101, 117, 124,139,140	101, 117, 124,139,140	101, 117, 124,139,140
		9.4.0			101, 117, 124,139,143	101, 117, 124,139,143	101, 117, 124,139,143
		9.4.1			101, 117, 124,139,144	101, 117, 124,139,144	101, 117, 124,139,144
		9.5.0			101, 117, 124,139,145	101, 117, 124,139,145	101, 117, 124,139,145
	No Cluster		No VM				
			LVM	2.02.143-7.el6	117,124,139	117,124,139	117,124,139
	RedHat Cluster Suite		No VM		101,127	101,127	101,127
			LVM	2.02.143-7.el6	101,117,124,139	101,117,124,139	101,117,124,139
		8.3.2			101, 111,117, 124,139	101, 111,117, 124,139	101, 111,117, 124,139
		8.4.0			101, 112,117, 124,139	101, 112,117, 124,139	101, 112,117, 124,139
		8.4.1			101, 113,117, 124,139	101, 113,117, 124,139	101, 113,117, 124,139

Red Hat Enterprise Linux 6.8 X64 / x86_64 Processors Kernel 2.6.32-642.el6.x86_64	Lifekeeper (*114)	9.0.0	No VM - OR - 2.02.143-7.el6		**101, 115,117, 124,139**	**101, 115,117, 124,139**	**101, 115,117, 124,139**
		9.0.1			**101, 116,117, 124,139**	**101, 116,117, 124,139**	**101, 116,117, 124,139**
		9.0.2			**101, 117,118, 124,139**	**101, 117,118, 124,139**	**101, 117,118, 124,139**
		9.1			**101, 117, 121, 124,139**	**101, 117, 121, 124,139**	**101, 117, 121, 124,139**
		9.1.1			**101, 117, 124,126,139**	**101, 117, 124,126,139**	**101, 117, 124,126,139**
		9.1.2			**101, 117, 124,129,139**	**101, 117, 124,129,139**	**101, 117, 124,129,139**
		9.2			**101, 117, 124,130,139**	**101, 117, 124,130,139**	**101, 117, 124,130,139**
		9.2.1			**101, 117, 124,131,139**	**101, 117, 124,131,139**	**101, 117, 124,131,139**
		9.2.2			**101, 117, 124,133,139**	**101, 117, 124,133,139**	**101, 117, 124,133,139**
		9.3			**101, 117, 124,135,139**	**101, 117, 124,135,139**	**101, 117, 124,135,139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
Red Hat Enterprise Linux 6.9 IA32 / x86 Processors Kernel 2.6.32-696.el6.i686	No Cluster		No VM				
			LVM	2.02.143-12.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.143-12.el6	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
	Lifekeeper (*114)	9.1.2	No VMNo VM - OR - 2.02.143-12.el6		**101, 117, 124,129,139**	**101, 117, 124,129,139**	**101, 117, 124,129,139**
		9.2			**101, 117, 124,130,139**	**101, 117, 124,130,139**	**101, 117, 124,130,139**
		9.2.1			**101, 117, 124,131,139**	**101, 117, 124,131,139**	**101, 117, 124,131,139**
		9.2.2			**101, 117, 124,133,139**	**101, 117, 124,133,139**	**101, 117, 124,133,139**
		9.3			**101, 117, 124,135,139**	**101, 117, 124,135,139**	**101, 117, 124,135,139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
Red Hat Enterprise Linux 6.9 X64 / x86_64 Processors Kernel 2.6.32-696.el6.x86_64	No Cluster		No VM				
			LVM	2.02.143-12.el6	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.143-12.el6	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
	Lifekeeper (*114)	9.1.2	No VMNo VM - OR - 2.02.143-12.el6		**101, 117, 124,129,139**	**101, 117, 124,129,139**	**101, 117, 124,129,139**
		9.2			**101, 117, 124,130,139**	**101, 117, 124,130,139**	**101, 117, 124,130,139**
		9.2.1			**101, 117, 124,131,139**	**101, 117, 124,131,139**	**101, 117, 124,131,139**
		9.2.2			**101, 117, 124,133,139**	**101, 117, 124,133,139**	**101, 117, 124,133,139**
		9.3			**101, 117, 124,135,139**	**101, 117, 124,135,139**	**101, 117, 124,135,139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**
		9.3.2			**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
Red Hat Enterprise Linux 6.10 IA32 / x86 Processors Kernel	No Cluster		No VM				
			LVM	2.02.143-12.el6_9.1	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.143-12.el6_9.1	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
		9.3.1			**101, 117, 124,137,139**	**101, 117, 124,137,139**	**101, 117, 124,137,139**

2.6.32-754.el6.i686	Lifekeeper (*114)	9.3.2	No VMNo VM - OR - 2.02.143-12.el6_9.1		**101, 117, 124,139,140**	**101, 117, 124,139,140**	**101, 117, 124,139,140**
		9.4.0			**101, 117, 124,139,143**	**101, 117, 124,139,143**	**101, 117, 124,139,143**
		9.4.1			**101, 117, 124,139,144**	**101, 117, 124,139,144**	**101, 117, 124,139,144**
		9.5.0			**101, 117, 124,139,145**	**101, 117, 124,139,145**	**101, 117, 124,139,145**
Red Hat Enterprise Linux 6.10 X64 / x86_64 Processors Kernel 2.6.32-754.el6.x86_64	No Cluster		No VM				
			LVM	2.02.143-12.el6_9.1	**117,124,139**	**117,124,139**	**117,124,139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.143-12.el6_9.1	**101,117,124, 139**	**101,117,124, 139**	**101,117,124, 139**
	Lifekeeper (*114)	9.3.1	No VMNo VM - OR - 2.02.143-12.el6_9.1		**101, 117, 124, 137, 139**	**101, 117, 124, 137, 139**	**101, 117, 124, 137, 139**
		9.3.2			**101, 117, 124, 139, 140**	**101, 117, 124, 139, 140**	**101, 117, 124, 139, 140**
		9.4.0			**101, 117, 124, 139, 143**	**101, 117, 124, 139, 143**	**101, 117, 124, 139, 143**
		9.4.1			**101, 117, 124, 139, 144**	**101, 117, 124, 139, 144**	**101, 117, 124, 139, 144**
		9.5.0			**101, 117, 124, 139, 145**	**101, 117, 124, 139, 145**	**101, 117, 124, 139, 145**
Red Hat Enterprise Linux 7 AMD64 and EM64T Processors 3.10.0-123.el7.x86_64	No Cluster		No VM				
			LVM	2.02.105-14.el7	**125, 139**	**125, 139**	**125, 139**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.105-14.el7	**101, 125, 139**	**101, 125, 139**	**101, 125, 139**
	Lifekeeper (*114)	9.0.0	No VM - OR - 2.02.105-14.el7		**101, 115, 119, 120, 125, 139**	**101, 115, 119, 120, 125, 139**	**101, 115, 119, 120, 125, 139**
		9.0.1			**101, 116, 119, 120, 125, 139**	**101, 116, 119, 120, 125, 139**	**101, 116, 119, 120, 125, 139**
		9.0.2			**101, 118, 119, 120, 125, 139**	**101, 118, 119, 120, 125, 139**	**101, 118, 119, 120, 125, 139**
		9.1			**101, 120, 121, 125, 139**	**101, 120, 121, 125, 139**	**101, 120, 121, 125, 139**
		9.1.1			**101, 120, 125, 126, 139**	**101, 120, 125, 126, 139**	**101, 120, 125, 126, 139**
		9.1.2			**101, 120, 125, 129, 139**	**101, 120, 125, 129, 139**	**101, 120, 125, 129, 139**
		9.2			**101, 120, 125, 130, 139**	**101, 120, 125, 130, 139**	**101, 120, 125, 130, 139**
		9.2.1			**101, 120, 125, 131, 139**	**101, 120, 125, 131, 139**	**101, 120, 125, 131, 139**
		9.2.2			**101, 120, 125, 133, 139**	**101, 120, 125, 133, 139**	**101, 120, 125, 133, 139**
		9.3			**101, 120, 125, 135, 139**	**101, 120, 125, 135, 139**	**101, 120, 125, 135, 139**
		9.3.1			**101, 120, 125, 137, 139**	**101, 120, 125, 137, 139**	**101, 120, 125, 137, 139**
		9.3.2			**101, 120, 125, 139, 140**	**101, 120, 125, 139, 140**	**101, 120, 125, 139, 140**
		9.4.0			**101, 120, 125, 139, 143**	**101, 120, 125, 139, 143**	**101, 120, 125, 139, 143**
		9.4.1			**101, 120, 125, 139, 144**	**101, 120, 125, 139, 144**	**101, 120, 125, 139, 144**
		9.5.0			**101, 120, 125, 139, 145**	**101, 120, 125, 139, 145**	**101, 120, 125, 139, 145**
		9.5.1			**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**
Red Hat Enterprise Linux 7.1 AMD64 and EM64T Processors 3.10.0-229.el7.x86_64	No Cluster		No VM				
			LVM	2.02.115-3.el7	**125, 139**	**125, 139**	**125, 139**
	RedHat Cluster Suite		No VM				
			LVM	2.02.115-3.el7			
	Lifekeeper (*114)	9.0.0	No VM - OR - 2.02.115-3.el7		**101, 115, 119, 120, 125, 139**	**101, 115, 119, 120, 125, 139**	**101, 115, 119, 120, 125, 139**
		9.0.1			**101, 116, 119, 120, 125, 139**	**101, 116, 119, 120, 125, 139**	**101, 116, 119, 120, 125, 139**
		9.0.2			**101, 118, 119, 120, 125, 139**	**101, 118, 119, 120, 125, 139**	**101, 118, 119, 120, 125, 139**
		9.1			**101, 120, 121, 125, 139**	**101, 120, 121, 125, 139**	**101, 120, 121, 125, 139**
		9.1.1			**101, 120, 125, 126, 139**	**101, 120, 125, 126, 139**	**101, 120, 125, 126, 139**
		9.1.2			**101, 120, 125, 129, 139**	**101, 120, 125, 129, 139**	**101, 120, 125, 129, 139**
		9.2			**101, 120, 125, 130, 139**	**101, 120, 125, 130, 139**	**101, 120, 125, 130, 139**
		9.2.1			**101, 120, 125, 131, 139**	**101, 120, 125, 131, 139**	**101, 120, 125, 131, 139**
		9.2.2			**101, 120, 125, 133, 139**	**101, 120, 125, 133, 139**	**101, 120, 125, 133, 139**
		9.3			**101, 120, 125, 135, 139**	**101, 120, 125, 135, 139**	**101, 120, 125, 135, 139**
		9.3.1			**101, 120, 125, 137, 139**	**101, 120, 125, 137, 139**	**101, 120, 125, 137, 139**

		9.3.2			101, 120, 125, 139, 140	101, 120, 125, 139, 140	101, 120, 125, 139, 140
		9.4.0			101, 120, 125, 139, 143	101, 120, 125, 139, 143	101, 120, 125, 139, 143
		9.4.1			101, 120, 125, 139, 144	101, 120, 125, 139, 144	101, 120, 125, 139, 144
		9.5.0			101, 120, 125, 139, 145	101, 120, 125, 139, 145	101, 120, 125, 139, 145
		9.5.1			101, 120, 125, 139, 142, 146	101, 120, 125, 139, 142, 146	101, 120, 125, 139, 142, 146
Red Hat Enterprise Linux 7.2 AMD64 and EM64T Processors 3.10.0-327.el7.x86_64	No Cluster		No VM				
			LVM	2.02.130-5.el7	125, 139	125, 139	125, 139
	RedHat Cluster Suite		No VM		101	101	101
			LVM	2.02.130-5.el7	101, 125, 139	101, 125, 139	101, 125, 139
	Lifekeeper (*114)	9.0.0	No VM - OR - 2.02.130-3.el7		101, 115, 119, 120, 125, 139	101, 115, 119, 120, 125, 139	101, 115, 119, 120, 125, 139
		9.0.1			101, 116, 119, 120, 125, 139	101, 116, 119, 120, 125, 139	101, 116, 119, 120, 125, 139
		9.0.2			101, 118, 119, 120, 125, 139	101, 118, 119, 120, 125, 139	101, 118, 119, 120, 125, 139
		9.1			101, 120, 121, 125, 139	101, 120, 121, 125, 139	101, 120, 121, 125, 139
		9.1.1			101, 120, 125, 126, 139	101, 120, 125, 126, 139	101, 120, 125, 126, 139
		9.1.2			101, 120, 125, 129, 139	101, 120, 125, 129, 139	101, 120, 125, 129, 139
		9.2			101, 120, 125, 130, 139	101, 120, 125, 130, 139	101, 120, 125, 130, 139
		9.2.1			101, 120, 125, 131, 139	101, 120, 125, 131, 139	101, 120, 125, 131, 139
		9.2.2			101, 120, 125, 133, 139	101, 120, 125, 133, 139	101, 120, 125, 133, 139
		9.3			101, 120, 125, 135, 139	101, 120, 125, 135, 139	101, 120, 125, 135, 139
		9.3.1			101, 120, 125, 137, 139	101, 120, 125, 137, 139	101, 120, 125, 137, 139
		9.3.2			101, 120, 125, 139, 140	101, 120, 125, 139, 140	101, 120, 125, 139, 140
		9.4.0			101, 120, 125, 139, 143	101, 120, 125, 139, 143	101, 120, 125, 139, 143
		9.4.1			101, 120, 125, 139, 144	101, 120, 125, 139, 144	101, 120, 125, 139, 144
		9.5.0			101, 120, 125, 139, 145	101, 120, 125, 139, 145	101, 120, 125, 139, 145
		9.5.1			101, 120, 125, 139, 142, 146	101, 120, 125, 139, 142, 146	101, 120, 125, 139, 142, 146
Red Hat Enterprise Linux 7.3 AMD64 and EM64T Processors 3.10.0-514.el7.x86_64	No Cluster		No VM				
			LVM	2.02.166-1.el7	125, 139, 142	125, 139, 142	125, 139, 142
				2.02.171-8.el7	125, 139, 142	125, 139, 142	125, 139, 142
	RedHat Cluster Suite		No VM		101	101	101
			LVM	2.02.166-1.el7	101, 125, 139, 142	101, 125, 139, 142	101, 125, 139, 142
				2.02.171-8.el7	101, 125, 139, 142	101, 125, 139, 142	101, 125, 139, 142
	Lifekeeper (*114)	9.1.1	No VMNo VM - OR - 2.02.166-1.el7 - OR - 2.02.171-8.el7		101, 120, 125, 126, 139, 142	101, 120, 125, 126, 139, 142	101, 120, 125, 126, 139, 142
		9.1.2			101, 120, 125, 129, 139, 142	101, 120, 125, 129, 139, 142	101, 120, 125, 129, 139, 142
		9.2			101, 120, 125, 130, 139, 142	101, 120, 125, 130, 139, 142	101, 120, 125, 130, 139, 142
		9.2.1			101, 120, 125, 131, 139, 142	101, 120, 125, 131, 139, 142	101, 120, 125, 131, 139, 142
		9.2.2			101, 120, 125, 133, 139, 142	101, 120, 125, 133, 139, 142	101, 120, 125, 133, 139, 142
		9.3			101, 120, 125, 135, 139, 142	101, 120, 125, 135, 139, 142	101, 120, 125, 135, 139, 142
		9.3.1			101, 120, 125, 137, 139, 142	101, 120, 125, 137, 139, 142	101, 120, 125, 137, 139, 142
		9.3.2			101, 120, 125, 139, 140, 142	101, 120, 125, 139, 140, 142	101, 120, 125, 139, 140, 142
		9.4.0			101, 120, 125, 139, 142, 143	101, 120, 125, 139, 142, 143	101, 120, 125, 139, 142, 143
		9.4.1			101, 120, 125, 139, 142, 144	101, 120, 125, 139, 142, 144	101, 120, 125, 139, 142, 144
		9.5.0			101, 120, 125, 139, 142, 145	101, 120, 125, 139, 142, 145	101, 120, 125, 139, 142, 145
		9.5.1			101, 120, 125, 139, 142, 146	101, 120, 125, 139, 142, 146	101, 120, 125, 139, 142, 146
	No Cluster		No VM				
			LVM	2.02.171-8.el7	125, 139, 142	125, 139, 142	125, 139, 142
	RedHat Cluster Suite		No VM		101	101	101
			LVM	2.02.171-8.el7	101, 125, 139, 142	101, 125, 139, 142	101, 125, 139, 142
		9.2			101, 120, 125, 130, 139, 142	101, 120, 125, 130, 139, 142	101, 120, 125, 130, 139, 142

Red Hat Enterprise Linux 7.4 AMD64 and EM64T Processors 3.10.0-693.el7.x86_64	Lifekeeper (*114)	9.2.1	No VMNo VM - OR - 2.02.171-8.el7		**101, 120, 125, 131, 139, 142**	**101, 120, 125, 131, 139, 142**	**101, 120, 125, 131, 139, 142**
		9.2.2			**101, 120, 125, 133, 139, 142**	**101, 120, 125, 133, 139, 142**	**101, 120, 125, 133, 139, 142**
		9.3			**101, 120, 125, 135, 139, 142**	**101, 120, 125, 135, 139, 142**	**101, 120, 125, 135, 139, 142**
		9.3.1			**101, 120, 125, 137, 139, 142**	**101, 120, 125, 137, 139, 142**	**101, 120, 125, 137, 139, 142**
		9.3.2			**101, 120, 125, 139, 140, 142**	**101, 120, 125, 139, 140, 142**	**101, 120, 125, 139, 140, 142**
		9.4.0			**101, 120, 125, 139, 142, 143**	**101, 120, 125, 139, 142, 143**	**101, 120, 125, 139, 142, 143**
		9.4.1			**101, 120, 125, 139, 142, 144**	**101, 120, 125, 139, 142, 144**	**101, 120, 125, 139, 142, 144**
		9.5.0			**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**
		9.5.1			**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**
Red Hat Enterprise Linux 7.5 AMD64 and EM64T Processors 3.10.0-862.el7.x86_64	No Cluster		No VM				
			LVM	2.02.177-4.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
				2.02.180-8.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.177-4.el7	**101, 125, 139, 142**	**101, 125, 139, 142**	**101, 125, 139, 142**
				2.02.180-8.el7	**101, 125, 139, 142**	**101, 125, 139, 142**	**101, 125, 139, 142**
	Lifekeeper (*114)	9.3	No VMNo VM - OR - 2.02.177-4.el7 - OR - 2.02.180-8.el7		**101, 120, 125, 135, 139, 142**	**101, 120, 125, 135, 139, 142**	**101, 120, 125, 135, 139, 142**
		9.3.1			**101, 120, 125, 137, 139, 142**	**101, 120, 125, 137, 139, 142**	**101, 120, 125, 137, 139, 142**
		9.3.2			**101, 120, 125, 139, 140, 142**	**101, 120, 125, 139, 140, 142**	**101, 120, 125, 139, 140, 142**
		9.4.0			**101, 120, 125, 139, 142, 143**	**101, 120, 125, 139, 142, 143**	**101, 120, 125, 139, 142, 143**
		9.4.1			**101, 120, 125, 139, 142, 144**	**101, 120, 125, 139, 142, 144**	**101, 120, 125, 139, 142, 144**
		9.5.0			**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**
		9.5.1			**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**
Red Hat Enterprise Linux 7.6 AMD64 and EM64T Processors 3.10.0-957.el7.x86_64	No Cluster		No VM				
			LVM	2.02.180-8.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
				2.02.180-10.el7_6.7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.180-8.el7	**101, 125, 139, 142**	**101, 125, 139, 142**	**101, 125, 139, 142**
				2.02.180-10.el7_6.7	**101, 125, 139, 142**	**101, 125, 139, 142**	**101, 125, 139, 142**
	Lifekeeper (*114)	9.3.2	No VMNo VM - OR - 2.02.180-8.el7 - OR - 2.02.180-10.el7_6.7		**101, 120, 125, 139, 140, 142**	**101, 120, 125, 139, 140, 142**	**101, 120, 125, 139, 140, 142**
		9.4.0			**101, 120, 125, 139, 142, 143**	**101, 120, 125, 139, 142, 143**	**101, 120, 125, 139, 142, 143**
		9.4.1			**101, 120, 125, 139, 142, 144**	**101, 120, 125, 139, 142, 144**	**101, 120, 125, 139, 142, 144**
		9.5.0			**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**
		9.5.1			**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**
Red Hat Enterprise Linux 7.7 AMD64 and EM64T Processors 3.10.0-1062.el7.x86_64	No Cluster		No VM				
			LVM	2.02.185-2.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.185-2.el7	**101, 125, 139, 142**	**101, 125, 139, 142**	**101, 125, 139, 142**
	Lifekeeper (*114)	9.4.0	No VMNo VM - OR - 2.02.185-2.el7		**101, 120, 125, 139, 142, 143**	**101, 120, 125, 139, 142, 143**	**101, 120, 125, 139, 142, 143**
		9.4.1			**101, 120, 125, 139, 142, 144**	**101, 120, 125, 139, 142, 144**	**101, 120, 125, 139, 142, 144**
		9.5.0			**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**
		9.5.1			**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**
Red Hat Enterprise Linux 7.8 AMD64 and EM64T Processors 3.10.0-1127.el7.x86_64	No Cluster		No VM				
			LVM	2.02.186-2.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.186-2.el7	**101, 125, 139, 142**	**101, 125, 139, 142**	**101, 125, 139, 142**
	Lifekeeper (*114)	9.5.0	No VMNo VM - OR - 2.02.186-2.el7		**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**	**101, 120, 125, 139, 142, 145**
		9.5.1			**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**
	No Cluster		No VM				

Red Hat Enterprise Linux 7.9 AMD64 and EM64T Processors 3.10.0-1160.el7.x86_64	No Cluster		LVM	2.02.187-6.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.02.187-6.el7	**101, 125, 139, 142**	**101, 125, 139, 142**	**101, 125, 139, 142**
	Lifekeeper (*114)	9.5.1	No VMNo VM - OR - 2.02.187-6.el7		**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**	**101, 120, 125, 139, 142, 146**
Red Hat Enterprise Linux 8 AMD64 and EM64T Processors 4.18.0-80.el8.x86_64	No Cluster		No VM				
			LVM	2.03.02-6.el8			
	RedHat Cluster Suite		No VM				
			LVM	2.03.02-6.el8			
Red Hat Enterprise Linux 8.1 AMD64 and EM64T Processors 4.18.0-147.el8.x86_64	No Cluster		No VM				
			LVM	2.03.05-5.el8	**141, 142**	**141, 142**	**141, 142**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.03.05-5.el8	**101, 141, 142**	**101, 141, 142**	**101, 141, 142**
	Lifekeeper (*114)	9.5.1	No VMNo VM - OR - 2.03.05-5.el8		**101, 120, 139, 141, 142, 146**	**101, 120, 139, 141, 142, 146**	**101, 120, 139, 141, 142, 146**
Red Hat Enterprise Linux 8.2 AMD64 and EM64T Processors 4.18.0-193.el8.x86_64	No Cluster		No VM				
			LVM	2.03.08-3.el8	**141, 142**	**141, 142**	**141, 142**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.03.08-3.el8	**101, 141, 142**	**101, 141, 142**	**101, 141, 142**
	Lifekeeper (*114)	9.5.1	No VMNo VM - OR - 2.03.08-3.el8		**120, 139, 141, 142, 146**	**120, 139, 141, 142, 146**	**120, 139, 141, 142, 146**
Red Hat Enterprise Linux 8.3 AMD64 and EM64T Processors 4.18.0-240.el8.x86_64	No Cluster		No VM				
			LVM	2.03.09-5.el8	**141, 142**	**141, 142**	**141, 142**
	RedHat Cluster Suite		No VM		**101**	**101**	**101**
			LVM	2.03.09-5.el8	**101, 141, 142**	**101, 141, 142**	**101, 141, 142**
	Lifekeeper (*114)	9.5.1	No VMNo VM - OR - 2.03.09-5.el8		**101, 120, 139, 141, 142, 146**	**101, 120, 139, 141, 142, 146**	**101, 120, 139, 141, 142, 146**
Red Hat Enterprise Linux 8.4 AMD64 and EM64T Processors 4.18.0-305.el8.x86_64	No Cluster		No VM				
			LVM	2.03.11-5.el8			**141, 142**
	RedHat Cluster Suite		No VM				**101**
			LVM	2.03.11-5.el8			**101, 141, 142**
SUSE Linux Enterprise Server 10 IA32 / x86 Processors 2.6.16.21-0.8-default 2.6.16.21-0.8-smp 2.6.16.21-0.8-bigsmp	No Cluster		No VM				
			LVM	2.02.02-11.2			
SUSE Linux Enterprise Server 10 (Security Fix) IA32 / x86 Processors 2.6.16.27-0.9-default 2.6.16.27-0.9-smp 2.6.16.27-0.9-bigsmp	No Cluster		No VM				
			LVM	2.02.02-11.2			
SUSE Linux Enterprise Server 10 AMD64 and EM64T Processors 2.6.16.21-0.8-default 2.6.16.21-0.8-smp	No Cluster		No VM				
			LVM	2.02.02-11.2			
SUSE Linux Enterprise Server 10 (Security Fix) AMD64 and EM64T Processors 2.6.16.27-0.9-default 2.6.16.27-0.9-smp	No Cluster		No VM				
			LVM	2.02.02-11.2			
SUSE Linux Enterprise Server 10 Itanium / IA64 Processors 2.6.16.21-0.8-default	No Cluster		No VM				
			LVM	2.02.02-11.2			
SUSE Linux Enterprise Server 10 (Security Fix) Itanium / IA64 Processors 2.6.16.27-0.9-default	No Cluster		No VM				
			LVM	2.02.02-11.2			
			No VM				

SUSE Linux Enterprise Server 10 (Service Pack 1) IA32 / x86 Processors 2.6.16.46-0.14-default 2.6.16.46-0.14-smp 2.6.16.46-0.14-bigsmp	No Cluster		LVM	2.02.17-7.9			
	Heartbeat	Bundle 2.0.8-0.19	No VM				
			LVM	2.02.17-7.9			
SUSE Linux Enterprise Server 10 (Service Pack 1) Itanium / IA64 Processors 2.6.16.46-0.14-default	No Cluster		No VM				
			LVM	2.02.17-7.9			
	Heartbeat	Bundle 2.0.8-0.19	No VM				
			LVM	2.02.17-7.9			
SUSE Linux Enterprise Server 10 (Service Pack 1) AMD64 and EM64T Processors 2.6.16.46-0.14-default	No Cluster		No VM				
			LVM	2.02.17-7.9			
	Heartbeat	Bundle 2.0.8-0.19	No VM				
			LVM	2.02.17-7.9			
SUSE Linux Enterprise Server 10 (Service Pack 2) IA32 / x86 Processors 2.6.16.60-0.21-default 2.6.16.60-0.21-smp 2.6.16.60-0.21-bigsmp	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
	Novell Open ES 2	SP1	No VM				
SUSE Linux Enterprise Server 10 (Service Pack 2) IA32 / x86 Processors 2.6.16.60-0.21-xenpae	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
SUSE Linux Enterprise Server 10 (Service Pack 2 + Security Fix) IA32 / x86 Processors 2.6.16.60-0.29-default 2.6.16.60-0.29-smp 2.6.16.60-0.29-bigsmp	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
	Novell Open ES 2	SP1	No VM				
SUSE Linux Enterprise Server 10 (Service Pack 2 + Security Fix) IA32 / x86 Processors 2.6.16.60-0.29-xenpae	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
SUSE Linux Enterprise Server 10 (Service Pack 2) Itanium / IA64 Processors 2.6.16.60-0.21-default	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
	Novell Open ES 2	SP1	No VM				
SUSE Linux Enterprise Server 10 (Service Pack 2) AMD64 and EM64T Processors 2.6.16.60-0.21-default 2.6.16.60-0.21-smp	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
	Novell Open ES 2	SP1	No VM				
SUSE Linux Enterprise Server 10 (Service Pack 2) AMD64 and EM64T Processors 2.6.16.60-0.21-xen	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			

SUSE Linux Enterprise Server 10 (Service Pack 2 + Security Fix) IA32 / x86 Processors 2.6.16.60-0.42.5-default 2.6.16.60-0.42.5-smp 2.6.16.60-0.42.5-bigsmp 2.6.16.60-0.42.5-xenpae	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
SUSE Linux Enterprise Server 10 (Service Pack 2 + Security Fix) Itanium / IA64 Processors 2.6.16.60-0.42.5-default	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
SUSE Linux Enterprise Server 10 (Service Pack 2 + Security Fix) AMD64 and EM64T Processors 2.6.16.60-0.42.5-default 2.6.16.60-0.42.5-smp 2.6.16.60-0.42.5-xen	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bundle 2.1.3-0.9	No VM				
			LVM	2.02.17-7.19			
SUSE Linux Enterprise Server 10 (Service Pack 3) IA32 / x86 Processors 2.6.16.60-0.54.5-default 2.6.16.60-0.54.5-smp 2.6.16.60-0.54.5-bigsmp 2.6.16.60-0.54.5-xenpae	No Cluster		No VM				
			LVM	2.02.17-27.8			
	Heartbeat	Bundle 2.1.4-0.15.3	No VM				
			LVM	2.02.17-27.8			
SUSE Linux Enterprise Server 10 (Service Pack 3) Itanium / IA64 Processors 2.6.16.60-0.54.5-default	No Cluster		No VM				
			LVM	2.02.17-27.8			
	Heartbeat	Bundle 2.1.4-0.15.3	No VM				
			LVM	2.02.17-27.8			
SUSE Linux Enterprise Server 10 (Service Pack 3) AMD64 / EM64T Processors 2.6.16.60-0.54.5-default 2.6.16.60-0.54.5-smp 2.6.16.60-0.54.5-xen	No Cluster		No VM				
			LVM	2.02.17-27.8			
	Heartbeat	Bundle 2.1.4-0.15.3	No VM				
			LVM	2.02.17-27.8			
SUSE Linux Enterprise Server 10 (Service Pack 4) IA32 / x86 Processors 2.6.16.60-0.85.1-default 2.6.16.60-0.85.1-smp 2.6.16.60-0.85.1-bigsmp 2.6.16.60-0.85.1-xenpae	No Cluster		No VM				
			LVM	2.02.17-7.30.1			
	Heartbeat	Bundle 2.1.4-0.24.9	No VM				
			LVM	2.02.17-7.30.1			
SUSE Linux Enterprise Server 10 (Service Pack 4) Itanium / IA64 Processors 2.6.16.60-0.85.1-default	No Cluster		No VM				
			LVM	2.02.17-7.30.1			
	Heartbeat	Bundle 2.1.4-0.24.9	No VM				
			LVM	2.02.17-7.30.1			

SUSE Linux Enterprise Server 10 (Service Pack 4) AMD64 / EM64T Processors 2.6.16.60-0.85.1-default 2.6.16.60-0.85.1-smp 2.6.16.60-0.85.1-xen	No Cluster		No VM					
			LVM	2.02.17-7.30.1				
	Heartbeat	Bundle 2.1.4-0.24.9	No VM					
			LVM	2.02.17-7.30.1				
SUSE Linux Enterprise Server 11 (Security Fix) IA32 / x86 Processors 2.6.27.21-0.1.2-default 2.6.27.21-0.1.2-pae 2.6.27.21-0.1.2-xen	No Cluster		No VM					
			LVM	2.02.39-17.3				
SUSE Linux Enterprise Server 11 (Security Fix) Itanium / IA64 Processors 2.6.27.21-0.1.2-default	No Cluster		No VM					
			LVM	2.02.39-17.3				
SUSE Linux Enterprise Server 11 (Security Fix) AMD64 / EM64T Processors 2.6.27.21-0.1.2-default 2.6.27.21-0.1.2-xen	No Cluster		No VM					
			LVM	2.02.39-17.3				
SUSE Linux Enterprise Server 11 (Service Pack 1) IA32 / x86 Processors 2.6.32.12-0.7.1-default 2.6.32.12-0.7.1-pae 2.6.32.12-0.7.1-xen	No Cluster		No VM					
			LVM	2.02.39-18.26.1				
SUSE Linux Enterprise Server 11 (Service Pack 1) Itanium / IA64 Processors 2.6.32.12-0.7.1-default	No Cluster		No VM					
			LVM	2.02.39-18.26.1				
SUSE Linux Enterprise Server 11 (Service Pack 1) AMD64 / EM64T Processors 2.6.32.12-0.7.1-default 2.6.32.12-0.7.1-xen	No Cluster		No VM					
			LVM	2.02.39-18.26.1				
SUSE Linux Enterprise Server 11 (Service Pack 2) IA32 / x86 Processors 3.0.13-0.27-default 3.0.13-0.27-pae	No Cluster		No VM					
			LVM	2.02.84-3.25.5				
SUSE Linux Enterprise Server 11 (Service Pack 2) Itanium / IA64 Processors 3.0.13-0.27-default	No Cluster		No VM					
			LVM	2.02.84-3.25.5				
SUSE Linux Enterprise Server 11 (Service Pack 2) AMD64 / EM64T Processors 3.0.13-0.27-default	No Cluster		No VM					
			LVM	2.02.84-3.25.5				
SUSE Linux Enterprise Server 11 (Service Pack 3) IA32 / x86 Processors 3.0.76-0.11-default 3.0.76-0.11-pae	No Cluster		No VM					
			LVM	2.02.98-0.25.3				
SUSE Linux Enterprise Server 11 (Service Pack 3) Itanium / IA64 Processors 3.0.76-0.11-default	No Cluster		No VM					
			LVM	2.02.98-0.25.3				
SUSE Linux Enterprise Server 11 (Service Pack 3) AMD64 / EM64T Processors 3.0.76-0.11-default	No Cluster		No VM					
			LVM	2.02.98-0.25.3				
	GPFS	3.4.0.28	No VM					
SUSE Linux Enterprise Server 11 (Service Pack 3) AMD64 / EM64T Processors	No Cluster		No VM					
			LVM	2.02.98-0.25.3				

3.0.76-0.11-xen	GPFS	3.4.0.28	No VM				
SUSE Linux Enterprise Server 11 (Service Pack 4) IA32 / x86 Processors 3.0.101-63.1-default 3.0.101-63.1-pae	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 11 (Service Pack 4) Itanium / IA64 Processors 3.0.101-63.1-default	No Cluster		No VM				
			LVM	2.02.98-0.33.1			
SUSE Linux Enterprise Server 11 (Service Pack 4) AMD64 / EM64T Processors 3.0.101-63.1-default	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 11 (Service Pack 4) AMD64 / EM64T Processors 3.0.101-63.1-xen	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 11 (Service Pack 4) IA32 / x86 Processors (Security Fix) 3.0.101-108.21-default 3.0.101-108.21-pae	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 11 (Service Pack 4) Itanium / IA64 Processors (Security Fix) 3.0.101-108.21-default	No Cluster		No VM				
			LVM	2.02.98-0.33.1			
SUSE Linux Enterprise Server 11 (Service Pack 4) AMD64 / EM64T Processors (Security Fix) 3.0.101-108.21-default	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 11 (Service Pack 4) AMD64 / EM64T Processors (Security Fix) 3.0.101-108.21-xen	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 11 (Service Pack 4) IA32 / x86 Processors (Security Fix) 3.0.101-108.68-default 3.0.101-108.68-pae	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 11 (Service Pack 4) AMD64 / EM64T Processors (Security Fix) 3.0.101-108.68-default	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 11 (Service Pack 4) AMD64 / EM64T Processors (Security Fix) 3.0.101-108.68-xen	No Cluster		No VM				
			LVM	2.02.98-0.33.1	**139**	**139**	**139**
SUSE Linux Enterprise Server 12 AMD64 / EM64T Processors 3.12.28-4-default	No Cluster		No VM				
			LVM	2.02.98-48.8	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 AMD64 / EM64T Processors 3.12.28-4-xen	No Cluster		No VM				
			LVM	2.02.98-48.8	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 (Service Pack 1) AMD64 / EM64T Processors 3.12.59-60.45-default	No Cluster		No VM				
			LVM	2.02.120-60.1	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 (Service Pack 1) AMD64 / EM64T Processors 3.12.59-60.45-xen	No Cluster		No VM				
			LVM	2.02.120-60.1	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 (Service Pack 1) AMD64 / EM64T Processors (Security Fix) 3.12.74-60.64.40-default	No Cluster		No VM				
			LVM	2.02.120-60.1	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 (Service Pack 1) AMD64 / EM64T Processors (Security Fix) 3.12.74-60.64.40-xen	No Cluster		No VM				
			LVM	2.02.120-60.1	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 (Service Pack 2)	No Cluster		No VM				

AMD64 / EM64T Processors 4.4.21-69-default	No Cluster	LVM	2.02.120-72.8	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 (Service Pack 3) AMD64 / EM64T Processors 4.4.103-6.33-default	No Cluster	No VM				
		LVM	2.02.120-77.2	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 (Service Pack 3) AMD64 / EM64T Processors (Security Fix) 4.4.114-94.14-default	No Cluster	No VM				
		LVM	2.02.120-77.2	**125, 139**	**125, 139**	**125, 139**
SUSE Linux Enterprise Server 12 (Service Pack 4) AMD64 / EM64T Processors 4.12.14-94.41-default	No Cluster	No VM				
		LVM	2.02.180-8.16	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
SUSE Linux Enterprise Server 12 (Service Pack 5) AMD64 / EM64T Processors 4.12.14-120-default	No Cluster	No VM				
		LVM	2.02.180-9.18.1	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
SUSE Linux Enterprise Server 15 AMD64 / EM64T Processors 4.12.14-23-default	No Cluster	No VM				
		LVM	2.02.177-5.11	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
SUSE Linux Enterprise Server 15 (Service Pack 1) AMD64 / EM64T Processors 4.12.14-195-default	No Cluster	No VM				
		LVM	2.02.180-10.16	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
SUSE Linux Enterprise Server 15 (Service Pack 2) AMD64 / EM64T Processors 5.3.18-22-default	No Cluster	No VM				
		LVM	2.03.05-6.5	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 5.6 x64 / x86_64 Processors 2.6.32-100.26.2.el5	No Cluster	No VM				
		LVM	2.02.74-5.el5			
Oracle Unbreakable Enterprise Kernel 5.7 IA32 / x86 Processors 2.6.32-200.13.1.el5uek	No Cluster	No VM				
		LVM	2.02.84-6.0.1.el5			
Oracle Unbreakable Enterprise Kernel 5.7 IA32 / x86 Processors 2.6.32-300.27.1.el5uek	No Cluster	No VM				
		LVM	2.02.84-6.0.1.el5			
Oracle Unbreakable Enterprise Kernel 5.7 x64 / x86_64 Processors 2.6.32-200.13.1.el5uek	No Cluster	No VM				
		LVM	2.02.84-6.0.1.el5			
Oracle Unbreakable Enterprise Kernel 5.7 x64 / x86_64 Processors 2.6.32-300.27.1.el5uek	No Cluster	No VM				
		LVM	2.02.84-6.0.1.el5			
Oracle Unbreakable Enterprise Kernel 5.8 IA32 / x86 Processors 2.6.32-300.39.2.el5uek	No Cluster	No VM				
		LVM	2.02.88-7.0.1.el5			
Oracle Unbreakable Enterprise Kernel 5.8 x64 / x86_64 Processors 2.6.32-300.39.2.el5uek	No Cluster	No VM				
		LVM	2.02.88-7.0.1.el5			
Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors	No Cluster	No VM				

Kernel 2.6.39-200.29.1.el6uek.x86_64	No Cluster	LVM	2.02.87-6.el6	**117, 139**	**117, 139**	**117, 139**
Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors Kernel 2.6.39-200.29.2.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.87-6.el6	**117, 139**	**117, 139**	**117, 139**
Oracle Unbreakable Enterprise Kernel 6.2 IA32 / x86 Processors Kernel 2.6.39-200.29.1.el6uek.i686	No Cluster	No VM				
		LVM	2.02.87-6.el6	**117, 139**	**117, 139**	**117, 139**
Oracle Unbreakable Enterprise Kernel 6.2 IA32 / x86 Processors Kernel 2.6.39-200.29.2.el6uek.i686	No Cluster	No VM				
		LVM	2.02.87-6.el6	**117, 139**	**117, 139**	**117, 139**
Oracle Unbreakable Enterprise Kernel 6.3 IA32 / x86 Processors Kernel 2.6.39-200.24.1.el6uek.i686	No Cluster	No VM				
		LVM	2.02.95-10.el6	**117, 139**	**117, 139**	**117, 139**
Oracle Unbreakable Enterprise Kernel 6.3 X64 / x86_64 Processors Kernel 2.6.39-200.24.1.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.95-10.el6	**117, 139**	**117, 139**	**117, 139**
Oracle Unbreakable Enterprise Kernel 6.4 (Security Fix) IA32 / x86 Processors Kernel 2.6.39-400.211.1.el6uek.i686	No Cluster	No VM				
		LVM	2.02.98-9.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.4 (Security Fix) X64 / x86_64 Processors Kernel 2.6.39-400.211.1.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.98-9.el6	**117,124,139**	**117,124,139**	**117,124,139**
			2.02.111-2.el6_6.3	**117,124,139**	**117,124,139**	**117,124,139**
			2.02.143-7.el6_8.1	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.4 (Security Fix) X64 / x86_64 Processors Kernel 2.6.39-400.264.1.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.98-9.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.5 IA32 / x86 Processors Kernel 2.6.39-400.211.1.el6uek.i686	No Cluster	No VM				
		LVM	2.02.100-8.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.5 X64 / x86_64 Processors Kernel 3.8.13-16.2.1.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.5 (Security Fix) X64 / x86_64 Processors Kernel 3.8.13-44.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.el6	**117,124,139**	**117,124,139**	**117,124,139**

Oracle Unbreakable Enterprise Kernel 6.6 IA32 / x86 Processors Kernel 2.6.39-400.215.10.el6uek.i686	No Cluster	No VM				
		LVM	2.02.111-2.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.6 X64 / x86_64 Processors Kernel 3.8.13-44.1.1.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.6 (Security Fix) X64 / x86_64 Processors Kernel 3.8.13-68.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.6 (Security Fix) X64 / x86_64 Processors Kernel 3.8.13-68.1.3.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.7 IA32 / x86 Processors Kernel 2.6.39-400.250.7.el6uek.i686	No Cluster	No VM				
		LVM	2.02.118-2.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.7 X64 / x86_64 Processors Kernel 3.8.13-68.3.4.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.118-2.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.8 IA32 / x86 Processors Kernel 2.6.39-400.278.2.el6uek.i686	No Cluster	No VM				
		LVM	2.02.143-7.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.8 X64 / x86_64 Processors Kernel 4.1.12-37.4.1.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.143-7.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.9 X64 / x86_64 Processors Kernel 4.1.12-61.1.8.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.9 (Security Fix) X64 / x86_64 Processors Kernel 4.1.12-94.2.1.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.el6	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.10 X64 / x86_64 Processors Kernel 4.1.12-124.16.4.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.el6_9.1	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 6.10(Security Fix) X64 / x86_64 Processors Kernel 4.1.12-124.45.6.el6uek.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.el6_9.1	**117,124,139**	**117,124,139**	**117,124,139**
Oracle Unbreakable Enterprise Kernel 7 X64 / x86_64 Processors	No Cluster	No VM				

X64 / x86_64 Processors Kernel 3.8.13-44.el7uek.x86_64	No Cluster	LVM	2.02.105-14.el7	**125, 139**	**125, 139**	**125, 139**
Oracle Unbreakable Enterprise Kernel 7.1 X64 / x86_64 Processors Kernel 3.8.13-55.1.6.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.105-14.el7	**125, 139**	**125, 139**	**125, 139**
Oracle Unbreakable Enterprise Kernel 7.1 **(Security Fix)** X64 / x86_64 Processors Kernel 3.8.13-68.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.105-14.el7	**125, 139**	**125, 139**	**125, 139**
Oracle Unbreakable Enterprise Kernel 7.1 **(Security Fix)** X64 / x86_64 Processors Kernel 3.8.13-68.2.2.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.105-14.el7	**125, 139**	**125, 139**	**125, 139**
Oracle Unbreakable Enterprise Kernel 7.2 X64 / x86_64 Processors Kernel 3.8.13-98.7.1.el7uek.x86_64	No Cluster	No VM		**101**	**101**	**101**
		LVM	2.02.130-5.el7	**101, 125, 139**	**101, 125, 139**	**101, 125, 139**
Oracle Unbreakable Enterprise Kernel 7.2 **(Security Fix)** X64 / x86_64 Processors Kernel 3.8.13-118.10.2.el7uek.x86_64	No Cluster	No VM		**101**	**101**	**101**
		LVM	2.02.130-5.el7	**101, 125, 139**	**101, 125, 139**	**101, 125, 139**
Oracle Unbreakable Enterprise Kernel 7.3 X64 / x86_64 Processors Kernel 4.1.12-61.1.18.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.166-1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
			2.02.171-8.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.3 **(Security Fix)** X64 / x86_64 Processors Kernel 4.1.12-61.1.28.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.166-1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
			2.02.171-8.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.4 X64 / x86_64 Processors Kernel 4.1.12-94.3.9.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.171-8.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.5 X64 / x86_64 Processors Kernel 4.1.12-112.16.4.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.177-4.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.5 **(Security Fix)** X64 / x86_64 Processors Kernel 4.1.12-124.16.4.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.171-8.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
			2.02.177-4.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
			2.02.180-8.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**

Oracle Unbreakable Enterprise Kernel 7.5 (Security Fix) X64 / x86_64 Processors Kernel 4.1.12-124.30.1.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.171-8.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
			2.02.177-4.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
			2.02.180-8.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.6 X64 / x86_64 Processors Kernel 4.14.35-1818.3.3.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.180-8.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.7 X64 / x86_64 Processors Kernel 4.14.35-1902.3.2.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.185-2.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.8 X64 / x86_64 Processors Kernel 4.14.35-1902.300.11.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.186-7.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.8 (Security Fix) X64 / x86_64 Processors Kernel 4.14.35-1902.301.1.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.186-7.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 7.9 X64 / x86_64 Processors Kernel 5.4.17-2011.6.2.el7uek.x86_64	No Cluster	No VM				
		LVM	2.02.187-6.0.3.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 8.2 (Security Fix) X64 / x86_64 Processors Kernel 5.4.17-2011.5.3.el8uek.x86_64	No Cluster	No VM				
		LVM	2.03.08-3.el8	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 8.3 X64 / x86_64 Processors Kernel 5.4.17-2011.7.4.el8uek.x86_64	No Cluster	No VM				
		LVM	2.03.09-5.el8	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Unbreakable Enterprise Kernel 8.4 X64 / x86_64 Processors Kernel 5.4.17-2102.201.3.el8uek.x86_64	No Cluster	No VM				
		LVM	2.03.11-5.el8			**125, 139, 142**
Oracle Enterprise Linux 5.1 IA32 / x86 Processors 2.6.18-53.el5 2.6.18-53.el5PAE	No Cluster	No VM				
		LVM	2.02.26-3.el5			
	RedHat Cluster Suite 2.0.73-1	No VM				
		LVM	2.02.26-3.el5			
Oracle Enterprise Linux 5.1 x64 / x86_64 Processors	No Cluster	No VM				
		LVM	2.02.26-3.el5			

x64 / x86_64 Processors 2.6.18-53.el5	RedHat Cluster Suite	2.0.73-1	No VM				
			LVM	2.02.26-3.el5			
Oracle Enterprise Linux 5.4 IA32 / x86 Processors 2.6.18-164.el5 2.6.18-164.el5PAE	No Cluster		No VM				
			LVM	2.02.46-8.el5			
Oracle Enterprise Linux 5.4 x64 / x86_64 Processors 2.6.18-164.el5	No Cluster		No VM				
			LVM	2.02.46-8.el5			
Oracle Enterprise Linux 5.5 IA32 / x86 Processors 2.6.18-194.el5 2.6.18-194.el5PAE	No Cluster		No VM				
			LVM	2.02.56-8.el5			
Oracle Enterprise Linux 5.5 x64 / x86_64 Processors 2.6.18-194.el5	No Cluster		No VM				
			LVM	2.02.56-8.el5			
Oracle Enterprise Linux 5.6 IA32 / x86 Processors 2.6.18-238.el5 2.6.18-238.el5PAE	No Cluster		No VM				
			LVM	2.02.74-5.el5			
Oracle Enterprise Linux 5.6 x64 / x86_64 Processors 2.6.18-238.el5	No Cluster		No VM				
			LVM	2.02.74-5.el5			
Oracle Enterprise Linux 5.7 IA32 / x86 Processors 2.6.18-274.el5 2.6.18-274.el5PAE	No Cluster		No VM				
			LVM	2.02.84-6.el5			
Oracle Enterprise Linux 5.7 x64 / x86_64 Processors 2.6.18-274.el5	No Cluster		No VM				
			LVM	2.02.84-6.el5			
Oracle Linux 6.5 IA32 / x86 Processors 2.6.32-431.el6.i686	No Cluster		No VM				
			LVM	2.02.100-8.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.5 x64 / x86_64 Processors 2.6.32-431.el6.x86_64	No Cluster		No VM				
			LVM	2.02.100-8.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.6 IA32 / x86 Processors 2.6.32-504.el6.i686	No Cluster		No VM				
			LVM	2.02.111-2.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.6 x64 / x86_64 Processors 2.6.32-504.el6.x86_64	No Cluster		No VM				
			LVM	2.02.111-2.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.7 IA32 / x86 Processors 2.6.32-573.el6.i686	No Cluster		No VM				
			LVM	2.02.118-2.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.7 x64 / x86_64 Processors 2.6.32-573.el6.x86_64	No Cluster		No VM				
			LVM	2.02.118-2.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.8 IA32 / x86 Processors 2.6.32-642.el6.i686	No Cluster		No VM				
			LVM	2.02.143-7.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.8 x64 / x86_64 Processors	No Cluster		No VM				

x64 / x86_64 Processors 2.6.32-642.el6.x86_64	No Cluster	LVM	2.02.143-7.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.9 IA32 / x86 Processors 2.6.32-696.el6.i686	No Cluster	No VM				
		LVM	2.02.143-12.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.9 x64 / x86_64 Processors 2.6.32-696.el6.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.el6	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.10 IA32 / x86 Processors 2.6.32-754.el6.i686	No Cluster	No VM				
		LVM	2.02.143-12.el6_9.1	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 6.10 x64 / x86_64 Processors 2.6.32-754.el6.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.el6_9.1	**124, 139**	**124, 139**	**124, 139**
Oracle Linux 7 x64 / x86_64 Processors 3.10.0-123.el7.x86_64	No Cluster	No VM				
		LVM	2.02.105-14.el7	**125, 139**	**125, 139**	**125, 139**
Oracle Linux 7.1 x64 / x86_64 Processors 3.10.0-123.el7.x86_64	No Cluster	No VM				
		LVM	2.02.115-3.el7	**125, 139**	**125, 139**	**125, 139**
Oracle Linux 7.2 x64 / x86_64 Processors 3.10.0-327.el7.x86_64	No Cluster	No VM				
		LVM	2.02.130-5.el7	**125, 139**	**125, 139**	**125, 139**
Oracle Linux 7.3 x64 / x86_64 Processors 3.10.0-514.el7.x86_64	No Cluster	No VM				
		LVM	2.02.166-1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Linux 7.4 x64 / x86_64 Processors 3.10.0-693.el7.x86_64	No Cluster	No VM				
		LVM	2.02.171-8.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Linux 7.4 x64 / x86_64 Processors (Security Fix) 3.10.0-693.11.6.el7.x86_64	No Cluster	No VM				
		LVM	2.02.171-8.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Linux 7.5 x64 / x86_64 Processors 3.10.0-862.el7.x86_64	No Cluster	No VM				
		LVM	2.02.177-4.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Linux 7.6 x64 / x86_64 Processors 3.10.0-957.el7.x86_64	No Cluster	No VM				
		LVM	2.02.180-8.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Linux 7.7 x64 / x86_64 Processors 3.10.0-1062.el7.x86_64	No Cluster	No VM				
		LVM	2.02.185-2.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Linux 7.8 x64 / x86_64 Processors 3.10.0-1127.el7.x86_64	No Cluster	No VM				
		LVM	2.02.186-7.0.1.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Linux 7.9 x64 / x86_64 Processors 3.10.0-1160.el7.x86_64	No Cluster	No VM				
		LVM	2.02.187-6.0.3.el7	**125, 139, 142**	**125, 139, 142**	**125, 139, 142**
Oracle Linux 8.1 x64 / x86_64 Processors 4.18.0-147.el8.x86_64	No Cluster	No VM				
		LVM	2.03.05-5.el8	**141, 142**	**141, 142**	**141, 142**

Oracle Linux 8.2 x64 / x86_64 Processors 4.18.0-193.el8.x86_64	No Cluster	No VM				
		LVM	2.03.08-3.el8	**141, 142**	**141, 142**	**141, 142**
Oracle Linux 8.3 x64 / x86_64 Processors 4.18.0-240.el8.x86_64	No Cluster	No VM				
		LVM	2.03.09-5.el8	**141, 142**	**141, 142**	**141, 142**
Oracle Linux 8.4 x64 / x86_64 Processors 4.18.0-305.el8.x86_64	No Cluster	No VM				
		LVM	2.03.11-5.el8			**141, 142**

Supported	
Not Supported	

Notes	
1	VCS DiskReservation agent is not supported.
75	Only environments using HDLM ARK 6.0.1-2 are supported. HDLM ARK is bundled with LifeKeeper.
77	Only environments using HDLM ARK 6.1.0-4 are supported. HDLM ARK is bundled with LifeKeeper.
87	Only environments using HDLM ARK 6.2.2-3 are supported. HDLM ARK is bundled with LifeKeeper.
79	USP, USP V, or USP VM storage systems are not supported when QLogic HBAs are used.
84	EFI label is not supported.
90	Only environments using HDLM ARK 6.2.3-1 are supported. HDLM ARK is bundled with LifeKeeper.
91	Only environments using HDLM ARK 6.4.0-2 are supported. HDLM ARK is bundled with LifeKeeper.
93	You can also use Heartbeat together with Oracle Cluster File System 2.
94	Security Fix kernels are not supported.
95	Only environments using HDLM ARK 7.0.0-1 are supported. HDLM ARK is bundled with LifeKeeper.
96	LVM2 + boot disk environment configurations are not supported.
97	Only environments using HDLM ARK 7.2.0-1 are supported. HDLM ARK is bundled with LifeKeeper.
98	SCSI-persistent-reservation fencing is not supported.
99	This is supported in HDLM 6.6.2-01 or later.
101	iSCSI environments are not supported.
103	Boot disk environments are not supported.
104	Only environments using HDLM ARK 8.1.1-5620 are supported. HDLM ARK is bundled with LifeKeeper.
105	Only environments using HDLM ARK 8.1.2-5795 are supported. HDLM ARK is bundled with LifeKeeper.
106	GPFS Persistent Reserve is not supported.
107	Only environments using HDLM ARK 8.2.0-6213 are supported. HDLM ARK is bundled with LifeKeeper.
108	Only environments using HDLM ARK 8.2.1-6353 are supported. HDLM ARK is bundled with LifeKeeper.
109	Only environments using HDLM ARK 8.3.0-6389 are supported. HDLM ARK is bundled with LifeKeeper.
110	Only environments using HDLM ARK 8.3.1-6397 are supported. HDLM ARK is bundled with LifeKeeper.
111	Only environments using HDLM ARK 8.3.2-6405 are supported. HDLM ARK is bundled with LifeKeeper.
112	Only environments using HDLM ARK 8.4.0-6427 are supported. HDLM ARK is bundled with LifeKeeper.
113	Only environments using HDLM ARK 8.4.1-6449 are supported. HDLM ARK is bundled with LifeKeeper.
114	The following storage system devices are supported: - Hitachi AMS2000/AMS series. - Hitachi TagmaStore Universal Storage Platform 100. - Hitachi TagmaStore Universal Storage Platform 600. - Hitachi TagmaStore Universal Storage Platform 1100. - Hitachi Virtual Storage Platform. - HUS100 series. - HUS VM. - Hitachi Virtual Storage Platform G1000. - Hitachi Virtual Storage Platform G200, G400, G600, G800. - Hitachi Virtual Storage Platform F400, F600, G800 . - Hitachi VSP G350, G370, G700, G900. - Hitachi VSP F350, F370, F700, F900. - Hitachi Virtual Storage Platform G1500. - Hitachi Virtual Storage Platform F1500.
115	Only environments using HDLM ARK 9.0.0-6488 are supported. HDLM ARK is bundled with LifeKeeper.
116	Only environments using HDLM ARK 9.0.1-6492 are supported. HDLM ARK is bundled with LifeKeeper.
117	For the filter setting of /etc/lvm/lvm.conf, if you specify a permanent name for a SCSI device(*): Output of a kernel dump fails if you specify a logical volume created on a SCSI device in an HDLM for Linux environment. In this case, add a disk for the kernel dump output according to the procedure in Add a disk for the kernel dump output" in the HDLM User Guide. <*Example> Seeing Notes on Using LVM2 in the HDLM User Guide and setting the following to /etc/lvm/lvm.conf: filter = ["a|sddlm[a-p][a-p].*|","a|scsi-3600605b005d7a320196f1f53484dfb20|","r|/dev/sd|"] Note: scsi-3600605b005d7a320196f1f53484dfb20 is a permanent name that is confirmed by using the udevadm command
118	Only environments using HDLM ARK 9.0.2-6513 are supported. HDLM ARK is bundled with LifeKeeper.
119	The patch for bug 7205 must be applied. For details about how to obtain this patch, contact SIOS Technology Corp.
120	Configurations using raw devices are not supported.
121	Only environments using HDLM ARK 9.1.0-6538 are supported. HDLM ARK is bundled with LifeKeeper.
122	The following options are supported in the lvm.conf settings with values other than the operating system defaults. - filter (*) - types - write_cache_state - md_component_detection (*): The setting for global_filter is supported individually.
123	The following options are supported in the lvm.conf settings with values other than the operating system defaults. - global_filter (*) - types - write_cache_state - md_component_detection (*): The setting for filter is supported individually.

124	The following options are supported in the lvm.conf settings with values other than the operating system defaults. - filter (*) - types - write_cache_state - md_component_detection - use_lvmetad (*): If you perform operations with use_lvmetad=1 in a version of LVM2 that supports global_filter, specify global_filter instead of filter.
125	The following options are supported in the lvm.conf settings with values other than the operating system defaults. - global_filter (*) - types - write_cache_state - md_component_detection - use_lvmetad (*): If you perform operations with use_lvmetad=0, specify filter instead of global_filter.
126	Only environments using HDLM ARK 9.1.1-6594 are supported. HDLM ARK is bundled with LifeKeeper.
127	You can also use Pacemaker provided by the OS.
128	The following lists the reserve functionalities that HDLM supports for each OS cluster:

OS	Cluster Name	Reserve Functionality	Remarks
Linux	HA Monitor	Used regularly	
	RedHat Cluster Suite	Used regularly	When enabling reserve functionalities in the RedHat Cluster Suite settings
	Lifekeeper	Used regularly	
	ClusterPerfect	Used regularly	

129	Only environments using HDLM ARK 9.1.2-6609 are supported. HDLM ARK is bundled with LifeKeeper.
130	Only environments using HDLM ARK 9.2.0-6629 are supported. HDLM ARK is bundled with LifeKeeper.
131	Only environments using HDLM ARK 9.2.1-6653 are supported. HDLM ARK is bundled with LifeKeeper.
132	Not supported in environments where the boot disk is a logical volume (LVM2) on an HDLM device.
133	Only environments using HDLM ARK 9.2.2-6679 are supported. HDLM ARK is bundled with LifeKeeper.
134	lvm2-2.02.177-4.el7.x86_64 and later versions are not supported in an environment where a logical volume (LVM2) on an HDLM device is used as a boot disk.
135	Only environments using HDLM ARK 9.3.0-6728 are supported. HDLM ARK is bundled with LifeKeeper.
136	This is supported in HDLM 8.6.2-01 or later.
137	Only environments using HDLM ARK 9.3.1-6750 are supported. HDLM ARK is bundled with LifeKeeper.
138	This is supported in HDLM 8.6.2-02 or later.
139	A function that, during the installation of HDLM, checks whether the use of LVM cache files is enabled was added. If the use of LVM is enabled, the KAPL12451-E message is output and the installation is terminated.
140	Only environments using HDLM ARK 9.3.2-6863 are supported. HDLM ARK is bundled with LifeKeeper.
141	The following options are supported in the lvm.conf settings with values other than the operating system defaults. - global_filter - types - md_component_detection
142	In the device section of the /etc/lvm/lvm.conf file, specify 1 for allow_changes_with_duplicate_pvs. If allow_changes_with_duplicate_pvs is not in the file, add the line
143	Only environments using HDLM ARK 9.4.0-6959 are supported. HDLM ARK is bundled with LifeKeeper.
144	Only environments using HDLM ARK 9.4.1-6983 are supported. HDLM ARK is bundled with LifeKeeper.
145	Only environments using HDLM ARK 9.5.0-7075 are supported. HDLM ARK is bundled with LifeKeeper.
146	Only environments using HDLM ARK 9.5.1-7154 are supported. HDLM ARK is bundled with LifeKeeper.

Supported Oracle 9i RAC Configurations

Operating System	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Solaris 10 (SPARC 64 Bit)	9.2.0.8.0	SunCluster 3.1 (08/05)	Raw			

Operating System	Oracle Version	Cluster	Volume Manager	HDLM Version		
				6.1.0	6.5.0	6.5.1
HP-UX 11iv1 (PA-RISC 64 Bit)	9.0.1.0.0	MC/ServiceGuard 11.13	LVM			
	9.2.0.1.0	MC/ServiceGuard 11.15	LVM			
	9.2.0.1.0	Serviceguard 11.16	LVM			
	9.2.0.5.0	Serviceguard 11.16	LVM			
HP-UX 11iv2 (Itanium / IA64) September 2004 May 2005 December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	9.2.0.6.0	Serviceguard 11.16	LVM			
	9.2.0.8.0	Serviceguard 11.16	LVM			

Supported	
Not Supported	

Notes	
6	Two-node configurations are supported.
15	RAC accesses storage system by using a Oracle Solaris Cluster device ID.
33	The following configurations are not supported: - RAC using LUs with EFI labels set - RAC using ZFS

Supported Oracle 10g RAC Configurations

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Windows Server 2008 (IA32 / x86)	10.2.0.4.0	Clusterware	ASM			
			Raw			
			OCFS			
Windows Server 2008 (X64 / x86_64)	10.2.0.4.0	Clusterware	ASM			
			Raw			
			OCFS			
Windows Server 2008 SP2 (IA32 / x86)	10.2.0.5.0	Clusterware	OCFS			
Windows Server 2008 R2 (X64 / x86_64)	10.2.0.5.0	Clusterware	Raw			
Windows Server 2008 R2 SP1 (X64 / x86_64)	10.2.0.5.0	Clusterware	ASM			

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Solaris 10 (SPARC 64 Bit)	10.1.0.4.0	CRS (Bundle)	ASM			
	10.1.0.5.0	CRS (Bundle)	Raw			
	10.2.0.1.0	Clusterware (Bundle)	ASM			
	10.2.0.2.0	CRS (Bundle)	ASM			
			RAW			
		Sun Cluster 3.1 8/05 Clusterware (Bundle)	RAW			
			VxVM 4.1			
	10.2.0.3.0	Clusterware (Bundle)	RAW			
			ASM			
		Sun Cluster 3.2 Clusterware	Raw			
			VxVM 5.0			
		Sun Cluster 3.2 Clusterware 3+ Nodes Configuration	Raw			
			ASM			
	10.2.0.4.0	Sun Cluster 3.2 Clusterware 2 Node Configuration	Raw			
			VxVM 5.0			
		Clusterware (Bundle)	Raw			
			ASM			
		VCS 5.0 + Clusterware	VxVM 5.0			
	10.2.0.5.0	Clusterware (Bundle)	ASM			

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.8	8.8.0	8.8.1
Red Hat Linux 5 (IA32) 2.6.18-8.el5 2.6.18-8.el5PAE	10.2.0.4.0	Clusterware (Bundle)	OCFS 2			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5 (x64) 2.6.18-8.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	ASM + ASMLib			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.1 (IA32) 2.6.18-53.el5 2.6.18-53.el5PAE	10.2.0.4.0	Clusterware (Bundle)	OCFS 2			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + ASMLib			

Red Hat Linux 5.1 (x64) 2.6.18-53.el5	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+ASMLib			
Red Hat Linux 5.2 (IA32) 2.6.18-92.el5 2.6.18-92.el5PAE	10.2.0.4.0	Clusterware (Bundle)	OCFS 2			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.2 (x64) 2.6.18-92.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	ASM + ASMLib			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.3 (IA32) 2.6.18-128.el5 2.6.18-128.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.3 (x64) 2.6.18-128.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM + ASMLib			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.4 (IA32) 2.6.18-164.el5 2.6.18-164.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.4 (x64) 2.6.18-164.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.5 (IA32) 2.6.18-194.el5 2.6.18-194.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.5 (x64) 2.6.18-194.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.6 (IA32) 2.6.18-238.el5 2.6.18-238.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.6 (x64) 2.6.18-238.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.7 (IA32) 2.6.18-274.el5 2.6.18-274.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.7 (x64)	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			

2.6.18-274el5	10.2.0.4.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.8 (IA32) 2.6.18-308.el5 2.6.18-308.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.8 (x64) 2.6.18-308.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.9 (IA32) 2.6.18-348.el5 2.6.18-348.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.9 (x64) 2.6.18-348.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.9 (IA32) **(Security Fix)** 2.6.18-348.39.1.el5 2.6.18-348.39.1.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.9 (x64) **(Security Fix)** 2.6.18-348.39.1.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.10 (IA32) 2.6.18-371.el5 2.6.18-371.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.10 (x64) 2.6.18-371.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.11 (IA32) 2.6.18-398.el5 2.6.18-398.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.11 (x64) 2.6.18-398.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.11 (IA32) **(Security Fix)** 2.6.18-416.el5 2.6.18-416.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.11 (x64) **(Security Fix)** 2.6.18-416.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			

	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.11 (IA32) **(Security Fix)** 2.6.18-419.el5 2.6.18-419.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.11 (x64) **(Security Fix)** 2.6.18-419.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.11 (IA32) **(Security Fix)** 2.6.18-426.el5 2.6.18-426.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.11 (x64) **(Security Fix)** 2.6.18-426.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
Red Hat Linux 5.11 (IA32) **(Security Fix)** 2.6.18-431.el5 2.6.18-431.el5PAE	10.2.0.4.0	Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
Red Hat Linux 5.11 (x64) **(Security Fix)** 2.6.18-431.el5	10.2.0.1.0	Clusterware (Bundle)	ASM+Raw			
	10.2.0.3.0	Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	RAW			
	10.2.0.4.0	Clusterware (Bundle)	RAW			
		Clusterware (Bundle)	ASM + Raw			
		Clusterware (Bundle)	ASM+ASMLib			
		Clusterware (Bundle)	OCFS 2			
	10.2.0.5.0	Clusterware (Bundle)	RAW			
	10.2.0.5.0+ Patch 11066597	Clusterware (Bundle)	ASM+Raw			
			ASM+ASMLib			
SuSE Linux Enterprise Server 10 (IA32 / x86) 2.6.16.21-0.8-default 2.6.16.21-0.8-smp 2.6.16.21-0.8-bigsmp	10.2.0.3.0	Clusterware (Bundle)	ASM+Raw			
SuSE Linux Enterprise Server 10 (IA32 / x86) **Security Fix** 2.6.16.27-0.9-default 2.6.16.27-0.9-smp 2.6.16.27-0.9-bigsmp	10.2.0.3.0	Clusterware (Bundle)	ASM+Raw			
SuSE Linux Enterprise Server 10 (IA32 / x86) **Service Pack 1** 2.6.16.46-0.14-default 2.6.16.46-0.14-smp 2.6.16.46-0.14-bigsmp	10.2.0.3.0	Clusterware (Bundle)	ASM+Raw			
SuSE Linux Enterprise Server 10 (x64 / x86_64) 2.6.16.21-0.8-default 2.6.16.21-0.8-smp	10.2.0.3.0	Clusterware (Bundle)	ASM+Raw			
SuSE Linux Enterprise Server 10 (x64 / x86_64) **Security Fix** 2.6.16.27-0.9-default 2.6.16.27-0.9-smp	10.2.0.3.0	Clusterware (Bundle)	ASM+Raw			
SuSE Linux Enterprise Server 10 (x64 / x86_64) **Service Pack 1 Security Fix** 2.6.16.46-0.14-default 2.6.16.46-0.14-smp	10.2.0.3.0	Clusterware (Bundle)	ASM+Raw			

Operating System Name	**Oracle Version**	**Cluster**	**Volume Manager**	**HDLM Version**		
				6.1.0	**6.5.0**	**6.5.1**
HP-UX 11iv1 (PA-RISC 64 Bit)	10.1.0.3.0	Serviceguard 11.16 CRS (Bundle)	LVM	**8**	**8**	**8**
HP-UX 11iv2 (Itanium / IA64) September 2004 May 2005	10.2.0.1.0	Serviceguard 11.16 Clusterware (Bundle)	LVM	**8**	**8**	**8**
	10.2.0.2.0	Serviceguard 11.17 Clusterware (Bundle)	LVM	**8,16**	**8,16**	**8,16**

December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	10.2.0.2.0	Clusterware (Bundle)	ASM	**8, 16 23**	**8, 16 23**	**8, 16 23**
	10.2.0.3.0	Clusterware (Bundle)	ASM	**8, 16 23**	**8, 16 23**	**8, 16 23**
		Serviceguard 11.17 Clusterware (Bundle)	LVM	**8,16**	**8,16**	**8,16**
		Serviceguard 11.18 Clusterware (Bundle)	LVM	**8,16**	**8,16**	**8,16**
HP-UX 11iv2 (PA-RISC) September 2004 May 2005 December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	10.2.0.1.0	Serviceguard 11.16 Clusterware (Bundle)	LVM	**8**	**8**	**8**

Supported	
Not Supported	

Notes	
2	/dev/raw/rawxx raw devices can be used on Linux.
8	When using HDLM with Oracle 10g RAC 10.1.0.3.0 and later versions, we recommend that you set the I/O timeout period (MISSCOUNT) of the voting disk to a value higher than the number of paths to the voting disk x yy seconds (yy is 60 for RAID models, and 30 for DF models.). If the MISSCOUNT value is smaller than the recommended value and an I/O timeout occurs on the path for the voting disk, RAC will recognize the I/O timeout before HDLM can use all paths by performing a failover. For inquiries about changing the MISSCOUNT value, contact Oracle Support Services.
11	Edit the /etc/ocfs.conf file and change the parameter value of comm_voting to 0.
14	Apply patch 13.
16	Set the DISKTIMEOUT value as follows when using Oracle RAC 10g 10.2.0.2.0 or later versions: DISKTIMEOUT = 60 x Number of paths Do not modify the DISKTIMEOUT value if the result of the above is lower than the default value of 200. In addition, if the relationship between MISSCOUNT and DISKTIMEOUT is (MISSCOUNT >= DISKTIMEOUT), an error may occur in Oracle due to Oracle specifications. If an error occurs, set a MISSCOUNT value that is larger than the DISKTIMEOUT value: for example, set a value of (DISKTIMEOUT value + 1). For details, contact the Oracle support service.
17	HDLM for Linux 5.7.0-02 or later is required.
18	Use ASMLib (ASMLib kernel driver).
19	Apply patch 5.
20	Only available when using Red Hat AS/ES 3 (IA32 / x86) Update5 + Security Fix: 2.4.21-32.0.1.EL
21	Use TechnologyLevel 05 or later.
23	In this configuration, Oracle bug #5131219 occurs. For this reason the customer's consent is required for the bug below to be treated as a restriction. - When a path failure occurs on a node, if node 1 (the node operated by the database instance whose instance number is 1) shuts down, the node where the path failure occurred might incorrectly reboot.
24	Apply patch 6.
25	For the I/O timeout value (MISSCOUNT), set whichever of the following has the higher value: - 600 seconds (the default value of Oracle Clusterware in a Oracle Cluster environment) - Number of paths to the voting disk x yy seconds (yy is 60 for RAID models, and 30 for DF models.) For inquiries about changing the MISSCOUNT value, contact Oracle Support Services.
26	Only configurations of three or more nodes are supported.
27	RAC accesses storage system by using a Oracle Solaris Cluster device ID.
28	Apply patch 2.
29	Supports only 2 node configuration.
30	When using TechnologyLevel05, apply APAR IY92037.
31	Volumes created by the VxVM
32	When using the MNDHB functionality with HDLM, create MNDHB LVs on the HDLM device by using the following procedure: 1. Create a concurrent VG on the HDLM device that corresponds to the LU that uses the MNDHB functionality. 2. Create an MNDHB LV on the concurrent VG that you created in step 1. For details on how to create the MNDHB LV, see the HACMP/PowetrHA documentation.
33	The following configurations are not supported: - RAC using LUs with EFI labels set - RAC using ZFS
34	Only "pathcount" is supported for a setting of SCSI protocol (fencing protocol) of storage system device. For the setting of SCSI protocol (fencing protocol) of storage system device, refer to the manual of Oracle Solaris Cluster.
35	ASM accesses storage system by using a Oracle Solaris Cluster device ID.
36	Apply MP1 or later.
51	When using parallel service groups, activate I/O fencing.
52	The following storage systems are supported: - USP/NSC/USP V/USP VM - HP XP10000/XP12000/XP20000/XP24000/SVS When using I/O fencing function, enable "host mode option 02 (Veritas Database Edition/Advanced Cluster)" on the storage system side. When not using I/O fencing function, do not enable "host mode option 02 (Veritas Database Edition/Advanced Cluster)" on the storage system side. Also, make sure that hosts using I/O fencing are not in the same host group as any hosts that are not using I/O fencing.

53	When you use Oracle Cluster file System 2 in an Oracle RAC environment, set the O2CB_HEARTBEAT_THRESHOLD parameter in the /etc/sysconfig/o2cbf file to the following value: (Number of paths connected to Oracle Cluster file System 2 x yy seconds / 2) + 1 (yy is 60 for RAID models, and 30 for DF models.)
54	HDLM for Windows does not support configurations where Oracle RAC is installed on OCFS to share Oracle Home with multiple nodes.
55	iSCSI environments are not supported.
56	This is supported in HDLM 8.6.2-02 or later.

Supported Oracle 11g RAC Configurations

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Windows 2008 (IA32 / x86)	11.2.0.3.0	Oracle Clusterware	ASM			
Windows 2008 SP2 (IA32 / x86)	11.1.0.7.0	Oracle Clusterware	Raw			
			ASM			
	11.2.0.3.0	Oracle Clusterware	ASM			
Windows 2008 (x64 / x86_64)	11.1.0.7.0	Oracle Clusterware	ASM			
		Oracle Clusterware	Raw			
	11.2.0.4.0	Oracle Clusterware	ASM			
Windows 2008 SP2 (x64 / x86_64)	11.1.0.7.0	Oracle Clusterware	ASM			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM			
			OCFS			
	11.2.0.3.0	Oracle Clusterware	ASM			
		MSFC + OracleFailSafe (3.4.2)	MSFC			
	11.2.0.4.0	Oracle Clusterware	ASM			
Windows 2008 R2 (x64 / x86_64)	11.2.0.1.0	Oracle Grid Infrastructure	ASM			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM			
	11.2.0.4.0	Oracle Clusterware	ASM			
Windows 2008 R2 SP1 (x64 / x86_64)	11.2.0.1.0	Oracle Grid Infrastructure	ASM			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM			
	11.2.0.4.0	Oracle Clusterware	ASM			
Windows 2012 (x64 / x86_64)	11.2.0.4.0	Oracle Clusterware	ASM	**1,3,22**	**1,3,22**	**1,3,22**
Windows 2012 R2 (x64 / x86_64)	11.2.0.4.0	Oracle Clusterware	ASM	**1,3,22,23**	**1,3,22,23**	**1,3,22,23**

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Solaris 10 (SPARC)	11.1.0.6.0	Oracle Clusterware	Raw	**1,3,9**	**1,3,9**	**1,3,9**
			ASM	**1,3,9**	**1,3,9**	**1,3,9**
		Sun Cluster 3.1 08/05 + Oracle Clusterware	Raw	**3,6,7,8,9**	**3,6,7,8,9**	**3,6,7,8,9**
			ASM	**3,6,8,9,11**	**3,6,8,9,11**	**3,6,8,9,11**
		Sun Cluster 3.2 + Oracle Clusterware	Raw	**3,6,7,8,9,10**	**3,6,7,8,9,10**	**3,6,7,8,9,10**
			ASM	**3,6,8,9,10,11**	**3,6,8,9,10,11**	**3,6,8,9,10,11**
	11.1.0.7.0	Oracle Clusterware	Raw	**1,3,9**	**1,3,9**	**1,3,9**
			ASM	**1,3,9**	**1,3,9**	**1,3,9**
		Sun Cluster 3.2 + Oracle Clusterware	VxVM 5.0 MP3			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM	**1,3,9**	**1,3,9**	**1,3,9**
		Sun Cluster 3.2 + Oracle Grid Infrastructure	ASM	**3,6,8,9, 10**	**3,6,8,9, 10**	**3,6,8,9, 10**
	11.2.0.2.0	Oracle Grid Infrastructure	ASM	**1,3,9**	**1,3,9**	**1,3,9**
		Sun Cluster 3.3 + Oracle Grid Infrastructure	ASM	**3,6,8,9, 10**	**3,6,8,9, 10**	**3,6,8,9, 10**
	11.2.0.3.0	Oracle Grid Infrastructure	ASM	**1,3,9,22**	**1,3,9,22**	**1,3,9,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM	**1,3,9,22**	**1,3,9,22**	**1,3,9,22**
Solaris 11 (SPARC)	11.2.0.3.0	Oracle Grid Infrastructure	ASM	**1,3,9,22**	**1,3,9,22**	**1,3,9,22**
Solaris 11.1 (SPARC)	11.2.0.3.0	Oracle Grid Infrastructure	ASM	**1,3,9,22**	**1,3,9,22**	**1,3,9,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM	**1,3,9,22**	**1,3,9,22**	**1,3,9,22**
Solaris 11.2 (SPARC)	11.2.0.4.0	Oracle Grid Infrastructure	ASM	**1,3,9,22**	**1,3,9,22**	**1,3,9,22**
Solaris 11.3 (SPARC)	11.2.0.4.0	Oracle Grid Infrastructure	ASM	**1,3,9,22**	**1,3,9,22**	**1,3,9,22**

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.8	8.8.0	8.8.1
AIX 7.1 (POWER 64 Bit)	11.2.0.2.0	Oracle Grid Infrastructure	ASM+Raw	**1,3**	**1,3**	**1,3**
	11.2.0.3.0	Oracle Grid Infrastructure	ASM+Raw	**1,3,22**	**1,3,22**	**1,3,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM+Raw	**1,3,22**	**1,3,22**	**1,3,22**
AIX 7.2 (POWER 64 Bit)	11.2.0.2.0	Oracle Grid Infrastructure	ASM+Raw	**1,3**	**1,3**	**1,3**
	11.2.0.3.0	Oracle Grid Infrastructure	ASM+Raw	**1,3,22**	**1,3,22**	**1,3,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM+Raw	**1,3,22**	**1,3,22**	**1,3,22**

				HDLM Version

Operating System Name	Oracle Version	Cluster	Volume Manager	8.7.8	8.8.0	8.8.1
Red Hat Linux 5 (IA32 / x86) 2.6.18-8.el5 2.6.18-8.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
Red Hat Linux 5 (x64 / x86_64) 2.6.18-8.el5	11.1.0.6.0	Oracle Clusterware	ASM + ASMLib			
			ASM + Raw			
			Raw			
	11.1.0.7.0	Oracle Clusterware	Raw			
			ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	Raw			
			ASM + Raw			
			ASM + ASMLib			
			OCFS2			
Red Hat Linux 5.1 (IA32 / x86) 2.6.18-53.el5 2.6.18-53.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
Red Hat Linux 5.1 (x64 / x86_64) 2.6.18-53.el5	11.1.0.6.0	Oracle Clusterware	ASM + ASMLib			
			ASM + Raw			
			Raw			
	11.1.0.7.0	Oracle Clusterware	ASM + ASMLib			
			ASM + Raw			
			Raw			
			OCFS2			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + ASMLib			
			ASM + Raw			
			Raw			
			OCFS2			
Red Hat Linux 5.2 (x86/ IA32) Kernels 2.6.18-92.el5 2.6.18-92.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.2 (x64 / x86_64) Kernels 2.6.18-92.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			Raw			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.3 (x86/ IA32) Kernels 2.6.18-128.el5 2.6.18-128.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			Raw			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch		ASM + Raw			
			ASM + ASMLib			

Red Hat Linux 5.3 (x64 / x86_64) Kernels 2.6.18-128.el5	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.4 (x86/ IA32) Kernels 2.6.18-164.el5 2.6.18-164.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.4 (x64 / x86_64) Kernels 2.6.18-164.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			Raw			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.5 (x86/ IA32) Kernels 2.6.18-194.el5 2.6.18-194.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.5 (x64 / x86_64) Kernels 2.6.18-194.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.6 (x86/ IA32) Kernels 2.6.18-238.el5 2.6.18-238.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			ASM + Raw			

Red Hat Linux 5.6 (x64 / x86_64) Kernels 2.6.18-238.el5	11.1.0.7.0	Oracle Clusterware	ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.7 (x86/ IA32) Kernels 2.6.18-274.el5 2.6.18-274.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.7 (x64 / x86_64) Kernels 2.6.18-274.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.8 (x86/ IA32) Kernels 2.6.18-308.el5 2.6.18-308.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.8 (x64 / x86_64) Kernels 2.6.18-308.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.9 (x86/ IA32) Kernels 2.6.18-348.el5 2.6.18-348.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + Raw			

Red Hat Linux 5.9 (x64 / x86_64) Kernels 2.6.18-348.el5	11.1.0.6.0	Oracle Clusterware	ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.9 (x86/ IA32) **(Security Fix)** Kernels 2.6.18-348.39.1.el5 2.6.18-348.39.1.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.9 (x64 / x86_64) **(Security Fix)** Kernels 2.6.18-348.39.1.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.10 (x86/ IA32) Kernels 2.6.18-371.el5 2.6.18-371.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.10 (x64 / x86_64) Kernels 2.6.18-371.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			

	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.11 (x86/ IA32) Kernels 2.6.18-398.el5 2.6.18-398.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.11 (x64 / x86_64) Kernels 2.6.18-398.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.11 (x86/ IA32) **(Security Fix)** Kernels 2.6.18-416.el5 2.6.18-416.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.11 (x64 / x86_64) **(Security Fix)** Kernels 2.6.18-416.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.11 (x86/ IA32) **(Security Fix)** Kernels 2.6.18-419.el5 2.6.18-419.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			

Red Hat Linux 5.11 (x64 / x86_64) **(Security Fix)** Kernels 2.6.18-419.el5	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.11 (x86/ IA32) **(Security Fix)** Kernels 2.6.18-426.el5 2.6.18-426.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.11 (x64 / x86_64) **(Security Fix)** Kernels 2.6.18-426.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
Red Hat Linux 5.11 (x86/ IA32) **(Security Fix)** Kernels 2.6.18-431.el5 2.6.18-431.el5PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Red Hat Linux 5.11 (x64 / x86_64) **(Security Fix)** Kernels 2.6.18-431.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
	11.1.0.7.0	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw			
			ASM + ASMLib			
			OCFS2			
			Raw			
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			
			ASM + ASMLib			

Red Hat Linux 6 (x64 / x86_64) Kernels 2.6.32-71.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.1 (x64 / x86_64) Kernels 2.6.32-2.6.32-131.0.15.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.2 (x64 / x86_64) Kernels 2.6.32-220.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.3 (x64 / x86_64) Kernels 2.6.32-279.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.4 (x64 / x86_64) Kernels 2.6.32-358.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.5(x64 / x86_64) Kernels 2.6.32-431.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
			ASM + ASMLib 2.0.6	**1,3,12,19,21,22**	**1,3,12,19,21,22**	**1,3,12,19,21,22**
Red Hat Linux 6.6(x64 / x86_64) Kernels 2.6.32-504.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.7(x64 / x86_64) Kernels 2.6.32-573.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.8(x64 / x86_64) Kernels 2.6.32-642.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.9(x64 / x86_64) Kernels 2.6.32-696.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 6.10(x64 / x86_64) Kernels 2.6.32-754.el6.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,20,22**	**1,3,13,19,20,22**	**1,3,13,19,20,22**
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,21,22**	**1,3,13,19,21,22**	**1,3,13,19,21,22**
Red Hat Linux 7 (x64 / x86_64) Kernels 3.10.0-123.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22,24**	**1,3,13,19,22,24**	**1,3,13,19,22,24**

Red Hat Linux 7.1 (x64 / x86_64) **Kernels** 3.10.0-229.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
Red Hat Linux 7.2 (x64 / x86_64) **Kernels** 3.10.0-327.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
Red Hat Linux 7.3 (x64 / x86_64) **Kernels** 3.10.0-514.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
Red Hat Linux 7.4 (x64 / x86_64) **Kernels** 3.10.0-693.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
Red Hat Linux 7.5 (x64 / x86_64) **Kernels** 3.10.0-862.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
Red Hat Linux 7.6 (x64 / x86_64) **Kernels** 3.10.0-957.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
Red Hat Linux 7.7 (x64 / x86_64) **Kernels** 3.10.0-1062.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
Red Hat Linux 7.8 (x64 / x86_64) **Kernels** 3.10.0-1127.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
Red Hat Linux 7.9 (x64 / x86_64) **Kernels** 3.10.0-1160.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**	**1,3,13,19, 22,24**
SuSE Linux 10 (IA32 / x86) Kernels Security Fix 2.6.16.46-0.14-default 2.6.16.46-0.14-smp 2.6.16.46-0.14-bigsmp	11.1.0.6.0	Oracle Clusterware	ASM+Raw			
SuSE Linux 10 (x64 / x86_64) **Kernels** 2.6.16.60-0.85.1-default or 2.6.16.60-0.85.1-smp or 2.6.16.60-0.85.1-xen	11.2.0.3.0	Oracle Clusterware	ASM+Raw			
SuSE Linux 11 (x64 / x86_64) **Kernels** 3.0.13-0.27-default	11.2.0.3.0	Oracle Clusterware	ASM+Raw			
	11.2.0.4.0	Oracle Clusterware	ASM+Raw			
SuSE Linux 11 SP4 (x64 / x86_64) **Kernels** 3.0.101-63.1-default	11.2.0.3.0	Oracle Clusterware	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
		Oracle Clusterware	ASM + ASMLib	**1,3,12,16,19, 22**	**1,3,12,16,19,2 2**	**1,3,12,16,19,2 2**
	11.2.0.4.0	Oracle Clusterware	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
		Oracle Clusterware	ASM + ASMLib	**1,3,12,16,19, 22**	**1,3,12,16,19,2 2**	**1,3,12,16,19,2 2**
SuSE Linux 11 SP4 (x64 / x86_64) **Kernels Security Fix** 3.0.101-108.21-default	11.2.0.3.0	Oracle Clusterware	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
		Oracle Clusterware	ASM + ASMLib	**1,3,12,16,19, 22**	**1,3,12,16,19,2 2**	**1,3,12,16,19,2 2**
	11.2.0.4.0	Oracle Clusterware	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
		Oracle Clusterware	ASM + ASMLib	**1,3,12,16,19, 22**	**1,3,12,16,19,2 2**	**1,3,12,16,19,2 2**
SuSE Linux 11 SP4 (x64 / x86_64) **Kernels Security Fix** 3.0.101-108.68-default	11.2.0.3.0	Oracle Clusterware	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
		Oracle Clusterware	ASM + ASMLib	**1,3,12,16,19, 22**	**1,3,12,16,19,2 2**	**1,3,12,16,19,2 2**
	11.2.0.4.0	Oracle Clusterware	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
		Oracle Clusterware	ASM + ASMLib	**1,3,12,16,19, 22**	**1,3,12,16,19,2 2**	**1,3,12,16,19,2 2**
Oracle Unbreakable Enterprise Kernel 5.6 (x64 / x86_64) **Kernels** 2.6.32-100.26.2.el5	11.1.0.7.0	Oracle Grid Infrastructure	ASM + Raw			
	11.2.0.3.0		ASM + Raw			
Oracle Unbreakable Enterprise Kernel 5.7 (IA32 / x86) **Kernels** 2.6.32-200.13.1.el5uek	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
Oracle Unbreakable Enterprise Kernel 5.7 (IA32 / x86) **Kernels** 2.6.32-300.27.1.el5uek	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
Oracle Unbreakable Enterprise Kernel 5.7 (x64 / x86_64) **Kernels** 2.6.32-200.13.1.el5uek	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			

Oracle Unbreakable Enterprise Kernel 5.7 (x64 / x86_64) Kernels 2.6.32-300.27.1.el5uek	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
Oracle Unbreakable Enterprise Kernel 5.8 (x64 / x86_64) Kernels 2.6.32-300.39.2.el5uek	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw			
Oracle Unbreakable Enterprise Kernel 6.2 (x64 / x86_64) Kernels 2.6.39-200.29.1.el6uek.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
Oracle Unbreakable Enterprise Kernel 6.2 (x64 / x86_64) Kernels 2.6.39-200.29.2.el6uek.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
Oracle Unbreakable Enterprise Kernel 6.3 (x64 / x86_64) Kernels 2.6.39-200.24.1.el6uek.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
Oracle Unbreakable Enterprise Kernel 6.4 (x64 / x86_64) Kernels 2.6.39-400.211.1.el6uek.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
Oracle Unbreakable Enterprise Kernel 6.5 (x64 / x86_64) Kernels 3.8.13-16.2.1.el6uek.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
Oracle Unbreakable Enterprise Kernel 6.5 (Security Fix) X64 / x86_64 Processors Kernel 3.8.13-44.el6uek.x86_64	11.2.0.3.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
Oracle Unbreakable Enterprise Kernel 6.10 (Security Fix) X64 / x86_64 Processors Kernel 4.1.12-124.45.6.el6uek.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
Oracle Enterprise Linux 5.1 (IA32 / x86) Kernels 2.6.18-53.el5 2.6.18-53.el5 PAE	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
Oracle Enterprise Linux 5.1 (x64 / x86_64) Kernels 2.6.18-53.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw			
Oracle Enterprise Linux 5.4 (IA32 / x86) Kernels 2.6.18-164.el5 2.6.18-164.el5 PAE	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Oracle Enterprise Linux 5.4 (x64 / x86_64) Kernels 2.6.18-164.el5	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw			
Oracle Enterprise Linux 5.7 (IA32 / x86) Kernels 2.6.18-274.el5 2.6.18-274.el5 PAE	11.1.0.7.0	Oracle Grid Infrastructure	ASM + Raw			
			Raw			
Oracle Enterprise Linux 5.7 (x64 / x86_64) Kernels 2.6.18-274.el5	11.1.0.7.0	Oracle Grid Infrastructure	ASM + Raw			
			Raw			
Oracle Linux 7.4 (x64 / x86_64) Kernels 3.10.0-693.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22,24**	**1,3,13,16,19, 22,24**	**1,3,13,16,19, 22,24**
			ASM + ASMLib 2.08	**1,3,12,16,19, 22, 24**	**1,3,12,16,19,2 2, 24**	**1,3,12,16,19,2 2, 24**
Oracle Linux 7.4 (x64 / x86_64) Kernels 3.10.0-693.11.6.el7.x86_64	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22,24**	**1,3,13,16,19, 22,24**	**1,3,13,16,19, 22,24**
			ASM + ASMLib 2.08	**1,3,12,16,19, 22, 24**	**1,3,12,16,19,2 2, 24**	**1,3,12,16,19,2 2, 24**

Operating System Name	**Oracle Version**	**Cluster**	**Volume Manager**	**HDLM Version**		
				6.1.0	**6.5.0**	**6.5.1**
HP-UX 11iV2 (Itanium) September 2004 May 2005 December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	11.1.0.6.0	Oracle Clusterware	ASM	**1,3**	**1,3**	**1,3**
		ServiceGuard 11.18 Oracle Clusterware	LVM	**1,3**	**1,3**	**1,3**
	11.1.0.7.0	Oracle Clusterware	ASM	**1,3**	**1,3**	**1,3**
		ServiceGuard 11.18 Oracle Clusterware	LVM	**1,3**	**1,3**	**1,3**
		ServiceGuard 11.19 Oracle Clusterware	LVM	**1,3**	**1,3**	**1,3**

HP-UX 11iV2 (PA-RISC) September 2004 May 2005 December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	11.1.0.6.0	Oracle Clusterware	ASM	**1,3**	**1,3**	**1,3**
		ServiceGuard 11.18 Oracle Clusterware	LVM	**1,3**	**1,3**	**1,3**

Supported	
Not Supported	

Notes	
1	When using HDLM with Oracle 10g RAC 10.1.0.3.0 and later versions, we recommend that you set the I/O timeout period (MISSCOUNT) of the voting disk to a value higher than the number of paths to the voting disk x yy seconds (yy is 60 for RAID models, and 30 for DF models.). If the MISSCOUNT value is smaller than the recommended value and an I/O timeout occurs on the path for the voting disk, RAC will recognize the I/O timeout before HDLM can use all paths by performing a failover. For inquiries about changing the MISSCOUNT value, contact Oracle Support Services.
3	Set the DISKTIMEOUT value as follows when using Oracle RAC 10g 10.2.0.2.0 or later versions: DISKTIMEOUT = 60 x Number of paths Do not modify the DISKTIMEOUT value if the result of the above is lower than the default value of 200. In addition, if the relationship between MISSCOUNT and DISKTIMEOUT is (MISSCOUNT >= DISKTIMEOUT), an error may occur in Oracle due to Oracle specifications. If an error occurs, set a MISSCOUNT value that is larger than the DISKTIMEOUT value: for example, set a value of (DISKTIMEOUT value + 1). For details, contact the Oracle support service.
4	When using TechnologyLevel05, apply APAR IY92037.
5	In this configuration, the problem below occurs in Oracle (Oracle BUG: 5131219). Therefore, customers must understand the restrictions caused by this problem in advance. When a path failure occurs in a node, and node 1 (the node that operates DB instances, whose instance number = 1) is shut down, the above node with the path failure sometimes incorrectly reboots.
6	Regarding the I/O timeout value (MISSCOUNT), set a higher value of the following two: - 600 seconds (a default value of Oracle Clusterware in a Sun Cluster environment) - number-of-paths-to-voting-disk x yy seconds (yy is 60 for Enterprise storage systems, 30 for Modular storage systems) For questions about how to change the MISSCOUNT value, contact Oracle Support Services.
7	RAC accesses storage system by using a Oracle Solaris Cluster device ID.
8	Support only 2 node configuration.
9	The following conditions apply to this configuration: - RAC cannot use LUs whose EFI label setting is enabled. - RAC cannot use ZFS.
10	Only "pathcount" is supported for a setting of SCSI protocol (fencing protocol) of storage system device. For the setting of SCSI protocol (fencing protocol) of storage system device, refer to the manual of Sun Cluster.
11	ASM accesses storage system by using a Oracle Solaris Cluster device ID.
12	ASMLib (ASMLib kernel driver)
13	Linux supports the use of /dev/Raw/Rawxx Raw devices.
14	When you use Oracle Cluster file System 2 in an Oracle RAC environment, set the O2CB_HEARTBEAT_THRESHOLD parameter in the /etc/sysconfig/o2cbf file to the following value: (Number of paths connected to Oracle Cluster file System 2 x yy seconds / 2) + 1 (yy is 60 for RAID models, and 30 for DF models.)
15	Create volumes by using CVM (Cluster Volume Manager).
16	Shared file systems created by ADVM (ASM Dynamic Volume Manager) and ACFS (ASM Cluster File System) cannot be used for areas of the archive REDO log.
17	HDLM device names can be specified directly for ASM.
18	HDLM for Windows does not support configurations where Oracle RAC is installed on OCFS to share Oracle Home with multiple nodes.
19	iSCSI environments are not supported.
20	The archive REDO log can be stored in a shared file system created by ADVM (ASM Dynamic Volume Manager) and ACFS (ASM Cluster File System). However, PSU 11.2.0.3.3 or later is required.
21	The archive REDO log can be stored in a shared file system created by ADVM (ASM Dynamic Volume Manager) and ACFS (ASM Cluster File System).
22	It is recommended that you use external redundancy for ASM disk groups. To use normal or high redundancy, contact the Oracle Corporation.
23	Applying patch 13 (11.2.0.4.13) or later is required.
24	The following patches are required: - p18370031, and p19692824
25	This is supported in HDLM 8.6.2-01 or later.
26	This is supported in HDLM 8.6.2-02 or later.

Supported Oracle 12c RAC Configurations

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Windows 2012 (x64 / x86_64)	12.1.0.2	Oracle Clusterware	ASM	**1,3,22**	**1,3,22**	**1,3,22**
Windows 2012 R2 (x64 / x86_64)	12.1.0.2	Oracle Clusterware	ASM	**1,3,22**	**1,3,22**	**1,3,22**
	12.1.0.2	MSFC + OracleFailSafe (4.2.1)	MSFC			
Windows 2016 (x64 / x86_64)	12.2.0.1	Oracle Clusterware	ASM	**1,3,22**	**1,3,22**	**1,3,22**

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Solaris 11.1 (SPARC)	12.1.0.2.0	Oracle Grid Infrastructure	ASM	**1,3,22,24,25**	**1,3,22,24,25**	**1,3,22,24,25**
			ClouldFS	**1,3,22,24,25, 26**	**1,3,22,24,25, 26**	**1,3,22,24,25, 26**
Solaris 11.2 (SPARC)	12.1.0.2.0	Oracle Grid Infrastructure	ASM	**1,3,22,24,25**	**1,3,22,24,25**	**1,3,22,24,25**
			ClouldFS	**1,3,22,24,25, 26**	**1,3,22,24,25, 26**	**1,3,22,24,25, 26**
Solaris 11.3 (SPARC)	12.1.0.2.0	Oracle Grid Infrastructure	ASM	**1,3,22,24,25**	**1,3,22,24,25**	**1,3,22,24,25**
			ClouldFS	**1,3,22,24,25, 26**	**1,3,22,24,25, 26**	**1,3,22,24,25, 26**
	12.2.0.1.0	Oracle Grid Infrastructure	ASM	**1,3,22,24,25**	**1,3,22,24,25**	**1,3,22,24,25**

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.8	8.8.0	8.8.1
AIX 7.1 (POWER 64 Bit)	12.1.0.2.0	Oracle Grid Infrastructure	ASM	**1,3,22**	**1,3,22**	**1,3,22**
AIX 7.2 (POWER 64 Bit)	12.1.0.2.0	Oracle Grid Infrastructure	ASM	**1,3,22**	**1,3,22**	**1,3,22**

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.8	8.8.0	8.8.1
Red Hat Linux 6 (x64 / x86_64) Kernels 2.6.32-71.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 6.1 (x64 / x86_64) Kernels 2.6.32-2.6.32-131.0.15.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 6.2 (x64 / x86_64) Kernels 2.6.32-220.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 6.3 (x64 / x86_64) Kernels 2.6.32-279.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 6.4 (x64 / x86_64) Kernels 2.6.32-358.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Red Hat Linux 6.5(x64 / x86_64) Kernels 2.6.32-431.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Red Hat Linux 6.6(x64 / x86_64) Kernels 2.6.32-504.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**

	12.2.0.1.0	Oracle Grid Infrastructure	ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Red Hat Linux 6.7(x64 / x86_64) Kernels 2.6.32-573.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Red Hat Linux 6.8(x64 / x86_64) Kernels 2.6.32-642.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Red Hat Linux 6.9(x64 / x86_64) Kernels 2.6.32-696.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Red Hat Linux 6.10(x64 / x86_64) Kernels 2.6.32-754.el6.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Red Hat Linux 7 (x64 / x86_64) Kernels 3.10.0-123.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.1 (x64 / x86_64) Kernels 3.10.0-229.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
Red Hat Linux 7.2 (x64 / x86_64) Kernels 3.10.0-327.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**

			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
Red Hat Linux 7.3 (x64 / x86_64) Kernels 3.10.0-514.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
Red Hat Linux 7.4 (x64 / x86_64) Kernels 3.10.0-693.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
Red Hat Linux 7.5 (x64 / x86_64) Kernels 3.10.0-862.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
Red Hat Linux 7.6 (x64 / x86_64) Kernels 3.10.0-957.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
Red Hat Linux 7.7 (x64 / x86_64) Kernels 3.10.0-1062.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**

	12.2.0.1	Oracle Grid Infrastructure	ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
Red Hat Linux 7.8 (x64 / x86_64) Kernels 3.10.0-1127.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
Red Hat Linux 7.9 (x64 / x86_64) Kernels 3.10.0-1160.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
	12.2.0.1	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
			ASM+ASMFD	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**	**1,3,16,19, 22,27**
SUSE Linux Enterprise Server 12 (Service Pack 1) AMD64 / EM64T Processors 3.12.59-60.45-default	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19, 22**	**1,3,13,16,19, 22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
SUSE Linux Enterprise Server 12 (Security Fix) (Service Pack 1) AMD64 / EM64T Processors 3.12.74-60.64.40-default	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19, 22**	**1,3,13,16,19, 22**	**1,3,13,16,19, 22**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors Kernel 2.6.39-200.29.1.el6uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors Kernel 2.6.39-200.29.2.el6uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Oracle Unbreakable Enterprise Kernel 6.3 X64 / x86_64 Processors Kernel 2.6.39-200.24.1.el6uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Oracle Unbreakable Enterprise Kernel 6.4 (x64 / x86_64) Kernels 2.6.39-400.211.1.el6uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Oracle Unbreakable Enterprise Kernel 6.5 (x64 / x86_64) Kernels 3.8.13-16.2.1.el6uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**

Oracle Unbreakable Enterprise Kernel 6.9 (x64 / x86_64) **Kernels** 4.1.12-94.2.1.el6uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM+ASMLib 2.0.6	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Oracle Unbreakable Enterprise Kernel 7 (x64 / x86_64) **Kernels** 3.8.13-44.el7uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Oracle Unbreakable Enterprise Kernel 7 .3 (Security Fix) **(x64 / x86_64)** **Kernels** 4.1.12-61.1.28.el7uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Oracle Unbreakable Enterprise Kernel 7.5 (Security Fix) **(x64 / x86_64)** **Kernels** 4.1.12-112.16.4.el7uek.x86_64	12.2.0.1.0	Oracle Grid Infrastructure	ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Oracle Unbreakable Enterprise Kernel 7.5 (Security Fix) **(x64 / x86_64)** **Kernels** 4.1.12-124.16.4.el7uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Oracle Linux 7 (x64 / x86_64) **Kernels** 3.10.0-123.el7.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**	**1,3,13,19,22, 23**
Oracle Linux 7.4 (x64 / x86_64) **Kernels** 3.10.0-693.el7.x86_64	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**
Oracle Linux 7.4 (x64 / x86_64) **Kernels** 3.10.0-693.11.6.el7.x86_64	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**	**1,3,13,16,19,2 2**
			ASM+ASMLib 2.0.8	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**	**1,3,12,16,19, 22**

Supported	
Not Supported	

Notes	
1	When using HDLM with Oracle 10g RAC 10.1.0.3.0 and later versions, we recommend that you set the I/O timeout period (MISSCOUNT) of the voting disk to a value higher than the number of paths to the voting disk x yy seconds (yy is 60 for RAID models, and 30 for DF models.). If the MISSCOUNT value is smaller than the recommended value and an I/O timeout occurs on the path for the voting disk, RAC will recognize the I/O timeout before HDLM can use all paths by performing a failover. For inquiries about changing the MISSCOUNT value, contact Oracle Support Services.
3	Set the DISKTIMEOUT value as follows when using Oracle RAC 10g 10.2.0.2.0 or later versions: DISKTIMEOUT = 60 x Number of paths Do not modify the DISKTIMEOUT value if the result of the above is lower than the default value of 200. In addition, if the relationship between MISSCOUNT and DISKTIMEOUT is (MISSCOUNT >= DISKTIMEOUT), an error may occur in Oracle due to Oracle specifications. If an error occurs, set a MISSCOUNT value that is larger than the DISKTIMEOUT value: for example, set a value of (DISKTIMEOUT value + 1). For details, contact the Oracle support service.
12	ASMLib (ASMLib kernel driver)
13	Linux supports the use of /dev/Raw/Rawxx Raw devices.
16	Shared file systems created by ADVM (ASM Dynamic Volume Manager) and ACFS (ASM Cluster File System) cannot be used for areas of the archive REDO log.
19	iSCSI environments are not supported.
21	The archive REDO log can be stored in a shared file system created by ADVM (ASM Dynamic Volume Manager) and ACFS (ASM Cluster File System).
22	It is recommended that you use external redundancy for ASM disk groups. To use normal or high redundancy, contact the Oracle Corporation.
23	Oracle Cloud File System is usable; however, applying PATCH P18321597 is required.
24	If the database instance is forcibly terminated during a path failover, perform the following, and then adjust the HBA timeout value. - Add the following line to the /kernel/drv/fp.conf file: fp_offline_ticker = (timeout value of the fp driver); - Add the following line to the /kernel/drv/fcp.conf file: fcp_offline_delay = (timeout value of the fcp driver); Set the timeout value of the fp driver and the timeout value of the fcp driver so that the total of the two is a maximum of 70, and then reboot the host.
25	The following conditions apply to this configuration: - RAC cannot use ZFS.
26	Also including Oracle ACFS（ASM Cluster File System）.
27	ASMFD (ASM filter driver)
28	This is supported in HDLM 8.6.2-02 or later.

Supported Oracle 18c RAC Configurations

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Windows 2016 (x64 / x86_64)	18.3.0.0	Oracle Clusterware	ASM	**1,3,22**	**1,3,22**	**1,3,22**

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.8	8.8.0	8.8.1
Red Hat Linux 7 (x64 / x86_64) **Kernels** 3.10.0-123.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.1 (x64 / x86_64) **Kernels** 3.10.0-229.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.2 (x64 / x86_64) **Kernels** 3.10.0-327.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.3 (x64 / x86_64) **Kernels** 3.10.0-514.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.4 (x64 / x86_64) **Kernels** 3.10.0-693.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.5 (x64 / x86_64) **Kernels** 3.10.0-862.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.6 (x64 / x86_64) **Kernels** 3.10.0-957.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.7 (x64 / x86_64) **Kernels** 3.10.0-1062.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.8 (x64 / x86_64) **Kernels** 3.10.0-1127.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
Red Hat Linux 7.9 (x64 / x86_64) **Kernels** 3.10.0-1160.el7.x86_64	18.3.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**

Supported	
Not Supported	

Notes	
1	When using HDLM with Oracle 10g RAC 10.1.0.3.0 and later versions, we recommend that you set the I/O timeout period (MISSCOUNT) of the voting disk to a value higher than the number of paths to the voting disk x yy seconds (yy is 60 for RAID models, and 30 for DF models.). If the MISSCOUNT value is smaller than the recommended value and an I/O timeout occurs on the path for the voting disk, RAC will recognize the I/O timeout before HDLM can use all paths by performing a failover. For inquiries about changing the MISSCOUNT value, contact Oracle Support Services.
3	Set the DISKTIMEOUT value as follows when using Oracle RAC 10g 10.2.0.2.0 or later versions: DISKTIMEOUT = 60 x Number of paths Do not modify the DISKTIMEOUT value if the result of the above is lower than the default value of 200. In addition, if the relationship between MISSCOUNT and DISKTIMEOUT is (MISSCOUNT >= DISKTIMEOUT), an error may occur in Oracle due to Oracle specifications. If an error occurs, set a MISSCOUNT value that is larger than the DISKTIMEOUT value: for example, set a value of (DISKTIMEOUT value + 1). For details, contact the Oracle support service.
13	Linux supports the use of /dev/Raw/Rawxx Raw devices.
19	iSCSI environments are not supported.
22	It is recommended that you use external redundancy for ASM disk groups. To use normal or high redundancy, contact the Oracle Corporation.

Supported Oracle 19c RAC Configurations

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Windows 2016 (x64 / x86_64)	19.3.0.0	Oracle Clusterware	ASM	**1,3,22**	**1,3,22**	**1,3,22**
Windows 2019 (x64 / x86_64)	19.3.0.0	Oracle Clusterware	ASM	**1,3,22**	**1,3,22**	**1,3,22**
	19.3.0.0	MSFC + OracleFailSafe (4.2.1)	MSFC			
	19.10.0.0	Oracle Clusterware	ASM	**1,3,22**	**1,3,22**	**1,3,22**

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.6	8.8.0	8.8.1
Solaris 11.4 (SPARC)	19.6.0.0.0	Oracle Grid Infrastructure	ASM	**1,3,22,24,25**	**1,3,22,24,25**	**1,3,22,24,25**
	19.8.0.0.0	Oracle Grid Infrastructure	ASM	**1,3,22,24,25**	**1,3,22,24,25**	**1,3,22,24,25**

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.7.8	8.8.0	8.8.1
Red Hat Linux 7.5 (x64 / x86_64) **Kernels** 3.10.0-862.14.4.el7.x86_64	19.3.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.5.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.6.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.7.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.8.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM + ASMFD	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.9.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
Red Hat Linux 7.6 (x64 / x86_64) **Kernels** 3.10.0-957.el7.x86_64	19.3.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.5.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.6.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.7.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.8.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM + ASMFD	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.9.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**

Red Hat Linux 7.7 (x64 / x86_64) **Kernels** 3.10.0-1062.el7.x86_64	19.3.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.5.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.6.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.7.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.8.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM + ASMFD	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.9.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
Red Hat Linux 7.8 (x64 / x86_64) **Kernels** 3.10.0-1127.el7.x86_64	19.3.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.5.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.6.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.7.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.8.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM + ASMFD	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.9.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
Red Hat Linux 7.9 (x64 / x86_64) **Kernels** 3.10.0-1160.el7.x86_64	19.3.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.5.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.6.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.7.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
	19.8.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,13,19,22**	**1,3,13,19,22**	**1,3,13,19,22**
			ASM + ASMFD	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.9.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**

Red Hat Enterprise Linux 8.1 AMD64 and EM64T Processors 4.18.0-147.el8.x86_64	19.10.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
Red Hat Enterprise Linux 8.2 AMD64 and EM64T Processors 4.18.0-193.el8.x86_64	19.10.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
Red Hat Enterprise Linux 8.3 AMD64 and EM64T Processors 4.18.0-240.el8.x86_64	19.10.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw	**1,3,19,22,23**	**1,3,19,22,23**	**1,3,19,22,23**
Red Hat Enterprise Linux 8.4 AMD64 and EM64T Processors 4.18.0-305.el8.x86_64	19.10.0.0.0	Oracle Grid Infrastructure	ASM + Raw			**1,3,19,22,23**
	19.11.0.0.0	Oracle Grid Infrastructure	ASM + Raw			**1,3,19,22,23**

Supported	
Not Supported	

Notes	
1	When using HDLM with Oracle 10g RAC 10.1.0.3.0 and later versions, we recommend that you set the I/O timeout period (MISSCOUNT) of the voting disk to a value higher than the number of paths to the voting disk x yy seconds (yy is 60 for RAID models, and 30 for DF models.). If the MISSCOUNT value is smaller than the recommended value and an I/O timeout occurs on the path for the voting disk, RAC will recognize the I/O timeout before HDLM can use all paths by performing a failover. For inquiries about changing the MISSCOUNT value, contact Oracle Support Services.
3	Set the DISKTIMEOUT value as follows when using Oracle RAC 10g 10.2.0.2.0 or later versions: DISKTIMEOUT = 60 x Number of paths Do not modify the DISKTIMEOUT value if the result of the above is lower than the default value of 200. In addition, if the relationship between MISSCOUNT and DISKTIMEOUT is (MISSCOUNT >= DISKTIMEOUT), an error may occur in Oracle due to Oracle specifications. If an error occurs, set a MISSCOUNT value that is larger than the DISKTIMEOUT value: for example, set a value of (DISKTIMEOUT value + 1). For details, contact the Oracle support service.
13	Linux supports the use of /dev/Raw/Rawxx Raw devices.
19	iSCSI environments are not supported.
22	It is recommended that you use external redundancy for ASM disk groups. To use normal or high redundancy, contact the Oracle Corporation.
23	ASMFD (ASM filter driver)

Centralized Management Console(HGLM) Supported Operating Systems

HGLM cannot be installed in the server where Command View XP AE Device Manager is installed.

Microsoft Windows				HGLM		
OS Name	Version	Service Pack	Architecture	8.7.6	8.8.0	8.8.1
Windows Server 2008	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	No SP	IA32 / x86			
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	No SP	x64 / x86_64			
	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	SP2	IA32 / x86			
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	SP2	x64 / x86_64			
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition	No SP	x64 / x86_64			
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition	SP1	x64 / x86_64			
Windows Server 2012	Essentials Edition Standard Edition Datacenter Edition	No SP	x64 / x86_64			
	R2 Essentials Edition R2 Standard Edition R2 Datacenter Edition	No SP	x64 / x86_64			
Windows Server 2016	Standard Edition Datacenter Edition	No SP	x64 / x86_64			
Windows Server 2019	Standard Edition Datacenter Edition	No SP	x64 / x86_64			

Supported	
Not Supported	

Centralized Management Console(HGLM) Supported Functions		HGLM		
		8.7.6	8.8.0	8.8.1
Host Management	Displaying / Modifying Host Information			
	Adding / Deleting Host			
	Host Discovery by IP Address Range			
	VMware ESXi Host Discovery			
	Scheduled Host Discovery by IP Address Range			
	Automatic / Scheduled Host Refresh			
	Discover Hosts by IPv6	**4**	**4**	**4**
	global-active device non-preferred path option refresh			
	Displaying Refresh Failed Hosts			
	Displaying CHA and HBA ports as icons			
Modify Multipathing Settings	Load Balancing for Each LU	**1**	**1**	**1**
	Path use times	**8**	**8**	**8**
	Path Health Checking			
	Auto Failback			
	Intermittent Error Monitor			
	Dynamic I/O path Control			
	Log / Trace Settings			
	Multi Host setting			
	Path use time for random I/O	**6**	**6**	**6**
Path Management	Displaying Path Information			
	Bring Paths Online / Take Paths Offline			
	Display HBA Port WWN	**4**	**4**	**4**
	Displaying LDEV Label	**5**	**5**	**5**
	Adds/Deletes a Path Dynamically			
	Filtering of Paths			
Alert Management	Receive and Display Path Failure Alerts			
	Forward Path Failure Alerts to External Application			
	Alert receiving/forwarding in SNMPv3(*7)			
	Alert creation for HDLM 5.7 or earlier			
	Filtering of Alert Console View			
	E-mail Alert notification			
	Send test E-mail			
	Lost Path Check Option			
Group Management	Host Group			
	Resource Group			
CSV Export Reporting	All Multipathing Configuration Data			
	All Multipathing Configuration Data (CLI)			
	Historical Path Availability Data			
Other	Silent Installation			
	Installation On Server Using IPv6	**2, 3**	**2, 3**	**2, 3**
	Changing of the GUI color			
	Making it easy to perform setup before and after installation.			

Supported	
Not Supported	

Notes	
1	HDLM 5.8 or later is required.
2	Currently not supported with MSCS. If MSCS is required, please contact appropriate person in Hitachi Vantara for an Interoperability Support Request (ISR) for testing.

3	Only IPv6 is not supported. The server must be configured for both IPv4 and IPv6 networks.
4	Connecting to a host using HDLM 6.1 or later is required.
5	HDvM 6.0 or later is required.
6	HDLM 8.1.2 or later is required.
7	To receive alerts of SNMPv3, HDLM 8.2.0 or later is required.
8	HDLM 7.4.1 or later is required.

Centralized Management Console(HGLM) Supported Path Manager		HGLM		
		8.7.6	8.8.0	8.8.1
JP1/HiCommand Dynamic Link Manager	5.2 or later(*1)(*2)			
Hitachi Dynamic Link Manager Software	6.0 or later(*1)			
Symantec Volume Manager for Solaris (*3)	5.0 (*4)			
Symantec Volume Manager for Windows (*3)	5.1 (*6)			
HP-UX 11iv3 Native Multipathing	11iv3			

Supported Storage Systems that can be managed by HGLM (Symantec Volume Manager (*3))	HGLM		
Storage name	8.7.6	8.8.0	8.8.1
Hitachi Lightning 9900V			
Hitachi Universal Storage Platform			
Hitachi Universal Storage Platform V			
Hitachi Universal Storage Platform VM			
Hitachi Virtual Storage Platform			
Hitachi Virtual Storage Platform G1000			
Hitachi Network Storage Controller NSC55			
Hitachi Thunder 9530V			
Hitachi Thunder 9570V			
Hitachi Thunder 9580V			
Hitachi Adaptable Modular Storage AMS200			
Hitachi Adaptable Modular Storage AMS500			
Hitachi Adaptable Modular Storage AMS1000			
Hitachi Adaptable Modular Storage AMS2100			
Hitachi Adaptable Modular Storage AMS2300			
Hitachi Adaptable Modular Storage AMS2500			
Hitachi Workgroup Modular Storage WMS100			
SMS			
HP StorageWorks XP128 Disk Array			
HP StorageWorks XP1024 Disk Array			
HP StorageWorks XP10000 Disk Array			
HP StorageWorks XP12000 Disk Array			
HP StorageWorks XP20000 Disk Array			
HP StorageWorks XP24000 Disk Array			
HP StorageWorks P9500 Disk Array			
HP XP7 Storage			
SVS			
Hitachi Unified Storage 110			
Hitachi Unified Storage 130			
Hitachi Unified Storage 150			
Hitachi Unified Storage VM			

Supported Storage Systems (HP-UX 11iv3 Native Multipathing)	HGLM		
Storage name	8.7.6	8.8.0	8.8.1
Hitachi Lightning 9900V			
Hitachi Universal Storage Platform			
Hitachi Universal Storage Platform V			
Hitachi Universal Storage Platform VM			
Hitachi Virtual Storage Platform			
Hitachi Virtual Storage Platform G1500			
Hitachi Virtual Storage Platform F1500			
Hitachi Virtual Storage Platform G1000			
Hitachi Network Storage Controller NSC55			
Hitachi Thunder 9530V			
Hitachi Thunder 9570V			
Hitachi Thunder 9580V			
Hitachi Adaptable Modular Storage AMS200			
Hitachi Adaptable Modular Storage AMS500			
Hitachi Adaptable Modular Storage AMS1000			
Hitachi Adaptable Modular Storage AMS2100			
Hitachi Adaptable Modular Storage AMS2300			
Hitachi Adaptable Modular Storage AMS2500			
Hitachi Workgroup Modular Storage WMS100			

SMS			
HP StorageWorks XP128 Disk Array			
HP StorageWorks XP1024 Disk Array			
HP StorageWorks XP10000 Disk Array			
HP StorageWorks XP12000 Disk Array			
HP StorageWorks XP20000 Disk Array			
HP StorageWorks XP24000 Disk Array			
HP StorageWorks P9500 Disk Array			
HP XP7 Storage			
SVS			
Hitachi Unified Storage 110			
Hitachi Unified Storage 130			
Hitachi Unified Storage 150			
Hitachi Unified Storage VM			
Hitachi Virtual Storage Platform G200			
Hitachi Virtual Storage Platform G400			
Hitachi Virtual Storage Platform G600			
Hitachi Virtual Storage Platform G800			
Hitachi Virtual Storage Platform F400			
Hitachi Virtual Storage Platform F600			
Hitachi Virtual Storage Platform F800			

Supported	
Not Supported	

	Notes
1	For details about the environment, see the "27-2. Mgmt Console (HDLM)" sheet.
2	If the HDLM version is earlier than version 5.8, then Hitachi Device Manager (HDvM) Agent version 3.5 or later must be installed on the same host as HDLM.
3	Dynamic Multipathing (DMP), which is the Veritas Volume Manager path management functionality, is supported.
4	The supported OS versions are Solaris 9 and Solaris 10.
6	The supported OS versions are Windows Server 2003 R2 SP2 and Windows Server 2008 No SP.
7	DMP 5.1 without AP, or with AP1 or SP1, is supported.
8	If the micro version of the storage system is 83-02-01-XX/XX, "VSP_Gx000" is displayed for the model ID of the storage system in HGLM.

Centralized Management Console(HGLM)
Supported HDLM Versions

Microsoft Windows					HGLM		
OS Name	Version	Service Pack	Architecture	Minimum HDLM Version	8.7.6	8.8.0	8.8.1
Windows Server 2008	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	No SP	IA32 / x86	5.9.5			
			IA64 / Itanium	5.9.5			
			x64 / x86_64	5.9.5			
		SP2	IA32 / x86	6.1.0			
			IA64 / Itanium	6.1.0			
			x64 / x86_64	6.1.0			
	Standard Edition Enterprise Edition Datacenter Edition	No SP	IA32 / x86	6.1.0			
		SP2		6.2.0			
	Standard Edition Enterprise Edition Datacenter Edition	No SP	x64 / x86_64	6.1.0			
		SP2		6.2.0			
	Itanium-based Systems	No SP	IA64 / Itanium	6.1.0			
		SP2		6.2.0			
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition R2 Standard without Hyper-V Edition R2 Enterprise without Hyper-V Edition R2 Datacenter without Hyper-V Edition	No SP	x64 / x86_64	6.2.0			
		SP1	x64 / x86_64	6.2.0			
	R2 Itanium-based Systems	No SP	IA64 / Itanium	6.2.0			
		SP1	IA64 / Itanium	6.2.0			
Windows Server 2012	Essentials Edition Standard Edition Datacenter Edition	No SP	x64 / x86_64	7.4.0			
	R2 Essentials Edition R2 Standard Edition R2 Datacenter Edition	No SP	x64 / x86_64	7.6.0			
Windows Server 2016	Standard Edition Datacenter Edition	No SP	x64 / x86_64	8.5.0			
Windows Server 2019	Standard Edition Datacenter Edition	No SP	x64 / x86_64	8.6.4			

Supported	
Not Supported	

Solaris SPARC					HGLM		
OS Name	Version	Architecture	Kernel Mode	Minimum HDLM Version	8.7.6	8.8.0	8.8.1
Solaris	10	SPARC	64bit	5.6.1	1	1	1
	11		64bit	7.3.0			
	11.1		64bit	7.3.0			
	11.2		64bit	7.6.0			
	11.3		64bit	8.4.0			
	11.4		64bit	8.6.3			

Supported	
Not Supported	

Notes	
1	If the HDLM version is earlier than version 5.8, then Hitachi Device Manager (HDvM) Agent version 3.5 or later must be installed on the same host as HDLM.
2	This is supported in HGLM 8.6.2-01 or later.

AIX					HGLM		
OS Name	Version	Architecture	Kernel Mode	Minimum HDLM Version	8.7.6	8.8.0	8.8.1
AIX	6.1	POWER	64bit	5.9.4			
	7.1		64bit	6.5.0	1,2	1,2	1,2
	7.2		64bit	8.2.1	1,2	1,2	1,2

Supported	
Not Supported	

Notes	
1	See the sheet "17. AIX VIO" when using Virtual I/O Server.
2	HDLM does not support environments that use the Secure by Default option of AIX 6.1, AIX 7.1, and AIX 7.2.

HP-UX						HGLM		
OS Name	Version	Release	Architecture	Kernel Mode	Minimum HDLM Version	8.7.6	8.8.0	8.8.1
	11iV1	N/A	PA-RISC	64bit	5.2			
	11iV2	September 2004 May 2005 December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	Itanium	-	5.6			

HP-UX		September 2004 May 2005 December 2005 March 2006 June 2006 September 2006 June 2007 December 2007 June 2008	PA-RISC	64bit	5.6.1			
	11iV3	There are no plans to support HDLM Advanced with HP-UX 11iV3 or later because HP-UX 11iV3 has implemented its own native multipathing solution. Additionally, HP does not recommend nor support 3rd party vendor multipathing on HP-UX 11iV3 or later. All issues relating to multipathing and HP-UX 11iV3 must be discussed directly with HP.						

Supported	
Not Supported	

Red Hat Linux						**HGLM**		
OS Name	Version	Update	Kernel	Architecture	Minimum HDLM Version	**8.7.6**	**8.8.0**	**8.8.1**
Red Hat Linux ELAP or EL	5	None	2.6.18-8.el5 2.6.18-8.el5PAE	Intel x86	5.9.3			
			2.6.18-8.el5	IA64 / Itanium	5.9.3			
			2.6.18-8.el5	EM64T AMD64	5.9.3	1	1	1
	5.1	None	2.6.18-53.el5 2.6.18-53.el5PAE	Intel x86	5.9.4			
			2.6.18-53.el5	IA64 / Itanium	5.9.4			
			2.6.18-53.el5	EM64T AMD64	5.9.4	1	1	1
	5.2	None	2.6.18-92.el5 2.6.18-92.el5PAE	Intel x86	5.9.4			
			2.6.18-92.el5	IA64 / Itanium	5.9.4			
			2.6.18-92.el5	EM64T AMD64	5.9.4	1	1	1
	5.3	None	2.6.18-128.el5 2.6.18-128.el5PAE	Intel x86	6.1.2			
			2.6.18-128.el5	IA64 / Itanium	6.1.2			
			2.6.18-128.el5	EM64T AMD64	6.1.2	1	1	1
	5.4	None	2.6.18-164.el5 2.6.18-164.el5PAE	Intel x86	6.1.2			
			2.6.18-164.el5	IA64 / Itanium	6.1.2			
			2.6.18-164.el5	EM64T AMD64	6.1.2	1	1	1
	5.5	None	2.6.18-194.el5 2.6.18-194.el5PAE	Intel x86	6.1.2			
			2.6.18-194.el5	IA64 / Itanium	6.1.2			
			2.6.18-194.el5	EM64T AMD64	6.1.2	1	1	1
	5.6	None	2.6.18-238.el5 2.6.18-238.el5PAE	Intel x86	6.1.2			
			2.6.18-238.el5	IA64 / Itanium	6.1.2			
			2.6.18-238.el5	EM64T AMD64	6.1.2	1	1	1
	5.7	None	2.6.18-274.el5 2.6.18-274.el5PAE	Intel x86	6.1.2			
			2.6.18-274.el5	IA64 / Itanium	6.1.2			
			2.6.18-274.el5	EM64T AMD64	6.1.2	1	1	1
	5.8	None	2.6.18-308.el5 2.6.18-308.el5PAE	Intel x86	6.1.2			
			2.6.18-308.el5	IA64 / Itanium	6.1.2			
			2.6.18-308.el5	EM64T AMD64	6.1.2	1	1	1
	5.9	None	2.6.18-348.el5 2.6.18-348.el5PAE	Intel x86	6.1.2			
			2.6.18-348.el5	IA64 / Itanium	6.1.2			
			2.6.18-348.el5	EM64T AMD64	6.1.2	1	1	1
	5.9(Security Fix)	None	2.6.18-348.39.1.el5 2.6.18-348.39.1.el5PAE	Intel x86	8.6.2-02			
			2.6.18-348.39.1.el5	EM64T AMD64	8.6.2-02	1	1	1
	5.10	None	2.6.18-371.el5 2.6.18-371.el5PAE	Intel x86	6.1.2			
			2.6.18-371.el5	IA64 / Itanium	6.1.2			
			2.6.18-371.el5	EM64T AMD64	6.1.2	1	1	1
	5.11	None	2.6.18-398.el5 2.6.18-398.el5PAE	Intel x86	6.1.2			
			2.6.18-398.el5	IA64 / Itanium	6.1.2			
			2.6.18-398.el5	EM64T AMD64	6.1.2	1	1	1
	5.11(Security Fix)	None	2.6.18-416.el5 2.6.18-416.el5PAE	Intel x86	6.1.2			
			2.6.18-416.el5	IA64 / Itanium	6.1.2			
			2.6.18-416.el5	EM64T AMD64	6.1.2	1	1	1
	5.11(Security Fix)	None	2.6.18-419.el5 2.6.18-419.el5PAE	Intel x86	6.1.2			
			2.6.18-419.el5	IA64 / Itanium	6.1.2			
			2.6.18-419.el5	EM64T AMD64	6.1.2	1	1	1
	5.11(Security Fix)	None	2.6.18-426.el5 2.6.18-426.el5PAE	Intel x86	6.1.2			
			2.6.18-426.el5	IA64 / Itanium	6.1.2			
			2.6.18-426.el5	EM64T AMD64	6.1.2	1	1	1
	5.11(Security Fix)	None	2.6.18-431.el5 2.6.18-431.el5PAE	Intel x86	8.6.2-02			
			2.6.18-431.el5	EM64T AMD64	8.6.2-02	1	1	1
	6	None	2.6.32-71.el6.i686	Intel x86	6.5.2			
			2.6.32-71.el6.x86_64	EM64T AMD64	6.5.2	2	2	2
	6.1	None	2.6.32-131.0.15.el6.i686	Intel x86	6.6.2-01			
			2.6.32-131.0.15.el6.x86_64	EM64T AMD64	6.6.2-01	2	2	2
	6.2	None	2.6.32-220.el6.i686	Intel x86	7.2.0-00			
			2.6.32-220.el6.x86_64	EM64T AMD64	7.2.0-00	2	2	2
	6.3	None	2.6.32-279.el6.i686	Intel x86	7.4.0-00			
			2.6.32-279.el6.x86_64	EM64T AMD64	7.4.0-00	2	2	2

Red Hat Linux EL	6.4	None	2.6.32-358.el6.i686	Intel x86	7.4.0-00			
			2.6.32-358.el6.x86_64	EM64T AMD64	7.4.0-00	2	2	2
	6.5	None	2.6.32-431.el6.i686	Intel x86	7.4.0-00			
			2.6.32-431.el6.x86_64	EM64T AMD64	7.4.0-00	2	2	2
	6.6	None	2.6.32-504.el6.i686	Intel x86	7.4.0-00			
			2.6.32-504.el6.x86_64	EM64T AMD64	7.4.0-00	2	2	2
	6.7	None	2.6.32-573.el6.i686	Intel x86	7.4.0-00			
			2.6.32-573.el6.x86_64	EM64T AMD64	7.4.0-00	2	2	2
	6.8	None	2.6.32-642.el6.i686	Intel x86	7.4.0-00			
			2.6.32-642.el6.x86_64	EM64T AMD64	7.4.0-00	2	2	2
	6.9	None	2.6.32-696.el6.i686	Intel x86	8.0.0-00			
			2.6.32-696.el6.x86_64	EM64T AMD64	8.0.0-00	2	2	2
	6.10	None	2.6.32-754.el6.i686	Intel x86	8.6.2-00			
			2.6.32-754.el6.x86_64	EM64T AMD64	8.6.2-00	2	2	2
	7	None	3.10.0-123.el7.x86_64	EM64T AMD64	8.0.1-00			
	7.1	None	3.10.0-229.el7.x86_64	EM64T AMD64	8.1.4-00			
	7.2	None	3.10.0-327.el7.x86_64	EM64T AMD64	8.4.0-00			
	7.3	None	3.10.0-514.el7.x86_64	EM64T AMD64	8.5.1-00			
	7.4	None	3.10.0-693.el7.x86_64	EM64T AMD64	8.5.1-00			
	7.5	None	3.10.0-862.el7.x86_64	EM64T AMD64	8.6.1-00			
	7.6	None	3.10.0-957.el7.x86_64	EM64T AMD64	8.6.2-02			
	7.7	None	3.10.0-1062.el7.x86_64	EM64T AMD64	8.7.0-00			
	7.8	None	3.10.0-1127.el7.x86_64	EM64T AMD64	8.7.4-00			
	7.9	None	3.10.0-1160.el7.x86_64	EM64T AMD64	8.7.4-00			
	8	None	4.18.0-80.el8.x86_64	EM64T AMD64	-			
	8.1	None	4.18.0-147.el8.x86_64	EM64T AMD64	8.7.2-00			
	8.2	None	4.18.0-193.el8.x86_64	EM64T AMD64	8.7.4-00			
	8.3	None	4.18.0-240.el8.x86_64	EM64T AMD64	8.7.4-00			
	8.4	None	4.18.0-305.el8.x86_64	EM64T AMD64	8.8.1-00			
Oracle Unbreakable Enterprise Kernel	5.6	None	2.6.32-100.26.2.el5	EM64T AMD64	7.2.1-00	1	1	1
	5.7	None	2.6.32-200.13.1.el5uek	Intel x86	7.3.0-00			
			2.6.32-300.27.1.el5uek	Intel x86	7.4.0-00			
			2.6.32-200.13.1.el5uek	EM64T AMD64	7.3.0-00	1	1	1
			2.6.32-300.27.1.el5uek	EM64T AMD64	7.4.0-00	1	1	1
	5.8	None	2.6.32-300.39.2.el5uek	Intel x86	7.4.0-00			
			2.6.32-300.39.2.el5uek	EM64T AMD64	7.4.0-00	1	1	1
	6.2	None	2.6.39-200.29.1.el6uek.i686	Intel x86	7.4.1-00			
			2.6.39-200.29.2.el6uek.i686	Intel x86	7.4.1-00			
			2.6.39-200.29.1.el6uek.x86_64	EM64T AMD64	7.4.1-00	2	2	2
			2.6.39-200.29.2.el6uek.x86_64	EM64T AMD64	7.4.1-00	2	2	2
	6.3	None	2.6.39-200.24.1.el6uek.i686	Intel x86	7.4.1-00			
			2.6.39-200.24.1.el6uek.x86_64	EM64T AMD64	7.4.1-00	2	2	2
	6.4	None	2.6.39-400.211.1.el6uek.i686	Intel x86	7.6.1-00			
			2.6.39-400.211.1.el6uek.x86_64	EM64T AMD64	7.6.1-00	2	2	2
			2.6.39-400.264.1.el6uek.x86_64	EM64T AMD64	7.6.1-00	2	2	2
	6.5	None	2.6.39-400.211.1.el6uek.i686	Intel x86	7.6.1-00			
		None	3.8.13-16.2.1.el6uek.x86_64	EM64T AMD64	8.0.1-00	2	2	2
		None	3.8.13-44.el6uek.x86_64	EM64T AMD64	8.1.4-00	2	2	2
	6.6	None	2.6.39-400.215.10.el6uek.i686	Intel x86	8.5.0-00	2	2	2
		None	3.8.13-44.1.1.el6uek.x86_64	EM64T AMD64	8.1.4-00	2	2	2
		None	3.8.13-68.el6uek.x86_64	EM64T AMD64	8.1.4-00	2	2	2
		None	3.8.13-68.1.3.el6uek.x86_64	EM64T AMD64	8.1.4-00	2	2	2
	6.7	None	2.6.39-400.250.7.el6uek.i686	Intel x86	7.6.1-00	2	2	2
			3.8.13-68.3.4.el6uek.x86_64	EM64T AMD64	8.1.4-00	2	2	2
	6.8	None	2.6.39-400.278.2.el6uek.i686	Intel x86	8.5.0-00	2	2	2
			4.1.12-37.4.1.el6uek.x86_64	EM64T AMD64	8.5.0-00	2	2	2
	6.9	None	4.1.12-61.1.28.el6uek.x86_64	EM64T AMD64	8.5.0-00	2	2	2
		None	4.1.12-94.2.1.el6uek.x86_64	EM64T AMD64	8.5.0-00	2	2	2
	6.10	None	4.1.12-124.16.4.el6uek.x86_64	EM64T AMD64	8.6.2-00	2	2	2
	6.10(Security Fix)	None	4.1.12-124.45.6.el6uek.x86_64	EM64T AMD64	8.6.2-00	2	2	2
	7.1	None	3.8.13-55.1.6.el7uek.x86_64	EM64T AMD64	8.1.4-00			
		None	3.8.13-68.el7uek.x86_64	EM64T AMD64	8.1.4-00			
		None	3.8.13-68.2.2.el7uek.x86_64	EM64T AMD64	8.1.4-00			
	7.2	None	3.8.13-98.7.1.el7uek.x86_64	EM64T AMD64	8.1.4-00			
		None	3.8.13-118.10.2.el7uek.x86_64	EM64T AMD64	8.1.4-00			
	7.3	None	4.1.12-61.1.18.el7uek.x86_64	EM64T AMD64	8.5.1-00			
	7.3(Security Fix)	None	4.1.12-61.1.28.el7uek.x86_64	EM64T AMD64	8.5.1-00			
	7.4	None	4.1.12-94.3.9.el7uek.x86_64	EM64T AMD64	8.5.2-00			

	7.5	None	4.1.12-112.16.4.el7uek.x86_64	EM64T AMD64	8.6.2-00			
	7.5(Security Fix)	None	4.1.12-124.16.4.el7uek.x86_64	EM64T AMD64	8.6.2-00			
	7.5(Security Fix)	None	4.1.12-124.30.1.el7uek.x86_64	EM64T AMD64	8.6.2-00			
	7.6	None	4.14.35-1818.3.3.el7uek.x86_64	EM64T AMD64	8.6.5-00			
	7.7	None	4.14.35-1902.3.2.el7uek.x86_64	EM64T AMD64	8.7.0-00			
	7.8	None	4.14.35-1902.300.11.el7uek.x86_64	EM64T AMD64	8.7.4-00			
	7.8(Security Fix)	None	4.14.35-1902.301.1.el7uek.x86_64	EM64T AMD64	8.7.4-00			
	7.9	None	5.4.17-2011.6.2.el7uek.x86_64	EM64T AMD64	8.7.7-00			
	8.2(Security Fix)	None	5.4.17-2011.5.3.el8uek.x86_64	EM64T AMD64	8.7.6-00			
	8.3	None	5.4.17-2011.7.4.el8uek.x86_64	EM64T AMD64	8.7.6-00			
	8.4	None	5.4.17-2102.201.3.el8uek.x86_64	EM64T AMD64	8.8.1-00			
Oracle Linux	6.5	None	2.6.32-431.el6.i686	Intel x86	8.1.4-00			
			2.6.32-431.el6.x86_64	EM64T AMD64	8.1.4-00	2	2	2
	6.6	None	2.6.32-504.el6.i686	Intel x86	8.1.4-00			
			2.6.32-504.el6.x86_64	EM64T AMD64	8.1.4-00	2	2	2
	6.7	None	2.6.32-573.el6.i686	Intel x86	8.1.4-00			
			2.6.32-573.el6.x86_64	EM64T AMD64	8.1.4-00	2	2	2
	6.8	None	2.6.32-642.el6.i686	Intel x86	8.1.4-00			
			2.6.32-642.el6.x86_64	EM64T AMD64	8.1.4-00	2	2	2
	6.9	None	2.6.32-696.el6.i686	Intel x86	8.1.4-00			
			2.6.32-696.el6.x86_64	EM64T AMD64	8.1.4-00	2	2	2
	6.10	None	2.6.32-754.el6.i686	Intel x86	8.6.2-00			
			2.6.32-754.el6.x86_64	EM64T AMD64	8.6.2-00	2	2	2
	7	None	3.10.0-123.el7.x86_64	EM64T AMD64	8.1.0-00			
	7.1	None	3.10.0-229.el7.x86_64	EM64T AMD64	8.1.4-00			
	7.2	None	3.10.0-327.el7.x86_64	EM64T AMD64	8.4.0-00			
	7.3	None	3.10.0-514.el7.x86_64	EM64T AMD64	8.5.1-00			
	7.4	None	3.10.0-693.el7.x86_64	EM64T AMD64	8.5.1-00			
	7.4(Security Fix)	None	3.10.0-693.11.6.el7.x86_64	EM64T AMD64	8.5.1-00			
	7.5	None	3.10.0-862.el7.x86_64	EM64T AMD64	8.6.1-00			
	7.6	None	3.10.0-957.el7.x86_64	EM64T AMD64	8.6.2-02			
	7.7	None	3.10.0-1062.el7.x86_64	EM64T AMD64	8.7.0-00			
	7.8	None	3.10.0-1127.el7.x86_64	EM64T AMD64	8.7.4-00			
	7.9	None	3.10.0-1160.el7.x86_64	EM64T AMD64	8.7.4-00			
	8.1	None	4.18.0-147.el8.x86_64	EM64T AMD64	8.7.2-00			
	8.2	None	4.18.0-193.el8.x86_64	EM64T AMD64	8.7.6-00			
	8.3	None	4.18.0-240.el8.x86_64	EM64T AMD64	8.7.6-00			
	8.4	None	4.18.0-305.el8.x86_64	EM64T AMD64	8.8.1-00			

Supported	
Not Supported	

	Notes
1	In an EM64T/AMD64 environment, the RPM (Red Hat Package Manager) packages listed below are required. Install these RPM packages before installing HDLM: - libstdc++-RPM package version.i386.rpm - libgcc-RPM package version.i386.rpm - glibc-RPM package version.i686.rpm RPM-package-version depends on the OS version you are using.
2	In an EM64T/AMD64 environment, the RPM (Red Hat Package Manager) packages listed below are required. Install these RPM packages before installing HDLM: - libstdc++-RPM package version.i686.rpm - libgcc-RPM package version.i686.rpm - glibc-RPM package version.i686.rpm RPM-package-version depends on the OS version you are using.
3	This is supported in HGLM 8.6.2-01 or later.

SuSE Linux						**HGLM**		
OS Name	Version	Update	Kernel	Architecture	Minimum HDLM Version	**8.7.6**	**8.8.0**	**8.8.1**
	10	None	2.6.16.21-0.8-default 2.6.16.21-0.8-smp 2.6.16.21-0.8-bigsmp	Intel x86	5.9			
			2.6.16.21-0.8-default	IA64 / Itanium	5.9.3			
			2.6.16.21-0.8-default 2.6.16.21-0.8-smp	EM64T AMD64	5.9.4			
		SP1 + Security Fix	2.6.16.46-0.14-default 2.6.16.46-0.14-smp 2.6.16.46-0.14-bigsmp	Intel x86	5.9.3			
			2.6.16.46-0.14-default	IA64 / Itanium	5.9.3			
			2.6.16.46-0.14-default 2.6.16.46-0.14-smp	EM64T AMD64	5.9.4			
		SP2	2.6.16.60-0.21-default 2.6.16.60-0.21-smp 2.6.16.60-0.21-bigsmp	Intel x86	6.0.1			
			2.6.16.60-0.21-xenpae	Intel x86	6.2.0			
			2.6.16.60-0.21-default	IA64 / Itanium	6.0.1			
			2.6.16.60-0.21-default 2.6.16.60-0.21-smp	EM64T AMD64	6.0.1			
			2.6.16.60-0.21-xenpae	EM64T AMD64	6.2.0			
			2.6.16.60-0.54.5-default 2.6.16.60-0.54.5-smp 2.6.16.60-0.54.5-bigsmp	Intel x86	6.3.0			

SUSELES	11	SP3	2.6.16.60-0.54.5-xenpae	Intel x86	6.3.0			
			2.6.16.60-0.54.5-default	IA64 / Itanium	6.3.0			
			2.6.16.60-0.54.5-default 2.6.16.60-0.54.5-smp	EM64T AMD64	6.3.0			
			2.6.16.60-0.54.5-xenpae	EM64T AMD64	6.3.0			
		SP4	2.6.16.60-0.85.1-default 2.6.16.60-0.85.1-smp 2.6.16.60-0.85.1-bigsmp	Intel x86	6.6.2			
			2.6.16.60-0.85.1-xenpae	Intel x86	6.6.2			
			2.6.16.60-0.85.1-default	IA64 / Itanium	6.6.2			
			2.6.16.60-0.85.1-default 2.6.16.60-0.85.1-smp	EM64T AMD64	6.6.2			
			2.6.16.60-0.85.1-xenpae	EM64T AMD64	6.6.2			
		Security Fix	2.6.27.21-0.1.2-default 2.6.27.21-0.1.2-pae 2.6.27.21-0.1.2-xen	Intel x86	6.2.1			
			2.6.27.21-0.1.2-default	IA64 / Itanium	6.2.1			
			2.6.27.21-0.1.2-default 2.6.27.21-0.1.2-xen	EM64T AMD64	6.2.1			
		SP1	2.6.32.12-0.7.1-default 2.6.32.12-0.7.1-pae 2.6.32.12-0.7.1-xen	Intel x86	6.5.0			
			2.6.32.12-0.7.1-default	IA64 / Itanium	6.5.0			
			2.6.32.12-0.7.1-default 2.6.32.12-0.7.1-xen	EM64T AMD64	6.5.0			
		SP2	3.0.13-0.27-default 3.0.13-0.27-pae	Intel x86	7.4.0			
			3.0.13-0.27-default	IA64 / Itanium	7.4.0			
			3.0.13-0.27-default	EM64T AMD64	7.4.0			
		SP3	3.0.76-0.11-default 3.0.76-0.11-pae	Intel x86	7.6.0			
			3.0.76-0.11-default	IA64 / Itanium	7.6.0			
			3.0.76-0.11-default	EM64T AMD64	7.6.0			
			3.0.76-0.11-xen	EM64T AMD64	8.0.0			
		SP4	3.0.101-63.1-default 3.0.101-63.1-pae	Intel x86	8.2.1			
			3.0.101-63.1-default	IA64 / Itanium	8.2.1			
			3.0.101-63.1-default	EM64T AMD64	8.2.1			
			3.0.101-63.1-xen	EM64T AMD64	8.2.1			
		SP4(Security Fix)	3.0.101-108.21-default 3.0.101-108.21-pae	Intel x86	8.2.1			
			3.0.101-108.21-default	IA64 / Itanium	8.2.1			
			3.0.101-108.21-default	EM64T AMD64	8.2.1			
			3.0.101-108.21-xen	EM64T AMD64	8.2.1			
		SP4(Security Fix)	3.0.101-108.68-default 3.0.101-108.68-pae	Intel x86	8.6.4			
			3.0.101-108.68-default	EM64T AMD64	8.6.2-01			
			3.0.101-108.68-xen	EM64T AMD64	8.6.4			
	12	None	3.12.28-4-default	EM64T AMD64	8.1.4			
			3.12.28-4-xen	EM64T AMD64	8.1.4			
		SP1	3.12.59-60.45-default	EM64T AMD64	8.5.0			
			3.12.59-60.45-xen	EM64T AMD64	8.5.0			
		SP1(Security Fix)	3.12.74-60.64.40-default	EM64T AMD64	8.5.0			
			3.12.74-60.64.40-xen	EM64T AMD64	8.5.0			
		SP2	4.4.21-69-default	EM64T AMD64	8.5.2			
		SP3	4.4.103-6-33-default	EM64T AMD64	8.5.4			
		SP3(Security Fix)	4.4.114-94.14-default	EM64T AMD64	8.6.1			
		SP4	4.12.14-94.41-default	EM64T AMD64	8.6.4			
		SP5	4.12.14-120-default	EM64T AMD64	8.7.2			
	15	None	4.12.14-23-default	EM64T AMD64	8.6.2			
		SP1	4.12.14-195-default	EM64T AMD64	8.7.1			
		SP2	5.3.18-22-default	EM64T AMD64	8.7.7			

Supported	
Not Supported	

1	This is supported in HGLM 8.6.2-01 or later.

VMware					**HGLM**		
OS Name	Version/Edition	Architecture	Kernel Mode	Minimum HDLM Version	**8.7.6**	**8.8.0**	**8.8.1**
VMware ESXi	6.0 Enterprise	EM64T or AMD64	64bit	8.1.4	1	1	1
	6.0 Enterprise plus	EM64T or AMD64	64bit	8.1.4	1	1	1
	6.0 Standard	EM64T or AMD64	64bit	8.1.4	1	1	1
	6.5 Enterprise	EM64T or AMD64	64bit	8.2.1	1	1	1
	6.5 Enterprise plus	EM64T or AMD64	64bit	8.2.1	1	1	1
	6.5 Standard	EM64T or AMD64	64bit	8.2.1	1	1	1
	6.7 Enterprise	EM64T or AMD64	64bit	8.2.1	1	1	1
	6.7 Enterprise plus	EM64T or AMD64	64bit	8.2.1	1	1	1
	6.7 Standard	EM64T or AMD64	64bit	8.2.1	1	1	1
	7.0 Enterprise	EM64T or AMD64	64bit	8.7.4			
	7.0 Enterprise plus	EM64T or AMD64	64bit	8.7.4			

	7.0 Standard	EM64T or AMD64	64bit	8.7.4			

Notes	
1	According to the VMware ESXi 6.0/6.5/6.7/7.0 End User License Agreement (EULA), HDLM can only be used on the Standard, Enterprise, and Enterprise Plus VMware ESXi Editions.

Supported	
Not Supported	

Centralized Management Console(HGLM)
Supported Cluster Software

The following table describes the cluster function supported by Centralized Management Console(HGLM)
For the cluster configuration, Centralized Management Console(HGLM) supports the "Active - Standby" configuration only.

Microsoft Windows				Cluster		HGLM		
OS Name	Version	Service Pack	Architecture	Name	Bundle	8.7.6	8.8.0	8.8.1
Windows Server 2008	Enterprise Edition Datacenter Edition	SP2	IA32 / x86	MSFC	Bundle			
			x64 / x86_64	MSFC	Bundle			
	R2 Enterprise Edition R2 Datacenter Edition	No SP	x64 / x86_64	MSFC	Bundle			
		SP1	x64 / x86_64	MSFC	Bundle			
Windows Server 2012	Standard Edition Datacenter Edition	No SP	x64 / x86_64	MSFC	Bundle			
	R2 Standard Edition R2 Datacenter Edition	No SP	x64 / x86_64	MSFC	Bundle			
Windows Server 2016	Standard Edition Datacenter Edition	No SP	x64 / x86_64	MSFC	Bundle			
Windows Server 2019	Standard Edition Datacenter Edition	No SP	x64 / x86_64	MSFC	Bundle			

Supported	
Not Supported	

Centralized Management Console(HGLM)
Supported Browser

Operating System				Browser		HGLM		
						8.7.6	8.8.0	8.8.1
Windows Server 2008	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	No SP	IA32 / x86	Internet Explorer	7.X 8.X			
		SP2			7.X 8.X			
					9.X			
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	No SP	X64 / x86_64	Internet Explorer	7.X 8.X			
		SP2			7.X 8.X			
					9.X			
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition R2 Standard without Hyper-V Edition R2 Enterprise without Hyper-V Edition R2 Datacenter without Hyper-V Edition	No SP	X64 / x86_64	Internet Explorer	8.X			
					9.X			
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition R2 Standard without Hyper-V Edition R2 Enterprise without Hyper-V Edition R2 Datacenter without Hyper-V Edition	SP1	X64 / x86_64	Internet Explorer	8.X			
					9.X			
					10.x			
					11.x			
Windows Server 2012	Essentials Edition Standard Edition Datacenter Edition	No SP	X64 / x86_64	Internet Explorer	10.X			
					11.X			
	R2 Essentials Edition R2 Standard Edition R2 Datacenter Edition	No SP	X64 / x86_64	Internet Explorer	11.X			
Windows Server 2016	Standard Edition Datacenter Edition	No SP	X64 / x86_64	Internet Explorer	11.X			
Windows Server 2019	Standard Edition Datacenter Edition	No SP	X64 / x86_64	Internet Explorer	11.X			
Windows 7	Professional Edition Enterprise Edition Ultimate Edition	No SP	IA32 / x86	Internet Explorer	8.X			
					9.X			
			X64 / x86_64		10.x			
		SP1	IA32 / x86	Internet Explorer	8.X			
					9.X			
					10.x			
					11.x			
			X64 / x86_64		9.x			
					10.x			
					11.x			
Windows 8	Windows 8 Edition Pro Edition Enterprise Edition	No SP	IA32 / x86	Internet Explorer	10.X			
			X64 / x86_64	Internet Explorer	10.X			
Windows 8.1	Windows 8 Edition Pro Edition	No SP	IA32 / x86	Internet Explorer	11.X			
				Chrome for Work	Latest version of stable channel			

Windows 8.1	Pro Edition Enterprise Edition	No SP	X64 / x86_64	Internet Explorer	11.X			
				Chrome for Work	Latest version of stable channel			
Windows 10	Windows Pro or Education or Enterprise	No SP	IA32 / x86	Internet Explorer	11.X			
				Chrome for Work	Latest version of stable channel			
			X64 / x86_64	Internet Explorer	11.X			
				Chrome for Work	Latest version of stable channel			

Operating System			Browser		HGLM		
					8.7.6	8.8.0	8.8.1
Solaris 10	SPARC	32bit	FireFox	3.6.x			
		64bit	FireFox	3.6.x			
				ESR 10.0.x			
				ESR 17.0.x			
				ESR 24.1.x			

Operating System		Browser		HGLM		
				8.7.6	8.8.0	8.8.1
Red Hat AS/ES 5.2 2.6.18-92.el5 2.6.18-92.el5PAE	IA32 / x86	FireFox	3.0.x			
			3.6.x			
			ESR 10.0.x			
			ESR 17.0.x			
Red Hat AS/ES 5.6 2.6.18-238.el5 2.6.18-238.el5PAE	IA32 / x86	FireFox	3.6.x			
			ESR 10.0.x			
			ESR 17.0.x			
Red Hat AS/ES 5.8 2.6.18-308.el5 2.6.18-308.el5PAE	IA32 / x86	FireFox	3.6.x			
			ESR 10.0.x			
			ESR 17.0.x			
Red Hat EL 6.2 2.6.32-220.el6.i686	IA32 / x86	FireFox	3.6.x			
			ESR 10.0.x			
			ESR 17.0.x			
			ESR 24.1.x			
			ESR 31.x			
			ESR 38.x			
			ESR 45.x			
Red Hat EL 6.2 2.6.32-220.el6.x86_64	x64		ESR 31.x			
			ESR 38.x			

			ESR 45.x	**2**	**2**	**2**
Red Hat EL 6.4 2.6.32-358.el6.i686	IA32 / x86	FireFox	3.6.x			
			ESR 10.0.x			
			ESR 17.0.x			
			ESR 24.1.x			
			ESR 31.x			
			ESR 38.x			
			ESR 45.x			
Red Hat EL 6.4 2.6.32-358.el6.x86_64	x64		ESR 31.x			
			ESR 38.x			
			ESR 45.x	**2**	**2**	**2**
Red Hat EL 6.5 2.6.32-431.el6.i686	IA32 / x86	FireFox	ESR 24.1.x			
			ESR 31.x			
			ESR 38.x			
			ESR 45.x			
Red Hat EL 6.5 2.6.32-431.el6.x86_64	x64		ESR 31.x			
			ESR 38.x			
			ESR 45.x	**2**	**2**	**2**
Red Hat EL 6.7 2.6.32-573.el6.i686	IA32 / x86	FireFox	ESR 24.1.x			
			ESR 31.x			
			ESR 38.x			
			ESR 45.x			
Red Hat EL 6.7 2.6.32-573.el6.x86_64	x64		ESR 31.x			
			ESR 38.x			
			ESR 45.x	**2**	**2**	**2**
Red Hat EL 6.8 2.6.32-642.el6.i686	IA32 / x86	FireFox	ESR 45.x			
Red Hat EL 6.8 2.6.32-642.el6.x86_64	x64		ESR 45.x	**2**	**2**	**2**

Red Hat EL 7 3.10.0-123.el7.x86_64	x64	FireFox	ESR 38.x			
			ESR 45.x			
			ESR 52.x			
			ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 7.1 3.10.0-229.el7.x86_64	x64	FireFox	ESR 38.x			
			ESR 45.x			
			ESR 52.x			
			ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 7.2 3.10.0-327.el7.x86_64	x64	FireFox	ESR 38.x			
			ESR 45.x			
			ESR 52.x			
			ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 7.3 3.10.0-514.el7.x86_64	x64	FireFox	ESR 45.x			
			ESR 52.x			
			ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 7.4 3.10.0-693.el7.x86_64	x64	FireFox	ESR 52.x			
			ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 7.5 3.10.0-862.el7.x86_64	x64	FireFox	ESR 52.x			
			ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 7.6 3.10.0-957.el7.x86_64	x64	FireFox	ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**

Red Hat EL 7.7 3.10.0-1062.el7.x86_64	x64	FireFox	ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 7.8 3.10.0-1127.el7.x86_64	x64	FireFox	ESR 68.x	**2, 3**	**2, 3**	**2, 3**
			ESR 78.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 7.9 3.10.0-1160.el7.x86_64	x64	FireFox	ESR 91.x			**2, 3**
Red Hat EL 8 4.18.0-80.el8.x86_64	x64	FireFox	ESR 60.x			
			ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 8.1 4.18.0-147.el8.x86_64	x64	FireFox	ESR 68.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 8.2 4.18.0-193.el8.x86_64	x64	FireFox	ESR 68.x	**2, 3**	**2, 3**	**2, 3**
			ESR 78.x	**2, 3**	**2, 3**	**2, 3**
Red Hat EL 8.3 4.18.0-240.el8.x86_64	x64	FireFox	ESR 68.x		**2, 3**	**2, 3**
			ESR 78.x		**2, 3**	**2, 3**
Red Hat EL 8.4 4.18.0-305.el8.x86_64	x64	FireFox	ESR 78.x		**2, 3**	**2, 3**
			ESR 91.x			**2, 3**
SUSE Linux Enterprise Server 11	SP3 x86	FireFox	ESR 31.x			
			ESR 38.x			
	SP4 x86	FireFox	ESR 38.x			
			ESR 45.x			

Supported	
Not Supported	

	Notes
1	The alert filtering display function cannot be used.
2	x64 includes EM64T and AMD64.
3	Please refer to the Firefox system requirements and install or update packages as needed.

Centralized Management Console(HGLM)
Supported IPv6 Network

Attention:

1: Use Centralized Management Console(HGLM) on OS configured for IPv4/IPv6 Dual Stack Network.
Centralized Management Console(HGLM) does not support IPv6-only environments. Set up the OS such that both IPv4 and IPv6 can be used.
Only a IPv6 global address is supported by Centralized Management Console(HGLM).
You can only use global addresses as an IPv6 addresses. Global-unique local addresses (site-local addresses), and link addresses cannot be used.

(1) Centralized Management Console(HGLM)

OS	OS Name	OS Service Pack	architecture	HGLM		
				8.7.6	8.8.0	8.8.1
Windows	Windows Server 2008	No SP	IA32 / x86			
			X64 / x86_64			
		SP2	IA32 / x86			
			X64 / x86_64			
	Windows Server 2008 R2	No SP	X64 / x86_64			
		SP1	X64 / x86_64			
	Windows Server 2012	No SP	X64 / x86_64			
	Windows Server 2012 R2	No SP	X64 / x86_64			
	Windows Server 2016	No SP	X64 / x86_64			
	Windows Server 2019	No SP	X64 / x86_64			

(2) Web Client

OS	OS Name	OS Service Pack	architecture	Name	Version	HGLM		
						8.7.6	8.8.0	8.8.1
Windows	Windows Server 2008	No SP	IA32 / x86	Internet Explorer	7.0 or later			
			X64 / x86_64	Internet Explorer	7.0 or later			
		SP2	IA32 / x86	Internet Explorer	from 7.0 to 8.x			
					9.0 or later			
			X64 / x86_64	Internet Explorer	from 7.0 to 8.x			
					9.0 or later			
	Windows Server 2008 R2	No SP	X64 / x86_64	Internet Explorer	8.x			
					9.x			
		SP1	X64 / x86_64	Internet Explorer	8.x			
					9.x			
					11.x			
	Windows Server 2012	No SP	X64 / x86_64	Internet Explorer	10.x			
					11.x			
	Windows Server 2012 R2	No SP	X64 / x86_64	Internet Explorer	11.x			
	Windows Server 2016	No SP	X64 / x86_64	Internet Explorer	11.x			
	Windows Server 2019	No SP	X64 / x86_64	Internet Explorer	11.x			
	Windows 7	No SP	IA32 / x86	Internet Explorer	8.x			
					9.0 or later			
			X64 / x86_64	Internet Explorer	8.x			
					9.0 or later			
		SP1	IA32 / x86	Internet Explorer	8.x			
					9.x			
					10.x			
					11.x			
			X64 / x86_64	Internet Explorer	8.x			
					9.x			
					10.x			
					11.x			
	Windows 8	No SP	IA32 / x86	Internet Explorer	10.0 or later			
			X64 / x86_64	Internet Explorer	10.0 or later			
	Windows 8.1	No SP	IA32 / x86	Internet Explorer	11.x			
				Chrome for Work	Latest version of stable channel			
			X64 / x86_64	Internet Explorer	11.x			
				Chrome for Work	Latest version of stable channel			
	Windows 10	No SP	IA32 / x86	Internet Explorer	11.x			
				Chrome for Work	Latest version of stable channel			
			X64 / x86_64	Internet Explorer	11.x			
				Chrome for Work	Latest version of stable channel			

(3) Path Manager

Product Name	Version	HGLM		
		8.7.6	8.8.0	8.8.1
Hitachi Dynamic Link Manager Software	6.0 or later(*5)(*6)			
Veritas Volume Manager	5.0			
Veritas Volume Manager	5.1			
HP-UX 11iv3 Native Multipathing	11iv3			

Supported	
Not Supported	

Notes	
4	If you specify an IPv6 address in Internet Explorer 6, you cannot connect to the HGLM server. To connect to an HGLM server in this environment, use a host name.
5	For details about the environment, see "27-2. Mgmt Console (HDLM)".
6	HP-UX is not supported.

Centralized Management Console(HGLM)
Supported Virtualization

OS	OS Name	OS Version OS Edition	OS Service Pack	architecture	Virtualization	Version	HGLM		
							8.7.6	8.8.0	8.8.1
Windows	Windows Server 2008	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	No SP	X64 / x86_64	Hyper-V	1.x			
		Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	SP2	X64 / x86_64	Hyper-V	1.x			
		R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition R2 Standard without Hyper-V Edition R2 Enterprise without Hyper-V Edition R2 Datacenter without Hyper-V Edition	No SP	x64 / x86_64	Hyper-V	2.x			
		R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition R2 Standard without Hyper-V Edition R2 Enterprise without Hyper-V Edition R2 Datacenter without Hyper-V Edition	SP1	x64 / x86_64	Hyper-V	2.x			
	Windows Server 2012	Essentials Edition Standard Edition Datacenter Edition	No SP	x64 / x86_64	VMware ESX/ESXi	6.x			
					Hyper-V	3.x			
	Windows Server 2012	R2 Essentials Edition R2 Standard Edition R2 Datacenter Edition	No SP	x64 / x86_64	VMware ESX/ESXi	6.x			
					Hyper-V	3.x			
	Windows Server 2016	Standard Edition Datacenter Edition	No SP	x64 / x86_64	Hyper-V				
	Windows Server 2019	Standard Edition Datacenter Edition	No SP	x64 / x86_64	Hyper-V				

Supported	
Not Supported	

Supported Java Versions

Centralized Management Console(HGLM)

Version	Version	Service Pack	Architecture	JDK Version	HDLM Version 8.7.6	HDLM Version 8.8.0	HDLM Version 8.8.1
Windows 2008	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	No SP	x64 / x86_64	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*2)			
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	No SP	x64 / x86_64	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*2)			
	Standard 32-bit Edition Enterprise 32-bit Edition Datacenter 32-bit Edition Standard without Hyper-V 32-bit Edition Enterprise without Hyper-V 32-bit Edition Datacenter without Hyper-V 32-bit Edition	SP2	IA32 / x86	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*2)			
	Standard Edition Enterprise Edition Datacenter Edition Standard without Hyper-V Edition Enterprise without Hyper-V Edition Datacenter without Hyper-V Edition	SP2	x64 / x86_64	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*2)			
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition	No SP	x64 / x86_64	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*2)			
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition	SP1	x64 / x86_64	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*1)			
				1.7.0(*2)			
				1.8.0(*1)			
				1.8.0(*2)			
Windows 2012	Essentials Edition Standard Edition Datacenter Edition	No SP	x64 / x86_64	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*1)			
				1.7.0(*2)			
				1.8.0(*1)			
				1.8.0(*2)			
	R2 Essentials Edition R2 Standard Edition R2 Datacenter Edition	No SP	x64 / x86_64	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*1)			
				1.7.0(*2)			
				1.8.0(*1)			
				1.8.0(*2)			
Windows 2016	Standard Edition Datacenter Edition	No SP	x64 / x86_64	1.5.0(*1)			
				1.5.0(*2)			
				1.6.0(*1)			
				1.6.0(*2)			
				1.7.0(*1)			
				1.7.0(*2)			
				1.8.0(*1)			
				1.8.0(*2)			
Windows 2019	Standard Edition Datacenter Edition	No SP	x64 / x86_64	1.8.0(*1)			
				1.8.0(*2)			

Supported	
Not Supported	

Notes	
1	The JDK is enhanced by Hitachi and contains the required patches to execute Server.
2	The JDK is released by Oracle Corporation.

Hitachi Dynamic Link Manager Software Contents Matrix

Product Name	HDLM Version		
Hitachi Dynamic Link Manager Software	8.7.8	8.8.0	8.8.1
Hitachi Dynamic Link Manager Software (for AIX)	8.7.8	8.8.0	8.8.1
Hitachi Dynamic Link Manager Software (for Linux)	8.7.8	8.8.0	8.8.1
Hitachi Dynamic Link Manager Software (for Solaris)	8.7.6-02	8.8.0	8.8.1
Hitachi Dynamic Link Manager Software (for Windows)	8.7.6-02	8.8.0	8.8.1
Hitachi Dynamic Link Manager Software (for VMware)	8.7.6-02	8.8.0	8.8.1
Hitachi Global Link Manager Software	8.7.6-02	8.8.0	8.8.1