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**Hitachi Vantara**
**Hitachi Dynamic Link Manager Software Interoperability Support Matrix**


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**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.

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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...

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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 RHEL5.0 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).

OS Name	Version	Service Pack	Architecture	HDLM Version		
				6.4.3	6.6.0	6.6.2
Windows Server 2008	Standard Edition Enterprise Edition Datacenter Edition	No SP	IA32 / x86			
		SP2		36	36	36
	Standard Edition Enterprise Edition Datacenter Edition	No SP	x64 / x86_64			
		SP2		35		
	Itanium-based Systems	No SP	IA64 / Itanium			
		SP2		35,36	35,36	35,36
	R2 Standard Edition R2 Enterprise Edition R2 Datacenter Edition R2 Web Edition	No SP	x64 / x86_64			
		SP1		38		
		No SP	IA64 / Itanium			
		SP1		36, 38	36, 38	36, 38
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		39	39	39
	Essentials Edition Standard Edition Datacenter Edition	No SP		40	40	40
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, 42, 43

Supported  
 Not Supported

**Notes**

- 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
- SP can be applied to the multipath environment where HDLM is installed.
- 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. For details about the available HBA drivers, see the sheet "4. Windows HBA".
- In Windows Server 2008 and 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
- In Windows Server 2012 and 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. For details about the available HBA drivers, see the sheet "4. Windows HBA".
- 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. For details about the available HBA drivers, see the sheet "4. Windows HBA".
- 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. For details about the available HBA drivers, see the sheet "4. Windows HBA".
- In Windows 2019, HDLM does not support the HDLM GUI.
- In Windows 2019, HDLM does not support the function for managing HDLM by using Global Link Manager.

OS Name	Version	Architecture	Kernel Mode	HDLM Version		
				6.4.3	6.6.0	6.6.2
Solaris	10	SPARC	64bit	4,5,7	4,5,7	4,5,7
	11		64bit	6,7	6,7	6,7
	11.1		64bit	7,8	7,8	7,8
	11.2		64bit	7,8,9,10,11	7,8,9,10,11	7,8,9,10,11
	11.3		64bit	7,8,9,10,12	7,8,9,10,12	7,8,9,10,12
	11.4		64bit			7,8,9,10,12

Supported  
 Not Supported

**Notes**

- The following patches are required:  
 - 108434-04 or later, 108974-10 or later, 121972-04 or later, and Recommended Patch Cluster Aug/27/02 or later
- If you are using EFI labels, use Solaris 9 4/03 or later.
- The following patches are required:  
 - 118335-08 or later, and Recommended Patch Cluster Nov/12/02 or later
- If you are using ZFS, use Solaris 10 6/06 or later.
- If you are using a boot disk environment on ZFS, use Solaris 10 9/10 or later.
- 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
- 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.
- A boot disk for which an EFI disk label is set supports only non-cluster configurations. Cluster configurations are not supported.
- 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, upgrade to or reinstall HDLM as version 8.4.1 or later.
12	Configurations that use the boot pool function are not supported in a boot disk environment.

AIX				HDLM Version		
OS Name	Version	Architecture	Kernel Mode	6.1.0	6.1.0	6.1.0
AIX	6.1	POWER	64bit	23	23	23
	7.1		64bit	23	23	23
	7.2		64bit	23	23	23
				Supported		
				Not Supported		

Notes	
23	The Secure by Default functionality of AIX 6.1, AIX 7.1, and AIX 7.2 is not supported.

HP-UX					HDLM Version		
OS Name	Version	Release	Architecture	Kernel Mode	6.1.0	6.1.0	6.1.0
HP-UX	11V1		PA-RISC	64bit			
	11V2	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			
11V3	There are no plans to support HDLM with HP-UX 11V3 or later because HP-UX 11V3 has implemented its own native multipathing solution. Additionally, HP does not recommend nor support 3rd party vendor multipathing on HP-UX 11V3 or later. All issues relating to multipathing and HP-UX 11V3 must be discussed directly with HP.						

Supported	
Not Supported	

2. Multipathing OSes

OS Name	Red Hat Linux				HDL Version			
	Version	Update	Kernel	Architecture	6.0	6.1	6.2	
Red Hat Linux ELAP or EL	5	None	2.6.18-8.el5	Intel x86	26, 31, 75	26, 31, 75	26, 31, 75	
			2.6.18-8.el5PAE	IA64 / Itanium				
			2.6.18-8.el5	EM64T AMD64	26, 31 34, 64, 75	26, 31 34, 64, 75	26, 31 34, 64, 75	
	5.1	None	2.6.18-8.el5	Intel x86	26	26	26	
			2.6.18-53.el5	IA64 / Itanium				
			2.6.18-53.el5PAE	EM64T AMD64	26, 31 34, 37, 64, 75	26, 31 34, 37, 64, 75	26, 31 34, 37, 64, 75	
	5.2	None	2.6.18-92.el5	Intel x86	26, 31, 75	26, 31, 75	26, 31, 75	
			2.6.18-92.el5PAE	IA64 / Itanium				
			2.6.18-92.el5	EM64T AMD64	26, 31 34, 64, 75	26, 31 34, 64, 75	26, 31 34, 64, 75	
	5.3	None	2.6.18-128.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-128.el5PAE	IA64 / Itanium				
			2.6.18-128.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.4	None	2.6.18-164.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-164.el5PAE	IA64 / Itanium				
			2.6.18-164.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.5	None	2.6.18-194.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-194.el5PAE	IA64 / Itanium				
			2.6.18-194.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.6	None	2.6.18-238.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-238.el5PAE	IA64 / Itanium				
			2.6.18-238.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.7	None	2.6.18-274.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-274.el5PAE	IA64 / Itanium				
			2.6.18-274.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.8	None	2.6.18-308.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-308.el5PAE	IA64 / Itanium				
			2.6.18-308.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.9	None	2.6.18-348.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-348.el5PAE	IA64 / Itanium				
			2.6.18-348.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.10	None	2.6.18-371.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-371.el5PAE	IA64 / Itanium				
			2.6.18-371.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.11	None	2.6.18-398.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.18-398.el5PAE	IA64 / Itanium				
			2.6.18-398.el5	EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75	
	5.11(Security Fix)	None	2.6.18-416.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
	2.6.18-416.el5PAE		IA64 / Itanium					
	2.6.18-416.el5		EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75		
	5.11(Security Fix)	None	2.6.18-419.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
	2.6.18-419.el5PAE		IA64 / Itanium					
	2.6.18-419.el5		EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75		
	5.11(Security Fix)	None	2.6.18-426.el5	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
	2.6.18-426.el5PAE		IA64 / Itanium					
	2.6.18-426.el5		EM64T AMD64	26, 34, 38, 75	26, 34, 38, 75	26, 34, 38, 75		
	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
				2.6.32-131.0.15.el6.i686	Intel x86	26, 38, 66, 75	26, 38, 66, 75	26, 38, 66, 75
		6.1	None	2.6.32-131.0.15.el6.x86_64	EM64T AMD64	26, 38, 75	26, 38, 75	26, 38, 75
2.6.32-131.0.15.el6.i686				Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
2.6.32-220.el6.i686				EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75	
6.2		None	2.6.32-220.el6.x86_64	Intel x86	26, 38, 75	26, 38, 75	26, 38, 75	
			2.6.32-279.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75	
			2.6.32-279.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75	
6.3		None	2.6.32-358.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75	
			2.6.32-358.el6.x86_64	Intel x86	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75	
			2.6.32-431.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75	
6.4		None	2.6.32-431.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75	
			2.6.32-504.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75	
			2.6.32-504.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75	
6.5		None	2.6.32-504.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75	
			2.6.32-504.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75	
			2.6.32-573.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75	
6.6	None	2.6.32-573.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75		
		2.6.32-642.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75		
		2.6.32-642.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75		
6.7	None	2.6.32-696.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75		
		2.6.32-696.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75		
		2.6.32-696.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75		
6.8	None	2.6.32-696.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75		
		2.6.32-754.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75		
		2.6.32-754.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75		
6.9	None	2.6.32-754.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75		
		2.6.32-754.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75		
		2.6.32-754.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75		
6.10	None	2.6.32-754.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75		
		2.6.32-754.el6.i686	EM64T AMD64	26, 38, 68, 75	26, 38, 68, 75	26, 38, 68, 75		
		2.6.32-754.el6.x86_64	Intel x86	26, 38, 71, 75	26, 38, 71, 75	26, 38, 71, 75		
Red Hat Linux EL	7	None	3.10.0-123.el7.x86_64	EM64T AMD64	26, 31	26, 31	26, 31	
			3.10.0-123.el7.x86_64	EM64T AMD64	70, 71, 75	70, 71, 75	70, 71, 75	
	7.1	None	3.10.0-229.el7.x86_64	EM64T AMD64	26, 31	26, 31	26, 31	
			3.10.0-229.el7.x86_64	EM64T AMD64	70, 71, 75	70, 71, 75	70, 71, 75	
	7.2	None	3.10.0-327.el7.x86_64	EM64T AMD64	26, 31	26, 31	26, 31	
			3.10.0-327.el7.x86_64	EM64T AMD64	70, 71, 75, 83	70, 71, 75, 83	70, 71, 75, 93	
7.3	None	3.10.0-514.el7.x86_64	EM64T AMD64	26, 31	26, 31	26, 31		
		3.10.0-514.el7.x86_64	EM64T AMD64	70, 71, 75, 84	70, 71, 75, 84	70, 71, 75, 94		
7.4	None	3.10.0-693.el7.x86_64	EM64T AMD64	26, 31	26, 31	26, 31		
		3.10.0-693.el7.x86_64	EM64T AMD64	70, 71, 75, 85	70, 71, 75, 85	70, 71, 75, 95		
7.5	None	3.10.0-682.el7.x86_64	EM64T AMD64	26, 31	26, 31	26, 31		
		3.10.0-682.el7.x86_64	EM64T AMD64	70, 71, 75	70, 71, 75	70, 71, 75		

Supported	
Not Supported	

Notes	
26	XEN is not supported.
31	GFS and GFS2 are not supported.
	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
34	Note: RPM-package-version depends on the OS version you are using. The following library is required:
37	glibc-2.5-18.el5_1.1 or later
38	GFS is not supported.
64	Only the 64bit kernel mode is supported.
65	The LVM2 + boot disk environment configuration is not supported.
66	This is supported in HDLM 6.6.2-01 and later. 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
68	Note: RPM-package-version depends on the OS version you are using.
69	Boot disk environment configurations are not supported.
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. The following message is output when HDLM is uninstalled, but this does not indicate a problem in the uninstallation: # rpm -e HDLM Stopping DLMManager: [ OK ] warning: erase unlink of /opt/DynamicLinkManager/lib64/libdlnhcc64-4.4.4.so_64 failed: No such file or directory warning: erase unlink of /opt/DynamicLinkManager/lib64/libdlnhccmp64-4.4.4.so_64 failed: No such file or directory warning: erase unlink of /opt/DynamicLinkManager/lib64/libdlnmgui_jni.so_64 failed: No such file or directory warning: erase unlink of /opt/DynamicLinkManager/lib64/libdlnm.so_64 failed: No such file or directory warning: erase unlink of /etc/opt/DynamicLinkManager/libdlnhccmp-4.4.4.so_32 failed: No such file or directory warning: erase unlink of /opt/DynamicLinkManager/libdlnhcc-4.4.4.so_32 failed: No such file or directory warning: erase unlink of /opt/DynamicLinkManager/libdlnmgui_jni.so_32 failed: No such file or directory warning: erase unlink of /opt/DynamicLinkManager/libdlnm.so_32 failed: No such file or directory warning: erase unlink of /etc/opt/DynamicLinkManager/dimmgr_e.xml failed: No such file or directory warning: erase unlink of /etc/opt/DynamicLinkManager/dimchnm.conf failed: No such file or directory KAPL09044-1 The remove of HDLM-8.4.0.2.808-1 completed successfully.
73	# The following message is output when HDLM is uninstalled, but this does not indicate a problem in the uninstallation. # rpm -e HDLM Stopping DLMManager: [ OK ] warning: erase unlink of /etc/opt/DynamicLinkManager/dimmgr_e.xml failed: No such file or directory warning: erase unlink of /etc/opt/DynamicLinkManager/dimchnm.conf failed: No such file or directory KAPL09044-1 The remove of HDLM-8.4.0.2.807-1 completed successfully.
74	#
75	UEFI Secure Boot is not supported.
	The following kernel versions are not supported.
76	2.6.32-358.87.1.el6.x86_64 or later
	The following kernel versions are not supported.
77	2.6.32-431.87.1.el6.x86_64 or later
	The following kernel versions are not supported.
78	2.6.32-504.66.1.el6.x86_64 or later
	The following kernel versions are not supported.
79	2.6.32-573.53.1.el6.i686 or later
	The following kernel versions are not supported.
80	2.6.32-573.53.1.el6.x86_64 or later
	The following kernel versions are not supported.
81	2.6.32-696.23.1.el6.i686 or later
	The following kernel versions are not supported.
82	2.6.32-696.23.1.el6.x86_64 or later
	The following kernel versions are not supported.
83	3.10.0-327.64.1.el7.x86_64 or later
	The following kernel versions are not supported.
84	3.10.0-514.44.1.el7.x86_64 or later
	The following kernel versions are not supported.
85	3.10.0-693.21.1.el7.x86_64 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
86	2.6.32-358.87.1.el6.x86_64 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
87	2.6.32-431.87.1.el6.x86_64 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
88	2.6.32-504.66.1.el6.x86_64 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
89	2.6.32-573.53.1.el6.i686 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
90	2.6.32-573.53.1.el6.x86_64 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
91	2.6.32-696.23.1.el6.i686 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
92	2.6.32-696.23.1.el6.x86_64 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
93	3.10.0-327.64.1.el7.x86_64 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
94	3.10.0-514.44.1.el7.x86_64 or later
	The following kernel versions are supported in HDLM 8.6.2 or later.
95	3.10.0-693.21.1.el7.x86_64 or later



Oracle Unbreakable Enterprise Kernel					HDLM Version		
OS Name	Version	Update	Kernel	Architecture	64-bit	32-bit	64-bit
Oracle Unbreakable Enterprise Kernel	5.6	None	2.6.32-100.26.2.el5	EM64T AMD64	26, 34, 38, 71	26, 34, 38, 71	26, 34, 38, 71
	5.7	None	2.6.32-200.13.1.el5uek	Intel x86	26, 34, 38, 71	26, 34, 38, 71	26, 34, 38, 71
			2.6.32-300.27.1.el5uek	Intel x86	26, 34, 38, 71	26, 34, 38, 71	26, 34, 38, 71
			2.6.32-200.13.1.el5uek	EM64T AMD64	26, 34, 38, 71	26, 34, 38, 71	26, 34, 38, 71
			2.6.32-300.27.1.el5uek	EM64T AMD64	26, 34, 38, 71	26, 34, 38, 71	26, 34, 38, 71
	5.8	None	2.6.32-300.39.2.el5uek	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.32-300.39.2.el5uek	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	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
	6.3	None	2.6.39-200.29.2.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-200.24.1.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.4(Security Fix)	None	2.6.39-200.24.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-400.211.1.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.5	None	2.6.39-400.211.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
			2.6.39-400.211.1.el6uek.i686	Intel x86	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.5(Security Fix)	None	3.8.13-16.2.1.el6uek.x86_64	EM64T AMD64	26, 38, 68, 71	26, 38, 68, 71	26, 38, 68, 71
	6.6	None	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	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
	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	
7.5(Security Fix)	None	4.1.12-124.16.4.el7uek.x86_64	EM64T AMD64			26, 38, 71	

Supported	
Not Supported	

Notes	
26	XEN is not supported. 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
34	Note: RPM-package-version depends on the OS version you are using.
38	GFS is not supported. 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
68	Note: RPM-package-version depends on the OS version you are using.
69	Boot disk environment configurations are not supported.
71	UEFI Secure Boot is not supported.

Oracle Enterprise Linux					HDLM Version		
OS Name	Version	Update	Kernel	Architecture	64 bit	32 bit	64 bit Z
Oracle Enterprise Linux	5	1	2.6.18-53.el5	Intel x86	26,31,73	26,31,73	26,31,73
			2.6.18-53.el5 PAE	EM64T	26	26	26
			2.6.18-53.el5	AMD64	34, 64, 31,73	34, 64, 31,73	34, 64, 31,73
	5.4	None	2.6.18-164.el5 or 2.6.18-164.el5PAE	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.18-164.el5	EM64T AMD64	26,34,38,73	26,34,38,73	26,34,38,73
	5.5	None	2.6.18-194.el5 or 2.6.18-194.el5PAE	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.18-194.el5	EM64T AMD64	26,34,38,73	26,34,38,73	26,34,38,73
	5.6	None	2.6.18-238.el5 or 2.6.18-238.el5PAE	Intel x86	26,38,73	26,38,73	26,38,73
			2.6.18-238.el5	EM64T AMD64	26,34,38,73	26,34,38,73	26,34,38,73
	5.7	None	2.6.18-274.el5 or 2.6.18-274.el5PAE	Intel x86	26,38,73	26,38,73	26,38,73
2.6.18-274.el5			EM64T AMD64	26,34,38,73	26,34,38,73	26,34,38,73	
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
	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	

Supported	
Not Supported	

Notes	
26	XEN is not supported.
31	GFS and GFS2 are not supported.
	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
34	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.
69	Boot disk environment configurations are not 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.
	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
72	Note: RPM-package-version depends on the OS version you are using.
73	UEFI Secure Boot is not supported.

OS Name	Version	SUSE Linux			HDLML Version			
		Update	Kernel	Architecture	8.6.0	8.6.1	8.6.2	
SUSE Linux	10	None	2.6.16.21-0.8-default	Intel x86				
			2.6.16.21-0.8-smp					
			2.6.16.21-0.8-bigsmpt					
		SP1 + Security Fix	2.6.16.21-0.8-default	IA64 / Itanium				
			2.6.16.21-0.8-smp	EM64T				
			2.6.16.21-0.8-smp	AMD64				
		SP2	2.6.16.46-0.14-default	Intel x86				
			2.6.16.46-0.14-smp					
			2.6.16.46-0.14-bigsmpt					
			2.6.16.46-0.14-default	IA64 / Itanium				
			2.6.16.46-0.14-smp	EM64T				
			2.6.16.46-0.14-smp	AMD64				
		SP3	2.6.16.60-0.21-default	Intel x86				
			2.6.16.60-0.21-smp					
			2.6.16.60-0.21-bigsmpt					
			2.6.16.60-0.21-xenpae	Intel x86				
			2.6.16.60-0.21-default	IA64 / Itanium				
			2.6.16.60-0.21-smp	EM64T				
		SP4	2.6.16.60-0.54.5-smp	Intel x86				
			2.6.16.60-0.54.5-bigsmpt					
			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-smp	EM64T				
			2.6.16.60-0.54.5-smp	AMD64				
		11	None+Security Fix	2.6.16.60-0.85.1-xen	Intel x86	26, 66	26, 66	26, 66
				2.6.16.60-0.85.1-default				
				2.6.16.60-0.85.1-smp				
			SP1	2.6.16.60-0.85.1-bigsmpt	Intel x86	66	66	66
				2.6.16.60-0.85.1-xenpae	IA64 / Itanium			
				2.6.16.60-0.85.1-default	EM64T	26, 64, 66	26, 64, 66	26, 64, 66
	SP2		2.6.16.60-0.85.1-smp	EM64T	64, 66	64, 66	64, 66	
			2.6.16.60-0.85.1-xen	AMD64				
			2.6.16.60-0.85.1-xen	EM64T	64, 66	64, 66	64, 66	
			2.6.16.60-0.85.1-xen	AMD64				
			2.6.27.21-0.1.2-default	Intel x86	26, 66	26, 66	26, 66	
			2.6.27.21-0.1.2-pae					
	12	None	2.6.27.21-0.1.2-xen	Intel x86	66	66	66	
			2.6.27.21-0.1.2-default	IA64 / Itanium				
			2.6.27.21-0.1.2-default	EM64T	26, 66	26, 66	26, 66	
		SP1	2.6.32.12-0.7.1-default	AMD64				
			2.6.32.12-0.7.1-pae	Intel x86	26, 66	26, 66	26, 66	
			2.6.32.12-0.7.1-xen	Intel x86	66	66	66	
		SP2	2.6.32.12-0.7.1-xen	EM64T				
			2.6.32.12-0.7.1-default	AMD64				
			2.6.32.12-0.7.1-default	IA64 / Itanium	26, 66	26, 66	26, 66	
		SP3	3.0.13-0.27-default	EM64T	26, 66	26, 66	26, 66	
			3.0.13-0.27-smp	AMD64				
			3.0.13-0.27-default	Intel x86	26, 66	26, 66	26, 66	
	SP4	3.0.13-0.27-default	IA64 / Itanium					
		3.0.13-0.27-smp	EM64T	26, 66	26, 66	26, 66		
		3.0.13-0.27-default	AMD64					
	15	None	3.0.76-0.11-default	Intel x86	26, 66	26, 66	26, 66	
			3.0.76-0.11-smp					
			3.0.76-0.11-smp	IA64 / Itanium				
		SP1	3.0.76-0.11-default	EM64T	26, 66	26, 66	26, 66	
			3.0.76-0.11-smp	AMD64				
			3.0.76-0.11-xen	EM64T	66	66	66	
	SP2	3.0.76-0.11-xen	AMD64					
		3.0.101-63.1-default	Intel x86	26, 66	26, 66	26, 66		
		3.0.101-63.1-smp	IA64 / Itanium					
	SP3	3.0.101-63.1-default	EM64T	26, 66	26, 66	26, 66		
		3.0.101-63.1-smp	AMD64					
		3.0.101-63.1-xen	EM64T	66	66	66		
	SP4	3.0.101-63.1-xen	AMD64					
		3.0.101-108.68-default	EM64T					
		3.0.101-108.68-default	AMD64			26, 66, 67		
	15	None	3.12.28-4-default	Intel x86	26, 66	26, 66	26, 66	
			3.12.28-4-xen	EM64T	66	66	66	
			3.12.28-4-xen	AMD64				
		SP1	3.12.59-60.45-default	EM64T	26, 66	26, 66	26, 66	
			3.12.59-60.45-smp	AMD64				
			3.12.59-60.45-xen	EM64T	66	66	66	
	SP2	4.4.21-69-default	AMD64					
		4.4.21-69-smp	EM64T	66	66	66		
	SP3	4.4.103-6.33-default	AMD64					
		4.4.103-6.33-smp	EM64T	66	66	66		
	SP3	4.4.114-94.14-default	AMD64					
		4.4.114-94.14-smp	EM64T		66	66		
	15	None	4.12.14-23-default	AMD64				
			4.12.14-23-smp	EM64T			66	

Supported	
Not Supported	

Notes
26 XEN is not supported.
29 Make sure that the package gdb-6.5-21.2 is applied.
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 and later.

Name	VMware			Architecture	HDLM Version		
	Version	Update	Kernel		8.2.1	8.5.0	8.6.2
VMware vSphere ESXi	5.0	None		EM64T or AMD64			
		1		EM64T or AMD64			
		2		EM64T or AMD64			
		3		EM64T or AMD64			
	5.1	None		EM64T or AMD64			
		1		EM64T or AMD64			
		2		EM64T or AMD64			
		3		EM64T or AMD64			
	5.5	None		EM64T or AMD64	1	1	
		1		EM64T or AMD64	1	1	
		2		EM64T or AMD64	1	1	
		3		EM64T or AMD64	1	1	
	6.0	None		EM64T or AMD64	1	1	1
		1		EM64T or AMD64	1	1	1
		2		EM64T or AMD64	1	1	1
		3		EM64T or AMD64	1	1	1
	6.5	None		EM64T or AMD64	1	1	1
		1		EM64T or AMD64	1	1	1
		2		EM64T or AMD64	1	1	1
	6.7	None		EM64T or AMD64	1	1	1
		1		EM64T or AMD64	1	1	1

Supported	
Not Supported	

Notes	
1	According to the VMware ESXi 5.0/5.1/5.5/6.0/6.5/6.7 End User License Agreement (EULA), HDLM can be used on Enterprise, Enterprise Plus VMware ESXi Editions, and Standard .iso.
2	If the version of HDLM on the remote management client is from 8.2.1 to 8.5.0, use vSphere Command-Line Interface 6.0.
	If you want to use vSphere Command-Line Interface 6.5 or later, use HDLM version 8.5.1 or later on the remote management client.

3. Windows

Microsoft Windows		HDLM Version		
		8.5.3	8.6.0	8.6.2
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	3	3	3	
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				

### 3. Windows

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 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			

3. Windows

Supported Storage Systems

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			
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(*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 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	Fibre Channel	0712/A or later			
Hitachi Adaptable Modular Storage AMS1000	iSCSI	0732/A or later			
Hitachi Adaptable Modular Storage AMS2100	Fibre Channel	0712/A or later			
	iSCSI	0732/A or later			
	Fibre Channel	0832/E or later			
	iSCSI	0846/A or later			
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	1810/N or later			
	Fibre Channel	08B8/D or later(*15)			
	iSCSI	08B8/D or later(*15)			

3. Windows

	EMC Symmetrix DMX Series	Fibre Channel		4	4	4
	EMC CLARiiON CX Series	Fibre Channel		10, 11	10, 11	10, 11
	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 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		12, 17	12, 17	12, 17
<b>Exclusive Products</b>	Hitachi Path Manager			7	7	7
	VxVM-DMP			7	7	7
	PowerPath			7	7	7
	SDD			7	7	7
	HDLM for VMware					

<b>Supported</b>	
<b>Not Supported</b>	



### 3. Windows

<b>Notes</b>	
<b>1</b>	See the HBA vendor's support matrix to determine which HBAs and drivers support SAN Boot. HDLM supports all of the
<b>2</b>	This is supported by the following OSs:
<b>3</b>	This is only supported in the following versions: Standard Edition x64, Enterprise Edition x64, and Datacenter Edition x64
<b>4</b>	The evaluation of EMC DMX3000 has been completed in the following environments:
<b>5</b>	Update installation is available in HDLM 5.5.0 and later.
<b>7</b>	This product is mutually exclusive with HDLM.
<b>8</b>	In Windows Server 2008, HDLM can be upgraded while multipath is configured.
<b>9</b>	In Windows Server 2003 SP1 or later (including R2), HDLM can be upgraded while multipath is configured.
<b>10</b>	The evaluation of EMC CX700 has been completed in the following environments:
<b>11</b>	The evaluation of EMC CX3-10 with Failover Mode 2 has been completed in the following environments:
<b>12</b>	The evaluation of HP EVA8000 has been completed in the following environments:
<b>14</b>	HDLM 6.6.0 or later is required for the disk number display.
<b>15</b>	When you set the Dynamic I/O Path Control function, use this version.
<b>16</b>	Supported with some conditions customer-by-customer basis (SUI 044226).
<b>17</b>	The evaluation of HP EVA6400/4400 has been completed in the following environments:
<b>19</b>	When you use global-active device, use this version.
<b>20</b>	When you use High Availability, use this version.
<b>21</b>	A refresh operation that reflects the setting of the non-preferred path option to HDLM is supported when a global-active
<b>22</b>	This is supported in an HAM environment by the following OSs:
<b>23</b>	Apply this version when a global-active device is used.
<b>24</b>	When you use a normal VOL as a global-active device pair VOL, use this version.
<b>25</b>	When you use a normal VOL as a High Availability pair VOL, use this version.
<b>26</b>	When you use the HAM functionality, use this version.
<b>27</b>	The dlnkmgr command, HDLM GUI and HGLM display "VSP_Gx00" as the model ID of the storage system.
<b>28</b>	When you use the HAM functionality with Microsoft Failover Cluster, use this version.
<b>29</b>	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		8.5.3	8.6.0	8.6.2
				Windows 2008 (IA32 / x86)	Fibre Channel	Emulex
	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					
	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					
	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	1				
	Brocade 1.0.0-06					
	1.1.0.1					
	2.2.0.0					
	STOR Miniport 3.2.4.0					
	iSCSI Microsoft Bundle					
	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					
	2.1.5.15					
	STOR Miniport 2.1.6.10					
	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					
	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					
	STOR Miniport 10.4.246.0					
	STOR Miniport 11.1.145.16					
	STOR Miniport 2.2.0.0					
	iSCSI Emulex					
	QLogic					
	Fibre Channel over Ethernet Emulex					
	QLogic					
	HP					
	Brocade					

Supported	
Not Supported	

**Notes**

1 | All drivers applied to Hitachi HBA cards are supported.

Windows 2008 (IA64 / Itanium)				HDLM Version		
OS	HBA	Driver		8.5.3	8.6.0	8.6.2
				Windows 2008 (IA64 / Itanium)	Fibre Channel	Emulex
	STOR Miniport 2.10a7					
	iSCSI	Microsoft	Bundle			
			STOR Miniport 9.1.8.16			

Supported	
Not Supported	

Windows 2008 (x64 / x86_64)			HDLM Version		
OS	HBA	Driver	8.5.3	8.6.0	8.6.2
Windows 2008 (x64 / x86_64)	Fibre Channel	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			
		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	1		
		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			
		1.0.0-06			
		1.1.0.1			
		2.2.0.0			
	iSCSI	Microsoft	Bundle		
			4.1.334.0		
			4.9.160.0		
			10.0.732.0		
	iSCSI HBA/CNA	Emulex	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		
			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		
		Emulex	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		
			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		
		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	

**Notes**  
 1 | All drivers applied to Hitachi HBA cards are supported.

Windows 2008 SP2 (IA32 / x86)				HDLM Version		
OS	HBA	Driver	8.5.3	8.6.0	8.6.2	
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		1	1	1
		1.0.0-06				
	Brocade	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				
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 2.70.018					
	STOR Miniport 2.76.003.001					
	STOR Miniport 10.0.720.0					
Fibre Channel over Ethernet	Emulex	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					
	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				
		STOR Miniport 2.2.0.0				
		STOR Miniport 2.1.0.11				
		STOR Miniport 2.1.0.11				

Supported	
Not Supported	

**Notes**  
 1 | All drivers applied to Hitachi HBA cards are supported.

Windows 2008 SP2 (IA64 / Itanium)				HDLM Version		
OS	HBA	Driver	8.5.3	8.6.0	8.6.2	
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	8.5.3	8.6.0	8.6.2	
Windows 2008 SP2 (x64 / x86_64)	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 2.70.014			
			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			
			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			
			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	1	1	1
		IBM	STOR Miniport 9.1.7.55			
			STOR Miniport 9.1.8.25			
		HP	STOR Miniport 9.1.9.49			
			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			
		Brocade	1.0.0-06			
			1.1.0.1			
			2.2.0.0			
		iSCSI	Microsoft			
		iSCSI HBA/CNA	Emulex	Bundle		
				4.1.334.0		
				4.9.180.0		
				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		
		Fibre Channel over Ethernet	Emulex	STOR Miniport 11.2.1099.0		
				STOR Miniport 2.1.6.10		
				STOR Miniport 2.32.002		
				STOR Miniport 2.50.007		
				STOR Miniport 2.70.018		
			QLogic	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		
		Brocade	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			
		HP	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			
		Cisco	STOR Miniport 2.2.0.0			
			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				
		STOR Miniport 2.1.0.25				

Supported  
Not Supported

Notes

1 | All drivers applied to Hitachi HBA cards are supported.

Windows 2008 R2 (x64 / x86_64)			HDLML Version				
OS	HBA	Driver	8.5.3	8.6.0	8.6.2		
Windows 2008 R2 (x64 / x86_64)	Fibre Channel	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				
			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		1		
			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				
			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				
			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 3.2.5.0				
		iSCSI	Microsoft	Bundle		3	
				4.1.334.0			
		iSCSI HBA/CNA	Emulex	STOR Miniport 4.9.160.0			
				STOR Miniport 10.0.732.0			
				STOR Miniport 10.2.370.9			
			QLogic	STOR Miniport 10.2.421.0			
			HP	STOR Miniport 2.1.6.10			
				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			
				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			
		STOR Miniport 2.42.002					
	HP	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					
		STOR Miniport 2.2.0.0					
		STOR Miniport 2.3.0.2					
	Brocade	3.0.0.0					
		STOR Miniport 3.2.4.0					
		STOR Miniport 3.2.5.0					
	Cisco	STOR Miniport 2.1.0.11		2			
		STOR Miniport 9.1.8.27					
	Intel	STOR Miniport 1.16.0.0		2			

Supported  
Not Supported

Notes  
 1 | All drivers applied to Hitachi HBA cards are supported.  
 2 | This is not supported in cluster environments.  
 3 | Windows OSs operating as guest OSs of ESXi 5.1 are supported.

Windows 2008 R2 (IA64 / Itanium)			HDLML Version			
OS	HBA	Driver	8.5.3	8.6.0	8.6.2	
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				
		8.5.3	8.6.0	8.6.2		
OS	HBA	Driver				
Windows 2008 R2 SP1 (x64 / x86_64)	Fibre Channel	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			
			STOR Miniport 10.7.110.20			
			STOR Miniport 11.0.247.0			
		STOR Miniport 11.1.145.16				
		STOR Miniport 11.2.124.0				
		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				
		Bundle				
		Hitachi		1	1	1
		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				
		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 3.2.5.0				
		STOR Miniport 3.2.6.0				
		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				
		Bundle				
		iSCSI	Microsoft	4.1.334.0		
		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 11.2.1099.0						
STOR Miniport 2.1.6.10						
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					
	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					
	STOR Miniport 3.2.5.0					
STOR Miniport 9.1.11.16						
STOR Miniport 9.1.12.10						
STOR Miniport 9.1.13.10						
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						
STOR Miniport 3.2.4.0						
STOR Miniport 3.2.5.0						
STOR Miniport 1.16.0.0	2	2	2			

Supported	Light Blue
Not Supported	Grey



Notes	
1	All drivers applied to Hitachi HBA cards are supported.
2	This is not supported in cluster environments.

Windows 2008 R2 SP1 (IA64 / Itanium)				HDLM Version		
OS	HBA	Driver	HDLM Version			
			8.5.3	8.6.0	8.6.2	
Windows 2008 R2 SP1 (IA64 / Itanium)	Fibre Channel	Emulex				
		Microsoft				
	iSCSI	Microsoft	Bundle			

Supported	
Not Supported	

Windows 2012 (x64 / x86_64)				HDLM Version			
OS	HBA	Driver	HDLM Version				
			8.5.3	8.6.0	8.6.2		
Windows 2012 (x64 / x86_64)	Fibre Channel	Emulex	STOR Miniport 2.72.205.004				
			STOR Miniport 2.72.012.001	3	3	3	
			STOR Miniport 2.74.009.001				
			STOR Miniport 2.74.014.001	3	3	3	
			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				
			QLogic	STOR Miniport 3.2.5.0			
				STOR Miniport 9.1.9.205			
		STOR Miniport 9.1.10.26		3	3	3	
		STOR Miniport 9.1.10.27					
		STOR Miniport 9.1.11.20		3	3	3	
		STOR Miniport 9.1.11.24		3	3	3	
		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					
		STOR Miniport 9.2.4.21					
		STOR Miniport 9.2.6.20					
		STOR Miniport 9.2.8.22					
		STOR Miniport 9.2.8.20					
		STOR Miniport 9.2.9.20					
		Hitachi	Bundle	1	1	1	
			STOR Miniport 3.0.2.21				
		Brocade	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	3	3	3	
	STOR Miniport 9.1.11.24		3	3	3		
	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	2	2	2	
	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				
			STOR Miniport 2.1.6.10				
			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						
	STOR Miniport 3.2.5.0						
	Fibre Channel over Ethernet	QLogic	STOR Miniport 9.1.10.15				
			STOR Miniport 9.1.11.16				
			STOR Miniport 9.1.12.10				
			STOR Miniport 9.1.13.10				
			STOR Miniport 9.1.13.10				
		Brocade	STOR Miniport 3.2.4.0				
			STOR Miniport 3.2.5.0				
			STOR Miniport 2.74.014.001				
		HP	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	Windows OSs operating as guest OSs of ESXi 5.1 are supported.
3	Virtual Fibre Channel is supported.

Windows 2012 R2 (x64 / x86_64)			HDLM Version						
OS	HBA	Driver	8.5.3	8.6.0	8.6.2				
Windows 2012 R2 (x64 / x86_64)	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 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							
		Hitachi	Bundle	1	1	1			
			STOR Miniport 4.4.8.2280	2	2	2			
		Brocade	STOR Miniport 3.2.4.0						
			STOR Miniport 3.2.5.0						
			STOR Miniport 9.1.11.24	2	2	2			
			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							
		QLogic	2.1.5.38						
	Windows 2016 (x64 / x86_64)	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						
			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						
			3.2.3.1						
			STOR Miniport 3.2.4.0						
			STOR Miniport 3.2.5.0						
			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						
			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									
			STOR Miniport 11.0.247.8000						
			STOR Miniport 11.1.145.16						
		STOR Miniport 11.2.1135.0							
		STOR Miniport 11.4.1162.0							
		9.1.11.3							
		Hitachi	Bundle		1	1	1		
		Microsoft	Bundle						
iSCSI		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						
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 12.0.193.13					
				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 9.1.17.25					
				STOR Miniport 9.2.4.21					
				STOR Miniport 11.1.145.16					
			Hitachi	Bundle	1	1	1		
			iSCSI	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				
			Windows 2016 (x64 / x86_64)	Fibre Channel	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			
						9.1.11.3			

Supported	
Not Supported	

**Notes**  
 1 All drivers applied to Hitachi HBA cards are supported.  
 2 Virtual Fibre Channel is supported.

Windows 2016 (x64 / x86_64)			HDLM Version					
OS	HBA	Driver	8.5.3	8.6.0	8.6.2			
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 12.0.193.13					
			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 9.1.17.25					
			STOR Miniport 9.2.4.21					
			STOR Miniport 11.1.145.16					
		Hitachi	Bundle	1	1	1		
		iSCSI	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				
		Windows 2016 (x64 / x86_64)	Fibre Channel	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			
					9.1.11.3			

	over Ethernet	HP	STOR Miniport 7.14.0.0 or later			
			STOR Miniport 11.1.145.16			
			STOR Miniport 3.0.0.7			
		Cisco	STOR Miniport 3.0.0.8			
			Supported			
			Not Supported			
<b>Notes</b>						
1   All drivers applied to Hitachi HBA cards are supported.						

Supported GPT Versions				
OS	Architecture	HDLM Version		
		1 2 3	4 5 6	7 8 9
Windows 2008	IA32 / x86	1		
	Itanium / IA64			
	X64 / x86_64	2		
Windows 2008 SP2	IA32 / x86	1	1	1
	Itanium / IA64			
	X64 / x86_64	2	2	2
Windows 2008 R2	X64 / x86_64	2		
	Itanium / IA64			
Windows 2008 R2 SP1	X64 / x86_64	2	2	2
	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

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			
		8.5.3	8.6.0	8.6.3	
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			
		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	7, 8, 20,33	7, 8, 20,33	7, 8, 20,33	
	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 filesystem					
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	15, 16, 22,32	15, 16, 22,32		
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			
Supported Storage Systems	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 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
	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 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)			
	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			
Exclusive Products	Hitachi Path Manager			11	11	11
	Sun StorEdge[™] RAID Manager			11	11	11
	VxVM-DMP			11	11	11
	MPxIO[Sun StorEdge Traffic Manager Software]			13	13	13
	PowerPath			12	12	12
	SDD			12	12	12

<b>Supported</b>	
<b>Not Supported</b>	

<b>Notes</b>	
<b>1</b>	The following OS versions are supported: - Solaris 10 (SPARC) (64bit)
<b>2</b>	ZFS cannot be used on an LU that is managed by a volume manager.
<b>3</b>	ZFS is supported only in Solaris 10 or Solaris 11.x.
<b>4</b>	Load balancing is not available for LUs that are using SCSI-2 reserves in Sun Cluster 2-node configurations.
<b>5</b>	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.
<b>6</b>	For supported cluster configurations, see the [20. Clusters and VMs] sheet.
<b>7</b>	Only configurations without Volume Manager and Clusterware are supported.
<b>8</b>	Boot disks are supported if your configuration meets any of the following conditions: (1) The configuration uses neither volume managers nor clusterware (2) The configuration meets both of the following conditions: - The HDLM device of the boot disk is managed by SVM, and mirroring is adopted as a RAID level (up to three-way mirroring is supported). - The HBA is qla234x and the HBA driver is a qlc driver. (3) The configuration meets all of the following conditions: - The HDLM version is 6.5.1-00 or later - The OS is Solaris 10 - The HDLM device of the boot disk is managed by ZFS (4) The configuration meets all of the following conditions: - The OS is Solaris 11.x. - The HDLM device of the boot disk is managed by ZFS.
<b>9</b>	This is supported only in Solaris 10 or Solaris 11.x.
<b>10</b>	Configurations that use Clusterware are not supported.
<b>11</b>	This product is mutually exclusive with HDLM.
<b>12</b>	HDLM and other path management software may be able to coexist if they manage separate storage systems. Please contact appropriate person in Hitachi Vantara.
<b>13</b>	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.
<b>14</b>	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.
<b>15</b>	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

## 6. Solaris

<b>16</b>	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.
<b>18</b>	Microprogram version 08B8/D or later is required for using Dynamic I/O Path Control on the Hitachi AMS2000 series/Hitachi SMS series.
<b>19</b>	Supported with some conditions customer-by-customer basis (SUI 044226). Please contact appropriate person in Hitachi Vantara.
<b>20</b>	For a boot disk for which the EFI disk label is set, only non-cluster configurations are supported. Cluster configurations are not supported.
<b>22</b>	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.
<b>23</b>	Global-active devices are supported.
<b>24</b>	High Availability is supported.
<b>25</b>	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.
<b>26</b>	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.
<b>27</b>	Apply this version when a global-active device is used.
<b>28</b>	When you use a normal VOL as a global-active device pair VOL, use this version.
<b>29</b>	When you use a normal VOL as a High Availability pair VOL, use this version.
<b>30</b>	The dlnkmgr command and HGLM display "VSP_Gx00" as the model ID of the storage system.
<b>31</b>	Apply this version when an HAM environment is used.
<b>32</b>	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.
<b>33</b>	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.



**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			
			8.5.3	8.6	8.6.3	
OS	HBA	Driver				
Solaris 10 SPARC	Fibre Channel	SUN	Solaris 10 Bundle	B 4,5,9,20	B 4,5,9,20	B 4,5,9,20
		Emulex	6.02f	2	2	2
			6.02h	2	2	2
			6.11c	2	2	2
			6.11cx2	2	2	2
			6.21g	2	2	2
		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	B,4,5,9,20,2 2	B,4,5,9,20,2 2
		Brocade	bfa 2.3.0.6	18	18	18

Supported	
Not Supported	

Notes	
	HDLM is not supported on x86 for any Solaris version.
<b>B</b>	SAN boot is supported.
<b>2</b>	Edit and set the /kernel/drv/jpfc.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
<b>4</b>	Please refer to the below document at My Oracle Support website ( <a href="https://support.oracle.com/">https://support.oracle.com/</a> ) Bug ID: 4897065 Bug ID: 6288500
<b>5</b>	Requires Solaris 10 attachment driver.
<b>7</b>	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.
<b>9</b>	In case of using this HBA driver, the phenomenon of the followings reported by BugID 15354368(SUNBT6479229) at the My Oracle Support website ( <a href="https://support.oracle.com/">https://support.oracle.com/</a> ) may occur. - Re-instating function and FailFast probe function are uN/Available.
<b>17</b>	Edit and set the /kernel/drv/jpfca.conf file as follows: - failover_function=1
<b>18</b>	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
<b>19</b>	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 dlknmgr 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	<p>Apply the following patches:</p> <p>(1) The following HBA models provided by Oracle:  - X6727A, X6748A, X6757A, X6799A, SG-XPC11FC-QF2&lt;X6767A&gt;, SG-XPCI2FC-QF2&lt;X6766A&gt;, SG-XPCI2FC-QF2-Z, SG-XPC11FC-QL2, SG-XPC11FC-QF4, SG-XPCI2FC-QF4, SG-XPCIE1FC-QF4, and SG-XPCIE2FC-QF4</p> <p>(2) The following HBA models provided by QLogic:  - QLA2300F, QLA2310F, QLA2332, QLA2340, QLA2342, QLA2344, QLA2460, QLA2462, QLE2460, QLE2462, QLE2464, QCP2332, QCP2330, QCP2340, and QCP2342</p> <p>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</p> <p>(3) The following HBA models provided by Oracle:  - SG-XPC11FC-EM2, SG-XPCI2FC-EM2, SG-XPC11FC-EM4-Z, SG-XPCI2FC-EM4-Z, SG-XPCIE1FC-EM4, and SG-XPCIE2FC-EM4</p> <p>(4) The following HBA models provided by Emulex:  - LP9002, LP9802, LP10000, LP10000DC, LP11000, LP11002, LPe11000, and LPe11002</p> <p>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</p> <p>(5) The following HBA models provided by Oracle:  - SG-XPCIE1FC-QF8-Z, SG-XPCIE2FC-QF8-Z, and SG-XPCIE2FC-QB4-Z</p> <p>(6) The following HBA models provided by QLogic:  - QLE2560, QLE2562, and QEM2462</p> <p>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</p> <p>(7) The following HBA models provided by Oracle:  - SG-XPCIE1FC-EM8-Z, SG-XPCIE2FC-EM8-Z, and SG-XPCIE2FC-EB4-Z</p> <p>(8) The following HBA models provided by Emulex:  - LPe12000 and LPe12002</p> <p>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</p> <p>(9) The following HBA model provided by Oracle:  - SG-XPCIE2FCGBE-Q-Z</p> <p>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</p> <p>(10) The following HBA model provided by Oracle:  - SG-XPCIE2FCGBE-E-Z</p> <p>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</p> <p>(11) The following CNA models provided by Emulex:  - LP21000, LP21002, OCe10102, and OCe11102</p> <p>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: emlx driver patch</p> <p>(12) The following CNA models provided by QLogic:  • QLE8140, QLE8142</p> <p>The patches which should be applied in the case of (12)  143957-05 (or later) SunOS 5.10: qlc patch</p>
22	SAN boot is not supported when using CNA provided by Emulex.

Solaris 11 SPARC				HDLM Version		
OS	HBA		Driver	8.5.3	8.6.0	8.6.3
Solaris 11 SPARC	Fibre Channel	SUN	Solaris 11 Bundle	B,1	B,1	B,1
	Fibre Channel over Ethernet	SUN	Solaris 11 Bundle	B,1,2	B,1,2	B,1,2
Solaris 11.1 SPARC	Fibre Channel	SUN	Solaris 11 Bundle	B,1	B,1	B,1
	Fibre Channel over Ethernet	SUN	Solaris 11 Bundle	1,3	1,3	1,3
Solaris 11.2 SPARC	Fibre Channel	SUN	Solaris 11 Bundle	B,1	B,1	B,1
	Fibre Channel over Ethernet	SUN	Solaris 11 Bundle	1,3	1,3	1,3
Solaris 11.3 SPARC	Fibre Channel	SUN	Solaris 11 Bundle	B,1	B,1	B,1
	Fibre Channel over Ethernet	SUN	Solaris 11 Bundle	1,3	1,3	1,3
Solaris 11.4 SPARC	Fibre Channel	SUN	Solaris 11 Bundle			B,1
	Fibre Channel over Ethernet	SUN	Solaris 11 Bundle			1,3

Supported	
Not Supported	

Notes	
	HDLM is not supported on x86 for any Solaris version.
<b>B</b>	SAN boot is supported.
<b>1</b>	Requires Solaris 11 attachment driver.
<b>2</b>	SAN boot is not supported when using CNA provided by Emulex.
<b>3</b>	SAN boot configurations are not supported.

Red Hat & SuSE Enterprise Linux		HDLM Version		
		8.6.0	8.6.1	8.6.2
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 AMS2300	Fibre Channel	0832/E or later			
		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			
		Fibre Channel	70-01-00-XX/XX or later			
	Hitachi Virtual Storage Platform	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 G1500	Fibre Channel	80-05-0X-XX/XX or later			
		Fibre Channel	80-01-2X-XX/XX or later	43	43	43
	Hitachi Virtual Storage Platform G1000	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
		Fibre Channel	83-01-01-20/XX or later			
	Hitachi Virtual Storage Platform G200	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	83-01-2X-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
		Fibre Channel	83-03-01-40/XX or later			
	Hitachi Virtual Storage Platform F600	Fibre Channel	83-02-01-40/XX or later	51	51	51
		Fibre Channel	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
		Fibre Channel	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 Unified Storage VM	Fibre Channel	73-01-0X-XX/XX or later	47	47	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			
		Fibre Channel	60-01-61-XX/XX or later	8	8	8
	HP StorageWorks XP20000 Disk Array	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	8	8
		Fibre Channel	60-06-05-XX/XX or later(*52)			
		Fibre Channel	70-01-00-XX/XX or later	8	8	8
	HP StorageWorks P9500 Disk Array	Fibre Channel	70-01-42-XX/XX or later(*52)(*53)			
		Fibre Channel over Ethernet	70-02-5X-XX/XX or later	8	8	8
	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					

<b>Supported</b>	
<b>Not Supported</b>	

<b>Notes</b>	
<b>7</b>	This is only supported in Red Hat Enterprise AS3/ES3 and AS4/ES4.
<b>8</b>	Not supported in conjunction with Hitachi Compute Blade
<b>29</b>	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".
<b>31</b>	HDLM and other path management software may be able to coexist if they manage separate storage systems. Please contact appropriate person in Hitachi Vantara.
<b>41</b>	Microprogram version 08B8/D or later is required for using Dynamic I/O Path Control on Hitachi AMS2000 series/Hitachi SMS series.
<b>42</b>	Supported with some conditions customer-by-customer basis (SUI 044226). Please contact appropriate person in Hitachi Vantara.
<b>43</b>	Global-active devices are supported.
<b>44</b>	High Availability is supported.
<b>45</b>	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.
<b>46</b>	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.
<b>47</b>	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.
<b>48</b>	Apply this version when a global-active device is used.
<b>49</b>	When you use a normal VOL as a global-active device pair VOL, use this version.
<b>50</b>	When you use a normal VOL as a High Availability pair VOL, use this version.
<b>51</b>	The dinkmgr command and HGLM display "VSP_Gx00" as the model ID of the storage system.
<b>52</b>	Apply this version when an HAM environment is used.
<b>53</b>	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 ESRs if their base kernels are supported and all of conditions below are met.  
 (1) The security fix kernels are for RHEL 4 or RHEL 5 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 RHEL 4/5/ESV or before, or has a different bundled driver version from one of the base kernel, please contact appropriate person in Hitachi Support for an Interoperability Support Request (ISR).  
 HCLM 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 HCLM 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		Driver	HCLM Version					
OS	HBA		8.0 #1.0	8.1 #1.1	8.2 #1.2			
Red Hat Enterprise Linux 5 IA32 / x86 Processors Kernel 2.6.18-8.el5 2.6.18-8.el5PAE	File Channel over Ethernet	QLogic	8.01.07.41	B, 31	B, 31	B, 31		
			8.02.08	31, 60	31, 60	31, 60		
		Emulex	8.1.10.3	B, 31	B, 31	B, 31		
			8.1.10.12	31	31	31		
			8.2.0.22	31	31	31		
			8.2.0.29	31	31	31		
			8.2.0.33.3p	31	31	31		
			8.2.0.22	31	31	31		
		HP	8.1.10.11	31	31	31		
			8.2.0.33.3p	31	31	31		
		IBM	8.02.12	31, 60	31, 60	31, 60		
		Red Hat Enterprise Linux 5 x86_64 Processors Kernel 2.6.18-8.el5	File Channel over Ethernet	QLogic	8.01.07.41			
					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							
Red Hat Enterprise Linux 5 x64 / x86_64 Processors Kernel 2.6.18-8.el5	File Channel over Ethernet			QLogic	8.01.07.41	B, 31	B, 31	B, 31
					8.02.08	31, 60	31, 60	31, 60
				Emulex	8.1.10.3	B, 31	B, 31	B, 31
		8.1.10.12	31		31	31		
		8.2.0.22	31		31	31		
		8.2.0.29	31		31	31		
		8.2.0.33.3p	31		31	31		
		8.2.0.22	31		31	31		
		HP	8.1.10.11	31	31	31		
			8.2.0.33.3p	31	31	31		
		IBM	8.02.12	31, 60	31, 60	31, 60		
		Emulex	8.2.0.29	31	31	31		

Red Hat Enterprise Linux 5.1 IA32 / x86 Processors Kernel 2.6.18-53.el5 2.6.18-53.el5PAE	File Channel	QLogic	8.01.07.47	B, 31	B, 31	B, 31
			8.02.14	31, 60	31, 60	31, 60
			8.1.10.9	B, 31	B, 31	B, 31
		Emulex	8.1.10.12	31, 62	31, 62	31, 62
			8.2.0.22	31	31	31
			8.2.0.29	31	31	31
			8.2.0.33.3p	31	31	31
			8.02.11	31	31	31
		HP	8.01.07.25	31	31	31
			8.01.07.25	31	31	31
			8.2.0.33.3p	31	31	31
			8.01.07.25-2			
		Hicli	Bundls	B, 6, 31, 69	B, 6, 31, 69	B, 6, 31, 69
			8.1.10.9	31	31	31
	IBM	8.02.12	31, 60	31, 60	31, 60	
		8.02.14	31, 60	31, 60	31, 60	
		1.0.0.3	31	31	31	
	Brocade	1.1.0.1	31	31	31	
		1.1.0.6	B, 31	B, 31	B, 31	
		2.1.0.0	B, 31	B, 31	B, 31	
File Channel over Ethernet	Emulex	8.2.0.29	31	31	31	
		Brocade	2.1.0.0	B, 31	B, 31	B, 31
Red Hat Enterprise Linux 5.1 x86_64 Processors Kernel 2.6.18-53.el5	File Channel	QLogic	8.01.07.47			
			8.02.14			
			8.1.10.9			
		Emulex	8.1.10.12			
			8.2.0.22			
			8.2.0.29			
			8.2.0.33.3p			
			8.1.10.9			
		IBM	8.02.12			
			8.02.14			
			1.1.0.1			
		Brocade	1.1.0.6			
			2.1.0.0			
	HP	8.2.0.33.3p				
	File 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	File Channel	QLogic	8.01.07.47	B, 31	B, 31
8.02.14				31, 60	31, 60	31, 60
8.1.10.9				B, 31	B, 31	B, 31
Emulex			8.1.10.12	31, 62	31, 62	31, 62
			8.2.0.22	31	31	31
			8.2.0.29	31	31	31
			8.2.0.33.3p	31	31	31
			8.1.10.9	B, 31	B, 31	B, 31
Hicli			Bundls	B, 6, 31, 69	B, 6, 31, 69	B, 6, 31, 69
			8.02.11	31	31	31
			8.01.07.25	31	31	31
HP			8.01.07.25	31	31	31
			8.2.0.33.3p	31	31	31
			8.01.07.25-2			
		8.1.10.9	31	31	31	
IBM		8.02.12	31, 60	31, 60	31, 60	
		8.02.14	31, 60	31, 60	31, 60	
		1.0.0.3	31	31	31	
Brocade		1.1.0.1	31	31	31	
		1.1.0.6	B, 31	B, 31	B, 31	
	2.1.0.0	B, 31	B, 31	B, 31		
File Channel over Ethernet	Emulex	8.2.0.29	31	31	31	
		Brocade	2.1.0.0	B, 31	B, 31	B, 31



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	B, 31	B, 31	B, 31	
			8.02.14	31, 60	31, 60	31, 60	
			8.02.23	31, 60	31, 60	31, 60	
		Emulex	8.2.0.22	B, 31	B, 31	B, 31	
			8.2.0.29	31	31	31	
			8.2.0.33.3p	31	31	31	
			8.02.11	31	31	31	
		HP	8.01.07.25	31	31	31	
			8.01.07.25	31	31	31	
			8.2.0.22_p1	31	31	31	
			8.2.0.33.3p	31	31	31	
		IBM	8.02.12	31, 60	31, 60	31, 60	
	8.02.14		31, 60	31, 60	31, 60		
	Hicli	Bundle	B, 6, 31, 69	B, 6, 31, 69	B, 6, 31, 69		
		1.0.0.3	31	31	31		
	Brocade	1.1.0.1	31	31	31		
		1.1.0.6	B, 31	B, 31	B, 31		
		2.1.0.0	B, 31	B, 31	B, 31		
		2.1.0.2	31	31	31		
	Fibre Channel over Ethernet	Emulex	8.2.0.29	31	31	31	
Brocade			2.1.0.0	B, 31	B, 31	B, 31	
Red Hat Enterprise Linux 5.2 x86_64 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				
			8.02.12				
		IBM	8.02.14				
			1.1.0.1				
		Brocade	8.2.0.33.3p				
			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 x64 / x86_64 Processors Kernel: 2.6.18-92.el5	Fibre Channel	QLogic	8.02.00-k5	B, 31	B, 31	B, 31
				8.02.14	31, 60	31, 60	31, 60
				8.02.23	31, 60	31, 60	31, 60
			Emulex	8.2.0.22	B, 31	B, 31	B, 31
				8.2.0.29	31	31	31
8.2.0.33.3p				31	31	31	
8.02.11				31	31	31	
HP			8.01.07.25	31	31	31	
			8.01.07.25	31	31	31	
			8.2.0.22_p1	31, 67, 68	31, 67, 68	31, 67, 68	
			8.2.0.33.3p	31	31	31	
IBM			8.02.12	31, 60	31, 60	31, 60	
		8.02.14	31, 60	31, 60	31, 60		
Brocade		1.0.0.3	31	31	31		
		1.1.0.1	31	31	31		
		1.1.0.6	B, 31	B, 31	B, 31		
		2.1.0.0	B, 31	B, 31	B, 31		
Fibre Channel over Ethernet		Emulex	8.2.0.29	31	31	31	
			Brocade	2.1.0.0	B, 31	B, 31	B, 31

Red Hat Enterprise Linux 5.3 IA32 / x86 Processors Kernel 2.6.18-128.el5 2.6.18-128.el5PAE	Fibre Channel	QLogic	8.02.00.06.05.03x	B, 32	B, 32	B, 32	
			8.02.23	32, 60	32, 60	32, 60	
			8.02.00.51	32	32	32	
			8.03.01.06	B, 32	B, 32	B, 32	
		Emulex	8.2.0.33.3p	B, 32	B, 32	B, 32	
		Huachi	Bunde	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69	
		Brocade	1.1.0.6	B, 32	B, 32	B, 32	
			2.1.0.0	B, 32	B, 32	B, 32	
			2.1.0.2	32	32	32	
			2.2.0.0	32	32	32	
	2.3.0.0		32	32	32		
	3.0.0.0		32	32	32		
	HP	8.2.0.33.3p	32	32	32		
	IBM	8.02.00.51	32	32	32		
		8.03.01.06	B, 32	B, 32	B, 32		
	Fibre Channel over Ethernet	QLogic	8.03.00.09	32	32	32	
			2.1.0.0	B, 32	B, 32	B, 32	
		Brocade	2.2.0.0	32	32	32	
			2.3.0.0	32	32	32	
Red Hat Enterprise Linux 5.3 x86_64 Processors Kernel 2.6.18-128.el5	Fibre Channel	QLogic	8.02.00.06.05.03x				
			8.02.23				
			8.2.0.33.3p				
			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				
			2.1.0.0				
		Brocade	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	8.02.00.06.05.03x	B, 32	B, 32	B, 32
				8.02.23	32, 60	32, 60	32, 60
				8.02.00.51	32	32	32
				8.03.01.06	B, 32	B, 32	B, 32
Emulex			8.2.0.33.3p	B, 32	B, 32	B, 32	
Brocade			1.1.0.6	B, 32	B, 32	B, 32	
			2.1.0.0	B, 32	B, 32	B, 32	
			2.1.0.2	32	32	32	
			2.2.0.0	32	32	32	
			2.3.0.0	32	32	32	
		3.0.0.0	32	32	32		
HP		8.2.0.33.3p	32	32	32		
IBM		8.02.00.51	32	32	32		
		8.03.01.06	B, 32	B, 32	B, 32		
Huachi		Bunde	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69		
Fibre Channel over Ethernet		QLogic	8.03.00.09	32	32	32	
			2.1.0.0	B, 32	B, 32	B, 32	
		Brocade	2.2.0.0	32	32	32	
			2.3.0.0	32	32	32	

Red Hat Enterprise Linux 5.4 IA32 / x86 Processors Kernel 2.6.18-164.el5 2.6.18-164.el5PAE	Fibre Channel	QLogic	8.03.00.10.05.04-k	B, 32	B, 32	B, 32		
			8.03.00.1.05.05-k	B, 32, 65	B, 32, 65	B, 32, 65		
			8.03.01.06	B, 32	B, 32	B, 32		
		Emulex	8.03.03.15.05.06	B, 32	B, 32	B, 32		
			8.2.0.48.2p	B, 32	B, 32	B, 32		
			8.2.0.48.3p	B, 32, 64	B, 32, 64	B, 32, 64		
		HP	8.03.00.10.05.04-k	32	32	32		
			8.03.00.1.05.05-k	32, 65	32, 65	32, 65		
			8.03.01.05.05.06-k	32	32	32		
			8.2.0.48.2p	32	32	32		
			8.2.0.48.3p	32, 64	32, 64	32, 64		
		IBM	8.03.03.15.05.06	B, 32	B, 32	B, 32		
			8.03.00.10.05.04-k	32	32	32		
			8.03.00.1.05.05-k	32, 65, 66	32, 65, 66	32, 65, 66		
		Brocade	8.03.01.06	B, 32	B, 32	B, 32		
	2.1.0.0		B, 32	B, 32	B, 32			
	2.1.0.2		32	32	32			
	2.2.0.0		B, 32	B, 32	B, 32			
	2.3.0.0		B, 32	B, 32	B, 32			
	Hitachi	Bundle	32	32	32			
	Fibre Channel over Ethernet	Brocade	2.1.0.0	B, 32	B, 32	B, 32		
			2.2.0.0	B, 32	B, 32	B, 32		
			2.3.0.0	B, 32	B, 32	B, 32		
		QLogic	8.03.03.15.05.06	32	32	32		
			Bundle	32, 80	32, 80	32, 80		
		Emulex	8.2.0.71	32	32	32		
		Red Hat Enterprise Linux 5.4 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			
					8.2.0.48.2p			
	Emulex			8.2.0.48.3p				
				8.2.0.48.2p				
				8.2.0.48.3p				
	HP			8.03.01.05.05.06-k				
2.1.0.0								
2.1.0.2								
2.2.0.0								
2.3.0.0								
Brocade	3.0.0.0							
	2.1.0.0							
	2.2.0.0							
QLogic	Bundle							
	8.2.0.71							
	Red Hat Enterprise Linux 5.4 IA32 / x86_64 Processors Kernel 2.6.18-164.el5	Fibre Channel	QLogic	8.03.00.10.05.04-k	B, 32	B, 32	B, 32	
8.03.00.1.05.05-k				B, 32, 65	B, 32, 65	B, 32, 65		
8.03.01.06				B, 32	B, 32	B, 32		
Emulex			8.03.03.15.05.06	B, 32	B, 32	B, 32		
			8.2.0.48.2p	B, 32	B, 32	B, 32		
			8.2.0.48.3p	B, 32, 64	B, 32, 64	B, 32, 64		
HP			8.03.00.10.05.04-k	32	32	32		
			8.03.00.1.05.05-k	32, 65	32, 65	32, 65		
			8.03.01.05.05.06-k	32	32	32		
			8.2.0.48.2p	32	32	32		
			8.2.0.48.3p	32, 64	32, 64	32, 64		
IBM			8.03.03.15.05.06	B, 32	B, 32	B, 32		
			8.03.00.10.05.04-k	32	32	32		
			8.03.00.1.05.05-k	32, 65, 66	32, 65, 66	32, 65, 66		
Brocade			8.03.01.06	B, 32	B, 32	B, 32		
	2.1.0.0	B, 32	B, 32	B, 32				
	2.1.0.2	32	32	32				
	2.2.0.0	B, 32	B, 32	B, 32				
	2.3.0.0	B, 32	B, 32	B, 32				
Hitachi	Bundle	32	32	32				
Fibre Channel over Ethernet	Brocade	2.1.0.0	B, 32	B, 32	B, 32			
		2.2.0.0	B, 32	B, 32	B, 32			
		2.3.0.0	B, 32	B, 32	B, 32			
	QLogic	8.03.03.15.05.06	32	32	32			
		Bundle	32, 80	32, 80	32, 80			
	Emulex	8.2.0.71	32	32	32			

Red Hat Enterprise Linux 5.5 IA32 / x86 Processors Kernel 2.6.18-194.el5 2.6.18-194.el5PAE	Fibre Channel	QLogic	8.03.01.04.05.05k	B, 32	B, 32	B, 32	
			8.03.01.06	B, 32	B, 32	B, 32	
			8.03.03.15.05.06	B, 32	B, 32	B, 32	
			8.03.07.03.5.6-k	32	32	32	
			8.03.07.05.5.6-k-ww1	B, 32	B, 32	B, 32	
		Emulex	8.2.0.63.3p	B, 32	B, 32	B, 32	
			8.2.0.63.3p	32	32	32	
		HP	8.03.01.04.05.05k	32	32	32	
			8.2.0.63.3p	32, 64	32, 64	32, 64	
			8.03.03.15.05.06	B, 32	B, 32	B, 32	
			8.03.07.03.5.6	B, 32	B, 32	B, 32	
			8.2.0.106-1	B, 32	B, 32	B, 32	
			8.2.0.134	32	32	32	
		IBM	8.03.01.04.05.05k	32	32	32	
			8.03.01.04.05.05k	B, 32	B, 32	B, 32	
			8.03.01.06	B, 32	B, 32	B, 32	
	Brocade	2.1.0.0	32	32	32		
		2.2.0.0	B, 32	B, 32	B, 32		
		2.3.0.0	B, 32	B, 32	B, 32		
		3.0.0.0	B, 32	B, 32	B, 32		
	Fibre Channel over Ethernet	Brocade	2.1.0.0	32	32	32	
			2.2.0.0	B, 32	B, 32	B, 32	
			2.3.0.0	B, 32	B, 32	B, 32	
		QLogic	8.03.03.15.05.06	32	32	32	
			Bundle	32, 80	32, 80	32, 80	
		Emulex	8.2.0.71	32	32	32	
			8.2.0.96	32	32	32	
			8.2.0.126	32	32	32	
	Red Hat Enterprise Linux 5.5 x86_64 Processors Kernel 2.6.18-194.el5	Fibre Channel	QLogic	8.03.01.04.05.05k			
				Emulex	8.2.0.63.3p		
HP			8.2.0.63.3p				
			8.2.0.106-1				
			8.2.0.134				
			2.1.0.0				
Brocade			2.2.0.0				
			2.3.0.0				
		3.0.0.0					
		2.1.0.0					
Brocade		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	8.03.01.04.05.05k	B, 32	B, 32	B, 32
	8.03.01.06			B, 32	B, 32	B, 32	
	8.03.03.15.05.06			B, 32	B, 32	B, 32	
	8.03.07.03.5.6-k			32	32	32	
	8.03.07.05.5.6-k-ww1			B, 32	B, 32	B, 32	
	Emulex		8.2.0.63.3p	B, 32	B, 32	B, 32	
			8.2.0.63.3p	32, 64	32, 64	32, 64	
	HP		8.03.03.15.05.06	B, 32	B, 32	B, 32	
			8.03.07.03.5.6	B, 32	B, 32	B, 32	
			8.2.0.106-1	B, 32	B, 32	B, 32	
			8.2.0.134	32	32	32	
			8.03.01.04.05.05k	32	32	32	
			8.03.01.04.05.05k	B, 32	B, 32	B, 32	
	IBM		8.03.01.06	B, 32	B, 32	B, 32	
			2.1.0.0	32	32	32	
			2.2.0.0	B, 32	B, 32	B, 32	
	Brocade	2.3.0.0	B, 32	B, 32	B, 32		
		3.0.0.0	B, 32	B, 32	B, 32		
		Cisco	1.4.0.146	32	32	32	
		Fibre Channel over Ethernet	Brocade	2.1.0.0	32	32	32
	2.2.0.0			B, 32	B, 32	B, 32	
	2.3.0.0			B, 32	B, 32	B, 32	
	QLogic		8.03.03.15.05.06	32	32	32	
			Bundle	32, 80	32, 80	32, 80	
	Emulex		8.2.0.71	32	32	32	
			8.2.0.96	32	32	32	
			8.2.0.126	32	32	32	
			Cisco	1.5.0.1	32, 76	32, 76	32, 76

<b>Red Hat Enterprise Linux 5.6</b> 8027 / 80 Processors Kernel 2.6.18-238.el5 2.6.18-238.el5PAE	File Channel	QLLogic	8.03.01.05.05.06-k	B, 32	B, 32	B, 32	
			8.03.07.03.5.6-k	32	32	32	
		Emulex	8.2.0.87.1p	B, 32	B, 32	B, 32	
			HP	8.03.07.03.5.6	B, 32	B, 32	B, 32
		8.2.0.106-1		B, 32	B, 32	B, 32	
		8.2.0.134		32	32	32	
	Brocade	3.0.0.0	B, 32	B, 32	B, 32		
	Huachi	Bunde	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69		
	File Channel over Ethernet	QLLogic	Bunde	32, 80	32, 80	32, 80	
			8.2.0.96	32	32	32	
		Emulex	8.2.0.128	32	32	32	
	Red Hat		Bunde	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	
<b>Red Hat Enterprise Linux 5.6</b> Itanium / IA64 Processors Kernel 2.6.18-238.el5	File Channel	QLLogic	8.03.01.05.05.06-k				
			8.03.07.03.5.6-k				
		Emulex	8.2.0.87.1p				
			HP	8.2.0.106-1			
		8.2.0.134					
		Brocade		3.0.0.0			
	File Channel over Ethernet	QLLogic	Bunde				
			Emulex	8.2.0.128			
		Red Hat	Bunde				
	<b>Red Hat Enterprise Linux 5.6</b> Itanium / IA64 Processors Kernel 2.6.18-238.el5	File Channel	QLLogic	8.03.01.05.05.06-k	B, 32	B, 32	B, 32
				8.03.07.03.5.6-k	32	32	32
			Emulex	8.2.0.87.1p	B, 32	B, 32	B, 32
HP				8.03.07.03.5.6	B, 32	B, 32	B, 32
			8.2.0.106-1	B, 32	B, 32	B, 32	
			8.2.0.134	32	32	32	
Brocade		3.0.0.0	B, 32	B, 32	B, 32		
Huachi		Bunde	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69		
File Channel over Ethernet		QLLogic	Bunde	32, 80	32, 80	32, 80	
			8.2.0.96	32	32	32	
		Emulex	8.2.0.128	32	32	32	
			Cisco	1.4.0.145	32, 76	32, 76	32, 76
	1.5.0.1	32, 76		32, 76	32, 76		
	Red Hat	Bunde	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75		

Red Hat Enterprise Linux 5.7 M37 / M6 Processors Kernel 2.6.18-274.el5 2.6.18-274.el5PAE	Fibre Channel	QLogic	8.03.07.03.05.07.4	B, 32	B, 32	B, 32	
		Emulex	8.2.0.96.2p	B, 32	B, 32	B, 32	
		Huachi	Bundle	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69	
	HP	8.2.0.134	32	32	32		
		8.03.07.03.5.6	B, 32	B, 32	B, 32		
		8.03.07.15.5.6	B, 32	B, 32	B, 32		
	Fibre Channel over Ethernet	QLogic	8.03.07.03.05.07.4	32	32	32	
		Bundle	32, 80	32, 80	32, 80		
		Emulex	8.2.0.128	32	32	32	
	HP	8.2.0.136	32	32	32		
Red Hat		Bundle	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75		
Red Hat Enterprise Linux 5.7 Ranum / M64 Processors Kernel 2.6.18-274.el5	Fibre Channel	QLogic	8.03.07.03.05.07.4				
		Emulex	8.2.0.96.2p				
		HP	8.2.0.134				
	Fibre Channel over Ethernet	QLogic	8.03.07.03.05.07.4				
		Bundle					
		Emulex	8.2.0.128				
	UCB	Red Hat	Bundle				
	Red Hat Enterprise Linux 5.7 X64 / M6, 64 Processors Kernel 2.6.18-274.el5	Fibre Channel	QLogic	8.03.07.03.05.07.4	B, 32	B, 32	B, 32
			Emulex	8.2.0.33.3p-1.6.1-MCL	32, 73	32, 73	32, 73
8.2.0.96.2p				B, 32	B, 32	B, 32	
Huachi			Bundle	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69	
HP			8.2.0.134	32	32	32	
			8.03.07.03.5.6	B, 32	B, 32	B, 32	
			8.03.07.15.5.6	B, 32	B, 32	B, 32	
Fibre Channel over Ethernet			QLogic	8.03.07.03.05.07.4	32	32	32
			Bundle	32, 80	32, 80	32, 80	
		Emulex	8.2.0.128	32	32	32	
		HP	8.2.0.136	32	32	32	
		Cisco	1.5.0.1	32, 76	32, 76	32, 76	
1.5.0.20			32, 76	32, 76	32, 76		
UCB		Red Hat	Bundle	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	

Red Hat Enterprise Linux 5.8 IA32 / x86 Processors Kernel 2.6.18-308.el5 2.6.18-308.el5PAE	File Channel	QLogic	8.03.07.09.05.08-k	B, 32	B, 32	B, 32	
			8.06.00.11.5.6-k	32, 73	32, 73	32, 73	
		Emulex	8.2.0.108-4p	B, 32	B, 32	B, 32	
			8.2.0.134	32	32	32	
		HP	8.03.07.15.5.6	B, 32	B, 32	B, 32	
			8.04.00.10.5.6	B, 32	B, 32	B, 32	
	File Channel over Ethernet	QLogic	Bundle	32, 80	32, 80	32, 80	
			8.2.0.108-4p	32	32	32	
		HP	8.2.0.136	32	32	32	
	IB/IB	Red Hat	Bundle	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	
Red Hat Enterprise Linux 5.8 Random / IA64 Processors Kernel 2.6.18-308.el5	File Channel	QLogic	8.03.07.09.05.08-k				
		Emulex	8.2.0.108-4p				
		HP	8.2.0.134				
	File Channel over Ethernet	QLogic	Bundle				
		Emulex	8.2.0.108-4p				
	IB/IB	Red Hat	Bundle				
	Red Hat Enterprise Linux 5.8 X64 / x86_64 Processors Kernel 2.6.18-308.el5	File Channel	QLogic	8.03.07.09.05.08-k	B, 32	B, 32	B, 32
				8.06.00.11.5.6-k	32, 73	32, 73	32, 73
			Emulex	8.2.0.108-4p	B, 32	B, 32	B, 32
				8.2.0.134	32	32	32
HP			8.03.07.15.5.6	B, 32	B, 32	B, 32	
			8.04.00.10.5.6	B, 32	B, 32	B, 32	
File Channel over Ethernet		QLogic	Bundle	32, 80	32, 80	32, 80	
			8.2.0.108-4p	32	32	32	
		HP	8.2.0.136	32	32	32	
		Cisco	1.5.0.1	32, 76	32, 76	32, 76	
IB/IB iB/CNA		Red Hat	Bundle	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	
Red Hat Enterprise Linux 5.9 IA32 / x86 Processors Kernel 2.6.18-348.el5 2.6.18-348.el5PAE		File Channel	QLogic	8.03.07.15.05.09-k	B, 32	B, 32	B, 32
				8.06.00.11.5.6-k	32, 73	32, 73	32, 73
			Emulex	8.2.0.128-3p	B, 32	B, 32	B, 32
				8.04.00.10.5.6	B, 32	B, 32	B, 32
			Hitachi	Bundle	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69
	File Channel over Ethernet		QLogic	Bundle	32, 80	32, 80	32, 80
		IB/IB	Red Hat	Bundle	32, 73, 74, 75	32, 73, 74, 75	
	Red Hat Enterprise Linux 5.9 Random / IA64 Processors Kernel 2.6.18-348.el5	File Channel	QLogic	8.03.07.15.05.09-k			
			Emulex	8.2.0.128-3p			
			HP	8.04.00.10.5.6			
File Channel over Ethernet		QLogic	Bundle				
		IB/IB	Red Hat	Bundle			
Red Hat Enterprise Linux 5.9 X64 / x86_64 Processors Kernel 2.6.18-348.el5		File Channel	QLogic	8.03.07.15.05.09-k	B, 32	B, 32	B, 32
				8.06.00.11.5.6-k	32, 73	32, 73	32, 73
			Emulex	8.2.0.128-3p	B, 32	B, 32	B, 32
				8.04.00.10.5.6	B, 32	B, 32	B, 32
			Hitachi	Bundle	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69
	Cisco		1.6.0.12b	B, 32	B, 32	B, 32	
		1.6.0.18	B, 32	B, 32	B, 32		
	File Channel over Ethernet	Cisco	Bundle	32, 80	32, 80	32, 80	
			1.6.0.12	B, 32	B, 32	B, 32	
	IB/IB	Red Hat	Bundle	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	

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	B, 32	B, 32	B, 32	
			8.06.00.11.5.6.k	32, 73	32, 73	32, 73	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
Red Hat Enterprise Linux 5.10 x86_64 Processors Kernel 2.6.18-371.el5	Fibre Channel (Ethernet)	QLogic	Bunde	32, 80	32, 80	32, 80	
			QLogic	8.03.07.15.05.09.k			
			Emulex	8.2.0.128.3p			
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	B, 32	B, 32	B, 32	
			8.06.00.11.5.6.k	32, 73	32, 73	32, 73	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
	Fibre Channel over Ethernet	QLogic	Bunde	32, 80	32, 80	32, 80	
			Cisco	1.6.0.23	B, 32	B, 32	B, 32
			1.6.0.25	B, 32	B, 32	B, 32	
Red Hat Enterprise Linux 5.11 IA32 / x86 Processors Kernel 2.6.18-386.el5 2.6.18-386.el5PAE	Fibre Channel	QLogic	8.03.07.15.05.09.k	B, 32	B, 32	B, 32	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
			QLogic	Bunde	32, 80	32, 80	32, 80
Red Hat Enterprise Linux 5.11 x86_64 Processors Kernel 2.6.18-386.el5	Fibre Channel (Ethernet)	QLogic	8.03.07.15.05.09.k				
			Emulex	8.2.0.128.3p			
			QLogic	Bunde			
Red Hat Enterprise Linux 5.11 x64 / x86_64 Processors Kernel 2.6.18-386.el5	Fibre Channel	QLogic	8.03.07.15.05.09.k	B, 32	B, 32	B, 32	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
	Fibre Channel over Ethernet	QLogic	Bunde	32, 80	32, 80	32, 80	
			Cisco	1.6.0.25	B, 32	B, 32	B, 32
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	B, 32	B, 32	B, 32	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
			QLogic	Bunde	32, 80	32, 80	32, 80
Red Hat Enterprise Linux 5.11 x86_64 Processors Kernel (Security Fix) 2.6.18-416.el5	Fibre Channel (Ethernet)	QLogic	8.03.07.15.05.09.k				
			Emulex	8.2.0.128.3p			
			QLogic	Bunde			
Red Hat Enterprise Linux 5.11 x64 / x86_64 Processors Kernel (Security Fix) c	Fibre Channel	QLogic	8.03.07.15.05.09.k	B, 32	B, 32	B, 32	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
	Fibre Channel over Ethernet	QLogic	Bunde	32, 80	32, 80	32, 80	
			Cisco	1.6.0.25	B, 32	B, 32	B, 32
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	B, 32	B, 32	B, 32	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
			QLogic	Bunde	32, 80	32, 80	32, 80
Red Hat Enterprise Linux 5.11 x86_64 Processors Kernel (Security Fix) 2.6.18-419.el5	Fibre Channel	QLogic	8.03.07.15.05.09.k	B, 32	B, 32	B, 32	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
	Fibre Channel over Ethernet	QLogic	Bunde	32, 80	32, 80	32, 80	
			Cisco	1.6.0.25	B, 32	B, 32	B, 32
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	B, 32	B, 32	B, 32	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
			QLogic	Bunde	32, 80	32, 80	32, 80
Red Hat Enterprise Linux 5.11 x86_64 Processors Kernel (Security Fix) 2.6.18-426.el5	Fibre Channel (Ethernet)	QLogic	8.03.07.15.05.09.k				
			Emulex	8.2.0.128.3p			
			QLogic	Bunde			
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	B, 32	B, 32	B, 32	
			Emulex	8.2.0.128.3p	B, 32	B, 32	B, 32
	Fibre Channel over Ethernet	QLogic	Bunde	32, 80	32, 80	32, 80	
			Cisco	1.6.0.25	B, 32	B, 32	B, 32
Red Hat Enterprise Linux 6 IA32 / x86 Processors Kernel 2.6.32-71.el6.el8	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	QLogic	8.03.04.12.06.0.k0	32	32	32	
			Bunde	B, 32, 80	B, 32, 80	B, 32, 80	
			Emulex	8.3.5.65	B, 32	B, 32	B, 32
None 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	



Red Hat Enterprise Linux 6 X64 / x86_64 Processors Actual 2.6.32-71.el6.x86_64	File Channel over Ethernet	Brocade	2.3.0.0	B, 32	B, 32	B, 32
		Brocade	2.3.0.0	B, 32	B, 32	B, 32
		Logic	8.03.04.12.06.0-040	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
				32, 76	32, 76	32, 76

Red Hat Enterprise Linux 6.1 IA32 / x86 Processors Kernel 2.6.32-131.0.15.el6.el6	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	8.3.5.30.1.p	B, 32	B, 32	B, 32	
		Brocade	3.0.0.0	B, 32	B, 32	B, 32	
		Huachi	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	
			8.3.5.30.1.p	32	32	32	
		Emulex	8.3.5.65	B, 32	B, 32	B, 32	
	ICSI	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.el6	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			8.3.5.30.1.p	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	
Huachi			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	
			8.3.5.30.1.p	32	32	32	
		Emulex	8.3.5.65	B, 32	B, 32	B, 32	
		HP	8.3.5.77.1.p	32	32	32	
Cisco		1.5.0.1	32, 76	32, 76	32, 76		
ICSI		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.el6		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	8.3.5.45.4.p	B, 32	B, 32	B, 32
		Huachi	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			8.3.5.65	B, 32	B, 32	B, 32
	ICSI	Red Hat	Bundle	B, 32, 74, 75	B, 32, 74, 75	B, 32, 74, 75	
	iSCSI / HBAs	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.el6	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	8.3.5.45.4.p	B, 32	B, 32	B, 32	
			8.3.7.18-1	32	32	32	
	Huachi	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	8.3.5.77.1.p	32	32	32	
		Cisco	1.5.0.1	32, 76	32, 76	32, 76	
	ICSI	Red Hat	Bundle	B, 32, 74, 75	B, 32, 74, 75	B, 32, 74, 75	
	iSCSI / HBAs	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 6.3 IA32 / x86 Processors Kernel 2.6.32-279.el6.i686	File 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
	File Channel over Ethernet	QLogic	8.04.00.04.06.3.k	32	32	32
			Bundle	B, 32, 80	B, 32, 80	B, 32, 80
	UCB	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.i686_64	File 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	8.3.5.88.5.p	B, 32	B, 32	B, 32	
		8.3.7.18-1	32	32	32	
	File Channel over Ethernet	QLogic	8.04.00.04.06.3.k	32	32	32
Bundle			B, 32, 80	B, 32, 80	B, 32, 80	
UCB	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	File 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	8.3.5.88.1.p	B, 32	B, 32	B, 32	
		Hitachi	Bundle	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69
	File 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
	UCB	Red Hat	Bundle	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75
	UCB / HBA/DA	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.i686_64	File 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	8.3.5.88.1.p	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
	File 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
			1.6.0.129	32, 73	32, 73	32, 73
UCB	Red Hat	Bundle	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	
		Emulex	4.2.374.0	32, 77	32, 77	32, 77

<b>Red Hat Enterprise Linux 6.5</b> <b>IA32 / x86 Processors</b> Kernel 2.6.32-431.el6.i686	Fibre Channel iFC28 HBA/CCW	Emulex Bundles	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				
			8.3.7.21.4p	B, 32	B, 32	B, 32				
	Fibre Channel over Ethernet iFC28 HBA/CCW	QLogic Bundles	8.07.00.08.06.0-k	32, 73	32, 73	32, 73				
			10.2.370.12	32, 73	32, 73	32, 73				
			10.2.370.12	32, 73	32, 73	32, 73				
	<b>Red Hat Enterprise Linux 6.5</b> <b>X64 / x86_64 Processors</b> Kernel 2.6.32-431.el6.x86_64	Fibre Channel iFC28 HBA/CCW	Emulex Bundles	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			
				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			
<b>Red Hat Enterprise Linux 6.5</b> <b>X64 / x86_64 Processors</b> Kernel 2.6.32-431.el6.x86_64	Fibre Channel over Ethernet iFC28 HBA/CCW	Emulex Bundles	8.07.00.06.06.0-k	32, 73	32, 73	32, 73				
			Bundles	B, 32, 80	B, 32, 80	B, 32, 80				
			10.2.370.12	32, 73	32, 73	32, 73				
			1.5.0.45	B, 32	B, 32	B, 32				
			<b>Red Hat Enterprise Linux 6.6</b> <b>IA32 / x86 Processors</b> Kernel 2.6.32-504.el6.i686	Fibre Channel iFC28 HBA/CCW	QLogic Bundles	8.07.00.08.06.0-k1	B, 32	B, 32	B, 32	
						10.2.8020.1	B, 32	B, 32	B, 32	
						10.2.8020.1	B, 32	B, 32	B, 32	
				Fibre Channel over Ethernet iFC28 HBA/CCW	Emulex Bundles	Bundles	B, 32, 69	B, 6, 32, 69	B, 6, 32, 69	
						Bundles	32, 77	32, 77	32, 77	
						Bundles	B, 32, 80	B, 32, 80	B, 32, 80	
<b>Red Hat Enterprise Linux 6.6</b> <b>X64 / x86_64 Processors</b> Kernel 2.6.32-504.el6.x86_64	Fibre Channel iFC28 HBA/CCW	Emulex Bundles		8.07.00.08.06.0-k1	B, 32	B, 32	B, 32			
				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			
			HP	Bundles	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69			
				8.07.00.28.06.0-k1	32, 73	32, 73	32, 73			
			<b>Red Hat Enterprise Linux 6.6</b> <b>X64 / x86_64 Processors</b> Kernel 2.6.32-504.el6.x86_64	Fibre Channel over Ethernet iFC28 HBA/CCW	Emulex Bundles	Bundles	32, 77	32, 77	32, 77	
Bundles	B, 32, 80	B, 32, 80				B, 32, 80				
10.2.273.0r	32, 73	32, 73				32, 73				
<b>Red Hat Enterprise Linux 6.6</b> <b>X64 / x86_64 Processors</b> Kernel 2.6.32-504.el6.x86_64	Fibre Channel iFC28 HBA/CCW	QLogic Bundles				8.07.00.08.06.0-k1	B, 32	B, 32	B, 32	
						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
			HP	Bundles	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69			
				8.07.00.28.06.0-k1	32, 73	32, 73	32, 73			
			<b>Red Hat Enterprise Linux 6.6</b> <b>X64 / x86_64 Processors</b> Kernel 2.6.32-504.el6.x86_64	Fibre Channel over Ethernet iFC28 HBA/CCW	Emulex Bundles	Bundles	32, 77	32, 77	32, 77	
Bundles	B, 32, 80	B, 32, 80				B, 32, 80				
10.2.273.0r	32, 73	32, 73				32, 73				

Red Hat Enterprise Linux 6.7 IA32 / x86 Processors Kernel 2.6.32-073.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
		Huachi	Bunde	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69
	(SCSI)	Red Hat	Bunde	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75
Red Hat Enterprise Linux 6.7 X64 / x86_64 Processors Kernel 2.6.32-073.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
			11.1.39.84	32, 73	32, 73	32, 73
			11.1.172.22	B, 32	B, 32	B, 32
	HP	8.07.00.29.06.0.k1	32, 73	32, 73	32, 73	
		8.07.00.42.06.0.k1	32, 73	32, 73	32, 73	
	Huachi	Bunde	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69	
	(SCSI)	Red Hat	Bunde	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75
	Fibre Channel over Ethernet	QLogic	Bunde	B, 32, 80	B, 32, 80	B, 32, 80
		Fibre Channel	QLogic	8.07.00.26.06.8.k	B, 32	B, 32
Emulex			11.0.0.4	B, 32	B, 32	B, 32
Huachi	Bunde		B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69	
(SCSI)	Red Hat	Bunde	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	
Fibre Channel over Ethernet	QLogic	Bunde	B, 32, 80	B, 32, 80	B, 32, 80	
	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
Huachi	Bunde	B, 6, 32, 69	B, 6, 32, 69	B, 6, 32, 69		
(SCSI)	Red Hat	Bunde	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	
Fibre Channel over Ethernet	QLogic	Bunde	B, 32, 80	B, 32, 80	B, 32, 80	
	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	
(SCSI)	Red Hat	Bunde	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75	
Red Hat Enterprise Linux 6.9 X64 / x86_64 Processors Kernel 2.6.32-096.el6.x86_64	Fibre 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
			11.2.307.13	B, 32	B, 32	B, 32
	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	
	(SCSI)	Red Hat	Bunde	32, 73, 74, 75	32, 73, 74, 75	32, 73, 74, 75
	Fibre Channel over Ethernet	QLogic	8.07.00.26.06.8.k			B, 32
		Emulex	11.0.1.6			B, 32
(SCSI)		Red Hat	Bunde			32, 73, 74, 75
Fibre Channel	QLogic	8.07.00.26.06.8.k			B, 32	
	Emulex	11.0.1.6			B, 32	
	(SCSI)	Red Hat	Bunde			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	
	UCB	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	
UCB			Red Hat	Bundle	31, 73, 74, 75, 79	31, 73, 74, 75, 79	31, 73, 74, 75, 79
UCB Hitachi		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		
	UCB	Red Hat	Bundle	31, 73, 74, 75, 79	31, 73, 74, 75, 79	31, 73, 74, 75, 79	
	UCB Hitachi	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	B, 31	B, 31	
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		
UCB		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 7.4 x64 / i86, 64 Processors Kernel 3.10.0-693.el7.x86_64	Fibre Channel	Vendor	Model	Support			
				Kernel	BIOS	UEFI	
Red Hat Enterprise Linux 7.4 x64 / i86, 64 Processors Kernel 3.10.0-693.el7.x86_64	QLogic		8.07.00.38.07.4.41	B, 31	B, 31	B, 31	
			8.07.00.50.07.0.44	B, 31	B, 31	B, 31	
			8.08.00.07.07.0.41	B, 31	B, 31	B, 31	
	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	B, 31	B, 31	
	Hitachi	Bunde		B, 6, 31, 69	B, 6, 31, 69	B, 6, 31, 69	
				B, 6, 31, 69	B, 6, 31, 69	B, 6, 31, 69	
	HP		8.07.00.50.07.0.47	B, 31	B, 31	B, 31	
			8.08.00.08.07.0.41	B, 31	B, 31	B, 31	
iSCSI	Red Hat	Bunde	31, 73, 74, 75	31, 73, 74, 75	31, 73, 74, 75		
			31, 73, 74, 75	31, 73, 74, 75	31, 73, 74, 75		
Fibre Channel Element	QLogic	Bunde					
Red Hat Enterprise Linux 7.5 x64 / i86, 64 Processors Kernel 3.10.0-692.el7.x86_64	Fibre Channel		8.08.00.07.07.5.41		B, 31	B, 31	
			9.00.00.00.07.5.41		B, 31	B, 31	
			Emulex	11.4.0.4		B, 31	B, 31
			Hitachi	Bunde		B, 6, 31, 69	B, 6, 31, 69
			HP	8.08.00.08.07.5.41		B, 31	B, 31
	iSCSI	Red Hat	Bunde		31, 73, 74, 75	31, 73, 74, 75	
					31, 73, 74, 75	31, 73, 74, 75	
	Fibre Channel Element	QLogic	Bunde				
	Supported						
Not Supported							

Notes	
2) OS/BIOS is supported.	
3) This is only supported in environments in combination with Hitachi Compute Blade.	
4) Only the kernel package kernel-2.6.9-55.EL.i686 is supported.	
5) Only the kernel package kernel-2.6.9-55.EL.i686 is supported.	
6) iSCSI and QFS are not supported.	
7) QFS is not supported. For details on QFS support, see "8. Linux".	
8) When using QLogic QM5700, use the 4.1.16.136 or later driver.	
9) The default setting of these drivers is "Failover". If you want to change the setting to "Disable", set the following in the microcode and file:	
options qla2xxx qla2xxx=0	
10) Only Red Hat Enterprise Linux AS kernel is supported.	
11) OS/BIOS is supported by kernel 2.6.18-53.1.el5 or later.	
12) Supported by kernel 2.6.9-89.0.20 or later.	
13) Supported by kernel 2.6.18-154.1.1 or later.	
14) Supported by kernel 2.6.18-154.1.1 or later.	
15) The following HBA models are supported:	
4011945	
67) The following HBA models are supported:	
FC2143, FC2243, FC2143SR, FC2243SR	
68) The following HBA model is supported:	
803621-821	
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 HCLM 6.6.2-01 and later.	
72) Boot disk environment configurations are not supported.	
73) iSCSI HBA/CAR is not supported.	
74) iSCSI HBA/CAR is not supported.	
75) iSCSI HBA/CAR is not supported.	
76) Only using an HCLM device as the boot disk is supported.	
77) OS/BIOS 4.2.0.33.608 or later is required.	
78) Supported by kernel 3.10.0-123.1.2 or later.	
79) Disable the local serial or NetworkManager-dispatcher service.	
Using an editor such as vi, comment out "brivsystemd --no-block-reload-iscsi.service" in the file	
etc/NetworkManager/dispatcher.d/04-iscsi.	
Before correction:	
case "\$2" in	
*vppn-up)	
#brivsystemd --no-block-reload-iscsi.service    :	
*)	
esac	
After correction:	
case "\$2" in	
*vppn-up)	
#brivsystemd --no-block-reload-iscsi.service    :	
*)	
esac	
80) QLogic 8400 Series are supported.	

Oracle Enterprise Linux Server			HCLM Version			
			6.6	6.5	6.2	
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	qllogic	8.01.07.k7	B, 31	B, 31	B, 31
		Emulex	8.1.10.9	B, 31	B, 31	B, 31
Oracle Enterprise Linux 5 (Update 1) X64 / x86_64 Processors Kernel 2.6.18-53.el5 or 2.6.18-53.el5PAE	Fibre Channel	qllogic	8.01.07.k7	B, 31	B, 31	B, 31
		Emulex	8.1.10.9	B, 31	B, 31	B, 31
Oracle Enterprise Linux 5.4 IA32 / x86 Processors Kernel 2.6.18-164.el5 or 2.6.18-164.el5PAE	Fibre Channel	qllogic	8.03.00.10.05.04.k	B, 32	B, 32	B, 32
		Emulex	8.2.0.48.2p	B, 32	B, 32	B, 32
Oracle Enterprise Linux 5.4 X64 / x86_64 Processors Kernel 2.6.18-164.el5	Fibre Channel	qllogic	8.03.00.10.05.04.k	B, 32	B, 32	B, 32
		Emulex	8.2.0.48.2p	B, 32	B, 32	B, 32
Oracle Enterprise Linux 5.5 IA32 / x86 Processors Kernel 2.6.18-194.el5 or 2.6.18-194.el5PAE	Fibre Channel	qllogic	8.03.01.04.05.05.k	B, 32	B, 32	B, 32
		Emulex	8.2.0.63.3p	B, 32	B, 32	B, 32
Oracle Enterprise Linux 5.5 X64 / x86_64 Processors Kernel 2.6.18-194.el5	Fibre Channel	qllogic	8.03.01.04.05.05.k	B, 32	B, 32	B, 32
		Emulex	8.2.0.63.3p	B, 32	B, 32	B, 32
Oracle Enterprise Linux 5.6 IA32 / x86 Processors Kernel 2.6.18-238.el5 or 2.6.18-238.el5PAE	Fibre Channel	qllogic	8.03.01.05.05.06.k	B, 32	B, 32	B, 32
		Emulex	8.2.0.87.1p	B, 32	B, 32	B, 32
Oracle Enterprise Linux 5.6 X64 / x86_64 Processors Kernel 2.6.18-238.el5	Fibre Channel	qllogic	8.03.01.05.05.06.k	B, 32	B, 32	B, 32
		Emulex	8.2.0.87.1p	B, 32	B, 32	B, 32
Oracle Enterprise Linux 5.7 IA32 / x86 Processors Kernel 2.6.18-274.el5 or 2.6.18-274.el5PAE	Fibre Channel	qllogic	8.03.07.03.05.07.k	B, 32	B, 32	B, 32
		Emulex	8.2.0.96.2p	B, 32	B, 32	B, 32
Oracle Enterprise Linux 5.7 X64 / x86_64 Processors Kernel 2.6.18-274.el5	Fibre Channel	qllogic	8.03.07.03.05.07.k	B, 32	B, 32	B, 32
		Emulex	8.2.0.96.2p	B, 32	B, 32	B, 32
Oracle Linux 6.5 IA32 / x86 Processors Kernel 2.6.32-431.el6.el6PE	Fibre Channel	qllogic	8.05.00.03.06.5.42	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.el6PE_64	Fibre Channel	qllogic	8.05.00.03.06.5.42	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.el6PE	Fibre Channel	qllogic	8.07.00.08.06.6.41	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.el6PE_64	Fibre Channel	qllogic	8.07.00.08.06.6.41	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.el6PE	Fibre Channel	qllogic	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.el6PE_64	Fibre Channel	qllogic	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.el6PE	Fibre Channel	qllogic	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.el6PE_64	Fibre Channel	qllogic	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.el6PE	Fibre Channel	qllogic	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.el6PE_64	Fibre Channel	qllogic	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 7 X64 / x86_64 Processors Kernel 3.10.0-123.el7.el7PE_64	Fibre Channel	qllogic	8.06.00.08.07.0.42	B, 31	B, 31	B, 31
		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.el7PE_64	Fibre Channel	qllogic	8.07.00.08.07.1.42	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 3.10.0-527.el7.el7PE_64	Fibre Channel	qllogic	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.el7PE_64	Fibre Channel	qllogic	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.el7PE_64	Fibre Channel	qllogic	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.el7PE_64	Fibre Channel	qllogic	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 3.10.0-852.el7.el7PE_64	Fibre Channel	qllogic	9.00.00.00.07.5.k1	B, 31	B, 31	B, 31
		Emulex	11.4.0.4	B, 31	B, 31	B, 31
Supported						
Not Supported						
Notes						
B SAN boot is supported.						
31 QFS and QFS2 are not supported.						
32 QFS is not supported. For details on QFS2 support, see "B Linux".						



**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		
OS	HBA	Driver	8.6.0	8.6.1	8.6.2	
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	B, 32	B, 32	B, 32
		Emulex	8.3.18	B, 32	B, 32	B, 32
	ISCSI	Qlacle	Bundle	B, 32	B, 32	B, 32
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	B, 32	B, 32	B, 32
		Emulex	8.3.5.44	B, 32	B, 32	B, 32
	ISCSI	Qlacle	Bundle	B, 32	B, 32	B, 32
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	B, 32	B, 32	B, 32
		Emulex	8.3.5.45.4p	B, 32	B, 32	B, 32
	ISCSI	Qlacle	Bundle	B, 32	B, 32	B, 32
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	B, 32	B, 32	B, 32
		Emulex	8.3.5.44	B, 32	B, 32	B, 32
	ISCSI	Qlacle	Bundle	B, 32	B, 32	B, 32
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	B, 32	B, 32	B, 32
		Emulex	8.3.5.45.4p	B, 32	B, 32	B, 32
	ISCSI	Qlacle	Bundle	B, 32	B, 32	B, 32
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	B, 32	B, 32	B, 32
		Emulex	8.3.5.45.4p	B, 32	B, 32	B, 32
	ISCSI	Qlacle	Bundle	B, 32	B, 32	B, 32
Oracle Unbreakable Enterprise Kernel 5.8 X64 / x86_64 Processors Kernel 2.6.32-300.39.2.el5uek	Fibre Channel	QLogic	8.03.07.08.32.1-k	B, 32	B, 32	B, 32
		Emulex	8.3.5.45.4p	B, 32	B, 32	B, 32
	ISCSI	Qlacle	Bundle	B, 32	B, 32	B, 32

<b>Oracle Unbreakable Enterprise Kernel 6.2 IA32 / x86 Processors</b> 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
	iSCSI HBA/CNA	Qlacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32
<b>Oracle Unbreakable Enterprise Kernel 6.2 IA32 / x86 Processors</b> 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 HBA/CNA	Qlacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32
<b>Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors</b> 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 HBA/CNA	Qlacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32
<b>Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors</b> 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 HBA/CNA	Qlacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32
<b>Oracle Unbreakable Enterprise Kernel 6.3 IA32 / x86 Processors</b> 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 HBA/CNA	Qlacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32
<b>Oracle Unbreakable Enterprise Kernel 6.3 X64 / x86_64 Processors</b> 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 HBA/CNA	Qlacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32

<b>Oracle Unbreakable Enterprise Kernel 6.4</b> (Security Fix) <b>IA32 / x86 Processors</b> 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 HBA/CNA	Oacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32
<b>Oracle Unbreakable Enterprise Kernel 6.4</b> (Security Fix) <b>X64 / x86_64 Processors</b> 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 HBA/CNA	Oacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32
<b>Oracle Unbreakable Enterprise Kernel 6.5</b> <b>IA32 / x86 Processors</b> 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 HBA/CNA	Oacle	Bundle	B, 32	B, 32	B, 32
		Emulex	Bundle	B, 32	B, 32	B, 32
<b>Oracle Unbreakable Enterprise Kernel 6.5</b> <b>X64 / x86_64 Processors</b> 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 HBA/CNA	Oacle	Bundle	B, 33	B, 33	B, 33
		Emulex	Bundle	B, 33	B, 33	B, 33
<b>Oracle Unbreakable Enterprise Kernel 6.5</b> (Security Fix) <b>X64 / x86_64 Processors</b> 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 HBA/CNA	Oacle	Bundle	B, 33	B, 33	B, 33
		Emulex	Bundle	B, 33	B, 33	B, 33

<b>Oracle Unbreakable Enterprise Kernel 6.6 X64 / x86_64 Processors</b> 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
		Oacle	Bundle	B, 33	B, 33	B, 33
	iSCSI HBACNA	Emulex	Bundle	B, 33	B, 33	B, 33
<b>Oracle Unbreakable Enterprise Kernel 6.6 (Security Fix) X64 / x86_64 Processors</b> 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	Oacle	Bundle	B, 33	B, 33	B, 33
	iSCSI HBACNA	Emulex	Bundle	B, 33	B, 33	B, 33
<b>Oracle Unbreakable Enterprise Kernel 6.6 (Security Fix) X64 / x86_64 Processors</b> 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	Oacle	Bundle	B, 33	B, 33	B, 33
	iSCSI HBACNA	Emulex	Bundle	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 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	Oacle	Bundle	B, 33	B, 33	B, 33
	iSCSI HBACNA	Emulex	Bundle	B, 33	B, 33	B, 33
<b>Oracle Unbreakable Enterprise Kernel 6.7 (Security Fix) X64 / x86_64 Processors</b> 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	Oacle	Bundle	B, 33	B, 33	B, 33
	iSCSI HBACNA	Emulex	Bundle	B, 33	B, 33	B, 33
<b>Oracle Unbreakable Enterprise Kernel 6.8 X64 / x86_64 Processors</b> 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	Oacle	Bundle	33	33	33
<b>Oracle Unbreakable Enterprise Kernel 6.9 X64 / x86_64 Processors</b> 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	Oacle	Bundle	33	33	33
<b>Oracle Unbreakable Enterprise Kernel 6.9 (Security Fix) X64 / x86_64 Processors</b> 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	Oacle	Bundle	33	33	33
<b>Oracle Unbreakable Enterprise Kernel 6.10 (Security Fix) X64 / x86_64 Processors</b> Kernel	Fibre Channel	QLogic	9.00.00.00.40.0-k1			B, 33
		Emulex	11.4.0.7			B, 33

4.1.12-124.16.4.el6uek.x86_64	ISCSI	Oracle	Bundle			33
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<b>Oracle Unbreakable Enterprise Kernel 7 X64 / x86_64 Processors</b> 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	Olacle	Bundle	33, 34	33, 34	33, 34
<b>Oracle Unbreakable Enterprise Kernel 7.1 X64 / x86_64 Processors</b> 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	Olacle	Bundle	33, 34	33, 34	33, 34
	iSCSI HBACNA	Emulex	Bundle	33, 34	33, 34	33, 34
<b>Oracle Unbreakable Enterprise Kernel 7.1 (Security Fix) X64 / x86_64 Processors</b> 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	Olacle	Bundle	33, 34	33, 34	33, 34
	iSCSI HBACNA	Emulex	Bundle	33, 34	33, 34	33, 34
	<b>Oracle Unbreakable Enterprise Kernel 7.1 (Security Fix) X64 / x86_64 Processors</b> Kernel 3.8.13-68.2.2.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.16.39.0-k	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		Olacle	Bundle	33, 34	33, 34	33, 34
iSCSI HBACNA		Emulex	Bundle	33, 34	33, 34	33, 34
<b>Oracle Unbreakable Enterprise Kernel 7.2 X64 / x86_64 Processors</b> Kernel 3.8.13-98.7.1.el7uek.x86_64		Fibre Channel	QLogic	8.07.00.18.39.0-k	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	Olacle	Bundle	33, 34	33, 34	33, 34
<b>Oracle Unbreakable Enterprise Kernel 7.2 (Security Fix) X64 / x86_64 Processors</b> 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
	iSCSI	Olacle	Bundle	33	33	33
<b>Oracle Unbreakable Enterprise Kernel 7.3 X64 / x86_64 Processors</b> 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	Olacle	Bundle	33	33	33
	<b>Oracle Unbreakable Enterprise Kernel 7.3 (Security Fix) X64 / x86_64 Processors</b> Kernel 4.1.12-61.1.28.el7uek.x86_64	Fibre Channel	QLogic	8.07.00.38.40.0-k	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		Olacle	Bundle	33	33	33

<b>Oracle Unbreakable Enterprise Kernel 7.4 X64 / x86_64 Processors</b> 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	Olacle	Bundle	33	33	33
<b>Oracle Unbreakable Enterprise Kernel 7.5 X64 / x86_64 Processors</b> Kernel 4.1.12-112.16.4.el7uek.x86_64	Fibre Channel	QLogic	9.00.00.00.40.0-k			B, 33
		Emulex	11.4.0.2			B, 33
	iSCSI	Olacle	Bundle			33

<b>Oracle Unbreakable Enterprise Kernel 7.5</b> (Security Fix) <b>X64 / x86_64 Processors</b> Kernel 4.1.12-124.16.4.el7uek.x86_64	Fibre Channel	QLogic	9.00.00.00.40.0-k			B, 33
		Emulex	11.4.0.2			B, 33
			11.4.0.7-3.1.0-ol-MCL			B, 33
	ISCSI	Oracle	Bundle			33

<b>Supported</b>		
<b>Not Supported</b>		

Notes	
<b>B</b>	SAN boot is supported.
<b>32</b>	GFS is not supported. For details on GFS2 support, see "8. Linux".
<b>33</b>	GFS and GFS2 are not supported.
<b>34</b>	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		
OS	HBA	Driver	8.6.0	8.6.1	8.6.2
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-bigamp	Fibre Channel	QLogic	8.01.04-k		
		Emulex	8.1.6		
		IBM	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		
		Emulex	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		
		Emulex	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-bigamp	Fibre Channel	QLogic	8.01.07-k3		
		QLogic	8.02.14		
		Emulex	8.1.10.3		
		HP	8.1.10.12		
	Fibre Channel over Ethernet	Emulex	8.2.0.29		
		QLogic	8.01.07-k3		
		QLogic	8.02.14		
		Emulex	8.1.10.3		
SUSE Linux Enterprise Server 10 (Service Pack 1 Errata) Itanium / IA64 Processors Kernel 2.6.16.46-0.14-default	Fibre Channel over Ethernet	Emulex	8.2.0.29		
		QLogic	8.01.07-k3		
		QLogic	8.02.14		
		Emulex	8.1.10.3		
SUSE Linux Enterprise Server 10 (Service Pack 1 Errata) EM64T/AMD64 Processors Kernel 2.6.16.46-0.14-default 2.6.16.46-0.14-smp	Fibre Channel	QLogic	8.01.07-k3		
		QLogic	8.02.14		
		Emulex	8.1.10.3		
		Hitachi Bundle	8.1.10.12		
	Fibre Channel over Ethernet	HP	8.01.07-k3		
		Emulex	8.2.0.29		
		QLogic	8.02.00-k6		
		QLogic	8.02.14		
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-bigamp	Fibre Channel	Emulex	8.2.0.22		
		Emulex	1.0.0.2		
		Emulex	1.0.0.3		
		Brocade	1.1.0.1		
		Brocade	2.1.0.0		
		Brocade	2.2.0.0		
	Fibre Channel over Ethernet	Emulex	8.2.0.29		
		Emulex	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-xen-pae	Fibre Channel	QLogic	8.02.00-k6		
		QLogic	8.02.14		
	Fibre Channel over Ethernet	Emulex	8.2.0.22		
		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		
		QLogic	8.02.14		
		Emulex	8.2.0.22		
		Emulex	1.0.0.2		
		Emulex	1.0.0.3		
		Brocade	1.1.0.1		
	Fibre Channel over Ethernet	QLogic	8.03.00.08		
		Emulex	8.2.0.29		
		Emulex	8.2.0.96		
		Brocade	2.1.0.0		
SUSE Linux Enterprise Server 10 (Service Pack 2) EM64T/AMD64 Processors Kernel 2.6.16.60-0.21-smp	Fibre Channel	QLogic	8.02.00-k6		
		QLogic	8.02.14		
	Fibre Channel over Ethernet	Emulex	8.2.0.22		
SUSE Linux Enterprise Server 10 (Service Pack 2) EM64T/AMD64 Processors Kernel 2.6.16.60-0.21-xen	Fibre Channel	QLogic	8.02.00-k6		
		Emulex	8.2.0.22		
SUSE Linux Enterprise Server 10 (Service Pack 2) EM64T/AMD64 Processors Kernel 2.6.16.60-0.21-xen	Fibre Channel over Ethernet	Emulex	8.2.0.96		
		Emulex	8.2.0.96		

<b>SUSE Linux Enterprise Server 10 (Service Pack 3)</b> <b>IA32 / x86 Processors</b> Kernel 2.6.16.60-0.54.5-default 2.6.16.60-0.54.5-mp 2.6.16.60-0.54.5-bigmp	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						
<b>SUSE Linux Enterprise Server 10 (Service Pack 3)</b> <b>IA32 / x86 Processors</b> 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					
<b>SUSE Linux Enterprise Server 10 (Service Pack 3)</b> <b>Itanium / IA64 Processors</b> 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					
	<b>SUSE Linux Enterprise Server 10 (Service Pack 3)</b> <b>EM64T/AMD64 Processors</b> 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					
		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-bigmp	Fibre Channel	QLogic	8.03.01.12.10.3-k4	B, 26	B, 26	B, 26
		Emulex	8.2.0.92.1p	26	26	26
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	B	B	B
		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	B, 26	B, 26	B, 26
		Emulex	8.2.0.92.1p	26	26	26
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	B	B	B
		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	B, 26	B, 26	B, 26
		Emulex	8.2.8.14	26	26	26
		Brocade	2.1.0.0	26	26	26
			2.2.0.0	B, 26	B, 26	B, 26
	Fibre Channel over Ethernet	Brocade	2.1.0.0	26	26	26
		QLogic	8.03.01.15.11.0-k4	26	26	26
SCSI	Novell	Bundle	26, 65, 66, 67	26, 65, 66, 67	26, 65, 66, 67	
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	B	B	B
		Emulex	8.2.8.14			
	Fibre Channel over Ethernet	QLogic	8.03.01.15.11.0-k4			
		Novell	Bundle	65, 66, 67	65, 66, 67	65, 66, 67
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			
	Fibre Channel over Ethernet	Brocade	2.1.0.0			
		QLogic	8.03.01.15.11.0-k4			
		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	B, 26	B, 26	B, 26
		Emulex	8.2.8.14	26	26	26
		Brocade	2.1.0.0	26	26	26
	Fibre Channel over Ethernet	Brocade	2.1.0.0	B, 26	B, 26	B, 26
		QLogic	8.03.01.15.11.0-k4	26	26	26
		Novell	Bundle	26, 65, 66, 67	26, 65, 66, 67	26, 65, 66, 67
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	B	B	B
		Emulex	8.2.8.14			
	Fibre Channel over Ethernet	QLogic	8.03.01.15.11.0-k4			
		Novell	Bundle	65, 66, 67	65, 66, 67	65, 66, 67

<b>SUSE Linux Enterprise Server 11 (Service Pack 1)</b> <b>IA32 / x86 Processors</b> Kernel 2.6.32.12-0.7.1-default 2.6.32.12-0.7.1-pae	Fibre Channel	QLogic	8.03.01.06.11.1-k8	B, 26	B, 26	B, 26	
			8.03.01.08.11.1-k8	B, 26, 63	B, 26, 63	B, 26, 63	
			8.03.07.13.11.1-k	26	26	26	
			8.03.04.14.11.1-k0	26	26	26	
		Emulex	8.3.5.8.1p	26	26	26	
			8.3.5.8.2p	26, 64	26, 64	26, 64	
	Brocade	2.3.0.0	B, 26	B, 26	B, 26		
	Fibre Channel over Ethernet	Brocade	2.3.0.0	B, 26	B, 26	B, 26	
		QLogic	8.03.04.14.11.1-k0	26	26	26	
		Emulex	8.3.5.35	26	26	26	
SCSI	Novell	Bundle	26, 65, 66, 67	26, 65, 66, 67	26, 65, 66, 67		
<b>SUSE Linux Enterprise Server 11 (Service Pack 1)</b> <b>IA32 / x86 Processors</b> Kernel 2.6.32.12-0.7.1-xen	Fibre Channel	QLogic	8.03.01.06.11.1-k8	B	B	B	
			8.03.01.08.11.1-k8	B, 63	B, 63	B, 63	
			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	64	64	64	
	Brocade	2.3.0.0	B	B	B		
	Fibre Channel over Ethernet	Brocade	2.3.0.0	B	B	B	
		QLogic	8.03.04.14.11.1-k0				
		Emulex	8.3.5.35				
SCSI	Novell	Bundle	65, 66, 67	65, 66, 67	65, 66, 67		
<b>SUSE Linux Enterprise Server 11 (Service Pack 1)</b> <b>Itanium / IA64 Processors</b> 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				
	SCSI	Novell	Bundle				
	<b>SUSE Linux Enterprise Server 11 (Service Pack 1)</b> <b>EM64T/AMD64 Processors</b> Kernel 2.6.32.12-0.7.1-default	Fibre Channel	QLogic	8.03.01.06.11.1-k8	B, 26	B, 26	B, 26
8.03.01.08.11.1-k8				B, 26, 63	B, 26, 63	B, 26, 63	
8.03.07.13.11.1-k				26	26	26	
8.03.04.14.11.1-k0				26	26	26	
Emulex			8.3.5.8.1p	26	26	26	
			8.3.5.8.2p	26, 64	26, 64	26, 64	
Brocade			2.3.0.0	B, 26	B, 26	B, 26	
Fibre Channel over Ethernet			Brocade	2.3.0.0	B, 26	B, 26	B, 26
			QLogic	8.03.04.14.11.1-k0	26	26	26
			Emulex	8.3.5.35	26	26	26
		SCSI	Novell	Bundle	26, 65, 66, 67	26, 65, 66, 67	

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	B	B	B
			8.03.01.08.11.1-k8	B, 63	B, 63	B, 63
			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	64	64	64	
	Brocade	2.3.0.0	B	B	B	
	Fibre Channel over Ethernet	Brocade	2.3.0.0	B	B	B
		QLogic	8.03.04.14.11.1-k0			
		Emulex	8.3.5.35			
iSCSI	Novell	Bundle	65, 66, 67	65, 66, 67	65, 66, 67	
	Fibre Channel	QLogic	8.03.07.07-k	B, 26	B, 26	B, 26
		Emulex	8.3.5.48.2p	26, 65	26, 65	26, 65
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	Novell	Bundle	26, 65, 66, 67	26, 65, 66, 67	26, 65, 66, 67
		Fibre Channel	QLogic	8.03.07.07-k		
	Emulex		8.3.5.48.2p			
SUSE Linux Enterprise Server 11 (Service Pack 2) Itanium / IA64 Processors Kernel 3.0.13-0.27-default	Fibre Channel	Novell	Bundle			
		Fibre Channel	QLogic	8.03.07.07-k		
	Emulex		8.3.5.48.2p			
SUSE Linux Enterprise Server 11 (Service Pack 2) EM64T/AMD64 Processors Kernel 3.0.13-0.27-default	Fibre Channel	QLogic	8.03.07.07-k	B, 26	B, 26	B, 26
		Emulex	8.3.5.48.2p	B, 26, 65	B, 26, 65	B, 26, 65
	iSCSI	Novell	Bundle	26, 65, 66, 67	26, 65, 66, 67	26, 65, 66, 67
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	B, 26	B, 26	B, 26
		Emulex	8.3.7.10.6p	26, 65	26, 65	26, 65
	iSCSI	Novell	Bundle	26, 65, 66, 67	26, 65, 66, 67	26, 65, 66, 67
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	B, 26	B, 26	B, 26
		Emulex	8.3.7.10.6p	26, 65	26, 65	26, 65
	iSCSI	Novell	Bundle	26, 65, 66, 67	26, 65, 66, 67	26, 65, 66, 67
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	B	B	B
		Emulex	8.3.7.10.6p	65	65	65
	iSCSI	Novell	Bundle	65, 66, 67	65, 66, 67	65, 66, 67
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			
	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
			10.4.8000.0	B, 26	B, 26	B, 26
		Emulex	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) EM64T/AMD64 Processors Kernel (Security Fix) 3.0.101-108-68-default	Fibre Channel	QLogic	8.07.00.18-k			B, 26, 68
		Emulex	10.4.8000.0			B, 26, 68
			11.2.216.8			B, 26, 68
iSCSI	Novell	Bundle			26, 65, 66, 67, 68	
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
			Bundle	26, 65, 66, 67	26, 65, 66, 67	26, 65, 66, 67
iSCSI	Novell	Bundle			26, 65, 66, 67	
SUSE Linux Enterprise Server 12 EM64T/AMD64 Processors Kernel 3.12.28-4-xen	Fibre Channel	QLogic	8.07.00.08.12.0-k	B	B	B
		Emulex	10.2.8040.1	65	65	65
			Bundle	65, 66, 67	65, 66, 67	65, 66, 67
iSCSI	Novell	Bundle			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 2) EM64T/AMD64 Processors Kernel 4.4.21-69-default	Fibre Channel	QLogic	8.07.00.33-k	B	B	B
		Emulex	11.1.0.1	B	B	B
			Bundle	65, 66, 67	65, 66, 67	65, 66, 67
iSCSI	Novell	Bundle			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
			Bundle	65, 66, 67	65, 66, 67	65, 66, 67
iSCSI	Novell	Bundle			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
			Bundle	65, 66, 67	65, 66, 67	65, 66, 67
iSCSI	Novell	Bundle			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
		Emulex	12.0.0.1			B
			Bundle			65, 66, 67
iSCSI	Novell	Bundle			65, 66, 67	

Supported
Not Supported

Notes	
9	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-imp/2.6.16.21-08-bigmp).
51	Bundled with SUSE Linux ES 10 (Kernel 2.6.16.27-0.9-defaults/2.6.16.27-0.9-imp/2.6.16.27-0.9-bigmp).
60	The settings of these drivers are fallback. If you want to change the setting of fallback 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 "Fallback". If you want to change the setting to "Disable", set the following in the /etc/modprobe.conf file.
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.

**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 Virtual 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					
Supported Storage Systems	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		
	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
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 hpvmigrate 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
	Fibre Channel	HP			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
	Fibre Channel	HP			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

<b>Supported</b>	■
<b>Not Supported</b>	■

**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 hpvmigrate command

IBM AIX		HDLM Version		
		8.5.3	8.6.0	8.6.2
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	48	48	48
	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/mkdv/backupios command in boot disk environment				
HDLM log output to OS error log				

Supported Storage Systems	Storage System	Interface	Microcode version			
		Hitachi Lightning 9900V	Fibre Channel	21-02-21-XX/XX or later		
	Hitachi Universal Storage Platform V	Fibre Channel	60-01-XX-XX/XX or later	6	6	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	6	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	3,6	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	3,6	3,6
	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			
		Fibre Channel	83-01-01-40/XX or later			
	Hitachi Virtual Storage Platform G400	Fibre Channel	83-01-2X-40/XX or later(*50)			
		Fibre Channel	83-01-01-40/XX or later			
	Hitachi Virtual Storage Platform G600	Fibre Channel	83-01-2X-40/XX or later(*50)			
		Fibre Channel	83-01-01-40/XX or later			
	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			
		Fibre Channel	83-02-01-40/XX or later	53	53	53
	Hitachi Virtual Storage Platform F400	Fibre Channel	83-03-01-40/XX or later			
		Fibre Channel	83-02-01-40/XX or later	53	53	53
	Hitachi Virtual Storage Platform F600	Fibre Channel	83-03-01-40/XX or later			
		Fibre Channel	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F700	Fibre Channel	88-01-03-60/XX or later			
		Fibre Channel	83-02-01-60/XX or later	53	53	53
	Hitachi Virtual Storage Platform F800	Fibre Channel	83-03-01-60/XX or later			
		Fibre Channel	88-01-03-60/XX or later			
	Hitachi Virtual Storage Platform F900	Fibre Channel	88-01-03-60/XX or later			
		Fibre Channel	73-01-0X-XX/XX or later	4,6	4,6	4,6
	Hitachi Unified Storage VM	Fibre Channel	73-03-0X-XX/XX or later(*54)			
		Fibre Channel				

9	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 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	9	9	9
	Hitachi Adaptable Modular Storage AMS2300	Fibre Channel	0832/E or later	9	9	9
	Hitachi Adaptable Modular Storage AMS2500	Fibre Channel	0832/E or later	9	9	9
	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
	Hitachi Workgroup Modular Storage WMS100	Fibre Channel	0720/A or later			
	SMS 100	Fibre Channel	1810/N or later	9	9	9
	HP StorageWorks XP10000 Disk Array	Fibre Channel	50-03-94-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	6	6	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	6	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	6	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	3,6	3,6
	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			
	SVS	Fibre Channel	50-07-01-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	34,35,36	
SDD			33	33	33	
RDAC			29	29	29	
AIX 5.1 ML00 or earlier bundle MPIO						
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	

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	IS/OS and Linux on Power can be used as virtual I/O clients. For details, contact IBM.
6	Select Host Mode Option 2.
7	Set the Host Mode Option [Persistent RSV Cluster Mode] ON.
8	Set the Host Mode Option [Unique Reserve Mode 1] ON.
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.
44	Supported with some conditions customer-by-customer basis (SUI 044226). Please contact appropriate person in Hitachi Vantara.
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.
48	This is supported in an HAM environment by the following OSs: AIX V6.1 TL06 SP01  This is supported in an HAM environment by the following cluster software: PowerHA 5.5 to 6.1(*1)  *1: When executing reverse resynchronization for recovering the owner path from a failure, PowerHA must be stopped before the reverse resynchronization.  For information about functional restrictions, see the HAM User Guide.
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 dlkmgr command and HGLM display "VSP_Gx00" as the model ID of the
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 6.1					HDLM Version		
OS		IBM	HBA/CNA	Driver	8.5.3	8.6.0	8.6.2
AIX 6.1	Fibre Channel	QLogic	-	AIX Bundle			
			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 7.1					HDLM Version		
OS		IBM	HBA/CNA	Driver	8.5.3	8.6.0	8.6.2
AIX 7.1	Fibre Channel	QLogic	-	AIX Bundle			
			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		IBM	HBA/CNA	Driver	8.5.3	8.6.0	8.6.2
AIX 7.2	Fibre Channel	QLogic	-	AIX Bundle			
			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	5.3	6.0	6.2
6.1	No TL	SP1 + APAR IZ11722	SP1 + APAR IZ11722	SP1 + APAR IZ11722
	TL01	APAR IZ42661	APAR IZ42661	APAR IZ42661
	TL02	SP2 + APAR IZ42662	SP2 + APAR IZ42662	SP2 + APAR IZ42662
	TL03	SP1 or later are supported	SP1 or later are supported	SP1 or later are supported
	TL04	2	2	2
	TL05	SP1 or later are supported	SP1 or later are supported	SP1 or later are supported
	TL06			
	TL07			
	TL08	SP1 or later are supported	SP1 or later are supported	SP1 or later are supported
TL09	SP1 or later are supported,3	SP1 or later are supported,3	SP1 or later are supported,3	
7.1	No TL			
	TL01			
	TL02	SP1 or later are supported	SP1 or later are supported	SP1 or later are supported
	TL03	SP1 or later are supported	SP1 or later are supported	SP1 or later are supported
	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	3,4	3,4	3
	TL01	SP1 or later are supported,3,4	SP1 or later are supported,3,4	SP1 or later are supported,3
	TL02	3,4	3,4	3
	TL03	SP1 or later are supported,4	SP1 or later are supported,4	SP1 or later are supported

Supported	
Not Supported	

Notes	
All SPs are supported unless otherwise specified.	
<b>SPx or later are supported.</b>	Apply specified SP or later version.
<b>SP1 + APAR IZ11722</b>	You must apply SP1 (or later) and the APAR to the left is required.
<b>1</b>	Apply a patch equivalent to APAR IX06210 for AIX5.3 TL04 or TL05, because there is a possibility of a kernel panic due to OS failure. According to the IBM support policy ( <a href="http://www14.software.ibm.com/webapp/set2/sas/f/best/AIX5Lrel-svc-strat-chngs2007.pdf">http://www14.software.ibm.com/webapp/set2/sas/f/best/AIX5Lrel-svc-strat-chngs2007.pdf</a> ), patches equivalent to APAR IZ06210 for AIX 5.3 TL04 or TL05 are not currently provided to the public. Request such patches from IBM directly. This technology level is supported if a patch equivalent to APAR IZ06210 for AIX5.3 TL04 or TL05 is applied.
<b>APAR IZ43371</b>	Apply APAR IZ43371. You might have to request this of IBM directly if it is not publicly available. All SPs are supported
<b>APAR IZ42661</b>	Apply APAR IZ42661. You might have to request this of IBM directly if it is not publicly available. All SPs are supported
<b>SP2 + APAR IZ42658</b>	Install Service Pack 2 (or a later version) and APAR.
<b>SP2 + APAR IZ42662</b>	Install Service Pack 2 (or a later version) and APAR.
<b>2</b>	When using a boot disk environment that uses any model of the Thunder 9500V series, Hitachi AMS2000/AMS/TMS/WMS/SMS series, or HUS100 series, you must apply SP2 or later.
<b>3</b>	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 dimodmset 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.
<b>4</b>	The AIX Live Update function is not supported.

AIX VIO Support							
Operating System		VIO Version	Cluster		HDLM Version		
Name	Version		Name	Version	6.1	7.1	7.2
AIX	6.1	2.2.0.xx	No Cluster		12	12	12
			PowerHA	6.1	12	12	12
				7.1/7.1.x	12	12	12
		7.2.x	12,13	12,13	12,13		
		2.2.1.xx	No Cluster		12	12	12
			PowerHA	6.1	12	12	12
				7.1/7.1.x	12	12	12
		7.2.x	12,13	12,13	12,13		
		2.2.2.xx	No Cluster		12	12	12
			PowerHA	6.1	12	12	12
				7.1/7.1.x	12	12	12
		7.2.x	12,13	12,13	12,13		
		2.2.3.xx	No Cluster		12	12	12
			PowerHA	6.1	12	12	12
				7.1/7.1.x	12	12	12
		7.2.x	12,13	12,13	12,13		
		2.2.4.xx	No Cluster		12,18	12,18	12,18
			PowerHA	6.1	12,18	12,18	12,18
				7.1/7.1.x	12,18	12,18	12,18
		7.2.x	12,13,18	12,13,18	12,13,18		
		2.2.5.xx	No Cluster		12,18	12,18	12,18
			PowerHA	6.1	12,18	12,18	12,18
				7.1/7.1.x	12,18	12,18	12,18
		7.2.x	12,13,18	12,13,18	12,13,18		
	2.2.6.xx	No Cluster		12,18	12,18	12,18	
		PowerHA	6.1	12,18	12,18	12,18	
			7.1/7.1.x	12,18	12,18	12,18	
	7.2.x	12,13,18	12,13,18	12,13,18			
	7.1	2.2.0.xx	No Cluster		12	12	12
			PowerHA	6.1	12	12	12
				7.1/7.1.x	12	12	12
		7.2.x	12,13	12,13	12,13		
		2.2.1.xx	No Cluster		12	12	12
			PowerHA	6.1	12	12	12
				7.1/7.1.x	12	12	12
		7.2.x	12,13	12,13	12,13		
		2.2.2.xx	No Cluster		12	12	12
			PowerHA	6.1	12	12	12
				7.1/7.1.x	12	12	12
		7.2.x	12,13	12,13	12,13		
		2.2.3.xx	No Cluster		12	12	12
			PowerHA	6.1	12	12	12
				7.1/7.1.x	12	12	12
		7.2.x	12,13	12,13	12,13		
		2.2.4.xx	No Cluster		12,18	12,18	12,18
			PowerHA	6.1	12,18	12,18	12,18
				7.1/7.1.x	12,18	12,18	12,18
		7.2.x	12,13,18	12,13,18	12,13,18		
2.2.5.xx		No Cluster		12,18	12,18	12,18	
		PowerHA	6.1	12,18	12,18	12,18	
			7.1/7.1.x	12,18	12,18	12,18	
7.2.x		12,13,18	12,13,18	12,13,18			
2.2.6.xx	No Cluster		12,18	12,18	12,18		
	PowerHA	6.1	12,18	12,18	12,18		
		7.1/7.1.x	12,18	12,18	12,18		
7.2.x	12,13,18	12,13,18	12,13,18				
7.2	2.2.0.xx	No Cluster		12	12	12	
		PowerHA	6.1	12	12	12	
			7.1/7.1.x	12	12	12	
	7.2.x	12,13	12,13	12,13			
	2.2.1.xx	No Cluster		12	12	12	
		PowerHA	6.1	12	12	12	
			7.1/7.1.x	12	12	12	
	7.2.x	12,13	12,13	12,13			
	2.2.2.xx	No Cluster		12	12	12	
		PowerHA	6.1	12	12	12	
			7.1/7.1.x	12	12	12	
	7.2.x	12,13	12,13	12,13			
	2.2.3.xx	No Cluster		12	12	12	
		PowerHA	6.1	12	12	12	
			7.1/7.1.x	12	12	12	
	7.2.x	12,13	12,13	12,13			
	2.2.4.xx	No Cluster		12,18	12,18	12,18	
		PowerHA	6.1	12,18	12,18	12,18	
			7.1/7.1.x	12,18	12,18	12,18	
	7.2.x	12,13,18	12,13,18	12,13,18			
	2.2.5.xx	No Cluster		12,18	12,18	12,18	
		PowerHA	6.1	12,18	12,18	12,18	
			7.1/7.1.x	12,18	12,18	12,18	
	7.2.x	12,13,18	12,13,18	12,13,18			
2.2.6.xx	No Cluster		12,18	12,18	12,18		
	PowerHA	6.1	12,18	12,18	12,18		
		7.1/7.1.x	12,18	12,18	12,18		
7.2.x	12,13,18	12,13,18	12,13,18				

Supported	
Not Supported	



<b>Notes</b>	
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.	
<b>12</b>	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 for using HDLM are the same as for using HDLM in a local boot disk environment where a virtual I/O server is not used.
<b>13</b>	If you are using the Disk Fencing functionality of the quarantine policy, be sure to stop the cluster system before adding a path.
<b>17</b>	When using a boot disk environment that uses any model of the Thunder 9500V series, the Hitachi AMS2000/AMS/WMS/SMS series, or the HUS100 series, you must use VIO version 2.1.2.12 or later.
<b>18</b>	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 dimodmset 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.

Supported AIX GPFS and Cluster Configurations				
AIX	GPFS	HDLM Version		
		8.6.3	8.6.0	8.6.2
6.1	3.4	4	4	4
	3.5			
7.1	3.4	4	4	4
	3.5			
	4.1			
7.2	3.4	4	4	4
	3.5			
	4.1			

  

Supported	
Not Supported	

  

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

VMware vSphere ESXi			HDLM Version			
			8.5.1	8.6.0	8.6.2	
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						

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 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)			
	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
	iSCSI	83-03-01-40/XX or later	23	23	23
	iSCSI	83-02-01-40/XX or later	23	23	23
	iSCSI	83-03-01-40/XX or later	23	23	23
Hitachi Virtual Storage Platform F600	Fibre Channel	83-02-01-40/XX or later	23	23	23
	iSCSI	83-02-01-40/XX or later	23	23	23
	iSCSI	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			
	Fibre Channel	83-02-01-60/XX or later	23	23	23
Hitachi Virtual Storage Platform F800		83-03-01-60/XX or later	23	23	23
	iSCSI	83-02-01-60/XX or later	23	23	23
	iSCSI	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 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	70-02-xx or later			
	Fibre Channel	70-03-xx or later(*24)(*25)			
	Fibre Channel	80-01-2X-XX/XX or later	16	16	16
HP XP7 Storage	Fibre Channel	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			
EXCI usiv e Prod ucts	HDL for Windows		8	8	8

Supported	
Not Supported	

<b>Notes</b>	
<b>1</b>	This functionality cannot be disabled because the OS-provided functionality is used.
<b>2</b>	The check interval cannot be changed because the OS-provided functionality is used.
<b>3</b>	You can use Round Robin by setting "vmwrr" for load balancing from HDLM Remote Management Client.
<b>4</b>	You can use the following Path Selection Plugins (PSPs) provided by VMware: - VMW_PSP_MRU - VMW_PSP_RR
<b>5</b>	You can use the following HBAs and HBA drivers: - Inbox drivers for ESXi 5.0/5.1/5.5/6.0/6.5/6.7 or HBA drivers that support ESXi 5.0/5.1/5.5/6.0/6.5/6.7 as listed in the VMware Compatibility Guide. - HBAs and HBA drivers for Hitachi Compute Blade that support ESXi 5.0/5.1/5.5/6.0/6.5/6.7 as listed in the VMware Compatibility Guide.
<b>6</b>	Contact VMware for details about the supported guest OSs. Note that precautions related to NMP also apply to HDLM environments.
<b>7</b>	For VMware, a remote management client, separate from ESXi 5.0/5.1/5.5/6.0/6.5/6.7 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.
<b>8</b>	Do not install HDLM for Windows on a host that is used as a remote management client for HDLM for VMware.
<b>12</b>	To link with HGLM, use an OS other than Windows Vista for the remote management client.
<b>13</b>	Microprogram version 08B8/D or later is required for using Dynamic I/O Path Control on Hitachi AMS2000 series/Hitachi SMS series.
<b>14</b>	Supported with some conditions customer-by-customer basis (SUI 044226). Please contact appropriate person in Hitachi Vantara.
<b>15</b>	Global-active devices are supported.
<b>16</b>	High Availability is supported.
<b>17</b>	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.
<b>18</b>	This is supported in an HAM environment by the following OSs: VMware vSphere ESXi 5.5 VMware vSphere ESXi 6.0 Update 2 VMware vSphere ESXi 6.5 For information about functional restrictions, see the HAM User Guide.
<b>19</b>	Apply this version when a global-active device is used.
<b>20</b>	When you use a normal VOL as a global-active device pair VOL, use this version.
<b>21</b>	When you use a normal VOL as a High Availability pair VOL, use this version.
<b>22</b>	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 perform 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
<b>23</b>	The dlinkmgr command and HGLM display "VSP_Gx00" as the model ID of the storage system.
<b>24</b>	Apply this version when an HAM environment is used.
<b>25</b>	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	vSphere Command-Line Interface Version	HDLM Version		
				8.5.1	8.6.0	8.6.2
Windows Vista SP1	IA32 / x86	5.0/5.0u1				
		5.1/5.1u1				
Windows Vista SP1	x64 / x86_64	5.0/5.0u1				
		5.1/5.1u1				
Windows Vista SP2	IA32 / x86	5.0/5.0u1				
		5.1/5.1u1				
Windows Vista SP2	x64 / x86_64	5.0/5.0u1				
		5.1/5.1u1				
Windows 7 No SP	IA32 / x86	5.0/5.0u1				
		5.1/5.1u1				
		5.5/5.5u1/5.5u2				
	x64 / x86_64	6.0/6.0u1/6.0u2				
		5.0/5.0u1				
		5.1/5.1u1				
Windows 7 SP1	IA32 / x86	5.5/5.5u1/5.5u2				
		6.0/6.0u1/6.0u2				
		5.0/5.0u1				
	x64 / x86_64	5.1/5.1u1				
		5.5/5.5u1/5.5u2				
		6.0/6.0u1/6.0u2				
Windows 8 No SP	IA32 / x86	5.0/5.0u1				
		5.1/5.1u1				
		5.5/5.5u1/5.5u2				
	x64 / x86_64	6.0/6.0u1/6.0u2				
		5.0/5.0u1				
		5.1/5.1u1				
Windows 10 No SP	x64 / x86_64	5.5/5.5u1/5.5u2				
		6.0/6.0u1/6.0u2				
		6.5				
Windows 2008 No SP	x64 / x86_64	6.7				
		5.0/5.0u1				
		5.1/5.1u1				
Windows 2008 SP2	x64 / x86_64	5.5/5.5u1/5.5u2				
		6.0/6.0u1/6.0u2				
		6.5				
	x64 / x86_64	6.7				
		5.0/5.0u1				
		5.1/5.1u1				
Windows 2008 R2 SP1	x64 / x86_64	5.5/5.5u1/5.5u2				
		6.0/6.0u1/6.0u2				
		6.5				
	x64 / x86_64	6.7				
		5.0/5.0u1				
		5.1/5.1u1				
Windows 2012 R2 No SP	x64 / x86_64	5.5/5.5u1/5.5u2				
		6.0/6.0u1/6.0u2				
		6.5				
Windows 2016 / 2019	x64 / x86_64	6.7				
		6.0/6.0u1/6.0u2	1	1	1	
		6.5	1	1	1	
			6.7	1	1	1

  

Supported	
Not Supported	

Supported JRE Versions

Windows						
Version	Architecture	JRE Version	HDLM Version			
			8.5.3	8.6.0	8.6.2	
Windows 2008	IA32 / x86	6.0_17				
		1.6.0				
		1.7.0				
		1.8.0	3			
	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	3			
Windows 2008 SP2	IA32 / x86	6.0_17				
		1.6.0				
		7.0_01				
		1.7.0				
	Itanium / IA64	1.8.0	3	3	3	
		6.0_17				
		1.6.0				
		1.7.0				
	x64 / x86_64	1.8.0				
		6.0_17				
		1.6.0				
		7.0_01				
Windows 2008 R2	Itanium / IA64	1.7.0				
		1.6.0				
		1.8.0				
		1.7.0				
	x64 / x86_64	1.8.0	3	3	3	
		1.7.0				
		1.6.0				
		1.8.0				
	Windows 2008 R2 SP1	x64 / x86_64	1.6.0			
			1.7.0			
			7.0_01			
			1.8.0	2, 3, 4	2, 3, 4	2, 3, 4
Windows 2012	x64 / x86_64	1.6.0				
		1.7.0				
		1.8.0	2, 3, 4	2, 3, 4	2, 3, 4	
		1.6.0				
Windows 2012 R2	x64 / x86_64	1.7.0				
		1.8.0	2, 3, 4	2, 3, 4	2, 3, 4	
		1.6.0				
		1.7.0				
Windows 2016	x64 / x86_64	1.8.0	3	3	3	
		1.6.0				
		1.7.0				
		1.8.0				

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		
			8.5.3	8.6.0	8.6.3
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		
			8.5.3	8.6.0	8.6.2
6.1		7 32-bit (build pap3270-20110827_01) or later			
		8 32-bit (build ppc-20150116_231420) or later	1,2	1,2	1,2
7.1		7 32-bit (build pap3270-20110827_01) or later			
		8 32-bit (build ppc-20150116_231420) or later	1,2	1,2	1,2
7.2		7 32-bit (build pap3270-20110827_01) or later			
		8 32-bit (build ppc-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		
			8.6.0	8.6.1	8.6.2
5.5 or later	Intel x86	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
	IA64 / Itanium	5.0			
		1.8.0			
		EM64T	5.0	6	6
6.0 or later	AMD64	1.8.0	2, 4	2, 4	2, 4
		5.0	6	6	6
	Intel x86	1.8.0	2, 4	2, 4	2, 4
		5.0	6	6	6
		EM64T	1.8.0	4, 5	4, 5
7.0 or later	AMD64	1.7.0			
	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 <code>javapath_set</code> . For information about the command <code>javapath_set</code> , 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		
			8.6.0	8.6.1	8.6.2
6.2 to 6.5	Intel x86	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
	AMD64	5.0	6	6	6
		1.8.0	4, 5	4, 5	4, 5
6.6 or later	AMD64	5.0	6	6	6
	AMD64	1.8.0	4, 5	4, 5	4, 5
7.0 or later	AMD64	1.7.0			
	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 <code>javapath_set</code> . For information about the command <code>javapath_set</code> , 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		
			8.6.0	8.6.1	8.6.2
6.5 or later	Intel x86	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
	AMD64	5.0	6	6	6
		1.8.0	4, 5	4, 5	4, 5
7.0 or later	AMD64	1.7.0			
	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 <code>javapath_set</code> . For information about the command <code>javapath_set</code> , 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		
			8.6.0	8.6.1	8.6.2
10 (SP2 or later)	Intel x86	5.0	6	6	6
		1.8.0	2, 4	2, 4	2, 4
	IA64 / Itanium	5.0			
		1.8.0			
		EM64T	6	6	6
		AMD64	2, 4	2, 4	2, 4
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	6	6	6
		AMD64	2, 4	2, 4	2, 4
12	EM64T	1.7.0			
	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		
			8.5.1	8.6.0	8.6.2
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			
	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0			
Windows 7 No SP	IA32 / x86	1.6.0			
		1.7.0			
		1.8.0	6	6	6
	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0	6	6	6
Windows 7 SP1	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 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	6	6	6
		1.8.0			
Windows 2008 SP2	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0	6	6	6
Windows 2008 R2 SP1	x64 / x86_64	1.6.0			
		1.7.0			
		1.8.0	2,4,6	2,4,6	2,4,6
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

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	HCLM			
			6.5.3	6.6	6.6.2	
Windows 2008 Windows 2008 Server Pack 2	IA32 / x86	No Cluster				
		MSCS	No VM			
		No Cluster	No VM			
	x64 / x86_64	No Cluster	No VM			
		MSCS	No VM			
		No Cluster	No VM			
Windows 2008 R2 Server Pack 1	IA32 / x86	No Cluster				
		MSCS	No VM			
		No Cluster	No VM			
	x64 / x86_64	No Cluster	No VM			
		MSCS	No VM			
		No Cluster	No VM			
Windows 2008 R2 Server Pack 2	IA32 / x86	No Cluster				
		MSCS	No VM			
		No Cluster	No VM			
	x64 / x86_64	No Cluster	No VM			
		MSCS	No VM			
		No Cluster	No VM			
Windows 2008 R2 Server Pack 1	IA32 / x86	No Cluster				
		MSCS	No VM			
		No Cluster	No VM			
	x64 / x86_64	No Cluster	No VM			
		MSCS	No VM			
		No Cluster	No VM			
Windows 2012 Windows 2012 R2	IA32 / x86	No Cluster				
		MSCS	No VM			
		No Cluster	No VM			
	x64 / x86_64	No Cluster	No VM			
		MSCS	No VM			
		No Cluster	No VM			
Windows 2012 R2 Windows 2012 R2	IA32 / x86	No Cluster				
		MSCS	No VM			
		No Cluster	No VM			
	x64 / x86_64	No Cluster	No VM			
		MSCS	No VM			
		No Cluster	No VM			
Windows 2016 Windows 2019	IA32 / x86	No Cluster				
		MSCS	No VM			
		No Cluster	No VM			
	x64 / x86_64	No Cluster	No VM			
		MSCS	No VM			
		No Cluster	No VM			

Supported  
Not Supported

**Notes**

66 Maintenance Pack 1 (MP1) is required.

66 The following lists the reserve functionalities that HCLM supports for each OS cluster:

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

OS	Cluster (*25)	Volume Manager	HCLM				
			6.3.1	6.0.0	6.3.1		
Oracle SPARC	No Cluster	No VM					
		SVM	5.11.13	5.11.13	5.11.13		
		Symantec VVMM 4.1					
		Symantec VVMM 5.0					
		Symantec VVMM 5.1	18	18	18		
		SunCluster	3.1 (800)	No VM			
				Symantec VVMM 4.1			
			3.2	No VM			
				SVM			
			3.2 (206)	VVMM	5.0		
	No VM						
	3.2 (109)		SVM				
			VVMM	5.0			
	3.2 (109)		SVM	5.1			
			No VM				
	3.2 (1109)	SVM	5.0				
		VVMM	5.1				
	SolarisCluster	3.3	No VM	10	10	10	
			SVM	6.10.13.18	6.10.13.18	6.10.13.18	
		3.3 (511)	VVMM	5.1			
			No VM				
		3.3 (511)	SVM	6.10.13.18	6.10.13.18	6.10.13.18	
			VVMM	5.1			
		3.3 (313)	No VM	10	10	10	
			SVM	6.10.13.18	6.10.13.18	6.10.13.18	
		3.3 (313)	VVMM	5.1	10.18	10.18	
			No VM				
	Symantec VCS	4.1	No VM				
			SVM				
		5.0	No VM				
			Symantec VVMM 5.0				
		5.1	No VM	1.2.7.14.41	1.2.7.14.41	1.2.7.14.41	
			Symantec VVMM 5.1	1.2.4.15.18.19	1.2.4.15.18.19	1.2.4.15.18.19	
		6.0	No VM	1.2.7.23	1.2.7.23	1.2.7.23	
			Symantec VVMM 6.0	1.2.7.18.23	1.2.7.18.23	1.2.7.18.23	
		6.0.3	No VM	1.2.7.23	1.2.7.23	1.2.7.23	
			Symantec VVMM 6.0.3	1.2.7.18.23	1.2.7.18.23	1.2.7.18.23	
	7.1	No VM	1.2.7.23	1.2.7.23	1.2.7.23		
		Symantec VVMM 7.1	1.2.7.18.23	1.2.7.18.23	1.2.7.18.23		
	SolarisCluster	4.0	No VM	13.18.22	13.18.22	13.18.22	
			SVM	13.18.22	13.18.22	13.18.22	
		6.0	No VM	1.2.21	1.2.21	1.2.21	
			Symantec VVMM 6.0	1.2.18.21	1.2.18.21	1.2.18.21	
		4.1	No VM	13.18.22	13.18.22	13.18.22	
			SVM	13.18.22	13.18.22	13.18.22	
		6.0.3	No VM	1.2.7.18	1.2.7.18	1.2.7.18	
			Symantec VVMM 6.0.3	1.2.7.18.21	1.2.7.18.21	1.2.7.18.21	
		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	6.2.1	No VM				
			Symantec VVMM				
		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	
		6.2.1	No VM	13.11.22.24	13.11.22.24	13.11.22.24	
			Symantec VVMM				
		7.1	No VM	13.18.22.24.26	13.18.22.24.26	13.18.22.24.26	
			Symantec VVMM				
		7.2	No VM	13.18.22.24.26	13.18.22.24.26	13.18.22.24.26	
			Symantec VVMM				
	Notes						
	1 The functionality for links with SPVS (Storage Foundation Volume Server) in VCS 6.0 is not supported.						
	2 The Disk Reservation Agent functionality of VCS is not supported.						
	3 IO fencing is not supported on VCS.						
	The following SVM features are not supported: - Data with greater than 1 TB capacity - Multi-owner disk sets - Importing of disk sets - Automatic (top-down) volume creation						
	4 In a configuration that uses a driver other than the Oracle HBA driver (other than the qlc or emulex driver), the SVM shared diskset cannot use disks managed by HCLM.						
	5 When the SVM shared diskset uses disks managed by HCLM in a configuration that uses a driver other than the Oracle HBA driver (other than the qlc or emulex driver), use Oracle Solaris Cluster device IDs (logical device files under /dev/did/dsk). The SVM shared diskset cannot use HCLM logical device names.						
	6 VCS IO 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. - LSPINCSUSP VVUSP VMVSP - VFS600 - HP XP10000/XP12000/XP20000/XP40000/XP69000 When using IO fencing, enable host mode option 03 (VERITAS Database Edition/Advanced Cluster) on the storage system. When not using IO 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 IO fencing to different host groups.						
	7 When using IO fencing, you must apply MP2 or later. Only two-node configurations are supported. Only pathout 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.						
	8 ZFS is not supported.						
	9 EFI labels are not supported.						
	The following SVM features are not supported: - Multi-owner disk sets - Importing of disk sets - Automatic (top-down) volume creation						
	10 There are no limits on the MP2 version except when using IO fencing.						
	11 When using IO fencing, you must apply MP1 or later. In two-node configurations, only pathout 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.						
	12 EFI labels and ZFS are supported in two-node configurations only.						
	13 EFI labels and ZFS are not supported.						
	Support VCS IO 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. - LSPINCSUSP VVUSP VM - HP XP10000/XP12000/XP20000/XP40000/XP69000 When using IO fencing, enable host mode option 03 (VERITAS Database Edition/Advanced Cluster) on the storage system. When not using IO fencing, do not enable host mode option 02 (VERITAS Database Edition/Advanced Cluster) on the storage system. Also, set the host using the IO fencing function and the host not using the IO fencing to different host groups.						
	14 The following storage system devices are supported: - Hitachi Adaptable Modular Storage (AMS series) (Microcode version 08B0A and later) - Hitachi Universal Storage Platform V (V) (Microcode version 60-06-05-0010 and later)						
	15 VCS IO 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. - AMS200 When using IO fencing, enable [Special Reserve Mode 1] on the storage system. When not using IO fencing, do not enable [Special Reserve Mode 1] on the storage system. Also, set hosts that do and do not use IO fencing to different host groups.						
	16 Only 'hclm/scsi3' is supported for the SCSI protocol (fencing protocol) settings of storage system devices.						
	17 Up to 4096 LUs and up to 8192 paths are supported as HCLM management targets.						
	18 Links with Global Link Manager is not supported.						
	19 The following link reserve functionalities that HCLM supports for each OS cluster:						
	OS	Cluster Name	Reserve Functionality	Remarks			
	Solaris	VCS	IO fencing				
		Solaris Cluster	Fencing				
	20 Auto refresh of fencing registrations on the coordination points is not supported.						

OS	Cluster (*)	Volume Manager	HDLM			
			OS	OS	OS	
AIX	6.1 (64 bit)	No Cluster				
		HACMP/PowerHA	LVM or No LVM			
			LVM			
			LVM			
			LVM			
			LVM			
			LVM			
		Symmetrix VCS	LVM or No LVM	1,4	1,4	1,4
		DB2 pureScale	LVM or No LVM	2	2	2
		DB2 pureScale	LVM or No LVM	2	2	2
		DB2 pureScale	LVM or No LVM	2	2	2
		DB2 pureScale	LVM or No LVM	2	2	2
	DB2 pureScale	LVM or No LVM	2	2	2	
	7.1 (64 bit)	No Cluster	LVM or No LVM			
		HACMP/PowerHA	LVM			
			LVM			
			LVM			
			LVM			
			LVM			
			LVM			
		Symmetrix VCS	LVM or No LVM	1,4	1,4	1,4
		DB2 pureScale	LVM or No LVM	2	2	2
		DB2 pureScale	LVM or No LVM	2	2	2
		DB2 pureScale	LVM or No LVM	2	2	2
DB2 pureScale		LVM or No LVM	2	2	2	
7.2 (64 bit)	No Cluster	LVM or No LVM				
	HACMP/PowerHA	LVM				
		LVM				
		LVM				
		LVM				
		LVM				
		LVM				
	Symmetrix VCS	LVM or No LVM	1,4	1,4	1,4	
	DB2 pureScale	LVM or No LVM	2	2	2	
	DB2 pureScale	LVM or No LVM	2	2	2	
	DB2 pureScale	LVM or No LVM	2	2	2	
	DB2 pureScale	LVM or No LVM	2	2	2	

Supported  
Not Supported

**Notes**

- To use the Disk Fencing functionality of the quarantine policy, PowerHA
- For Fast IO Fencing to be used, use HDLM to set the LB settings of the The Breaker Disk to OFF.
- 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 usePciAdapterReserve parameter to	
	DB2 PureScale	IO 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			
			OS	OS	OS	
HEXX	11 V1.0 PA-RISC	No Cluster				
		MC/ServiceGuard	No VM			
			LVM	1		
			LVM	1		
	11 V2.0 (PA-RISC and Itanium / IA64)	No Cluster	No VM			
		Serviceguard	LVM			
			LVM			
			LVM	2	2	
	11 V2.0 (PA-RISC and Itanium / IA64)	No Cluster	No VM			
		Serviceguard	LVM			
			LVM			
			LVM	2	2	
LVM			2	2		

Supported  
Not Supported

**Notes**

- Look disks of MC/ServiceGuard A.11.13, A.11.14, A.11.15 are not supported
- Only the Itanium/IA64 is supported

OS	Cluster (*128)	Volume Manager		HCLM			
				6.0	6.1	6.2	
Red Hat Enterprise Linux 5 x62 / x64 Processors 2.6.18-0.0e 2.6.18-0.0PAE	No Cluster	No VM					
	RedHat Cluster Suite	LVM	2.02.16-3.0e				
		No VM					
	Lifeline (*114)	LVM	2.02.16-3.0e				
		No VM					
		6.1	No VM		77	77	77
		6.2	No VM		87	87	87
		6.3	No VM		90	90	90
		6.4	No VM		91	91	91
		7.0	No VM		91	91	91
		7.1	No VM		91	91	91
		7.2	No VM		97	97	97
		7.3	No VM		97	97	97
		7.4	No VM		97	97	97
		7.5	No VM		97	97	97
		8	No VM		97	97	97
		8.1.1	No VM		104	104	104
		8.1.2	No VM		105	105	105
		8.2.0	No VM		107	107	107
		8.2.1	No VM		108	108	108
		8.3.0	No VM		109	109	109
		8.3.1	No VM		110	110	110
		8.3.2	No VM		111	111	111
		8.4.0	No VM		112	112	112
		8.4.1	No VM		113	113	113
		9.0.0	No VM		115	115	115
		9.0.1	No VM		116	116	116
		9.0.2	No VM		118	118	118
		9.1	No VM		121	121	121
		9.1.1	No VM		126	126	126
		9.1.2	No VM		129	129	129
		9.2	No VM		130	130	130
		9.2.1	No VM		131	131	131
	9.2.2	No VM		133	133	133	
Red Hat Enterprise Linux 5 Itanium / x64 Processors 2.6.18-0.0e	No Cluster	No VM					
	RedHat Cluster Suite	LVM	2.02.16-3.0e				
		No VM					
Red Hat Enterprise Linux 5 AMD64 and EM64T Processors 2.6.18-0.0e	No Cluster	No VM					
	RedHat Cluster Suite	LVM	2.02.16-3.0e				
		No VM					
	Lifeline (*114)	LVM	2.02.16-3.0e				
		No VM					
		6.1	No VM		77	77	77
		6.2	No VM		87	87	87
		6.3	No VM		90	90	90
		6.4	No VM		91	91	91
		7.0	No VM		91	91	91
		7.1	No VM		91	91	91
		7.2	No VM		97	97	97
		7.3	No VM		97	97	97
		7.4	No VM		97	97	97
		7.5	No VM		97	97	97
		8	No VM		97	97	97
		8.1.1	No VM		104	104	104
		8.1.2	No VM		105	105	105
		8.2.0	No VM		107	107	107
		8.2.1	No VM		108	108	108
		8.3.0	No VM		109	109	109
		8.3.1	No VM		110	110	110
		8.3.2	No VM		111	111	111
		8.4.0	No VM		112	112	112
		8.4.1	No VM		113	113	113
		9.0.0	No VM		115	115	115
		9.0.1	No VM		116	116	116
		9.0.2	No VM		118	118	118
		9.1	No VM		121	121	121
		9.1.1	No VM		126	126	126
		9.1.2	No VM		129	129	129
		9.2	No VM		130	130	130
		9.2.1	No VM		131	131	131
	9.2.2	No VM		133	133	133	

	No Cluster	No VM					
		LVM	2.02.26-3.eS				
Red Hat Enterprise Linux 5.1 x86_64 Processors 2.6.18-53.el5 2.6.18-53.el5PAE	RedHat Cluster Suite	1.0.50-1.3	No VM				
			LVM	2.02.26-3.eS			
		6.1	No VM - OR - 2.02.26-3.eS	77_94	77_94	77_94	
		6.2		87	87	87	
		6.3		90	90	90	
		6.4		91	91	91	
		7.0		91	91	91	
		7.1		91	91	91	
		7.2		97	97	97	
		7.3		97	97	97	
		7.4		97	97	97	
		7.5		97	97	97	
		8		97	97	97	
		8.1.1		104	104	104	
		8.1.2		105	105	105	
		8.2.0		107	107	107	
		8.2.1		108	108	108	
		8.3.0		109	109	109	
		8.3.1		110	110	110	
		8.3.2		111	111	111	
		8.4.0		112	112	112	
		8.4.1		113	113	113	
		9.0.0		115	115	115	
		9.0.1		116	116	116	
		9.0.2		118	118	118	
		9.1		121	121	121	
		9.1.1		126	126	126	
	9.1.2	129		129	129		
	9.2	130		130	130		
	9.2.1	131	131	131			
	9.2.2	133	133	133			
Red Hat Enterprise Linux 5.1 Itanium 2 Processors 2.6.18-53.el5	No Cluster		No VM				
			LVM	2.02.26-3.eS			
	RedHat Cluster Suite	1.0.50-1.3	No VM				
			LVM	2.02.26-3.eS			
Red Hat Enterprise Linux 5.1 AMD64 and EM64T Processors 2.6.18-53.el5	No Cluster		No VM				
			LVM	2.02.26-3.eS			
	RedHat Cluster Suite	1.0.50-1.3	No VM				
				LVM	2.02.26-3.eS		
		6.1	No VM - OR - 2.02.26-3.eS	77_94	77_94	77_94	
		6.2		87	87	87	
		6.3		90	90	90	
		6.4		91	91	91	
		7.0		91	91	91	
		7.1		91	91	91	
		7.2		97	97	97	
		7.3		97	97	97	
		7.4		97	97	97	
		7.5		97	97	97	
		8		97	97	97	
		8.1.1		104	104	104	
		8.1.2		105	105	105	
		8.2.0		107	107	107	
		8.2.1		108	108	108	
		8.3.0		109	109	109	
		8.3.1		110	110	110	
		8.3.2		111	111	111	
		8.4.0		112	112	112	
		8.4.1		113	113	113	
		9.0.0		115	115	115	
		9.0.1		116	116	116	
		9.0.2		118	118	118	
	9.1	121		121	121		
	9.1.1	126		126	126		
	9.1.2	129		129	129		
	9.2	130		130	130		
	9.2.1	131	131	131			
	9.2.2	133	133	133			

	No Cluster		No VM						
			LVM	2.02.32-4.e5					
Red Hat Cluster Suite	2.0.84-2	No VM							
		LVM	2.02.32-4.e5						
Red Hat Enterprise Linux 5.2 i386/x86 Processors 2.6.18-92.el5 2.6.18-92.el5PAE	Lifekeeper (*114)	6.3	No VM - OR - 2.02.32-4.e5	90	90	90			
		6.4		91	91	91			
		7.0		91	91	91			
		7.1		91	91	91			
		7.2		97	97	97			
		7.3		97	97	97			
		7.4		97	97	97			
		7.5		97	97	97			
		8		97	97	97			
		8.1.1		104	104	104			
		8.1.2		105	105	105			
		8.2.0		107	107	107			
		8.2.1		108	108	108			
		8.3.0		109	109	109			
		8.3.1		110	110	110			
		8.3.2		111	111	111			
		8.4.0		112	112	112			
		8.4.1		113	113	113			
		9.0.0		115	115	115			
		9.0.1		116	116	116			
		9.0.2		118	118	118			
		9.1		121	121	121			
		9.1.1		126	126	126			
		9.1.2		129	129	129			
9.2	130	130	130						
9.2.1	131	131	131						
9.2.2	133	133	133						
Red Hat Enterprise Linux 5.2 Itanium / IA64 Processors 2.6.18-92.el5	No Cluster		No VM						
			LVM	2.02.32-4.e5					
	Red Hat Cluster Suite		No VM						
	2.0.84-2			LVM	2.02.32-4.e5				
Red Hat Enterprise Linux 5.2 AMD64 and EM64T Processors 2.6.18-92.el5	Lifekeeper (*114)	No Cluster		No VM					
				LVM	2.02.32-4.e5				
		Red Hat Cluster Suite		No VM					
			2.0.84-2			LVM	2.02.32-4.e5		
		6.3	No VM - OR - 2.02.32-4.e5	90	90	90			
		6.4		91	91	91			
		7.0		91	91	91			
		7.1		91	91	91			
		7.2		97	97	97			
		7.3		97	97	97			
		7.4		97	97	97			
		7.5		97	97	97			
		8		97	97	97			
		8.1.1		104	104	104			
		8.1.2		105	105	105			
		8.2.0		107	107	107			
		8.2.1		108	108	108			
		8.3.0		109	109	109			
		8.3.1		110	110	110			
		8.3.2		111	111	111			
		8.4.0		112	112	112			
		8.4.1		113	113	113			
		9.0.0		115	115	115			
		9.0.1		116	116	116			
9.0.2	118	118		118					
9.1	121	121		121					
9.1.1	126	126		126					
9.1.2	129	129		129					
9.2	130	130	130						
9.2.1	131	131	131						
9.2.2	133	133	133						



	No Cluster		No VM				
			LVM	2.02.40-6.e6			
<b>Red Hat Enterprise Linux 5.3</b> x86_64 Processors 2.6.18-128.el5 2.6.18-128.el5PAE	Red Hat Cluster Suite	2.0.98-1	No VM				
			LVM	2.02.40-6.e6			
	Lifeline (*) (114)	2.0.98-1	No VM				
			LVM	2.02.40-6.e6			
			8.4		91	91	91
			7.0		91	91	91
			7.1		91	91	91
			7.2		97	97	97
			7.3		97	97	97
			7.4		97	97	97
			7.5		97	97	97
			8		97	97	97
			8.1.1		104	104	104
			8.1.2		105	105	105
			8.2.0		107	107	107
			8.2.1		108	108	108
			8.3.0	No VM	109	109	109
			8.3.1	- OR -	110	110	110
			8.3.2	2.02.40-6.e6	111	111	111
			8.4.0		112	112	112
			8.4.1		113	113	113
			9.0.0		115	115	115
			9.0.1		116	116	116
			9.0.2		118	118	118
			9.1		121	121	121
			9.1.1		126	126	126
			9.1.2		129	129	129
			9.2		130	130	130
			9.2.1		131	131	131
			9.2.2		133	133	133
<b>Red Hat Enterprise Linux 5.3</b> AMD64 and EM64T Processors 2.6.18-128.el5	No Cluster		No VM				
			LVM	2.02.40-6.e6			
	Red Hat Cluster Suite	2.0.98-1	No VM				
			LVM	2.02.40-6.e6			
	Lifeline (*) (114)	2.0.98-1	No VM				
			LVM	2.02.40-6.e6			
			8.4		91	91	91
			7.0		91	91	91
			7.1		91	91	91
			7.2		97	97	97
			7.3		97	97	97
			7.4		97	97	97
			7.5		97	97	97
			8		97	97	97
			8.1.1		104	104	104
			8.1.2		105	105	105
			8.2.0		107	107	107
			8.2.1		108	108	108
			8.3.0	No VM	109	109	109
			8.3.1	- OR -	110	110	110
			8.3.2	2.02.40-6.e6	111	111	111
			8.4.0		112	112	112
			8.4.1		113	113	113
			9.0.0		115	115	115
			9.0.1		116	116	116
			9.0.2		118	118	118
			9.1		121	121	121
			9.1.1		126	126	126
			9.1.2		129	129	129
			9.2		130	130	130
9.2.1				131	131	131	
9.2.2				133	133	133	
<b>Red Hat Enterprise Linux 5.3</b> Itanium / EM64 Processors 2.6.18-128.el5	No Cluster		No VM				
			LVM	2.02.40-6.e6			
	Red Hat Cluster Suite	2.0.98-1	No VM				
LVM			2.02.40-6.e6				

	No Cluster		No VM				
			LVM	2.02.46-8.a05			
	RedHat Cluster Suite	2.0.115-1	No VM				
LVM			2.02.46-8.a05				
Red Hat Enterprise Linux 5.4 IA32 /x86 Processors 2.6.18-164.el5 2.6.18-164.el5PAE	Lifemaker (*114)	6.4	No VM - OR - 2.02.46-8.a05				
		7.0		91	91	91	
		7.1		91	91	91	
		7.2		97	97	97	
		7.3		97	97	97	
		7.4		97	97	97	
		7.5		97	97	97	
		8		97	97	97	
		8.1.1		104	104	104	
		8.1.2		105	105	105	
		8.2.0		107	107	107	
		8.2.1		108	108	108	
		8.3.0		109	109	109	
		8.3.1		110	110	110	
		8.3.2		111	111	111	
		8.4.0		112	112	112	
		8.4.1		113	113	113	
		9.0.0		115	115	115	
		9.0.1		116	116	116	
		9.0.2		118	118	118	
		9.1		121	121	121	
		9.1.1		126	126	126	
		9.1.2		129	129	129	
		9.2		130	130	130	
9.2.1	131	131	131				
9.2.2	133	133	133				
Red Hat Enterprise Linux 5.4 Itanium / IA64 Processors 2.6.18-164.el5	No Cluster		No VM				
			LVM	2.02.46-8.a05			
	RedHat Cluster Suite	2.0.115-1	No VM				
LVM			2.02.46-8.a05				
Red Hat Enterprise Linux 5.4 AMD64 and EM64T Processors 2.6.18-164.el5	Lifemaker (*114)	6.4	No VM - OR - 2.02.46-8.a05				
		7.0		91	91	91	
		7.1		91	91	91	
		7.2		97	97	97	
		7.3		97	97	97	
		7.4		97	97	97	
		7.5		97	97	97	
		8		97	97	97	
		8.1.1		104	104	104	
		8.1.2		105	105	105	
		8.2.0		107	107	107	
		8.2.1		108	108	108	
		8.3.0		109	109	109	
		8.3.1		110	110	110	
		8.3.2		111	111	111	
		8.4.0		112	112	112	
		8.4.1		113	113	113	
		9.0.0		115	115	115	
		9.0.1		116	116	116	
		9.0.2		118	118	118	
		9.1		121	121	121	
		9.1.1		126	126	126	
		9.1.2		129	129	129	
		9.2		130	130	130	
9.2.1	131	131	131				
9.2.2	133	133	133				

	No Cluster	No VM							
		LVM	2.02.56-8.e5						
Red Hat Enterprise Linux 5.5 IA32 / x86 Processors 2.6.18-194.e5 2.6.18-194.e5PAE	Lifemaker (*114)	6.4	No VM - OR - 2.02.56-8.e5						
		7.0							
		7.1		91	91	91			
		7.2		97	97	97			
		7.3		97	97	97			
		7.4		97	97	97			
		7.5		97	97	97			
		8		97	97	97			
		8.1.1		104	104	104			
		8.1.2		105	105	105			
		8.2.0		107	107	107			
		8.2.1		108	108	108			
		8.3.0		109	109	109			
		8.3.1		110	110	110			
		8.3.2		111	111	111			
		8.4.0		112	112	112			
		8.4.1		113	113	113			
		9.0.0		115	115	115			
		9.0.1		116	116	116			
		9.0.2		118	118	118			
		9.1		121	121	121			
		9.1.1		126	126	126			
		9.1.2		129	129	129			
		9.2		130	130	130			
		9.2.1		131	131	131			
		9.2.2		133	133	133			
		Red-Hat Cluster Suite		No VM		101	101	101	
				LVM	2.02.56-8.e5	101	101	101	
		Red Hat Enterprise Linux 5.5 Itanium / IA64 Processors 2.6.18-194.e5		No Cluster	No VM				
					LVM	2.02.56-8.e5			
				Red-Hat Cluster Suite	No VM				
				LVM	2.02.56-8.e5				
		Red Hat Enterprise Linux 5.5 AMD64 and EM64T Processors 2.6.18-194.e5		Lifemaker (*114)	6.4	No VM - OR - 2.02.56-8.e5			
	7.0								
7.1	97		97		97				
7.2	97		97		97				
7.3	97		97		97				
7.4	97		97		97				
7.5	97		97		97				
8	97		97		97				
8.1.1	104		104		104				
8.1.2	105		105		105				
8.2.0	107		107		107				
8.2.1	108		108		108				
8.3.0	109		109		109				
8.3.1	110		110		110				
8.3.2	111		111		111				
8.4.0	112		112		112				
8.4.1	113		113		113				
9.0.0	115		115		115				
9.0.1	116		116		116				
9.0.2	118		118		118				
9.1	121		121		121				
9.1.1	126		126		126				
9.1.2	129		129		129				
9.2	130		130		130				
9.2.1	131		131		131				
9.2.2	133		133		133				
Red-Hat Cluster Suite	No VM		101		101		101		
	LVM		2.02.56-8.e5		101		101	101	

	No Cluster	No VM					
		LVM	2.02.74.5.eS				
			2.02.84.3.eS				
Red Hat Enterprise Linux 5.6 x32 i686 Processors 2.6.18-238.eS 2.6.18-238.eSFAE	Red-Hat Cluster Suite	No VM		101	101	101	
		LVM	2.02.74.5.eS	101	101	101	
	Lifeline (114)	6.4	No VM				
		7.0	No VM				
		7.1	No VM				
		7.2	No VM				
		7.3	No VM				
		7.4	No VM		97, 101	97, 101	97, 101
		7.5	No VM		97, 101	97, 101	97, 101
		8	No VM		97, 101	97, 101	97, 101
		8.1.1	No VM		101, 104	101, 104	101, 104
		8.1.2	No VM		101, 105	101, 105	101, 105
		8.2.0	No VM		101, 107	101, 107	101, 107
		8.2.1	No VM		101, 108	101, 108	101, 108
		8.3.0	No VM		101, 109	101, 109	101, 109
		8.3.1	No VM		101, 110	101, 110	101, 110
		8.3.2	No VM		101, 111	101, 111	101, 111
		8.4.0	No VM		101, 112	101, 112	101, 112
		8.4.1	No VM		101, 113	101, 113	101, 113
		9.0.0	No VM		101, 115	101, 115	101, 115
		9.0.1	No VM		101, 116	101, 116	101, 116
		9.0.2	No VM		101, 118	101, 118	101, 118
		9.1	No VM		101, 121	101, 121	101, 121
		9.1.1	No VM		101, 126	101, 126	101, 126
		9.1.2	No VM		101, 129	101, 129	101, 129
	9.2	No VM		101, 130	101, 130	101, 130	
	9.2.1	No VM		101, 131	101, 131	101, 131	
	9.2.2	No VM		101, 133	101, 133	101, 133	
	Red Hat Enterprise Linux 5.6 Itanium i686 Processors 2.6.18-238.eS	No Cluster	No VM				
			LVM	2.02.74.5.eS			
				2.02.84.3.eS			
	Red-Hat Cluster Suite	No VM					
	LVM	2.02.74.5.eS					
Red Hat Enterprise Linux 5.6 AMD64 and EM64T Processors 2.6.18-238.eS	No Cluster	No VM					
		LVM	2.02.74.5.eS				
			2.02.84.3.eS				
	Red-Hat Cluster Suite	No VM		101	101	101	
		LVM	2.02.74.5.eS	101	101	101	
	Lifeline (114)	6.4	No VM				
		7.0	No VM				
		7.1	No VM				
		7.2	No VM				
		7.3	No VM				
		7.4	No VM		97, 101	97, 101	97, 101
		7.5	No VM		97, 101	97, 101	97, 101
		8	No VM		97, 101	97, 101	97, 101
		8.1.1	No VM		101, 104	101, 104	101, 104
		8.1.2	No VM		101, 105	101, 105	101, 105
		8.2.0	No VM		101, 107	101, 107	101, 107
		8.2.1	No VM		101, 108	101, 108	101, 108
		8.3.0	No VM		101, 109	101, 109	101, 109
		8.3.1	No VM		101, 110	101, 110	101, 110
		8.3.2	No VM		101, 111	101, 111	101, 111
		8.4.0	No VM		101, 112	101, 112	101, 112
		8.4.1	No VM		101, 113	101, 113	101, 113
		9.0.0	No VM		101, 115	101, 115	101, 115
		9.0.1	No VM		101, 116	101, 116	101, 116
		9.0.2	No VM		101, 118	101, 118	101, 118
		9.1	No VM		101, 121	101, 121	101, 121
		9.1.1	No VM		101, 126	101, 126	101, 126
		9.1.2	No VM		101, 129	101, 129	101, 129
	9.2	No VM		101, 130	101, 130	101, 130	
	9.2.1	No VM		101, 131	101, 131	101, 131	
	9.2.2	No VM		101, 133	101, 133	101, 133	

	No Cluster	No VM		101	101	101	
		LVM	2.02.84.6.eS				
<b>Red Hat Enterprise Linux 5.7</b> IA32 / x86 Processors 2.6.18-274.el5 2.6.18-274.el5PAE	RedHat Cluster Suite 2.0.115-85	No VM		101	101	101	
		LVM	2.02.84.6.eS	101	101	101	
	Lifekeeper (*114)	LVM 2.02.84.6.eS	No VM		101	101	101
			LVM	2.02.84.6.eS	101	101	101
			7.3		97, 101	97, 101	97, 101
			7.4		97, 101	97, 101	97, 101
			7.5		97, 101	97, 101	97, 101
			8		97, 101	97, 101	97, 101
			8.1.1		101, 104	101, 104	101, 104
			8.1.2		101, 105	101, 105	101, 105
			8.2.0		101, 107	101, 107	101, 107
			8.2.1		101, 108	101, 108	101, 108
			8.3.0		101, 109	101, 109	101, 109
			8.3.1		101, 110	101, 110	101, 110
			8.3.2		101, 111	101, 111	101, 111
			8.4.0		101, 112	101, 112	101, 112
			8.4.1		101, 113	101, 113	101, 113
			9.0.0		101, 115	101, 115	101, 115
			9.0.1		101, 116	101, 116	101, 116
			9.0.2		101, 118	101, 118	101, 118
			9.1		101, 121	101, 121	101, 121
			9.1.1		101, 126	101, 126	101, 126
	9.1.2		101, 129	101, 129	101, 129		
	9.2		101, 130	101, 130	101, 130		
	9.2.1		101, 131	101, 131	101, 131		
	9.2.2		101, 133	101, 133	101, 133		
	<b>Red Hat Enterprise Linux 5.7</b> Itanium / IA64 Processors 2.6.18-274.el5	No Cluster	No VM				
		LVM	2.02.84.6.eS				
RedHat Cluster Suite 2.0.115-85		No VM					
	LVM	2.02.84.6.eS					
<b>Red Hat Enterprise Linux 5.7</b> AMD64 and EM64T Processors 2.6.18-274.el5	No Cluster	No VM		101	101	101	
		LVM	2.02.84.6.eS	101	101	101	
	Lifekeeper (*114)	LVM 2.02.84.6.eS	No VM		101	101	101
			LVM	2.02.84.6.eS	101	101	101
			7.3		97, 101	97, 101	97, 101
			7.4		97, 101	97, 101	97, 101
			7.5		97, 101	97, 101	97, 101
			8		97, 101	97, 101	97, 101
			8.1.1		101, 104	101, 104	101, 104
			8.1.2		101, 105	101, 105	101, 105
			8.2.0		101, 107	101, 107	101, 107
			8.2.1		101, 108	101, 108	101, 108
			8.3.0		101, 109	101, 109	101, 109
			8.3.1		101, 110	101, 110	101, 110
			8.3.2		101, 111	101, 111	101, 111
			8.4.0		101, 112	101, 112	101, 112
			8.4.1		101, 113	101, 113	101, 113
			9.0.0		101, 115	101, 115	101, 115
			9.0.1		101, 116	101, 116	101, 116
			9.0.2		101, 118	101, 118	101, 118
			9.1		101, 121	101, 121	101, 121
			9.1.1		101, 126	101, 126	101, 126
	9.1.2		101, 129	101, 129	101, 129		
	9.2		101, 130	101, 130	101, 130		
	9.2.1		101, 131	101, 131	101, 131		
	9.2.2		101, 133	101, 133	101, 133		

Red Hat Enterprise Linux 5.8 IA32 / x86 Processors 2.6.18-308.el5 2.6.18-308.el5PAE	No Cluster		No VM						
			LVM	2.02.88-7.el5					
	RedHat Cluster Suite		No VM		101	101	101		
	2.0.115-96			LVM	2.02.88-7.el5	101	101	101	
	7.5					97,101	97,101	97,101	
	8					97,101	97,101	97,101	
	8.1.1					101,104	101,104	101,104	
	8.1.2					101,105	101,105	101,105	
	8.2.0					101,107	101,107	101,107	
	8.2.1					101,108	101,108	101,108	
	8.3.0					101,109	101,109	101,109	
	8.3.1					101,110	101,110	101,110	
	8.3.2					101,111	101,111	101,111	
	8.4.0					101,112	101,112	101,112	
	8.4.1					101,113	101,113	101,113	
	9.0.0					101,115	101,115	101,115	
	9.0.1					101,116	101,116	101,116	
	9.0.2					101,118	101,118	101,118	
	9.1					101,121	101,121	101,121	
	9.1.1					101,126	101,126	101,126	
	9.1.2					101,129	101,129	101,129	
9.2					101,130	101,130	101,130		
9.2.1					101,131	101,131	101,131		
9.2.2					101,133	101,133	101,133		
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		No VM						
	2.0.115-96			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		No VM		101	101	101	
		2.0.115-96			LVM	2.02.88-7.el5	101	101	101
		7.5					97,101	97,101	97,101
		8					97,101	97,101	97,101
		8.1.1					101,104	101,104	101,104
		8.1.2					101,105	101,105	101,105
		8.2.0					101,107	101,107	101,107
		8.2.1					101,108	101,108	101,108
		8.3.0					101,109	101,109	101,109
		8.3.1					101,110	101,110	101,110
		8.3.2					101,111	101,111	101,111
		8.4.0					101,112	101,112	101,112
		8.4.1					101,113	101,113	101,113
		9.0.0					101,115	101,115	101,115
		9.0.1					101,116	101,116	101,116
9.0.2						101,118	101,118	101,118	
9.1						101,121	101,121	101,121	
9.1.1						101,126	101,126	101,126	
9.1.2						101,129	101,129	101,129	
9.2					101,130	101,130	101,130		
9.2.1					101,131	101,131	101,131		
9.2.2					101,133	101,133	101,133		
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		No VM		101	101	101		
	2.0.115-109			LVM	2.02.88-10.el5	101	101	101	
	7.5					97,101	97,101	97,101	
	8					97,101	97,101	97,101	
	8.1.1					101,104	101,104	101,104	
	8.1.2					101,105	101,105	101,105	
	8.2.0					101,107	101,107	101,107	
	8.2.1					101,108	101,108	101,108	
	8.3.0					101,109	101,109	101,109	
	8.3.1					101,110	101,110	101,110	
	8.3.2					101,111	101,111	101,111	
	8.4.0					101,112	101,112	101,112	
	8.4.1					101,113	101,113	101,113	
	9.0.0					101,115	101,115	101,115	
	9.0.1					101,116	101,116	101,116	
	9.0.2					101,118	101,118	101,118	
	9.1					101,121	101,121	101,121	
	9.1.1					101,126	101,126	101,126	
	9.1.2					101,129	101,129	101,129	
9.2					101,130	101,130	101,130		
9.2.1					101,131	101,131	101,131		
9.2.2					101,133	101,133	101,133		
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		No VM		101	101	101		
	2.0.115-109			LVM	2.02.88-10.el5	101	101	101	
	7.5					97,101	97,101	97,101	
	8					97,101	97,101	97,101	
	8.1.1					101,104	101,104	101,104	
	8.1.2					101,105	101,105	101,105	
	8.2.0					101,107	101,107	101,107	
	8.2.1					101,108	101,108	101,108	
	8.3.0					101,109	101,109	101,109	
	8.3.1					101,110	101,110	101,110	
	8.3.2					101,111	101,111	101,111	
	8.4.0					101,112	101,112	101,112	
	8.4.1					101,113	101,113	101,113	
	9.0.0					101,115	101,115	101,115	
	9.0.1					101,116	101,116	101,116	
	9.0.2					101,118	101,118	101,118	
	9.1					101,121	101,121	101,121	
	9.1.1					101,126	101,126	101,126	
	9.1.2					101,129	101,129	101,129	
9.2					101,130	101,130	101,130		
9.2.1					101,131	101,131	101,131		
9.2.2					101,133	101,133	101,133		

Red Hat Enterprise Linux 5.10 IA32 / x86 Processors 2.6.18-371.el5 2.6.18-371.el5PAE	No Cluster	No VM		101	101	101	
		LVM	2.02.88-12.el5	101	101	101	
	RedHat Cluster Suite	2.0.115-118	No VM		101	101	101
			LVM	2.02.88-12.el5	101	101	101
	Lifeline (*)114	7.5	No VM -OR- 2.02.88-12.el5	97_101	97_101	97_101	
		8		97_101	97_101	97_101	
		8.1.1		101_104	101_104	101_104	
		8.1.2		101_105	101_105	101_105	
		8.2.0		101_107	101_107	101_107	
		8.2.1		101_108	101_108	101_108	
		8.3.0		101_109	101_109	101_109	
		8.3.1		101_110	101_110	101_110	
		8.3.2		101_111	101_111	101_111	
		8.4.0		101_112	101_112	101_112	
		8.4.1		101_113	101_113	101_113	
		9.0.0		101_115	101_115	101_115	
		9.0.1		101_116	101_116	101_116	
		9.0.2		101_118	101_118	101_118	
		9.1		101_121	101_121	101_121	
		9.1.1		101_126	101_126	101_126	
9.1.2		101_129		101_129	101_129		
9.2		101_130		101_130	101_130		
9.2.1	101_131	101_131	101_131				
9.2.2	101_133	101_133	101_133				
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		101	101	101	
		LVM	2.02.88-12.el5	101	101	101	
	RedHat Cluster Suite	2.0.115-118	No VM		101	101	101
			LVM	2.02.88-12.el5	101	101	101
	Lifeline (*)114	7.5	No VM -OR- 2.02.88-12.el5	97_101	97_101	97_101	
		8		97_101	97_101	97_101	
		8.1.1		101_104	101_104	101_104	
		8.1.2		101_105	101_105	101_105	
		8.2.0		101_107	101_107	101_107	
		8.2.1		101_108	101_108	101_108	
		8.3.0		101_109	101_109	101_109	
		8.3.1		101_110	101_110	101_110	
		8.3.2		101_111	101_111	101_111	
		8.4.0		101_112	101_112	101_112	
		8.4.1		101_113	101_113	101_113	
		9.0.0		101_115	101_115	101_115	
		9.0.1		101_116	101_116	101_116	
		9.0.2		101_118	101_118	101_118	
		9.1		101_121	101_121	101_121	
		9.1.1		101_126	101_126	101_126	
9.1.2		101_129		101_129	101_129		
9.2		101_130		101_130	101_130		
9.2.1	101_131	101_131	101_131				
9.2.2	101_133	101_133	101_133				
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 IA32 / x86 Processors 2.6.18-398.el5 2.6.18-398.el5PAE	No Cluster	No VM		101	101	101	
		LVM	2.02.88-13.el5	101	101	101	
	RedHat Cluster Suite	2.0.115-124	No VM		101	101	101
			LVM	2.02.88-13.el5	101	101	101
	Lifeline (*)114	7.5	No VM -OR- 2.02.88-13.el5	97_101	97_101	97_101	
		8		97_101	97_101	97_101	
		8.1.1		101_104	101_104	101_104	
		8.1.2		101_105	101_105	101_105	
		8.2.0		101_107	101_107	101_107	
		8.2.1		101_108	101_108	101_108	
		8.3.0		101_109	101_109	101_109	
		8.3.1		101_110	101_110	101_110	
		8.3.2		101_111	101_111	101_111	
		8.4.0		101_112	101_112	101_112	
		8.4.1		101_113	101_113	101_113	
		9.0.0		101_115	101_115	101_115	
		9.0.1		101_116	101_116	101_116	
		9.0.2		101_118	101_118	101_118	
		9.1		101_121	101_121	101_121	
		9.1.1		101_126	101_126	101_126	
9.1.2		101_129		101_129	101_129		
9.2		101_130		101_130	101_130		
9.2.1	101_131	101_131	101_131				
9.2.2	101_133	101_133	101_133				
Red Hat Enterprise Linux 5.11 AMD64 and EM64T Processors 2.6.18-398.el5	No Cluster	No VM		101	101	101	
		LVM	2.02.88-13.el5	101	101	101	
RedHat Cluster Suite	2.0.115-124	No VM		101	101	101	
		LVM	2.02.88-13.el5	101	101	101	
Red Hat Enterprise Linux 5.11 AMD64 and EM64T Processors 2.6.18-398.el5	No Cluster	No VM		101	101	101	
		LVM	2.02.88-13.el5	101	101	101	
	RedHat Cluster Suite	2.0.115-124	No VM		101	101	101
			LVM	2.02.88-13.el5	101	101	101
	Lifeline (*)114	7.5	No VM -OR- 2.02.88-13.el5	97_101	97_101	97_101	
		8		97_101	97_101	97_101	
		8.1.1		101_104	101_104	101_104	
		8.1.2		101_105	101_105	101_105	
		8.2.0		101_107	101_107	101_107	
		8.2.1		101_108	101_108	101_108	
		8.3.0		101_109	101_109	101_109	
		8.3.1		101_110	101_110	101_110	
		8.3.2		101_111	101_111	101_111	
		8.4.0		101_112	101_112	101_112	
		8.4.1		101_113	101_113	101_113	
		9.0.0		101_115	101_115	101_115	
		9.0.1		101_116	101_116	101_116	
		9.0.2		101_118	101_118	101_118	
		9.1		101_121	101_121	101_121	
		9.1.1		101_126	101_126	101_126	
9.1.2		101_129		101_129	101_129		
9.2		101_130		101_130	101_130		
9.2.1	101_131	101_131	101_131				
9.2.2	101_133	101_133	101_133				

Red Hat Enterprise Linux 5.11 (Security Fx) IA32 x86 Processors 2.6.18-19.el5 2.6.18-116.el5PAE	No Cluster	No VM		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	RedHat Cluster Suite	No VM		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	Lifeline ("114)	7.5	No VM -OR- 2.02.88-13.el5	97,101	97,101	97,101
		8		97,101	97,101	97,101
		8.1.1		101,104	101,104	101,104
		8.1.2		101,105	101,105	101,105
		8.2.0		101,107	101,107	101,107
		8.2.1		101,108	101,108	101,108
		8.3.0		101,109	101,109	101,109
		8.3.1		101,110	101,110	101,110
		8.3.2		101,111	101,111	101,111
		8.4.0		101,112	101,112	101,112
		8.4.1		101,113	101,113	101,113
		9.0.0		101,115	101,115	101,115
		9.0.1		101,116	101,116	101,116
		9.0.2		101,118	101,118	101,118
		9.1		101,121	101,121	101,121
		9.1.1		101,126	101,126	101,126
9.1.2		101,129		101,129	101,129	
9.2		101,130		101,130	101,130	
9.2.1	101,131	101,131	101,131			
9.2.2	101,133	101,133	101,133			
Red Hat Enterprise Linux 5.11 (Security Fx) Itanium / IA64 Processors 2.6.18-116.el5	No Cluster	No VM				
	LVM	2.02.88-13.el5				
RedHat Cluster Suite	No VM					
	LVM	2.02.88-13.el5				
Red Hat Enterprise Linux 5.11 (Security Fx) AMD64 and EM64T Processors 2.6.18-116.el5	No Cluster	No VM		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	RedHat Cluster Suite	No VM		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	Lifeline ("114)	7.5	No VM -OR- 2.02.88-13.el5	97,101	97,101	97,101
		8		97,101	97,101	97,101
		8.1.1		101,104	101,104	101,104
		8.1.2		101,105	101,105	101,105
		8.2.0		101,107	101,107	101,107
		8.2.1		101,108	101,108	101,108
		8.3.0		101,109	101,109	101,109
		8.3.1		101,110	101,110	101,110
		8.3.2		101,111	101,111	101,111
		8.4.0		101,112	101,112	101,112
		8.4.1		101,113	101,113	101,113
		9.0.0		101,115	101,115	101,115
		9.0.1		101,116	101,116	101,116
		9.0.2		101,118	101,118	101,118
		9.1		101,121	101,121	101,121
		9.1.1		101,126	101,126	101,126
9.1.2		101,129		101,129	101,129	
9.2		101,130		101,130	101,130	
9.2.1	101,131	101,131	101,131			
9.2.2	101,133	101,133	101,133			
Red Hat Enterprise Linux 5.11 (Security Fx) Itanium / IA64 Processors 2.6.18-119.el5	No Cluster	No VM				
	LVM	2.02.88-13.el5				
RedHat Cluster Suite	No VM					
	LVM	2.02.88-13.el5				
Red Hat Enterprise Linux 5.11 (Security Fx) AMD64 and EM64T Processors 2.6.18-119.el5	No Cluster	No VM		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	RedHat Cluster Suite	No VM		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	Lifeline ("114)	7.5	No VM -OR- 2.02.88-13.el5	97,101	97,101	97,101
		8		97,101	97,101	97,101
		8.1.1		101,104	101,104	101,104
		8.1.2		101,105	101,105	101,105
		8.2.0		101,107	101,107	101,107
		8.2.1		101,108	101,108	101,108
		8.3.0		101,109	101,109	101,109
		8.3.1		101,110	101,110	101,110
		8.3.2		101,111	101,111	101,111
		8.4.0		101,112	101,112	101,112
		8.4.1		101,113	101,113	101,113
		9.0.0		101,115	101,115	101,115
		9.0.1		101,116	101,116	101,116
		9.0.2		101,118	101,118	101,118
		9.1		101,121	101,121	101,121
		9.1.1		101,126	101,126	101,126
9.1.2		101,129		101,129	101,129	
9.2		101,130		101,130	101,130	
9.2.1	101,131	101,131	101,131			
9.2.2	101,133	101,133	101,133			



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		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	RedHat Cluster Suite	No VM		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	Lifemaker (*114)	7.5	No VM -OR- 2.02.88-13.el5	97,101	97,101	97,101
		8		97,101	97,101	97,101
		8.1.1		101,104	101,104	101,104
		8.1.2		101,105	101,105	101,105
		8.2.0		101,107	101,107	101,107
		8.2.1		101,108	101,108	101,108
		8.3.0		101,109	101,109	101,109
		8.3.1		101,110	101,110	101,110
		8.3.2		101,111	101,111	101,111
		8.4.0		101,112	101,112	101,112
		8.4.1		101,113	101,113	101,113
		9.0.0		101,115	101,115	101,115
		9.0.1		101,116	101,116	101,116
		9.0.2		101,118	101,118	101,118
		9.1		101,121	101,121	101,121
		9.1.1		101,126	101,126	101,126
9.1.2		101,129		101,129	101,129	
9.2		101,130		101,130	101,130	
9.2.1	101,131	101,131	101,131			
9.2.2	101,133	101,133	101,133			
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	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		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	RedHat Cluster Suite	No VM		101	101	101
		LVM	2.02.88-13.el5	101	101	101
	Lifemaker (*114)	7.5	No VM -OR- 2.02.88-13.el5	97,101	97,101	97,101
		8		97,101	97,101	97,101
		8.1.1		101,104	101,104	101,104
		8.1.2		101,105	101,105	101,105
		8.2.0		101,107	101,107	101,107
		8.2.1		101,108	101,108	101,108
		8.3.0		101,109	101,109	101,109
		8.3.1		101,110	101,110	101,110
		8.3.2		101,111	101,111	101,111
		8.4.0		101,112	101,112	101,112
		8.4.1		101,113	101,113	101,113
		9.0.0		101,115	101,115	101,115
		9.0.1		101,116	101,116	101,116
		9.0.2		101,118	101,118	101,118
		9.1		101,121	101,121	101,121
		9.1.1		101,126	101,126	101,126
9.1.2		101,129		101,129	101,129	
9.2		101,130		101,130	101,130	
9.2.1	101,131	101,131	101,131			
9.2.2	101,133	101,133	101,133			
Red Hat Enterprise Linux 6 IA32 / x86 Processors 2.6.32-71.el6.el8	No Cluster	No VM		117	117	117
		LVM	2.02.72-8.el6	117	117	117
	RedHat Cluster Suite	No VM		117	117	117
		LVM	2.02.72-8.el6	117	117	117
	Lifemaker (*114)	7.3	No VM -OR- 2.02.72-8.el6	97,101,117	97,101,117	97,101,117
		7.4		97,101,117	97,101,117	97,101,117
		7.5		97,101,117	97,101,117	97,101,117
		8		97,101,117	97,101,117	97,101,117
		8.1.1		101,104,117	101,104,117	101,104,117
		8.1.2		101,105,117	101,105,117	101,105,117
		8.2.0		101,107,117	101,107,117	101,107,117
		8.2.1		101,108,117	101,108,117	101,108,117
		8.3.0		101,109,117	101,109,117	101,109,117
		8.3.1		101,110,117	101,110,117	101,110,117
		8.3.2		101,111,117	101,111,117	101,111,117
		8.4.0		101,112,117	101,112,117	101,112,117
		8.4.1		101,113,117	101,113,117	101,113,117
		9.0.0		101,115,117	101,115,117	101,115,117
		9.0.1		101,116,117	101,116,117	101,116,117
		9.0.2		101,118	101,118	101,118
9.1		101,121		101,121	101,121	
9.1.1		101,126		101,126	101,126	
9.1.2	101,129	101,129	101,129			
9.2	101,130	101,130	101,130			
9.2.1	101,131	101,131	101,131			
9.2.2	101,133	101,133	101,133			
9.3	101,135	101,135	101,135			
Red Hat Enterprise Linux 6 AMD64 and EM64T Processors 2.6.32-71.el6.el8_4	No Cluster	No VM		117	117	117
		LVM	2.02.72-8.el6	117	117	117
	RedHat Cluster Suite	No VM		117	117	117
		LVM	2.02.72-8.el6	117	117	117
	Lifemaker (*114)	7.3	No VM -OR- 2.02.72-8.el6	97,101,117	97,101,117	97,101,117
		7.4		97,101,117	97,101,117	97,101,117
		7.5		97,101,117	97,101,117	97,101,117
		8		97,101,117	97,101,117	97,101,117
		8.1.1		101,104,117	101,104,117	101,104,117
		8.1.2		101,105,117	101,105,117	101,105,117
		8.2.0		101,107,117	101,107,117	101,107,117
		8.2.1		101,108,117	101,108,117	101,108,117
		8.3.0		101,109,117	101,109,117	101,109,117
		8.3.1		101,110,117	101,110,117	101,110,117
		8.3.2		101,111,117	101,111,117	101,111,117
		8.4.0		101,112,117	101,112,117	101,112,117
		8.4.1		101,113,117	101,113,117	101,113,117
		9.0.0		101,115,117	101,115,117	101,115,117
		9.0.1		101,116,117	101,116,117	101,116,117
		9.0.2		101,117,118	101,117,118	101,117,118
9.1		101,117,121		101,117,121	101,117,121	
9.1.1		101,117,126		101,117,126	101,117,126	
9.1.2	101,117,129	101,117,129	101,117,129			
9.2	101,117,130	101,117,130	101,117,130			
9.2.1	101,117,131	101,117,131	101,117,131			
9.2.2	101,117,133	101,117,133	101,117,133			
9.3	101,117,135	101,117,135	101,117,135			



Red Hat Enterprise Linux 8.3 i32 / x86 Processors 2.6.32-279.el8.x86_64	No Cluster	No VM				
		LVM	2.02.95-10.el8	117	117	117
	RedHat Cluster Suite	No VM				
		LVM	2.02.95-10.el8	117	117	117
	Lifemaker (*114)	7.5	No VM CR - 2.02.95-10.el8	97, 101, 117	97, 101, 117	97, 101, 117
		8		97, 101, 117	97, 101, 117	97, 101, 117
		8.1.1		101, 104, 117	101, 104, 117	101, 104, 117
		8.1.2		101, 105, 117	101, 105, 117	101, 105, 117
		8.2.0		101, 107, 117	101, 107, 117	101, 107, 117
		8.2.1		101, 108, 117	101, 108, 117	101, 108, 117
		8.3.0		101, 109, 117	101, 109, 117	101, 109, 117
		8.3.1		101, 110, 117	101, 110, 117	101, 110, 117
		8.3.2		101, 111, 117	101, 111, 117	101, 111, 117
		8.4.0		101, 112, 117	101, 112, 117	101, 112, 117
		8.4.1		101, 113, 117	101, 113, 117	101, 113, 117
		9.0.0		101, 115, 117	101, 115, 117	101, 115, 117
		9.0.1		101, 116, 117	101, 116, 117	101, 116, 117
		9.0.2		101, 117, 118	101, 117, 118	101, 117, 118
		9.1		101, 117, 121	101, 117, 121	101, 117, 121
		9.1.1		101, 117, 126	101, 117, 126	101, 117, 126
9.1.2		101, 117, 129		101, 117, 129	101, 117, 129	
9.2		101, 117, 130		101, 117, 130	101, 117, 130	
9.2.1		101, 117, 131		101, 117, 131	101, 117, 131	
9.2.2	101, 117, 133	101, 117, 133	101, 117, 133			
9.3	101, 117, 135	101, 117, 135	101, 117, 135			
Red Hat Enterprise Linux 8.3 AMD64 and EM64T Processors 2.6.32-279.el8.x86_64	No Cluster	No VM				
		LVM	2.02.95-10.el8	117	117	117
	RedHat Cluster Suite	No VM				
		LVM	2.02.95-10.el8	117	117	117
	Lifemaker (*114)	7.5	No VM CR - 2.02.95-10.el8	97, 101, 117	97, 101, 117	97, 101, 117
		8		97, 101, 117	97, 101, 117	97, 101, 117
		8.1.1		101, 104, 117	101, 104, 117	101, 104, 117
		8.1.2		101, 105, 117	101, 105, 117	101, 105, 117
		8.2.0		101, 107, 117	101, 107, 117	101, 107, 117
		8.2.1		101, 108, 117	101, 108, 117	101, 108, 117
		8.3.0		101, 109, 117	101, 109, 117	101, 109, 117
		8.3.1		101, 110, 117	101, 110, 117	101, 110, 117
		8.3.2		101, 111, 117	101, 111, 117	101, 111, 117
		8.4.0		101, 112, 117	101, 112, 117	101, 112, 117
		8.4.1		101, 113, 117	101, 113, 117	101, 113, 117
		9.0.0		101, 115, 117	101, 115, 117	101, 115, 117
		9.0.1		101, 116, 117	101, 116, 117	101, 116, 117
		9.0.2		101, 117, 118	101, 117, 118	101, 117, 118
		9.1		101, 117, 121	101, 117, 121	101, 117, 121
		9.1.1		101, 117, 126	101, 117, 126	101, 117, 126
9.1.2		101, 117, 129		101, 117, 129	101, 117, 129	
9.2		101, 117, 130		101, 117, 130	101, 117, 130	
9.2.1		101, 117, 131		101, 117, 131	101, 117, 131	
9.2.2	101, 117, 133	101, 117, 133	101, 117, 133			
9.3	101, 117, 135	101, 117, 135	101, 117, 135			
GPFS	3.6.0.0	No VM	101, 106	101, 106	101, 106	
Red Hat Enterprise Linux 8.4 i32 / x86 Processors 2.6.32-358.el8.x86_64	No Cluster	No VM				
		LVM	2.02.98-9.el8	117,124	117,124	117,124
	RedHat Cluster Suite	No VM				
		LVM	2.02.98-9.el8	101,117,124	101,117,124	101,117,124
	Lifemaker (*114)	8.1.2	No VM CR - 2.02.98-9.el8	101,	101,	101,
		8.2.0		105,117,124	105,117,124	105,117,124
		8.2.1		101,	101,	101,
		8.3.0		107,117,124	107,117,124	107,117,124
		8.3.1		101,	101,	101,
		8.3.2		108,117,124	108,117,124	108,117,124
		8.4.0		101,	101,	101,
		8.4.1		109,117,124	109,117,124	109,117,124
		9.0.0		101,	101,	101,
		9.0.1		110,117,124	110,117,124	110,117,124
		9.0.2		101,	101,	101,
		9.1		111,117,124	111,117,124	111,117,124
		9.1.1		112,117,124	112,117,124	112,117,124
		9.1.2		113,117,124	113,117,124	113,117,124
		9.2		101,	101,	101,
		9.2.1		115,117,124	115,117,124	115,117,124
9.2.2		116,117,124		116,117,124	116,117,124	
9.3		101,		101,	101,	
Red Hat Enterprise Linux 8.4 AMD64 and EM64T Processors 2.6.32-358.el8.x86_64		No Cluster		No VM		
	LVM		2.02.98-9.el8	117,124	117,124	117,124
	RedHat Cluster Suite	No VM				
		LVM	2.02.98-9.el8	101,117,124	101,117,124	101,117,124
	Lifemaker (*114)	8.1.2	No VM CR - 2.02.98-9.el8	101,	101,	101,
		8.2.0		105,117,124	105,117,124	105,117,124
		8.2.1		101,	101,	101,
		8.3.0		107,117,124	107,117,124	107,117,124
		8.3.1		101,	101,	101,
		8.3.2		108,117,124	108,117,124	108,117,124
		8.4.0		101,	101,	101,
		8.4.1		109,117,124	109,117,124	109,117,124
		9.0.0		101,	101,	101,
		9.0.1		110,117,124	110,117,124	110,117,124
		9.0.2		101,	101,	101,
		9.1		111,117,124	111,117,124	111,117,124
		9.1.1		112,117,124	112,117,124	112,117,124
		9.1.2		113,117,124	113,117,124	113,117,124
		9.2		101,	101,	101,
		9.2.1		115,117,124	115,117,124	115,117,124
9.2.2		116,117,124		116,117,124	116,117,124	
9.3		101,		101,	101,	

Red Hat Enterprise Linux 6.5 IA32 / x86 Processors 2.6.32-431.el6.el6	No Cluster	No VM							
		LVM	2.02.100-8.el6	117,124	117,124	117,124			
	RedHat Cluster Suite	No VM		101	101	101			
		LVM	2.02.100-8.el6	101,117,124	101,117,124	101,117,124			
	Lifemaker (*114)	No VM - DR - 2.02.100-8.el6	8.2.1	101, 108,117,124	101, 108,117,124	101, 108,117,124			
			8.3.0	101, 109,117,124	101, 109,117,124	101, 109,117,124			
			8.3.1	101, 110,117,124	101, 110,117,124	101, 110,117,124			
			8.3.2	101, 111,117,124	101, 111,117,124	101, 111,117,124			
			8.4.0	101, 112,117,124	101, 112,117,124	101, 112,117,124			
			8.4.1	101, 113,117,124	101, 113,117,124	101, 113,117,124			
			9.0.0	101, 115,117,124	101, 115,117,124	101, 115,117,124			
			9.0.2	101, 116,117,124	101, 116,117,124	101, 116,117,124			
			9.1	101, 117,118,124	101, 117,118,124	101, 117,118,124			
			9.1.1	101, 121,124	101, 121,124	101, 121,124			
			9.1.2	101, 124,126	101, 124,126	101, 124,126			
			9.2	101, 124,129	101, 124,129	101, 124,129			
			9.2.1	101, 124,131	101, 124,131	101, 124,131			
			9.2.2	101, 124,133	101, 124,133	101, 124,133			
			9.3	101, 124,135	101, 124,135	101, 124,135			
			Red Hat Enterprise Linux 6.5 AMD64 and EM64T Processors 2.6.32-431.el6.el6_64	No Cluster	No VM				
					LVM	2.02.100-8.el6	117,124	117,124	117,124
	RedHat Cluster Suite	No VM		101	101	101			
		LVM		2.02.100-8.el6	101,117,124	101,117,124	101,117,124		
	Lifemaker (*114)	No VM - DR - 2.02.100-8.el6		8.2.1	101, 108,117,124	101, 108,117,124	101, 108,117,124		
				8.3.0	101, 109,117,124	101, 109,117,124	101, 109,117,124		
8.3.1				101, 110,117,124	101, 110,117,124	101, 110,117,124			
8.3.2				101, 111,117,124	101, 111,117,124	101, 111,117,124			
8.4.0				101, 112,117,124	101, 112,117,124	101, 112,117,124			
8.4.1				101, 113,117,124	101, 113,117,124	101, 113,117,124			
9.0.0				101, 115,117,124	101, 115,117,124	101, 115,117,124			
9.0.2				101, 116,117,124	101, 116,117,124	101, 116,117,124			
9.1				101, 117,118,124	101, 117,118,124	101, 117,118,124			
9.1.1				101, 121,124	101, 121,124	101, 121,124			
9.1.2				101, 124,126	101, 124,126	101, 124,126			
9.2				101, 124,129	101, 124,129	101, 124,129			
9.2.1				101, 124,131	101, 124,131	101, 124,131			
9.2.2				101, 124,133	101, 124,133	101, 124,133			
9.3				101, 124,135	101, 124,135	101, 124,135			
Red Hat Enterprise Linux 6.6 IA32 / x86 Processors 2.6.32-604.el6.el6				No Cluster	No VM				
					LVM	2.02.111-2.el6	117,124	117,124	117,124
	RedHat Cluster Suite	No VM		101	101	101			
		LVM		2.02.111-2.el6	101,117,124	101,117,124	101,117,124		
	Lifemaker (*114)	No VM - DR - 2.02.111-2.el6		8.3.2	101, 115,117,124	101, 115,117,124	101, 115,117,124		
				8.4.0	101, 112,117,124	101, 112,117,124	101, 112,117,124		
			8.4.1	101, 113,117,124	101, 113,117,124	101, 113,117,124			
			9.0.0	101, 115,117,124	101, 115,117,124	101, 115,117,124			
			9.0.1	101, 116,117,124	101, 116,117,124	101, 116,117,124			
			9.0.2	101, 117,118,124	101, 117,118,124	101, 117,118,124			
			9.1	101, 121,124	101, 121,124	101, 121,124			
			9.1.1	101, 124,126	101, 124,126	101, 124,126			
			9.1.2	101, 124,129	101, 124,129	101, 124,129			
			9.2	101, 124,130	101, 124,130	101, 124,130			
			9.2.1	101, 124,131	101, 124,131	101, 124,131			
			9.2.2	101, 124,133	101, 124,133	101, 124,133			
			9.3	101, 124,135	101, 124,135	101, 124,135			



Kernel 2.6.32-754.el6.x86_64	RedHat Cluster Suite	No VM		101
		LVM	2.02.143- 12.el6.x86_64	







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	Bunde 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-smp	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bunde 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-bigmp 2.6.16.60-0.42.5-warpae	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bunde 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	Bunde 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-smp 2.6.16.60-0.42.5-wen	No Cluster		No VM				
			LVM	2.02.17-7.19			
	Heartbeat	Bunde 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-bigmp 2.6.16.60-0.54.5-warpae	No Cluster		No VM				
			LVM	2.02.17-27.8			
	Heartbeat	Bunde 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	Bunde 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-wen	No Cluster		No VM				
			LVM	2.02.17-27.8			
	Heartbeat	Bunde 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-bigmp 2.6.16.60-0.85.1-warpae	No Cluster		No VM				
			LVM	2.02.17-7.30.1			
	Heartbeat	Bunde 2.1.4-0.24.9	No VM		93	93	93
			LVM	2.02.17-7.30.1	93	93	93
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	Bunde 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-smp 2.6.16.60-0.85.1-wen	No Cluster		No VM				
			LVM	2.02.17-7.30.1			
	Heartbeat	Bunde 2.1.4-0.24.9	No VM		93	93	93
			LVM	2.02.17-7.30.1	93	93	93
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-wen	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-wen	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-wen	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	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			
SUSE Linux Enterprise Server 11 (Service Pack 3) AMD64 / EM64T Processors 3.0.76-0.11-neh	GFFS	3.4.0.28	No VM	101, 106	101, 106	101, 106
		LVM	2.02.98-0.25.3			
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			
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-neh	No Cluster	No VM				
		LVM	2.02.98-0.33.1			
SUSE Linux Enterprise Server 11 (Service Pack 4) AMD64 / EM64T Processors (Security Fix) 3.0.101-108.68-default	No Cluster	No VM				136
		LVM	2.02.98-0.33.1			136
SUSE Linux Enterprise Server 12 AMD64 / EM64T Processors 3.12.28-4-default	No Cluster	No VM				
		LVM	2.02.98-48.8	125	125	125
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	125	125
SUSE Linux Enterprise Server 12 (Service Pack 1) AMD64 / EM64T Processors 3.12.59-60.45-neh	No Cluster	No VM				
		LVM	2.02.120-60.1	125	125	125
SUSE Linux Enterprise Server 12 (Service Pack 2) AMD64 / EM64T Processors 4.4.1-69-default	No Cluster	No VM				
		LVM	2.02.120-72.8	125	125	125
SUSE Linux Enterprise Server 12 (Service Pack 3) AMD64 / EM64T Processors 4.4.1-93.6.33-default	No Cluster	No VM				
		LVM	2.02.120-77.2	125, 132	125	125
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	125
SUSE Linux Enterprise Server 15 AMD64 / EM64T Processors 4.12.14-20-default	No Cluster	No VM				
		LVM	2.02.177-6.11			125
Oracle Unbreakable Enterprise Kernel 5.6 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 2.6.32-300.13.1.el5uk	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.el5uk	No Cluster	No VM				
		LVM	2.02.84-6.0.1.el5			
Oracle Unbreakable Enterprise Kernel 5.7 x86_64 Processors 2.6.32-300.13.1.el5uk	No Cluster	No VM				
		LVM	2.02.84-6.0.1.el5			
Oracle Unbreakable Enterprise Kernel 5.7 x86_64 Processors 2.6.32-300.27.1.el5uk	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.el5uk	No Cluster	No VM				
		LVM	2.02.88-7.0.1.el5			
Oracle Unbreakable Enterprise Kernel 5.8 x86_64 Processors 2.6.32-300.39.2.el5uk	No Cluster	No VM				
		LVM	2.02.88-7.0.1.el5			

Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors Kernel 2.6.39-200.23.1.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.87.6.a6	117	117	117
Oracle Unbreakable Enterprise Kernel 6.2 X64 / x86_64 Processors Kernel 2.6.39-200.23.2.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.87.6.a6	117	117	117
Oracle Unbreakable Enterprise Kernel 6.2 IA32 / i686 Processors Kernel 2.6.39-200.23.1.el6uak.i686	No Cluster	No VM				
		LVM	2.02.87.6.a6	117	117	117
Oracle Unbreakable Enterprise Kernel 6.2 IA32 / i686 Processors Kernel 2.6.39-200.23.2.el6uak.i686	No Cluster	No VM				
		LVM	2.02.87.6.a6	117	117	117
Oracle Unbreakable Enterprise Kernel 6.3 IA32 / i686 Processors Kernel 2.6.39-200.24.1.el6uak.i686	No Cluster	No VM				
		LVM	2.02.95-10.a6	117	117	117
Oracle Unbreakable Enterprise Kernel 6.3 X64 / x86_64 Processors Kernel 2.6.39-200.24.1.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.95-10.a6	117	117	117
Oracle Unbreakable Enterprise Kernel 6.4 (Security Fx) IA32 / i686 Processors Kernel 2.6.39-400.211.1.el6uak.i686	No Cluster	No VM				
		LVM	2.02.98-9.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.4 (Security Fx) X64 / x86_64 Processors Kernel 2.6.39-400.211.1.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.98-9.a6	117,124	117,124	117,124
		LVM	2.02.111-2.a6,6.3	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.5 IA32 / i686 Processors Kernel 2.6.39-400.211.1.el6uak.i686	No Cluster	No VM				
		LVM	2.02.100-8.a6	117,124	117,124	117,124
		LVM	2.02.143-7.a6,8.1	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.5 X64 / x86_64 Processors Kernel 3.8.13-16.2.1.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.5 (Security Fx) X64 / x86_64 Processors Kernel 3.8.13-44.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.6 X64 / x86_64 Processors Kernel 3.8.13-44.1.1.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.6 (Security Fx) X64 / x86_64 Processors Kernel 3.8.13-68.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.6 (Security Fx) X64 / x86_64 Processors Kernel 3.8.13-68.1.3.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.100-8.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.7 IA32 / i686 Processors Kernel 2.6.39-400.250.7.el6uak.i686	No Cluster	No VM				
		LVM	2.02.119-2.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.7 X64 / x86_64 Processors Kernel 3.8.13-68.3.4.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.119-2.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.8 X64 / x86_64 Processors Kernel 4.1.12-37.4.1.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.143-7.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.9 X64 / x86_64 Processors Kernel 4.1.12-61.1.8.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.9 (Security Fx) X64 / x86_64 Processors Kernel 4.1.12-94.2.1.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.a6	117,124	117,124	117,124
Oracle Unbreakable Enterprise Kernel 6.10 X64 / x86_64 Processors Kernel 4.1.12-124.64.4.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.143-12.a6,5.1			117,124
Oracle Unbreakable Enterprise Kernel 7 X64 / x86_64 Processors Kernel 3.8.13-14-67.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.105-14.a67	125, 134	125	125
Oracle Unbreakable Enterprise Kernel 7.1 X64 / x86_64 Processors Kernel 3.8.13-55.1.6.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.105-14.a67	125, 134	125	125
Oracle Unbreakable Enterprise Kernel 7.1 (Security Fx) X64 / x86_64 Processors Kernel 3.8.13-68-67.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.105-14.a67	125, 134	125	125
Oracle Unbreakable Enterprise Kernel 7.1 (Security Fx) X64 / x86_64 Processors Kernel 3.8.13-68.2.2.el6uak.x86_64	No Cluster	No VM				
		LVM	2.02.105-14.a67	125, 134	125	125
Oracle Unbreakable Enterprise Kernel 7.2 X64 / x86_64 Processors Kernel 3.8.13-98.7.1.el6uak.x86_64	No Cluster	No VM		101	101	101
		LVM	2.02.130-6.a67	101, 125, 134	101, 125	101, 125
Oracle Unbreakable Enterprise Kernel 7.2 (Security Fx) X64 / x86_64 Processors Kernel 3.8.13-118.10.2.el6uak.x86_64	No Cluster	No VM		101	101	101
		LVM	2.02.130-6.a67	101, 125, 134	101, 125	101, 125
Oracle Unbreakable Enterprise Kernel 7.3 X64 / x86_64 Processors Kernel 4.1.12-61.1.18.el6uak.x86_64	No Cluster	No VM		125	125	125
		LVM	2.02.166-1.a67	125, 134	125	125

			2.02.171-8.0.1.607	125, 134	125	125
Oracle Unbreakable Enterprise Kernel 7.3 (Security FS) X64 / x86_64 Processors Kernel 4.1.12-61.1.28.el7uak.x86_64	No Cluster	No VM		125	125	125
		LVM	2.02.166-1.607	125, 134	125	125
			2.02.171-8.0.1.607	125, 134	125	125
Oracle Unbreakable Enterprise Kernel 7.4 X64 / x86_64 Processors Kernel 4.1.12-94.3.9.el7uak.x86_64	No Cluster	No VM		125	125	125
		LVM	2.02.171-8.0.1.607	125, 134	125	125
Oracle Unbreakable Enterprise Kernel 7.5 X64 / x86_64 Processors Kernel 4.1.12-112.16.4.el7uak.x86_64	No Cluster	No VM				125
		LVM	2.02.177-4.0.1.607			125
Oracle Unbreakable Enterprise Kernel 7.5 (Security FS) X64 / x86_64 Processors Kernel 4.1.12-124.16.4.el7uak.x86_64	No Cluster	No VM				125
		LVM	2.02.171-8.0.1.607			125
			2.02.177-4.0.1.607			125

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 2.6.18-53.el5	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 5.4 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	2.02.56-6.el5			
Oracle Enterprise Linux 5.5 x64 / x86_64 Processors 2.6.18-194.el5	No Cluster	No VM				
		LVM	2.02.56-6.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		124	124	124
		LVM	2.02.100-8.el6			
Oracle Linux 6.5 x64 / x86_64 Processors 2.6.32-431.el6.x86_64	No Cluster	No VM		124	124	124
		LVM	2.02.100-8.el6			
Oracle Linux 6.6 IA32 / x86 Processors 2.6.32-504.el6.i686	No Cluster	No VM		124	124	124
		LVM	2.02.111-2.el6			
Oracle Linux 6.6 x64 / x86_64 Processors 2.6.32-504.el6.x86_64	No Cluster	No VM		124	124	124
		LVM	2.02.111-2.el6			
Oracle Linux 6.7 IA32 / x86 Processors 2.6.32-673.el6.i686	No Cluster	No VM		124	124	124
		LVM	2.02.118-2.el6			
Oracle Linux 6.7 x64 / x86_64 Processors 2.6.32-673.el6.x86_64	No Cluster	No VM		124	124	124
		LVM	2.02.118-2.el6			
Oracle Linux 6.8 IA32 / x86 Processors 2.6.32-642.el6.i686	No Cluster	No VM		124	124	124
		LVM	2.02.143-7.el6			
Oracle Linux 6.8 x64 / x86_64 Processors 2.6.32-642.el6.x86_64	No Cluster	No VM		124	124	124
		LVM	2.02.143-7.el6			
Oracle Linux 6.9 IA32 / x86 Processors 2.6.32-696.el6.i686	No Cluster	No VM		124	124	124
		LVM	2.02.143-12.el6			
Oracle Linux 6.9 x64 / x86_64 Processors 2.6.32-696.el6.x86_64	No Cluster	No VM		124	124	124
		LVM	2.02.143-12.el6			
Oracle Linux 7 x64 / x86_64 Processors 3.10.0-123.el7.x86_64	No Cluster	No VM		125, 134	125	125
		LVM	2.02.105-14.el7			
Oracle Linux 7.1 x64 / x86_64 Processors 3.10.0-123.el7.x86_64	No Cluster	No VM		125, 134	125	125
		LVM	2.02.115-3.el7			
Oracle Linux 7.2 x64 / x86_64 Processors 3.10.0-327.el7.x86_64	No Cluster	No VM		125, 134	125	125
		LVM	2.02.130-6.el7			
Oracle Linux 7.3 x64 / x86_64 Processors 3.10.0-514.el7.x86_64	No Cluster	No VM		125, 134	125	125
		LVM	2.02.166-1.el7			
Oracle Linux 7.4 x64 / x86_64 Processors 3.10.0-693.el7.x86_64	No Cluster	No VM		125, 134	125	125
		LVM	2.02.171-8.el7			
Oracle Linux 7.4 x64 / x86_64 Processors (Security Fix) 3.10.0-693.11.6.el7.x86_64	No Cluster	No VM		125, 134	125	125
		LVM	2.02.171-8.el7			
Oracle Linux 7.5 x64 / x86_64 Processors 3.10.0-802.el7.x86_64	No Cluster	No VM				
		LVM	2.02.177-4.0.1.el7			

Supported  
Not Supported

Notes																					
1	YUCS 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 6.1.3-4 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 Global HBAs are used.																				
84	FTI 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 6.4.1-2 are supported. HDLM ARK is bundled with LifeKeeper.																				
93	You can also use Heartbeat together with Oracle Cluster File System 2.																				
94	Security File Methods are not supported.																				
95	Only environments using HDLM ARK 7.0.1-1 are supported. HDLM ARK is bundled with LifeKeeper.																				
96	IBM z-Boot disk environment configurations are not supported.																				
97	Only environments using HDLM ARK 7.2.1-1 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 and later.																				
101	SCSI 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 8.1.1-5705 are supported. HDLM ARK is bundled with LifeKeeper.																				
106	GPFS Persistent Reserve is not supported.																				
107	Only environments using HDLM ARK 8.2.2-9212 are supported. HDLM ARK is bundled with LifeKeeper.																				
108	Only environments using HDLM ARK 8.2.1-8323 are supported. HDLM ARK is bundled with LifeKeeper.																				
109	Only environments using HDLM ARK 8.3.0-8389 are supported. HDLM ARK is bundled with LifeKeeper.																				
110	Only environments using HDLM ARK 8.3.1-8337 are supported. HDLM ARK is bundled with LifeKeeper.																				
111	Only environments using HDLM ARK 8.3.2-8405 are supported. HDLM ARK is bundled with LifeKeeper.																				
112	Only environments using HDLM ARK 8.4.0-8427 are supported. HDLM ARK is bundled with LifeKeeper.																				
113	Only environments using HDLM ARK 8.4.1-8449 are supported. HDLM ARK is bundled with LifeKeeper. The following storage system devices are supported: - Hitachi AMS200/AMS series - Hitachi TagmaStore Universal Storage Platform 100 - Hitachi TagmaStore Universal Storage Platform 600 - Hitachi TagmaStore Universal Storage Platform 1100 - Hitachi Virtual Storage Platform																				
114	HUE 100 series. HUE VM. - Hitachi Virtual Storage Platform G1000. - Hitachi Virtual Storage Platform G200, G400, G600, G800. - Hitachi Virtual Storage Platform F400, F600, G800 - Hitachi Virtual Storage Platform G1000 - Hitachi Virtual Storage Platform F1500																				
115	Only environments using HDLM ARK 8.0.0-8488 are supported. HDLM ARK is bundled with LifeKeeper.																				
116	Only environments using HDLM ARK 8.0.1-8493 are supported. HDLM ARK is bundled with LifeKeeper. For the filter setting of <code>lvm.conf</code> , 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: Setting Notes on Using LVM2 in the HDLM User Guide and setting the following to <code>lvm.conf</code> . filter = [ "sd*([a-p])?T", "scsi-3600050505f6320198f1534848b20", "?"dev/disk/"] Note: <code>scsi-3600050505f6320198f1534848b20</code> is a permanent name that is confirmed by using the <code>udevadm command</code>																				
118	Only environments using HDLM ARK 9.0.2-8513 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 9.1.0-8638 are supported. HDLM ARK is bundled with LifeKeeper.																				
122	The following options are supported in the <code>lvm.conf</code> settings with values other than the operating system defaults. - filter (*) - types - write_cache_state - mid_component_selection (*) The setting for global filter is supported individually.																				
123	The following options are supported in the <code>lvm.conf</code> settings with values other than the operating system defaults. - global_filter (*) - types - write_cache_state - mid_component_selection (*) The setting for filter is supported individually.																				
124	The following options are supported in the <code>lvm.conf</code> settings with values other than the operating system defaults. - filter (*) - types - write_cache_state - mid_component_selection - use_lvmtest (*) If you perform operations with <code>use_lvmtest=1</code> in a version of LVM2 that supports global filter, specify <code>global_filter</code> instead of <code>filter</code> .																				
125	The following options are supported in the <code>lvm.conf</code> settings with values other than the operating system defaults. - global_filter (*) - types - write_cache_state - mid_component_selection - use_lvmtest (*) If you perform operations with <code>use_lvmtest=0</code> , specify <code>filter</code> instead of <code>global_filter</code> .																				
126	Only environments using HDLM ARK 9.1.1-8594 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:																				
	<table border="1"> <thead> <tr> <th>OS</th> <th>Cluster Name</th> <th>Reserve Functionality</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>Linux</td> <td>HA Monitor</td> <td>Used regularly</td> <td></td> </tr> <tr> <td></td> <td>RedHat Cluster Suite</td> <td>Used regularly</td> <td>When enabling reserve functionalities in the RedHat Cluster Suite settings</td> </tr> <tr> <td></td> <td>LifeKeeper</td> <td>Used regularly</td> <td></td> </tr> <tr> <td></td> <td>ClusterPerfect</td> <td>Used regularly</td> <td></td> </tr> </tbody> </table>	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	
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 9.1.2-8609 are supported. HDLM ARK is bundled with LifeKeeper.																				
130	Only environments using HDLM ARK 9.2.0-8629 are supported. HDLM ARK is bundled with LifeKeeper.																				
131	Only environments using HDLM ARK 9.2.1-8659 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 9.2.2-8679 are supported. HDLM ARK is bundled with LifeKeeper.																				

**Supported Oracle 9i RAC Configurations**

Operating System	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.5.3	8.6.0	8.6.3
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		
				8.5.3	8.6.0	8.6.2
Windows Server 2008 (IA32 / x86)	10.2.0.4.0	Clusterware	ASM	8, 16		
			Raw	8, 16		
			OCFS	8, 16, 54		
Windows Server 2008 (X64 / x86_64)	10.2.0.4.0	Clusterware	ASM	8, 16		
			Raw	8, 16		
			OCFS	8, 16, 54		
Windows Server 2008 SP2 (IA32 / x86)	10.2.0.5.0	Clusterware	OCFS	8, 16, 54	8, 16, 54	8, 16, 54
Windows Server 2008 R2 (X64 / x86_64)	10.2.0.5.0	Clusterware	Raw	8, 16		
Windows Server 2008 R2 SP1 (X64 / x86_64)	10.2.0.5.0	Clusterware	ASM	8, 16	8, 16	8, 16

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.5.3	8.6.0	8.6.3
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			
			RAW			
	10.2.0.3.0	Sun Cluster 3.1 8/05 Clusterware (Bundle)	VxVM 4.1			
			RAW			
			ASM			
			Raw			
			VxVM 5.0			
			Raw			
	10.2.0.4.0	Sun Cluster 3.2 Clusterware	ASM			
			Raw			
			VxVM 5.0			
			Raw			
			ASM			
	10.2.0.5.0	Sun Cluster 3.2 Clusterware	Raw			
			VxVM 5.0			
			Raw			
ASM						
10.2.0.4.0	2 Node Configuration	Raw				
		VxVM 5.0				
		Raw				
10.2.0.5.0	Clusterware (Bundle)	Raw				
		ASM				
10.2.0.4.0	VCS 5.0 + Clusterware	Raw				
		VxVM 5.0				
10.2.0.5.0	Clusterware (Bundle)	ASM				







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-bigsm	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-bigsm	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-bigsm	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	HDL Version		
				6.1.0	6.0	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 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
	10.2.0.2.0	Serviceguard 11.17 Clusterware (Bundle)	LVM	8,16	8,16	8,16
		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/PowertHA 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.

## Supported Oracle 11g RAC Configurations

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				11gR2	11gR1	11gR1
Windows 2008 (IA32 / x86)	11.2.0.3.0	Oracle Clusterware	ASM	1,3,22		
Windows 2008 SP2 (IA32 / x86)	11.1.0.7.0	Oracle Clusterware	Raw	1,3	1,3	1,3
			ASM	1,3	1,3	1,3
Windows 2008 (x64 / x86_64)	11.2.0.3.0	Oracle Clusterware	ASM	1,3,22	1,3,22	1,3,22
	11.1.0.7.0	Oracle Clusterware	ASM	1,3		
		Oracle Clusterware	Raw	1,3		
Windows 2008 SP2 (x64 / x86_64)	11.2.0.4.0	Oracle Clusterware	ASM	1,3,22		
	11.1.0.7.0	Oracle Clusterware	ASM	1,3	1,3	1,3
		Oracle Grid Infrastructure	ASM	1,3	1,3	1,3
			OCFS	1,3,18	1,3,18	1,3,18
	11.2.0.3.0	Oracle Clusterware	ASM	1,3,22	1,3,22	1,3,22
		MSFC + OracleFailSafe (3.4.2)	MSFC			
Windows 2008 R2 (x64 / x86_64)	11.2.0.4.0	Oracle Clusterware	ASM	1,3,22	1,3,22	1,3,22
	11.2.0.1.0	Oracle Grid Infrastructure	ASM	1,3		
	11.2.0.2.0	Oracle Grid Infrastructure	ASM	1,3		
	11.2.0.3.0	Oracle Grid Infrastructure	ASM	1,3,22		
Windows 2008 R2 SP1 (x64 / x86_64)	11.2.0.4.0	Oracle Clusterware	ASM	1,3,22	1,3,22	1,3,22
	11.2.0.1.0	Oracle Grid Infrastructure	ASM	1,3	1,3	1,3
	11.2.0.3.0	Oracle Grid Infrastructure	ASM	1,3,22	1,3,22	1,3,22
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		
				11gR2	11gR1	11gR1
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
	11.2.0.1.0	Sun Cluster 3.2 + Oracle Clusterware	VxVM 5.0 MP3			
		Oracle Grid Infrastructure	ASM	1,3,9	1,3,9	1,3,9
	11.2.0.2.0	Sun Cluster 3.2 + Oracle Grid Infrastructure	ASM	3,6,8,9,10	3,6,8,9,10	3,6,8,9,10
		Oracle Grid Infrastructure	ASM	1,3,9	1,3,9	1,3,9
	11.2.0.3.0	Sun Cluster 3.3 + Oracle Grid Infrastructure	ASM	3,6,8,9,10	3,6,8,9,10	3,6,8,9,10
		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
Solaris 11.1 (SPARC)	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		
				11gR2	11gR1	11gR1
AIX 6.1 (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
AIX 7.1 (POWER 64 Bit)	11.2.0.3.0	PowerHA 6.1+Clusterware	LVM	1,3,22	1,3,22	1,3,22
	11.2.0.2.0	Oracle Grid Infrastructure	ASM+Raw	1,3	1,3	1,3
AIX 7.2 (POWER 64 Bit)	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

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version			
				11.1.0.6	11.1.0.7	11.2.0.1	
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	1,3,13	1,3,13	1,3,13	
			ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
	11.1.0.7.0	Oracle Clusterware	ASM + Raw	1,3,13	1,3,13	1,3,13	
			ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
Red Hat Linux 5 (x64 / x86_64) 2.6.18-3.el5	11.1.0.6.0	Oracle Clusterware	ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			ASM + Raw	1,3,13	1,3,13	1,3,13	
			Raw	1,3,13	1,3,13	1,3,13	
	11.1.0.7.0	Oracle Clusterware	ASM + Raw	1,3,13	1,3,13	1,3,13	
			ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	Raw	1,3,13	1,3,13	1,3,13	
			ASM + Raw	1,3,13	1,3,13	1,3,13	
			ASM + ASMLib	1,3,12	1,3,12	1,3,12	
	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 + ASMLib	1,3,12	1,3,12	1,3,12
				OCFS2	1,3,14	1,3,14	1,3,14
				ASM + Raw	1,3,13	1,3,13	1,3,13
11.1.0.7.0		Oracle Clusterware	ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
			Raw	1,3,13	1,3,13	1,3,13	
Red Hat Linux 5.1 (x64 / x86_64) 2.6.18-53.el5	11.1.0.6.0	Oracle Clusterware	ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			ASM + Raw	1,3,13	1,3,13	1,3,13	
			Raw	1,3,13	1,3,13	1,3,13	
	11.1.0.7.0	Oracle Clusterware	ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			ASM + Raw	1,3,13	1,3,13	1,3,13	
			Raw	1,3,13	1,3,13	1,3,13	
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	OCFS2	1,3,14	1,3,14	1,3,14	
			ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			ASM + Raw	1,3,13	1,3,13	1,3,13	
	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 + ASMLib	1,3,12	1,3,12	1,3,12
				OCFS2	1,3,14	1,3,14	1,3,14
				ASM + Raw	1,3,13	1,3,13	1,3,13
11.1.0.7.0		Oracle Clusterware	ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
			Raw	1,3,13	1,3,13	1,3,13	
11.2.0.1.0		Oracle Grid Infrastructure	ASM + Raw	1,3,13,16,17	1,3,13,16,17	1,3,13,16,17	
11.2.0.2.0		Oracle Grid Infrastructure	ASM + Raw	1,3,13,16	1,3,13,16	1,3,13,16	
Red Hat Linux 5.2 (x64 / x86_64) Kernels 2.6.18-92.el5		11.1.0.6.0	Oracle Clusterware	ASM + Raw	1,3,13	1,3,13	1,3,13
				ASM + ASMLib	1,3,12	1,3,12	1,3,12
				Raw	1,3,13	1,3,13	1,3,13
		11.1.0.7.0	Oracle Clusterware	ASM + Raw	1,3,13	1,3,13	1,3,13
	ASM + ASMLib			1,3,12	1,3,12	1,3,12	
	OCFS2			1,3,14	1,3,14	1,3,14	
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	Raw	1,3,13	1,3,13	1,3,13	
			ASM + Raw	1,3,13	1,3,13	1,3,13	
			ASM + ASMLib	1,3,12	1,3,12	1,3,12	
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16,17	1,3,13,16,17	1,3,13,16,17	
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16	1,3,13,16	1,3,13,16	
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + ASMLib	1,3,12,16	1,3,12,16	1,3,12,16	
ASM + Raw			1,3,13,16,22	1,3,13,16,22	1,3,13,16,22		
ASM + ASMLib			1,3,12,16,22	1,3,12,16,22	1,3,12,16,22		
ASM + Raw			1,3,13,16,22	1,3,13,16,22	1,3,13,16,22		
11.2.0.4.0	Oracle Grid Infrastructure	ASM + ASMLib	1,3,12,16,22	1,3,12,16,22	1,3,12,16,22		
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 + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
			ASM + Raw	1,3,13	1,3,13	1,3,13	
	11.1.0.7.0	Oracle Clusterware	ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
			Raw	1,3,13	1,3,13	1,3,13	
11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16,17	1,3,13,16,17	1,3,13,16,17		
11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16	1,3,13,16	1,3,13,16		
Red Hat Linux 5.3 (x64 / x86_64) Kernels 2.6.18-128.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw	1,3,13	1,3,13	1,3,13	
			ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			Raw	1,3,13	1,3,13	1,3,13	
	11.1.0.7.0	Oracle Clusterware	ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
			Raw	1,3,13	1,3,13	1,3,13	
	11.1.0.7.0 + Patch 8833297	Oracle Clusterware	ASM + Raw	1,3,13	1,3,13	1,3,13	
			ASM + ASMLib	1,3,12	1,3,12	1,3,12	
			OCFS2	1,3,14	1,3,14	1,3,14	
	11.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16,17	1,3,13,16,17	1,3,13,16,17	
	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16	1,3,13,16	1,3,13,16	
	11.2.0.3.0	Oracle Grid Infrastructure	ASM + ASMLib	1,3,12,16	1,3,12,16	1,3,12,16	
ASM + Raw			1,3,13,16,22	1,3,13,16,22	1,3,13,16,22		
ASM + ASMLib			1,3,12,16,22	1,3,12,16,22	1,3,12,16,22		
ASM + Raw			1,3,13,16,22	1,3,13,16,22	1,3,13,16,22		
11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16,22	1,3,13,16,22	1,3,13,16,22		









11.2.0.4.0	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	1,3,12,16,19,22	1,3,12,16,19,22	1,3,12,16,19,22

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
	11.2.0.4.0	Oracle Grid Infrastructure	ASM + Raw			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
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-bigsm	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	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
SuSE Linux 11 (x64 / x86_64) Kernels 3.0.10-3.27-default	11.2.0.3.0	Oracle Clusterware	ASM+Raw	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
	11.2.0.4.0	Oracle Clusterware	ASM+Raw	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22
	11.2.0.4.0	Oracle Clusterware	ASM + ASMLib	1,3,12,16,19,22	1,3,12,16,19,22	1,3,12,16,19,22
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			1,3,13,16,19,22,25
	11.2.0.4.0	Oracle Clusterware	ASM + ASMLib			1,3,12,16,19,22,25
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	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
	11.2.0.3.0		ASM + Raw	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13,16,19,22	1,3,13,16,19,22
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	1,3,13	1,3,13	1,3,13
Oracle Enterprise Linux 5.1 (x64 / x86_64) Kernels 2.6.18-53.el5	11.1.0.6.0	Oracle Clusterware	ASM + Raw	1,3,13	1,3,13	1,3,13
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	1,3,13,16	1,3,13,16	1,3,13,16
Oracle Enterprise Linux 5.4 (x64 / x86_64) Kernels 2.6.18-164.el5	11.2.0.2.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16	1,3,13,16	1,3,13,16
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	1,3,13,16	1,3,13,16	1,3,13,16
			Raw	1,3,13	1,3,13	1,3,13
Oracle Enterprise Linux 5.7 (x64 / x86_64) Kernels 2.6.18-274.el5	11.1.0.7.0	Oracle Grid Infrastructure	ASM + Raw	1,3,13,16	1,3,13,16	1,3,13,16
			Raw	1,3,13	1,3,13	1,3,13
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	1,3,12,16,19,22,24	1,3,12,16,19,22,24
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	1,3,12,16,19,22,24	1,3,12,16,19,22,24

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				6.0	6.5	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
		Oracle Clusterware	ASM	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/Rawx 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/oc2cb 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

## Supported Oracle 12c RAC Configurations

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.5.3	8.6.0	8.6.2
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

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.5.3	8.6.0	8.6.3
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
			CloudFS	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
			CloudFS	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
			CloudFS	1,3,22,24,25,26	1,3,22,24,25,26	1,3,22,24,25,26

Operating System Name	Oracle Version	Cluster	Volume Manager	HDLM Version		
				8.5.3	8.6.0	8.6.2
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		
				8.6.0	8.6.1	8.6.2
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
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
	12.2.0.1.0	Oracle Grid Infrastructure	ASM + Raw			1,3,13,19,22
			ASM+ASMLib 2.0.6			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
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
	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
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
	ASM+ASMLib 2.0.8				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
			ASM+ASMLib 2.0.8		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
	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
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 4.1.12-124.16.4.el7uek.x86_64	12.1.0.2.0	Oracle Grid Infrastructure	ASM + Raw			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	1,3,13,16,19,22	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 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	1,3,13,16,19,22	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

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/driv/fp.conf file: fp_offline_timeout = (timeout value of the fp driver); - Add the following line to the /kernel/driv/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)

**Centralized Management Console(HGLM) Supported Operating Systems**

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

OS Name	Microsoft Windows			HGLM		
	Version	Service Pack	Architecture	8.5.3	8.6.0	8.6.2
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			
	Standard Edition Datacenter Edition	No SP	x64 / x86_64			

<b>Supported</b>	
<b>Not Supported</b>	

Centralized Management Console(HGLM) Supported Functions		HGLM		
		8.5.3	8.6.0	8.6.2
<b>Host Management</b>	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			
<b>Modify Multipathing Settings</b>	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			
<b>Path Management</b>	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			
<b>Alert Management</b>	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			
<b>Group Management</b>	Lost Path Check Option			
	Host Group			
<b>CSV Export Reporting</b>	Resource Group			
	All Multipathing Configuration Data			
	All Multipathing Configuration Data (CLI)			
<b>Other</b>	Historical Path Availability Data			
	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		
		8.5.3	8.6.0	8.6.2
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		
	8.5.3	8.6.0	8.6.2
Storage name			
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		
	8.5.2	8.5.3	8.6.0
Storage name			
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	8		
Hitachi Virtual Storage Platform F600	8		
Hitachi Virtual Storage Platform F800	8		

Supported	
Not Supported	

<b>Notes</b>	
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	8.5.3	8.6.0	8.6.2		
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			
				No SP	IA64 / Itanium	6.2.0			
				SP1	IA64 / Itanium	6.2.0			
R2 Itanium-based Systems	No SP	IA64 / Itanium		6.2.0					
	SP1			6.2.0					
	SP1			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					

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	HDLM 6.3.0 or earlier is supported.
3	HDLM 8.1.4 or earlier is supported.

Solaris SPARC					HGLM		
OS Name	Version	Architecture	Kernel Mode	Minimum HDLM Version	8.5.3	8.6.0	8.6.2
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			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	HDLM 8.1.4 or earlier is supported.
3	This is supported in HGLM 8.6.2-01 and later.

AIX					HGLM		
OS Name	Version	Architecture	Kernel Mode	Minimum HDLM Version	8.5.3	8.6.0	8.6.2
AIX	6.1	POWER	64bit	5.9.4	6.8	6.8	6.8
	7.1		64bit	6.5.0	6.8	6.8	6.8
	7.2		64bit	8.2.1	6.8	6.8	6.8

Supported	
Not Supported	

Notes	
6	See the sheet "17. AIX VIO" when using Virtual I/O Server.
8	HDLM does not support environments that use the Secure by Default option of AIX 6.1, AIX 7.1, and AIX 7.2.
9	HDLM 6.1.0 or earlier is supported.
10	HDLM 8.1.4 or earlier is supported.

HP-UX						HGLM		
OS Name	Version	Release	Architecture	Kernel Mode	Minimum HDLM Version	8.5.3	8.6.0	8.6.2
HP-UX	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			
		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	

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   HDLM 6.5.1 or earlier is supported.

Red Hat Linux						HGLM		
OS Name	Version	Update	Kernel	Architecture	Minimum HDLM Version	8.5.3	8.6.0	8.6.2
Red Hat Linux ELAP or EL	5	None	2.6.18-8.el5	Intel x86	5.9.3			
			2.6.18-8.el5PAE	IA64 / Itanium	5.9.3			
			2.6.18-8.el5	EM64T AMD64	5.9.3	11	11	11
	5.1	None	2.6.18-53.el5	Intel x86	5.9.4			
			2.6.18-53.el5PAE	IA64 / Itanium	5.9.4			
			2.6.18-53.el5	EM64T AMD64	5.9.4	11	11	11
	5.2	None	2.6.18-92.el5	Intel x86	5.9.4			
			2.6.18-92.el5PAE	IA64 / Itanium	5.9.4			
			2.6.18-92.el5	EM64T AMD64	5.9.4	11	11	11
	5.3	None	2.6.18-128.el5	Intel x86	6.1.2			
			2.6.18-128.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-128.el5	EM64T AMD64	6.1.2	11	11	11
	5.4	None	2.6.18-164.el5	Intel x86	6.1.2			
			2.6.18-164.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-164.el5	EM64T AMD64	6.1.2	11	11	11
	5.5	None	2.6.18-194.el5	Intel x86	6.1.2			
			2.6.18-194.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-194.el5	EM64T AMD64	6.1.2	11	11	11
	5.6	None	2.6.18-238.el5	Intel x86	6.1.2			
			2.6.18-238.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-238.el5	EM64T AMD64	6.1.2	11	11	11
	5.7	None	2.6.18-274.el5	Intel x86	6.1.2			
			2.6.18-274.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-274.el5	EM64T AMD64	6.1.2	11	11	11
	5.8	None	2.6.18-308.el5	Intel x86	6.1.2			
			2.6.18-308.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-308.el5	EM64T AMD64	6.1.2	11	11	11
	5.9	None	2.6.18-348.el5	Intel x86	6.1.2			
			2.6.18-348.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-348.el5	EM64T AMD64	6.1.2	11	11	11
	5.10	None	2.6.18-371.el5	Intel x86	6.1.2			
			2.6.18-371.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-371.el5	EM64T AMD64	6.1.2	11	11	11
	5.11	None	2.6.18-398.el5	Intel x86	6.1.2			
			2.6.18-398.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-398.el5	EM64T AMD64	6.1.2	11	11	11
	5.11(Security Fix)	None	2.6.18-416.el5	Intel x86	6.1.2			
			2.6.18-416.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-416.el5	EM64T AMD64	6.1.2	11	11	11
	5.11(Security Fix)	None	2.6.18-419.el5	Intel x86	6.1.2			
			2.6.18-419.el5PAE	IA64 / Itanium	6.1.2			
			2.6.18-419.el5	EM64T AMD64	6.1.2	11	11	11
5.11(Security Fix)	None	2.6.18-426.el5	Intel x86	6.1.2				
		2.6.18-426.el5PAE	IA64 / Itanium	6.1.2				
		2.6.18-426.el5	EM64T AMD64	6.1.2	11	11	11	

Red Hat Linux EL	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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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			12
	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			
			3.10.0-327.el7.x86_64	EM64T AMD64	8.4.0-00			
	7.2	None	3.10.0-514.el7.x86_64	EM64T AMD64	8.5.1-00			
			3.10.0-693.el7.x86_64	EM64T AMD64	8.5.1-00			
	7.3	None	3.10.0-862.el7.x86_64	EM64T AMD64	8.6.1-00			
3.10.0-862.el7.x86_64			EM64T AMD64	8.6.1-00				



Oracle Unbreakable Enterprise Kernel	5.6	None	2.6.32-100.26.2.el5	EM64T AMD64	7.2.1-00	11	11	11
	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	11	11	11
	5.8	None	2.6.32-300.27.1.el5uek	EM64T AMD64	7.4.0-00	11	11	11
			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	11	11	11
	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	12	12	12
	6.3	None	2.6.39-200.29.2.el6uek.x86_64	EM64T AMD64	7.4.1-00	12	12	12
			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	12	12	12
	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	12	12	12
	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	12	12	12
		None	3.8.13-44.el6uek.x86_64	EM64T AMD64	8.1.4-00	12	12	12
	6.6	None	3.8.13-44.1.1.el6uek.x86_64	EM64T AMD64	8.1.4-00	12	12	12
		None	3.8.13-68.el6uek.x86_64	EM64T AMD64	8.1.4-00	12	12	12
		None	3.8.13-68.1.3.el6uek.x86_64	EM64T AMD64	8.1.4-00	12	12	12
	6.7	None	2.6.39-400.250.7.el6uek.i686	Intel x86	7.6.1-00	12	12	12
			3.8.13-68.3.4.el6uek.x86_64	EM64T AMD64	8.1.4-00	12	12	12
	6.8	None	4.1.12-37.4.1.el6uek.x86_64	EM64T AMD64	8.5.0-00	12	12	12
	6.9	None	4.1.12-61.1.28.el6uek.x86_64	EM64T AMD64	8.5.0-00	12	12	12
		None	4.1.12-94.2.1.el6uek.x86_64	EM64T AMD64	8.5.0-00	12	12	12
	6.10	None	4.1.12-124.16.4.el6uek.x86_64	EM64T AMD64	8.6.2-00			12
	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				
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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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	12	12	12
	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				

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.
11	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.
12	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.
13	HDLM 8.1.4 or earlier is supported.
14	HDLM 6.0.1 or earlier is supported.
15	HDLM 6.5.1 or earlier is supported.



SuSE Linux						HGLM		
OS Name	Version	Update	Kernel	Architecture	Minimum HDLM Version	8.5.3	8.6.0	8.6.2
SUSELES	10	None	2.6.16.21-0.8-default	Intel x86	5.9			
			2.6.16.21-0.8-smp					
			2.6.16.21-0.8-bigsm					
			2.6.16.21-0.8-default	IA64 / Itanium	5.9.3			
		2.6.16.21-0.8-default	EM64T	5.9.4				
		2.6.16.21-0.8-smp	AMD64	5.9.4				
		SP1 + Security Fix	2.6.16.46-0.14-default	Intel x86	5.9.3			
			2.6.16.46-0.14-smp					
			2.6.16.46-0.14-bigsm					
			2.6.16.46-0.14-default	IA64 / Itanium	5.9.3			
		2.6.16.46-0.14-default	EM64T	5.9.4				
		2.6.16.46-0.14-smp	AMD64	5.9.4				
		SP2	2.6.16.60-0.21-default	Intel x86	6.0.1			
			2.6.16.60-0.21-smp					
			2.6.16.60-0.21-bigsm					
			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-smp	EM64T	6.0.1			
		SP3	2.6.16.60-0.21-smp	AMD64	6.0.1			
			2.6.16.60-0.21-xenpae	EM64T	6.2.0			
			2.6.16.60-0.21-xenpae	AMD64	6.2.0			
			2.6.16.60-0.54.5-default	Intel x86	6.3.0			
		2.6.16.60-0.54.5-smp						
		2.6.16.60-0.54.5-bigsm						
	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-smp	EM64T	6.3.0					
	2.6.16.60-0.54.5-smp	AMD64	6.3.0					
	2.6.16.60-0.54.5-xenpae	EM64T	6.3.0					
	2.6.16.60-0.54.5-xenpae	AMD64	6.3.0					
	SP4	2.6.16.60-0.85.1-default	Intel x86	6.6.2				
		2.6.16.60-0.85.1-smp						
		2.6.16.60-0.85.1-bigsm						
		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-smp	EM64T	6.6.2				
	2.6.16.60-0.85.1-smp	AMD64	6.6.2					
	2.6.16.60-0.85.1-xenpae	EM64T	6.6.2					
	2.6.16.60-0.85.1-xenpae	AMD64	6.6.2					
	11	Security Fix	2.6.27.21-0.1.2-default	Intel x86	6.2.1			
			2.6.27.21-0.1.2-pae					
			2.6.27.21-0.1.2-xen					
			2.6.27.21-0.1.2-default	IA64 / Itanium	6.2.1			
		2.6.27.21-0.1.2-default	EM64T	6.2.1				
		2.6.27.21-0.1.2-xen	AMD64	6.2.1				
SP1		2.6.32.12-0.7.1-default	Intel x86	6.5.0				
		2.6.32.12-0.7.1-pae						
		2.6.32.12-0.7.1-xen						
		2.6.32.12-0.7.1-default	IA64 / Itanium	6.5.0				
2.6.32.12-0.7.1-default		EM64T	6.5.0					
2.6.32.12-0.7.1-xen		AMD64	6.5.0					
SP2		3.0.13-0.27-default	Intel x86	7.4.0				
		3.0.13-0.27-pae						
		3.0.13-0.27-default	IA64 / Itanium	7.4.0				
		3.0.13-0.27-default	EM64T	7.4.0				
3.0.13-0.27-default		AMD64	7.4.0					
SP3		3.0.76-0.11-default	Intel x86	7.6.0				
		3.0.76-0.11-pae						
		3.0.76-0.11-default	IA64 / Itanium	7.6.0				
		3.0.76-0.11-default	EM64T	7.6.0				
3.0.76-0.11-pae		AMD64	7.6.0					
3.0.76-0.11-xen		EM64T	8.0.0					
3.0.76-0.11-xen		AMD64	8.0.0					
SP4	3.0.101-63.1-default	Intel x86	8.2.1					
	3.0.101-63.1-pae							
	3.0.101-63.1-default	IA64 / Itanium	8.2.1					
	3.0.101-63.1-default	EM64T	8.2.1					
3.0.101-63.1-pae	AMD64	8.2.1						
3.0.101-63.1-xen	EM64T	8.2.1						
3.0.101-63.1-xen	AMD64	8.2.1						
SP4(Security Fix)	3.0.101-108.68-default	EM64T	8.6.2-01					
3.0.101-108.68-default	AMD64	8.6.2-01						
12	None	3.12.28-4-default	EM64T	8.1.4				
		3.12.28-4-xen	AMD64	8.1.4				
	SP1	3.12.59-60.45-default	EM64T	8.5.0				
		3.12.59-60.45-xen	AMD64	8.5.0				
	SP2	4.4.21-69-default	EM64T	8.5.2				
	4.4.21-69-xen	AMD64	8.5.2					
	SP3	4.4.103-6-33-default	EM64T	8.5.4				
	4.4.103-6-33-xen	AMD64	8.5.4					
SP3(Security Fix)	4.4.114-94.14-default	EM64T	8.6.1					
4.4.114-94.14-xen	AMD64	8.6.1						
15	None	4.12.14-23-default	EM64T	8.6.2				
4.12.14-23-xen	AMD64	8.6.2						

Supported	
Not Supported	

- 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 HDLM 5.9.4 or earlier is supported.
- 3 HDLM 7.2.1 or earlier is supported.
- 4 HDLM 8.1.4 or earlier is supported.
- 5 This is supported in HGLM 8.6.2-01 and later.

VMware					HGLM		
OS Name	Version/Edition	Architecture	Kernel Mode	Minimum HDLM Version	8.5.3	8.6.0	8.6.2
VMware ESXi	5.0 Enterprise	EM64T or AMD64	64bit	7.3.0			
	5.0 Enterprise plus	EM64T or AMD64	64bit	7.3.0			
	5.0 Standard	EM64T or AMD64	64bit	8.1.4			
	5.1 Enterprise	EM64T or AMD64	64bit	7.4.0			
	5.1 Enterprise plus	EM64T or AMD64	64bit	7.4.0			
	5.1 Standard	EM64T or AMD64	64bit	8.1.4			
	5.5 Enterprise	EM64T or AMD64	64bit	7.6.0	1	1	
	5.5 Enterprise plus	EM64T or AMD64	64bit	7.6.0	1	1	
	5.5 Standard	EM64T or AMD64	64bit	8.1.4	1	1	
	6.0 Enterprise	EM64T or AMD64	64bit	8.1.4	2	2	2
	6.0 Enterprise plus	EM64T or AMD64	64bit	8.1.4	2	2	2
	6.0 Standard	EM64T or AMD64	64bit	8.1.4	2	2	2
	6.5 Enterprise	EM64T or AMD64	64bit	8.2.1	2	2	2
	6.5 Enterprise plus	EM64T or AMD64	64bit	8.2.1	2	2	2
	6.5 Standard	EM64T or AMD64	64bit	8.2.1	2	2	2
	6.7 Enterprise	EM64T or AMD64	64bit	8.2.1	2	2	2
	6.7 Enterprise plus	EM64T or AMD64	64bit	8.2.1	2	2	2
6.7 Standard	EM64T or AMD64	64bit	8.2.1	2	2	2	

Notes	
1	According to the VMware ESXi 5.0/5.1/5.5 End User License Agreement (EULA), HDLM can only be used on either the Enterprise or Enterprise Plus VMware ESXi Editions.
2	According to the VMware ESXi 6.0/6.5/6.7 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.

OS Name	Microsoft Windows			Cluster		HGLM		
	Version	Service Pack	Architecture	Name	Bundle	8.5.3	8.6.0	8.6.2
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			

<b>Supported</b>	
<b>Not Supported</b>	

Centralized Management Console(MGLM)  
Supported Browser

Operating System		Browser		MGLM						
				8.1.3	8.1.0	8.1.2				
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	9.X					
					8.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	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							
Windows Server 2016	Standard Edition Datacenter Edition	No SP	X64 / x86_64	Internet Explorer	11.X					
					8.X					
Windows 7	Professional Edition Enterprise Edition Ultimate Edition	No SP	IA32 / x86	Internet Explorer	8.X					
					9.X					
					10.X					
					11.X					
	Standard Edition Datacenter Edition	No SP	X64 / x86_64	Internet Explorer	8.X					
					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	10.X				
Windows 8.1	Windows 8 Edition Pro Edition Enterprise Edition	No SP	IA32 / x86	Internet Explorer	11.X					
					Latest version of stable channel					
			X64 / x86_64	Internet Explorer	11.X					
					Latest version of stable channel					
Windows 10	Windows Pro or Education or Enterprise	No SP	IA32 / x86	Internet Explorer	11.X					
					Latest version of stable channel					
			X64 / x86_64	Internet Explorer	11.X					
					Latest version of stable channel					

  

Operating System		Browser		MGLM		
				8.1.3	8.1.0	8.1.2
Solaris 10	32bit	SPARC	Firefox	3.6.x		
	64bit	SPARC	Firefox	3.6.x ESR 10.0.x ESR 17.0.x ESR 24.1.x		

Operating System		Browser	MSLM			
			8.1.3	8.1.0	8.1.2	
Red Hat ASE 5.2 2.6.18-238.el6 2.6.18-238.el6PAE	IA32 / x86	Firefox	3.0.x			
			3.6.x			
			ESR 10.0.x			
			ESR 17.0.x			
Red Hat ASE 5.6 2.6.18-238.el6 2.6.18-238.el6PAE	IA32 / x86	Firefox	3.6.x			
			ESR 10.0.x			
			ESR 17.0.x			
Red Hat ASE 5.9 2.6.18-308.el6 2.6.18-308.el6PAE	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	Firefox	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	Firefox	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	Firefox	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	Firefox	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			
			ESR 45.x	2	2	2
Red Hat EL 6.8 2.6.32-642.el6.x86_64	x64	Firefox	ESR 45.x	2	2	2
			ESR 45.x			
Red Hat EL 7 3.10.0-123.el7.x86_64	x64	Firefox	ESR 38.x			
			ESR 45.x			
			ESR 52.x	2	2	
			ESR 60.x			2
Red Hat EL 7.1 3.10.0-229.el7.x86_64	x64	Firefox	ESR 38.x			
			ESR 45.x			
			ESR 52.x	2	2	
			ESR 60.x			2
Red Hat EL 7.2 3.10.0-327.el7.x86_64	x64	Firefox	ESR 38.x			
			ESR 45.x			
			ESR 52.x	2	2	
			ESR 60.x			2
Red Hat EL 7.3 3.10.0-514.el7.x86_64	x64	Firefox	ESR 45.x			
			ESR 52.x	2	2	
			ESR 60.x			2
Red Hat EL 7.4 3.10.0-693.el7.x86_64	x64	Firefox	ESR 45.x			
			ESR 52.x	2	2	
			ESR 60.x			2

Red Hat EL 7.5 3.10.0-062.el7.x86_64	x4	Fedora	ESR G2.x	2
			ESR G0.x	2



SUSE Linux Enterprise Server 11		SP3	x86	Firefox	ESR 31.x				
					ESR 36.x				
		SP4	x86	Firefox	ESR 36.x				
					ESR 45.x				
					Supported				
					Not Supported				
<b>Notes</b>									
1 The alert filtering display function cannot be used.									
2 i686 includes EM64T and AMD64.									

**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		
				8.5.3	8.6.0	8.6.2
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				

**(2) Web Client**

OS	OS Name	OS Service Pack	architecture	Name	Version	HGLM				
						8.5.3	8.6.0	8.6.2		
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					
			X64 / x86_64	Internet Explorer	from 7.0 to 8.x					
	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					
	Windows Server 2012	No SP	X64 / x86_64	Internet Explorer	10.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 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				
			X64 / x86_64	Internet Explorer	8.x					
						9.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			
					X64 / x86_64	Internet Explorer	11.x			
	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		
		8.5.3	8.6.0	8.6.2
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			

<b>Supported</b>	
<b>Not Supported</b>	

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 (HGLM)".
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			
							8.5.3	8.6.0	8.6.2	
Windows	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	VMware ESX/ESXi	3.x				
						4.x				
						5.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	VMware ESX/ESXi	3.x				
						4.x				
						5.x				
					Hyper-V	1.x				
		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	VMware ESX/ESXi	3.x				
						4.x				
						5.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	VMware ESX/ESXi	3.x				
						4.x				
						5.x				
					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	VMware ESX/ESXi	3.x				
						4.x				
						5.x				
					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	VMware ESX/ESXi	3.x				
						4.x				
						5.x				
					Hyper-V	2.x				
		Windows Server 2012	Essentials Edition Standard Edition Datacenter Edition	No SP	x64 / x86_64	VMware ESX/ESXi	5.x	2	2	2
							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	5.x	3	3	3		
					6.x					
					Hyper-V	3.x				
Windows Server 2016	Standard Edition Datacenter Edition	No SP	x64 / x86_64	Hyper-V						

<b>Supported</b>	
<b>Not Supported</b>	

Notes	
1	If you use VMware vSphere ESX 4.0, support it in a version after Update 2.
2	If you use VMware vSphere ESX 4.0, support it in a version after Update 2, and in a patch version after ESXi500-201209001.
3	If you use VMware vSphere ESXi 5.0, support it in a version after Update 2.

Supported Java Versions

Centralized Management Console(HGLM)								
Version	Version	Service Pack	Architecture	JDK Version	HDLM Version			
					8.0.3	8.0.0	7.0.6	
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)				
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)				
	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)				
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)			
					1.7.0(*2)			
					1.8.0(*1)			
					1.8.0(*2)			
					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	8.6.1	8.6.2	8.6.3
Hitachi Dynamic Link Manager Software (for AIX)	8.6.0(*1)	8.6.2	8.6.2(*6)
Hitachi Dynamic Link Manager Software (for Linux)	8.6.1	8.6.2	8.6.2(*7)
Hitachi Dynamic Link Manager Software (for Solaris)	8.6.0(*2)	8.6.0(*2)	8.6.3
Hitachi Dynamic Link Manager Software (for Windows)	8.6.0(*3)	8.6.2	8.6.2(*8)
Hitachi Dynamic Link Manager Software (for VMware)	8.6.0(*4)	8.6.2	8.6.2(*9)
Hitachi Global Link Manager Software	8.6.0(*5)	8.6.2	8.6.2(*10)

Notes	
1	For information about the version of HDLM for AIX that is included in HDLM 8.6.1, refer to HDLM for AIX 8.6.0.
2	For information about the version of HDLM for Solaris that is included in HDLM 8.6.1 and HDLM 8.6.2, refer to HDLM for Solaris 8.6.0.
3	For information about the version of HDLM for Windows that is included in HDLM 8.6.1, refer to HDLM for Windows 8.6.0.
4	For information about the version of HDLM for VMware that is included in HDLM 8.6.1, refer to HDLM for VMware 8.6.0.
5	For information about the version of HGLM that is included in HDLM 8.6.1, refer to HGLM 8.6.0.
6	For information about the version of HDLM for AIX that is included in HDLM 8.6.3, refer to HDLM for AIX 8.6.2.
7	For information about the version of HDLM for Linux that is included in HDLM 8.6.3, refer to HDLM for Linux 8.6.2.
8	For information about the version of HDLM for Windows that is included in HDLM 8.6.3, refer to HDLM for Windows 8.6.2.
9	For information about the version of HDLM for VMware that is included in HDLM 8.6.3, refer to HDLM for VMware 8.6.2.
10	For information about the version of HGLM that is included in HDLM 8.6.3, refer to HGLM 8.6.2.