UCP CI Interoperability Matrix

UCP CI w/ HA800 G3 server

Hardware

UCP CI (Release Version)	**v9.3**	
Release date	**April 21, 2025**	
Major Windows Server Release:	**2025**	

Management and Compute Nodes : (HA810 G3)

Components		Notes
System ROM	U54 v2.30	Packaged with Media Kit separately
iLO Firmware	v1.63	
CPU Family	**Sapphire Rapids/Emerald Rapids**	

Compute Nodes : (HA820 G3)

Components		Notes
System ROM	U54 v2.30	Packaged with Media Kit separately
iLO Firmware	v1.63	
CPU Family	**Sapphire Rapids/Emerald Rapids**	

Compute Nodes : (HA840 G3)

Components		Notes
System ROM	U59 v2.30	
iLO Firmware	v1.63	
CPU Family	**Sapphire Rapids**	

I/O Card Support for HA810 G3 / HA820 G3 / HA840 G3

Components			Notes
OCP Network Cards (Options)			
INT I350 1GbE, 4p, BASE-T OCP3 Adptr	Firmware	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42
	e1r68x64.sys Driver	Inbox	
INT E810 10/25GbE, 2p, SFP28 OCP3	Firmware	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	icea.sys Driver	Inbox	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr	Firmware	16.35.3006 (SPV 7.42)	Packaged with SPV image v 7.42. This card is not supported for HA840 G3.
	mlx5.sys Driver	Inbox	
MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr	Firmware	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlx5.sys Driver	Inbox	
BCM 57412 10GbE 2p SFP+ OCP3	Firmware	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	bnxtnd.sys Driver	230.0.162.0	
BCM 57504 10/25GbE 4p SFP28 OCP3	Firmware	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	bnxtnd.sys Driver	230.0.162.0	
PCIe Network Cards (Options)			
INT I350 1GbE, 4p, BASE-T PCIe Adptr	Firmware	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42
	e1r68x64.sys Driver	Inbox	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	icea.sys Driver	Inbox	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	icea.sys Driver	Inbox	
INT E810 100GbE, 2p, QSFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	Packaged with SPV image v 7.42. This card is not supported for HA840 G3.
	icea.sys Driver	Inbox	
MLX MCX631102 10/25GbE 2p SFP28 Adptr	Firmware	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlx5.sys Driver	Inbox	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr	Firmware	22.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlx5.sys Driver	Inbox	
BCM 57412 10GbE 2p SFP+ Adptr	Firmware	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	bnxtnd.sys Driver	230.0.162.0	
HBA Controller			
HPE SN1200E 16Gb 2p FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	Packaged with SPV image v 7.42
	elxfc.sys Driver	Inbox	
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.4.329.10	Packaged with SPV image v 7.42
	elxfc.sys Driver	14.4.313.0	
HPE SN1610Q 32Gb 1p FC HBA	Firmware	02.10.00	Packaged with SPV image v 7.42
	ql2300.sys Driver	9.4.10.20	
HPE SN1610Q 32Gb 2p FC HBA	Firmware	02.10.00	Packaged with SPV image v 7.42
	ql2300.sys Driver	9.4.10.20	
HPE SN1700E 64Gb 2P FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	Packaged with SPV image v 7.42
	elxfc.sys Driver	14.4.313.0	
HPE SN1700E 64Gb 1P FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	Packaged with SPV image v 7.42
	elxfc.sys Driver	14.4.313.0	
HPE SN1600E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.2.589.21	
	elxfc.sys Driver	Inbox	
Boot Controller			
NS204i-u (PCIe card)	Firmware	1.2.14.1013	Packaged with SPV image v 7.42
	Driver	Inbox	

Drives for vSAN Cache and Capacity (Options) for HA 800 G3

Components			Notes
			SSD/NVME firmware is packaged and applied with SPV image v 7.42

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor			Notes
Brocade	G620	9.2.1a	
Brocade	G720	9.2.1a	

Ethernet Switches

Vendor			
Arista	DCS-7010T-48-R	4.28.10.1M	
Arista	DCS-7050CX3-32S-R	4.29.5M	
Arista	DCS-7050SX3-48YC8-R	4.29.5M	
Cisco	Nexus 3048	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.
Cisco	Nexus 93180LC-EX	NXOS 10.3.5	
Cisco	Nexus 93180YC-EX	NXOS 10.3.4a	
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.5.1	
Cisco	Nexus 9332C (100G Spine)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.5.1	
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.5.1	

Storage Models

	Models		Notes
VSP	G200	83-05-54-x0/00	Hitachi Support Page - ECNs
VSP	G400	83-05-54-x0/00	
VSP	G600	83-05-54-x0/00	
VSP	G800	83-05-54-x0/00	
VSP	F400	83-05-54-x0/00	
VSP	F600	83-05-54-x0/00	
VSP	F800	83-05-54-x0/00	
VSP	G350	88-08-16-xx/00	
VSP	G370	88-08-16-xx/00	
VSP	G700	88-08-16-xx/00	
VSP	G900	88-08-16-xx/00	
VSP	F350	88-08-16-xx/00	
VSP	F370	88-08-16-xx/00	
VSP	F700	88-08-16-xx/00	
VSP	F900	88-08-16-xx/00	
VSP	G1000, VSP G1500, VSP F1500	80-06-98-00/20	
VSP	E590	93-07-26-x0/00	
VSP	E790	93-07-26-x0/00	
VSP	E990	93-07-26-x0/00	
VSP	E1090	93-07-26-x0/00	
VSP	5100, 5200, 5500, 5600	90-09-27-00/00	
VSP	One Block 24, 26, 28	A3-03-03-40/00	

* Minimum Level or above

GPU

Vendor			
NVIDIA A2	Firmware	94.07.62.00.AE	Compatible with HA810 G3
	Driver	N/A	
NVIDIA A16	Firmware	94.07.62.00.AD	Compatible with HA820 G3 only
	Driver	N/A	
NVIDIA A100	Firmware	N/A	Compatible with HA820 G3 only
	Driver	N/A	
NVIDIA L4	Firmware	95.04.55.00.01	Compatible with HA810 G3 & HA820 G3
	Driver	N/A	
NVIDIA L40	Firmware	95.02.5D.00.01	Compatible with HA820 G3 only
	Driver	N/A	
NVIDIA L40S	Firmware	95.02.66.00.02	Compatible with HA820 G3 only
	Driver	N/A	
NVIDIA H100	Firmware	96.00.74.00.1C	Compatible with HA820 G3 only
	Driver	N/A	
NVIDIA H100 NVL	Firmware	96.00.88.00.11	Compatible with HA820 G3 only
	Driver	N/A	

Software

Software Versions

Vendor	Component		Notes
Hitachi	UCP Advisor	4.7	

Downloadable ZIPs

Vendor	Component		Notes
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20250331.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20250331.zip	
Hitachi	UCPToolkit ZIP	Toolkit9.2.zip	

Main Mediakit ZIP

Vendor	Component		Notes
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA8x5 G3 server

Hardware

UCP CI (Release Version)	**v9.3**	
Release date	**April 21, 2025**	
Major Windows Server Release:	**2025**	
Compute Nodes : (HA805 / HA815/ HA825 G3)		
Compute Nodes : (HA805 G3)		
Components		**Notes**
System ROM	A56 v2.10	Packaged with Media Kit separately
iLO Firmware	v1.63	
CPU Family	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	
Compute Nodes : (HA815 G3)		
Components		**Notes**
System ROM	A55 v2.14	Packaged with Media Kit separately
iLO Firmware	v1.63	
CPU Family	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	
Compute Nodes : (HA825 G3)		
Components		**Notes**
System ROM	A55 v2.14	Packaged with Media Kit separately
iLO Firmware	v1.63	
CPU Family	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	

I/O Card Support for HA805 G3 / HA825 G3			
Components			**Notes**
OCP Network Cards (Options)			
INT I350 1GbE, 4p, BASE-T OCP3 Adptr	Firmware	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42
	e1r68x64.sys Driver	Inbox	
INT E810 10/25GbE, 2p, SFP28 OCP3	Firmware	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	icea.sys Driver	Inbox	
INT E810 100GbE 2p QSFP28 OCP3 Adptr	Firmware	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	icea.sys Driver	Inbox	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr	Firmware	16.35.3006 (SPV 7.42)	Packaged with SPV image v 7.42
	mlx5.sys Driver	Inbox	
MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr	Firmware	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlx5.sys Driver	Inbox	
BCM 57412 10GbE 2p SFP+ OCP3	Firmware	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	bnxtnd.sys Driver	230.0.162.0	
BCM 57504 10/25GbE 4p SFP28 OCP3	Firmware	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	bnxtnd.sys Driver	230.0.162.0	
BCM 57416 10GbE 2p Base-T OCP3	Firmware	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	bnxtnd.sys Driver	230.0.162.0	
PCIe Network Cards (Options)			
INT I350 1GbE, 4p, BASE-T PCIe Adptr	Firmware	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42
	e1r68x64.sys Driver	Inbox	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	icea.sys Driver	Inbox	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	icea.sys Driver	Inbox	
MLX MCX631102 10/25GbE 2p SFP28 Adptr	Firmware	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlx5.sys Driver	Inbox	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr	Firmware	22.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlx5.sys Driver	Inbox	
BCM 57412 10GbE 2p SFP+ Adptr	Firmware	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	bnxtnd.sys Driver	230.0.162.0	
HBA Controller			
HPE SN1700E 64Gb 2P FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	Packaged with SPV image v 7.42
	elxfc.sys Driver	14.4.313.0	
HPE SN1700E 64Gb 1P FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	Packaged with SPV image v 7.42
	elxfc.sys Driver	14.4.313.0	
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.4.329.10	Packaged with SPV image v 7.42
	elxfc.sys Driver	14.4.313.0	
HPE SN1610Q 32Gb 1p FC HBA	Firmware	02.10.00	Packaged with SPV image v 7.42
	ql2300.sys Driver	9.4.10.20	
HPE SN1610Q 32Gb 2p FC HBA	Firmware	02.10.00	Packaged with SPV image v 7.42
	ql2300.sys Driver	9.4.10.20	
HPE SN1600E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.2.589.21	
	elxfc.sys Driver	Inbox	
Boot Controller			
NS204i-u (PCIe card)	Firmware	1.2.14.1013	Packaged with SPV image v 7.42
	Driver	Inbox	
Drives for vSAN Cache and Capacity (Options) for HA 800 G3			
Components			**Notes**
			SSD/NVME firmware is packaged and applied with SPV image v

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

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FC Switches

Vendor			Notes
Brocade	G620	9.2.1a	
Brocade	G720	9.2.1a	

Ethernet Switches

Vendor			
Arista	DCS-7010T-48-R	4.28.10.1M	
Arista	DCS-7050CX3-32S-R	4.29.5M	
Arista	DCS-7050SX3-48YC8-R	4.29.5M	
Cisco	Nexus 3048	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.
Cisco	Nexus 93180LC-EX	NXOS 10.3.5	
Cisco	Nexus 93180YC-EX	NXOS 10.3.4a	
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.5.1	
Cisco	Nexus 9332C (100G Spine)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.5.1	
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.5.1	

Storage Models

	Models		Notes
VSP	G200	83-05-54-x0/00	Hitachi Support Page - ECNs
VSP	G400	83-05-54-x0/00	
VSP	G600	83-05-54-x0/00	
VSP	G800	83-05-54-x0/00	
VSP	F400	83-05-54-x0/00	
VSP	F600	83-05-54-x0/00	
VSP	F800	83-05-54-x0/00	
VSP	G350	88-08-16-xx/00	
VSP	G370	88-08-16-xx/00	
VSP	G700	88-08-16-xx/00	
VSP	G900	88-08-16-xx/00	
VSP	F350	88-08-16-xx/00	
VSP	F370	88-08-16-xx/00	
VSP	F700	88-08-16-xx/00	
VSP	F900	88-08-16-xx/00	
VSP	G1000, VSP G1500, VSP F1500	80-06-98-00/20	
VSP	E590	93-07-26-x0/00	
VSP	E790	93-07-26-x0/00	
VSP	E990	93-07-26-x0/00	
VSP	E1090	93-07-26-x0/00	
VSP	5100, 5200, 5500, 5600	90-09-27-00/00	
VSP	One Block 24, 26, 28	A3-03-03-40/00	

* Minimum Level or above

GPU

Vendor			
NVIDIA A2	Firmware	94.07.62.00.AE	Compatible with HA805 G3 only
	Driver	N/A	

Software

Software Versions

Vendor	Component		Notes
Hitachi	UCP Advisor	4.7	

Downloadable ZIPs

Vendor	Component		Notes
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20250331.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20250331.zip	
Hitachi	UCPToolkit ZIP	Toolkit9.2.zip	

Main Mediakit ZIP

Vendor	Component		Notes
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA800 G2 server

Hardware

	UCP CI (Release Version)	v9.3	
	Release date	April 21, 2025	
	Major Windows Server Release:	2025	
Management and Compute Nodes : (HA810 G2)			
Components			**Notes**
System ROM		U46 v2.20 (SPV 6.92)	Packaged with SPV image v 6.92 System ROM & iLO are applied with SPV image.
iLO Firmware		v3.08	
CPU Family		**Icelake**	
Compute Nodes : (HA820 G2)			
Components			**Notes**
System ROM		U46 v2.20 (SPV 6.92)	Packaged with SPV image v 6.92 System ROM & iLO are applied with SPV image.
iLO Firmware		v3.08	
CPU Family		**Icelake**	
I/O Card Support for HA810 G2 / HA820 G2			
Components			**Notes**
OCP Network Cards (Options)			
INT I350 1GbE, 4p, BASE-T OCP3 Adptr	Firmware	1.3612.0 (SPV 6.92)	Packaged with SPV image v 6.92
	e1r68x64.sys Driver	Inbox	
INT E810 10/25GbE, 2p, SFP28 OCP3	Firmware	4.50 (SPV 6.92)	Packaged with SPV image v 6.92
	icea.sys Driver	Inbox	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr	Firmware	16.35.3502 (SPV 6.92)	Packaged with SPV image v 6.92
	mlx5.sys Driver	Inbox	
BCM 57412 10GbE, 2p, SFP+ OCP3 Adptr	Firmware	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	bnxtnd.sys Driver	230.0.162.0	
BCM 57414 10/25GbE, 2p, SFP28 OCP3	Firmware	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	bnxtnd.sys Driver	230.0.162.0	
BCM 57416 10GbE, 2p, BASE-T OCP3 Adptr	Firmware	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	bnxtnd.sys Driver	230.0.162.0	
PCIe Network Cards (Options)			
INT I350 1GbE, 4p, BASE-T PCIe Adptr	Firmware	1.3612.0 (SPV 6.92)	Packaged with SPV image v 6.92
	e1r68x64.sys Driver	Inbox	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 6.92)	Packaged with SPV image v 6.92
	icea.sys Driver	Inbox	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 6.92)	Packaged with SPV image v 6.92
	icea.sys Driver	Inbox	
INT E810 100GbE, 2p, QSFP28 PCIe Adptr	Firmware	4.50 (SPV 6.92)	Packaged with SPV image v 6.92
	icea.sys Driver	Inbox	
MLX MCX512F 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	16.35.3502 (SPV 6.92)	Packaged with SPV image v 6.92
	mlx5.sys Driver	Inbox	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr	Firmware	22.41.1000 (SPV 6.92)	Packaged with SPV image v 6.92
	mlx5.sys Driver	Inbox	
BCM 57412 10GbE, 2p, SFP+ Adptr	Firmware	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	bnxtnd.sys Driver	230.0.162.0	
BCM 57414 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	bnxtnd.sys Driver	230.0.162.0	
BCM 57416 10GbE, 2,p BASE-T Adptr	Firmware	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	bnxtnd.sys Driver	230.0.162.0	
HBA Controller			
HPE SN1100Q 16Gb 1p FC HBA - (Qlogic (Marvell), QLE2690)	Firmware	02.04.01 (SPV 6.92)	Packaged with SPV image v 6.92
	ql2300.sys Driver	9.4.10.20	
HPE SN1100Q 16Gb 2p FC HBA - (Qlogic (Marvell), QLE2692)	Firmware	02.04.01 (SPV 6.92)	Packaged with SPV image v 6.92
	ql2300.sys Driver	9.4.10.20	
HPE SN1200E 16Gb 1p FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10 (SPV 6.92)	Packaged with SPV image v 6.92
	elxfc.sys Driver	14.4.313.0	
HPE SN1200E 16Gb 2p FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10 (SPV 6.92)	Packaged with SPV image v 6.92
	elxfc.sys Driver	14.4.313.0	
HPE SN1610Q 32Gb 1p FC HBA - (Qlogic (Marvell), QLE2770)	Firmware	02.10.00 (SPV 6.92)	Packaged with SPV image v 6.92
	ql2300.sys Driver	9.4.10.20	
HPE SN1610Q 32Gb 2p FC HBA - (Qlogic (Marvell), QLE2772)	Firmware	02.10.00 (SPV 6.92)	Packaged with SPV image v 6.92
	ql2300.sys Driver	9.4.10.20	
HPE SN1610E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.4.329.10 (SPV 6.92)	Packaged with SPV image v 6.92
	elxfc.sys Driver	14.4.313.0	
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.4.329.10 (SPV 6.92)	Packaged with SPV image v 6.92
	elxfc.sys Driver	14.4.313.0	
SAS/RAID Controller			
HPE SR408i-p 12G	Firmware	7.11 (SPV 6.92)	Packaged with SPV image v 6.92
	SmartPqi.sys Driver	Inbox	
HPE SR408i-a 12G	Firmware	7.11 (SPV 6.92)	Packaged with SPV image v 6.92
	SmartPqi.sys Driver	Inbox	
HPE MR416i-p 12G	Firmware	52.26.3-5487 (SPV 6.92)	Packaged with SPV image v 6.92
	SmartPqi.sys Driver	Inbox	
HPE MR416i-a 12G	Firmware	52.26.3-5487 (SPV 6.92)	Packaged with SPV image v 6.92
	SmartPqi.sys Driver	Inbox	
HPE P816i-a SR 12G	Firmware	7.11 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-smartpqi Driver	Inbox	
HPE SR932i-p 24G	Firmware	03.01.30.106 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-smartpqi Driver	Inbox	
Boot Controller			
NS204i-r (Riser)	Firmware	1.2.14.1013 (SPV 6.92)	Packaged with SPV image v 6.92
	Driver	Inbox	
NS204i-p (PCIe card)	Firmware	1.2.14.1013 (SPV 6.92)	

	Driver	Inbox	Packaged with SPV image v 6.92
Drives for vSAN Cache and Capacity (Options) for HA 800 G2			
Components			**Notes**
			SSD/NVME firmware is packaged and applied with SPV image v

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The S**ervice Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor			**Notes**
Brocade	G620	9.2.1a	
Brocade	G720	9.2.1a	

Ethernet Switches

Vendor			
Arista	DCS-7010T-48-R	4.28.10.1M	
Arista	DCS-7050CX3-32S-R	4.29.5M	
Arista	DCS-7050SX3-48YC8-R	4.29.5M	
Cisco	Nexus 3048	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.
Cisco	Nexus 93180LC-EX	NXOS 10.3.5	
Cisco	Nexus 93180YC-EX	NXOS 10.3.4a	
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.5.1	
Cisco	Nexus 9332C (100G Spine)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.5.1	
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.5.1	

Storage Models

	Models		**Notes**
VSP	G200	83-05-54-x0/00	Hitachi Support Page - ECNs
VSP	G400	83-05-54-x0/00	
VSP	G600	83-05-54-x0/00	
VSP	G800	83-05-54-x0/00	
VSP	F400	83-05-54-x0/00	
VSP	F600	83-05-54-x0/00	
VSP	F800	83-05-54-x0/00	
VSP	G350	88-08-16-xx/00	
VSP	G370	88-08-16-xx/00	
VSP	G700	88-08-16-xx/00	
VSP	G900	88-08-16-xx/00	
VSP	F350	88-08-16-xx/00	
VSP	F370	88-08-16-xx/00	
VSP	F700	88-08-16-xx/00	
VSP	F900	88-08-16-xx/00	
VSP	G1000, VSP G1500, VSP F1500	80-06-98-00/20	
VSP	E590	93-07-26-x0/00	
VSP	E790	93-07-26-x0/00	
VSP	E990	93-07-26-x0/00	
VSP	E1090	93-07-26-x0/00	
VSP	5100, 5200, 5500, 5600	90-09-27-00/00	
VSP	One Block 24, 26, 28	A3-03-03-40/00	
* Minimum Level or above			

GPU

Vendor			
NVIDIA Tesla T4	Firmware	90.04.B4.00.04	Compatible with HA810 G2 and HA820 G2
	Driver	N/A	
NVIDIA A16	Firmware	94.07.62.00.AD	Compatible with HA820 G2 only
	Driver	N/A	
NVIDIA A40	Firmware	94.02.5C.00.0F	Compatible with HA820 G2 only
	Driver	N/A	
NVIDIA A100 80GB PCIe	Firmware	N/A	Compatible with HA820 G2 only
	Driver	N/A	

Software

Software Versions			
Vendor	**Component**		**Notes**
Hitachi	UCP Advisor	4.7	
Downloadable ZIPs			
Vendor	**Component**		**Notes**
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20250331.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20250331.zip	
Hitachi	UCPToolkit ZIP	Toolkit9.2.zip	
Main Mediakit ZIP			
Vendor	**Component**		**Notes**
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards - Solution Engineering uses

decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA800 G3 server

Hardware

	UCP CI (Release Version)	v9.2	v9.3	
	Release date	March 31, 2025	April 21, 2025	
	Major RHEL Release:	9.4	9.4	
Management and Compute Nodes : (HA810 G3)				
Components				**Notes**
System ROM		U54 v2.30	U54 v2.30	Packaged with Media Kit separately
iLO Firmware		v1.63	v1.63	
CPU Family		**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	
Compute Nodes : (HA820 G3)				
Components				**Notes**
System ROM		U54 v2.30	U54 v2.30	Packaged with Media Kit separately
iLO Firmware		v1.63	v1.63	
CPU Family		**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	
Compute Nodes : (HA840 G3)				**Notes**
Components				
System ROM		U59 v2.30	U59 v2.30	
iLO Firmware		v1.63	v1.63	
CPU Family		**Sapphire Rapids**	**Sapphire Rapids**	
I/O Card Support for HA810 G3 / HA820 G3 / HA840 G3				
Components				**Notes**
OCP Network Cards (Options)				
INT I350 1GbE, 4p, BASE-T OCP3 Adptr	Firmware	1.3602.0 (SPV 7.42)	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-hp-igb Driver	5.16.9-1.rhel9u4	5.16.9-1.rhel9u4	
INT E810 10/25GbE, 2p, SFP28 OCP3	Firmware	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr	Firmware	16.35.3006 (SPV 7.42)	16.35.3006 (SPV 7.42)	Packaged with SPV image v 7.42. This card is not supported for HA840 G3.
	mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr	Firmware	26.41.1000 (SPV 7.42)	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
BCM 57412 10GbE 2p SFP+ OCP3	Firmware	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-bnxt_en Driver	Inbox	Inbox	
BCM 57504 10/25GbE 4p SFP28 OCP3	Firmware	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-bnxt_en Driver	Inbox	Inbox	
PCIe Network Cards (Options)				
INT I350 1GbE, 4p, BASE-T PCIe Adptr	Firmware	1.3602.0 (SPV 7.42)	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-hp-igb Driver	Partner Async - 5.16.9-1.rhel9u4	Partner Async - 5.16.9-1.rhel9u4	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-ice Driver	Partner Async -1.14.11-1.rhel9u4	Partner Async -1.14.11-1.rhel9u4	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
INT E810 100GbE, 2p, QSFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42. This card is not supported for HA840 G3.
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
MLX MCX631102 10/25GbE 2p SFP28 Adptr	Firmware	26.41.1000 (SPV 7.42)	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr	Firmware	22.41.1000 (SPV 7.42)	22.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
BCM 57412 10GbE 2p SFP+ Adptr	Firmware	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-bnxt_en Driver	Inbox	Inbox	
HBA Controller				
HPE SN1200E 16Gb 2p FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42
	kmod-elx-lpfc Driver	Inbox	Inbox	
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1610Q 32Gb 1p FC HBA	Firmware	02.10.00	02.10.00	Packaged with SPV image v 7.42
	kmod-qlgc-qla2xxx Driver	10.02.12.01_k1-1.rhel9u4	10.02.12.01_k1-1.rhel9u4	
HPE SN1610Q 32Gb 2p FC HBA	Firmware	02.10.00	02.10.00	Packaged with SPV image v 7.42
	kmod-qlgc-qla2xxx Driver	10.02.12.01_k1-1.rhel9u4	10.02.12.01_k1-1.rhel9u4	
HPE SN1700E 64Gb 2P FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1700E 64Gb 1P FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1600E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.2.589.21	14.2.589.21	
	kmod-elx-lpfc Driver	Inbox	Inbox	
Boot Controller				
NS204i-u (PCIe card)	Firmware	1.2.14.1013	1.2.14.1013	Packaged with SPV image v 7.42
	Driver	Inbox	Inbox	
Drives for vSAN Cache and Capacity (Options) for HA 800 G3				
Components				**Notes**
				SSD/NVME firmware is packaged and applied with SPV image v 7.42

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor				Notes
Brocade	G620	9.2.1a	9.2.1a	
Brocade	G720	9.2.1a	9.2.1a	

Ethernet Switches

Vendor				
Arista	DCS-7010T-48-R	4.28.10.1M	4.28.10.1M	
Arista	DCS-7050CX3-32S-R	4.29.5M	4.29.5M	
Arista	DCS-7050SX3-48YC8-R	4.29.5M	4.29.5M	
Cisco	Nexus 3048	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.
Cisco	Nexus 93180LC-EX	NXOS 10.3.5	NXOS 10.3.5	
Cisco	Nexus 93180YC-EX	NXOS 10.3.4a	NXOS 10.3.4a	
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9332C (100G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9336C-FX2 (25G/100G Leaf)	NXOS 10.5.1	NXOS 10.5.1	

Storage Models

	Models			Notes
VSP	G200	83-05-53-x0/00	83-05-54-x0/00	Hitachi Support Page - ECNs
VSP	G400	83-05-53-x0/00	83-05-54-x0/00	
VSP	G600	83-05-53-x0/00	83-05-54-x0/00	
VSP	G800	83-05-53-x0/00	83-05-54-x0/00	
VSP	F400	83-05-53-x0/00	83-05-54-x0/00	
VSP	F600	83-05-53-x0/00	83-05-54-x0/00	

VSP	F800	83-05-53-x0/00	83-05-54-x0/00	
VSP	G350	88-08-15-xx/00	88-08-16-xx/00	
VSP	G370	88-08-15-xx/00	88-08-16-xx/00	
VSP	G700	88-08-15-xx/00	88-08-16-xx/00	
VSP	G900	88-08-15-xx/00	88-08-16-xx/00	
VSP	F350	88-08-15-xx/00	88-08-16-xx/00	
VSP	F370	88-08-15-xx/00	88-08-16-xx/00	
VSP	F700	88-08-15-xx/00	88-08-16-xx/00	
VSP	F900	88-08-15-xx/00	88-08-16-xx/00	
VSP	G1000, VSP G1500, VSP F1500	80-06-98-00/00	80-06-98-00/20	
VSP	E590	93-07-25-x0/00	93-07-26-x0/00	
VSP	E790	93-07-25-x0/00	93-07-26-x0/00	
VSP	E990	93-07-25-x0/00	93-07-26-x0/00	
VSP	E1090	93-07-25-x0/00	93-07-26-x0/00	
VSP	S100, 5200, 5500, 5600	90-09-26-00/00	90-09-27-00/00	
VSP	One Block 24, 26, 28	A3-03-21-40/00	A3-03-03-40/00	

* Minimum Level or above

GPU

Vendor				
NVIDIA A2	Firmware	94.07.62.00.AE	94.07.62.00.AE	Compatible with HA810 G3
	Driver	535.104.05	535.104.05	
NVIDIA A16	Firmware	94.07.62.00.AD	94.07.62.00.AD	Compatible with HA820 G3 only
	Driver	535.104.05	535.104.05	
NVIDIA A100	Firmware	N/A	N/A	Compatible with HA820 G3 only
	Driver	N/A	N/A	
NVIDIA L4	Firmware	95.04.55.00.01	95.04.55.00.01	Compatible with HA810 G3 & HA820 G3
	Driver	535.104.05	535.104.05	
NVIDIA L40	Firmware	95.02.5D.00.01	95.02.5D.00.01	Compatible with HA820 G3 only
	Driver	535.104.05	535.104.05	
NVIDIA L40S	Firmware	95.02.66.00.02	95.02.66.00.02	Compatible with HA820 G3 only
	Driver	535.104.05	535.104.05	
NVIDIA H100	Firmware	96.00.74.00.1C	96.00.74.00.1C	Compatible with HA820 G3 only
	Driver	550.90.07	550.90.07	
NVIDIA H100 NVL	Firmware	96.00.88.00.11	96.00.88.00.11	Compatible with HA820 G3 only
	Driver	550.90.07	550.90.07	

Software

Software Versions				
Vendor	**Component**			**Notes**
Hitachi	UCP Advisor	4.7	4.7	
Downloadable ZIPs				
Vendor	**Component**			**Notes**
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20250331.zip	Cisco_Firmware_20250331.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20250331.zip	Server_Firmware_HA_20250331.zip	
Hitachi	UCPToolkit ZIP	Toolkit9.2.zip	Toolkit9.2.zip	
Main Mediakit ZIP				
Vendor	**Component**			**Notes**
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.2_20250331.zip	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA8x5 G3 server

Hardware

UCP CI (Release Version)		v9.2	v9.3	
Release date		March 31, 2025	April 21, 2025	
Major RHEL Release:		9.4	9.4	
Compute Nodes : (HA805 / HA815/ HA825 G3)				
Compute Nodes : (HA805 G3)				
Components				**Notes**
System ROM		A56 v2.10	A56 v2.10	Packaged with Media Kit separately
iLO Firmware		v1.63	v1.63	
CPU Family		**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	
Compute Nodes : (HA815 G3)				
Components				**Notes**
System ROM		A55 v2.14	A55 v2.14	Packaged with Media Kit separately
iLO Firmware		v1.63	v1.63	
CPU Family		**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	
Compute Nodes : (HA825 G3)				
Components				**Notes**
System ROM		A55 v2.14	A55 v2.14	Packaged with Media Kit separately
iLO Firmware		v1.63	v1.63	
CPU Family		**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	
I/O Card Support for HA805 G3 / HA825 G3				
Components				**Notes**
OCP Network Cards (Options)				
INT I350 1GbE, 4p, BASE-T OCP3 Adptr	Firmware	1.3602.0 (SPV 7.42)	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-hp-igb Driver	5.16.9-1.rhel9u4	5.16.9-1.rhel9u4	
INT E810 10/25GbE, 2p, SFP28 OCP3	Firmware	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
INT E810 100GbE 2p QSFP28 OCP3 Adptr	Firmware	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr	Firmware	16.35.3006 (SPV 7.42)	16.35.3006 (SPV 7.42)	Packaged with SPV image v 7.42
	mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr	Firmware	26.41.1000 (SPV 7.42)	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
BCM 57412 10GbE 2p SFP+ OCP3	Firmware	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-bnxt_en Driver	Inbox	Inbox	
BCM 57504 10/25GbE 4p SFP28 OCP3	Firmware	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-bnxt_en Driver	Inbox	Inbox	
BCM 57416 10GbE 2p Base-T OCP3	Firmware	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-bnxt_en Driver	Inbox	Inbox	
PCIe Network Cards (Options)				
INT I350 1GbE, 4p, BASE-T PCIe Adptr	Firmware	1.3602.0 (SPV 7.42)	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-hp-igb Driver	5.16.9-1.rhel9u4	5.16.9-1.rhel9u4	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
MLX MCX631102 10/25GbE 2p SFP28 Adptr	Firmware	26.41.1000 (SPV 7.42)	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr	Firmware	22.41.1000 (SPV 7.42)	22.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42
	mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
BCM 57412 10GbE 2p SFP+ Adptr	Firmware	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42
	kmod-bnxt_en Driver	Inbox	Inbox	
HBA Controller				
HPE SN1700E 64Gb 2P FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1700E 64Gb 1P FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1610Q 32Gb 1p FC HBA	Firmware	02.10.00	02.10.00	Packaged with SPV image v 7.42
	kmod-qlgc-qla2xxx Driver	10.02.12.01_k1-1.rhel9u4	10.02.12.01_k1-1.rhel9u4	
HPE SN1610Q 32Gb 2p FC HBA	Firmware	02.10.00	02.10.00	Packaged with SPV image v 7.42
	kmod-qlgc-qla2xxx Driver	10.02.12.01_k1-1.rhel9u4	10.02.12.01_k1-1.rhel9u4	
HPE SN1600E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.2.589.21	14.2.589.21	
	kmod-elx-lpfc Driver	Inbox	Inbox	
Boot Controller				
NS204i-u (PCIe card)	Firmware	1.2.14.1013	1.2.14.1013	Packaged with SPV image v 7.42
	Driver	Inbox	Inbox	
Drives for vSAN Cache and Capacity (Options) for HA 800 G3				
Components				**Notes**
				SSD/NVME firmware is packaged and applied with SPV image v

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor				Notes
Brocade	G620	9.2.1a	9.2.1a	
Brocade	G720	9.2.1a	9.2.1a	

Ethernet Switches

Vendor				
Arista	DCS-7010T-48-R	4.28.10.1M	4.28.10.1M	
Arista	DCS-7050CX3-32S-R	4.29.5M	4.29.5M	
Arista	DCS-7050SX3-48YC8-R	4.29.5M	4.29.5M	
Cisco	Nexus 3048	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.
Cisco	Nexus 93180LC-EX	NXOS 10.3.5	NXOS 10.3.5	
Cisco	Nexus 93180YC-EX	NXOS 10.3.4a	NXOS 10.3.4a	
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9332C (100G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9336C-FX2 (25G/100G Leaf)	NXOS 10.5.1	NXOS 10.5.1	

Storage Models

	Models			Notes
VSP	G200	83-05-53-x0/00	83-05-54-x0/00	Hitachi Support Page - ECNs

VSP	G400	83-05-53-x0/00	83-05-54-x0/00	
VSP	G600	83-05-53-x0/00	83-05-54-x0/00	
VSP	G800	83-05-53-x0/00	83-05-54-x0/00	
VSP	F400	83-05-53-x0/00	83-05-54-x0/00	
VSP	F600	83-05-53-x0/00	83-05-54-x0/00	
VSP	F800	83-05-53-x0/00	83-05-54-x0/00	
VSP	G350	88-08-15-xx/00	88-08-16-xx/00	
VSP	G370	88-08-15-xx/00	88-08-16-xx/00	
VSP	G700	88-08-15-xx/00	88-08-16-xx/00	
VSP	G900	88-08-15-xx/00	88-08-16-xx/00	
VSP	F350	88-08-15-xx/00	88-08-16-xx/00	
VSP	F370	88-08-15-xx/00	88-08-16-xx/00	
VSP	F700	88-08-15-xx/00	88-08-16-xx/00	
VSP	F900	88-08-15-xx/00	88-08-16-xx/00	
VSP	G1000, VSP G1500, VSP F1500	80-06-98-00/00	80-06-98-00/20	
VSP	E590	93-07-25-x0/00	93-07-26-x0/00	
VSP	E790	93-07-25-x0/00	93-07-26-x0/00	
VSP	E990	93-07-25-x0/00	93-07-26-x0/00	
VSP	E1090	93-07-25-x0/00	93-07-26-x0/00	
VSP	5100, 5200, 5500, 5600	90-09-26-00/00	90-09-27-00/00	
VSP	One Block 24, 26, 28	A3-03-21-40/00	A3-03-03-40/00	

* Minimum Level or above

GPU

Vendor				
NVIDIA A2	Firmware	94.07.62.00.AE	94.07.62.00.AE	Compatible with HA805 G3 only
	Driver	535.104.05	535.104.05	

Software

Software Versions

Vendor	Component			Notes
Hitachi	UCP Advisor	4.7	4.7	

Downloadable ZIPs

Vendor	Component			Notes
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20250331.zip	Cisco_Firmware_20250331.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20250331.zip	Server_Firmware_HA_20250331.zip	
Hitachi	UCPToolkit ZIP	Toolkit9.2.zip	Toolkit9.2.zip	

Main Mediakit ZIP

Vendor	Component			Notes
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.2_20250331.zip	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA800 G2 server

Hardware

UCP CI (Release Version)		v9.2	v9.3	
Release date		March 31, 2025	April 21, 2025	
Major RHEL Release:		9.4	9.4	
Management and Compute Nodes : (HA810 G2)				
Components				**Notes**
System ROM		U46 v2.20 (SPV 6.92)	U46 v2.20 (SPV 6.92)	Packaged with SPV image v 6.92 System ROM & iLO are applied with SPV image.
iLO Firmware		v3.08	v3.08	
CPU Family		**Icelake**	**Icelake**	
Compute Nodes : (HA820 G2)				
Components				**Notes**
System ROM		U46 v2.20 (SPV 6.92)	U46 v2.20 (SPV 6.92)	Packaged with SPV image v 6.92 System ROM & iLO are applied with SPV image.
iLO Firmware		v3.08	v3.08	
CPU Family		**Icelake**	**Icelake**	
I/O Card Support for HA810 G2 / HA820 G2				
Components				**Notes**
OCP Network Cards (Options)				
INT I350 1GbE, 4p, BASE-T OCP3 Adptr	Firmware	1.3612.0 (SPV 6.92)	1.3612.0 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-hp-igb Driver	5.16.9-1.rhel9u4	5.16.9-1.rhel9u4	
INT E810 10/25GbE, 2p, SFP28 OCP3	Firmware	4.50 (SPV 6.92)	4.50 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr	Firmware	16.35.3502 (SPV 6.92)	16.35.3502 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
BCM 57412 10GbE, 2p, SFP+ OCP3 Adptr	Firmware	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-bnxt_en Driver	Inbox	Inbox	
BCM 57414 10/25GbE, 2p, SFP28 OCP3	Firmware	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-bnxt_en Driver	Inbox	Inbox	
BCM 57416 10GbE, 2p, BASE-T OCP3 Adptr	Firmware	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	bnxtnet Driver (ESXi)	Inbox	Inbox	
PCIe Network Cards (Options)				
INT I350 1GbE, 4p, BASE-T PCIe Adptr	Firmware	1.3612.0 (SPV 6.92)	1.3612.0 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-hp-igb Driver	5.16.9-1.rhel9u4	5.16.9-1.rhel9u4	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 6.92)	4.50 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr	Firmware	4.50 (SPV 6.92)	4.50 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
INT E810 100GbE, 2p, QSFP28 PCIe Adptr	Firmware	4.50 (SPV 6.92)	4.50 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-ice Driver	1.14.11-1.rhel9u4	1.14.11-1.rhel9u4	
MLX MCX512F 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	16.35.3502 (SPV 6.92)	16.35.3502 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-mlnx-ofa_kernel Driver	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr	Firmware	22.41.1000 (SPV 6.92)	22.41.1000 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-mlnx-ofa_kernel	24.04-OFED.24.04.0.6.6.1.rhel9u4	24.04-OFED.24.04.0.6.6.1.rhel9u4	
BCM 57412 10GbE, 2p, SFP+ Adptr	Firmware	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-bnxt_en Driver	Inbox	Inbox	
BCM 57414 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-bnxt_en Driver	Inbox	Inbox	
BCM 57416 10GbE, 2,p BASE-T Adptr	Firmware	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)	Packaged with SPV image v 6.92
	bnxtnet Driver (ESXi)	Inbox	Inbox	
HBA Controller				
HPE SN1100Q 16Gb 1p FC HBA - (Qlogic (Marvell), QLE2690)	Firmware	02.04.01 (SPV 6.92)	02.04.01 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-qlgc-qla2xxx Driver	10.02.12.01_k1-1.rhel9u4	10.02.12.01_k1-1.rhel9u4	
HPE SN1100Q 16Gb 2p FC HBA - (Qlogic (Marvell), QLE2692)	Firmware	02.04.01 (SPV 6.92)	02.04.01 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-qlgc-qla2xxx Driver	10.02.12.01_k1-1.rhel9u4	10.02.12.01_k1-1.rhel9u4	
HPE SN1200E 16Gb 1p FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10 (SPV 6.92)	14.4.329.10 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1200E 16Gb 2p FC HBA - (Emulex (Broadcom), XE201)	Firmware	14.4.329.10 (SPV 6.92)	14.4.329.10 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1610Q 32Gb 1p FC HBA - (Qlogic (Marvell), QLE2770)	Firmware	02.10.00 (SPV 6.92)	02.10.00 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-qlgc-qla2xxx Driver	10.02.12.01_k1-1.rhel9u4	10.02.12.01_k1-1.rhel9u4	
HPE SN1610Q 32Gb 2p FC HBA - (Qlogic (Marvell), QLE2772)	Firmware	02.10.00 (SPV 6.92)	02.10.00 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-qlgc-qla2xxx Driver	10.02.12.01_k1-1.rhel9u4	10.02.12.01_k1-1.rhel9u4	
HPE SN1610E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.4.329.10 (SPV 6.92)	14.4.329.10 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.4.329.10 (SPV 6.92)	14.4.329.10 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-elx-lpfc Driver	14.4.329.9-1.rhel9u4	14.4.329.9-1.rhel9u4	
SAS/RAID Controller				
HPE SR408i-p 12G	Firmware	7.11 (SPV 6.92)	7.11 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-smartpqi Driver	2.1.30-031.rhel9u4	2.1.30-031.rhel9u4	
HPE SR408i-a 12G	Firmware	7.11 (SPV 6.92)	7.11 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-smartpqi Driver	2.1.30-031.rhel9u4	2.1.30-031.rhel9u4	
HPE MR416i-p 12G	Firmware	52.26.3-5487 (SPV 6.92)	52.26.3-5487 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-smartpqi Driver	07.726.04.00_rhel9u3-1	07.726.04.00_rhel9u3-1	
HPE MR416i-a 12G	Firmware	52.26.3-5487 (SPV 6.92)	52.26.3-5487 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-smartpqi Driver	07.726.04.00_rhel9u3-1	07.726.04.00_rhel9u3-1	
HPE P816i-a SR 12G	Firmware	7.11 (SPV 6.92)	7.11 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-smartpqi Driver	2.1.30-031.rhel9u4	2.1.30-031.rhel9u4	
HPE SR932i-p 24G	Firmware	03.01.30.106 (SPV 6.92)	03.01.30.106 (SPV 6.92)	Packaged with SPV image v 6.92
	kmod-smartpqi Driver	2.1.30-031.rhel9u4	2.1.30-031.rhel9u4	
Boot Controller				
NS204i-r (Riser)	Firmware	1.2.14.1013 (SPV 6.92)	1.2.14.1013 (SPV 6.92)	Packaged with SPV image v 6.92
	Driver	Inbox	Inbox	
NS204i-p (PCIe card)	Firmware	1.2.14.1013 (SPV 6.92)	1.2.14.1013 (SPV 6.92)	Packaged with SPV image v 6.92
	Driver	Inbox	Inbox	
Drives for vSAN Cache and Capacity (Options) for HA 800 G2				
Components				**Notes**
				SSD/NVME firmware is packaged and applied with SPV image v

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor				Notes
Brocade	G620	9.2.1a	9.2.1a	
Brocade	G720	9.2.1a	9.2.1a	

Ethernet Switches

Vendor				
Arista	DCS-7010T-48-R	4.28.10.1M	4.28.10.1M	
Arista	DCS-7050CX3-32S-R	4.29.5M	4.29.5M	
Arista	DCS-7050SX3-48YC8-R	4.29.5M	4.29.5M	
Cisco	Nexus 3048	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.
Cisco	Nexus 93180LC-EX	NXOS 10.3.5	NXOS 10.3.5	
Cisco	Nexus 93180YC-EX	NXOS 10.3.4a	NXOS 10.3.4a	
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9332C (100G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.5.1	NXOS 10.5.1	
Cisco	Nexus 9336C-FX2 (25G/100G Leaf)	NXOS 10.5.1	NXOS 10.5.1	

Storage Models

	Models			Notes
VSP	G200	83-05-53-x0/00	83-05-54-x0/00	Hitachi Support Page - ECNs
VSP	G400	83-05-53-x0/00	83-05-54-x0/00	
VSP	G600	83-05-53-x0/00	83-05-54-x0/00	
VSP	G800	83-05-53-x0/00	83-05-54-x0/00	
VSP	F400	83-05-53-x0/00	83-05-54-x0/00	
VSP	F600	83-05-53-x0/00	83-05-54-x0/00	
VSP	F800	83-05-53-x0/00	83-05-54-x0/00	
VSP	G350	88-08-15-xx/00	88-08-16-xx/00	
VSP	G370	88-08-15-xx/00	88-08-16-xx/00	
VSP	G700	88-08-15-xx/00	88-08-16-xx/00	
VSP	G900	88-08-15-xx/00	88-08-16-xx/00	
VSP	F350	88-08-15-xx/00	88-08-16-xx/00	
VSP	F370	88-08-15-xx/00	88-08-16-xx/00	
VSP	F700	88-08-15-xx/00	88-08-16-xx/00	
VSP	F900	88-08-15-xx/00	88-08-16-xx/00	
VSP	G1000, VSP G1500, VSP F1500	80-06-98-00/00	80-06-98-00/20	
VSP	E590	93-07-25-x0/00	93-07-26-x0/00	
VSP	E790	93-07-25-x0/00	93-07-26-x0/00	
VSP	E990	93-07-25-x0/00	93-07-26-x0/00	
VSP	E1090	93-07-25-x0/00	93-07-26-x0/00	
VSP	5100, 5200, 5500, 5600	90-09-26-00/00	90-09-27-00/00	
VSP	One Block 24, 26, 28	A3-03-21-40/00	A3-03-03-40/00	
* Minimum Level or above				

GPU

Vendor				
NVIDIA Tesla T4	Firmware	90.04.B4.00.04	90.04.B4.00.04	Compatible with HA810 G2 and HA820 G2
	Driver	535.104.05	535.104.05	
NVIDIA A16	Firmware	94.07.62.00.AD	94.07.62.00.AD	Compatible with HA820 G2 only
	Driver	535.104.05	535.104.05	
NVIDIA A40	Firmware	94.02.5C.00.0F	94.02.5C.00.0F	Compatible with HA820 G2 only
	Driver	Inbox	Inbox	
NVIDIA A100 80GB PCIe	Firmware	N/A	N/A	Compatible with HA820 G2 only
	Driver	535.54.06	535.54.06	

Software

Software Versions

Vendor	Component			Notes
Hitachi	UCP Advisor	4.7	4.7	

Downloadable ZIPs

Vendor	Component			Notes
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20250331.zip	Cisco_Firmware_20250331.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20250331.zip	Server_Firmware_HA_20250331.zip	
Hitachi	UCPToolkit ZIP	Toolkit9.2.zip	Toolkit9.2.zip	

Main Mediakit ZIP

Vendor	Component			Notes
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.2_20250331.zip	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA800 G3 server

Hardware

UCP CI (Release Version)		v9.0	v9.1	v9.2	v9.3		
Release date		July 5, 2024	October 21, 2024	March 31, 2025	April 21, 2025		
Major vSphere Release:		8.0u2	8.0u3	8.0u3	8.0u3		
Management and Compute Nodes : (HA810 G3)							
Components						**Notes**	
System ROM		U54 v2.16	U54 v2.16	U54 v2.30	U54 v2.30	Packaged with Media Kit separately	
iLO Firmware		v1.58	v1.58	v1.63	v1.63		
CPU Family		**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**		
Compute Nodes : (HA820 G3)							
Components						**Notes**	
System ROM		U54 v2.16	U54 v2.16	U54 v2.30	U54 v2.30	Packaged with Media Kit separately	
iLO Firmware		v1.58	v1.58	v1.63	v1.63		
CPU Family		**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**		
Compute Nodes : (HA840 G3)						**Notes**	
Components							
System ROM		U59 v2.16	U59 v2.16	U59 v2.30	U59 v2.30		
iLO Firmware		v1.58	v1.58	v1.63	v1.63		
CPU Family		**Sapphire Rapids**	**Sapphire Rapids**	**Sapphire Rapids**	**Sapphire Rapids**		
I/O Card Support for HA810 G3 / HA820 G3 / HA840 G3							
Components						**Notes**	**VMWare HCL / IOVP link:**
OCP Network Cards (Options)							
INT I350 1Gbt, 4p, BASE-T OCP3 Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a3	Firmware intel-igbn Driver (ESXi)	1.3429.0 Partner Async - 1.11.2.0-1OEM	1.3429.0 Partner Async - 1.12.5.0-1OEM	1.3602.0 (SPV 7.42) Partner Async - 1.12.0.0-1OEM	1.3602.0 (SPV 7.42) Partner Async - 1.12.0.0-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
INT E810 10/25Gbt, 2p, SFP28 OCP3 VID=8086, DVID=159b, SVID=8086, SSID=0005	Firmware intel-icen Driver (ESXi)	4.30 (SPV 7.41) VMware Inbox - 1.5.2.12-1vmw	4.30 (SPV 7.41) VMware Inbox - 1.5.2.12-1vmw	4.50 (SPV 7.42) Partner Async - 1.14.2.0-1OEM	4.50 (SPV 7.42) Partner Async - 1.14.2.0-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr VID=15b3, DVID=1017, SVID=15b3, SSID=00c2	Firmware nmlx5_core Driver (ESXi)	16.35.3006 (SPV 7.41) VMWare Inbox - 4.23.0.66-2vmw	16.35.3006 (SPV 7.41) VMWare Inbox - 4.23.0.66-2vmw	16.35.3006 (SPV 7.42) VMWare Inbox - 4.23.6.2-7vmw	16.35.3006 (SPV 7.42) VMWare Inbox - 4.23.6.2-7vmw	Packaged with SPV Image v 7.42. This card is not supported for HA840 G3.	VMware Compatibility Guide Link
MLX MCX514 10/25GbE 2p SFP28 OCP3 Adptr VID=15b3, DVID=10ff, SVID=15b3, SSID=0007	Firmware nmlx5_core Driver (ESXi)	26.39.1002 (SPV 7.41) VMWare Inbox -4.23.0.66-2vmw	26.39.1002 (SPV 7.41) VMWare Inbox -4.23.0.66-2vmw	26.41.1000 (SPV 7.42) VMWare Inbox -4.23.6.2-7vmw	26.41.1000 (SPV 7.42) VMWare Inbox -4.23.6.2-7vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
BCM 57412 10GbE 2p SFP+ OCP3 VID=14e4, DVID=16d6, SVID=14e4, SSID=1594	Firmware bnxtnet Driver (ESXi)	228.1.111.0 (SPV 7.41) 228.0.116.0-1OEM (Async)	228.1.111.0 (SPV 7.41) 228.0.116.0-1OEM (Async)	230.1.123.0 (SPV 7.42) Partner Async - 230.0.236.0-1OEM	230.1.123.0 (SPV 7.42) Partner Async -230.0.236.0-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
BCM 57504 10/25GbE 4p SFP28 OCP3 VID=14e4, DVID=1751, SVID=14e4, SSID=1598	Firmware bnxtnet Driver (ESXi)	228.1.111.0 (SPV 7.41) 228.0.116.0-1OEM (Async)	228.1.111.0 (SPV 7.41) 228.0.116.0-1OEM (Async)	230.1.123.0 (SPV 7.42) Partner Async - 230.0.236.0-1OEM	230.1.123.0 (SPV 7.42) Partner Async - 230.0.236.0-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
PCIe Network Cards (Options)							
INT I350 1Gbt, 4p, BASE-T PCIe Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware igbn Driver (ESXi)	1.3429.0 Partner Async - 1.11.2.0-1OEM	1.3429.0 Partner Async - 1.11.2.0-1OEM	1.3602.0 (SPV 7.42) Partner Async - 1.12.0.0-1OEM	1.3602.0 (SPV 7.42) Partner Async - 1.12.0.0-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware intel-icen Driver (ESXi)	4.30 (SPV 7.41) VMWare Inbox - 1.5.2.12-1vmw	4.30 (SPV 7.41) VMWare Inbox - 1.5.2.12-1vmw	4.50 (SPV 7.42) Partner Async - 1.14.2.0-1OEM	4.50 (SPV 7.42) Partner Async - 1.14.2.0-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr VID=8086, DVID=1593, SVID=8086, SSID=0005	Firmware intel-icen Driver (ESXi)	4.30 (SPV 7.41) VMWare Inbox - 1.5.2.12-1vmw	4.30 (SPV 7.41) VMWare Inbox - 1.5.2.12-1vmw	4.50 (SPV 7.42) Partner Async - 1.14.2.0-1OEM	4.50 (SPV 7.42) Partner Async - 1.14.2.0-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
INT E810 100GbE, 2p, QSFP28 PCIe Adptr VID=8086, DVID=1593, SVID=8086, SSID=0005	Firmware intel-icen Driver (ESXi)	4.30 (SPV 7.41) VMWare Inbox - 1.5.2.12-1vmw	4.30 (SPV 7.41) VMWare Inbox - 1.5.2.12-1vmw	4.50 (SPV 7.42) Partner Async - 1.14.2.0-1OEM	4.50 (SPV 7.42) Partner Async - 1.14.2.0-1OEM	Packaged with SPV Image v 7.42. This card is not supported for HA840 G3.	VMware Compatibility Guide Link
MLX MCX311O2 10/25GbE 2p SFP28 Adptr VID=15b3, DVID=10ff, SVID=15b3, SSID=0012	Firmware nmlx5_core Driver (ESXi)	26.39.1002 (SPV 7.41) VMWare Inbox -4.23.0.66-2vmw	26.39.1002 (SPV 7.41) VMWare Inbox -4.23.0.66-2vmw	26.41.1000 (SPV 7.42) VMWare Inbox -4.23.6.2-7vmw	26.41.1000 (SPV 7.42) VMWare Inbox -4.23.6.2-7vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
MLX MCX631102 10/25GbE 2p SFP28 Adptr VID=15b3, DVID=101d, SVID=15b3, SSID=0042	Firmware nmlx5_core Driver (ESXi)	22.39.1002 (SPV 7.41) VMWare Inbox -4.23.0.66-2vmw	22.39.1002 (SPV 7.41) VMWare Inbox -4.23.0.66-2vmw	22.41.1000 (SPV 7.42) VMWare Inbox -4.23.6.2-7vmw	22.41.1000 (SPV 7.42) VMWare Inbox -4.23.6.2-7vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
BCM 57412 10GbE 2p SFP+ Adptr VID=14e4, DVID=16db, SVID=14e4, SSID=1595	Firmware bnxtnet Driver (ESXi)	228.1.111.0 (SPV 7.41) 228.0.116.0-1OEM (Async)	228.1.111.0 (SPV 7.41) 228.0.116.0-1OEM (Async)	230.1.123.0 (SPV 7.42) Partner Async - 230.0.236.0-1OEM	230.1.123.0 (SPV 7.42) Partner Async - 230.0.236.0-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
HBA Controller							
HPE SN1200E 16Gb 2p FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0214	Firmware lpfc Driver (ESXi)	14.2.589.21 VMWare Inbox - 14.2.641.5-32vmw	14.2.589.21 VMWare Inbox - 14.2.641.5-32vmw	14.4.329.10 VMWare Inbox - 14.4.0.39-35vmw	14.4.329.10 VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=f400, SVID=1590, SSID=02d6	Firmware lpfc Driver (ESXi)	14.2.589.19 VMWare Inbox - 14.2.641.5-32vmw	14.2.589.19 VMWare Inbox - 14.2.641.5-32vmw	14.4.329.10 VMWare Inbox - 14.4.0.39-35vmw	14.4.329.10 VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
HPE SN1610Q 32Gb 1p FC HBA VID=1077, DVID=2281, SVID=1077, SSID=02d3	Firmware qlnativefc Driver (ESXi)	09.12.01 VMWare Inbox - 5.4.69.0-23vmw	09.12.01 VMWare Inbox - 5.4.69.0-23vmw	02.10.00 Partner Async - 5.4.82.1-1OEM	02.10.00 Partner Async - 5.4.82.1-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
HPE SN1610Q 32Gb 2p FC HBA VID=1077, DVID=2281, SVID=1077, SSID=02d4	Firmware qlnativefc Driver (ESXi)	09.12.01 VMWare Inbox - 5.4.69.0-23vmw	09.12.01 VMWare Inbox - 5.4.69.0-23vmw	02.10.00 Partner Async - 5.4.82.1-1OEM	02.10.00 Partner Async - 5.4.82.1-1OEM	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
HPE SN1700E 64Gb 2P FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0168	Firmware lpfc Driver (ESXi)	14.2.589.19 VMWare Inbox - 14.2.641.5-32vmw	14.2.589.19 VMWare Inbox - 14.2.641.5-32vmw	14.4.329.10 VMWare Inbox - 14.4.0.39-35vmw	14.4.329.10 VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
HPE SN1700E 64Gb 1P FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0214	Firmware lpfc Driver (ESXi)	14.2.589.19 VMWare Inbox - 14.2.641.5-32vmw	14.2.589.19 VMWare Inbox - 14.2.641.5-32vmw	14.4.329.10 VMWare Inbox - 14.4.0.39-35vmw	14.4.329.10 VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
HPE SN1600E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=e300, SVID=1590, SSID=0201	Firmware lpfc Driver (ESXi)	14.2.589.21 VMWare Inbox - 14.2.641.5-32vmw	14.2.589.21 VMWare Inbox - 14.2.641.5-32vmw	14.2.589.21 VMWare Inbox - 14.4.0.39-35vmw	14.2.589.21 VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
Boot Controller							
NS204-i (PCIe card) VID=1b4b, DVID=2241, SVID=1590, SSID=0379	Firmware nvme_pcIe Driver (ESXi)	1.2.14.1013 VMWare Inbox -1.2.4.11-1vmw	1.2.14.1013 VMWare Inbox -1.2.4.11-1vmw	1.2.14.1013 VMWare Inbox -1.2.4.15-1vmw	1.2.14.1013 VMWare Inbox -1.2.4.15-1vmw	Packaged with SPV Image v 7.42	VMware Compatibility Guide Link
Drives for vSAN Cache and Capacity (Options) for HA 800 G3							
Components						**Notes**	
						SSD/NVME firmware is packaged and applied with SPV image v 7.42	

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor						Notes	
Brocade	G620	9.2.0a	9.2.0a	9.2.1a	9.2.1a		
Brocade	G720	9.2.0a	9.2.0a	9.2.1a	9.2.1a		

Ethernet Switches

Vendor							
Arista	DCS-7010T-48-R	4.28.10.1M	4.28.10.1M	4.28.10.1M	4.28.10.1M		
Arista	DCS-7050CX3-32S-R	4.29.5M	4.29.5M	4.29.5M	4.29.5M		
Arista	DCS-7050SX3-48YC8-R	4.29.5M	4.29.5M	4.29.5M	4.29.5M		
Cisco	Nexus 3048	9.3.13	9.3.13	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	9.3.13	9.3.13	NXOS 10.3.5	NXOS 10.3.5		
Cisco	Nexus 93180YC-EX	NXOS 10.1.4a	NXOS 10.3.4a	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 9332C (100G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 9336D-GX (400G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		

Storage Models

	Models					Notes	
VSP	G200	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00	Hitachi Support Page - CSN	
VSP	G400	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G600	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G800	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F400	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F600	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F800	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G350	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G370	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G700	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G900	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F350	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F370	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F700	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F900	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-96-00/00	80-06-97-00/00	80-06-98-00/00	80-06-98-00/20		
VSP	E590	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E790	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E990	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E1090	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	5100, 5200, 5500, 5600	90-09-24-00/01	90-09-25-00/10	90-09-26-00/00	90-09-27-00/00		
VSP	One Block 24, 26, 28	A3-02-01-40/00	A3-02-21-40/01	A3-03-21-40/00	A3-03-01-40/00		

* Minimum Level or above

GPU

Vendor							
NVIDIA A2 VID=10de DVID=25b6, SVID=0000, SSID=157e	Firmware NVD-VMware_ESXi_8.0.0_Driver	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	Compatible with HA810 G3	VMware Compatibility Guide Link
NVIDIA A16 VID=10de DVID=25b6, SVID=0000, SSID=14a9	Firmware NVD-VMware_ESXi_8.0.0_Driver	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	Compatible with HA820 G3 only	VMware Compatibility Guide Link
NVIDIA A100 VID=10de DVID=20b5, SVID=0000, SSID=20b5	Firmware NVD-VMware_ESXi_8.0.0_Driver	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	Compatible with HA820 G3 only	VMware Compatibility Guide Link
NVIDIA L4 VID=10de DVID=27b8, SVID=0000, SSID=16ca	Firmware NVD-VMware_ESXi_8.0.0_Driver	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	Compatible with HA810 G3 & HA820 G3	VMware Compatibility Guide Link
NVIDIA L40 VID=10de DVID=26b5, SVID=0000, SSID=169d	Firmware NVD-VMware_ESXi_8.0.0_Driver	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	N/A 535.54.06	Compatible with HA820 G3 only	VMware Compatibility Guide Link
NVIDIA L40S VID=10de DVID=26b9, SVID=0000, SSID=18cf	Firmware NVD-VMware_ESXi_8.0.0_Driver	N/A 535.104.06	N/A 535.104.06	N/A 535.104.06	N/A 535.104.06	Compatible with HA820 G3 only	VMware Compatibility Guide Link
NVIDIA H100 VID=10de DVID=2331, SVID=0000, SSID=1626	Firmware NVD-VMware_ESXi_8.0.0_Driver	88.00.98.00.01 535.54.06	88.00.98.00.01 535.54.06	88.00.98.00.01 535.54.06	88.00.98.00.01 535.54.06	Compatible with HA820 G3 only	VMware Compatibility Guide Link
NVIDIA H100 NVL VID=10de DVID=2321, SVID=0000, SSID=1839	Firmware NVD-VMware_ESXi_8.0.0_Driver	96.00.74.00.00 535.54.06	96.00.74.00.00 535.54.06	96.00.74.00.00 535.54.06	96.00.74.00.00 535.54.06	Compatible with HA820 G3 only	VMware Compatibility Guide Link

Software

Software Versions							
Vendor	**Component**					**Notes**	
Hitachi	UCP Advisor	4.6	4.6	4.7	4.7		
VMware	ESXi	8.0U2 GA (Build # 22380479)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)		
VMware	vCenter(VCSA)	8.0U2 GA (Build # 22617221)	8.0U3 GA (Build # 24022515)	8.0U3 GA (Build # 24022515)	8.0U3 GA (Build # 24022515)		
VMware	vSAN	8.0U2 GA (Build # 22380479)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)		
Downloadable ZIPs							
Vendor	**Component**					**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip		
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20240705.zip	Cisco_Firmware_20240705.zip	Cisco_Firmware_20250331.zip	Cisco_Firmware_20250331.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20240705.zip	Server_Firmware_HA_20240705.zip	Server_Firmware_HA_20250331.zip	Server_Firmware_HA_20250331.zip		
Hitachi	Firmware Software ZIP (v8.0 HA Package)	HA_vSphere_8.x_20240506.zip	HA_vSphere_8.x_20241021.zip	HA_vSphere_8.x_20241021.zip	HA_vSphere_8.x_20241021.zip		
Hitachi	UCP Toolkit ZIP	Toolkit9.0.zip	Toolkit9.1.zip	Toolkit9.2.zip	Toolkit9.2.zip		
Main Mediakit ZIP							
Vendor	**Component**					**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.0_20240705.zip	UCPCI-HC_BaseMediaKit_v9.1_20241021.zip	UCPCI-HC_BaseMediaKit_v9.2_20250331.zip	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This well sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA8x5 G3 server

Hardware

UCP CI (Release Version)		v9.0	v9.1	v9.2	v9.3		
Release date		July 5, 2024	October 21, 2024	March 31, 2025	April 21, 2025		
Major vSphere Release:		8.0u2	8.0u3	8.0u3	8.0u3		
Compute Nodes : (HA805 / HA815/ HA825 G3)							
Compute Nodes : (HA805 G3)							
Components						**Notes**	
System ROM		A56 v1.58	A56 v1.58	A56 v2.10	A56 v2.10	Packaged with Media Kit separately	
iLO Firmware		v1.58	v1.58	v1.63	v1.63		
CPU Family		**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**		
Compute Nodes : (HA815 G3)							
Components						**Notes**	
System ROM		A55 v1.58	A55 v1.58	A55 v2.14	A55 v2.14	Packaged with Media Kit separately	
iLO Firmware		v1.58	v1.58	v1.63	v1.63		
CPU Family		**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**		
Compute Nodes : (HA825 G3)							
Components						**Notes**	
System ROM		A55 v1.58	A55 v1.58	A55 v2.14	A55 v2.14	Packaged with Media Kit separately	
iLO Firmware		v1.58	v1.58	v1.63	v1.63		
CPU Family		**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**	**AMD Genoa / AMD Genoa-x / AMD Bergamo/Turin**		
I/O Card Support for HA805 G3 / HA825 G3							
Components						**Notes**	**VMWare HCL / IOVP link:**
OCP Network Cards (Options)							
INT I350 1GbE, 4p, BASE-T OCP3 Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a3	Firmware	1.3429.0	1.3429.0	1.3602.0 (SPV 7.42)	1.3602.0 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	intal-igbn Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.0.0-1OEM	Partner Async - 1.12.0.0-1OEM		
INT E810 10/25GbE, 2p, SFP28 OCP3 VID=8086, DVID=159b, SVID=8086, SSID=0005	Firmware	4.30 (SPV 7.41)	4.30 (SPV 7.41)	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	intal-icen Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.14.2.0-1OEM		
INT E810 100GbE 2p QSFP28 OCP3 Adptr VID=8086, DVID=1592, SVID=8086, SSID=0006	Firmware	4.30 (SPV 7.41)	4.30 (SPV 7.41)	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	intal-icen Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.14.2.0-1OEM		
MLX MCX631A 10/25GbE, 2p, SFP28 OCP3 Adptr VID=15b3, DVID=1017, SVID=15b3, SSID=0052	Firmware	16.35.3006 (SPV 7.41)	16.35.3006 (SPV 7.41)	16.35.3006 (SPV 7.42)	16.35.3006 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw		
MLX MCX614 10/25GbE 2p SFP28 OCP3 Adptr VID=15b3, DVID=10ff, SVID=15b3, SSID=0007	Firmware	26.39.1002 (SPV 7.41)	26.39.1002 (SPV 7.41)	26.41.1000 (SPV 7.42)	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox -4.23.0.66-2vmw	VMWare Inbox -4.23.0.66-2vmw	VMWare Inbox -4.23.6.2-7vmw	VMWare Inbox -4.23.6.2-7vmw		
BCM 57412 10GbE 2p SFP+ OCP3 VID=14e4, DVID=16d6, SVID=14e4, SSID=1594	Firmware	228.1.111.0 (SPV 7.41)	228.1.111.0 (SPV 7.41)	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	228.0.116.0-1OEM (Async)	228.0.116.0-1OEM (Async)	Partner Async - 230.0.236.0-1OEM	Partner Async - 230.0.236.0-1OEM		
BCM 57504 10/25GbE 4p SFP28 OCP3 VID=14e4, DVID=1751, SVID=14e4, SSID=1598	Firmware	228.1.111.0 (SPV 7.41)	228.1.111.0 (SPV 7.41)	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	228.0.116.0-1OEM (Async)	228.0.116.0-1OEM (Async)	Partner Async - 230.0.236.0-1OEM	Partner Async - 230.0.236.0-1OEM		
BCM 57416 10GbE 2p Base-T OCP3 **VID=14e4, DVID=16d8, SVID=14e4, SSID=1592**	Firmware	228.1.111.0 (SPV 7.41)	228.1.111.0 (SPV 7.41)	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	228.0.116.0-1OEM (Async)	228.0.116.0-1OEM (Async)	Partner Async - 230.0.236.0-1OEM	Partner Async - 230.0.236.0-1OEM		
PCIe Network Cards (Options)							
INT I350 1GbE, 4p, BASE-T PCIe Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware	1.3429.0	1.3429.0	1.3602.0	1.3602.0	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	igbn Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.0.0-1OEM	Partner Async - 1.12.0.0-1OEM		
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware	4.30 (SPV 7.41)	4.30 (SPV 7.41)	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	intal-icen Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.14.2.0-1OEM		
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr VID=8086, DVID=1593, SVID=8086, SSID=0005	Firmware	4.30 (SPV 7.41)	4.30 (SPV 7.41)	4.50 (SPV 7.42)	4.50 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	intal-icen Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.14.2.0-1OEM		
MLX MCX31102 10/25GbE 2p SFP28 Adptr VID=15b3, DVID=10ff, SVID=15b3, SSID=0012	Firmware	26.39.1002 (SPV 7.41)	26.39.1002 (SPV 7.41)	26.41.1000 (SPV 7.42)	26.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox -4.23.0.66-2vmw	VMWare Inbox -4.23.0.66-2vmw	VMWare Inbox -4.23.6.2-7vmw	VMWare Inbox -4.23.6.2-7vmw		
MLX MCX621B6AS 100GbE, 2p, QSFP56 Adptr VID=15b3, DVID=101d, SVID=15b3, SSID=0042	Firmware	22.39.1002 (SPV 7.41)	22.39.1002 (SPV 7.41)	22.41.1000 (SPV 7.42)	22.41.1000 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox -4.23.6.2-7vmw	VMWare Inbox -4.23.6.2-7vmw		
BCM 57412 10GbE 2p SFP+ Adptr VID=14e4, DVID=16d6, SVID=14e4, SSID=1595	Firmware	228.1.111.0 (SPV 7.41)	228.1.111.0 (SPV 7.41)	230.1.123.0 (SPV 7.42)	230.1.123.0 (SPV 7.42)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	228.0.116.0-1OEM (Async)	228.0.116.0-1OEM (Async)	Partner Async - 230.0.236.0-1OEM	Partner Async - 230.0.236.0-1OEM		
HBA Controller							
HPE SN1700E 64Gb 2P FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=f400, SVID=1590, SSID=0368	Firmware	14.2.589.19	14.2.589.19	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw		
HPE SN1700E 64Gb 1P FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0214	Firmware	14.2.589.19	14.2.589.19	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw		
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=f400, SVID=1590, SSID=02d6	Firmware	14.2.589.19	14.2.589.19	14.4.329.10	14.4.329.10	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw		
HPE SN1610Q 32Gb 1p FC HBA VID=1077, DVID=2281, SVID=1077, SSID=02d3	Firmware	09.12.01	09.12.01	02.10.00	02.10.00	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw	Partner Async - 5.4.82.1-1OEM	Partner Async - 5.4.82.1-1OEM		
HPE SN1610Q 32Gb 2p FC HBA VID=1077, DVID=2281, SVID=1077, SSID=02d4	Firmware	09.12.01	09.12.01	02.10.00	02.10.00	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw	Partner Async - 5.4.82.1-1OEM	Partner Async - 5.4.82.1-1OEM		
HPE SN1600E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=e300, SVID=1590, SSID=0201	Firmware	14.2.589.21	14.2.589.21	14.2.589.21	14.2.589.21		VMware Compatibility Guide Link
	qlfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw		
Boot Controller							
N5204-u (PCIe card) VID=1b4b, DVID=2241, SVID=1590, SSID=0379	Firmware	1.2.14.1013	1.2.14.1013	1.2.14.1013	1.2.14.1013	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nvme_pcie Driver (ESXi)	VMWare Inbox -1.2.4.11-1vmw	VMWare Inbox -1.2.4.11-1vmw	VMWare Inbox -1.2.4.15-1vmw	VMWare Inbox -1.2.4.15-1vmw		
Drives for vSAN Cache and Capacity (Options) for HA 800 G3							
Components						**Notes**	
For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items: 1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc) 2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)						SSD/NVME firmware is packaged and applied with SPV image v	

FC Switches

Vendor						Notes	
Brocade	G620	9.2.0a	9.2.0a	9.2.1a	9.2.1a		
Brocade	G720	9.2.0a	9.2.0a	9.2.1a	9.2.1a		

Ethernet Switches

Vendor							
Arista	DCS-7010T-48-R	4.28.10.1M	4.28.10.1M	4.28.10.1M	4.28.10.1M		
Arista	DCS-7050CX3-32S-R	4.29.5M	4.29.5M	4.29.5M	4.29.5M		
Arista	DCS-7050SX3-48YC8-R	4.29.5M	4.29.5M	4.29.5M	4.29.5M		
Cisco	Nexus 3048	9.3.13	9.3.13	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	9.3.13	9.3.13	NXOS 10.3.5	NXOS 10.3.5		
Cisco	Nexus 93180YC-EX	NXOS 10.3.4a	NXOS 10.3.4a	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9236BQ (1 G Mgmt)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 9332C (100G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		

Storage Models

	Models					Notes	
VSP	G200	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-03-54-x0/00	Hitachi Support Page - ECN1	
VSP	G400	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G600	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G800	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F400	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F600	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F800	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G350	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G370	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G700	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G900	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F350	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F370	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F700	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F900	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	E1000, VSP G1500, VSP F1500	80-06-96-00/00	80-06-97-00/00	80-06-98-00/00	80-06-98-00/20		
VSP	E590	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E790	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E990	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E1090	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	5100, 5200, 5500, 5600	90-09-24-00/01	90-09-25-00/10	90-09-26-00/00	90-09-27-00/00		
VSP	One Block 24, 26, 28	93-02-01-40/00	93-02-21-40/01	93-03-21-40/00	93-03-03-40/00		

* Minimum Level or above

GPU

Vendor							
NVIDIA A2 VID=10de DVID=25b6, SVID=0000, SSID=157e	Firmware	N/A	N/A	N/A	N/A	Compatible with HA805 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	535.54.06	535.54.06	535.54.06	535.54.06		

Software

Software Versions							
Vendor	**Component**					**Notes**	
Hitachi	UCP Advisor	4.6	4.6	4.7	4.7		
VMware	ESXi	8.0U2 GA (Build # 22380479)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)		
VMware	vCenter(VCSA)	8.0U2 GA (Build # 22617221)	8.0U3 GA (Build # 24022515)	8.0U3 GA (Build # 24022515)	8.0U3 GA (Build # 24022515)		
VMware	VSAN	8.0U2 GA (Build # 22380479)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)		
Downloadable ZIPs							
Vendor	**Component**					**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip		
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20240705.zip	Cisco_Firmware_20240705.zip	Cisco_Firmware_20250331.zip	Cisco_Firmware_20250331.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20240705.zip	Server_Firmware_HA_20240705.zip	Server_Firmware_HA_20250331.zip	Server_Firmware_HA_20250331.zip		
Hitachi	Vmware Software ZIP (v8.0 HA Package)	HA_vSphere_8.x_20240506.zip	HA_vSphere_8.x_20241021.zip	HA_vSphere_8.x_20241021.zip	HA_vSphere_8.x_20241021.zip		
Hitachi	UCP toolkit ZIP	Toolkit9.0.zip	Toolkit9.1.zip	Toolkit9.2.zip	Toolkit9.2.zip		
Main Mediakit ZIP							
Vendor	**Component**					**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.0_20240705.zip	UCPCI-HC_BaseMediaKit_v9.1_20241021.zip	UCPCI-HC_BaseMediaKit_v9.2_20250331.zip	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adaptor

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adaptors

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adaptor.

UCP CI Interoperability Matrix

UCP CI w/ HA800 G2 server

Hardware

UCP CI (Release Version)	v9.0	v9.1	v9.2	v9.3		
Release date	July 5, 2024	October 21, 2024	v9.3	April 21, 2025		
Major vSphere Release:	8.0u2	8.0u3	v9.4	8.0u3		
Management and Compute Nodes : (HA810 G2)						
Components					**Notes**	
System ROM		U46 v2.00 (SPV 6.91)	U46 v2.00 (SPV 6.91)	U46 v2.20 (SPV 6.92)	U46 v2.20 (SPV 6.92)	Packaged with SPV image v 6.92 System ROM & iLO are applied with SPV image.	
iLO Firmware		v3.03	v3.03	v3.08	v3.08		
CPU Family		**Icelake**	**Icelake**	**Icelake**	**Icelake**		
Compute Nodes : (HA820 G2)							
Components						**Notes**	
System ROM		U46 v2.00 (SPV 6.91)	U46 v2.00 (SPV 6.91)	U46 v2.20 (SPV 6.92)	U46 v2.20 (SPV 6.92)	Packaged with SPV image v 6.92 System ROM & iLO are applied with SPV image.	
iLO Firmware		v3.03	v3.03	v3.08	v3.08		
CPU Family		**Icelake**	**Icelake**	**Icelake**	**Icelake**		
I/O Card Support for HA810 G2 / HA820 G2							
Components						**Notes**	**VMWare HCL / IOVP link:**
OCP Network Cards (Options)							
INT I350 1GbE, 4p, BASE-T OCP3 Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a3	Firmware	1.3429.0 (SPV 6.91)	1.3429.0 (SPV 6.91)	1.3612.0 (SPV 6.92)	1.3612.0 (SPV 6.92)		VMware Compatibility Guide Link
	intel-igbn Driver (ESXi)	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.12.0.0-1OEM	Partner Async - 1.12.0.0-1OEM	Packaged with SPV image v 6.92	
INT E810 10/25GbE, 2p, SFP28 OCP3 VID=8086, DVID=159b, SVID=8086, SSID=0005	Firmware	4.30 (SPV 6.91)	4.30 (SPV 6.91)	4.50 (SPV 6.92)	4.50 (SPV 6.92)		VMware Compatibility Guide Link
	intel-Icen Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.14.2.0-1OEM	Packaged with SPV image v 6.92	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr VID=15b3, DVID=1017, SVID=15b3, SSID=0052	Firmware	16.35.3006 (SPV 6.91)	16.35.3006 (SPV 6.91)	16.35.3502 (SPV 6.92)	16.35.3502 (SPV 6.92)		VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	Packaged with SPV image v 6.92	
BCM 57412 10GbE, 2p, SFP+ OCP3 Adptr VID=14e4, DVID=16d6, SVID=14e4, SSID=1594	Firmware	228.1.111.0 (SPV 6.91)	228.1.111.0 (SPV 6.91)	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 228.0.116.0-1OEM	Partner Async - 228.0.116.0-1OEM	Partner Async -230.0.236.0-1OEM	Partner Async -230.0.236.0-1OEM	Packaged with SPV image v 6.92	
BCM 57414 10/25GbE, 2p, SFP28 OCP3 VID=14e4, DVID=16d7, SVID=14e4, SSID=1596	Firmware	228.1.111.0 (SPV 6.91)	228.1.111.0 (SPV 6.91)	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 228.0.116.0-1OEM	Partner Async - 228.0.116.0-1OEM	Partner Async -230.0.236.0-1OEM	Partner Async -230.0.236.0-1OEM	Packaged with SPV image v 6.92	
BCM 57416 10GbE, 2p, BASE-T OCP3 Adptr VID=14e4, DVID=16d8, SVID=14e4, SSID=1592	Firmware	228.1.111.0 (SPV 6.91)	228.1.111.0 (SPV 6.91)	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 228.0.116.0-1OEM	Partner Async - 228.0.116.0-1OEM	Partner Async -230.0.236.0-1OEM	Partner Async -230.0.236.0-1OEM	Packaged with SPV image v 6.92	
PCIe Network Cards (Options)							
INT I350 1GbE, 4p, BASE-T PCIe Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware	1.3429.0 (SPV 6.91)	1.3429.0 (SPV 6.91)	1.3612.0 (SPV 6.92)	1.3612.0 (SPV 6.92)		VMware Compatibility Guide Link
	igbn Driver (ESXi)	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.12.0.0-1OEM	Partner Async - 1.12.0.0-1OEM	Packaged with SPV image v 6.92	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware	4.30 (SPV 6.91)	4.30 (SPV 6.91)	4.50 (SPV 6.92)	4.50 (SPV 6.92)		VMware Compatibility Guide Link
	intel-Icen Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.14.2.0-1OEM	Packaged with SPV image v 6.92	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr VID=8086, DVID=1593, SVID=8086, SSID=0005	Firmware	4.30 (SPV 6.91)	4.30 (SPV 6.91)	4.50 (SPV 6.92)	4.50 (SPV 6.92)		VMware Compatibility Guide Link
	intel-Icen Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.14.2.0-1OEM	Packaged with SPV image v 6.92	
INT E810 100GbE, 2p, QSFP28 PCIe Adptr VID=8086, DVID=1592, SVID=8086, SSID=0002 (or 000e)	Firmware	4.30 (SPV 6.91)	4.30 (SPV 6.91)	4.50 (SPV 6.92)	4.50 (SPV 6.92)		VMware Compatibility Guide Link
	intel-Icen Driver (ESXi)	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.12.5.0-1OEM	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.14.2.0-1OEM	Packaged with SPV image v 6.92	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr VID=15b3, DVID=101d, SVID=15b3, SSID=0042	Firmware	16.35.3006 (SPV 6.91)	16.35.3006 (SPV 6.91)	16.35.3502 (SPV 6.92)	16.35.3502 (SPV 6.92)		VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	Packaged with SPV image v 6.92	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr VID=15b3, DVID=101d, SVID=15b3, SSID=0042	Firmware	22.39.1002 (SPV 6.91)	22.39.1002 (SPV 6.91)	22.41.1000 (SPV 6.92)	22.41.1000 (SPV 6.92)		VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	Packaged with SPV image v 6.92	
BCM 57412 10GbE, 2p, SFP+ Adptr VID=14e4, DVID=16d6, SVID=14e4, SSID=1595	Firmware	228.1.111.0 (SPV 6.91)	228.1.111.0 (SPV 6.91)	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 228.0.116.0-1OEM	Partner Async - 228.0.116.0-1OEM	Partner Async -230.0.236.0-1OEM	Partner Async -230.0.236.0-1OEM	Packaged with SPV image v 6.92	
BCM 57414 10/25GbE, 2p, SFP28 PCIe Adptr VID=14e4, DVID=16d7, SVID=14e4, SSID=1597	Firmware	228.1.111.0 (SPV 6.91)	228.1.111.0 (SPV 6.91)	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)		VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 228.0.116.0-1OEM	Partner Async - 228.0.116.0-1OEM	Partner Async -230.0.236.0-1OEM	Partner Async -230.0.236.0-1OEM	Packaged with SPV image v 6.92	
BCM 57416 10GbE, 2,p BASE-T Adptr VID=14e4, DVID=16d8, SVID=14e4, SSID=1593	Firmware	228.1.111.0 (SPV 6.91)	228.1.111.0 (SPV 6.91)	230.1.123.0 (SPV 6.92)	230.1.123.0 (SPV 6.92)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 228.0.116.0-1OEM	Partner Async - 228.0.116.0-1OEM	Partner Async -230.0.236.0-1OEM	Partner Async -230.0.236.0-1OEM	Packaged with SPV image v 6.92	
HBA Controller							
HPE SN1100Q 16Gb 1p FC HBA - (Qlogic (Marvell), QLE2690) VID=1077, DVID=2261, SVID=1590, SSID=00f9	Firmware	02.02.05 (SPV 6.91)	02.02.05 (SPV 6.91)	02.04.01 (SPV 6.92)	02.04.01 (SPV 6.92)		VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox -5.4.69.0-23vmw	VMWare Inbox -5.4.69.0-23vmw	Partner Async - 5.4.82.1-1OEM	Partner Async - 5.4.82.1-1OEM	Packaged with SPV image v 6.92	
HPE SN1100Q 16Gb 2p FC HBA - (Qlogic (Marvell), QLE2692) VID=1077, DVID=2261, SVID=1590, SSID=00fa	Firmware	02.02.05 (SPV 6.91)	02.02.05 (SPV 6.91)	02.04.01 (SPV 6.92)	02.04.01 (SPV 6.92)		VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox -5.4.69.0-23vmw	VMWare Inbox -5.4.69.0-23vmw	Partner Async - 5.4.82.1-1OEM	Partner Async - 5.4.82.1-1OEM	Packaged with SPV image v 6.92	
HPE SN1200E 16Gb 1p FC HBA - (Emulex Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0213	Firmware	14.2.589.21 (SPV 6.91)	14.2.589.21 (SPV 6.91)	14.4.329.10 (SPV 6.92)	14.4.329.10 (SPV 6.92)		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV image v 6.92	
HPE SN1200E 16Gb 2p FC HBA - (Emulex Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0214	Firmware	14.2.589.21 (SPV 6.91)	14.2.589.21 (SPV 6.91)	14.4.329.10 (SPV 6.92)	14.4.329.10 (SPV 6.92)		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV image v 6.92	
HPE SN1610Q 32Gb 1p FC HBA - (Qlogic (Marvell), QLE2770) VID=1077, DVID=2281, SVID=1590, SSID=02d3	Firmware	02.09.07 (SPV 6.91)	02.09.07 (SPV 6.91)	02.10.00 (SPV 6.92)	02.10.00 (SPV 6.92)		VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw	Partner Async - 5.4.82.1-1OEM	Partner Async - 5.4.82.1-1OEM	Packaged with SPV image v 6.92	
HPE SN1610Q 32Gb 2p FC HBA - (Qlogic (Marvell), QLE2772) VID=1077, DVID=2281, SVID=1590, SSID=02d4	Firmware	02.09.07 (SPV 6.91)	02.09.07 (SPV 6.91)	02.10.00 (SPV 6.92)	02.10.00 (SPV 6.92)		VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw	Partner Async - 5.4.82.1-1OEM	Partner Async - 5.4.82.1-1OEM	Packaged with SPV image v 6.92	
HPE SN1610E 32Gb 1p FC HBA - (Emulex Broadcom) LPe35000) VID=10df, DVID=f400, SVID=1590, SSID=02d5	Firmware	14.2.589.19 (SPV 6.91)	14.2.589.19 (SPV 6.91)	14.4.329.10 (SPV 6.92)	14.4.329.10 (SPV 6.92)		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV image v 6.92	
HPE SN1610E 32Gb 2p FC HBA - (Emulex Broadcom) LPe35000) VID=10df, DVID=f400, SVID=1590, SSID=02d6	Firmware	14.2.589.19 (SPV 6.91)	14.2.589.19 (SPV 6.91)	14.4.329.10 (SPV 6.92)	14.4.329.10 (SPV 6.92)		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw	Packaged with SPV image v 6.92	
SAS/RAID Controller							
HPE SR408i-p 12G VID=9005, DVID=028f, SVID=103c, SSID=0600	Firmware	6.52 (SPV 6.91)	6.52 (SPV 6.91)	7.11 (SPV 6.92)	7.11 (SPV 6.92)		VMware Compatibility Guide Link
	smartpqi Driver (ESXi)	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4700.0.5000-2vmw	VMWare Inbox - 80.4700.0.5000-2vmw	Packaged with SPV image v 6.92	
HPE SR408i-a 12G VID=9005, DVID=028f, SVID=103c, SSID=0602	Firmware	6.52 (SPV 6.91)	6.52 (SPV 6.91)	7.11 (SPV 6.92)	7.11 (SPV 6.92)		VMware Compatibility Guide Link
	smartpqi Driver (ESXi)	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4700.0.5000-2vmw	VMWare Inbox - 80.4700.0.5000-2vmw	Packaged with SPV image v 6.92	
HPE MR416i-p 12G VID=1000, DVID=10e2, SVID=1590, SSID=0293	Firmware	52.26.3.5379 (SPV 6.91)	52.26.3.5379 (SPV 6.91)	52.26.3.5487 (SPV 6.92)	52.26.3.5487 (SPV 6.92)		VMware Compatibility Guide Link
	si-mr3 Driver (ESXi)	Vmware Inbox - 7.726.02.00-2vmw	Vmware Inbox - 7.726.02.00-2vmw	Vmware Inbox - 7.728.02.00-1vmw	Vmware Inbox - 7.728.02.00-1vmw	Packaged with SPV image v 6.92	
HPE MR416i-a 12G VID=1000, DVID=10e2, SVID=1590, SSID=032a	Firmware	52.26.3.5379 (SPV 6.91)	52.26.3.5379 (SPV 6.91)	52.26.3.5487 (SPV 6.92)	52.26.3.5487 (SPV 6.92)		VMware Compatibility Guide Link
	si-mr3 Driver (ESXi)	Vmware Inbox - 7.726.02.00-2vmw	Vmware Inbox - 7.726.02.00-2vmw	Vmware Inbox - 7.728.02.00-1vmw	Vmware Inbox - 7.728.02.00-1vmw	Packaged with SPV image v 6.92	
HPE P816i-a SR 12G VID=9005, DVID=028f, SVID=103c, SSID=1100	Firmware	6.52 (SPV 6.91)	6.52 (SPV 6.91)	7.11 (SPV 6.92)	7.11 (SPV 6.92)		VMware Compatibility Guide Link
	smartpqi Driver (ESXi)	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4495.0.5000-7vmw	Vmware Inbox - 80.4700.0.5000-2vmw	Vmware Inbox - 80.4700.0.5000-2vmw	Packaged with SPV image v 6.92	
HPE SR932i-p 24G VID=9005, DVID=028f, SVID=1590, SSID=0294	Firmware	03.01.23.072 (SPV 6.91)	03.01.23.072 (SPV 6.91)	03.01.30.106 (SPV 6.92)	03.01.30.106 (SPV 6.92)		VMware Compatibility Guide Link
	smartpqi Driver (ESXi)	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4495.0.5000-7vmw	Vmware Inbox - 80.4700.0.5000-2vmw	Vmware Inbox - 80.4700.0.5000-2vmw	Packaged with SPV image v 6.92	
Boot Controller							
NS204i-r (Riser) VID=1b4b, DVID=2241, SVID=1590, SSID=030f	Firmware	1.2.14.1013 (SPV 6.91)	1.2.14.1013 (SPV 6.91)	1.2.14.1013 (SPV 6.92)	1.2.14.1013 (SPV 6.92)		VMware Compatibility Guide Link
	nvme_pcie Driver (ESXi)	Vmware Inbox - 1.2.4.11-1vmw	Vmware Inbox - 1.2.4.11-1vmw	Vmware Inbox - 1.2.4.15-1vmw	Vmware Inbox - 1.2.4.15-1vmw	Packaged with SPV image v 6.92	
NS204i-p (PCIe card) VID=1d4d, DVID=2241, SVID=1590, SSID=0216	Firmware	1.2.14.1013 (SPV 6.91)	1.2.14.1013 (SPV 6.91)	1.2.14.1013 (SPV 6.92)	1.2.14.1013 (SPV 6.92)		VMware Compatibility Guide Link
	nvme_pcie Driver (ESXi)	Vmware Inbox - 1.2.4.11-1vmw	Vmware Inbox - 1.2.4.11-1vmw	Vmware Inbox - 1.2.4.15-1vmw	Vmware Inbox - 1.2.4.15-1vmw	Packaged with SPV image v 6.92	
Drives for vSAN Cache and Capacity (Options) for HA 800 G2							
Components						**Notes**	
For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items: 1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc) 2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)						SSD/NVME firmware is packaged and applied with SPV image v	

FC Switches

Vendor						Notes	
Brocade	G620	9.2.0a	9.2.0a	9.2.1a	9.2.1a		
Brocade	G720	9.2.0a	9.2.0a	9.2.1a	9.2.1a		

Ethernet Switches

Vendor							
Arista	DCS-7010T-48-R	4.28.10.1M	4.28.10.1M	4.28.10.1M	4.28.10.1M		
Arista	DCS-7050CX3-32S-R	4.29.5M	4.29.5M	4.29.5M	4.29.5M		
Arista	DCS-7050SX3-48YC8-R	4.29.5M	4.29.5M	4.29.5M	4.29.5M		
Cisco	Nexus 3048	9.3.13	9.3.13	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NKOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	9.3.13	9.3.13	NKOS 10.3.5	NKOS 10.3.5		
Cisco	Nexus 93180YC-EX	NXOS 10.3.4a	NXOS 10.3.4a	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 92348GC-(1 G Mgmt)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 9332C (100G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		

Storage Models

	Models					Notes	
VSP	G200	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00	Hitachi Support Page - ECNs	
VSP	G400	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G600	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G800	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F400	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F600	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F800	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G350	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G370	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G700	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G900	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F350	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F370	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F700	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F900	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-96-00/00	80-06-97-00/00	80-06-98-00/00	80-06-98-00/20		
VSP	E590	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E790	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E990	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E1090	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	5100, 5200, 5500, 5600	90-09-24-00/01	90-09-25-00/10	90-09-26-00/00	90-09-27-00/00		
VSP	One Block 24, 26, 28	A3-02-01-40/00	A3-02-21-40/01	A3-03-21-40/00	A3-03-03-40/00		
* Minimum Level or above							

GPU

Vendor							
NVIDIA Tesla T4 VID=10de DVID=1eb8, SVID=0000, SSID=12a2	Firmware	N/A	N/A	N/A	N/A		VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	535.54.06	535.54.06	535.54.06	535.54.06	Compatible with HA810 G2 and HA820 G2	
NVIDIA A16 VID=10de DVID=25b6, SVID=0000, SSID=14a9	Firmware	N/A	N/A	N/A	N/A		VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	535.54.06	535.54.06	535.54.06	535.54.06	Compatible with HA820 G2 only	
NVIDIA A40 VID=10de DVID=2235, SVID=0000, SSID=145a	Firmware	N/A	N/A	N/A	N/A		VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	535.54.06	535.54.06	535.54.06	535.54.06	Compatible with HA820 G2 only	
NVIDIA A100 80GB PCIe VID=10de DVID=20b5, SVID=0000, SSID=20b5	Firmware	N/A	N/A	N/A	N/A		VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	535.54.06	535.54.06	535.54.06	535.54.06	Compatible with HA820 G2 only	

Software

Software Versions							
Vendor	**Component**					**Notes**	
Hitachi	UCP Advisor	4.6	4.6	4.7	4.7		
VMware	ESXi	8.0U2 GA (Build # 22380479)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)		
VMware	vCenter(VCSA)	8.0U2 GA (Build # 22617221)	8.0U3 GA (Build # 24022515)	8.0U3 GA (Build # 24022515)	8.0U3 GA (Build # 24022515)		
VMware	VSAN	8.0U2 GA (Build # 22380479)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)		
Downloadable ZIPs							
Vendor	**Component**					**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip		

Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20240705.zip	Cisco_Firmware_20240705.zip	Cisco_Firmware_20250331.zip	Cisco_Firmware_20250331.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20240705.zip	Server_Firmware_HA_20240705.zip	Server_Firmware_HA_20250331.zip	Server_Firmware_HA_20250331.zip		
Hitachi	Vmware Software ZIP (v7.0 HA Package)	HA_vSphere_7.x_20230703.zip	HA_vSphere_7.x_20230703.zip	HA_vSphere_7.x_20230703.zip	HA_vSphere_7.x_20230703.zip		
Hitachi	Vmware Software ZIP (v8.0 HA Package)	HA_vSphere_8.x_20240506.zip	HA_vSphere_8.x_20241021.zip	HA_vSphere_8.x_20241021.zip	HA_vSphere_8.x_20241021.zip		
Hitachi	UCPToolkit ZIP	Toolkit9.0.zip	Toolkit9.1.zip	Toolkit9.2.zip	Toolkit9.2.zip		
Main Mediakit ZIP							
Vendor	**Component**					**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.0_20240705.zip	UCPCI-HC_BaseMediaKit_v9.1_20241021.zip	UCPCI-HC_BaseMediaKit_v9.2_20250331.zip	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards: Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlxS_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI DS G1/G2

Hardware

	UCP CI (Release Version)	v9.0	v9.1	v9.2	v9.3		
	Release date	July 5, 2024	October 21, 2024	March 31, 2025	April 21, 2025		
	Major vSphere Release:	8.0u2	8.0u3	8.0u3	8.0u3		
Management and Compute Nodes : (DS120 G2)							
Components						**Notes**	
BIOS		3A20.H00	3A21.H00	3A23.H00	3A23.H00	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.	
BMC		3.65.06	3.67.06	3.68.06	3.68.06		
CPLD		Rev7	Rev7	Rev7	Rev7		
CPU Family		**Ice Lake**	**Ice Lake**	**Ice Lake**	**Ice Lake**		
Compute Nodes : (DS220 G2)							
Components						**Notes**	
BIOS		3A20.H00	3A21.H00	3A23.H00	3A23.H00	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.	
BMC		3.65.06	3.67.06	3.68.06	3.68.06		
CPLD		Rev7	Rev7	Rev7	Rev7		
CPU Family		**Ice Lake**	**Ice Lake**	**Ice Lake**	**Ice Lake**		
Management and Compute Nodes : (DS120 G1)							
Components						**Notes**	
BIOS		3B28.H00	3B28.H00	3B28.H00	3B28.H00		
BMC		4.80.06	4.82.06	4.83.06	4.83.06		
CPLD		Rev11	Rev11	Rev11	Rev11		
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**		
Compute Nodes : (DS220 G1)							
Components						**Notes**	
BIOS		3B28.H00	3B28.H00	3B28.H00	3B28.H00		
BMC		4.80.06	4.82.06	4.83.06	4.83.06		
CPLD		Rev11	Rev11	Rev11	Rev11		
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**		
Compute Nodes : (DS225 G1)							
Components						**Notes**	
BIOS		3B27.H00	3B27.H00	3B27.H00	3B27.H00		
BMC		4.77.06	4.77.06	4.77.06	4.77.06		
CPLD		Rev11	Rev11	Rev11	Rev11		
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**		
Compute Nodes : (DS240 G1)							
Components						**Notes**	
BIOS		3B26.H00	3B26.H00	3B26.H00	3B26.H00		
BMC		4.80.06	4.80.06	4.80.06	4.80.06		
CPLD		Rev11	Rev11	Rev11	Rev11		
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**		
Supported I/O Cards							
Components						**Notes**	**VMWare HCL / IOVP link:**
Network Cards (Options)							
Intel i350-T4, 1Gbe quad-port PCIe	Firmware	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes.Currently no Firmware.py support.	VMware Compatibility Guide Link
VID=8086, DVID=1521, SVID=8086, SSID=00a1	igbn Driver (ESXi)	VMWare Inbox - 1.4.11.7-2vmw	VMWare Inbox - 1.4.11.7-2vmw	VMWare Inbox - 1.4.11.7-2vmw	VMWare Inbox - 1.4.11.7-2vmw		
Intel i350-T4, 1Gbe quad-port OCP	Firmware	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes.Currently no Firmware.py support.	VMware Compatibility Guide Link
VID=8086, DVID=1523, SVID=8086, SSID=00a3	igbn Driver (ESXi)	VMWare Inbox - 1.4.11.7-2vmw	VMWare Inbox - 1.4.11.7-2vmw	Partner Async - 1.8.2.0	Partner Async - 1.8.2.0		
Intel X710-DA4, 10Gbe quad-port PCIe	Firmware	9.40 or higher	9.40 or higher	9.50 or higher	9.50 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes	VMware Compatibility Guide Link
VID=8086, DVID=1572, SVID=8086, SSID=0004	i40en Driver (ESXi)	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw		
Intel X710-DA4, 10Gbe quad-port OCP	Firmware	9.40 or higher	9.40 or higher	9.50 or higher	9.50 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes	VMware Compatibility Guide Link
VID=8086, DVID=1572, SVID=8086, SSID=00a2	i40en Driver (ESXi)	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw		
Intel X710-T4L, 10GbE, quad-port PCIe	Firmware	9.40 or higher	9.40 or higher	9.50 or higher	9.50 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
VID=8086, DVID=15ff, SVID=8086, SSID=0002	i40en Driver (ESXi)	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw		
Intel X710-T4L, 10GbE, quad-port OCP	Firmware	9.30 or higher	9.30 or higher	9.50 or higher	9.50 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
VID=8086, DVID=15ff, SVID=8086, SSID=000a	i40en Driver (ESXi)	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw		
Intel E810-XXVDA2, 10Gbe dual-port PCIe	Firmware	4.50 or higher	4.50 or higher	4.70 or higher	4.70 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
VID=8086, DVID=159b, SVID=8086, SSID=0003	icen Driver (ESXi)	Partner Async - 1.14.2.0-1OEM	Partner Async - 1.15.2.0-1OEM	Partner Async - 1.15.4.0-1OEM	Partner Async - 1.15.4.0-1OEM		
Mellanox CX-6 MCX631102AN-ADA_Ax 25GbE, dual-port PCIe	Firmware	26.34.1002 or higher	26.34.1002 or higher	26.34.1002 or higher	26.34.1002 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
VID=15b3, DVID=101f, SVID=15b3, SSID=0001	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw		
Mellanox CX-6 MCX631432AN-ADA_Ax 25GbE, dual-port OCPe	Firmware	26.34.1002 or higher	26.34.1002 or higher	26.34.1002 or higher	26.34.1002 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
VID=15b3, DVID=101f, SVID=15b3, SSID=0004	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw		
Mellanox CX-6 MCX653106A-ECA VPI 100GbE, dual-port PCIe	Firmware	20.34.1002 - or higher	20.34.1002 - or higher	20.34.1002 - or higher	20.34.1002 - or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
VID=15b3, DVID=101b, SVID=15b3, SSID=0008	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw		
Broadcom BCM957504-P425G 25GbE, quad-port PCIe	Firmware	228.1.111.0 or higher	230.1.116.0 or higher	232.1.132.8 or higher	232.1.132.8 or higher	Available on Advanced Server DSx20 Gen 2 nodes.Currently no Firmware.py support.	VMware Compatibility Guide Link
VID=14e4, DVID=1751, SVID=14e4, SSID=5048	bnxtnet Driver (ESXi)	PartnerAsync- 228.0.116.0-1OEM	PartnerAsync- 230.0.136.0-1OEM	PartnerAsync- 232.0.154.0-1OEM	PartnerAsync- 232.0.154.0-1OEM		
Broadcom BCM957504-N425G 25GbE, quad-port OCP	Firmware	228.1.111.0 or higher	230.1.116.0 or higher	232.1.132.8 or higher	232.1.132.8 or higher	Available on Advanced Server DSx20 Gen 2 nodes.Currently no Firmware.py support.	VMware Compatibility Guide Link
VID=14e4, DVID=1751, SVID=14e4, SSID=1598	bnxtnet Driver (ESXi)	VMWare Inbox - 225.0.4.0-8vmw	VMWare Inbox - 226.0.21.0-31vmw	VMWare Inbox - 226.0.21.0-31vmw	VMWare Inbox - 226.0.21.0-31vmw		
Intel X527-DA4, 10GbE quad-port, OCP Mezz	Firmware	4.30 or higher	4.30 or higher	4.30 or higher	4.30 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+	VMware Compatibility Guide Link
VID=8086, DVID=37d3, SVID=152d, SSID=8a41	i40en Driver (ESXi)	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw		
Intel X527-DA2, 10GbE quad-port, OCP Mezz	Firmware	4.30 or higher	4.30 or higher	4.30 or higher	4.30 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+"	VMware Compatibility Guide Link
VID=8086, DVID=37d3, SVID=152d, SSID=8a40	i40en Driver (ESXi)	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw		
Intel X557-T4, 10GBase-T quad-port, OCP Mezz	Firmware	4.30 or higher	4.30 or higher	4.30 or higher	4.30 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"	VMware Compatibility Guide Link
VID=8086, DVID=37d2, SVID=152d, SSID=8a3f	i40en Driver (ESXi)	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw		
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	Firmware	9.40 or higher	9.40 or higher	9.50 or higher	9.50 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "Intel(R) Ethernet Network Adapter XXV710-2"	VMware Compatibility Guide Link
VID=8086, DVID=158b, SVID=8086, SSID=0002	i40en Driver (ESXi)	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw	VMWare Inbox - 1.11.4.6-1vmw		
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) (Quanta ON 25GbE CX4 LX EN Dual port)	Firmware	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ON 25GbE ConnectX-4 LX EN Dual port"	VMware Compatibility Guide Link
VID=15b3, DVID=1015, SVID=152d, SSID=8a15	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw		
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe) (MCX4121A-ACA)	Firmware	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)"	VMware Compatibility Guide Link
VID=15b3, DVID=1015, SVID=15b3, SSID=0003	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw		
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 (MCX516A-CCAT)	Firmware	16.34.1002 - or higher	16.34.1002 - or higher	16.34.1002 - or higher	16.34.1002 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"	VMware Compatibility Guide Link
VID=15b3, DVID=1017, SVID=15b3, SSID=0007	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw	VMWare Inbox - 4.23.6.2-7vmw		
HBA Controller							
Emulex LPe31002 FC HBA	Firmware	14.0.639.18 or higher	14.0.639.18 or higher	14.2.673.40 or higher	14.2.673.40 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes. Listed on Vmware HCL as: "Emulex LightPulse LPe31002-M6 2-Port 16Gb Fibre Channel Adapter"	Vmware Compatibility Guide Link
VID=10df, DVID=e300, SVID=10df, SSID=e310	lpfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw		
Emulex LPe32002 FC HBA	Firmware	14.0.639.18 or higher	14.0.639.18 or higher	14.2.673.40 or higher	14.2.673.40 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on Vmware HCL as: "Emulex LightPulse LPe32002-M2 2-Port 32Gb Fibre Channel Adapter"	Vmware Compatibility Guide Link
VID=10df, DVID=e300, SVID=10df, SSID=e300	lpfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw	VMWare Inbox - 14.4.0.39-35vmw		
Emulex LPe35002 FC 32G HBA	Firmware	14.2.673.40 - or higher	14.2.673.40 - or higher	14.2.673.40 - or higher	14.2.673.40 - or higher	Available on Advanced Server DSx20 Gen 2 nodes	Vmware Compatibility Guide Link
VID=10df, DVID=f400, SVID=10df, SSID=f402	lpfc Driver (ESXi)	VMWare Inbox - 14.2.641.5-32vmw	Partner Async - 14.4.317.4-1OEM	Partner Async - 14.4.393.21	Partner Async - 14.4.393.21		
RAID Controller							
Broadcom SAS3516 2GB RAID Mezzanine	Firmware	5.100.00-2651 or higher	5.100.00-2651 or higher	5.100.00-2651 or higher	5.100.00-2651 or higher	Listed on Vmware HCL as: "QS-3516B-R6-PD32".Available on Advanced Server DSxxx Gen 1 nodes.	Vmware Compatibility Guide Link
VID=1000, DVID=0014, SVID=152d, SSID=8b00	lsi-mr3 Driver (ESXi)	VMware Inbox - 27.00.00.00-1vmw	VMware Inbox - 29.00.00.00-1vmw	VMware Inbox - 29.00.00.00-1vmw	VMware Inbox - 29.00.00.00-1vmw		
Broadcom 9460-16i	Firmware	51.22.0-4545 or higher	51.22.0-4545 or higher	51.22.0-4545 or higher	51.22.0-4545 or higher	Available on Advanced Server DSxxx Gen 1 nodes.. Listed on Vmware HCL as: "MegaRAID SAS 9460-16i". Used for RAID Boot devices on exceptions	Vmware Compatibility Guide link
VID=1000, DVID=0014, SVID=1000, SSID=9460	lsi-mr3 Driver (ESXi)	VMware Inbox - 7.726.02.00-2vmw	VMware Inbox - 7.728.02.00-1vmw	VMware Inbox - 7.728.02.00-1vmw	VMware Inbox - 7.728.02.00-1vmw		
Broadcom QS3916	Firmware	5.170.00-3513 or higher	5.170.00-3513 or higher	5.170.00-3513 or higher	5.170.00-3513 or higher	Available on Advanced Server DSxxx Gen 1 nodes.	Vmware Compatability Guide llnk
VID=1000, DVID=10e2, SVID=152d, SSID=00cd	lsi-mr3 Driver (ESXi)	VMware Inbox - 7.726.02.00-2vmw	VMware Inbox - 7.728.02.00-1vmw	VMware Inbox - 7.728.02.00-1vmw	VMware Inbox - 7.728.02.00-1vmw		
Broadcom 9560-16i	Firmware	52.27.0-5171 or higher	52.30.0-5604 or higher	52.30.0-5604 or higher	52.30.0-5604 or higher	Available on Advanced Server DSxxx Gen 2 nodes.	VMWare Compatibility Guide Link
VID=1000, DVID=10e2, SVID=1000, SSID=4000	lsi-mr3 Driver (ESXi)	VMware Inbox - 7.726.02.00-2vmw	VMware Inbox - 7.728.02.00-1vmw	VMware Inbox - 7.728.02.00-1vmw	VMware Inbox - 7.728.02.00-1vmw		
SAS Controller							
Quanta QS-3216 Mezz Card	Firmware	1A22 (16.00.09.00)	1A22 (16.00.09.00)	1A22 (16.00.09.00)	1A22 (16.00.09.00)	Listed on Vmware HCL as: "QS-3216" Only for DS120 and DS220 LFF.	Vmware Compatibility Guide Link
VID=1000, DVID=00c9, SVID=152d, SSID=8a12	lsi_msgpt3 Driver (ESXi)	VMware Inbox - 17.00.13.00-2vmw	VMware Inbox - 17.00.13.00-3vmw	VMware Inbox - 17.00.13.00-3vmw	VMware Inbox - 17.00.13.00-3vmw		
Broadcom SAS9305-16i PCIe (only for DS225)	Firmware	16.00.09.00 or higher	16.00.09.00 or higher	16.00.09.00 or higher	16.00.09.00 or higher	Listed on Vmware HCL as: "9305-16i" Only for DS225 and DS220 SFF.	Vmware Compatibility Guide Link
VID=1000, DVID=00c4, SVID=1000, SSID=3190	lsi_msgpt3 Driver (ESXi)	VMware Inbox - 17.00.13.00-2vmw	VMware Inbox - 17.00.13.00-3vmw	VMware Inbox - 17.00.13.00-3vmw	VMware Inbox - 17.00.13.00-3vmw		
Quanta QS3816 Mezz Card	Firmware	26.00.00.00 or higher	26.00.00.00 or higher	26.00.00.00 or higher	26.00.00.00 or higher	Available on Advanced Server DSxxx Gen 2 nodes.	Vmware Compatibility Guide Link
VID=1000, DVID=00e6, SVID=152d, SSID=00cc	lsi-msgpt35 Driver (ESXi)	Partner Async - 27.00.00.00-1OEM	Partner Async - 27.00.00.00-1OEM	Partner Async - 27.00.00.00-1OEM	Partner Async - 27.00.00.00-1OEM		
Broadcom 9500-16i	Firmware	31.00.00.00 or higher	30.00.00.00 or higher	33.00.00.00 or higher	33.00.00.00 or higher	Available on Advanced Server DSxxx Gen 2 nodes	VMware Compatilbility Buide Link
VID=1000, DVID=00e6, SVID=1000, SSID=4050	lsi-msgpt35 Driver (ESXi)	VMware Inbox - 27.00.00.00-1vmw	VMware Inbox - 29.00.00.00-1vmw	VMware Inbox - 29.00.00.00-1vmw	VMware Inbox - 29.00.00.00-1vmw		
Drives for vSAN Cache and Capacity (Options) for DS120/220/225/240							
Components						**Notes**	
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	8DV101H0 - or higher	8DV101H0 - or higher	8DV101H0 - or higher	8DV101H0 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatable with DS225	Vmware Compatibility Guide link
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10182 - or higher	VDV10182 - or higher	VDV10182 - or higher	VDV10182 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10182 - or higher	VDV10182 - or higher	VDV10182 - or higher	VDV10182 - or higher	Not compatable with DS225	Vmware Compatibility Guide link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
NVMe Driver	Driver (ESXi)	VMWare Inbox - nvme-pcie 1.2.4.11	VMWare Inbox - nvme-pcie 1.2.4.11	VMWare Inbox - nvme-pcie 1.2.4.11	VMWare Inbox - nvme-pcie 1.2.4.11		
Intel SSD DC S4500 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	VMware Compatibility Guide link
Intel SSD DC S4510 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4600 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4610 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD D7-P5520 Series	Firmware	9CV10200 -or higher	9CV10200 -or higher	9CV10200 -or higher	9CV10200 -or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD D7-P5620 Series	Firmware	9CV10200 -or higher	9CV10200 -or higher	9CV10200 -or higher	9CV10200 -or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Samsung SATA SSD PM893 Series	Firmware	JXTC104Q -or higher	JXTC104Q -or higher	JXTC104Q -or higher	JXTC104Q -or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	Requires SAS Controller	
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	Requires SAS Controller	
Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	XC311120 - or higher	XC311120 - or higher	XC311120 - or higher	XC311120 - or higher	Only for DS240 Boot Device	VMware Compatibility Guide link
Toshiba / Koxia BG4 Series - 256GB, M.2 2230	Firmware	N/A	N/A	N/A	N/A	Only available on Advanced Server DSx20 Gen 2 nodes. Only used as Boot device.	
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XXD128GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1XXD256GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XXD512GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
GPU							
Components						**Notes**	
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS225 G1 (Not Qualified on VCG for 8.0)	Vmware Compatibility Guide Link
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS120G1, DS220 G1, DS225 G1, DS120G2, DS220G2 (Not Qualified on VCG for 8.0)	Vmware Compatibility Guide Link
NVIDIA Tesla A16	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A30	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A100-80G	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A2	Nvidia Virtual GPU Software for vSphere	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS220 G2	Vmware Compatibility Guide Link

FC Switches

Vendor	Models					Notes	
Brocade	G620	9.2.0a or higher	9.2.0a or higher	9.2.1a or higher	9.2.1a or higher		
Brocade	G720	9.2.0a or higher	9.2.0a or higher	9.2.1a or higher	9.2.1a or higher		

Ethernet Switches

Vendor	Models					Notes	
Arista	DCS-7010T-48-R	4.28.10.1M	4.28.10.1M	4.28.10.1M	4.28.10.1M		
Arista	DCS-7050CX3-32S-R	4.29.5M	4.29.5M	4.29.5M	4.29.5M		
Arista	DCS-7050SX3-48YC8-R	4.29.5M	4.29.5M	4.29.5M	4.29.5M		
Cisco	Nexus 3048	9.3.13	9.3.13	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior	

Cisco	Nexus 93180LC-EX	9.3.13	9.3.13	NXOS 10.3.5	NXOS 10.3.5	and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 9318D9C-EX	NXOS 10.4.a	NXOS 10.3.4a	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9234BGC (1 G Mgmt)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 9332C (100G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 9316D-GX (400G Spine)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	NXOS 10.4.3.F	NXOS 10.4.3.F	NXOS 10.5.1	NXOS 10.5.1		

Storage Models

	Models					Notes	
VSP	G200	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00	Hitachi Support Page - ECNs	
VSP	G400	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G600	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G800	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F400	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F600	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	F800	83-05-51-x0/00	83-05-52-x0/00	83-05-53-x0/00	83-05-54-x0/00		
VSP	G350	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G370	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G700	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G900	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-15-xx/00		
VSP	F350	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F370	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F700	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	F900	88-08-13-x0/01	88-08-14-x0/00	88-08-15-xx/00	88-08-16-xx/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-96-00/00	80-06-97-00/00	80-06-98-00/00	80-06-98-00/10		
VSP	E590	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E790	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E990	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	E1090	93-07-23-x0/00	93-07-24-x0/00	93-07-25-x0/00	93-07-26-x0/00		
VSP	5100, 5200, 5500, 5600	60-09-24-00/01	60-09-25-00/10	60-09-26-00/00	60-09-27-00/00		
VSP	One Block 24, 26, 28	A3-02-01-40/00	A3-02-21-40/01	A3-03-21-40/00	A3-03-03-40/00		
* Minimum Level or above							

Software

Software Versions							
Vendor	**Component**					**Notes**	
Hitachi	UCP Advisor	4.6	4.6	4.7	4.7		
VMware	ESXi	8.0U2 GA (Build # 22380479)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)		
VMware	vCenter(VCSA)	8.0U2 GA (Build # 22617221)	8.0U3 GA (Build # 24022515)	8.0U3 GA (Build # 24022515)	8.0U3 GA (Build # 24022515)		
VMware	VSAN	8.0U2 GA (Build # 22380479)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)	8.0U3 GA (Build # 24022510)		
Downloadable ZIPs							
Vendor	**Component**					**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip	Arista_Firmware_20240705.zip		
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20240705.zip	Cisco_Firmware_20240705.zip	Cisco_Firmware_20250331.zip	Cisco_Firmware_20250331.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Adapter Firmware ZIP	Adapter_Firmware_20240705.zip	Adapter_Firmware_20241021.zip	Adapter_Firmware_20250331.zip	Adapter_Firmware_20250331.zip		
Hitachi	Server Firmware ZIP	Server_Firmware_DS_20240506.zip	Server_Firmware_DS_20241021.zip	Server_Firmware_DS_20250331.zip	Server_Firmware_DS_20250331.zip		
Hitachi	MIB Package(s)	MIB_20210906.zip	MIB_20210906.zip	MIB_20210906.zip	MIB_20210906.zip		
Hitachi	Vmware Software ZIP	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20240116.zip DS_vSphere_8.x_20240506.zip	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20240116.zip DS_vSphere_8.x_20241021.zip	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20240116.zip DS_vSphere_8.x_20241021.zip	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20240116.zip DS_vSphere_8.x_20241021.zip		
Hitachi	UCPToolkit ZIP	Toolkit9.0.zip	Toolkit9.1.zip	Toolkit9.2.zip	Toolkit9.2.zip		
Main Mediakit ZIP							
Vendor	**Component**					**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_BaseMediaKit_v9.0_20240705.zip	UCPCI-HC_BaseMediaKit_v9.1_20241021.zip	UCPCI-HC_BaseMediaKit_v9.2_20250331.zip	UCPCI-HC_BaseMediaKit_v9.3_20250421.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA800 G3 server

Hardware

UCP CI (Release Version)		**v8.0 (HA800 G3 specific components)**	**v8.5**	**v8.6**	**v8.7**		
Release date		**July 21, 2023**	**December 4, 2023**	**March 15, 2024**	**May 6, 2024**		
Major vSphere Release:		**8.0**	**8.0u1a**	**8.0u2**	**8.0u2**		
Management and Compute Nodes : (HA810 G3)							
Components						**Notes**	
System ROM		U54 v1.30 (SPV 7.30)	U54 v1.44 or higher	U54 v1.48 or higher	U54 v2.12 or higher	Packaged with Media Kit separately	
iLO Firmware		v1.30 (SPV 7.30)	v1.51 or higher	v1.53 or higher	v1.57 or higher		
CPU Family		**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**		
Compute Nodes : (HA820 G3)							
Components						**Notes**	
System ROM		U54 v1.30 (SPV 7.30)	U54 v1.44 or higher	U54 v1.48 or higher	U54 v2.12 or higher	Packaged with Media Kit separately	
iLO Firmware		v1.30 (SPV 7.30)	v1.51 or higher	v1.53 or higher	v1.57 or higher		
CPU Family		**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**	**Sapphire Rapids/Emerald Rapids**		
Compute Nodes : (HA840 G3)						**Notes**	
Components							
System ROM		N/A	N/A	N/A	U59 v2.12 or higher		
iLO Firmware		N/A	N/A	N/A	v1.57 or higher		
CPU Family		**N/A**	**N/A**	**N/A**	**Sapphire Rapids**		
I/O Card Support for HA810 G3 / HA820 G3 / HA840 G3							
Components						**Notes**	**VMWare HCL / IOVP link:**
OCP Network Cards (Options)							
INT I350 1GbE, 4p, BASE-T OCP3 Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a3	Firmware	1.3082.0 or higher	1.3082.0 or higher	1.3082.0 or higher	1.3082.0 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-igbn Driver (ESXi)	Partner Async - 1.10.2.0-1OEM	Partner Async - 1.10.2.0-1OEM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM		
INT E810 10/25GbE, 2p, SFP28 OCP3 VID=8086, DVID=159b, SVID=8086, SSID=0005	Firmware	4.10 (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-Icen Driver (ESXi)	VMWare Inbox - 1.5.1.16-1vmw	VMWare Inbox - 1.5.1.21-1vmw	VMWare Inbox - 1.5.2.12-1vmw	VMWare Inbox - 1.5.2.12-1vmw		
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr VID=15b3, DVID=1017, SVID=15b3, SSID=0052	Firmware	16.35.1012 (SPV 7.30)	16.35.1012 or higher (SPV 7.30)	16.35.1012 or higher (SPV 7.30)	16.35.1012 or higher (SPV 7.30)	Packaged with SPV image v 7.42. This card is not supported for HA840 G3.	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	4.23.0.36-8vmw	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr VID=15b3, DVID=10ff, SVID=15b3, SSID=0007	Firmware	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox -4.23.0.36-8vmw	VMWare Inbox -4.23.0.36-14vmw	VMWare Inbox -4.23.0.66-2vmw	VMWare Inbox -4.23.0.66-2vmw		
BCM 57412 10GbE 2p SFP+ OCP3 VID=14e4, DVID=16d6, SVID=14e4, SSID=1594	Firmware	224.1.102.0 (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	224.0.161.0 (Async)	224.0.161.0 (Async)	226.0.121.0 (Async)	226.0.121.0 (Async)		
BCM 57504 10/25GbE 4p SFP28 OCP3 VID=14e4, DVID=1751, SVID=14e4, SSID=1598	Firmware	224.1.102.0 (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	224.0.161.0 (Async)	224.0.161.0 (Async)	226.0.121.0 (Async)	226.0.121.0 (Async)		
PCIe Network Cards (Options)							
INT I350 1GbE, 4p, BASE-T PCIe Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware	1.3082.0 or higher	1.3082.0 or higher	1.3082.0 or higher	1.3082.0 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	igbn Driver (ESXi)	Partner Async - 1.10.2.0-1OEM	Partner Async - 1.10.2.0-1OEM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM		
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware	4.10 (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-Icen Driver (ESXi)	VMWare Inbox - 1.5.1.16-1vmw	VMWare Inbox - 1.5.1.21-1vmw	VMWare Inbox - 1.5.2.12-1vmw	VMWare Inbox - 1.5.2.12-1vmw		
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr VID=8086, DVID=1593, SVID=8086, SSID=0005	Firmware	4.10 (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-Icen Driver (ESXi)	VMWare Inbox - 1.5.1.16-1vmw	VMWare Inbox - 1.5.1.21-1vmw	VMWare Inbox - 1.5.2.12-1vmw	VMWare Inbox - 1.5.2.12-1vmw		
INT E810 100GbE, 2p, QSFP28 PCIe Adptr VID=8086, DVID=1593, SVID=8086, SSID=0005	Firmware	4.10 (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	Packaged with SPV image v 7.42. This card is not supported for HA840 G3.	VMware Compatibility Guide Link
	Intel-Icen Driver (ESXi)	VMWare Inbox - 1.5.1.16-1vmw	VMWare Inbox - 1.5.1.21-1vmw	VMWare Inbox - 1.5.2.12-1vmw	VMWare Inbox - 1.5.2.12-1vmw		
MLX MCX631102 10/25GbE 2p SFP28 Adptr VID=15b3, DVID=10ff, SVID=15b3, SSID=0012	Firmware	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox -4.23.0.36-8vmw	VMWare Inbox -4.23.0.36-14vmw	VMWare Inbox -4.23.0.66-2vmw	VMWare Inbox -4.23.0.66-2vmw		
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr VID=15b3, DVID=101d, SVID=15b3, SSID=0042	Firmware	22.35.1012 (SPV 7.30)	22.35.1012 or higher (SPV 7.30)	22.35.1012 or higher (SPV 7.30)	22.35.1012 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	4.23.0.36-8vmw	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
BCM 57412 10GbE 2p SFP+ Adptr VID=14e4, DVID=16d6, SVID=14e4, SSID=1595	Firmware	224.1.102.0 (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	224.0.161.0 (Async)	224.0.161.0 (Async)	226.0.121.0 (Async)	226.0.121.0 (Async)		
HBA Controller							
HPE SN1200E 16Gb 2p FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0214	Firmware	14.0.499.21 or higher	14.0.499.21 or higher	14.0.499.21 or higher	14.0.499.21 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.0.635.4-14vmw	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=f400, SVID=1590, SSID=02d6	Firmware	14.0.499.29	14.0.499.29 or higher	14.0.499.29 or higher	14.0.499.29 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
HPE SN1610Q 32Gb 1p FC HBA VID=1077, DVID=2281, SVID=1077, SSID=02d3	Firmware	N/A	N/A	02.07.04 or higher	02.07.04 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	N/A	N/A	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw		
HPE SN1610Q 32Gb 2p FC HBA VID=1077, DVID=2281, SVID=1077, SSID=02d4	Firmware	N/A	N/A	02.07.04 or higher	02.07.04 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	N/A	N/A	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw		
HPE SN1700E 64Gb 2P FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=f400, SVID=1590, SSID=0368	Firmware	N/A	14.0.499.29 or higher	14.0.499.29 or higher	14.0.499.29 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	N/A	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
HPE SN1700E 64Gb 1P FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0214	Firmware	N/A	14.0.499.29 or higher	14.0.499.29 or higher	14.0.499.29 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	N/A	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
HPE SN1600E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=e300, SVID=1590, SSID=0201	Firmware	N/A	14.0.499.21 or higher	14.0.499.21 or higher	14.0.499.21 or higher		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	N/A	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
Boot Controller							
NS204i-u (PCIe card) VID=1b4b, DVID=2241, SVID=1590, SSID=0379	Firmware	1.2.14.1009	1.2.14.1009 or higher	1.2.14.1009 or higher	1.2.14.1009 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nvme_pcie Driver (ESXi)	VMWare Inbox -1.2.4.7-1vmw	VMWare Inbox -1.2.4.7-1vmw	VMWare Inbox -1.2.4.11-1vmw	VMWare Inbox -1.2.4.11-1vmw		
Drives for vSAN Cache and Capacity (Options) for HA 800 G3							
Components						**Notes**	
						SSD/NVME firmware is packaged and applied with SPV image v 7.42	

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor						**Notes**	
Brocade	G620	9.0.1c or higher	9.1.1c or higher	9.1.1c or higher	9.1.1c or higher		
Brocade	G720	9.1.0b or higher	9.1.1c or higher	9.1.1c or higher	9.1.1c or higher		

Ethernet Switches

Vendor							
Arista	DCS-7010T-48-R	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Arista	DCS-7050CX3-32S-R	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Arista	DCS-7050SX3-48YC8-R	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Cisco	Nexus 3048	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	9.3.13	9.3.13		
Cisco	Nexus 93180YC-EX	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9332C (100G Spine)	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 93600GC (100G Spine)	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9316D-GX (400G Spine)	N/A	N/A	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	N/A	N/A	N/A	NXOS 10.3.4a		
Cisco	Nexus 9336C-FX2 (25G/100G Leaf)	N/A	N/A	N/A	N/A		

Storage Models

	Models					**Notes**	
VSP	G200	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00	Hitachi Support Page - ECNs	
VSP	G400	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G600	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G800	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F400	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F600	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F800	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G350	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G370	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G700	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G900	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F350	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F370	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F700	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F900	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-87-00/00	80-06-94-00/91	80-06-95-00/00	80-06-95-00/00		
VSP	E590	93-06-22-40/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E790	93-06-22-40/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E990	93-06-22-60/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E1090	93-06-22-80/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	5100, 5200, 5500, 5600	90-08-21-00/00	90-09-21-00/80	90-09-24-00/00	90-09-24-00/00		
VSP	One Block 24, 26, 28	N/A	N/A	N/A	N/A		

* Minimum Level or above

GPU

Vendor							
NVIDIA A2 VID=10de DVID=25b6, SVID=0000, SSID=157e	Firmware	N/A	N/A	N/A	N/A	Compatible with HA810 G3	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher		
NVIDIA A16 VID=10de DVID=25b6, SVID=0000, SSID=14a9	Firmware	N/A	N/A	N/A	N/A	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher		
NVIDIA A100 VID=10de DVID=20b5, SVID=0000, SSID=20b5	Firmware	N/A	N/A	N/A	N/A	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher		
NVIDIA L4 VID=10de DVID=27b8, SVID=0000, SSID=16ca	Firmware	N/A	N/A	N/A	N/A	Compatible with HA810 G3 & HA820 G3	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher		
NVIDIA L40 VID=10de DVID=26b5, SVID=0000, SSID=169d	Firmware	N/A	N/A	N/A	N/A	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher		
NVIDIA L40S VID=10de DVID=26b9, SVID=0000, SSID=18cf	Firmware	N/A	N/A	N/A	N/A	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	N/A	535.104.06	535.104.06		
NVIDIA H100 VID=10de DVID=2331, SVID=0000, SSID=1626	Firmware	N/A	88.00.98.00.01 or higher	88.00.98.00.01 or higher	88.00.98.00.01 or higher	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher		
NVIDIA H100 NVL VID=10de DVID=2321, SVID=0000, SSID=1839	Firmware	N/A	N/A	N/A	N/A	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	N/A	N/A	N/A		

Software

Software Versions							
Vendor	**Component**					**Notes**	
Hitachi	UCP Advisor	4.4	4.4	4.5	4.5		
VMware	ESXi	8.0 GA (Build # 20513097)	8.0.1 GA (Build # 21813344)	8.0U2 GA (Build # 22380479)	8.0U2 GA (Build # 22380479)		
VMware	vCenter(VCSA)	8.0 GA (Build # 20519528)	8.0.1 GA (Build # 21815093)	8.0U2 GA (Build # 22617221)	8.0U2 GA (Build # 22617221)		
VMware	VSAN	8.0 GA (Build # 20513097)	8.0.1 GA (Build # 21813344)	8.0U2 GA (Build # 22380479)	8.0U2 GA (Build # 22380479)		
Downloadable ZIPs							
Vendor	**Component**					**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20240315.zip	Arista_Firmware_20240315.zip		
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20240315.zip	Cisco_Firmware_20240506.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20230721.zip	Server_Firmware_HA_20231204.zip	Server_Firmware_HA_20240315.zip	Server_Firmware_HA_20240506.zip		
Hitachi	Vmware Software ZIP (v8.0 HA Package)	HA_vSphere_8.x_20230703.zip	HA_vSphere_8.x_20231204.zip	HA_vSphere_8.x_20240506.zip	HA_vSphere_8.x_20240506.zip		
Hitachi	UCPToolkit ZIP	UCPToolkit_v8.0_20230721.zip	UCPToolkit_v8.5_20231204.zip	Toolkit8.6.1.zip	Toolkit8.7.zip		
Main Mediakit ZIP							
Vendor	**Component**					**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_Base_Mediakit_v8.0_20230721.zip	UCPCI-HC_MediaKit_v8.5_20231204.zip	UCPCI-HC_BaseMediaKit_v8.6_20240315.zip	UCPCI-HC_BaseMediaKit_v8.7_20240506.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA8x5 G3 server

Hardware

UCP CI (Release Version)		v8.5	v8.6	v8.7		
Release date		December 4, 2023	March 15, 2024	May 6, 2024		
Major vSphere Release:		8.0u1a	8.0u2	8.0u2		
Compute Nodes : (HA805 / HA815/ HA825 G3)						
Compute Nodes : (HA805 G3)						
Components					**Notes**	
System ROM		A56 v1.42 or higher	A56 v1.42 or higher	A56 v1.42 or higher	Packaged with Media Kit separately	
iLO Firmware		v1.51 or higher	v1.53 or higher	v1.57 or higher		
CPU Family		**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**		
Compute Nodes : (HA815 G3)						
Components					**Notes**	
System ROM		N/A	A55 v1.42 or higher	A55 v1.42 or higher	Packaged with Media Kit separately	
iLO Firmware		N/A	v1.53 or higher	v1.57 or higher		
CPU Family		**N/A**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**		
Compute Nodes : (HA825 G3)						
Components					**Notes**	
System ROM		A55 v1.42 or higher	A55 v1.42 or higher	A55 v1.42 or higher	Packaged with Media Kit separately	
iLO Firmware		v1.51 or higher	v1.53 or higher	v1.57 or higher		
CPU Family		**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**	**AMD Genoa / AMD Genoa-x / AMD Bergamo**		
I/O Card Support for HA805 G3 / HA825 G3						
Components					**Notes**	**VMWare HCL / IOVP link:**
OCP Network Cards (Options)						
INT I350 1GbE, 4p, BASE-T OCP3 Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a3	Firmware	1.3082.0 or higher	1.3082.0 or higher	1.3082.0 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-igbn Driver (ESXi)	Partner Async - 1.10.2.0-10EM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM		
INT E810 10/25GbE, 2p, SFP28 OCP3 VID=8086, DVID=159b, SVID=8086, SSID=0005	Firmware	4.10 (SPV 7.30) or higher	4.10 (SPV 7.30) or higher	4.10 (SPV 7.30) or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-icen Driver (ESXi)	Partner Async - 1.10.5.0-10EM	Partner Async - 1.10.5.0-10EM	Partner Async - 1.10.5.0-10EM		
INT E810 100GbE 2p QSFP28 OCP3 Adptr VID=8086, DVID=1592, SVID=8086, SSID=0006	Firmware	N/A	4.10 (SPV 7.30) or higher	4.10 (SPV 7.30) or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-icen Driver (ESXi)	N/A	Partner Async - 1.10.5.0-10EM	Partner Async - 1.10.5.0-10EM		
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr VID=15b3, DVID=1017, SVID=15b3, SSID=0052	Firmware	16.35.1012 or higher (SPV 7.30)	16.35.1012 or higher (SPV 7.30)	16.35.1012 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
MLX MCX631X 10/25GbE 2p SFP28 OCP3 Adptr VID=15b3, DVID=10ff, SVID=15b3, SSID=0007	Firmware	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox -4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
BCM 57412 10GbE 2p SFP+ OCP3 VID=14e4, DVID=16d6, SVID=14e4, SSID=1594	Firmware	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	224.0.161.0 (Async)	226.0.121.0 (Async)	226.0.121.0 (Async)		
BCM 57504 10/25GbE 4p SFP28 OCP3 VID=14e4, DVID=1751, SVID=14e4, SSID=1598	Firmware	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	224.0.161.0 (Async)	226.0.121.0 (Async)	226.0.121.0 (Async)		
BCM 57416 10GbE 2p Base-T OCP3 **VID=14e4, DVID=16d8, SVID=14e4, SSID=1592**	Firmware	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	224.0.161.0 (Async)	226.0.121.0 (Async)	226.0.121.0 (Async)		
PCIe Network Cards (Options)						
INT I350 1GbE, 4p, BASE-T PCIe Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware	1.3082.0 or higher	1.3082.0 or higher	1.3082.0 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	igbn Driver (ESXi)	Partner Async - 1.10.2.0-10EM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM		
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-icen Driver (ESXi)	Partner Async - 1.10.5.0-10EM	Partner Async - 1.10.5.0-10EM	Partner Async - 1.10.5.0-10EM		
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr VID=8086, DVID=1593, SVID=8086, SSID=0005	Firmware	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	4.10 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	Intel-icen Driver (ESXi)	Partner Async - 1.10.5.0-10EM	Partner Async - 1.10.5.0-10EM	Partner Async - 1.10.5.0-10EM		
MLX MCX631102 10/25GbE 2p SFP28 Adptr VID=15b3, DVID=10ff, SVID=15b3, SSID=0012	Firmware	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	26.35.1012 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox -4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr VID=15b3, DVID=101d, SVID=15b3, SSID=0042	Firmware	22.35.1012 or higher (SPV 7.30)	22.35.1012 or higher (SPV 7.30)	22.35.1012 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
BCM 57412 10GbE 2p SFP+ Adptr VID=14e4, DVID=16d6, SVID=14e4, SSID=1595	Firmware	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	224.1.102.0 or higher (SPV 7.30)	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	224.0.161.0 (Async)	226.0.121.0 (Async)	226.0.121.0 (Async)		
HBA Controller						
HPE SN1700E 64Gb 2P FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=f400, SVID=1590, SSID=0368	Firmware	14.0.499.29 or higher	14.0.499.29 or higher	14.0.499.29 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
HPE SN1700E 64Gb 1P FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0214	Firmware	14.0.499.29 or higher	14.0.499.29 or higher	14.0.499.29 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=f400, SVID=1590, SSID=02d6	Firmware	14.0.499.29 or higher	14.0.499.29 or higher	14.0.499.29 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
HPE SN1610Q 32Gb 1p FC HBA VID=1077, DVID=2281, SVID=1077, SSID=02d3	Firmware	N/A	02.07.04 or higher	02.07.04 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	N/A	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw		
HPE SN1610Q 32Gb 2p FC HBA VID=1077, DVID=2281, SVID=1077, SSID=02d4	Firmware	N/A	02.07.04 or higher	02.07.04 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	N/A	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw		
HPE SN1600E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=e300, SVID=1590, SSID=0201	Firmware	14.0.499.29 or higher	14.0.499.29 or higher	14.0.499.29 or higher		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
Boot Controller						
NS204i-u (PCIe card) VID=1b4b, DVID=2243, SVID=1590, SSID=0379	Firmware	1.2.14.1009 or higher	1.2.14.1009 or higher	1.2.14.1009 or higher	Packaged with SPV image v 7.42	VMware Compatibility Guide Link
	nvme_pcie Driver (ESXi)	VMWare Inbox -1.2.4.7-1vmw	VMWare Inbox -1.2.4.11-1vmw	VMWare Inbox -1.2.4.11-1vmw		
Drives for vSAN Cache and Capacity (Options) for HA 800 G3						
Components					**Notes**	
					SSD/NVME firmware is packaged and applied with SPV image v 7.42	

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor					Notes	
Brocade	G620	9.1.1c	9.1.1c	9.1.1c		
Brocade	G720	9.1.1c	9.1.1c	9.1.1c		

Ethernet Switches

Vendor						
Arista	DCS-7010T-48-R	4.25.4M	4.27.5M	4.27.5M		
Arista	DCS-7050CX3-32S-R	4.25.4M	4.27.5M	4.27.5M		
Arista	DCS-7050SX3-48YC8-R	4.25.4M	4.27.5M	4.27.5M		
Cisco	Nexus 3048	NXOS 9.3.8 (Compact)	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	NXOS 9.3.8 (Compact)	9.3.13	9.3.13		
Cisco	Nexus 93180YC-EX	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9332C (100G Spine)	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 93600GC (100G Spine)	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9316D-GX (400G Spine)	N/A	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	N/A	N/A	NXOS 10.3.4a		
Cisco	Nexus 9336C-FX2 (25G/100G Leaf)	N/A	N/A	N/A		

Storage Models

	Models				Notes	
VSP	G200	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00	Hitachi Support Page - ECNs	
VSP	G400	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G600	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G800	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F400	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F600	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F800	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G350	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G370	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G700	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G900	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F350	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F370	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F700	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F900	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-94-00/91	80-06-95-00/00	80-06-95-00/00		
VSP	E590	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E790	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E990	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E1090	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	5100, 5200, 5500, 5600	90-09-21-00/80	90-09-24-00/00	90-09-24-00/00		
VSP	One Block 24, 26, 28	N/A	N/A	N/A		

* Minimum Level or above

GPU

Vendor						
NVIDIA A2 VID=10de DVID=25b6, SVID=0000, SSID=157e	Firmware	N/A	N/A	N/A	Compatible with HA805 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXI_8.0.0_Driver	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher		

Software

Software Versions						
Vendor	**Component**				**Notes**	
Hitachi	UCP Advisor	4.4	4.5	4.5		
VMware	ESXi	8.0.1 GA (Build # 21813344)	8.0U2 GA (Build # 22380479)	8.0U2 GA (Build # 22380479)		
VMware	vCenter(VCSA)	8.0.1 GA (Build # 21815093)	8.0U2 GA (Build # 22617221)	8.0U2 GA (Build # 22617221)		
VMware	VSAN	8.0.1 GA (Build # 21813344)	8.0U2 GA (Build # 22380479)	8.0U2 GA (Build # 22380479)		
Downloadable ZIPs						
Vendor	**Component**				**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20240315.zip	Arista_Firmware_20240315.zip		
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20220705.zip	Cisco_Firmware_20240315.zip	Cisco_Firmware_20240506.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20231204.zip	Server_Firmware_HA_20240315.zip	Server_Firmware_HA_20240506.zip		
Hitachi	Vmware Software ZIP (v8.0 HA Package)	HA_vSphere_8.x_20231204.zip	HA_vSphere_8.x_20240506.zip	HA_vSphere_8.x_20240506.zip		
Hitachi	UCPToolkit ZIP	UCPToolkit_v8.5_20231204.zip	Toolkit8.6.1.zip	Toolkit8.7.zip		
Main Mediakit ZIP						
Vendor	**Component**				**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_MediaKit_v8.5_20231204.zip	UCPCI-HC_BaseMediaKit_v8.6_20240315.zip	UCPCI-HC_BaseMediaKit_v8.7_20240506.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI w/ HA800 G2 server

Hardware

	UCP CI (Release Version)	v8.0	v8.0.1	v8.5	v8.6	v8.7		
	Release date	July 21, 2023	August 25, 2023	December 4, 2023	March 15, 2024	May 6, 2024		
	Major vSphere Release:	8.0	8.0	8.0u1a	8.0u2	8.0u2		
Management and Compute Nodes : (HA810 G2)								
Components							**Notes**	
System ROM		U46 v1.64 (SPV 6.70)	U46 v1.64 (SPV 6.80)	U46 v1.80 (SPV 6.90)	U46 v1.80 (SPV 6.90)	U46 v1.80 (SPV 6.90)	Packaged with SPV image v 6.92	
iLO Firmware		v2.72 (SPV 6.70)	v2.72 (SPV 6.80)	v2.96 (SPV 6.90)	v2.98	v3.02 or higher	System ROM & iLO are applied with SPV image.	
CPU Family		**Icelake**	**Icelake**	**Icelake**	**Icelake**	**Icelake**		
Compute Nodes : (HA820 G2)								
Components							**Notes**	
System ROM		U46 v1.64 (SPV 6.70)	U46 v1.72 (SPV 6.80)	U46 v1.80 (SPV 6.90)	U46 v1.80 (SPV 6.90)	U46 v1.80 (SPV 6.90)	Packaged with SPV image v 6.92	
iLO Firmware		v2.72 (SPV 6.70)	v2.81 (SPV 6.80)	v2.96 (SPV 6.90)	v2.98	v3.02 or higher	System ROM & iLO are applied with SPV image.	
CPU Family		**Icelake**	**Icelake**	**Icelake**	**Icelake**	**Icelake**		
I/O Card Support for HA810 G2 / HA820 G2								
Components							**Notes**	**VMWare HCL / IOVP link:**
OCP Network Cards (Options)								
INT I350 1GbE, 4p, BASE-T OCP3 Adptr	Firmware	1.3082.0 (SPV6.70)	1.3082.0 (SPV6.80) or higher	1.3353.0 or higher (SPV 6.90)	1.3353.0 or higher (SPV 6.90)	1.3353.0 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=8086, DVID=1521, SVID=8086, SSID=00a3	Intel-igbn Driver (ESXi)	Partner Async - 1.9.1.0-1OEM	Partner Async - 1.9.1.0-1OEM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM	Packaged with SPV image v 6.92	
INT E810 10/25GbE, 2p, SFP28 OCP3	Firmware	3.20 (SPV 6.70)	4.10 (SPV 6.80)	4.10 or higher (SPV 6.90)	4.10 or higher (SPV 6.90)	4.10 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=8086, DVID=159b, SVID=8086, SSID=0005	Intel-Icen Driver (ESXi)	Partner Async - 1.8.4.0-1OEM	Partner Async - 1.8.4.0-1OEM	Partner Async - 1.10.5.0-1OEM	Partner Async - 1.10.5.0-1OEM	Partner Async - 1.10.5.0-1OEM	Packaged with SPV image v 6.92	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr	Firmware	16.33.1048 (SPV 6.70)	16.35.1012 (SPV 6.80)	16.35.3006 or higher (SPV 6.90)	16.35.3006 or higher (SPV 6.90)	16.35.3006 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=15b3, DVID=1017, SVID=15b3, SSID=0052	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.36-8vmw	VMWare Inbox - 4.23.0.36-8vmw	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw	Packaged with SPV image v 6.92	
BCM 57412 10GbE, 2p, SFP+ OCP3 Adptr	Firmware	222.1.68.0 (SPV 6.70)	224.1.102.0 (SPV 6.80)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=14e4, DVID=16d6, SVID=14e4, SSID=1594	bnxtnet Driver (ESXi)	Partner Async - 222.0.118.0-OEM	Partner Async - 222.0.118.0-OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Packaged with SPV image v 6.92	
BCM 57414 10/25GbE, 2p, SFP28 OCP3	Firmware	222.1.68.0 (SPV 6.70)	224.1.102.0 (SPV 6.80)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=14e4, DVID=16d7, SVID=14e4, SSID=1596	bnxtnet Driver (ESXi)	Partner Async - 222.0.118.0-OEM	Partner Async - 222.0.118.0-OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Packaged with SPV image v 6.92	
BCM 57416 10GbE, 2p, BASE-T OCP3 Adptr	Firmware	222.1.68.0 (SPV 6.70)	224.1.102.0 (SPV 6.80)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=14e4, DVID=16d8, SVID=14e4, SSID=1592	bnxtnet Driver (ESXi)	Partner Async - 222.0.118.0-OEM	Partner Async - 222.0.118.0-OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Packaged with SPV image v 6.92	
PCIe Network Cards (Options)								
INT I350 1GbE, 4p, BASE-T PCIe Adptr	Firmware	1.3082.0 (SPV6.70)	1.3082.0 (SPV6.80) or higher	1.3353.0 or higher	1.3353.0 or higher	1.3353.0 or higher		VMware Compatibility Guide Link
VID=8086, DVID=1521, SVID=8086, SSID=00a1	igbn Driver (ESXi)	Partner Async - 1.9.1.0-1OEM	Partner Async - 1.9.1.0-1OEM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM	Partner Async - 1.11.2.0-1OEM	Packaged with SPV image v 6.92	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	3.20 (SPV 6.70)	4.10 (SPV 6.80)	4.20 or higher (SPV 6.90)	4.20 or higher (SPV 6.90)	4.20 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=8086, DVID=159b, SVID=8086, SSID=0003	Intel-Icen Driver (ESXi)	Partner Async - 1.8.4.0-1OEM	Partner Async - 1.8.4.0-1OEM	Partner Async - 1.11.3.0-1OEM	Partner Async - 1.11.3.0-1OEM	Partner Async - 1.11.3.0-1OEM	Packaged with SPV image v 6.92	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr	Firmware	3.20 (SPV 6.70)	4.10 (SPV 6.80)	4.20 or higher (SPV 6.90)	4.20 or higher (SPV 6.90)	4.20 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=8086, DVID=1593, SVID=8086, SSID=0005	Intel-Icen Driver (ESXi)	Partner Async - 1.8.4.0-1OEM	Partner Async - 1.8.4.0-1OEM	Partner Async - 1.11.3.0-1OEM	Partner Async - 1.11.3.0-1OEM	Partner Async - 1.11.3.0-1OEM	Packaged with SPV image v 6.92	
INT E810 100GbE, 2p, QSFP28 PCIe Adptr	Firmware	3.20 (SPV 6.70)	4.10 (SPV 6.80)	4.20 or higher (SPV 6.90)	4.20 or higher (SPV 6.90)	4.20 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=8086, DVID=1592, SVID=8086, SSID=0002 (or 000e)	Intel-Icen Driver (ESXi)	Partner Async - 1.8.4.0-1OEM	Partner Async - 1.8.4.0-1OEM	Partner Async - 1.11.3.0-1OEM	Partner Async - 1.11.3.0-1OEM	Partner Async - 1.11.3.0-1OEM	Packaged with SPV image v 6.92	
MLX MCX512F 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	16.33.1048 (SPV 6.70)	16.35.1012 (SPV 6.80)	16.35.3006 or higher (SPV 6.90)	16.35.3006 or higher (SPV 6.90)	16.35.3006 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=15b3, DVID=1017, SVID=15b3, SSID=0116	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.36-8vmw	VMWare Inbox - 4.23.0.36-8vmw	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw	Packaged with SPV image v 6.92	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr	Firmware	22.33.1048 (SPV 6.70)	22.35.1012 (SPV 6.80)	22.37.1700 or higher (SPV 6.90)	22.37.1700 or higher (SPV 6.90)	22.37.1700 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=15b3, DVID=101d, SVID=15b3, SSID=0042	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.36-8vmw	VMWare Inbox - 4.23.0.36-8vmw	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw	Packaged with SPV image v 6.92	
BCM 57412 10GbE, 2p, SFP+ Adptr	Firmware	222.1.68.0 (SPV 6.70)	224.1.102.0 (SPV 6.80)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=14e4, DVID=16d6, SVID=14e4, SSID=1595	bnxtnet Driver (ESXi)	Partner Async - 222.0.118.0-OEM	Partner Async - 222.0.118.0-OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Packaged with SPV image v 6.92	
BCM 57414 10/25GbE, 2p, SFP28 PCIe Adptr	Firmware	222.1.68.0 (SPV 6.70)	224.1.102.0 (SPV 6.80)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=14e4, DVID=16d7, SVID=14e4, SSID=1597	nmlx5_core Driver (ESXi)	Partner Async - 222.0.118.0-OEM	Partner Async - 222.0.118.0-OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Packaged with SPV image v 6.92	
BCM 57416 10GbE, 2,p BASE-T Adptr	Firmware	222.1.68.0 (SPV 6.70)	224.1.102.0 (SPV 6.80)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)	226.1.107.0 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=14e4, DVID=16d8, SVID=14e4, SSID=1593	bnxtnet Driver (ESXi)	Partner Async - 222.0.118.0-OEM	Partner Async - 222.0.118.0-OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Partner Async - 226.0.121.0-1OEM	Packaged with SPV image v 6.92	
HBA Controller								
HPE SN1100Q 16Gb 1p FC HBA - (Qlogic (Marvell), QLE2690)	Firmware	01.75.07 or higher (SPV 6.70)	01.75.07 or higher (SPV 6.80)	02.01.03 or higher (SPV 6.90)	02.01.03 or higher (SPV 6.90)	02.01.03 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=1077, DVID=2261, SVID=1590, SSID=00f9	qlnativefc Driver (ESXi)	VMWare Inbox - 5.2.46.0-2vmw	VMWare Inbox - 5.2.46.0-2vmw	VMWare Inbox - 5.4.69.0-16vmw	VMWare Inbox -5.4.69.0-23vmw	VMWare Inbox -5.4.69.0-23vmw	Packaged with SPV image v 6.92	
HPE SN1100Q 16Gb 2p FC HBA - (Qlogic (Marvell), QLE2692)	Firmware	01.75.07 or higher (SPV 6.70)	01.75.07 or higher (SPV 6.80)	02.01.03 or higher (SPV 6.90)	02.01.03 or higher (SPV 6.90)	02.01.03 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=1077, DVID=2261, SVID=1590, SSID=00fa	qlnativefc Driver (ESXi)	VMWare Inbox - 5.2.46.0-2vmw	VMWare Inbox - 5.2.46.0-2vmw	VMWare Inbox - 5.4.69.0-16vmw	VMWare Inbox -5.4.69.0-23vmw	VMWare Inbox -5.4.69.0-23vmw	Packaged with SPV image v 6.92	
HPE SN1200E 16Gb 1p FC HBA - (Emulex (Broadcom), XE201)	Firmware	12.8.528.21 or higher (SPV 6.70)	12.8.528.21 or higher (SPV 6.80)	14.2.589.5 or higher (SPV 6.90)	14.2.589.5 or higher (SPV 6.90)	14.2.589.5 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=10df, DVID=e300, SVID=1590, SSID=0213	lpfc Driver (ESXi)	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	Packaged with SPV image v 6.92	
HPE SN1200E 16Gb 2p FC HBA - (Emulex (Broadcom), XE201)	Firmware	12.8.528.21 or higher (SPV 6.70)	12.8.528.21 or higher (SPV 6.80)	14.2.589.5 or higher (SPV 6.90)	14.2.589.5 or higher (SPV 6.90)	14.2.589.5 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=10df, DVID=e300, SVID=1590, SSID=0214	lpfc Driver (ESXi)	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	Packaged with SPV image v 6.92	
HPE SN1610Q 32Gb 1p FC HBA - (Qlogic (Marvell), QLE2770)	Firmware	02.05.03 or higher (SPV 6.70)	02.05.03 or higher (SPV 6.80)	02.08.05 or higher (SPV 6.90)	02.08.05 or higher (SPV 6.90)	02.08.05 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=1077, DVID=2281, SVID=1590, SSID=02d3	qlnativefc Driver (ESXi)	VMWare Inbox - 5.2.46.0-2vmw	VMWare Inbox - 5.2.46.0-2vmw	VMWare Inbox - 5.4.69.0-16vmw	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw	Packaged with SPV image v 6.92	
HPE SN1610Q 32Gb 2p FC HBA - (Qlogic (Marvell), QLE2772)	Firmware	(09)02.05.03 or higher (SPV 6.70)	(09)02.05.03 or higher (SPV 6.80)	02.08.05 or higher (SPV 6.90)	02.08.05 or higher (SPV 6.90)	02.08.05 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=1077, DVID=2281, SVID=1590, SSID=02d4	qlnativefc Driver (ESXi)	VMWare Inbox - 5.2.46.0-2vmw	VMWare Inbox - 5.2.46.0-2vmw	VMWare Inbox - 5.4.69.0-16vmw	VMWare Inbox - 5.4.69.0-23vmw	VMWare Inbox - 5.4.69.0-23vmw	Packaged with SPV image v 6.92	
HPE SN1610E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.0.499.20 (SPV 6.70)	14.0.499.29 (SPV 6.80)	14.2.589.5 or higher (SPV 6.90)	14.2.589.5 or higher (SPV 6.90)	14.2.589.5 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=10df, DVID=f400, SVID=1590, SSID=02d5	lpfc Driver (ESXi)	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	Packaged with SPV image v 6.92	
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000)	Firmware	14.0.499.20 (SPV 6.70)	14.0.499.29 (SPV 6.80)	14.2.589.5 or higher (SPV 6.90)	14.2.589.5 or higher (SPV 6.90)	14.2.589.5 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=10df, DVID=f400, SVID=1590, SSID=02d6	lpfc Driver (ESXi)	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.0.635.3-14vmw	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw	Packaged with SPV image v 6.92	
SAS/RAID Controller								
HPE SR408i-p 12G	Firmware	4.11 or higher (SPV 6.70)	4.11 or higher (SPV 6.80)	6.22 or higher (SPV 6.90)	6.22 or higher (SPV 6.90)	6.22 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=9005, DVID=028f, SVID=103c, SSID=0600	smartpqi Driver (ESXi)	VMWare Inbox - 80.4253.0.5000-2vmw	VMWare Inbox - 80.4253.0.5000-2vmw	VMWare Inbox - 80.4385.0.200-1vmw	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4495.0.5000-7vmw	Packaged with SPV image v 6.92	
HPE SR408i-a 12G	Firmware	4.11 or higher (SPV 6.70)	4.11 or higher (SPV 6.80)	6.22 or higher (SPV 6.90)	6.22 or higher (SPV 6.90)	6.22 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=9005, DVID=028f, SVID=103c, SSID=0602	smartpqi Driver (ESXi)	VMWare Inbox - 80.4253.0.5000-2vmw	VMWare Inbox - 80.4253.0.5000-2vmw	VMWare Inbox - 80.4385.0.200-1vmw	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4495.0.5000-7vmw	Packaged with SPV image v 6.92	
HPE MR416i-p 12G	Firmware	52.16.3-4455 (SPV 6.70)	52.22.3-4650 (SPV 6.80)	52.24.3-4948 or higher (SPV 6.90)	52.24.3-4948 or higher (SPV 6.90)	52.24.3-4948 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=1000, DVID=10e2, SVID=1590, SSID=0293	lsi-mr3 Driver (ESXi)	Vmware Inbox - 7.722.02.00-1vmw	Vmware Inbox - 7.722.02.00-1vmw	Vmware Inbox -7.724.03.00-1vmw	Vmware Inbox - 7.726.02.00-2vmw	Vmware Inbox - 7.726.02.00-2vmw	Packaged with SPV image v 6.92	
HPE MR416i-a 12G	Firmware	52.16.3-4455 (SPV 6.70)	52.22.3-4650 (SPV 6.80)	52.24.3-4948 or higher (SPV 6.90)	52.24.3-4948 or higher (SPV 6.90)	52.24.3-4948 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=1000, DVID=10e2, SVID=1590, SSID=032a	lsi-mr3 Driver (ESXi)	Vmware Inbox - 7.722.02.00-1vmw	Vmware Inbox - 7.722.02.00-1vmw	Vmware Inbox -7.724.03.00-1vmw	Vmware Inbox - 7.726.02.00-2vmw	Vmware Inbox - 7.726.02.00-2vmw	Packaged with SPV image v 6.92	
HPE P816i-a SR 12G	Firmware	4.11 or higher (SPV 6.70)	4.11 or higher (SPV 6.80)	6.22 or higher (SPV 6.90)	6.22 or higher (SPV 6.90)	6.22 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=9005, DVID=028f, SVID=103c, SSID=1100	smartpqi Driver (ESXi)	Vmware Inbox - 80.4253.0.5000-2vmw	Vmware Inbox - 80.4253.0.5000-2vmw	VMWare Inbox - 80.4385.0.200-1vmw	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4495.0.5000-7vmw	Packaged with SPV image v 6.92	
HPE SR932i-p 24G	Firmware	03.01.09.056 or higher (SPV 6.70)	03.01.09.056 or higher (SPV 6.80)	03.01.23.072 or higher (SPV 6.90)	03.01.23.072 or higher (SPV 6.90)	03.01.23.072 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=9005, DVID=028f, SVID=1590, SSID=0294	smartpqi Driver (ESXi)	Vmware Inbox - 80.4253.0.5000-2vmw	Vmware Inbox - 80.4253.0.5000-2vmw	Vmware Inbox - 80.4385.0.200-1vmw	VMWare Inbox - 80.4495.0.5000-7vmw	VMWare Inbox - 80.4495.0.5000-7vmw	Packaged with SPV image v 6.92	
Boot Controller								
NS204i-r (Riser)	Firmware	1.0.14.1063 (SPV 6.70)	1.2.14.1009 (SPV 6.80)	1.2.14.1010 or higher (SPV 6.90)	1.2.14.1010 or higher (SPV 6.90)	1.2.14.1010 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=1b46, DVID=2241, SVID=1590, SSID=030f	nvme_pcie Driver (ESXi)	Vmware Inbox - 1.2.4.1-1vmw	Vmware Inbox - 1.2.4.1-1vmw	Vmware Inbox - 1.2.4.7-1vmw	Vmware Inbox - 1.2.4.11-1vmw	Vmware Inbox - 1.2.4.11-1vmw	Packaged with SPV image v 6.92	
NS204i-p (PCIe card)	Firmware	1.0.14.1063 (SPV 6.70)	1.2.14.1009 (SPV 6.80)	1.2.14.1010 or higher (SPV 6.90)	1.2.14.1010 or higher (SPV 6.90)	1.2.14.1010 or higher (SPV 6.90)		VMware Compatibility Guide Link
VID=14b6, DVID=2241, SVID=1590, SSID=0216	nvme_pcie Driver (ESXi)	Vmware Inbox - 1.2.4.1-1vmw	Vmware Inbox - 1.2.4.1-1vmw	Vmware Inbox - 1.2.4.7-1vmw	Vmware Inbox - 1.2.4.11-1vmw	Vmware Inbox - 1.2.4.11-1vmw	Packaged with SPV image v 6.92	
Drives for vSAN Cache and Capacity (Options) for HA 800 G2								
Components							**Notes**	
							SSD/NVME firmware is packaged and applied with SPV image v	

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The S**ervice Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor							Notes	
Brocade	G620	9.0.1c	9.0.1c	9.1.1c	9.1.1c	9.1.1c		
Brocade	G720	9.1.0b	9.1.0b	9.1.1c	9.1.1c	9.1.1c		

Ethernet Switches

Vendor								
Arista	DCS-7010T-48-R	4.25.4M	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Arista	DCS-7050CX3-32S-R	4.25.4M	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Arista	DCS-7050SX3-48YC8-R	4.25.4M	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Cisco	Nexus 3048	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	`	9.3.13		
Cisco	Nexus 93180YC-EX	NXOS 9.3.8	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 9.3.8	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 9.3.8	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9332C (100G Spine)	NXOS 9.3.8	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 9.3.8	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 93600GC (100G Spine)	NXOS 9.3.8	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93600CD-GX (100G Spine)	N/A	NXOS 10.2.5	NXOS 10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9316D-GX (400G Spine)	N/A	N/A	N/A	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	N/A	N/A	N/A	N/A	NXOS 10.3.4a		
Cisco	Nexus 9336C-FX2 (25G/100G Leaf)	N/A	N/A	N/A	N/A	N/A		

Storage Models

	Models						Notes	
VSP	G200	83-05-43-x0/00	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00	Hitachi Support Page - ECNs	
VSP	G400	83-05-43-x0/00	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G600	83-05-43-x0/00	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G800	83-05-43-x0/00	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F400	83-05-43-x0/00	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F600	83-05-43-x0/00	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F800	83-05-43-x0/00	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G350	88-08-04-x0/00	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G370	88-08-04-x0/00	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G700	88-08-04-x0/00	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G900	88-08-04-x0/00	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F350	88-08-04-x0/00	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F370	88-08-04-x0/00	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F700	88-08-04-x0/00	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F900	88-08-04-x0/00	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-87-00/00	80-06-87-00/00	80-06-94-00/91	80-06-95-00/00	80-06-95-00/00		
VSP	E590	93-06-22-40/00	93-06-22-40/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E790	93-06-22-40/00	93-06-22-40/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E990	93-06-22-60/00	93-06-22-60/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E1090	93-06-22-80/00	93-06-22-80/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	5100, 5200, 5500, 5600	90-08-21-00/00	90-08-21-00/00	90-09-21-00/80	90-09-24-00/00	90-09-24-00/00		
VSP	One Block 24, 26, 28		N/A	N/A	N/A	N/A		
* Minimum Level or above								

GPU

Vendor								
NVIDIA Tesla T4	Firmware	N/A	N/A	N/A	N/A	N/A		VMware Compatibility Guide Link
VID=10de DVID=1eb8, SVID=0000, SSID=12a2	NVD-VMware_ESXi_8.0.0_Driver	535.54.06	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Compatible with HA810 G2 and HA820 G2	
NVIDIA A16	Firmware	525.60.12	N/A	N/A	N/A	N/A		VMware Compatibility Guide Link
VID=10de DVID=25b6, SVID=0000, SSID=14a9	NVD-VMware_ESXi_8.0.0_Driver	535.54.06	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Compatible with HA820 G2 only	
NVIDIA A40	Firmware	525.60.12	N/A	N/A	N/A	N/A		VMware Compatibility Guide Link
VID=10de DVID=2235, SVID=0000, SSID=145a	NVD-VMware_ESXi_8.0.0_Driver	535.54.06	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Compatible with HA820 G2 only	
NVIDIA A100 80GB PCIe	Firmware	525.60.12	N/A	N/A	N/A	N/A		VMware Compatibility Guide Link
VID=10de DVID=20b5, SVID=0000, SSID=20b5	NVD-VMware_ESXi_8.0.0_Driver	525.85.07	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Compatible with HA820 G2 only	

Software

Software Versions								
Vendor	**Component**						**Notes**	
Hitachi	UCP Advisor	4.4	4.4	4.4	4.5	4.5		
VMware	ESXi	8.0 GA (Build # 20513097)	8.0 GA (Build # 20513097)	8.0.1 GA (Build # 21813344)	8.0U2 GA (Build # 22380479)	8.0U2 GA (Build # 22380479)		
VMware	vCenter(VCSA)	8.0 GA (Build # 20519528)	8.0 GA (Build # 20519528)	8.0.1 GA (Build # 21815093)	8.0U2 GA (Build # 22617221)	8.0U2 GA (Build # 22617221)		
VMware	VSAN	8.0 GA (Build # 20513097)	8.0 GA (Build # 20513097)	8.0.1 GA (Build # 21813344)	8.0U2 GA (Build # 22380479)	8.0U2 GA (Build # 22380479)		
Downloadable ZIPs								
Vendor	**Component**						**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20240315.zip	Arista_Firmware_20240315.zip		
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20240315.zip	Cisco_Firmware_20240506.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Server Firmware ZIP	Server_Firmware_HA_20230721.zip	Server_Firmware_HA_20230825.zip	Server_Firmware_HA_20231204.zip	Server_Firmware_HA_20240315.zip	Server_Firmware_HA_20240506.zip		
Hitachi	Vmware Software ZIP (v7.0 HA Package)	HA_vSphere_7.x_20230703.zip	HA_vSphere_7.x_20230703.zip	HA_vSphere_7.x_20230703.zip	HA_vSphere_7.x_20230703.zip	HA_vSphere_7.x_20230703.zip		
Hitachi	Vmware Software ZIP (v8.0 HA Package)	HA_vSphere_8.x_20230703.zip	HA_vSphere_8.x_20230703.zip	HA_vSphere_8.x_20231204.zip	HA_vSphere_8.x_20240315.zip	HA_vSphere_8.x_20240506.zip		
Hitachi	UCPToolkit ZIP	UCPToolkit_v8.0_20230721.zip	UCPToolkit_v8.0.1_20230825.zip	UCPToolkit_v8.5_20231204.zip	Toolkit8.6.1.zip	Toolkit8.7.zip		
Main Mediakit ZIP								
Vendor	**Component**						**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_Base_Mediakit_v8.0_20230721.zip	UCPCI-HC_Base_Mediakit_v8.0.1_20230825.zip	UCPCI-HC_MediaKit_v8.5_20231204.zip	UCPCI-HC_BaseMediaKit_v8.6_20240315.zip	UCPCI-HC_BaseMediaKit_v8.7_20240506.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI DS G1/G2

Hardware

		v8.0	v8.5	v8.6	v8.7		
UCP CI (Release Version)		**v8.0**	**v8.5**	**v8.6**	**v8.7**		
Release date		**July 21, 2023**	**December 4, 2023**	**March 15, 2024**	**May 6, 2024**		
Major vSphere Release:		**8.0**	**8.0u1a**	**8.0u2**	**8.0u2**		
Management and Compute Nodes : (DS120 G2)							
Components						**Notes**	
BIOS		3A16.H00	3A19.H00	3A19.H00	3A20.H00	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.	
BMC		3.34.06	3.64.06	3.64.06	3.65.06		
CPLD		Rev7	Rev7	Rev7	Rev7		
CPU Family		**Ice Lake**	**Ice Lake**	**Ice Lake**	**Ice Lake**		
Compute Nodes : (DS220 G2)							
Components						**Notes**	
BIOS		3A16.H00	3A19.H00	3A19.H00	3A20.H00	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.	
BMC		3.34.06	3.64.06	3.64.06	3.65.06		
CPLD		Rev7	Rev7	Rev7	Rev7		
CPU Family		**Ice Lake**	**Ice Lake**	**Ice Lake**	**Ice Lake**		
Management and Compute Nodes : (DS120 G1)							
Components						**Notes**	
BIOS		3B25.H00	3B27.H00	3B27.H00	3B28.H00		
BMC		4.76.06	4.79.06	4.79.06	4.80.06		
CPLD		Rev11	Rev11	Rev11	Rev11		
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**		
Compute Nodes : (DS220 G1)							
Components						**Notes**	
BIOS		3B25.H00	3B27.H00	3B27.H00	3B28.H00		
BMC		4.76.06	4.79.06	4.79.06	4.80.06		
CPLD		Rev11	Rev11	Rev11	Rev11		
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**		
Compute Nodes : (DS225 G1)							
Components						**Notes**	
BIOS		3B25.H00	3B27.H00	3B27.H00	3B27.H00		
BMC		4.76.06	4.77.06	4.77.06	4.77.06		
CPLD		Rev11	Rev11	Rev11	Rev11		
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**		
Compute Nodes : (DS240 G1)							
Components						**Notes**	
BIOS		3B25.H00	3B26.H00	3B26.H00	3B26.H00		
BMC		4.76.06	4.77.06	4.77.06	4.80.06		
CPLD		Rev11	Rev11	Rev11	Rev11		
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**		
Supported I/O Cards							
Components						**Notes**	**VMWare HCL / IOVP link:**
Network Cards (Options)							
Intel i350-T4, 1Gbe quad-port PCIe VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes.Currently no Firmware.py support.	VMware Compatibility Guide Link
	igbn Driver (ESXi)	VMWare Inbox - 1.4.11.6-1vmw	Partner Aysnc - 1.11.2.0	VMWare Inbox - 1.4.11.7-2vmw	VMWare Inbox - 1.4.11.7-2vmw		
Intel i350-T4, 1Gbe quad-port OCP VID=8086, DVID=1523, SVID=8086, SSID=00a3	Firmware	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes.Currently no Firmware.py support.	VMware Compatibility Guide Link
	igbn Driver (ESXi)	VMWare Inbox - 1.4.11.6-1vmw	Partner Aysnc - 1.11.2.0	VMWare Inbox - 1.4.11.7-2vmw	VMWare Inbox - 1.4.11.7-2vmw		
Intel X710-DA4, 10Gbe quad-port PCIe VID=8086, DVID=1572, SVID=8086, SSID=0004	Firmware	8.30 or higher	8.70 or higher	9.30 or higher	9.40 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.3.5-1vmw	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.3.10-1vmw		
Intel X710-DA4, 10Gbe quad-port OCP VID=8086, DVID=1572, SVID=8086, SSID=00a2	Firmware	8.30 or higher	8.70 or higher	9.30 or higher	9.40 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.3.5-1vmw	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.3.10-1vmw		
Intel X710-T4L, 10GbE, quad-port PCIe VID=8086, DVID=15ff, SVID=8086, SSID=0002	Firmware	8.30 or higher	8.70 or higher	9.30 or higher	9.40 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.3.5-1vmw	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.3.10-1vmw		
Intel X710-T4L, 10GbE, quad-port OCP VID=8086, DVID=15ff, SVID=8086, SSID=000a	Firmware	8.30 or higher	8.70 or higher	9.30 or higher	9.30 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.3.5-1vmw	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.3.10-1vmw		
Intel E810-XXVDA2, 10Gbe dual-port PCIe VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware	3.2 or higher	3.2 or higher	4.40 or higher	4.40 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
	icen Driver (ESXi)	Partner Async - 1.8.5.0-1OEM	Partner Async - 1.11.3.0	Partner Async - 1.11.3.0	Partner Async - 1.11.3.0		
Mellanox CX-6 MCX631102AN-ADA_Ax 25GbE, dual-port PCIe VID=15b3, DVID=101f, SVID=15b3, SSID=0001	Firmware	26.29.2002 or higher	26.34.1002 or higher	26.34.1002 or higher	26.34.1002 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 4.21.71.101	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
Mellanox CX-6 MCX631432AN-ADA_Ax 25GbE, dual-port OCPe VID=15b3, DVID=101f, SVID=15b3, SSID=0004	Firmware	26.29.2002 or higher	26.34.1002 or higher	26.30.1002 or higher	26.30.1002 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 4.21.71.101	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
Mellanox CX-6 MCX653106A-ECA VPI 100GbE, dual-port PCIe VID=15b3, DVID=101b, SVID=15b3, SSID=0008	Firmware	20.29.1016 - or higher	20.29.1016 - or higher	20.34.1002 - or higher	20.34.1002 - or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.19.16.10	VMWare Inbox - 4.19.16.10	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
Broadcom BCM957504-P425G 25GbE, quad-port PCIe VID=14e4, DVID=1751, SVID=14e4, SSID=5048	Firmware	218.0.219.21- or higher	223.1.116.1- or higher	228.1.111.0 or higher	228.1.111.0 or higher	Available on Advanced Server DSx20 Gen 2 nodes.Currently no Firmware.py support.	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	VMWare Inbox - 216.0.50.0-66vmw	PartnerAsync- 223.0.206.0	PartnerAsync- 228.0.116.0-1OEM	PartnerAsync- 228.0.116.0-1OEM		
Broadcom BCM957504-N425G 25GbE, quad-port OCP VID=14e4, DVID=1751, SVID=14e4, SSID=1598	Firmware	218.0.219.21- or higher	223.1.116.1- or higher	228.1.111.0 or higher	228.1.111.0 or higher	Available on Advanced Server DSx20 Gen 2 nodes.Currently no Firmware.py support.	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	VMWare Inbox - 216.0.50.0-66vmw	PartnerAsync- 223.0.206.0	VMWare Inbox - 225.0.4.0-8vmw	VMWare Inbox - 225.0.4.0-8vmw		
Intel X527-DA4, 10GbE quad-port, OCP Mezz VID=8086, DVID=37d3, SVID=152d, SSID=8a41	Firmware	4.30 or higher	4.30 or higher	4.30 or higher	4.30 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.3.10-1vmw		
Intel X527-DA2, 10GbE quad-port, OCP Mezz VID=8086, DVID=37d3, SVID=152d, SSID=8a40	Firmware	4.30 or higher	4.30 or higher	4.30 or higher	4.30 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+"	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.3.10-1vmw		
Intel X557-T4, 10GBase-T quad-port, OCP Mezz VID=8086, DVID=37d2, SVID=152d, SSID=8a3f	Firmware	4.30	4.30 or higher	4.30 or higher	4.30 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.3.10-1vmw		
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe VID=8086, DVID=158b, SVID=8086, SSID=0002	Firmware	8.30 - or higher	8.70 or higher	9.30 or higher	9.40 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "Intel(R) Ethernet Network Adapter XXV710-2"	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.2.5-1vmw	VMWare Inbox - 1.11.3.5-1vmw	VMWare Inbox - 1.11.3.10-1vmw	VMWare Inbox - 1.11.3.10-1vmw		
Mellanox ConnextX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) (Quanta ON 25GbE CX4 LX EN Dual port) VID=15b3, DVID=1015, SVID=152d, SSID=8a15	Firmware	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ON 25GbE ConnectX-4 LX EN Dual port"	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.36	VMWare Inbox - 4.23.0.36	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
Mellanox ConnextX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe) (MCX4121A-ACA) VID=15b3, DVID=1015, SVID=15b3, SSID=0003	Firmware	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)"	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.36	VMWare Inbox - 4.23.0.36	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
Mellanox ConnextX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 (MCX516A-CCAT) VID=15b3, DVID=1017, SVID=15b3, SSID=0007	Firmware	16.28.2006 - or higher	16.34.1002 - or higher	16.34.1002 - or higher	16.34.1002 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.23.0.36	VMWare Inbox - 4.23.0.36-14vmw	VMWare Inbox - 4.23.0.66-2vmw	VMWare Inbox - 4.23.0.66-2vmw		
HBA Controller							
Emulex LPe31002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e310	Firmware	12.8.542.26 - or higher	12.8.542.26 - or higher	14.0.639.18 or higher	14.0.639.18 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes. Listed on Vmware HCL as: "Emulex LightPulse LPe31002-M6 2-Port 16Gb Fibre Channel Adapter"	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.622.0	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
Emulex LPe32002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e300	Firmware	12.8.542.26 - or higher	12.8.542.26 - or higher	14.0.639.18 or higher	14.0.639.18 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on Vmware HCL as: "Emulex LightPulse LPe32002-M2 2-Port 32Gb Fibre Channel Adapter"	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.622.0	VMWare Inbox - 14.2.560.8-23vmw	VMWare Inbox - 14.2.641.5-32vmw	VMWare Inbox - 14.2.641.5-32vmw		
Emulex LPe35002 FC 32G HBA VID=10df, DVID=f400, SVID=10df, SSID=f402	Firmware	12.8.542.26 - or higher	14.0.505.12 - or higher	14.0.639.24 - or higher	14.0.639.24 - or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.622.0	Partner Async - 14.2.567.0	Partner Async - 14.2.673.36-1OEM	Partner Async - 14.2.673.36-1OEM		
RAID Controller							
Broadcom SAS3516 2GB RAID Mezzanine VID=1000, DVID=0014, SVID=152d, SSID=8b00	Firmware	5.100.00-2651 or higher	5.100.00-2651 or higher	5.100.00-2651 or higher	5.100.00-2651 or higher	Listed on Vmware HCL as: "QS-3516B-R6-PD32".Available on Advanced Server DSxxx Gen 1 nodes.	Vmware Compatibility Guide Link
	lsi-mr3 Driver (ESXi)	VMware Inbox - 23.00.00.00-1vmw	VMware Inbox - 26.00.00.00-3vmw	VMware Inbox - 27.00.00.00-1vmw	VMware Inbox - 27.00.00.00-1vmw		
Broadcom 9460-16i VID=1000, DVID=0014, SVID=1000, SSID=9460	Firmware	5.130.00-3059 or higher	51.22.0-4545 or higher	51.22.0-4545 or higher	51.22.0-4545 or higher	Available on Advanced Server DSxxx Gen 1 nodes.. Listed on Vmware HCL as: "MegaRAID SAS 9460-16i". Used for RAID Boot devices on exceptions.	Vmware Compatibility Guide link
	lsi-mr3 Driver (ESXi)	VMware Inbox 7.722.02.00	VMware Inbox - 7.724.03.00-1vmw	VMware Inbox - 7.726.02.00-2vmw	VMware Inbox - 7.726.02.00-2vmw		
Broadcom QS3916 VID=1000, DVID=10e2, SVID=152d, SSID=00cd	Firmware	5.170.00-3513 or higher	5.170.00-3513 or higher	5.170.00-3513 or higher	5.170.00-3513 or higher	Available on Advanced Server DSxxx Gen 1 nodes.	Vmware Compatability Guide link
	lsi-mr3 Driver (ESXi)	VMWare Inbox - 7.722.02.00-1	VMWare Inbox - 7.724.03.00-1vmw	VMWare Inbox - 7.726.02.00-2vmw	VMWare Inbox - 7.726.02.00-2vmw		
Broadcom 9560-16i VID=1000, DVID=10e2, SVID=1000, SSID=4000	Firmware	5.130.02-3059 or higher	52.26.0-5014 or higher	52.26.0-5014 or higher	52.27.0-5171 or higher	Available on Advanced Server DSxxx Gen 2 nodes.	VMWare Compatibility Guide Link
	lsi-mr3 Driver (ESXi)	VMware Inbox 7.722.02.00	VMware Inbox - 7.724.03.00-1vmw	VMware Inbox - 7.726.02.00-2vmw	VMware Inbox - 7.726.02.00-2vmw		
SAS Controller							
Quanta QS-3216 Mezz Card VID=1000, DVID=00c9, SVID=152d, SSID=8a12	Firmware	1A22 (16.00.09.00)	1A22 (16.00.09.00)	1A22 (16.00.09.00)	1A22 (16.00.09.00)	Listed on Vmware HCL as: "QS-3216" Only for DS120 and DS220 LFF.	Vmware Compatibility Guide Link
	lsi_msgpt3 Driver (ESXi)	VMware Inbox - 17.00.13.00-1	VMware Inbox - 17.00.13.00-2vmw	VMware Inbox - 17.00.13.00-2vmw	VMware Inbox - 17.00.13.00-2vmw		
Broadcom SAS9305-16i PCIe (only for DS225) VID=1000, DVID=00c4, SVID=1000, SSID=3190	Firmware	16.00.09.00 or higher	16.00.09.00 or higher	16.00.09.00 or higher	16.00.09.00 or higher	Listed on Vmware HCL as: "9305-16i" Only for DS225 and DS220 SFF.	Vmware Compatibility Guide Link
	lsi_msgpt3 Driver (ESXi)	VMware Inbox - 17.00.13.00-1	VMware Inbox - 17.00.13.00-2vmw	VMware Inbox - 17.00.13.00-2vmw	VMware Inbox - 17.00.13.00-2vmw		
Quanta QS3816 Mezz Card VID=1000, DVID=00e6, SVID=152d, SSID=00cc	Firmware	24.00.00.00 or higher	24.00.00.00 or higher	26.00.00.00 or higher	26.00.00.00 or higher	Available on Advanced Server DSxxx Gen 2 nodes.	Vmware Compatibility Guide Link
	lsi-msgpt35 Driver (ESXi)	VMWare Inbox - 24.00.00.00-1	VMWare Inbox - 26.00.00.00-3vmw	Partner Async - 27.00.00.00-1OEM	Partner Async - 27.00.00.00-1OEM		
Broadcom 9500-16i VID=1000, DVID=00e6, SVID=1000, SSID=4050	Firmware	22.00.00.00 or higher	26.00.00.00 or higher	30.00.00.00 or higher	30.00.00.00 or higher	Available on Advanced Server DSxxx Gen 2 nodes	VMware Compatilbility Buide Link
	lsi-msgpt35 Driver (ESXi)	VMware Inbox 7.722.02.00	VMware Inbox - 26.00.00.00-3vmw	VMware Inbox - 27.00.00.00-1vmw	VMware Inbox - 27.00.00.00-1vmw		
Drives for vSAN Cache and Capacity (Options) for DS120/220/225/240							
Components						**Notes**	
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	8DV101H0 - or higher	8DV101H0 - or higher	8DV101H0 - or higher	8DV101H0 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatable with DS225	Vmware Compatibility Guide link
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10182 - or higher	VDV10182 - or higher	VDV10182 - or higher	VDV10182 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10182 - or higher	VDV10182 - or higher	VDV10182 - or higher	VDV10182 - or higher	Not compatable with DS225	Vmware Compatibility Guide link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
NVMe Driver	Driver (ESXi)	VMWare Inbox - nvme-pcie 1.2.4.1	VMWare Inbox - nvme-pcie 1.2.4.1	VMWare Inbox - nvme-pcie 1.2.4.11	VMWare Inbox - nvme-pcie 1.2.4.11		
Intel SSD DC S4500 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	VMware Compatibility Guide link
Intel SSD DC S4510 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4600 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4610 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD D7-P5520 Series	Firmware	9CV10200 -or higher	9CV10200 -or higher	9CV10200 -or higher	9CV10200 -or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD D7-P5620 Series	Firmware	9CV10200 -or higher	9CV10200 -or higher	9CV10200 -or higher	9CV10200 -or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Samsung SATA SSD PM893 Series	Firmware	JXTC104Q -or higher	JXTC104Q -or higher	JXTC104Q -or higher	JXTC104Q -or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	Requires SAS Controller	
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	Requires SAS Controller	
Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	XC311120 - or higher	XC311120 - or higher	XC311120 - or higher	XC311120 - or higher	Only for DS240 Boot Device	VMware Compatibility Guide link
Toshiba / Koxia BG4 Series - 256GB, M.2 2230	Firmware	N/A	N/A	N/A	N/A	Only available on Advanced Server DSx20 Gen 2 nodes. Only used as Boot device.	
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XXD128GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1XXD256GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XXD512GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
GPU							
Components						**Notes**	
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	510.85.03 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	510.85.03 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	510.85.03 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	510.85.03 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide Link
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	510.85.03 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS120G1, DS220 G1, DS225 G1, DS120G2, DS220G2 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide Link
NVIDIA Tesla A16	Nvidia Virtual GPU Software for vSphere	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS220 G2	VMware Compatibility Guide Link
NVIDIA Tesla A30	Nvidia Virtual GPU Software for vSphere	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS220 G2	VMware Compatibility Guide Link
NVIDIA Tesla A100-80G	Nvidia Virtual GPU Software for vSphere	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS220 G2	VMware Compatibility Guide Link
NVIDIA Tesla A2	Nvidia Virtual GPU Software for vSphere	525.60.12 or higher	535.54.06 or higher	535.54.06 or higher	535.54.06 or higher	Available for DS220 G2	VMware Compatibility Guide Link

FC Switches

Vendor	Models					Notes	
Brocade	G620	9.0.1c	9.1.1c	9.1.1c	9.1.1c		
Brocade	G720	9.1.0b	9.1.1c	9.1.1c	9.1.1c		

Ethernet Switches

Vendor	Models					Notes	
Arista	DCS-7010T-48-R	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Arista	DCS-7050CX3-32S-R	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Arista	DCS-7050SX3-48YC8-R	4.25.4M	4.25.4M	4.27.5M	4.27.5M		
Cisco	Nexus 3048	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	9.3.13	9.3.13	* These Cisco switches are used on UCP CI appliance from v4.0 and prior	

Cisco	Nexus 93180LC-EX	NXOS 9.3.8	9.3.13	9.3.13	9.3.13	and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180YC-EX	NXOS 9.3.8	10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 9.3.8	10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 9.3.8	10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9332C (100G Spine)	NXOS 9.3.8	10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 9.3.8	10.2.5	NXOS 10.3.4a	NXOS 10.3.4a	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 93600GC (100G Spine)	NXOS 9.3.8	10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93600CD-GX (100G Spine)	NXOS 9.3.8	10.2.5	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 9316D-GX (400G Spine)	N/A	N/A	NXOS 10.3.4a	NXOS 10.3.4a		
Cisco	Nexus 93180YC-FX3H (10/25G Leaf)	N/A	N/A	N/A	NXOS 10.3.4a		
Cisco	Nexus 9336C-FX2 (25G/100G Leaf)	N/A	N/A	N/A	N/A		

Storage Models

	Models					Notes	
VSP	G200	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00	Hitachi Support Page - ECN	
VSP	G400	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G600	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G800	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F400	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F600	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	F800	83-05-43-x0/00	83-05-49-x0/31	83-05-50-x0/00	83-05-50-x0/00		
VSP	G350	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G370	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G700	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G900	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F350	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F370	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F700	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	F900	88-08-04-x0/00	88-08-11-x0/91	88-08-12-x0/00	88-08-12-x0/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-87-00/00	80-06-94-00/91	80-06-95-00/00	80-06-95-00/00		
VSP	E590	93-06-22-40/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E790	93-06-22-40/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E990	93-06-22-60/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	E1090	93-06-22-80/00	93-07-21-x0/80	93-07-22-x0/00	93-07-22-x0/00		
VSP	5100, 5200, 5500, 5600	90-08-21-00/00	90-09-21-00/80	90-09-24-00/00	90-09-24-00/00		
VSP	One Block 24, 26, 28	N/A	N/A	N/A	N/A		
* Minimum Level or above							

Software

Software Versions							
Vendor	**Component**					**Notes**	
Hitachi	UCP Advisor	4.4	4.4	4.5	4.5		
VMware	ESXi	6.0 (Build # 20513097)	6.0.1 GA (Build # 21813344)	8.0U2 GA (Build # 22380479)	8.0U2 GA (Build # 22380479)		
VMware	vCenter(VCSA)	6.0 (Build # 20519528)	6.0.1 GA (Build # 21815093)	8.0U2 GA (Build # 22617221)	8.0U2 GA (Build # 22617221)		
VMware	VSAN	6.0 (Build # 20513097)	6.0.1 GA (Build # 21813344)	8.0U2 GA (Build # 22380479)	8.0U2 GA (Build # 22380479)		
Downloadable ZIPs							
Vendor	**Component**					**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20240315.zip	Arista_Firmware_20240315.zip		
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20240315.zip	Cisco_Firmware_20240506.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Adapter Firmware ZIP	Adapter_Firmware_20221205.zip	Adapter_Firmware_20230721.zip	Adapter_Firmware_20240116.zip	Adapter_Firmware_20240506.zip		
Hitachi	Server Firmware ZIP	Server_Firmware_20221216.zip	Server_Firmware_DS_20230703.zip	Server_Firmware_DS_20231204.zip	Server_Firmware_DS_20240506.zip		
Hitachi	MIB Package(s)	MIB_20210906.zip	MIB_20210906.zip	MIB_20210906.zip	MIB_20210906.zip		
Hitachi	Vmware Software ZIP	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20230703.zip DS_vSphere_8.x_20230703.zip	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20230703.zip DS_vSphere_8.x_20231204.zip	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20240116.zip DS_vSphere_8.x_20231204.zip	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20240116.zip DS_vSphere_8.x_20240506.zip		
Hitachi	UCPToolkit ZIP	UCPToolkit_v8.0_20230721.zip	UCPToolkit_v8.5_20231204.zip	Toolkit8.6.1.zip	Toolkit8.7.zip		
Main Mediakit ZIP							
Vendor	**Component**					**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_Base_Mediakit_v8.0_20230721.zip	UCPCI-HC_MediaKit_v8.5_20231204.zip	UCPCI-HC_BaseMediaKit_v8.6_20240315.zip	UCPCI-HC_BaseMediaKit_v8.7_20240506.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

* This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI DS G1/G2

Hardware

UCP CI (Release Version)		7.00			
Release date		December 16, 2022			
Major vSphere Release:		7.0 U3d	7.0 U3g	8.0	
Management and Compute Nodes : (DS120 G2)					
Components		**Versions**			**Notes**
BIOS		3A14.H00	3A15.H00	3A15.H00	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.
BMC		3.32.06	3.33.06	3.33.06	
CPLD		Rev7	Rev7	Rev7	
CPU Family		**Ice Lake**	**Ice Lake**	**Ice Lake**	
Compute Nodes : (DS220 G2)					
Components		**Versions**			**Notes**
BIOS		3A14.H00	3A15.H00	3A15.H00	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.
BMC		3.32.06	3.33.06	3.33.06	
CPLD		Rev7	Rev7	Rev7	
CPU Family		**Ice Lake**	**Ice Lake**	**Ice Lake**	
Management and Compute Nodes : (DS120 G1)					
Components		**Versions**			**Notes**
BIOS		3B23.H00	3B24.H00	3B24.H00	
BMC		4.72.06	4.74.06	4.74.06	
CPLD		Rev11	Rev11	Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS220 G1)					
Components		**Versions**			**Notes**
BIOS		3B23.H00	3B24.H00	3B24.H00	
BMC		4.72.06	4.74.06	4.74.06	
CPLD		Rev11	Rev11	Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS225 G1)					
Components		**Versions**			**Notes**
BIOS		3B23.H00	3B23.H00	3B23.H00	
BMC		4.72.06	4.72.06	4.72.06	
CPLD		Rev11	Rev11	Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS240 G1)					
Components		**Versions**			**Notes**
BIOS		3B23.H00	3B23.H00	3B23.H00	
BMC		4.71.06	4.71.06	4.71.06	
CMC		N/A	N/A	N/A	
CPLD		Rev11	Rev11	Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	

Supported I/O Card						
Components					**Notes**	**VMWare HCL / IOVP link:**
Network Cards (Options)						
Intel I350-T4, 1Gbe quad-port PCIe VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	igbn Driver (ESXi)	VMWare Inbox - 1.4.11.2-1vmw	VMWare Inbox - 1.4.11.2-1vmw	VMWare Inbox - 1.4.11.6-1vmw		
Intel I350-T4, 1Gbe quad-port OCP VID=8086, DVID=1523, SVID=8086, SSID=00a3	Firmware	1.63.0 or higher	1.63.0 or higher	1.63.0 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	igbn Driver (ESXi)	VMWare Inbox - 1.4.11.2-1vmw	VMWare Inbox - 1.4.11.2-1vmw	VMWare Inbox - 1.4.11.6-1vmw		
Intel X710-DA4, 10Gbe quad-port PCIe VID=8086, DVID=1572, SVID=8086, SSID=0004	Firmware	8.30 or higher	8.30 or higher	8.30 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.2.5-1vmw		
Intel X710-DA4, 10Gbe quad-port OCP VID=8086, DVID=1572, SVID=8086, SSID=00a2	Firmware	8.30 or higher	8.30 or higher	8.30 or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.2.5-1vmw		
Intel X710-T4L, 10GbE, quad-port PCIe VID=8086, DVID=15ff, SVID=8086, SSID=0002	Firmware	8.30 or higher	8.30 or higher	8.30 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.2.5-1vmw		
Intel X710-T4L, 10GbE, quad-port OCP VID=8086, DVID=15ff, SVID=8086, SSID=000a	Firmware	8.30 or higher	8.30 or higher	8.30 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.8.1.136-1vmw	VMWare Inbox - 1.8.1.136-1vmw	VMWare Inbox - 1.11.2.5-1vmw		
Intel E810-XXVDA2, 10Gbe dual-port PCIe VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware	3.0 or higher	3.2 or higher	3.2 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
	icen Driver (ESXi)	Partner Async - 1.6.5.0-1OEM	Partner Async - 1.8.5.0-1OEM	Partner Async - 1.8.5.0-1OEM		
Mellanox CX-6 MCX631102AN-ADA_Ax 25GbE, dual-port PCIe VID=15b3, DVID=101f, SVID=15b3, SSID=0001	Firmware	26.29.2002 or higher	26.29.2002 or higher	26.29.2002 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 4.21.71.101	Partner Async - 4.21.71.101	Partner Async - 4.21.71.101		
Mellanox CX-6 MCX631432AN-ADA_Ax 25GbE, dual-port OCPe VID=15b3, DVID=101f, SVID=15b3, SSID=0004	Firmware	26.29.2002 or higher	26.29.2002 or higher	26.29.2002 or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 4.21.71.101	Partner Async - 4.21.71.101	Partner Async - 4.21.71.101		
Mellanox CX-6 MCX653106A-ECA VPI 100GbE, dual-port PCIe VID=15b3, DVID=101b, SVID=15b3, SSID=000c	Firmware	20.29.1016 - or higher	20.29.1016 - or higher	20.29.1016 - or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.19.16.10	VMWare Inbox - 4.19.16.10	VMWare Inbox - 4.19.16.10		
Broadcom BCM957504-N425G 25GbE, quad-port OCP VID=14e4, DVID=1751, SVID=14e4, SSID=1598	Firmware	218.0.219.21- or higher	218.0.219.21- or higher	218.0.219.21- or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	VMWare Inbox - 216.0.50.0-66vmw	VMWare Inbox - 216.0.50.0-66vmw	VMWare Inbox - 216.0.50.0-66vmw		
Intel X527-DA4, 10GbE quad-port, OCP Mezz VID=8086, DVID=37d3, SVID=152d, SSID=8a41	Firmware	4.30 or higher	4.30 or higher	4.30 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.2.5-1vmw		
Intel X527-DA2, 10GbE quad-port, OCP Mezz VID=8086, DVID=37d3, SVID=152d, SSID=8a40	Firmware	4.30 or higher	4.30 or higher	4.30 or higher	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.2.5-1vmw		
Intel X557-T4, 10GBase-T quad-port, OCP Mezz VID=8086, DVID=37d2, SVID=152d, SSID=8a3f	Firmware	4.30	4.30	4.30	Available on Advanced Server DSx20 Gen 1 nodes. Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.2.5-1vmw		
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe VID=8086, DVID=158b, SVID=8086, SSID=0002	Firmware	8.30 - or higher	8.30 - or higher	8.30 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "Intel(R) Ethernet Network Adapter XXV710-2"	VMware Compatibility Guide Link
	i40en Driver (ESXi)	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.1.31-1vmw	VMWare Inbox - 1.11.2.5-1vmw		
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) (Quanta ON 25GbE CX4 LX EN Dual port) VID=15b3, DVID=1015, SVID=152d, SSID=8a15	Firmware	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ON 25GbE ConnectX-4 LX EN Dual port"	VMware Compatibility Guide Link
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A		
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.19.16.11	VMWare Inbox - 4.19.16.11	VMWare Inbox - 4.23.0.36		
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe) (MCX4121A-ACA) VID=15b3, DVID=1015, SVID=15b3, SSID=0003	Firmware	14.32.1010 - or higher	14.32.1010 - or higher	14.32.1010 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)"	VMware Compatibility Guide Link
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A		
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.19.16.11	VMWare Inbox - 4.19.16.11	VMWare Inbox - 4.23.0.36		
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 (MCX516A-CCAT) VID=15b3, DVID=1017, SVID=15b3, SSID=0007	Firmware	16.28.2006 - or higher	16.28.2006 - or higher	16.28.2006 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"	VMware Compatibility Guide Link
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A		
	nmlx5_core Driver (ESXi)	VMWare Inbox - 4.19.16.11	VMWare Inbox - 4.19.16.11	VMWare Inbox - 4.23.0.36		
HBA Controller						
Emulex LPe31002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e310	Firmware	12.8.542.26 - or higher	12.8.542.26 - or higher	12.8.542.26 - or higher	Available on Advanced Server DSx20 Gen 1 & DSx20 Gen 2 nodes. Listed on Vmware HCL as: "Emulex LightPulse LPe31002-M6 2-Port 16Gb Fibre Channel Adapter"	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.326.12	Partner Async - 14.0.622.0	Partner Async - 14.0.622.0		
Emulex LPe32002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e300	Firmware	12.8.542.26 - or higher	12.8.542.26 - or higher	12.8.542.26 - or higher	Available on Advanced Server DSx20 Gen 1 nodes. Listed on Vmware HCL as: "Emulex LightPulse LPe32002-M2 2-Port 32Gb Fibre Channel Adapter"	Vmware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.326.12	Partner Async - 14.0.622.0	Partner Async - 14.0.622.0		
Emulex LPe35002 FC 32G HBA VID=10df, DVID=f400, SVID=10df, SSID=f402	Firmware	12.8.542.26 - or higher	12.8.542.26 - or higher	12.8.542.26 - or higher	Available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.326.12	Partner Async - 14.0.622.0	Partner Async - 14.0.622.0		
RAID Controller						
Broadcom SAS3516 2GB RAID Mezzanine VID=1000, DVID=0014, SVID=152d, SSID=8b00	Firmware	5.100.00.2651	5.100.00-2651 or higher	5.100.00-2651 or higher	Listed on Vmware HCL as: "QS-3516B-R6-PD32"	Vmware Compatibility Guide Link
	isi-mr3 Driver (ESXi)	VMWare Inbox - 19.00.02.00-1vmw	VMware Inbox 7.718.02.00	VMware Inbox 7.722.02.00		
Broadcom 9460-16i VID=1000, DVID=0014, SVID=1000, SSID=9460	Firmware	5.130.00-3059 or higher	5.130.00-3059 or higher	5.130.00-3059 or higher	Available on Advanced Server DSxxx Gen 1 nodes.. Listed on Vmware HCL as: "MegaRAID SAS 9460-16i". Used for RAID Boot devices on exceptions	VMware Compatibility Guide link
	isi-mr3 Driver (ESXi)	VMWare Inbox - 7.718.02.00-1vmw	VMware Inbox 7.718.02.00	VMware Inbox 7.722.02.00		
Broadcom QS3916 VID=1000, DVID=10e2, SVID=152d, SSID=00cd	Firmware	5.170.00-3513 - or higher	5.170.00-3513 or higher	5.170.00-3513 or higher	Available on Advanced Server DSxxx Gen 1 nodes.	Vmware Compatability Guide link
	isi-mr3 Driver (ESXi)	Vmware Inbox - 7.716.03.00-1vmw	VMWare Inbox - 7.718.02.00-1	VMWare Inbox - 7.722.02.00-1		
Broadcom 9560-16i VID=1000, DVID=10e2, SVID=1000, SSID=4000	Firmware	5.130.00-3059 or higher	5.130.02-3059 or higher	5.130.02-3059 or higher	Available on Advanced Server DSxxx Gen 2 nodes.	VMWare Compatibility Guide Link
	isi-mr3 Driver (ESXi)	Vmware Inbox - 7.718.02.00-1vmw	VMware Inbox 7.718.02.00	VMware Inbox 7.722.02.00		
SAS Controller						
Quanta QS-3216 Mezz Card VID=1000, DVID=00c9, SVID=152d, SSID=8a12	Firmware	1A22 (16.00.09.00)	1A22 (16.00.09.00)	1A22 (16.00.09.00)	Listed on Vmware HCL as: "QS-3216" Only for DS120 and DS220 LFF.	Vmware Compatibility Guide Link
	isi_msgpt3 Driver (ESXi)	VMWare Inbox - 17.00.12.00-1	VMWare Inbox - 17.00.12.00-1	VMWare Inbox - 17.00.13.00-1		
Broadcom SAS9305-16i PCIe (only for DS225) VID=1000, DVID=00c4, SVID=1000, SSID=3190	Firmware	16.00.09.00	16.00.09.00 or higher	16.00.09.00 or higher	Listed on Vmware HCL as: "9305-16i" Only for DS225 and DS220 SFF.	Vmware Compatibility Guide Link
	isi_msgpt3 Driver (ESXi)	VMWare Inbox - 17.00.12.00-1vmw	VMWare Inbox - 17.00.12.00-1	VMWare Inbox - 17.00.13.00-1		
Quanta QS3816 Mezz Card VID=1000, DVID=00e6, SVID=152d, SSID=00cc	Firmware	14.00.05.00	14.00.05.00 or higher	14.00.05.00 or higher	Available on Advanced Server DSxxx Gen 2 nodes.	VMware Compatibility Guide Link
	isi-msgpt35 Driver (ESXi)	VMWare Inbox - 19.00.02.00-1vmw	VMWare Inbox - 19.00.02.00-1	VMWare Inbox - 23.00.00.00-1		
Broadcom 9500-16i VID=1000, DVID=00e6, SVID=1000, SSID=4050	Firmware	22.00.00.00	22.00.00.00 or higher	22.00.00.00 or higher	Available on Advanced Server DSxxx Gen 2 nodes	VMware Compatibility Guide Link
	isi-msgpt35 Driver (ESXi)	VMWare Inbox - 19.00.02.00-1vmw	VMware Inbox 7.718.02.00	VMware Inbox 7.722.02.00		
Drives for vSAN Cache and Capacity (Options) for DS120/220/225/240						
Components					**Notes**	
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	8DV101H0 - or higher	8DV101H0 - or higher	8DV101H0 - or higher	Not compatible with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatible with DS225	VMware Compatibility Guide link
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10170 - or higher	VDV10182 - or higher	VDV10182 - or higher	Not compatible with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatible with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10170 - or higher	VDV10182 - or higher	VDV10182 - or higher	Not compatible with DS225	VMware Compatibility Guide link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatible with DS225	Vmware Compatibility Guide Link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatible with DS225	Vmware Compatibility Guide Link
NVMe Driver	Driver (ESXi)	VMWare Inbox - nvme-pcie 1.2.3.16	VMWare Inbox - nvme-pcie 1.2.3.16	VMWare Inbox - nvme-pcie 1.2.4.1		
Intel SSD DC S4500 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	VMware Compatibility Guide link
Intel SSD DC S4510 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4600 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4610 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD D7-P5520 Series	Firmware	N/A	9CV10200 -or higher	9CV10200 -or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link

Intel SSD D7-P5620 Series	Firmware	N/A	9CV10200 -or higher	9CV10200 -or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Samsung SATA SSD PM893 Series	Firmware	HXT7304Q - or higher	JXTC104Q -or higher	JXTC104Q -or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	E004 - or higher	E004 - or higher	E004 - or higher	Requires SAS Controller	
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002 - or higher	E002 - or higher	E002 - or higher	Requires SAS Controller	
Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	XC311120 - or higher	XC311120 - or higher	XC311120 - or higher	Only for DS240 Boot Device	VMware Compatibility Guide link
Toshiba / Kioxia BG4 Series - 256GB, M.2 2230	Firmware	N/A	N/A	N/A	Only available on Advanced Server DSx20 Gen 2 nodes. Only used as Boot device.	
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XXD128GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1XXD256GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XXD512GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
GPU						
Components					**Notes**	
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1 (Not Qualified on VCG for 8.0)	VMware Compatibility Guide link
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1 (Not Qualified on VCG for 8.0)	Vmware Compatibility Guide Link
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS120G1, DS220 G1, DS225 G1, DS120G2, DS220G2 (Not Qualified on VCG for 8.0)	Vmware Compatibility Guide Link
NVIDIA Tesla A16	Nvidia Virtual GPU Software for vSphere	NA	510.47.03	525.60.12	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A30	Nvidia Virtual GPU Software for vSphere	NA	510.47.03	525.60.12	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A100-80G	Nvidia Virtual GPU Software for vSphere	NA	515.48.07	525.60.12	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A2	Nvidia Virtual GPU Software for vSphere	NA	510.47.03	525.60.12	Available for DS220 G2	Vmware Compatibility Guide Link
FC Switches						
Vendor	**Models**				**Notes**	
Brocade	G620	9.0.1c	9.0.1c	9.0.1c		
Brocade	G720	9.1.0b	9.1.0b	9.1.0b		
Ethernet Switches						
Vendor	**Models**				**Notes**	
Quanta	LB9 Mgmt Switch	N/A	N/A	N/A		
Arista	DCS-7010T-48-R	4.25.4M	4.25.4M	4.25.4M		
Arista	DCS-7050CX3-32S-R	4.25.4M	4.25.4M	4.25.4M		
Arista	DCS-7050SX3-48YC8-R	4.25.4M	4.25.4M	4.25.4M		
Cisco	Nexus 3048	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-EX	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 9332PQ	N/A	N/A	N/A		
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 9332C (100G Spine)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	**These CISCO switches were added from Version 5.3**	
Cisco	Nexus 9360GC (100G Spine)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Storage Models						
	Models				**Notes**	
VSP	G200	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	Hitachi Support Page - ECNs	
VSP	G400	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	G600	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	G800	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	F400	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	F600	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	F800	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	G350	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	G370	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	G700	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	G900	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	F350	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	F370	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	F700	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	F900	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-87-00/00	80-06-87-00/00	80-06-87-00/00		
VSP	E590	93-06-22-40/00	93-06-22-40/00	93-06-22-40/00		
VSP	E790	93-06-22-40/00	93-06-22-40/00	93-06-22-40/00		
VSP	E990	93-06-22-60/00	93-06-22-60/00	93-06-22-60/00		
VSP	E1090	93-06-22-80/00	93-06-22-80/00	93-06-22-80/00		
VSP	5100, 5200, 5500, 5600	90-08-21-00/00	90-08-21-00/00	90-08-21-00/00		

* Minimum Level or above

Software						
Software Versions						
Vendor	**Component**				**Notes**	
VMware	ESXI	7.0U3d (Build # 19482537)	7.0U3g (Build # 20328353)	8.0 (Build # 20513097)		
VMware	vCenter(VCSA)	7.0U3d (Build # 19480866)	7.0U3g (Build # 20150588)	8.0 (Build # 20519528)		
VMware	VSAN	7.0U3d (Build # 19482537)	7.0U3g (Build # 20328353)	8.0 (Build # 20513097)		
Downloadable ZIPs						
Vendor	**Component**				**Notes**	
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip		
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip		
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt		
Hitachi	Adapter Firmware ZIP	Adapter_Firmware_20220729.zip	Adapter_Firmware_20221205.zip	Adapter_Firmware_20221205.zip		
Hitachi	Server Firmware ZIP	Server_Firmware_20220705.zip	Server_Firmware_20221205.zip	Server_Firmware_20221216.zip		
Hitachi	MIB Package(s)	MIB_20210906.zip	MIB_20210906.zip	MIB_20210906.zip		
Hitachi	Vmware Software ZIP	vSphere7.0u3d-19482537_20220705.zip	vSphere70u3g_20328353_20221205.zip	DS_vSphere_6.7_20221216.zip DS_vSphere_7.x_20221216.zip DS_vSphere_8.x_20221216.zip		
Hitachi	UCPToolkit ZIP	UCPToolkit_v6.1_20220905.zip	UCPToolkit_v6.3_20221205.zip	UCPToolkit_v7.0_20221216.zip		
Main Mediakit ZIP						
Vendor	**Component**				**Notes**	
Hitachi	UCP CI Mediakit	UCPCI-HC_MediaKit_V6.1_20220905.zip	UCPCI-HC_MediaKit_V6.3_20221205.zip	UCPCI-HC_Base_Mediakit_v7.0_20221216.zip		

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

HA

UCP CI Interoperability Matrix

UCP CI w/ HA800 G2 server

Hardware

UCP CI (Release Version)		**v7.0 (HA800 G2 specific components)**			
Release date		**December 23, 2022**			
Major vSphere Release:		**7.0 U3c**	**8.0**		
Management and Compute Nodes : (HA810 G2)					
Components		**Versions**		**Notes**	
System ROM		U46 v1.58 (SPV 6.60)	U46 v1.58 (SPV 6.60)	Packaged with SPV image v 6.70 System ROM & iLO are applied with SPV image.	
iLO Firmware		v2.65 (SPV 6.60)	v2.65 (SPV 6.60)		
CPU Family		**Icelake**	**Icelake**		
Compute Nodes : (HA820 G2)					
Components		**Versions**		**Notes**	
System ROM		U46 v1.58 (SPV 6.60)	U46 v1.58 (SPV 6.60)	Packaged with SPV image v 6.70 System ROM & iLO are applied with SPV image.	
iLO Firmware		v2.65 (SPV 6.60)	v2.65 (SPV 6.60)		
CPU Family		**Icelake**	**Icelake**		
I/O Card Support for HA810 G2 / HA820 G2					
Components				**Notes**	**VMWare HCL / IOVP link:**
OCP Network Cards (Options)					
INT I350 1GbE, 4p, BASE-T OCP3 Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a3	Firmware	1.3082.0 (SPV6.60)	1.3082.0 (SPV6.60)		VMware Compatibility Guide Link
	Intel-igbn Driver (ESXi)	Partner Async - 1.5.2.0-1OEM	Partner Async - 1.9.1.0-1OEM	Packaged with SPV image v 6.70	
INT E810 10/25GbE, 2p, SFP28 OCP3 VID=, DVID=, SVID=, SSID=	Firmware	3.00 (SPV 6.60)	3.00 (SPV 6.60)		VMware Compatibility Guide Link
	Intel-Icen Driver (ESXi)	Partner Async - 1.6.2.0-1OEM	Partner Async - 1.8.4.0-1OEM	Packaged with SPV image v 6.70	
MLX MCX562A 10/25GbE, 2p, SFP28 OCP3 Adptr VID=15b3, DVID=1017, SVID=15b3, SSID=0052	Firmware	16.32.1010 (SPV 6.60)	16.32.1010 (SPV 6.60)		VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 4.21.71.101-1OEM	VMWare Inbox - 4.23.0.36-8vmw	Packaged with SPV image v 6.70	
BCM 57412 10GbE, 2p, SFP+ OCP3 Adptr VID=14e4, DVID=16d6, SVID=14e4, SSID=1594	Firmware	219.0.144.0 (SPV 6.60)	219.0.144.0 (SPV 6.60)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 218.0.38.0-1OEM	Partner Async - 222.0.118.0-OEM	Packaged with SPV image v 6.70	
BCM 57414 10/25GbE, 2p, SFP28 OCP3 VID=14e4, DVID=16d7, SVID=14e4, SSID=1596	Firmware	219.0.144.0 (SPV 6.60)	219.0.144.0 (SPV 6.60)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 218.0.38.0-1OEM	Partner Async - 222.0.118.0-OEM	Packaged with SPV image v 6.70	
BCM 57416 10GbE, 2p, BASE-T OCP3 Adptr VID=14e4, DVID=16d8, SVID=14e4, SSID=1592	Firmware	219.0.144.0 (SPV 6.60)	219.0.144.0 (SPV 6.60)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 218.0.38.0-1OEM	Partner Async - 222.0.118.0-OEM	Packaged with SPV image v 6.70	
PCIe Network Cards (Options)					
INT I350 1GbE, 4p, BASE-T PCIe Adptr VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware	1.3082.0 (SPV6.60)	1.3082.0 (SPV6.60)		VMware Compatibility Guide Link
	igbn Driver (ESXi)	Partner Async - 1.5.2.0-1OEM	Partner Async - 1.9.1.0-1OEM	Packaged with SPV image v 6.70	
INT E810 10/25GbE, 2p, SFP28 PCIe Adptr VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware	3.00 (SPV 6.60)	3.00 (SPV 6.60)		VMware Compatibility Guide Link
	Intel-Icen Driver (ESXi)	Partner Async - 1.6.2.0-1OEM	Partner Async - 1.8.4.0-1OEM	Packaged with SPV image v 6.70	
INT E810 10/25GbE, 4p, SFP28 PCIe Adptr VID=8086, DVID=1593, SVID=8086, SSID=0005	Firmware	3.00 (SPV 6.60)	3.00 (SPV 6.60)		VMware Compatibility Guide Link
	Intel-Icen Driver (ESXi)	Partner Async - 1.6.2.0-1OEM	Partner Async - 1.8.4.0-1OEM	Packaged with SPV image v 6.70	
INT E810 100GbE, 2p, QSFP28 PCIe Adptr VID=8086, DVID=1592, SVID=8086, SSID=0002 (or 000e)	Firmware	3.00 (SPV 6.60)	3.00 (SPV 6.60)		VMware Compatibility Guide Link
	Intel-Icen Driver (ESXi)	Partner Async - 1.6.2.0-1OEM	Partner Async - 1.8.4.0-1OEM	Packaged with SPV image v 6.70	
MLX MCX512F 10/25GbE, 2p, SFP28 PCIe Adptr VID=15b3, DVID=1017, SVID=15b3, SSID=0116	Firmware	16.32.1010 (SPV 6.60)	16.32.1010 (SPV 6.60)		VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 4.21.71.101-1OEM	VMWare Inbox - 4.23.0.36-8vmw	Packaged with SPV image v 6.70	
MLX MCX623106AS 100GbE, 2p, QSFP56 Adptr VID=15b3, DVID=101d, SVID=15b3, SSID=0042	Firmware	22.32.1010 (SPV 6.60)	22.32.1010 (SPV 6.60)		VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 4.21.71.101-1OEM	VMWare Inbox - 4.23.0.36-8vmw	Packaged with SPV image v 6.70	
BCM 57412 10GbE, 2p, SFP+ Adptr VID=14e4, DVID=16d6, SVID=14e4, SSID=1595	Firmware	219.0.144.0 (SPV 6.60)	219.0.144.0 (SPV 6.60)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 218.0.38.0-1OEM	Partner Async - 222.0.118.0-OEM	Packaged with SPV image v 6.70	
BCM 57414 10/25GbE, 2p, SFP28 PCIe Adptr VID=14e4, DVID=16d7, SVID=14e4, SSID=1597	Firmware	219.0.144.0 (SPV 6.60)	219.0.144.0 (SPV 6.60)		VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	Partner Async - 218.0.38.0-1OEM	Partner Async - 222.0.118.0-OEM	Packaged with SPV image v 6.70	
BCM 57416 10GbE, 2,p BASE-T Adptr VID=14e4, DVID=16d8, SVID=14e4, SSID=1593	Firmware	219.0.144.0 (SPV 6.60)	219.0.144.0 (SPV 6.60)		VMware Compatibility Guide Link
	bnxtnet Driver (ESXi)	Partner Async - 218.0.38.0-1OEM	Partner Async - 222.0.118.0-OEM	Packaged with SPV image v 6.70	
HBA Controller					
HPE SN1100Q 16Gb 1p FC HBA - (Qlogic (Marvell), QLE2690) VID=1077, DVID=2261, SVID=1590, SSID=00f9	Firmware	(09)01.75.07 (SPV 6.60)	(09)01.75.07 (SPV 6.60)		VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox - 4.1.14.0.26vmw	VMWare Inbox - 5.2.46.0-2vmw	Packaged with SPV image v 6.70	
HPE SN1100Q 16Gb 2p FC HBA - (Qlogic (Marvell), QLE2692) VID=1077, DVID=2261, SVID=1590, SSID=00fa	Firmware	(09)01.75.07 (SPV 6.60)	(09)01.75.07 (SPV 6.60)		VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox - 4.1.14.0.26vmw	VMWare Inbox - 5.2.46.0-2vmw	Packaged with SPV image v 6.70	
HPE SN1200E 16Gb 1p FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0213	Firmware	12.8.528.21 (SPV 6.60)	12.8.528.21 (SPV 6.60)		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.326.12-1OEM	VMWare Inbox - 14.0.635.3-14vmw	Packaged with SPV image v 6.70	
HPE SN1200E 16Gb 2p FC HBA - (Emulex (Broadcom), XE201) VID=10df, DVID=e300, SVID=1590, SSID=0214	Firmware	12.8.528.21 (SPV 6.60)	12.8.528.21 (SPV 6.60)		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.326.12-1OEM	VMWare Inbox - 14.0.635.3-14vmw	Packaged with SPV image v 6.70	
HPE SN1610Q 32Gb 1p FC HBA - (Qlogic (Marvell), QLE2770) VID=1077, DVID=2281, SVID=1590, SSID=02d3	Firmware	(09)02.05.03 (SPV 6.60)	(09)02.05.03 (SPV 6.60)		VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox - 4.1.14.0.26vmw	VMWare Inbox - 5.2.46.0-2vmw	Packaged with SPV image v 6.70	
HPE SN1610Q 32Gb 2p FC HBA - (Qlogic (Marvell), QLE2772) VID=1077, DVID=2281, SVID=1590, SSID=02d4	Firmware	(09)02.05.03 (SPV 6.60)	(09)02.05.03 (SPV 6.60)		VMware Compatibility Guide Link
	qlnativefc Driver (ESXi)	VMWare Inbox - 4.1.14.0.26vmw	VMWare Inbox - 5.2.46.0-2vmw	Packaged with SPV image v 6.70	
HPE SN1610E 32Gb 1p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=f400, SVID=1590, SSID=02d5	Firmware	12.8.528.21 (SPV 6.60)	12.8.528.21 (SPV 6.60)		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partnet Async - 14.0.326.12-1OEM	VMWare Inbox - 14.0.635.3-14vmw	Packaged with SPV image v 6.70	
HPE SN1610E 32Gb 2p FC HBA - (Emulex (Broadcom) LPe3x000) VID=10df, DVID=f400, SVID=1590, SSID=02d6	Firmware	12.8.528.21 (SPV 6.60)	12.8.528.21 (SPV 6.60)		VMware Compatibility Guide Link
	lpfc Driver (ESXi)	Partner Async - 14.0.326.12-1OEM	VMWare Inbox - 14.0.635.3-14vmw	Packaged with SPV image v 6.70	
SAS/RAID Controller					
HPE SR408i-p 12G VID=9005, DVID=028f, SVID=103c, SSID=0600	Firmware	4.11 (SPV 6.60)	4.11 (SPV 6.60)		VMware Compatibility Guide Link
	smartpqi Driver (ESXi)	Partner Async - 70.4150.0.119-1OEM	VMWare Inbox - 80.4253.0.5000-2vmw	Packaged with SPV image v 6.70	
HPE SR408i-a 12G VID=9005, DVID=028f, SVID=103c, SSID=0602	Firmware	4.11 (SPV 6.60)	4.11 (SPV 6.60)		VMware Compatibility Guide Link
	smartpqi Driver (ESXi)	Partner Async - 70.4150.0.119-1OEM	VMWare Inbox - 80.4253.0.5000-2vmw	Packaged with SPV image v 6.70	
HPE MR416i-p 12G VID=1000, DVID=10e2, SVID=1590, SSID=0293	Firmware	52.16.3-3913 (SPV 6.60)	52.16.3-3913 (SPV 6.60)		VMware Compatibility Guide Link
	lsi-mr3 Driver (ESXi)	Vmware Inbox - 7.718.02.00-1vmw	Vmware Inbox - 7.722.02.00-1vmw	Packaged with SPV image v 6.70	
HPE MR416i-a 12G VID=1000, DVID=10e2, SVID=1590, SSID=032a	Firmware	03.01.09.056 (SPV 6.60)	03.01.09.056 (SPV 6.60)		VMware Compatibility Guide Link
	lsi-mr3 Driver (ESXi)	Vmware Inbox - 7.718.02.00-1vmw	Vmware Inbox - 7.722.02.00-1vmw	Packaged with SPV image v 6.70	
HPE P816i-a SR 12G VID=9005, DVID=028f, SVID=103c, SSID=1100	Firmware	4.11 (SPV 6.60)	4.11 (SPV 6.60)		VMware Compatibility Guide Link
	smartpqi Driver (ESXi)	Partner Async - 70.4150.0.119-1OEM	Vmware Inbox - 80.4253.0.5000-2vmw	Packaged with SPV image v 6.70	
HPE SR932i-p 24G VID=9005, DVID=028f, SVID=1590, SSID=0294	Firmware	03.01.09.056 (SPV 6.60)	03.01.09.056 (SPV 6.60)		VMware Compatibility Guide Link
	smartpqi Driver (ESXi)	Partner Async - 70.4150.0.119-1OEM	Vmware Inbox - 80.4253.0.5000-2vmw	Packaged with SPV image v 6.70	
Boot Controller					
NS204i-r (Riser) VID=1b46, DVID=2241, SVID=1590, SSID=030f	Firmware	1.0.14.1060 (SPV 6.60)	1.0.14.1060 (SPV 6.60)	Packaged with SPV image v 6.70 Universal Firmware Package for HPE Gen10 Plus Boot Controller	VMware Compatibility Guide Link
	nvme_pcie Driver (ESXi)	Vmware Inbox - 1.2.3.16-1vmw	Vmware Inbox - 1.2.4.1-1vmw		
NS204i-p (PCIe card) VID=14b6, DVID=2241, SVID=1590, SSID=0216	Firmware	1.0.14.1060 (SPV 6.60)	1.0.14.1060 (SPV 6.60)	Packaged with SPV image v 6.70 Universal Firmware Package for HPE Gen10 Plus Boot Controller	VMware Compatibility Guide Link
	nvme_pcie Driver (ESXi)	Vmware Inbox - 1.2.3.16-1vmw	Vmware Inbox - 1.2.4.1-1vmw		
Drives for vSAN Cache and Capacity (Options) for HA 800 G2					
Components				**Notes**	
				SSD/NVME firmware is packaged and applied with SPV image v	

For accurate Firmware requirments for SSD and NVMe devices being used for VSAN cache and/or capacity drives, please refer to the following two reference items:

1) **VMware Compatibility Guide:** Hitachi Vantara VSAN Ready Node listings. (https://www.vmware.com/resources/compatibility/search.php?deviceCategory=vsan&details=1&vsan_type=vsanreadynode&vsan_partner=39&page=1&display_interval=10&sortColumn=Partner&sortOrder=Asc)

2) The **Service Pack for Vantara (SPV) Content.html** file that is inside the SPV iso packaged in the UCP MediaKit, as well as posted on the UCP Download section on the https://support.hitachivantara.com support portal will list all firmware (including firmware for SSD/NVMe devices)

FC Switches

Vendor				**Notes**	
Brocade	G620	9.0.1c	9.0.1c		
Brocade	G720	9.1.0b	9.1.0b		

Ethernet Switches

Vendor					
Quanta	LB9 Mgmt Switch	N/A	N/A		
Arista	DCS-7010T-48-R	4.25.4M	4.25.4M		
Arista	DCS-7050CX3-32S-R	4.25.4M	4.25.4M		
Arista	DCS-7050SX3-48YC8-R	4.25.4M	4.25.4M		
Cisco	Nexus 3048	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-EX	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 9332PQ	N/A	N/A		
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 9332C (100G Spine)	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 9.3.8	NXOS 9.3.8	These CISCO switches were added from Version 5.3	

Cisco	Nexus 93600GC (100G Spine)	NXOS 9.3.8	NXOS 9.3.8	These Cisco switches were added from version 9.3	

Storage Models

	Models			Notes	
VSP	G200	83-05-43-x0/00	83-05-43-x0/00	Hitachi Support Page - ECNs	
VSP	G400	83-05-43-x0/00	83-05-43-x0/00		
VSP	G600	83-05-43-x0/00	83-05-43-x0/00		
VSP	G800	83-05-43-x0/00	83-05-43-x0/00		
VSP	F400	83-05-43-x0/00	83-05-43-x0/00		
VSP	F600	83-05-43-x0/00	83-05-43-x0/00		
VSP	F800	83-05-43-x0/00	83-05-43-x0/00		
VSP	G350	88-08-04-x0/00	88-08-04-x0/00		
VSP	G370	88-08-04-x0/00	88-08-04-x0/00		
VSP	G700	88-08-04-x0/00	88-08-04-x0/00		
VSP	G900	88-08-04-x0/00	88-08-04-x0/00		
VSP	F350	88-08-04-x0/00	88-08-04-x0/00		
VSP	F370	88-08-04-x0/00	88-08-04-x0/00		
VSP	F700	88-08-04-x0/00	88-08-04-x0/00		
VSP	F900	88-08-04-x0/00	88-08-04-x0/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-87-00/00	80-06-87-00/00		
VSP	E590	93-06-22-40/00	93-06-22-40/00		
VSP	E790	93-06-22-40/00	93-06-22-40/00		
VSP	E990	93-06-22-60/00	93-06-22-60/00		
VSP	E1090	93-06-22-80/00	93-06-22-80/00		
VSP	5100, 5200, 5500, 5600	90-08-21-00/00	90-08-21-00/00		

* Minimum Level or above

GPU

Vendor					
NVIDIA Tesla T4 VID=10de DVID=1eb8, SVID=0000, SSID=12a2	Firmware	N/A	N/A	Compatible with HA810 G2 and HA820 G2	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	N/A		
NVIDIA A16 VID=10de DVID=25b6, SVID=0000, SSID=14a9	Firmware	N/A	N/A	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	N/A		
NVIDIA A40 VID=10de DVID=2235, SVID=0000, SSID=145a	Firmware	N/A	N/A	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	N/A		
NVIDIA A100 80GB PCIe VID=10de DVID=20b5, SVID=0000, SSID=20b5	Firmware	N/A	N/A	Compatible with HA820 G3 only	VMware Compatibility Guide Link
	NVD-VMware_ESXi_8.0.0_Driver	N/A	N/A		

Software

Software Versions

Vendor	Component			Notes
VMware	ESXi	7.0U3c (Build # 19193900)	8.0 GA (Build # 20513097)	
VMware	vCenter(VCSA)	7.0U3c (Build # 19234570)	8.0 GA (Build # 20519528)	
VMware	VSAN	7.0U3c (Build # 19193900)	8.0 GA (Build # 20513097)	

Downloadable ZIPs

Vendor	Component			Notes
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	
Hitachi	Adapter Firmware ZIP (OS Package)	Adapter_Firmware_20221205.zip	Adapter_Firmware_20221205.zip	
Hitachi	Server Firmware ZIP	Server_Firmware_20221216.zip	Server_Firmware_20230403.zip	
Hitachi	Server Firmware ZIP	N/A	N/A	
Hitachi	MIB Package(s)	MIB_20210906.zip	MIB_20210906.zip	
Hitachi	Vmware Software ZIP (v7.0 HA Package)	HA_vSphere_7.x_20221216.zip	HA_vSphere_7.x_20221216.zip	
Hitachi	Vmware Software ZIP (v8.0 HA Package)	HA_vSphere_8.x_20221216.zip	HA_vSphere_8.x_20221216.zip	
Hitachi	UCPToolkit ZIP	UCPToolkit_v7.0_20221216.zip	UCPToolkit_v7.0_20230403.zip	

Main Mediakit ZIP

Vendor	Component			Notes
Hitachi	UCP CI Mediakit	UCPCI-HC_Base_Mediakit_v7.0_20221216.zip	UCPCI-HC_Base_Mediakit_v7.0.1_20230403.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI

Hardware

UCP CI (Release Version)	v6.5			
Release date	December 16, 2022			
Major vSphere Release:	7.0 U3d	7.0 U3g	8.0	
Management and Compute Nodes : (DS120 G2)				
Components	**Versions**			**Notes**
BIOS	3A14.H00	3A15.H00	3A15.H00	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.
BMC	3.32.06	3.33.06	3.33.06	
CPLD	Rev7	Rev7	Rev7	
CPU Family	**Ice Lake**	**Ice Lake**	**Ice Lake**	
Compute Nodes : (DS220 G2)				
Components	**Versions**			**Notes**
BIOS	3A14.H00	3A15.H00	3A15.H00	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.
BMC	3.32.06	3.33.06	3.33.06	
CPLD	Rev7	Rev7	Rev7	
CPU Family	**Ice Lake**	**Ice Lake**	**Ice Lake**	
Management and Compute Nodes : (DS120 G1)				
Components	**Versions**			**Notes**
BIOS	3B23.H00	3B24.H00	3B24.H00	
BMC	4.72.06	4.74.06	4.74.06	
CPLD	Rev11	Rev11	Rev11	
CPU Family	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS220 G1)				
Components	**Versions**			**Notes**
BIOS	3B23.H00	3B24.H00	3B24.H00	
BMC	4.72.06	4.74.06	4.74.06	
CPLD	Rev11	Rev11	Rev11	
CPU Family	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS225 G1)				
Components	**Versions**			**Notes**
BIOS	3B23.H00	3B23.H00	3B23.H00	
BMC	4.72.06	4.72.06	4.72.06	
CPLD	Rev11	Rev11	Rev11	
CPU Family	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS240 G1)				
Components	**Versions**			**Notes**
BIOS	3B23.H00	3B23.H00	3B23.H00	
BMC	4.71.06	4.71.06	4.71.06	
CMC	N/A	N/A	N/A	
CPLD	Rev11	Rev11	Rev11	
CPU Family	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	

I/O Card Support for DS120/220/225/240						
Components					**Notes**	**VMWare HCL / IOVP link:**
Network Cards (Options)						
Intel i350-T4, 1Gbe quad-port PCIe VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware igbn Driver (ESXi)	1.63.0 or higher VMWare Inbox - 1.4.11.2-1vmw	1.63.0 or higher VMWare Inbox - 1.4.11.2-1vmw	1.63.0 or higher VMWare Inbox - 1.4.11.2-1vmw	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
Intel i350-T4, 1Gbe quad-port OCP VID=8086, DVID=1523, SVID=8086, SSID=00a3	Firmware igbn Driver (ESXi)	1.63.0 or higher VMWare Inbox - 1.4.11.2-1vmw	1.63.0 or higher VMWare Inbox - 1.4.11.2-1vmw	1.63.0 or higher VMWare Inbox - 1.4.11.2-1vmw	Only available on Advanced Server DSx20 Gen 2 nodes. Inbox version is not listed in VCG yet. Currently no Firmware.py support.	VMware Compatibility Guide Link
Intel X710-DA4, 10Gbe quad-port PCIe VID=8086, DVID=1572, SVID=8086, SSID=0004	Firmware i40en Driver (ESXi)	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
Intel X710-DA4, 10Gbe quad-port OCP VID=8086, DVID=1572, SVID=8086, SSID=00a2	Firmware i40en Driver (ESXi)	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
Intel X710-T4L, 10GbE, quad-port PCIe VID=8086, DVID=15ff, SVID=8086, SSID=0002	Firmware i40en Driver (ESXi)	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	8.30 or higher VMWare Inbox - 1.111.1.31-1vmw	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
Intel X710-T4L, 10GbE, quad-port OCP VID=8086, DVID=15ff, SVID=8086, SSID=000a	Firmware i40en Driver (ESXi)	8.30 or higher VMWare Inbox - 1.8.1.136-1vmw	8.30 or higher VMWare Inbox - 1.8.1.136-1vmw	8.30 or higher VMWare Inbox - 1.8.1.136-1vmw	Only available on Advanced Server DSx20 Gen 2 nodes. Inbox version is not listed in VCG yet.	VMware Compatibility Guide Link
Intel E810-XXVDA2, 10Gbe dual-port PCIe VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware icen Driver (ESXi)	3.0 or higher Partner Async - 1.6.5.0-1OEM	3.2 or higher Partner Async - 1.8.5.0-1OEM	3.2 or higher Partner Async - 1.8.5.0-1OEM	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
Mellanox CX-6 MCX631102AN-ADA_Ax 25GbE, dual-port PCIe	Firmware nmlx5_core Driver (ESXi)	26.29.2002 or higher Partner Async - 4.21.71.101	26.29.2002 or higher Partner Async - 4.21.71.101	26.29.2002 or higher Partner Async - 4.21.71.101	Only available on Advanced Server DSx20 Gen 2 nodes.	VMware Compatibility Guide Link
Mellanox CX-6 MCX631432AN-ADA_Ax 25GbE, dual-port OCPe	Firmware nmlx5_core Driver (ESXi)	26.29.2002 or higher Partner Async - 4.21.71.101	26.29.2002 or higher Partner Async - 4.21.71.101	26.29.2002 or higher Partner Async - 4.21.71.101	Only available on Advanced Server DSx20 Gen 2 nodes.	VMware Compatibility Guide Link
Intel X527-DA4, 10GbE quad-port, OCP Mezz VID=8086, DVID=37d3, SVID=152d, SSID=8a41	Firmware i40en Driver (ESXi)	4.30 or higher VMWare Inbox - 1.111.1.31-1vmw	4.30 or higher VMWare Inbox - 1.111.1.31-1vmw	4.30 or higher VMWare Inbox - 1.111.1.31-1vmw	Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+. No firmware.py support.	VMware Compatibility Guide Link
Intel X527-DA2, 10GbE quad-port, OCP Mezz VID=8086, DVID=37d3, SVID=152d, SSID=8a40	Firmware i40en Driver (ESXi)	4.30 or higher VMWare Inbox - 1.111.1.31-1vmw	4.30 or higher VMWare Inbox - 1.111.1.31-1vmw	4.30 or higher VMWare Inbox - 1.111.1.31-1vmw	Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+". No firmware.py support.	VMware Compatibility Guide Link
Intel X557-T4, 10GBase-T quad-port, OCP Mezz VID=8086, DVID=37d2, SVID=152d, SSID=8a3f	Firmware i40en Driver (ESXi)	4.30 VMWare Inbox - 1.111.1.31-1vmw	4.30 VMWare Inbox - 1.111.1.31-1vmw	4.30 VMWare Inbox - 1.111.1.31-1vmw	Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T". No firmware.py support.	VMware Compatibility Guide Link
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe VID=8086, DVID=15bb, SVID=8086, SSID=0002	Firmware i40en Driver (ESXi)	8.30 - or higher VMWare Inbox - 1.111.1.31-1vmw	8.30 - or higher VMWare Inbox - 1.111.1.31-1vmw	8.30 - or higher VMWare Inbox - 1.111.1.31-1vmw	Listed on VMware HCL as: "Intel(R) Ethernet Network Adapter XXV710-2"	VMware Compatibility Guide Link
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) (Quanta ON 25GbE CX4 LX EN Dual port) VID=15b3, DVID=1015, SVID=152d, SSID=8a15	Firmware nmlx4_core Driver (ESXi) nmlx5_core Driver (ESXi)	14.32.1010 - or higher N/A VMWare Inbox - 4.19.16.11	14.32.1010 - or higher N/A VMWare Inbox - 4.19.16.11	14.32.1010 - or higher N/A VMWare Inbox - 4.19.16.11	Listed on VMware HCL as: "ON 25GbE ConnectX-4 LX EN Dual port"	VMware Compatibility Guide Link
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP. MD2 (PCIe) (MCX4121A-ACA) VID=15b3, DVID=1015, SVID=15b3, SSID=0003	Firmware nmlx4_core Driver (ESXi) nmlx5_core Driver (ESXi)	14.32.1010 - or higher N/A VMWare Inbox - 4.19.16.11	14.32.1010 - or higher N/A VMWare Inbox - 4.19.16.11	14.32.1010 - or higher N/A VMWare Inbox - 4.19.16.11	Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)" * 14.24.1000 is required ONLY IF enabling RDMA VSAN	VMware Compatibility Guide Link
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 (MCX516A-CCAT) VID=15b3, DVID=1017, SVID=15b3, SSID=0007	Firmware nmlx4_core Driver (ESXi) nmlx5_core Driver (ESXi)	16.28.2006 - or higher N/A VMWare Inbox - 4.19.16.11	16.28.2006 - or higher N/A VMWare Inbox - 4.19.16.11	16.28.2006 - or higher N/A VMWare Inbox - 4.19.16.11	Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"	VMware Compatibility Guide Link
HBA Controller						
Emulex LPe31002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e310	Firmware lpfc Driver (ESXi)	12.8.542.26 - or higher Partner Async - 14.0.326.12	12.8.542.26 - or higher Partner Async - 14.0.622.0	12.8.542.26 - or higher Partner Async - 14.0.622.0	Listed on Vmware HCL as: "Emulex LightPulse LPe31002-M6 2-Port 16Gb Fibre Channel Adapter"	VMware Compatibility Guide Link
Emulex LPe32002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e300	Firmware lpfc Driver (ESXi)	12.8.542.26 - or higher Partner Async - 14.0.326.12	12.8.542.26 - or higher Partner Async - 14.0.622.0	12.8.542.26 - or higher Partner Async - 14.0.622.0	Listed on Vmware HCL as: "Emulex LightPulse LPe32002-M2 2-Port 32Gb Fibre Channel Adapter"	Vmware Compatibility Guide Link
Emulex LPe35002 FC 32G HBA VID=10df, DVID=f400, SVID=10df, SSID=f402	Firmware lpfc Driver (ESXi)	12.8.542.26 - or higher Partner Async - 14.0.326.12	12.8.542.26 - or higher Partner Async - 14.0.622.0	12.8.542.26 - or higher Partner Async - 14.0.622.0	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
RAID Controller						
Broadcom SAS3516 2GB RAID Mezzanine VID=1000, DVID=0014, SVID=152d, SSID=8b00	Firmware isi-mr3 Driver (ESXi)	5.100.00.2651 VMWare Inbox - 19.00.02.00-1vmw	5.100.00-2651 or higher VMware Inbox 7.718.02.00	5.100.00-2651 or higher VMware Inbox 7.718.02.00	Listed on Vmware HCL as: "QS-3516B-R6-PD32". Currently no Firmware.py support.	Vmware Compatibility Guide Link
Broadcom 9460-16i VID=1000, DVID=0014, SVID=1000, SSID=9460	Firmware isi-mr3 Driver (ESXi)	5.130.00-3059 or higher VMWare Inbox - 7.718.02.00-1vmw	5.130.00-3059 or higher VMware Inbox 7.718.02.00	5.130.00-3059 or higher VMware Inbox 7.718.02.00	Listed on Vmware HCL as: "MegaRAID SAS 9460-16i". Used for RAID Boot devices on exceptions.	VMware Compatibility Guide link
Broadcom QS3916 VID=1000, DVID=10e2, SVID=152d, SSID=00cd	Firmware isi-mr3 Driver (ESXi)	5.170.00-3513 - or higher Vmware Inbox - 7.716.03.00-1vmw	5.170.00-3513 or higher VMWare Inbox - 7.722.02.00-1	5.170.00-3513 or higher VMWare Inbox - 7.722.02.00-1	Only available on Advanced Server DSx20 Gen 2 nodes	Vmware Compatability Guide link
Broadcom 9560-16i VID=1000, DVID=10e2, SVID=1000, SSID=4000	Firmware isi-mr3 Driver (ESXi)	5.130.00-3059 or higher Vmware Inbox - 7.718.02.00-1vmw	5.130.02-3059 or higher VMware Inbox 7.718.02.00	5.130.02-3059 or higher VMware Inbox 7.718.02.00	Only available on Advanced Server DSx20 Gen 2 nodes	VMWare Compatibility Guide Link
SAS Controller						
Quanta QS-3216 Mezz Card VID=1000, DVID=00c9, SVID=152d, SSID=8a12	Firmware isi_msgpt3 Driver (ESXi)	1A22 (16.00.09.00) VMWare Inbox - 17.00.12.00-1	1A22 (16.00.09.00) VMWare Inbox - 17.00.12.00-1	1A22 (16.00.09.00) VMWare Inbox - 17.00.12.00-1	Listed on Vmware HCL as: "QS-3216" Only for DS120 and DS220 LFF. Currently no Firmware.py support.	Vmware Compatibility Guide Link
Broadcom SAS9305-16i PCIe (only for DS225) VID=1000, DVID=00c4, SVID=1000, SSID=3190	Firmware isi_msgpt3 Driver (ESXi)	16.00.09.00 VMWare Inbox - 17.00.12.00-1vmw	16.00.09.00 or higher VMWare Inbox - 17.00.12.00-1	16.00.09.00 or higher VMWare Inbox - 17.00.12.00-1	Listed on Vmware HCL as: "9305-16i" Only for DS225 and DS220 SFF. Currently no Firmware.py support.	Vmware Compatibility Guide Link
Quanta QS3816 Mezz Card VID=1000, DVID=00e6, SVID=152d, SSID=00cc	Firmware isi-msgpt35 Driver (ESXi)	14.00.05.00 VMWare Inbox - 19.00.02.00-1vmw	14.00.05.00 or higher VMWare Inbox - 19.00.02.00-1	14.00.05.00 or higher VMWare Inbox - 19.00.02.00-1	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
Broadcom 9500-16i VID=1000, DVID=00e6, SVID=1000, SSID=4050	Firmware isi-msgpt35 Driver (ESXi)	22.00.00.00 VMWare Inbox - 19.00.02.00-1vmw	22.00.00.00 or higher VMWare Inbox 19.00.02.00-1	22.00.00.00 or higher VMWare Inbox 19.00.02.00-1	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Buide Link
Drives for vSAN Cache and Capacity (Options) for DS120/220/225/240						
Components					**Notes**	
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	8DV101H0 - or higher	8DV101H0 - or higher	8DV101H0 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatable with DS225	VMware Compatibility Guide link
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10170 - or higher	VDV10182 - or higher	VDV10182 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10170 - or higher	VDV10182 - or higher	VDV10182 - or higher	Not compatable with DS225	VMware Compatibility Guide link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010475 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
NVMe Driver	Driver (ESXi)	VMWare Inbox - nvme-pcie 1.2.3.16	VMWare Inbox - nvme-pcie 1.2.3.16	VMWare Inbox - nvme-pcie 1.2.3.16		
Intel SSD DC S4500 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	VMware Compatibility Guide link
Intel SSD DC S4510 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4600 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4610 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD D7-P5520 Series	Firmware	N/A	9CV10200 -or higher	9CV10200 -or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD D7-P5620 Series	Firmware	N/A	9CV10200 -or higher	9CV10200 -or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Samsung SATA SSD PM893 Series	Firmware	HXT7304Q - or higher	JXTC104Q -or higher	JXTC104Q -or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	E004 - or higher	E004 - or higher	E004 - or higher	Requires SAS Controller	
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002 - or higher	E002 - or higher	E002 - or higher	Requires SAS Controller	

Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	XC311120 - or higher	XC311120 - or higher	XC311120 - or higher	Only for DS240 Boot Device	VMware Compatibility Guide link
Toshiba / Kioxia BG4 Series - 256GB, M.2 2230	Firmware	N/A	N/A	N/A	Only available on Advanced Server DSx20 Gen 2 nodes. Only used as Boot device.	
Drives for vSAN Cache and Capacity (Options) for DS120/220						
Components					**Notes**	
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XXD128GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1XXD256GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XXD512GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
GPU						
Components					**Notes**	
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1	VMware Compatibility Guide link
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1	VMware Compatibility Guide link
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1	VMware Compatibility Guide link
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS225 G1	Vmware Compatibility Guide Link
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	470.82	510.85.03	510.85.03	Available for DS120G1, DS220 G1, DS225 G1, DS120G2, DS220G2	Vmware Compatibility Guide Link
NVIDIA Tesla A16	Nvidia Virtual GPU Software for vSphere	NA	510.47.03	510.47.03	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A30	Nvidia Virtual GPU Software for vSphere	NA	510.47.03	510.47.03	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A100-80G	Nvidia Virtual GPU Software for vSphere	NA	515.48.07	515.48.07	Available for DS220 G2	Vmware Compatibility Guide Link
NVIDIA Tesla A2	Nvidia Virtual GPU Software for vSphere	NA	510.47.03	510.47.03	Available for DS220 G2	Vmware Compatibility Guide Link
FC Switches						
Vendor	**Models**				**Notes**	
Brocade	G620	9.0.1c	9.0.1c	9.0.1c		
Brocade	G720	9.1.0b	9.1.0b	9.1.0b		
Ethernet Switches						
Vendor	**Models**				**Notes**	
Quanta	LB9 Mgmt Switch	N/A	N/A	N/A		
Arista	DCS-7010T-48-R	4.25.4M	4.25.4M	4.25.4M		
Arista	DCS-7050CX3-32S-R	4.25.4M	4.25.4M	4.25.4M		
Arista	DCS-7050SX3-48YC8-R	4.25.4M	4.25.4M	4.25.4M		
Cisco	Nexus 3048	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	NXOS 9.3.8 (Compact)	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.	
Cisco	Nexus 93180LC-EX	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-EX	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 9332PQ	N/A	N/A	N/A		
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 9332C (100G Spine)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93180YC-FX3 (10/25G Leaf)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8		
Cisco	Nexus 93600GC (100G Spine)	NXOS 9.3.8	NXOS 9.3.8	NXOS 9.3.8	**These CISCO switches were added from Version 5.3**	
Storage Models						
	Models				**Notes**	
VSP	G200	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	Hitachi Support Page - ECNs	
VSP	G400	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	G600	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	G800	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	F400	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	F600	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	F800	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00		
VSP	G350	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	G370	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	G700	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	G900	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	F350	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	F370	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	F700	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	F900	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00		
VSP	G1000, VSP G1500, VSP F1500	80-06-87-00/00	80-06-87-00/00	80-06-87-00/00		
VSP	E590	93-06-22-40/00	93-06-22-40/00	93-06-22-40/00		
VSP	E790	93-06-22-40/00	93-06-22-40/00	93-06-22-40/00		
VSP	E990	93-06-22-60/00	93-06-22-60/00	93-06-22-60/00		
VSP	E1090	93-06-22-80/00	93-06-22-80/00	93-06-22-80/00		
VSP	5100, 5200, 5500, 5600	90-08-21-00/00	90-08-21-00/00	90-08-21-00/00		

* Minimum Level or above

Software

Software Versions					
Vendor	**Component**				**Notes**
VMware	ESXi	7.0U3d (Build # 19482537)	7.0U3g (Build # 20328353)	7.0U3g (Build # 20328353)	
VMware	vCenter(VCSA)	7.0U3d (Build # 19480866)	7.0U3g (Build # 20150588)	7.0U3g (Build # 20150588)	
VMware	VSAN	7.0U3d (Build # 19482537)	7.0U3g (Build # 20328353)	8.0 (Build # 20328353)	
Downloadable ZIPs					
Vendor	**Component**				**Notes**
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	Cisco_Firmware_20220705.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	
Hitachi	Adapter Firmware ZIP	Adapter_Firmware_20220729.zip	Adapter_Firmware_20221205.zip	Adapter_Firmware_20221205.zip	
Hitachi	Server Firmware ZIP	Server_Firmware_20220705.zip	Server_Firmware_20221205.zip	Server_Firmware_20221205.zip	
Hitachi	MIB Package(s)	MIB_20210906.zip	MIB_20210906.zip	MIB_20210906.zip	
Hitachi	Vmware Software ZIP	vSphere7.0u3d-19482537_20220705.zip	vSphere70u3g_20328353_20221205.zip	vSphere70u3g_20328353_20221205.zip	
Hitachi	UCPToolkit ZIP	UCPToolkit_v6.1_20220905.zip	UCPToolkit_v6.3_20221205.zip	UCPToolkit_v6.3_20221205.zip	
Main Mediakit ZIP					
Vendor	**Component**				**Notes**
Hitachi	UCP CI Mediakit	UCPCI-HC_MediaKit_V6.1_20220905.zip	UCPCI-HC_MediaKit_V6.3_20221205.zip	UCPCI-HC_MediaKit_V6.3_20221205.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI

Hardware

UCP CI (Release Version)		v5.2			
Release date		March 7, 2022			
Major vSphere Release:		6.5U3 P06	6.7U3 EP18	7.0 U3c	
Management and Compute Nodes : (DS120 G2)					
Components		**Versions**	**Versions**	**Versions**	**Notes**
BIOS		N/A	N/A	3A12.H03	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.
BMC		N/A	N/A	4.72.06	
CPLD		N/A	N/A	Rev11	
CPU Family		N/A	N/A	**Ice Lake**	
Compute Nodes : (DS220 G2)					
Components		**Versions**	**Versions**	**Versions**	**Notes**
BIOS		N/A	N/A	3A12.H03	Advanced Server DSx20 Gen2 support vSphere 7.0U2a onward.
BMC		N/A	N/A	3.16.06	
CPLD		N/A	N/A	Rev7	
CPU Family		N/A	N/A	**Ice Lake**	
Management and Compute Nodes : (DS120 G1)					
Components		**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B22.H00	3B22.H00	3B23.H00	
BMC		4.70.06	4.70.06	4.72.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS220 G1)					
Components		**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B22.H00	3B22.H00	3B23.H00	
BMC		4.70.06	4.70.06	4.72.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS225 G1)					
Components		**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B22.H00	3B22.H00	3B23.H00	
BMC		4.70.06	4.70.06	4.72.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes : (DS240 G1)					
Components		**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B22.H00	3B22.H00	3B23.H00	
BMC		4.70.06	4.70.06	4.71.06	
CMC		N/A	N/A	N/A	
CPLD		Rev11	Rev11	Rev11	
CPU Family		**Skylake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	

I/O Card Support for DS120/220/225/240						
Components		**Versions**			**Notes**	**VMWare HCL / IOVP link:**
Network Cards (Options)						
Intel I350-T4, 1Gbe quad-port PCIe VID=8086, DVID=1521, SVID=8086, SSID=00a1	Firmware	N/A	N/A	1.63.0 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
	igbn Driver (ESXi)	N/A	N/A	VMWare Inbox - 1.4.11.2-1vmw		
Intel I350-T4, 1Gbe quad-port OCP VID=8086, DVID=1523, SVID=8086, SSID=00a3	Firmware	N/A	N/A	1.63.0 or higher	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	igbn Driver (ESXi)	N/A	N/A	VMWare Inbox - 1.4.11.2-1vmw		
Intel X710-DA4, 10Gbe quad-port PCIe VID=8086, DVID=1572, SVID=8086, SSID=0004	**Firmware**	N/A	N/A	8.30 or higher	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40enu Driver (ESXi)	N/A	N/A	VMWare Inbox - 1.8.1.136-1vmw		
Intel X710-DA4, 10Gbe quad-port OCP VID=8086, DVID=1572, SVID=8086, SSID=00a2	Firmware	N/A	N/A	8.30 or higher	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40enu Driver (ESXi)	N/A	N/A	VMWare Inbox - 1.8.1.136-1vmw		
Intel X710-T4L, 10GbE, quad-port PCIe VID=8086, DVID=15ff, SVID=8086, SSID=0002	Firmware	N/A	N/A	8.30 or higher	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	i40en Driver (ESXi)	N/A	N/A	VMWare Inbox - 1.8.1.136-1vmw		
Intel X710-T4L, 10GbE, quad-port OCP VID=8086, DVID=15ff, SVID=8086, SSID=000a	Firmware	N/A	N/A	8.30 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	
	i40en Driver (ESXi)	N/A	N/A	VMWare Inbox - 1.8.1.136-1vmw		
Intel E810-XXVDA2, 10Gbe dual-port PCIe VID=8086, DVID=159b, SVID=8086, SSID=0003	Firmware	N/A	N/A	3.0 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
	icen Driver (ESXi)	N/A	N/A	Partner Async - 1.6.5.0-1OEM		
Intel E810-XXVDA2, 10Gbe dual-port OCP VID=8086, DVID=159b, SVID=8086, SSID=0005	Firmware	N/A	N/A	3.0 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
	icen Driver (ESXi)	N/A	N/A	Partner Async - 1.6.5.0-1OEM		
Mellanox CX-6 MCX631102AN-ADA_Ax 25GbE, dual-port PCIe	Firmware	N/A	N/A	26.29.2002 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	N/A	N/A	Partner Async - 4.21.71.101		
Mellanox CX-6 MCX631432AN-ADA_Ax 25GbE, dual-port OCPe	Firmware	N/A	N/A	26.29.2002 or higher	Only available on Advanced Server DSx20 Gen 2 nodes Manual updates only. Currently no Firmware.py support.	VMware Compatibility Guide Link
	nmlx5_core Driver (ESXi)	N/A	N/A	Partner Async - 4.21.71.101		
Intel X557-T4, 10GBase-T quad-port, OCP Mezz VID=8086, DVID=37d2, SVID=152d, SSID=8a3f	Firmware	3.2d	4.00	4.30	Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"	VMware Compatibility Guide Link for x72 VMware Compatibility Guide Link for x722
	i40en Driver (ESXi)	1.5.6	1.7.17	VMWare Inbox - 1.11.1.31-1vmw		
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe VID=8086, DVID=158b, SVID=8086, SSID=0002	Firmware	6.0.1	7.30	8.30 - or higher	Listed on VMware HCL as: "Intel(R) Ethernet Network Adapter XXV710-2"	VMware Compatibility Guide Link
	i40en Driver (ESXi)	1.5.6	1.7.17	VMWare Inbox - 1.11.1.31-1vmw		
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) (Quanta ON 25GbE CX4 LX EN Dual port) VID=15b3, DVID=1015, SVID=152d, SSID=8a15	Firmware	14.23.1020	14.26.1040	14.28.2006	Listed on VMware HCL as: "ON 25GbE ConnectX-4 LX EN Dual port"	VMware Compatibility Guide Link NEED THIS FILE!
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A		
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.11		
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe) (MCX4121A-ACA) VID=15b3, DVID=1015, SVID=15b3, SSID=0003	Firmware	14.23.1020	14.27.1016	14.28.2006 - or higher	Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)" * 14.24.1000 is required ONLY IF enabling RDMA VSAN	VMware Compatibility Guide Link
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A		
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.11		
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 (MCX516A-CCAT) VID=15b3, DVID=1017, SVID=15b3, SSID=0007	Firmware	14.23.1020	16.27.1016	16.28.2006 - or higher	Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"	VMware Compatibility Guide Link
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A		
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.11		
HBA Controller						
Emulex LPe31002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e310	Firmware	12.0.193.13	12.6.182.8	12.8.542.26 - or higher	Listed on Vmware HCL as: "Emulex LightPulse LPe31002-M6 2-Port 16Gb Fibre Channel Adapter"	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	12.0.193.14	12.0.193.14	Partner Async - 14.0.326.12		
Emulex LPe32002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e300	Firmware	12.0.193.13	12.6.182.8	12.8.542.26 - or higher	Listed on Vmware HCL as: "Emulex LightPulse LPe32002-M2 2-Port 32Gb Fibre Channel Adapter"	Vmware Compatibility Guide Link
	lpfc Driver (ESXi)	12.0.193.14	12.0.193.14	Partner Async - 14.0.326.12		
Emulex LPe35002 FC 32G HBA VID=10df, DVID=f400, SVID=10df, SSID=f402	Firmware	N/A	N/A	12.8.542.26 - or higher	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	lpfc Driver (ESXi)	N/A	N/A	Partner Async - 14.0.326.12		
RAID Controller						
Broadcom SAS3516 2GB RAID Mezzanine VID=1000, DVID=0014, SVID=152d, SSID=8b00	Firmware	5.040.00-1123	5.100.00.2651	5.100.00.2651	Listed on Vmware HCL as: "QS-3516B-R6-PD32"	Vmware Compatibility Guide Link
	lsi-mr3 Driver (ESXi)	7.704.7.0	7.707.11	VMWare Inbox - 7.716.03.00		
Broadcom 9460-16i VID=1000, DVID=0014, SVID=1000, SSID=9460	Firmware			5.130.00-3059 or higher	Listed on Vmware HCL as: "MegaRAID SAS 9460-16i". Used for RAID Boot devices on exceptions.	VMware Compatibility Guide Link
	lsi-mr3 Driver (ESXi)			VMWare Inbox - 7.718.02.00-1vmw		
Broadcom QS3916 VID=1000, DVID=10e2, SVID=152d, SSID=00cd	Firmware	N/A	N/A	5.170.00-3513 - or higher	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link NEED THIS FILE!
	lsi-mr3 Driver (ESXi)	N/A	N/A	Vmware Inbox - 7.716.03.00-1vmw		
Broadcom 9560-16i VID=1000, DVID=10e2, SVID=1000, SSID=4000	Firmware	N/A	N/A	5.130.02-3059 or higher	Only available on Advanced Server DSx20 Gen 2 nodes	VMWare Compatibility Guide Link
	lsi-mr3 Driver (ESXi)	N/A	N/A	Vmware Inbox - 7.718.02.00-1vmw		
SAS Controller						
Quanta QS-3216 Mezz Card VID=1000, DVID=00c9, SVID=152d, SSID=8a12	Firmware	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A22 (16.00.09.00)	Listed on VMware HCL as: "QS-3216" Only for DS120 and DS220 LFF	Vmware Compatibility Guide Link
	lsi_msgpt3 Driver (ESXi)	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0		
Broadcom SAS9305-16i PCIe (only for DS225) VID=1000, DVID=00c4, SVID=1000, SSID=3190	Firmware	15.00.00.00	15.00.00.00	16.00.09.00	Listed on VMware HCL as: "9305-16i" Only for DS225 and DS220 SFF	Vmware Compatibility Guide Link
	lsi_msgpt3 Driver (ESXi)	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0		
Quanta QS3816 Mezz Card VID=1000, DVID=00e6, SVID=152d, SSID=00cc	Firmware	N/A	N/A	18.00.01.00	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	lsi-msgpt35 Driver (ESXi)	N/A	N/A	VMWare Inbox - 19.00.02.00-1vmw		
Broadcom 9500-16i VID=1000, DVID=00e6, SVID=1000, SSID=4050	Firmware	N/A	N/A	18.00.00.00	Only available on Advanced Server DSx20 Gen 2 nodes	VMware Compatibility Guide Link
	lsi-msgpt35 Driver (ESXi)	N/A	N/A	VMWare Inbox - 19.00.02.00-1vmw		
Drives for vSAN Cache and Capacity (Options) for DS120/220/225/240						
Components		**Versions**			**Notes**	
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	8DV101H0 - or higher	8DV101H0 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatable with DS225	VMware Compatibility Guide Link
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10131 - or higher	VDV10170 - or higher	VDV10170 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1 - or higher	QDV101D1 - or higher	QDV101D1 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10140 - or higher	VDV10170 - or higher	VDV10170 - or higher	Not compatable with DS225	VMware Compatibility Guide link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	E2010435 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010435 - or higher	E2010475 - or higher	E2010475 - or higher	Not compatable with DS225	Vmware Compatibility Guide Link
NVMe Driver	Driver (ESXi)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	VMWare Inbox - nvme-pcie 1.2.3.16		
Intel SSD DC S4500 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	VMware Compatibility Guide Link
Intel SSD DC S4510 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4600 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Intel SSD DC S4610 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.	Vmware Compatibility Guide Link
Samsung SATA SSD PM863a Series	Firmware	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	Requires SAS Controller	Vmware Compatibility Guide Link
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	E004 - or higher	E004 - or higher	E004 - or higher	Requires SAS Controller	
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002 - or higher	E002 - or higher	E002 - or higher	Requires SAS Controller	
Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	XC311120 - or higher	XC311120 - or higher	XC311120 - or higher	Only for DS240 Boot Device	VMware Compatibility Guide link
Toshiba / Kioxia BG4 Series - 256GB, M.2 2230	Firmware	N/A	N/A	N/A	Only available on Advanced Server DSx20 Gen 2 nodes. Only used as Boot device.	
Drives for vSAN Cache and Capacity (Options) for DS120/220						
Components		**Versions**			**Notes**	
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XXD128GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1XXD256GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XXD512GPS)	Firmware	1.2.0.5375 - or higher	1.2.0.5375 - or higher	1.2.0.5375 - or higher		
GPU						
Components		**Versions**			**Notes**	

NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	440.53	450.55	470.82	Available for DS225 G1	VMware Compatibility Guide link
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	440.53	450.55	470.82	Available for DS225 G1	VMware Compatibility Guide link
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	440.53	450.55	470.82	Available for DS225 G1	VMware Compatibility Guide link
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	440.53	450.55	470.82	Available for DS225 G1	Vmware Compatibility Guide Link
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	440.53	450.55	470.82	Available for DS120G1, DS220 G1, DS225 G1, DS120G2, DS220G2	Vmware Compatibility Guide Link
NVIDIA Tesla A100	Nvidia Virtual GPU Software for vSphere	N/A	N/A	470.82	Available for DS120G2, DS220G2	Vmware Compatibility Guide Link

FC Switches

Vendor	Models	Firmware Versions			Notes
Brocade	G620	8.0.1c	9.0.1c	9.0.1c	

Ethernet Switches

Vendor	Models	Firmware Versions			Notes
Quanta	LB9 Mgmt Switch	N/A	N/A	N/A	
Arista	DCS-7010T-48-R	4.25.4M	4.25.4M	4.25.4M	
Arista	DCS-7050CX3-32S-R	4.25.4M	4.25.4M	4.25.4M	
Arista	DCS-7050SX3-48YC8-R	4.25.4M	4.25.4M	4.25.4M	
Cisco	Nexus 3048	N/A - No longer used in UCP CI v4.0 and abov	N/A - No longer used in UCP CI v4.0 and abov	NXOS 9.3.7 (Compact)	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 9.3.7 (Compact NXOS) supported version on 3048.
Cisco	Nexus 93180LC-EX	N/A - No longer used in UCP CI v4.0 and abov	N/A - No longer used in UCP CI v4.0 and abov	NXOS 9.3.7	
Cisco	Nexus 93180YC-EX	N/A - No longer used in UCP CI v4.0 and abov	N/A - No longer used in UCP CI v4.0 and abov	NXOS 9.3.7	
Cisco	Nexus 9332PQ	N/A	N/A	N/A	
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 9.3.5 or 9.3.7	NXOS 9.3.5 or 9.3.7	NXOS 9.3.7	
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 9.3.5 or 9.3.7	NXOS 9.3.5 or 9.3.7	NXOS 9.3.7	
Cisco	Nexus 9332C (100G Spine)	NXOS 9.3.5 or 9.3.7	NXOS 9.3.5 or 9.3.7	NXOS 9.3.7	

Storage Models

	Models				Notes
VSP	G200	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	Hitachi Support Page - ECNs
VSP	G400	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	
VSP	G600	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	
VSP	G800	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	
VSP	F400	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	
VSP	F600	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	
VSP	F800	83-05-43-x0/00	83-05-43-x0/00	83-05-43-x0/00	
VSP	G350	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00	
VSP	G370	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00	
VSP	G700	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00	
VSP	G900	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00	
VSP	F350	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00	
VSP	F370	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00	
VSP	F700	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00	
VSP	F900	88-08-04-x0/00	88-08-04-x0/00	88-08-04-x0/00	
VSP	G1000, VSP G1500, VSP F1500	80-06-87-00/00	80-06-87-00/00	80-06-87-00/00	
VSP	E590	93-06-21-40/00	93-05-02-40/00	93-06-22-40/00	
VSP	E790	93-06-21-40/00	93-05-02-40/00	93-06-22-40/00	
VSP	E990	93-06-21-60/00	93-05-02-60/00	93-06-22-60/00	
VSP	E1090	93-06-21-80/00	93-06-21-80/00	93-06-22-80/00	
VSP	5100, 5200, 5500, 5600	90-08-21-00/00	90-08-21-00/00	90-08-21-00/00	

* Minimum Level or above

Software

Software Versions

Vendor	Component	Versions			Notes
VMware	ESXi	6.5U3 P06 (Build #17477841)	6.7U3 EP18 (Build # 17499825)	7.0U3c (Build # 19193900)	
VMware	vCenter(VCSA)	6.5U3n (Build # 17590285)	6.7U3L (Build # 17138064)	7.0U3c (Build # 19234570)	
VMware	VSAN	6.5.1	6.7	7.0U3c (Build # 19193900)	

Downloadable ZIPs

Vendor	Component	Filename			Notes
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	Arista_Firmware_20210906.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20210906.zip	Cisco_Firmware_20210906.zip	Cisco_Firmware_20210906.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	
Hitachi	Adapter Firmware ZIP	Adapter_Firmware_20220307.zip	Adapter_Firmware_20220307.zip	Adapter_Firmware_20220307.zip	
Hitachi	Server Firmware ZIP	Server_Firmware_20220307.zip	Server_Firmware_20220307.zip	Server_Firmware_20220325.zip	
Hitachi	MIB Package(s)	MIB_20210906.zip	MIB_20210906.zip	MIB_20210906.zip	
Hitachi	Vmware Software ZIP	vSphere6.5u3P06-171477841-20210224.zip	vSphere6.7u3EP18-17499825_20210224.zip	vSphere7.0u3c-19193900_20220414.zip	
Hitachi	UCPToolkit ZIP	UCPToolkit_v5.2_20220307.zip	UCPToolkit_v5.2_20220307.zip	UCPToolkit_v5.2_20220325.zip	

Main Mediakit ZIP

Vendor	Component	Filename			Notes
Hitachi	UCP CI Mediakit	UCPCI-HC_MediaKit_v5.2_20220307.zip	UCPCI-HC_MediaKit_v5.2_20220307.zip	UCPCI-HC_MediaKit_v5.2_20220414.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI

Hardware

UCP CI (Release Version)		v4.0			v4.0.02			v4.5			v4.6			
Release date		August 3rd, 2020			October 31st, 2020			GA - Jan. 18th, 2021			GA - April. 5th, 2021			
Major vSphere Release:		6.5U3EP20	6.7U3 EP15	7.0 GA	6.5U3EP21, Build 16901156	6.7U3 EP16, Build 16901156	7.0 GA, Build 15843807		6.7U3 P04, Build 17167734		6.5U3P06, Build 17477841	6.7U3 EP18, Build 17499825	7.0u2, Build 17630552	
Management and Compute Nodes :														
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B16.H00	3B16.H01	3B16.H01	3B17.H00	3B17.H00	3B17.H00	3B18.H00	3B18.H00	3B18.H00	3B19.H00	3B19.H00	3B19.H00	
BMC		4.64.06	4.65.06	4.65.06	4.66.06	4.66.06	4.66.06	4.67.06	4.67.06	4.67.06	4.68.06	4.68.06	4.68.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :														
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B16.H00	3B16.H01	3B16.H01	3B17.H00	3B17.H00	3B17.H00	3B18.H00	3B18.H00	3B18.H00	3B19.H00	3B19.H00	3B19.H00	
BMC		4.64.06	4.65.06	4.65.06	4.66.06	4.66.06	4.66.06	4.67.06	4.67.06	4.67.06	4.68.06	4.68.06	4.68.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :														
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B16.H00	3B16.H01	3B16.H01	3B17.H00	3B17.H00	3B17.H00	3B18.H00	3B18.H00	3B18.H00	3B19.H00	3B19.H00	3B19.H00	
BMC		4.64.06	4.65.06	4.65.06	4.66.06	4.66.06	4.66.06	4.67.06	4.67.06	4.67.06	4.68.06	4.68.06	4.68.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :														
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B16.H00	3B16.H01	3B16.H01	3B17.H00	3B17.H00	3B17.H00	3B18.H00	3B18.H00	3B18.H00	3B19.H00	3B19.H00	3B19.H00	
BMC		4.64.06	4.65.06	4.65.06	4.66.06	4.66.06	4.66.06	4.67.06	4.67.06	4.67.06	4.68.06	4.68.06	4.68.06	
CMC		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CPLD		Rev11	Rev11	Rev11	Rev11	Rev11	Rev11	Rev11	Rev11	Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
I/O Card Support for DS120/220/225/240														
Components		**Versions**			**Versions**			**Versions**			**Versions**	**Versions**	**Versions**	**Notes**
Network Cards (Options)														
Intel X527-DA4, 10GbE quad-port, OCP Mezz VID=8086, DVID=37d3, SVID=152d, SSID=8a3f or 8a41		3.2d	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
	i40en Driver (ESXi)	1.5.6	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.136	
Intel X557-T4, 10GBase-T quad-port, OCP Mezz VID=8086, DVID=37d2, SVID=152d, SSID=8a3f	Firmware	3.2d	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	Also listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"
	i40en Driver (ESXi)	1.5.6	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.136	
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe VID=8086, DVID=158b, SVID=8086, SSID=0002	Firmware	6.0.1	7.30	7.30	6.8	6.8	6.8 - or higher	6.8	6.8	6.8 - or higher	6.8	6.8	6.8 - or higher	Listed on VMware HCL as: "Intel(R) Ethernet Network Adapter XXV710-2"
	i40en Driver (ESXi)	1.5.6	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.16	1.7.17	1.7.17	VMWare Inbox - 1.8.1.136	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240) VID=15b3, DVID=1015, SVID=152d, SSID=8a15	Firmware	14.23.1020	14.26.1040	14.26.1040	14.23.1020	14.23.1020	14.23.1020 - or higher	14.23.1020	14.23.1020	14.26.1040 - or higher	14.23.1020	14.23.1020	14.26.1040 - or higher	Listed on VMware HCL as: "ON 25GbE ConnectX-4 LX EN Dual port"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.8	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.10	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe) VID=15b3, DVID=1015, SVID=15b3, SSID=0003	Firmware	14.23.1020	14.27.1016	14.27.1016	14.23.1020	14.23.1020	14.23.1020 - or higher	14.23.1020	14.23.1020	14.28.2006 - or higher	14.23.1020	14.23.1020	14.24.1000 *	Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)" * 14.24.1000 is required due to IOVP VSAN certification
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.8	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.10	
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16 VID=15b3, DVID=1017, SVID=15b3, SSID=0007	Firmware	14.23.1020	16.27.1016	16.27.1016	16.23.1020	16.23.1020	16.23.1020 - or higher	16.23.1020	16.23.1020	16.28.2006 - or higher	14.23.1020 (16.23.1020)	14.23.1020 (16.23.1020)	16.28.2006 - or higher	Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.7	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.8	4.16.14.2	4.17.14.2	VMWare Inbox - 4.19.16.10	
HBA Controller														
Emulex LPe31002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e310	Firmware	12.0.193.13	12.6.182.8	12.6.182.8	12.0.193.13	12.6.182.8	12.6.182.8	12.6.182.8	12.6.182.8	12.6.182.8 - or higher	12.6.182.8	12.6.182.8	12.6.182.8 - or higher	Listed on Vmware HCL as: "Emulex LightPulse LPe31002-M6 2-Port 16Gb Fibre Channel Adapter"
	lpfc Driver (ESXi)	12.0.193.14	12.0.193.14	VMWare Inbox - 12.4.293.3	12.0.193.14	12.0.193.14	VMWare Inbox - 12.4.293.3	12.6.182.2	12.6.182.2	VMWare Inbox - 12.6.278.10	12.6.182.2	12.6.182.2	VMWare Inbox - 12.8.298.3	
Emulex LPe32002 FC HBA VID=10df, DVID=e300, SVID=10df, SSID=e300	Firmware	12.0.193.13	12.6.182.8	12.6.182.8	12.0.193.13	12.6.182.8	12.6.182.8	12.6.182.8	12.6.182.8	12.6.182.8 - or higher	12.6.182.8	12.6.182.8	12.6.182.8 - or higher	Listed on Vmware HCL as: "Emulex LightPulse LPe32002-M2 2-Port 32Gb Fibre Channel Adapter"
	lpfc Driver (ESXi)	12.0.193.14	12.0.193.14	VMWare Inbox - 12.4.293.3	12.0.193.14	12.0.193.14	VMWare Inbox - 12.4.293.3	12.6.182.2	12.0.193.14	VMWare Inbox - 12.6.278.10	12.6.182.2	12.6.182.2	VMWare Inbox - 12.8.298.3	
RAID Controller														
Broadcom SAS3516 2GB RAID Mezzanine VID=1000, DVID=0014, SVID=152d, SSID=8b00	Firmware	5.040.00-1123	5.100.00.2651	5.100.00.2651	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123 - or higher	5.040.00-1123	5.040.00-1123	5.040.00-1123 - or higher	Listed on Vmware HCL as: "QS-3516B-R6-PD32"
	lsi-mr3 Driver (ESXi)	7.704.7.0	7.707.11	VMWare Inbox - 7.712.50.00	7.707.11.0	7.707.11.0	VMWare Inbox - 7.712.50.00	7.707.11.0	7.707.11.0	VMWare Inbox - 7.712.51.00	7.707.11.0	7.707.11.0	VMWare Inbox - 7.716.03.00	
Broadcom 9460-16i VID=1000, DVID=0014, SVID=1000, SSID=9460	Firmware				5.070.00-1615	5.070.00-1615	5.070.00-1615	5.070.00-1615	5.070.00-1615	5.070.00-1615 - or higher	5.070.00-1615	5.070.00-1615	5.070.00-1615 - or higher	Listed on Vmware HCL as: "MegaRAID SAS 9460-16i". Used for RAID Boot devices on exceptions.
	lsi-mr3 Driver (ESXi)				7.707.11.0	7.707.11.0	VMWare Inbox - 7.712.50.00	7.707.11.0	7.707.11.0	VMWare Inbox - 7.712.51.00	7.707.11.0	7.707.11.0	VMWare Inbox - 7.716.03.00	
SAS Controller														
QS-3216 Mezz Card VID=1000, DVID=00c9, SVID=152d, SSID=8a12	Firmware	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A22 (16.00.09.00)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A22 (16.00.09.00)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A22 (16.00.09.00)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A22 (16.00.09.00)	Listed on Vmware HCL as: "QS-3216" Only for DS120 and DS220 LFF
	lsi_msgpt3 Driver (ESXi)	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0	
Broadcom SAS9305-16i PCIe (only for DS225) VID=1000, DVID=00c4, SVID=1000, SSID=3190	Firmware	15.00.00.00	15.00.00.00	16.00.09.00	15.00.00.00	15.00.00.00	16.00.09.00	15.00.00.00	15.00.00.00	16.00.09.00	15.00.00.00	15.00.00.00	16.00.09.00	Listed on Vmware HCL as: "9305-16i" Only for DS225 and DS220 SFF
	lsi_msgpt3 Driver (ESXi)	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0	16.00.00.00-1OEM	16.00.00.00-1OEM	VMWare Inbox -17.00.10.0	
Drives for vSAN Cache and Capacity (Options) for DS120/220/225/240														
Components		**Versions**			**Versions**			**Versions**			**Versions**	**Versions**	**Versions**	**Notes**
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	8DV101H0	8DV101H0	8DV101H0	8DV101H0	8DV101H0	8DV101H0	8DV101H0	8DV101H0	8DV101H0	8DV101H0	8DV101H0	Not compatable with DS225
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	Not compatable with DS225
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10131	VDV10170	VDV10170	VDV10131	VDV10170	VDV10170	VDV10131	VDV10170	VDV10170	VDV10131	VDV10170	VDV10170	Not compatable with DS225
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	Not compatable with DS225
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10140	VDV10170	VDV10170	VDV10140	VDV10170	VDV10170	VDV10140	VDV10170	VDV10170	VDV10140	VDV10170	VDV10170	Not compatable with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010475	E2010475	E2010435	E2010475	E2010475	E2010435	E2010475	E2010475	E2010435	E2010475	E2010485	Not compatable with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010475	E2010475	E2010435	E2010475	E2010475	E2010435	E2010475	E2010475	E2010435	E2010475	E2010485	Not compatable with DS225
NVMe Driver	Driver (ESXi)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	VMWare Inbox - nvme-pcie 1.2.2.13	intel-nvme-vmd 1.8.1.1001 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	VMWare Inbox - nvme-pcie 1.2.2.13	intel-nvme-vmd 1.8.1.1001 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	VMWare Inbox - nvme-pcie 1.2.2.13	intel-nvme-vmd 1.8.1.1001 (Async driver)	intel-nvme-vmd 1.8.1.1001 (Async driver)	VMWare Inbox - iavmd 2.0.0.1152	
Intel SSD DC S4500 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.
Intel SSD DC S4510 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.
Intel SSD DC S4600 Series	Firmware	SCV10121 - or higher	SCV10121 - or higher	SCV10121 - or higher	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	Min = SCV10121 / Recommended = SCV10150	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.
Intel SSD DC S4610 Series	Firmware	XCV10100 - or higher	XCV10100 - or higher	XCV10100 - or higher	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	Min = XCV10100 / Recommended = XCV10132	* Requires SAS Controller * The min. version as listed on The VMWare CG * Strongly suggested to use recommended version.
Samsung SATA SSD PM863a Series	Firmware	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	GXT5204Q - or higher	Requires SAS Controller
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	HXT7304Q - or higher	Requires SAS Controller
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	E004 - or higher	Requires SAS Controller
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	E002 - or higher	Requires SAS Controller
Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	XC311120 - or higher	XC311120 - or higher	XC311120 - or higher	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Min = XC311120 / Recommended XC311132	Only for DS240 Boot Device
Drives for vSAN Cache and Capacity (Options) for DS120/220														
Components		**Versions**			**Versions**			**Versions**			**Versions**	**Versions**	**Versions**	**Notes**
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XXD128GPS)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1XXD256GPS)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XXD512GPS)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	
GPU for DS225														
Components		**Versions**			**Versions**			**Versions**			**Versions**	**Versions**	**Versions**	**Notes**
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	440.53	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	460.32	460.32	
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	440.53	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	460.32	460.32	
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	440.53	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	460.32	460.32	
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	440.53	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	460.32	460.32	
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	440.53	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	450.55	460.32	460.32	

FC Switches

Vendor	Models	Firmware Versions			Firmware Versions			Firmware Versions						Notes
Brocade	G620	~~v8.2.1d~~ 8.2.1c or 8.2.1e	~~v8.2.1d~~ 8.2.1c or 8.2.1e	~~v8.2.1d~~ 8.2.1c or 8.2.1e	~~v8.2.1d~~ 8.2.1c or 8.2.1e	~~v8.2.1d~~ 8.2.1c or 8.2.1e	~~v8.2.1d~~ 8.2.1c or 8.2.1e	9.0.0b	9.0.0b	9.0.0b	9.0.0b	9.0.0b	9.0.0b	

Ethernet Switches

Vendor	Models	Firmware Versions			Firmware Versions			Firmware Versions						Notes
Quanta	LB9 Mgmt Switch	N/A			N/A			N/A						
Arista	DCS-7010T-48-R	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.23.5m	4.23.5m	4.23.5m	4.23.5m	4.23.5m	4.23.5m	
Arista	DCS-7050CX3-32S-R	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.23.5m	4.23.5m	4.23.5m	4.23.5m	4.23.5m	4.23.5m	
Arista	DCS-7050SX3-48YC8-R	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.22.4M	4.23.5m	4.23.5m	4.23.5m	4.23.5m	4.23.5m	4.23.5m	
Cisco	Nexus 3048	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	7.0(3)I7(8)	7.0(3)I7(8)	7.0(3)I7(8)	7.0(3)I7(8)	7.0(3)I7(8)	7.0(3)I7(8)	* These Cisco switches are used on UCP CI appliance from v4.0 and prior. * 7.0(3)I7(8) will be the last supported NXOS version on 3048.
Cisco	Nexus 93180LC-EX	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.5	NXOS 9.3.5	NXOS 9.3.5	
Cisco	Nexus 93180YC-EX	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	N/A - No longer used in UCP CI v4.0 and abo	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.5	NXOS 9.3.5	NXOS 9.3.5	
Cisco	Nexus 9332PQ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Cisco	Nexus 92348GC (1 G Mgmt)	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.5	NXOS 9.3.5	NXOS 9.3.5	
Cisco	Nexus 93180YC-FX (10/25G Leaf)	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.5	NXOS 9.3.5	NXOS 9.3.5	
Cisco	Nexus 9332C (100G Spine)	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.3 or 9.3.5	NXOS 9.3.5	NXOS 9.3.5	NXOS 9.3.5	

Storage Models

	Models				Recommended GA			Recommended GA						Notes
VSP	G200	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-40-20/00 (SVOS 7.4)	RGA = 83-05-40-20/00 (SVOS 7.4)	RGA = 83-05-40-20/00 (SVOS 7.4)	Hitachi Support Page - ECNs
VSP	G400	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-40-40/00 (SVOS 7.4)	RGA = 83-05-40-40/00 (SVOS 7.4)	RGA = 83-05-40-40/00 (SVOS 7.4)	
VSP	G600	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-40-40/00 (SVOS 7.4)	RGA = 83-05-40-40/00 (SVOS 7.4)	RGA = 83-05-40-40/00 (SVOS 7.4)	
VSP	G800	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-40-60/00 (SVOS 7.4)	RGA = 83-05-40-60/00 (SVOS 7.4)	RGA = 83-05-40-60/00 (SVOS 7.4)	
VSP	F400	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-40-40/00 (SVOS 7.4)	RGA = 83-05-40-40/00 (SVOS 7.4)	RGA = 83-05-40-40/00 (SVOS 7.4)	
VSP	F600	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-40-40/00 (SVOS 7.4)	RGA = 83-05-40-40/00 (SVOS 7.4)	RGA = 83-05-40-40/00 (SVOS 7.4)	
VSP	F800	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-37-x0/00-M133	RGA = 83-05-40-60/00 (SVOS 7.4)	RGA = 83-05-40-60/00 (SVOS 7.4)	RGA = 83-05-40-60/00 (SVOS 7.4)	
VSP	G350	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-08-01-20/00 (SVOS 9.6.0)	RGA = 88-08-01-20/00 (SVOS 9.6.0)	RGA = 88-08-01-20/00 (SVOS 9.6.0)	
VSP	G370	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	
VSP	G700	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	
VSP	G900	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	
VSP	F350	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-08-01-20/00 (SVOS 9.6.0)	RGA = 88-08-01-20/00 (SVOS 9.6.0)	RGA = 88-08-01-20/00 (SVOS 9.6.0)	
VSP	F370	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	
VSP	F700	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	
VSP	F900	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-06-02-x0/10-M074	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	RGA = 88-08-01-60/00 (SVOS 9.6.0)	
VSP	G1000, VSP G1500, VSP F1500				RGA = 80-06-80-00/02-M209	RGA = 80-06-80-00/02-M209	RGA = 80-06-80-00/02-M209	RGA = 80-06-80-00/02-M209	RGA = 80-06-80-00/02-M209	RGA = 80-06-80-00/02-M209	RGA = 80-06-82-00/00 (SVOS 8.3)	RGA = 80-06-82-00/00 (SVOS 8.3)	RGA = 80-06-82-00/00 (SVOS 8.3)	
VSP	E590							RGA = 93-03-22-60/01-M016	RGA = 93-03-22-60/01-M016	RGA = 93-03-22-60/01-M016	RGA = 93-04-01-40/00 (SVOS 9.6.0)	RGA = 93-04-01-40/00 (SVOS 9.6.0)	RGA = 93-04-01-40/00 (SVOS 9.6.0)	
VSP	E790							RGA = 93-03-22-60/01-M016	RGA = 93-03-22-60/01-M016	RGA = 93-03-22-60/01-M016	RGA = 93-04-01-40/00 (SVOS 9.6.0)	RGA = 93-04-01-40/00 (SVOS 9.6.0)	RGA = 93-04-01-40/00 (SVOS 9.6.0)	
VSP	E990				RGA = 93-02-03-60/01-M009	RGA = 93-02-03-60/01-M009	RGA = 93-02-03-60/01-M009	RGA = 93-03-22-60/01-M016	RGA = 93-03-22-60/01-M016	RGA = 93-03-22-60/01-M016	RGA = 93-04-01-60/00 (SVOS 9.6.0)	RGA = 93-04-01-60/00 (SVOS 9.6.0)	RGA = 93-04-01-60/00 (SVOS 9.6.0)	
VSP	5100, 5500, 5100H, 5500H				RGA = 90-04-04-00/10-M037	RGA = 90-04-04-00/10-M037	RGA = 90-04-04-00/10-M037	RGA = 90-04-04-00/10-M037	RGA = 90-04-04-00/10-M037	RGA = 90-04-04-00/10-M037	RGA = 90-06-01-00/00 (SVOS 9.6.0)	RGA = 90-06-01-00/00 (SVOS 9.6.0)	RGA = 90-06-01-00/00 (SVOS 9.6.0)	

* Minimum Level or above

Software

Software Versions														
Vendor	**Component**	**Versions**			**Versions**			**Versions**			**Versions**	**Versions**	**Versions**	**Notes**
VMware	ESXi	6.5U3 (Build # 16576891)	6.7U3 EP15 (Build # 16316930)	7.0GA (Build# 15843807)	6.5U3 EP21 (Build # 16901156)	6.7U3 EP16 (Build # 16773714)	7.0GA (Build# 15843807)	6.5U3 EP23 (Build #17167537)	6.7U3 P04 (Build # 17167734)	7.0U1c (Build# 17325551)	6.5U3 P06 (Build #17477841)	6.7U3 EP18 (Build # 17499825)	7.0U2 (Build# 17630552)	
VMware	vCenter(VCSA)	6.5U3 (Build # 16613358)	6.7U3h (Build # 16275304)	7.0GA (Build# 15952498)	6.5U3L (Build # 16764584)	6.7U3j (Build # 16708996)	7.0GA (Build# 15952498)	6.5U3L (Build # 16764584)	6.7U3L (Build # 17138064)	7.0U1c (Build# 17328517)	6.5U3n (Build # 17590285)	6.7U3L (Build # 17138064)	7.0U2 (Build# 17694817)	
VMware	VSAN	6.6.1	6.7	7.0	6.6.1	6.7	7.0	6.6.1	6.7	7.0	6.6.1	6.7	7.0	
Downloadable ZIPs														
Vendor	**Component**	**Filename**			**Filename**			**Filename**						**Notes**
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20200803.zip	Arista_Firmware_20200803.zip	Arista_Firmware_20200803.zip	Arista_Firmware_20200803.zip	Arista_Firmware_20200803.zip	Arista_Firmware_20200803.zip	Arista_Firmware_20201207.zip	Arista_Firmware_20201207.zip	Arista_Firmware_20201207.zip	Arista_Firmware_20201207.zip	Arista_Firmware_20201207.zip	Arista_Firmware_20201207.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20200803.zip	Cisco_Firmware_20200803.zip	Cisco_Firmware_20200803.zip	Cisco_Firmware_20200803.zip	Cisco_Firmware_20200803.zip	Cisco_Firmware_20200803.zip	Cisco_Firmware_20201207.zip	Cisco_Firmware_20201207.zip	Cisco_Firmware_20201207.zip	Cisco_Firmware_20201207.zip	Cisco_Firmware_20201207.zip	Cisco_Firmware_20201207.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_Firmware_2020803.zip	Brocade_Firmware_2020803.zip	Brocade_Firmware_2020803.zip	Brocade_Firmware_2020803.zip	Brocade_Firmware_2020803.zip	Brocade_Firmware_2020803.zip	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	Brocade_ReadMe.txt	
Hitachi	Adapter Firmware ZIP										Adapter_Firmware_20210405.zip	Adapter_Firmware_20210405.zip	Adapter_Firmware_20210405.zip	
Hitachi	Server Firmware ZIP	Server_Firmware_20200803.zip	Server_Firmware_20200803.zip	Server_Firmware_20200803.zip	Server_Firmware_20201031.zip	Server_Firmware_20201031.zip	Server_Firmware_20201031.zip	Server_Firmware_20201207.zip	Server_Firmware_20201207.zip	Server_Firmware_20201207.zip	Server_Firmware_20210405.zip	Server_Firmware_20210405.zip	Server_Firmware_20210405.zip	
Hitachi	MIB Package(s)										MIB_20210405v2.zip	MIB_20210405v2.zip	MIB_20210405v2.zip	Only Quanta MIBs currently
Hitachi	Vmware Software ZIP	vSphere6.5U3_20200803.zip	vSphere6.7U3_20200803A.zip	vSphere7.0GA_20200803.zip	vSphere6.5U3-EP21_20201031.zip	vSphere6.7U3-EP16_20201031.zip	vSphere7.0GA_20200803.zip	vSphere6.5U3EP23-17167537_20210118.zip	vSphere6.7U3P04-17167734_20210118.zip	vSphere7.0u1c-17325551_20210118.zip	vSphere6.5u3P06-171477841-20210224.	vSphere6.7u3EP18-17499825_20210224.z	vSphere7.0u2-17630552_20210405.zip	
Hitachi	UCPToolkit ZIP	UCPToolkit_20200904.zip	UCPToolkit_20200904.zip	UCPToolkit_20200904.zip	UCPToolkit_20201031.zip	UCPToolkit_20201031.zip	UCPToolkit_20201031.zip	UCPToolkit_v4.5_20210118.zip	UCPToolkit_v4.5_20210118.zip	UCPToolkit_v4.5_20210118.zip	UCPToolkit_v4.6_20210405.zip	UCPToolkit_v4.6_20210405.zip	UCPToolkit_v4.6_20210405.zip	
Main Mediakit ZIP														
Vendor	**Component**	**Filename**			**Filename**			**Filename**	*					**Notes**
Hitachi	UCP CI Mediakit	UCPCI_MEDIAKIT_V4.0_20200904.zip	UCPCI_MEDIAKIT_V4.0_20200904.zip	UCPCI_MEDIAKIT_V4.0_20200904.zip	UCPCI_MEDIAKIT_V4.0_20201031.zip	UCPCI_MEDIAKIT_V4.0_20201031.zip	UCPCI_MEDIAKIT_V4.0_20201031.zip	UCPCI_Mediakit_v4.5_20210118.zip	UCPCI_Mediakit_v4.5_20210118.zip	UCPCI_Mediakit_v4.5_20210118.zip	UCPCI-HC_Mediakit_v20210405.zip	UCPCI-HC_Mediakit_v20210405.zip	UCPCI-HC_Mediakit_v20210405.zip	

Note: An explanation to the logic of how Firmware versions are decided on for the various I/O cards. Solution Engineering uses the VMWare Compatibility Guide for supported versions and combinations.

Step 1 - For a given vSphere version, we check the driver/vib that is used for each I/O Adapter

Step 2 - For I/O cards that use the same driver (i.e. all Mellanox cards use nmlx5_core Driver) we identify the version that is common accross all adapters

Step 3* - For Each I/O card, using the common driver/vib version, we identify the supported firmware version for that driver/vib.

*This will sometimes result in selecting older versions of firmware for a given I/O adapter.

UCP CI Interoperability Matrix

UCP CI
v3.5.1

Hardware

UCP CI (Release Version)		v3.0.0		v3.5.0		v3.5.1		v3.6		
Release date		September 30th, 2019		December 2nd, 2019		February 14th, 2020		June 1st, 2020		
Major vSphere Release:		6.5U3	6.7U3	6.5U3	6.7U3	6.5U3	6.7U3	6.5U3	6.7U3	
Management and Compute Nodes :		**Hitachi Advanced Server DS120**								
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B14.H01	3B14.H01	3B14.H01	3B14.H01	3B16.H00	3B16.H00	3B16.H00	3B16.H00	
BMC		4.62.06	4.62.06	4.62.06	4.62.06	4.64.06	4.64.06	4.64.06	4.64.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :		**Hitachi Advanced Server DS220**								
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B14.H01	3B14.H01	3B14.H01	3B14.H01	3B16.H00	3B16.H00	3B16.H00	3B16.H00	
BMC		4.62.06	4.62.06	4.62.06	4.62.06	4.64.06	4.64.06	4.64.06	4.64.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :		**Hitachi Advanced Server DS225**								
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B14.H01	3B14.H01	3B14.H01	3B14.H01	3B16.H00	3B16.H00	3B16.H00	3B16.H00	
BMC		4.62.06	4.62.06	4.62.06	4.62.06	4.64.06	4.64.06	4.64.06	4.64.06	
CPLD		Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :		**Hitachi Advanced Server DS240**								
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3B14.H01	3B14.H01	3B14.H01	3B14.H01	3B16.H00	3B16.H00	3B16.H00	3B16.H00	
BMC		4.62.06	4.62.06	4.62.06	4.62.06	4.64.06	4.64.06	4.64.06	4.64.06	
CMC		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CPLD		N/A	N/A	N/A	N/A	Rev11	Rev11	Rev11	Rev11	
CPU Family		**Skylake**	**Skylake**	**Skylake**	**Skylake**	**Skylake**	**Skylake**	**Skylake**	**Skylake**	
I/O Card Support for DS120/220/225/240										
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
Network Cards (Options)										
Intel X527-DA4, 10GbE quad-port, OCP Mezz	Firmware	3.2d	4.00	3.2d	4.00	3.2d	4.00	3.2d	4.00	Listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
	i40en Driver (ESXi)	1.5.6	1.7.17	1.5.6	1.7.17	1.5.6	1.7.17	1.5.6	1.7.17	
Intel X557-T4, 10GBase-T quad-port, OCP Mezz	Firmware	3.2d	4.00	3.2d	4.00	3.2d	4.00	3.2d	4.00	Listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"
	i40en Driver (ESXi)	1.5.6	1.7.17	1.5.6	1.7.17	1.5.6	1.7.17	1.5.6	1.7.17	
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	Firmware	6.0.1	6.80	6.0.1	6.80	6.0.1	6.80	6.0.1	6.80	
	i40en Driver (ESXi)	1.5.6	1.7.17	1.5.6	1.7.17	1.5.6	1.7.17	1.5.6	1.7.17	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240)	Firmware	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	"ON 25GbE ConnectX-4 LX EN Dual port"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Fw 14.21.1000 supported with driver 4.16.12.12 Async driver
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe)	Firmware	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	Firmware	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	14.23.1020	Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	4.16.14.2	4.17.14.2	
HBA Controller										
Emulex LPe31002 FC HBA	Firmware	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	
	lpfc Driver (ESXi)	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	
Emulex LPe32002 FC HBA	Firmware	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	12.0.193.13	
	lpfc Driver (ESXi)	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	12.0.193.14	
RAID Controller										
Broadcom SAS3516 2GB RAID Mezzanine	Firmware	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123	
	lsi-mr3 Driver (ESXi)	7.704.7.0	7.704.7.0	7.704.7.0	7.704.7.0	7.704.7.0	7.707.11.00	7.704.7.0	7.707.11.00	
SAS Controller										
QS-3216 Mezz Card	Firmware	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	Only for DS120 and DS220 LFF
	lsi_msgpt3 Driver (ESXi)	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	
Broadcom SAS9305-16i PCIe (only for DS225)	Firmware	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	Only for DS225 and DS220 SFF
	lsi_msgpt3 Driver (ESXi)	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	
Drives for vSAN Cache and Capacity (Options) for DS120/220/225/240										
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not compatable with DS225
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	Not compatable with DS225
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10131	VDV10131	VDV10131	VDV10131	VDV10131	VDV10131	VDV10131	VDV10131	Not compatable with DS225
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	QDV101D1	Not compatable with DS225
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	VDV10140	VDV10140	VDV10140	VDV10140	VDV10140	VDV10140	VDV10140	VDV10140	Not compatable with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	Not compatable with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	E2010435	Not compatable with DS225
NVMe Driver	Driver (ESXi)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	
Intel SSD DC S4500 Series	Firmware	SCV10121	SCV10121	SCV10121	SCV10121	SCV10121	SCV10121	SCV10150	SCV10150	Requires SAS Controller
Intel SSD DC S4510 Series	Firmware	SCV10121	SCV10121	SCV10121	SCV10121	SCV10121	SCV10121	XCV10120	XCV10120	Requires SAS Controller
Intel SSD DC S4600 Series	Firmware	SCV10121	SCV10121	SCV10121	SCV10121	SCV10121	SCV10121	SCV10150	SCV10150	Requires SAS Controller
Intel SSD DC S4610 Series	Firmware	SCV10121	SCV10121	SCV10121	SCV10121	SCV10121	SCV10121	XCV10120	XCV10120	Requires SAS Controller
Samsung SATA SSD PM863a Series	Firmware	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	Requires SAS Controller
Samsung SATA SSD PM883 Series	Firmware	HXT7304Q	HXT7304Q	HXT7304Q	HXT7304Q	HXT7304Q	HXT7304Q	HXT7304Q	HXT7304Q	Requires SAS Controller
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	E004	E004	E004	E004	E004	E004	E004	E004	Requires SAS Controller
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	E002	E002	E002	E002	E002	E002	E002	E002	Requires SAS Controller
Intel SSD S4510 Series (240 GB, M.2 2280)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	XC311120	XC311120	Only for DS240 Boot Device
Drives for vSAN Cache and Capacity (Options) for DS120/220										
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
Intel® Optane™ DC 128 GB Persistent Memory Module (NMA1XXD128GPS)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	
Intel® Optane™ DC 256 GB Persistent Memory Module (NMA1XXD256GPS)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	
Intel® Optane™ DC 512 GB Persistent Memory Module (NMA1XXD512GPS)	Firmware	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	1.2.0.5375	
GPU for DS225										
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	390.94	390.94	390.94	390.94	390.94	390.94	440.53	440.53	
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	390.94	390.94	390.94	390.94	390.94	390.94	440.53	440.53	
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	390.94	390.94	390.94	390.94	390.94	390.94	440.53	440.53	
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	390.94	390.94	390.94	390.94	390.94	390.94	440.53	440.53	
NVIDIA Tesla T4	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	N/A	N/A	N/A	440.53	440.53	

FC Switches

Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Brocade	G620	v8.2.1c	v8.2.1c	v8.2.1c	v8.2.1c	v8.2.1c	v8.2.1c	v8.2.1d	v8.2.1d	

Ethernet Switches

Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Quanta	LB9 Mgmt Switch	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Arista	DCS-7010T-48-R	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.22.4M	4.22.4M	
Arista	DCS-7050CX3-32S-R	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.22.4M	4.22.4M	
Arista	DCS-7050SX3-48YC8-R	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.21.6F	4.22.4M	4.22.4M	
Cisco	Nexus 3048	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	
Cisco	Nexus 93180LC-EX	7.0(3)I7(3)	7.0(3)I7(3)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	
Cisco	Nexus 93180YC-EX	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	7.0(3)I7(6)	
Cisco	Nexus 9332PQ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Storage Models

	Models									Notes
VSP	G200	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	
VSP	G400	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	G600	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	G800	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	
VSP	F400	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	F600	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	F800	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	
VSP	G350	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	G370	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	G700	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	G900	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	F350	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	F370	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	F700	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	F900	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	

* Minimum Level or above

Software

Software Versions										
Vendor	**Component**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
VMware	ESXi	6.5U3 (Build # 14320405)	6.7U3 (Build # 14320388)	6.5U3 (Build # 14320405)	6.7U3 (Build # 14320388)	6.5U3 (Build # 14320405)	6.7U3 (Build # 14320388)	6.5U3 (Build # 14320405)	6.7U3 (Build # 15160138)	
VMware	vCenter(VCSA)	6.5U3 (Build # 14020092)	6.7U3 (Build # 14367737)	6.5U3 (Build # 14020092)	6.7U3 (Build # 14367737)	6.5U3 (Build # 14020092)	6.7U3 (Build # 14367737)	6.5U3 (Build # 14020092)	6.7U3 (Build # 15976714)	
VMware	VSAN	6.6.1	6.7	6.6.1	6.7	6.6.1	6.7	6.6.1	6.7	
Hitachi	UCP Advisor	3.0	3.0	3.5^	3.5^	3.5.1	3.5.1	3.5.1	3.8	* Requires at least VCSA 6.5U2c ^ When available
Downloadable ZIPs										
Vendor	**Component**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Notes**
Hitachi	Arista Network Firmware ZIP	Arista_Firmware_20190923.zip	Arista_Firmware_20190923.zip	Arista_Firmware_20190923.zip	Arista_Firmware_20190923.zip	Arista_Firmware_20190923.zip	Arista_Firmware_20190923.zip	Arista_Firmware_20200601.zip	Arista_Firmware_20200601.zip	
Hitachi	Cisco Network Firmware ZIP	Cisco_Firmware_20190619.zip	Cisco_Firmware_20190619.zip	Cisco_Firmware_20191126.zip	Cisco_Firmware_20191126.zip	Cisco_Firmware_20191126.zip	Cisco_Firmware_20191126.zip	Cisco_Firmware_20200601.zip	Cisco_Firmware_20200601.zip	
Hitachi	Storage Network Firmware ZIP	Brocade_Firmware_20190923.zip	Brocade_Firmware_20190923.zip	Brocade_Firmware_20190923.zip	Brocade_Firmware_20190923.zip	Brocade_Firmware_20190923.zip	Brocade_Firmware_20190923.zip	Brocade_Firmware_20190923.zip	Brocade_Firmware_20190923.zip	
Hitachi	Server Firmware ZIP	Server_Firmware_20190923.zip	Server_Firmware_20190923.zip	Server_Firmware_20190923.zip	Server_Firmware_20190923.zip	Server_Firmware_20200129.zip	Server_Firmware_20200129.zip	Server_Firmware_20200129.zip	Server_Firmware_20200129.zip	
Hitachi	Vmware Software ZIP	vSphere6.5U3_20190923.zip	vSphere6.7U3_20190923.zip	vSphere6.5U3_20190923.zip	vSphere6.7U3_20190923.zip	vSphere6.5U3_20190923.zip	vSphere6.7U3_20190923.zip	vSphere6.5U3_20200601.zip	vSphere6.7U3b_20200601.zip	
Hitachi	UCPToolkit ZIP	UCPToolkit_20190923.zip	UCPToolkit_20190923.zip	UCPToolkit_20191126.zip	UCPToolkit_20191126.zip	UCPToolkit_20200205.zip	UCPToolkit_20200205.zip	UCPToolkit_20200601.zip	UCPToolkit_20200601.zip	
Main Mediakit ZIP										
Vendor	**Component**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Notes**
Hitachi	UCP CI Mediakit	UCPCI_MEDIAKIT_V3.0.0_20190923.zip	UCPCI_MEDIAKIT_V3.0.0_20190923.zip	UCPCI_MEDIAKIT_V3.5.0_20191127.zip	UCPCI_MEDIAKIT_V3.5.0_20191127.zip	UCPCI_MEDIAKIT_V3.5.1_20200205.zip	UCPCI_MEDIAKIT_V3.5.1_20200205.zip	UCPCI_MEDIAKIT_V3.6_20200601.zip	UCPCI_MEDIAKIT_V3.6_20200601.zip	

UCP CI Interoperability Matrix

UCP CI
v2.0.0 - v2.5.0

Hardware

UCP CI (Release Version)		v2.0.0	v2.0.1	v2.1.0 / v2.2.0			v2.5.0		
Release date		August 6th, 2018	September 17th, 2018	November 19th, 2018 / April 30th, 2019			September 3rd, 2019		
Major vSphere Release:		6.5U2	6.5U2	6.0U3	6.5U2	6.7U1	6.5U2	6.7U2	
Management and Compute Nodes :		**Hitachi Advanced Server DS120**							
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3A10.H7	3A10.H8	3A10.H8	3A10.H8	3A10.H8	3B14.H01	3B14.H01	
BMC		4.23.06	4.23.06	4.23.06	4.23.06	4.23.06	4.62.06	4.62.06	
CPLD		Rev10	Rev10	Rev10	Rev10	Rev10	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake**	**Skylake**	**Skylake**	**Skylake**	**Skylake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :		**Hitachi Advanced Server DS220**							
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3A10.H7	3A10.H8	3A10.H8	3A10.H8	3A10.H8	3B14.H01	3B14.H01	
BMC		4.23.06	4.23.06	4.23.06	4.23.06	4.23.06	4.62.06	4.62.06	
CPLD		Rev10	Rev10	Rev10	Rev10	Rev10	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**Skylake**	**Skylake**	**Skylake**	**Skylake**	**Skylake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :		**Hitachi Advanced Server DS225**							
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		N/A	N/A	N/A	3A10.H8	3A10.H8	3B14.H01	3B14.H01	
BMC		N/A	N/A	N/A	4.23.06	4.23.06	4.62.06	4.62.06	
CPLD		N/A	N/A	N/A	Rev10	Rev10	Rev10 / Rev11	Rev10 / Rev11	
CPU Family		**N/A**	**N/A**	**N/A**	**Skylake**	**Skylake**	**Skylake / Cascade Lake**	**Skylake / Cascade Lake**	
Compute Nodes :		**Hitachi Advanced Server DS240**							
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3A02.H1	3A02.H2	N/A	3A02.H2	3A02.H2	3B13.H01	3B13.H01	
BMC		4.23.06	4.23.06	N/A	4.23.06	4.23.06	4.60.06	4.60.06	
CMC		N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CPLD		N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CPU Family		**Skylake**	**Skylake**	**N/A**	**Skylake**	**Skylake**	**Skylake**	**Skylake**	
I/O Card Support for DS120/220/225/240									
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
Network Cards (Options)									
Intel X527-DA4, 10GbE quad-port, OCP Mezz	Firmware	3.2d	3.2d	3.2d	3.2d	3.2d	3.2d	4.00	Listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
	i40en Driver (ESXi)	1.5.6	1.5.6	1.5.6	1.5.6	1.5.6	1.5.6	1.7.17	
Intel X557-T4, 10GBase-T quad-port, OCP Mezz	Firmware	3.2d	3.2d	3.2d	3.2d	3.2d	3.2d	4.00	Listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"
	i40en Driver (ESXi)	1.5.6	1.5.6	1.5.6	1.5.6	1.5.6	1.5.6	1.7.17	
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	Firmware	6.0.1	6.0.1	6.0.1	6.0.1	6.0.1	6.0.1	6.80	
	i40en Driver (ESXi)	1.5.6	1.5.6	1.5.6	1.5.6	1.5.6	1.5.6	1.7.17	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240)	Firmware	14.20.1010	14.20.1010	14.20.1010	14.20.1010	14.20.1010	14.23.1020	14.23.1020	"ON 25GbE ConnectX-4 LX EN Dual port"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Fw 14.21.1000 supported with driver 4.16.12.12 Async driver
	nmlx5_core Driver (ESXi)	4.16.10.3	4.16.10.3	4.15.10.3	4.16.10.3	4.17.14.2	4.16.14.2	4.17.14.2	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe)	Firmware	14.20.1010	14.20.1010	14.20.1010	14.20.1010	14.23.1020	14.23.1020	14.23.1020	Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	4.16.10.3	4.16.10.3	4.15.10.3	4.16.10.3	4.17.14.2	4.16.14.2	4.17.14.2	
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	Firmware	N/A	N/A	N/A	N/A	N/A	14.23.1020	14.23.1020	Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	4.16.14.2	4.17.14.2	
HBA Controller									
Emulex LPe31002 FC HBA	Firmware	11.2.156.27	11.2.156.27	11.4.204.27	11.4.204.27	11.4.204.27	12.0.193.13	12.0.193.13	
	lpfc Driver (ESXi)	11.2.266.0	11.2.266.0	11.4.329.0	11.4.329.0	11.4.341.0	12.0.193.14	12.0.193.14	
Emulex LPe32002 FC HBA	Firmware	11.2.156.27	11.2.156.27	11.4.204.27	11.4.204.27	11.4.204.27	12.0.193.13	12.0.193.13	
	lpfc Driver (ESXi)	11.2.266.0	11.2.266.0	11.4.329.0	11.4.329.0	11.4.341.0	12.0.193.14	12.0.193.14	
RAID Controller									
Broadcom SAS3516 2GB RAID Mezzanine	Firmware	5.040.00-1123	5.040.00-1123	N/A	5.040.00-1123	5.040.00-1123	5.040.00-1123	5.040.00-1123	
	lsi-mr3 Driver (ESXi)	7.704.7.0	7.704.7.0	N/A	7.704.7.0	7.704.7.0	7.704.7.0	7.704.7.0	
SAS Controller									
QS-3216 Mezz Card	Firmware	N/A	N/A	N/A	1A14 (15.00.00.00)	1A14 (15.00.00.00)	1A14 (15.00.00.00) (20190530)	1A14 (15.00.00.00) (20190530)	Only for DS120 and DS220
	lsi_msgpt3 Driver (ESXi)	N/A	N/A	N/A	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	
Broadcom SAS9305-16i PCIe (only for DS225)	Firmware	N/A	N/A	N/A	15.00.00.00	15.00.00.00	15.00.00.00	15.00.00.00	Only for DS225
	lsi_msgpt3 Driver (ESXi)	N/A	N/A	N/A	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	16.00.00.00-1OEM	
Drives for vSAN Cache and Capacity (Options) for DS120/220/225									
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not compatable with DS225
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	QDV101D1	QDV101D1	QDV101D1	QDV101D1	Not compatable with DS225
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	VDV10131	VDV10131	VDV10131	VDV10131	Not compatable with DS225
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	QDV101B1, QDV101D1	QDV101B1, QDV101D1	QDV101D1	QDV101D1	Not compatable with DS225
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	N/A	VDV10140	VDV10140	Not compatable with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	E2010435	E2010435	E2010435	E2010435	Not compatable with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	E2010435	E2010435	E2010435	E2010435	Not compatable with DS225
NVMe Driver	Driver (ESXi)	N/A	N/A	N/A	intel-nvme-vmd 1.4.0.1016 (Async driver)	intel-nvme-vmd 1.4.0.1016 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	intel-nvme-vmd 1.6.0.1003 (Async driver)	
Intel SSD DC S4500 Series	Firmware	N/A	N/A	N/A	SCV10121	SCV10121	SCV10121	SCV10121	Requires SAS Controller
Intel SSD DC S4510 Series	Firmware	N/A	N/A	N/A	SCV10121	SCV10121	SCV10121	SCV10121	Requires SAS Controller
Intel SSD DC S4600 Series	Firmware	N/A	N/A	N/A	SCV10121	SCV10121	SCV10121	SCV10121	Requires SAS Controller
Intel SSD DC S4610 Series	Firmware	N/A	N/A	N/A	SCV10121	SCV10121	SCV10121	SCV10121	Requires SAS Controller
Samsung SATA SSD PM863a Series	Firmware	N/A	N/A	N/A	GXT5204Q	GXT5204Q	GXT5204Q	GXT5204Q	Requires SAS Controller
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	N/A	N/A	N/A	E004	E004	E004	E004	Requires SAS Controller
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	N/A	N/A	N/A	E002	E002	E002	E002	Requires SAS Controller
GPU for DS225									
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	390.72	390.72	390.94	390.94	
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	390.72	390.72	390.94	390.94	
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	390.72	390.72	390.94	390.94	
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	390.72	390.72	390.94	390.94	

FC Switches

Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Brocade	G620	v8.2.0b	v8.2.0b	v8.2.0b	v8.2.0b	v8.2.0b	v8.2.0b	v8.2.0b	

Ethernet Switches

Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Quanta	LB9 Mgmt Switch	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Cisco	Nexus 3048	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	
Cisco	Nexus 93180LC-EX	7.0(3)I7(3)	7.0(3)I7(3)	7.0(3)I7(3)	7.0(3)I7(3)	7.0(3)I7(3)	7.0(3)I7(3)	7.0(3)I7(3)	
Cisco	Nexus 93180YC-EX	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	7.0(3)I4(7)	
Cisco	Nexus 9332PQ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Storage Models

	Models	Microcode Versions	Microcode Versions	Microcode Versions*	Microcode Versions*	Microcode Versions*			Notes
VSP	G200	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	
VSP	G400	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	G600	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	G800	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	
VSP	F400	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	F600	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	F800	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	
VSP	G350	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	G370	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	G700	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	G900	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	F350	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	F370	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	F700	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	
VSP	F900	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	88-01-04-x0/00	

* Minimum Level or above

Software

Software Versions									
Vendor	**Component**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
VMware	ESXi	6.5U2 (Build # 8294253)	6.5U2 (Build # 9298722)	6.0U3 (Build# 10474991)	6.5U2 (Build # 10390116)	6.7U1 (Build # 10302608)	6.5U2 (Build # 13635690)	6.7U2 (Build # 13644319)	
VMware	vCenter(VCSA)	6.5U2 (Build # 8307201)	6.5U2c (Build # 9451637)	N/A	6.5U2c (Build # 9451637)	6.7U1 (Build # 10244745)	6.5U2g (Build # 13638625)	6.7U2a (Build # 13643870)	
VMware	VSAN	N/A	N/A	N/A	6.6.1 EP 10	6.7 EP 05	6.6.1 EP 14	6.7 EP 09	
Hitachi	UCP Advisor	2.7	2.7	2.8*	2.8	2.8	3.0	3.0	* Requires at least VCSA 6.5U2c
Downloadable ZIPs									
Vendor	**Component**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Notes**
Hitachi	Ethernet Network Firmware ZIP	N/A	N/A	N/A	N/A	N/A	Cisco_Firmware_20190619.zip	Cisco_Firmware_20190619.zip	
Hitachi	Storage Network Firmware ZIP	N/A	N/A	N/A	N/A	N/A	Brocade_Firmware_20190619.zip	Brocade_Firmware_20190619.zip	
Hitachi	Server Firmware ZIP	N/A	N/A	N/A	N/A	N/A	Server_Firmware_20190805.zip	Server_Firmware_20190805.zip	
Hitachi	Vmware Software ZIP	N/A	N/A	N/A	N/A	N/A	vSphere6.5U2_20190619.zip	vSphere6.7U2_20190619.zip	
Hitachi	UCPToolkit ZIP	N/A	N/A	N/A	N/A	N/A	UCPToolkit_20190805.zip	UCPToolkit_20190805.zip	
Main Mediakit ZIP									
Vendor	**Component**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Filename**	**Notes**
Hitachi	UCP CI Mediakit	N/A	N/A	N/A	N/A	N/A	UCPCI_MEDIAKIT_V2.5.0_20190806.zip	UCPCI_MEDIAKIT_V2.5.0_20190806.zip	

UCP CI Interoperability Matrix

UCP CI
v1.0.1 - 1.5.0

Hardware

	UCP CI (Release Version)	v1.0.1	v1.1	v1.1.1	v1.5.0
	Release date	September 7th, 2017	February 5th, 2018	April 9th, 2018	June 4th, 2018
	Major vSphere Release:	6.5U1	6.5U1	6.5U1	6.5U2
Management and Compute Nodes :		**Hitachi Advanced Server DS120**			
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		3A08.H2	3A08.H2	3A10.H3	3A10.H3	
BMC		3.16.06	3.16.06	3.75.06	3.75.06	
CPLD		Rev10	Rev10	Rev10	Rev10	
CPU Family		**Skylake**	**Skylake**	**Skylake**	**Skylake**	
Compute Nodes :		**Hitachi Advanced Server DS220**				
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		N/A	N/A	N/A	N/A	
BMC		N/A	N/A	N/A	N/A	
CPLD		N/A	N/A	N/A	N/A	
CPU Family		**N/A**	**N/A**	**N/A**	**N/A**	
Compute Nodes :		**Hitachi Advanced Server DS225**				
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		N/A	N/A	N/A	N/A	
BMC		N/A	N/A	N/A	N/A	
CPLD		N/A	N/A	N/A	N/A	
CPU Family		**N/A**	**N/A**	**N/A**	**N/A**	
Compute Nodes :		**Hitachi Advanced Server DS240**				
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
BIOS		N/A	N/A	N/A	N/A	
BMC		N/A	N/A	N/A	N/A	
CMC		N/A	N/A	N/A	N/A	
CPLD		N/A	N/A	N/A	N/A	
CPU Family		**N/A**	**N/A**	**N/A**	**N/A**	
I/O Card Support for DS120/220/225/240						
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
Network Cards (Options)						
Intel X527-DA4, 10GbE quad-port, OCP Mezz	Firmware	3.2d	3.2d	3.2d	3.2d	Listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GbE SFP+"
	i40en Driver (ESXi)	1.3.1 (inbox driver)	1.3.1 (inbox driver)	1.5.6	1.5.6	
Intel X557-T4, 10GBase-T quad-port, OCP Mezz	Firmware	3.2d	3.2d	3.2d	3.2d	Listed on VMware HCL as: "Intel(R) Ethernet Connection X722 for 10GBASE-T"
	i40en Driver (ESXi)	1.3.1 (inbox driver)	1.3.1 (inbox driver)	1.5.6	1.5.6	
Intel XXV710-DA2, 10/25/40GbE dual-port, PCIe	Firmware	N/A	N/A	N/A	6.0.1	
	i40en Driver (ESXi)	N/A	N/A	N/A	1.5.6	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mezz (except DS240)	Firmware	14.18.1000	14.18.1000	14.20.1010	14.20.1010	"ON 25GbE ConnectX-4 LX EN Dual port"
	nmlx4_core Driver (ESXi)	3.16.0.0-1 (Inbox driver)	N/A	N/A	N/A	Fw 14.21.1000 supported with driver 4.16.12.12 Async driver
	nmlx5_core Driver (ESXi)	N/A	4.16.8.8	4.16.10.3	4.16.10.3	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MD2 (PCIe)	Firmware	14.18.1000	14.18.1000	14.20.1010	14.20.1010	Listed on VMware HCL as: "ConnectX-4 Lx EN NIC; 25GbE; dual-port SFP28; (MCX4121A-ACA)"
	nmlx4_core Driver (ESXi)	3.16.0.0-1 (Inbox driver)	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	N/A	4.16.8.8	4.16.10.3	4.16.10.3	
Mellanox ConnectX-5 Lx EN 100GbE dual-port QSFP28, PCIe x16	Firmware	N/A	N/A	N/A	N/A	Listed on VMware HCL as: "ConnectX®-5 Ex EN network interface card, 100GbE dual-port QSFP28 (MCX516A-CCAT)"
	nmlx4_core Driver (ESXi)	N/A	N/A	N/A	N/A	
	nmlx5_core Driver (ESXi)	N/A	N/A	N/A	N/A	
HBA Controller						
Emulex LPe31002 FC HBA	Firmware	11.2.156.27	11.2.156.27	11.2.156.27	11.2.156.27	
	lpfc Driver (ESXi)	11.2.266.0	11.2.266.0	11.2.266.0	11.2.266.0	
Emulex LPe32002 FC HBA	Firmware	11.2.156.27	11.2.156.27	11.2.156.27	11.2.156.27	
	lpfc Driver (ESXi)	11.2.266.0	11.2.266.0	11.2.266.0	11.2.266.0	
RAID Controller						
Broadcom SAS3516 2GB RAID Mezzanine	Firmware	N/A	N/A	N/A	N/A	
	lsi-mr3 Driver (ESXi)	N/A	N/A	N/A	N/A	
SAS Controller						
QS-3216 Mezz Card	Firmware	N/A	N/A	N/A	N/A	Only for DS120 and DS220
	lsi_msgpt3 Driver (ESXi)	N/A	N/A	N/A	N/A	
Broadcom SAS9305-16i PCIe (only for DS225)	Firmware	N/A	N/A	N/A	N/A	Only for DS225
	lsi_msgpt3 Driver (ESXi)	N/A	N/A	N/A	N/A	
Drives for vSAN Cache and Capacity (Options) for DS120/220/225						
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
Intel SSD DC P3600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	Not compatable with DS225
Intel SSD DC P4500 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	Not compatable with DS225
Intel SSD DC P4510 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	Not compatable with DS225
Intel SSD DC P4600 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	Not compatable with DS225
Intel SSD DC P4610 Series (NVMe, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	Not compatable with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 375GB, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	Not compatable with DS225
Intel Optane SSD DC P4800X Series NVMe (NVMe, 750GB, 2.5" U2) (All except DS225)	Firmware	N/A	N/A	N/A	N/A	Not compatable with DS225
NVMe Driver	Driver (ESXi)	N/A	N/A	N/A	N/A	
Intel SSD DC S4500 Series	Firmware	N/A	N/A	N/A	N/A	Requires SAS Controller
Intel SSD DC S4510 Series	Firmware	N/A	N/A	N/A	N/A	Requires SAS Controller
Intel SSD DC S4600 Series	Firmware	N/A	N/A	N/A	N/A	Requires SAS Controller
Intel SSD DC S4610 Series	Firmware	N/A	N/A	N/A	N/A	Requires SAS Controller
Samsung SATA SSD PM863a Series	Firmware	N/A	N/A	N/A	N/A	Requires SAS Controller
Seagate SASIII HDD 10000 rpm, 2.5 inch	Firmware	N/A	N/A	N/A	N/A	Requires SAS Controller
Seagate SASIII HDD 7200 rpm, 3.5 inch (only for DS220 3.5 SKU)	Firmware	N/A	N/A	N/A	N/A	Requires SAS Controller
GPU for DS225						
Components		**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
NVIDIA Tesla M10	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	N/A	
NVIDIA Tesla M60	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	N/A	
NVIDIA Tesla P40	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	N/A	
NVIDIA Tesla V100	Nvidia Virtual GPU Software for vSphere	N/A	N/A	N/A	N/A	

FC Switches

Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Brocade	G620	v8.1.0b	v8.1.0b	v8.1.0b	v8.1.0b	

Ethernet Switches

Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Quanta	LB9 Mgmt Switch	N/A	N/A	N/A	N/A	
Cisco	Nexus 3048	7.0(3)I4(6)	7.0(3)I4(6)	7.0(3)I4(6)	7.0(3)I4(6)	
Cisco	Nexus 93180LC-EX	7.0(3)I7(1)	7.0(3)I7(1)	7.0(3)I7(1)	7.0(3)I7(1)	
Cisco	Nexus 93180YC-EX	7.0(3)I4(6)	7.0(3)I4(6)	7.0(3)I4(6)	7.0(3)I4(6)	
Cisco	Nexus 9332PQ	N/A	N/A	N/A	N/A	

Storage Models

	Models	Microcode Versions	Microcode Versions	Microcode Versions	Microcode Versions	Notes
VSP	G200	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	83-04-26-20/00	
VSP	G400	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	G600	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	G800	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	
VSP	F400	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	F600	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	83-04-26-40/00	
VSP	F800	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	83-04-26-60/00	
VSP	G350	N/A	N/A	N/A	88-01-04-x0/00	
VSP	G370	N/A	N/A	N/A	88-01-04-x0/00	
VSP	G700	N/A	N/A	N/A	88-01-04-x0/00	
VSP	G900	N/A	N/A	N/A	88-01-04-x0/00	
VSP	F350	N/A	N/A	N/A	88-01-04-x0/00	
VSP	F370	N/A	N/A	N/A	88-01-04-x0/00	
VSP	F700	N/A	N/A	N/A	88-01-04-x0/00	
VSP	F900	N/A	N/A	N/A	88-01-04-x0/00	

* Minimum Level or above

Software

Software Versions						
Vendor	**Component**	**Versions**	**Versions**	**Versions**	**Versions**	**Notes**
VMware	ESXi	6.5U1 (Build # 5969303)	6.5U1 (Build # 6765664)	6.5U1 (Build # 7388607)	6.5U2 (Build # 8294253)	
VMware	vCenter(VCSA)	6.5U1 (Build # 5973321)	6.5U1 (Build # 5973321)	6.5U1e (Build # 7515524)	6.5U2 (Build # 8307201)	
VMware	VSAN	N/A	N/A	N/A	N/A	
Hitachi	UCP Advisor	2.0	2.5	2.5	2.5	* Requires at least VCSA 6.5U2c
Downloadable ZIPs						
Vendor	**Component**	**Filename**	**Filename**	**Filename**	**Filename**	**Notes**
Hitachi	Ethernet Network Firmware ZIP	N/A	N/A	N/A	N/A	
Hitachi	Storage Network Firmware ZIP	N/A	N/A	N/A	N/A	
Hitachi	Server Firmware ZIP	N/A	N/A	N/A	N/A	
Hitachi	Vmware Software ZIP	N/A	N/A	N/A	N/A	
Hitachi	UCPToolkit ZIP	N/A	N/A	N/A	N/A	
Main Mediakit ZIP						
Vendor	**Component**	**Filename**	**Filename**	**Filename**	**Filename**	**Notes**
Hitachi	UCP CI Mediakit	N/A	N/A	N/A	N/A	