Last update:
12/6/18

Hitachi Unified Compute Platform CI for VMware interoperability Matrix

UCP CI

Hardware

UCP CI [Release Version]	v1.0.1	v1.1	v1.1.1	v1.1.0	v2.0.0	v2.0.1	v2.1.0			
Release date	September 8, 2017	February 5th, 2018	April 5, 2018	June 4th, 2018	August 6th, 2018	September 17th, 2018	November 19th, 2018			
Major vSphere Release	6.5U1	6.5U1	6.5U1	6.5U2	6.5U2	6.5U2	6.0U3	6.5U2	6.7U1	
Management and Compute Nodes :	**Hitachi Advanced Server DS120**									
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	1A08.H2	1A08.H2	1A03.H3	1A03.H3	1A03.H7	1A03.H8	1A03.H8	1A03.H8	1A03.H8	
BMC	4.19.06	4.19.06	4.75.06	4.75.06	4.23.06	4.23.06	4.23.06	4.23.06	4.28.06	
CPLD	Rev10	Rev10	Rev10	Rev10	Rev10	Rev10	Rev10	Rev10	Rev10	
CPU Family	Skylake	Skylake	Skylake	Skylake	Skylake	Skylake	Skylake	Skylake	Skylake	
Compute Nodes :	**Hitachi Advanced Server DS220**									
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	N/A	N/A	N/A	N/A	1A03.H7	1A03.H8	1A03.H8	1A03.H8	1A03.H8	
BMC	N/A	N/A	N/A	N/A	4.23.06	4.23.06	4.23.06	4.23.06	4.28.06	
CPLD	N/A	N/A	N/A	Rev10	Rev10	Rev10	Rev10	Rev10	Rev10	
CPU Family	N/A	N/A	N/A	Skylake	Skylake	Skylake	Skylake	Skylake	Skylake	
Compute Nodes :	**Hitachi Advanced Server DS225**									
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1A03.H8	1A03.H8	
BMC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.23.06	4.28.06	
CPLD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Rev10	Rev10	
CPU Family	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Skylake	Skylake	
Compute Nodes :	**Hitachi Advanced Server DS240**									
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
BIOS	N/A	N/A	N/A	N/A	1A02.H1	1A02.H2	N/A	1A02.H2	1A02.H2	
BMC	N/A	N/A	N/A	N/A	4.23.06	4.23.06	N/A	4.23.06	4.28.06	
CPLD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
CPU Family	N/A	N/A	N/A	N/A	Skylake	Skylake	N/A	Skylake	Skylake	
I/O Card Support for DS120/220/225/240										
Components	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
Network Cards (Options)										
Intel X527-DA2, 10GbE quad-port, DCP Mez	Firmware	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	Listed on VMware HCL as:
	i40en Driver (ESXi)	1.3.1 (inbox driver)	1.3.1 (inbox driver)	1.3.1	1.3.1	1.3.1	1.3.1	1.3.1	1.3.1	"Intel(R) Ethernet Connection X722 for 10GbE SFP+"
Intel X557-T4, 10GBase-T quad-port, DCP Mez	Firmware	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	Listed on VMware HCL as:
	i40en Driver (ESXi)	1.3.1 (inbox driver)	1.3.1 (inbox driver)	1.3.1	1.3.1	1.3.1	1.3.1	1.3.1	1.3.1	"Intel(R) Ethernet Connection X722 for 10GBASE-T"
Intel X557-SD-DA2, 10/1Gb/40Gbit dual-port, PCIe	Firmware	N/A	N/A	N/A	6.0.1	6.0.1	6.0.1	6.0.1	6.0.1	
	i40en Driver (ESXi)	N/A	N/A	N/A	1.3.1	1.3.1	1.3.1	1.3.1	1.3.1	
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, OCP Mez(except DS240)	Firmware	14.18.1000	14.18.1000	14.20.1010	14.20.1010	14.20.1010	14.20.1010	14.20.1010	14.20.1010	"EN 25GbE ConnectX-4 LX EN Dual port"
	mlnx4_core Driver (ESXi)	1.16.0.0-1 (inbox driver)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	net-mlx4_core Driver (ESXi)	4.16.8.8	4.16.10.3	4.16.10.3	4.16.10.3	4.16.10.3	4.15.10.3	4.16.10.3	4.17.14.2	For 14.21.1000 supported with driver 4.16.12.12 Async driver
Mellanox ConnectX-4 Lx EN 10/25GbE dual-port SFP28, LP-MEZ (PCIe)	Firmware	14.18.1000	14.18.1000	14.20.1010	14.20.1010	14.20.1010	14.20.1010	14.20.1010	14.20.1010	Listed on VMware HCL as:
	mlnx4_core Driver (ESXi)	1.16.0.0-1 (inbox driver)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	"ConnectX-4 Lx VK/MC; 25GbE; dual-port SFP28; (MCX4121A-ACAT
	net-mlx4_core Driver (ESXi)	N/A	4.16.8.8	4.16.10.3	4.16.10.3	4.16.10.3	4.15.10.3	4.16.10.3	4.17.14.2	
HBA Controller										
Emulex LPe31002-M6 FC HBA	Firmware	11.2.156.27	11.2.156.27	11.2.156.27	11.2.156.27	11.2.156.27	11.2.156.27	11.4.204.27	11.4.204.27	11.4.204.27
	lpfc Driver (ESXi)	11.2.266.0	11.2.266.0	11.2.266.0	11.2.266.0	11.2.266.0	11.2.266.0	11.4.329.0	11.4.329.0	11.4.341.0
Emulex LPe32002-M2 FC HBA	Firmware	11.2.156.27	11.2.156.27	11.2.156.27	11.2.156.27	11.2.156.27	11.2.156.27	11.4.204.27	11.4.204.27	11.4.204.27
	lpfc Driver (ESXi)	11.2.266.0	11.2.266.0	11.2.266.0	11.2.266.0	11.2.266.0	11.2.266.0	11.4.329.0	11.4.329.0	11.4.341.0
DAS Controller										
Broadcom SAS3516 2GB RAID Mezzanine (only for DS240)	Firmware	N/A	N/A	N/A	N/A	5.040.00-1123	5.040.00-1123	N/A	5.040.00-1123	5.040.00-1123
	lsi-mr3 Driver (ESXi)	N/A	N/A	N/A	N/A	7.704.7.0	7.704.7.0	N/A	7.704.7.0	7.704.7.0
SAS Controller										
SD-3216 Mezz Card	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.0 (31.00.00.00)	16.0 (31.00.00.00)
	lsi_msgpt3 Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.00.00.00-1OEM	16.00.00.00-1OEM
Broadcom SAS9305-16i PCIe (only for DS225)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.00.00.00	11.00.00.00
	lsi_msgpt3 Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	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	Versions	Versions	Notes
Intel SSD DC P4600 Series (NVMe)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Intel SSD DC P4500 Series (NVMe)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	QDV10140, QDV10101	QDV10140, QDV10101
	Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	nvme-nvme-wind 1.4.0.1016 (Async driver)	nvme-nvme-wind 1.4.0.1016 (Async driver)
Intel SSD DC P4510 Series (NVMe)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	P4500: QDV10101, P4510: VDV10131	P4500: QDV10101, P4510: VDV10131
	Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	nvme-nvme-wind 1.4.0.1016 (Async driver)	nvme-nvme-wind 1.4.0.1016 (Async driver)
Intel Optane SSD DC P4800X Series NVMe (375 GB, 2.5" U2)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E2010435	E2010435
	Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	nvme-nvme-wind 1.4.0.1016 (Async driver)	nvme-nvme-wind 1.4.0.1016 (Async driver)
Intel Optane SSD DC P4800X Series NVMe (750 GB, 2.5" U2)	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	E2010435	E2010435
	Driver (ESXi)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	nvme-nvme-wind 1.4.0.1016 (Async driver)	nvme-nvme-wind 1.4.0.1016 (Async driver)
Intel SSD DC S4600 Series	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	SCV10121	SCV10121
Intel SSD DC S4500 Series	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	SCV10121	SCV10121
Samsung SATA SSD PM863a Series	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	GXT3Q0A1	GXT3Q0A1
Seagate SAS 10k rpm 2.5"	Firmware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0004	0004

FC Switches

Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Brocade	DS-6	v8.1.0b	v8.1.0b	v8.1.0b	v8.1.0b	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	Firmware Versions	Firmware Versions	Notes
Cisco	Nexus 3048	7.0(3)I4(6)	7.0(3)I4(6)	7.0(3)I4(6)	7.0(3)I4(6)	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)	
	Nexus 93180LC-EX	7.0(3)I7(5)	7.0(3)I7(5)	7.0(3)I7(5)	7.0(3)I7(5)	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)	
	Nexus 9336PQ ACI	7.0(3)I4(6)	7.0(3)I4(6)	7.0(3)I4(6)	7.0(3)I4(6)	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)	

Storage Models

	Models	Microcode Versions	Microcode Versions	Microcode Versions	Microcode Versions	Microcode Versions	Microcode Versions	Microcode Versions*	Microcode Versions*	Microcode Versions*	Notes
VSP	G900	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	83-04-26-20/00	
	G800	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	83-04-26-40/00	
	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	83-04-26-40/00	
	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	83-04-26-40/00	
	F900	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	83-04-26-40/00	
	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	83-04-26-40/00	
	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	83-04-26-40/00	
	G350	N/A	N/A	N/A	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	
	G370	N/A	N/A	N/A	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	
	G350	N/A	N/A	N/A	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	
	G800	N/A	N/A	N/A	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	
	F350	N/A	N/A	N/A	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	
	F370	N/A	N/A	N/A	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	
	F350	N/A	N/A	N/A	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	
	F900	N/A	N/A	N/A	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	88-01-04-v0/00	

* Minimum Level or above

Software

Vendor	Component	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Versions	Notes
Vmware	ESXi	6.5U1 (Build #5969303)	6.5U1 (Build #6764646)	6.5U1 (Build #7388607)	6.5U2 (Build #8294253)	6.5U2 (Build #8294253)	6.5U2 (Build #8294722)	6.0U3 (Build #10474991)	6.5U2 (Build #10993116)	6.7U1 (Build #10302608)	
VMware	vCenter(VCSA)	6.5U1 (Build #5973321)	6.5U1 (Build #6973321)	6.5U1a (Build #7515124)	6.5U2 (Build #8307201)	6.5U2 (Build #8307201)	6.5U2c (Build #9451637)	N/A	6.5U2c (Build #9451637)	6.7U1 (Build #10244761)	
Hitachi	UCP Advisor	1.0	1.1	1.5	1.5	2.7	2.7	2.8*	2.8	2.8	* Requires at least VCSA 6.5U2c

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