

Oracle UCP CI Composable and XaaS Interoperability Matrix

UCP CI (Release Version)		Hardware			
Release date		v9 Aug. 2019		v10 Nov. 2019	v11 Feb. 2020
Management Nodes :		Hitachi Advanced Server DS120			
Components		Versions	Versions	Versions	Notes
BIOS		3A10.H8	3A10.H8	55BH3B14.H01	
BMC		4.23.06	4.23.06	4.62.06	
CPLD		Rev10	Rev10	Rev11	
CPU Family		Skylake			
Compute Nodes :		Hitachi Advanced Server DS220			
Components		Versions	Versions	Versions	Notes
BIOS		55BH3B14.H01	55BH3B14.H01	55BH3B14.H01	
BMC		4.62.06	4.62.06	4.62.06	
CPLD		Rev11	Rev11	Rev12	
CPU Family		Cascade lake			
Compute Nodes :		Hitachi Advanced Server DS240			
Components		Versions	Versions	Versions	Notes
BIOS		N/A	N/A	N/A	
BMC		N/A	N/A	N/A	
CPLD		N/A	N/A	N/A	
CPU Family		Cascade lake			
I/O Card Support for DS120/220/240		Versions	Versions	Versions	Notes
Network Cards (Options)					
Management Nodes DS120	Firmware	6.0.1	6.0.1	6.8	
Intel XXV710-DA2, 25GbE dual-port, PCIe	i40m Driver (ESX)	1.5.6 (inbox driver)	1.5.6 (inbox driver)	1.5.6 (inbox driver)	
Compute Nodes DS220	Firmware	6.0.2	6.0.2	6.0.2	
Intel XXV710-DA2, 25GbE dual-port, PCIe	i40e Driver (OV5)	2.1.14-k (inbox driver)	N/A (Using OLVN instead of OVM)	2.1.14-k (inbox driver)	
	i40e Driver (OL)	N/A	2.7.6-k (inbox driver)	N/A	
Compute Nodes DS240	i40e Driver (RHEL)	2.3.2-k	N/A	N/A	
	Firmware	N/A	N/A	N/A	
Intel XXV710-DA2, 25GbE dual-port, PCIe	i40e Driver (OV5)	N/A	N/A	N/A	
	i40e Driver (RHEL)	N/A	N/A	N/A	
HBA Controller					
Emulex LPe31002 FC HBA - DS120 Management Nodes	Firmware	11.4.204.27	11.4.204.27	12.0.193.13	
	igfc Driver (ESX)	11.4.341.0	11.4.341.0	12.0.193.14	
Emulex LPe31002 or LPe32002 FC HBA - DS220 Compute Nodes	Firmware	12.0.193.13(OVM tested, composable supported), 12.2.299.14(composable tested)	12.4.243.17 (OLVM), 12.0.261.9 or 12.2.299.23 (OL/RHEL)	12.4.243.17 (OVM), 12.0.261.9 or 12.2.299.23 (OL/RHEL)	
	igfc Driver (OV5)	11.4.40.7	N/A (Using OLVN instead of OVM)	12.0.0.10 (OVM)	
	igfc Driver (OL)	N/A	12.0.0.10 (inbox drive)	12.0.0.10 (inbox drive)	
	igfc Driver (RHEL)	12.0.0.5	N/A	N/A	
Emulex LPe31002 or LPe32002 FC HBA - DS240 Compute Nodes	Firmware	N/A	N/A	N/A	
	igfc Driver (OV5)	N/A	N/A	N/A	
	igfc Driver (RHEL)	N/A	N/A	N/A	
RAID Controller					
Broadcom SAS3516 2GB RAID Mezzanine	Firmware	5.020.00-0910	N/A	N/A	GS3516 supported but not tested
	Driver	N/A	N/A	N/A	
FC Switches					
Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Brocade	G620	v8.2.0b	v8.2.0b	v8.2.0b	
Ethernet Switches					
Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Notes
Cisco	Nexus 3048	7.0(3)(4/7)	7.0(3)(4/7)	7.0(3)(4/7)	
	Nexus 93180YC-EX	7.0(3)(4/7)	7.0(3)(4/7)	7.0(3)(7)(6)	
Storage Models					
	Models	Minimum Microcode Versions			Notes
	G200				
	G400				
	G600				
	G800				
	F400				
	F600				
	F800				
	G350				
	G370				
	G700				
	G900	88-02-03-80/00			
	F350				
	F370				
	F700				
	F900	88-02-03-80/00			
	G1500	N/A			
	F1500	N/A			
	S500 (SAS)		90-01-41-00/00	90-01-52-00/00	
	S500 (NVMe)		90-01-61-00/00	90-01-61-00/00	
Software					
Vendor	Component	Versions			Notes
VMware	ESXi	6.7.0 Build 10302608			
	vCenter (VCSA)	6.7.0 Build 10302608			
Red Hat	RHEL		7.6	7.6	Oracle RAC 19c support is BRE (with Oracle ASMlib related packages) 1) kmod-oracleasm-2.0.8-26.el7.x86_64 2) oracleasm-lib-2.0.12-1.el7.x86_64 3) oracleasm-support-2.1.11-2.el7.x86_64
Oracle	OL (Oracle Linux)	N/A	7.6 with UEK kernel update 4.14.35-1933.el7uek.x86_64	7.6 with UEK kernel update 4.14.35-1933.el7uek.x86_64	
Oracle for XaaS	Oracle VM Server	3.4.6	OL 7.6 with KVM (OLVM release)	3.4.6.1	
	Oracle VM Manager	3.4.6	OLVM 4.2.8	3.4.6.1	
	OS on VMs	Any supported by Oracle	OL 7.6	OL 7.7	
Oracle Database	Oracle	12c Release 2 (12.2.1.0), 18.4.0.0(Oracle for XaaS)	19.3.0.0(XaaS)	19.5.0.0(XaaS)	
	Oracle Real Application	12c Release 2 (12.2.1.0), 18.4.0.0(Oracle for XaaS)	19.3.0.0(XaaS)	19.5.0.0(XaaS)	
	Oracle Grid Infrastructure	12c Release 2 (12.2.1.0), 18.4.0.0(Oracle for XaaS)	19.3.0.0(XaaS)	19.5.0.0(XaaS)	
Hitachi Command Suite			N/A	N/A	
Hitachi Automation Director (HAD)		8.5.5-01	N/A	N/A	
Hitachi Storage Advisor (ISA)		3.4.1	N/A	N/A	
Hitachi Infrastructure Analytics Advisor (HIAA)		4.4.0-00	N/A	N/A	
Hitachi Data Center Analytics (HDCA) Server		9.4.0-00	N/A	N/A	
Hitachi Data Center Analytics Probe Server		9.4.0-00	N/A	N/A	
Hitachi Ops Center			10.0.0	10.0.0	Only applicable to UCP CI v10
Manager for Hitachi adapters for Oracle Database		Not supported			due to issues with current quanta FW release
Hitachi Storage Adapter for Oracle Enterprise Manager		Not supported			due to issues with current quanta FW release
Hitachi Server Adapter for Oracle Enterprise Manager		Not supported			due to issues with current quanta FW release
Oracle Enterprise Manager Cloud Control 13c		13c Release 2 (13.2.0.0)	N/A	13c Release 2 (13.2.0.0)	
Oracle Enterprise Manager Cloud Control 13c plugins		13c Release 2	N/A	13c Release 2	

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UCP CI (Release Version) Release date		Hardware			
		v5 November, 2017	v6 July, 2018	v7 October, 2018	v8 Feb. 2019
Management Nodes : Components		Hitachi Advanced Server DS120			
CPUs Family		Skylake			
Compute Nodes : Components		Hitachi Advanced Server DS220			
CPUs Family		Skylake			
Compute Nodes : Components		Hitachi Advanced Server DS240			
CPUs Family		Skylake			
I/O Card Support for DS120/220/240 Components					
Network Cards (Options)					
Management Nodes DS120	Firmware	5.51	5.51	5.51	6.0.1
Intel XXV710-DA2, 25GbE dual-port, PCIe	i40em Driver (ESK)	1.3.1 (inbox driver)	1.3.1 (inbox driver)	1.3.1 (inbox driver)	1.5.6 (inbox driver)
Compute Nodes DS220	Firmware	5.51	5.51	5.51	6.0.2
Intel XXV710-DA2, 25GbE dual-port, PCIe	i40e Driver (OVS)	1.6.21-k	1.6.21-k	no Oct 2018 release	2.1.14-k (inbox driver)
	i40e Driver (DL)	N/A	2.1.26	2.1.26	2.1.14-k
	i40e Driver (RHEL)	1.6.21-k	2.1.26	2.1.26	2.1.14-k
Compute Nodes DS240	Firmware	N/A	5.51	5.51	N/A
Intel XXV710-DA2, 25GbE dual-port, PCIe	i40e Driver (OVS)	N/A	N/A	no Oct 2018 release	N/A
	i40e Driver (RHEL)	N/A	2.1.14-k	2.1.14-k	N/A
HBA Controller					
Emulex LP31002 FC HBA - DS120 Management Nodes	Firmware	11.2.156.27	11.2.156.27	11.2.156.27	11.4.204.27
	igfc Driver (ESK)	11.1.0.6	11.1.0.6	11.1.0.6	11.1.0.6
Emulex LP31002 or LP32002 FC HBA - DS220 Compute Nodes	Firmware	11.2.156.27	11.2.156.27	11.2.156.27	11.4.204.25
	igfc Driver (OVS)	11.2.0.5	11.2.0.5	no Oct 2018 release	11.4.0.7
	igfc Driver (DL)	N/A	11.2.0.5	11.2.0.5	11.4.0.7
	igfc Driver (RHEL)	11.2.0.6	11.2.0.6	11.2.0.6	11.4.204.26
Emulex Lpe 31002 or LP32002 FC HBA - DS240 Compute Nodes	Firmware	N/A	11.4.204.25	11.4.204.25	N/A
	igfc Driver (OVS)	N/A	N/A	N/A	N/A
	igfc Driver (RHEL)	N/A	11.4.204.26	11.4.204.26	N/A
RAID Controller					
Broadcom SAS3516 2GB RAID Mezzanine	Firmware	5.020.00-0910	5.020.00-0910	5.020.00-0910	5.020.00-0910
	Driver	N/A	N/A	N/A	N/A
FC Switches					
Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions
Brocade	GG20	v8.0.1	v8.0.1	v8.2.0b	v8.2.0b
Ethernet Switches					
Vendor	Models	Firmware Versions	Firmware Versions	Firmware Versions	Firmware Versions
Nexus	3048	7.0(3)(4)(7)	7.0(3)(4)(7)	7.0(3)(4)(7)	7.0(3)(4)(7)
Cisco	Nexus 9318BYC-EX	7.0(3)(4)(7)	7.0(3)(4)(7)	7.0(3)(4)(7)	7.0(3)(4)(7)
Storage Models					
Vendor	Models	Minimum Microcode Versions	Minimum Microcode Versions	Minimum Microcode Versions	Notes
C200	G200	83-04-47	83-04-47		
	G400	83-04-47	83-04-47		
	G600	83-04-47	83-04-47		
	G800	83-04-47	83-04-47		
	F400	83-04-47	83-04-47		
	F600	83-04-47	83-04-47		
	F800	83-04-47	83-04-47		
	G350	N/A	88-01-03	88-02-03-20/00	
	G370	N/A	88-01-03	88-01-03	
	G700	N/A	88-01-03	88-01-03	
	G800	N/A	88-01-03	88-02-03-60/00	88-02-03-60/00
	F350	N/A	88-01-03	88-02-03-20/00	
	F370	N/A	88-01-03	88-01-03	
	F700	N/A	88-01-03	88-01-03	
	F800	N/A	88-01-03	88-02-03-60/00	88-02-03-60/00
	G1500	N/A	TBD	80-06-41-00/00	N/A
	F1500	N/A	TBD	80-06-41-00/00	N/A
	S500 (SAS)				
	S500 (NVMe)				
Software					
Vendor	Component	Version	Version	Version	Version
VMware	ESXi	6.5.0 Build 488730	6.5.0 Build 6765664	Version 6.5.0 Build 6765664	6.7.0 Build 10302608
	vCenter (VCSA)	6.5.0 Build 488730	6.5.0 Build 7515524	6.5.0 Build 7515524	6.7.0 Build 10302608
Red Hat	RHEL		7.4	7.4	7.5
Oracle	OL (Oracle Linux)		3.4.4		3.4.5
	Oracle VM Server	3.4.4	3.4.4	no Oct 2018 release	3.4.5
	Oracle VM Manager	3.4.4	3.4.4	no Oct 2018 release	3.4.5
Oracle for XaaS	OS on VMs	Any supported by Oracle	Any supported by Oracle	Any supported by Oracle	Any supported by Oracle
Oracle Database	Oracle	12c Release 1 (12.1.0.2.0)	12c Release 1 (12.1.0.2.0)	12c Release 2 (12.2.1.0)	12c Release 2 (12.2.1.0)
	Oracle Real Application	12c Release 1 (12.1.0.2.0)	12c Release 1 (12.1.0.2.0)	12c Release 2 (12.2.1.0)	12c Release 2 (12.2.1.0)
	Oracle Grid Infrastructure	12c Release 1 (12.1.0.2.0)	12c Release 1 (12.1.0.2.0)	12c Release 2 (12.2.1.0)	12c Release 2 (12.2.1.0)
Hitachi Command Suite		8.5.2	8.5.2		
Hitachi Automation Director (HAD)		8.5.2-03	8.5.2-03	8.6.3-00	8.6.3-00
Hitachi Storage Advisor (HSA)		2.1.0		2.3	2.3
Hitachi Infrastructure Analytics Advisor (HIAA)			2.1	3.1	4.2.0-01
Hitachi Data Center Analytics (HDC) Server			8.1	9.1.0-01	9.2.0-01
Hitachi Data Center Analytics Probe Server			8.1	9.1.0-01	9.2.0-01
Hitachi Ops Center					
Manager for Hitachi adapters for Oracle Database		2.0.0	2.2.0	2.2.3	2.2.3
Hitachi Storage Adapter for Oracle Enterprise Manager		2.0.0	2.2.0	2.2.3	2.2.3
Hitachi Server Adapter for Oracle Enterprise Manager		2.0.0	2.2.0	2.2.3	2.2.3
Oracle Enterprise Manager Cloud Control 13c		13c Release 2 (13.2.0.0)	13c Release 2 (13.2.0.0)	13c Release 2 (13.2.0.0)	13c Release 2 (13.2.0.0)
Oracle Enterprise Manager Cloud Control 13c plugins		13c Release 2	13c Release 2	13c Release 2	13c Release 2