



Hitachi Unified Compute Platform for the SAP HANA Platform Support Matrix

Note: Configurations added since the last matrix will be shown in **red** text.

Introduction

Use this interoperability matrix to check whether a proposed customer configuration is supported. Hitachi Unified Compute Platform for the SAP HANA Platform support matrix is the official support matrix for Hitachi Unified Compute Platform for the SAP HANA platform (UCP for SAP HANA) in a scale-up or scale-out configuration. SAP Solutions Engineering at Hitachi Vantara validates this matrix. It covers the following:

- SAP-certified appliance configuration
- Supported server configuration for SAP HANA tailored data center integration (TDI)
- Validated enterprise storage configuration for SAP HANA TDI
- Supported operating system and upgrade path

If a combination does not appear on the OS support matrix, the customer's Hitachi Vantara Sales Engineer (SE) or other field service employee must submit an Interoperability Support Request in order to gain support for the new configuration.

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SAP-Certified Appliance Configuration
Certified Scale-up Appliance Configurations using Rack Mount Server

Configuration		Rack Mount Server	
		DS7000 (Skylake 8176 or 8176M or 8180 or 8180M)	DS220 (Skylake 8176 or 8176M)
RAM size		384 GB – 12 TB	2S/768 GB, 2S/1536 GB, 2S/3072 GB
NIC certified with Appliance		Mellanox Connect X4-LX	Intel NIC
HBA		Broadcom Lpe31002-M6	Broadcom Lpe31002-M6
Fusion-io ioDrive2			
RAID Card			Broadcom 9460-16i MegaRAID storage controller card
Internal Storage			1.92TB Intel S4500 SATA
Chassis or Rack Mount	DS7000	Supports SLES 12 SP2*, SLES 12 SP3*, RHEL 7.4*	
	DS220 (Internal Drive)		Supports SLES 12 SP2*, SLES 12 SP3*, RHEL 7.3*, RHEL 7.4*
Storage	AMS 2100		
	HUS 130		
	HUS VM		
	VSP G200	Supports SLES 12 SP2, SLES 12 SP3, RHEL 7.4*	

Certified Scale-up Appliance Configurations using Server Blade

Configuration		Server Blade			
		520X B3 (Broadwell E7 v4) **	520X B2 (Haswell E7 v3) **	520X B1 Ivy Bridge E7 v2) **	X57A2 **
RAM size		256 GB - 8 TB	128 GB - 6 TB	128 GB - 6 TB	256 GB -1 TB
NIC certified with Appliance		Intel NIC	Intel NIC	Emulex LOM	Intel NIC
HBA		Hitachi HBA	Hitachi HBA	Hitachi HBA	Emulex HBA
Fusion-io ioDrive2					Supported
RAID Card					
Internal Storage					
Chassis or Rack Mount	CB 2500	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*		
	CB 500			Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, , RHEL 7.3*, RHEL 7.4*	
	CB 2000				Supports SLES 11 SP4*
Storage	AMS 2100				Supports SLES 11 SP4*
	HUS 130				Supports SLES 11 SP4*
	HUS VM			Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*	
	VSP G200	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*		

* Indicates operating system general support active for the operating system listed.

** Indicates the product is EOL.

A blank indicates that the particular server or storage is not certified in that Unified Compute Platform for SAP HANA configuration.

**SAP-Certified Appliance Configuration
Certified Scale-out Configurations**

Configuration	Rack Mount Server		Server Blade			
	DS7040 (Skylake 8176 or 8176M or 8180 or 8180M)		520X B3 (Broadwell E7 v4) **	520X B2 (Haswell E7 v3) **	520X B1 Ivy Bridge E7 v2) **	X57A2 ** (Westmere E7)
RAM (per node)	4S/3 TB, 4S/1.5 TB		4S/512 GB, 4S/1 TB, 4S/1.5 TB, 4S/2 TB, 8S/1 TB, 8S/2 TB, 8S/3 TB, 8S/4 TB, 8S/6 TB, 8S/8 TB	4S/512 GB, 4S, 1 TB, 4S/1.5 TB, 4S/2 TB, 8S/1 TB, 8S/2 TB, 8S/3 TB, 8S/4 TB	4S/1 TB, 8S/2 TB	4S/0.5 TB, 8S/1 TB
NIC certified with appliance	Mellanox Connect X4-LX		Intel NIC	Intel NIC	Emulex LOM	Intel NIC
HBA	Broadcom Lpe31002-M6		Hitachi HBA	Hitachi HBA	Hitachi HBA	Emulex HBA
Chassis or Rack Mount	DS7040	Supports SLES 12 SP2*, RHEL 7.4*				
	CB 2500		Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL7.4*	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*		
	CB 500				Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*	
	CB 2000					Supports SLES 11 SP4
Storage	VSP G700	Supports 4S/3 TB, 4S/1.5 TB				
	VSP F700	Supports 4S/3 TB, 4S/1.5 TB				
	VSP				Supports 8S/2TB Nodes	Supports 4S/0.5 TB, 8S/1 TB nodes
	HUS VM				Supports 4S/1 TB nodes	
	VSP G800		Supports 4S/512 GB, 4S/1 TB, 4S/1.5 TB, 4S/2 TB, 8S/1 TB, 8S/2 TB, 8S/3 TB, 8S/4 TB, 8S/6 TB, 8S/8 TB	Supports 4S/512 GB, 4S, 1 TB, 4S/1.5 TB, 4S/2 TB		
	VSP G1000			Supports 8S/1TB, 8S/2TB, 8S/3 TB, 8S/4 TB		
Hitachi NAS Platform	HNAS 3080 (EOL)				Supported	Supported
	HNAS 4060		Supported	Supported	Supported	Supported
SMU	Physical (EOL)			Supported	Supported	Supported
	Virtual		Supported	Supported	Supported	Supported
Switches	VDX6720-48		Supported	Supported	Supported	Supported
	VDX6720-24 (EOL)				Supported	Supported
	ICX-6430-48		Supported	Supported	Supported	Supported
	ICX-6430-24		Supported	Supported	Supported	Supported
	Cisco Nexus 93180YC-EX switch	Supported				
	Cisco Nexus 3048 switch	Supported				
Super scale-out		Contact Engineering for support details	Contact Engineering for support details			

* Indicates operating system general support active for the operating system listed.

** Indicates the product is EOL.

A blank indicates the particular server or storage is not certified in that Unified Compute Platform for SAP HANA configuration.

**Supported Server Configuration for SAP HANA Tailored Data Center Integration (TDI) Solution
Bare Metal Scale-up or Scale-out SAP HANA TDI Solution**

Server Generation	Scale-up Configurations			Scale-out Configuration		
	Rack Mount	Blade Server Chassis		Rack Mount	Blade Server Chassis	
	DS7000 or DS220 or DS240	CB 2500	CB 500	DS7040	CB 2500	CB 500
520X B3 (Broadwell E7 v4)	N/A	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*	Not Supported	N/A	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.4*	Not Supported
520X B2 (Haswell E7 v3)	N/A	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*	Supports SLES 12, SLES 12 SP1, RHEL 7.2	N/A	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*	Not Supported
520X B1 (Ivy Bridge E7 v2)	N/A	Not Supported	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*	N/A	Not Supported	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, SLES 12 SP3*, RHEL 7.2, RHEL 7.3*, RHEL 7.4*
520H B4 (Broadwell E5 v4)	N/A	Supports SLES 12, SLES 12 SP1, RHEL 7.2	Supports SLES 12, SLES 12 SP1, RHEL 7.2	N/A	Not Supported	Not Supported
520H B3 (Haswell E5 v3)	N/A	Supports SLES 12, SLES 12 SP1, RHEL 7.2	Supports SLES 12, RHEL 7.2	N/A	Not Supported	Not Supported
520H B2 (Ivy Bridge E5 v2)	N/A	Not Supported	Supports SLES 12, RHEL 7.2	N/A	Not Supported	Not Supported
D51B-2U (Broadwell E5 v4)	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, RHEL 7.2	N/A	N/A	N/A	N/A	
D51B-2U (Haswell E5 v3)	Supports SLES 12, SLES 12 SP1, SLES 12 SP2*, RHEL 7.2*	N/A	N/A	N/A	N/A	
Hitachi Advanced Server DS220 (Skylake SP)	Supports SLES 12 SP2*, SLES 12 SP3*, RHEL 7.3*, RHEL 7.4*	N/A	N/A	N/A	N/A	
Hitachi Advanced Server DS240 (Skylake SP)	Supports SLES 12 SP3*, RHEL 7.4*	N/A	N/A	N/A	N/A	
Hitachi Advanced Server DS7020/DS7040/DS7080 (Skylake SP)	Supports SLES 12 SP2*, SLES 12 SP3*, RHEL 7.4*	N/A	N/A	N/A	N/A	
Hitachi Advanced Server DS7040 (Skylake SP)	N/A	N/A	N/A	Supports SLES 12 SP2*, RHEL 7.4*	N/A	

* Indicates operating system general support is active for the operating system listed.

For each server blade used for a scale-up or scale-out bare metal SAP HANA TDI implementation, the supported memory size is same as listed in the certified appliance configuration.

**Supported Server Configuration for SAP HANA Tailored Data Center Integration (TDI)
Virtualized TDI Solution for SAP HANA**

Server Configuration for VMware vSphere			
CPU Generation	Rack Mount	Scale-up Chassis	
		CB 2500	CB 500
DS7000 (SkylakeSP)	Supports ESXi 6.5 U2 SLES 12 SP3, RHEL 7.4		
DS220 (SkylakeSP)	Supports ESXi 6.5 U2 SLES 12 SP2, SLES12 SP3, RHEL 7.3, RHEL 7.4		
DS240 (SkylakeSP)	Supports ESXi 6.5 U2 SLES 12 SP3, RHEL 7.4		
520X B3 (Broadwell E7 v4)	NA	Supports ESX6.0.2, SLES 12, SLES 12 SP1, SLES 12 SP2, SLES 12 SP3, RHEL 7.2	Not Supported
520X B2 (Haswell E7 v3)	NA	Supports ESX6.0.2, SLES 12, SLES 12 SP1, SLES 12 SP2, RHEL 7.2	Not Supported
520X B1 (Ivy Bridge E7 v2)	NA	Not Supported	Supports VMware ESXi 5.5, SLES 11 SP3, RHEL 6.6

Server Configuration for a Virtualized TDI Solution for SAP HANA with LPAR		
Server Blade	Scale-up Chassis	
	CB 2500	CB 500
520X B3 (Broadwell E7 v4)	Supports HVM 9.6, SLES 12, SLES 12 SP1, RHEL 7.2	Not Supported
520X B2 (Haswell E7 v3)	Supports HVM 9.6, SLES 12, SLES 12 SP1, RHEL 7.2	Not Supported
520X B1 (Ivy Bridge E7 v2)	Not Supported	Supports SLES 11 SP3

Note — A virtualized scale-out and EP CPU solutions are not supported by Hitachi Vantara Engineering. Also, the LPAR activity is restricted. For any new requests contact ucpsappm@hitachivantara.com

Supported Storage Configuration for SAP HANA Tailored Data Center Integration (TDI) Solution

Hitachi Enterprise Storage	Number of Nodes Certified	Certification Scenario
VSP G200 with SAS HDD	2	HANA-HWC-ES 1.1
VSP G400 with SAS HDD	7	HANA-HWC-ES 1.0
VSP F400, VSP G400 with flash	16	HANA-HWC-ES 1.1
VSP G600 with SAS HDD	11	HANA-HWC-ES 1.0
VSP G800 with SAS HDD	16	HANA-HWC-ES 1.0
VSP G1000 with SAS HDD	16 per single frame	HANA-HWC-ES 1.1
VSP G1500 with SAS HDD	16 per single frame	HANA-HWC-ES 1.1
VSP F1500, VSP G1500 with flash	64 per single frame; 128 per dual frame	HANA-HWC-ES 1.1
VSP F600 or VSP G600 with flash	28	HANA-HWC-ES 1.1
VSP F600 or VSP G600 with SSD	28	HANA-HWC-ES 1.1
VSP F400 or VSP G400 with SSD	16	HANA-HWC-ES 1.1
VSP G200 with SSD	8	HANA-HWC-ES 1.1
VSP G350 with SAS HDD	3	HANA-HWC-ES 1.1
VSP G350, F350 with SSD	16	HANA-HWC-ES 1.1
VSP G370 with SAS HDD	3	HANA-HWC-ES 1.1
VSP G370, VSP F370 with SSD	16	HANA-HWC-ES 1.1
VSP G700 with SAS HDD	13	HANA-HWC-ES 1.1
VSP G700, VSP F700 with SSD	34	HANA-HWC-ES 1.1
VSP G900, VSP F900 with SSD	40	HANA-HWC-ES 1.1

[Refer to "SAP Note 1943937 — Hardware Configuration Check Tool - Central Note" for further details on the differences between HANA-HWC-ES 1.1 and HANA-HWC-ES 1.0.](#)

Supported Operating System and Upgrade Path

Operating Systems					
Operating System and Version	Skylake	Broadwell	Haswell	Ivy Bridge	Westmere
SUSE Linux Enterprise Server 11 SP1 (EOL)	No	No	No	No	Yes
SUSE Linux Enterprise Server 11 SP2 (EOL)	No	No	No	Yes	Yes
SUSE Linux Enterprise Server 11 SP3 (EOL)	No	No	Yes	Yes	Yes
SUSE Linux Enterprise Server 11 SP4*	No	No	SAP HANA certification only for B/S/H	SAP HANA certification only for BASF:	Yes (Upgrade only)
SUSE Linux Enterprise Server 12 (EOL)	No	Yes	Yes	Yes (Upgrade Only)	No
SUSE Linux Enterprise Server 12 SP1 (EOL)	No	Yes	Yes	Yes (Upgrade Only)	No
SUSE Linux Enterprise Server 12 SP2*	Yes (DS220, DS7000)	Yes	Yes (Upgrade Only)	Yes (Upgrade Only)	No
SUSE Linux Enterprise Server 12 SP3*	Yes (DS240, DS220, DS7000 scale-up only)	Yes (Upgrade Only)	Yes (Upgrade Only)	Yes (Upgrade Only)	No
Red Hat Enterprise Linux 6.5 (EOL)	No	No	No	Yes (scale-up only)	No
Red Hat Enterprise Linux 6.6 (EOL)	No	No	Yes	Yes	No
Red Hat Enterprise Linux 6.7 (EOL)	No	No	No	No	No
Red Hat Enterprise Linux 7.2 (EOL)	No	Yes	Yes	Yes (upgrade only)	No
Red Hat Enterprise Linux 7.3*	Yes (DS220 only)	Yes (upgrade for scale-up only)	Yes (upgrade only)	Yes (upgrade only)	No
Red Hat Enterprise Linux 7.4*	Yes (DS7000, DS240, DS220)	Yes (upgrade for scale-up only)	Yes (upgrade only)	Yes (upgrade only)	No
VMware ESXi 5.5 U1(EOL)	No	No	No	Yes	No
VMware ESXi 5.5 U2 (EOL)	No	No	Yes	Yes	No
VMware ESXi 6.0 U2*	No	Yes	Yes	Yes (Upgrade only)	No
VMware ESXi 6.5 U2*	Yes	No	No	No	No

* Indicates operating system general support active for the operating system listed.

Operating System Upgrade Path					
Upgrade Path	Skylake	Broadwell	Haswell	Ivy Bridge	Westmere
SUSE Linux Enterprise Server 11 SP1 to SUSE Linux Enterprise Server 11SP2	No	No	No	No	Yes
SUSE Linux Enterprise Server 11 SP2 to SUSE Linux Enterprise Server 11 SP3	No	No	No	Yes	Yes
SUSE Linux Enterprise Server 11 SP3 to SUSE Linux Enterprise Server 11 SP4	No	No	No	No	Yes
SUSE Linux Enterprise Server 11 SP3 to SUSE Linux Enterprise Server 12 SP0	No	No	Yes	Yes	No
SUSE Linux Enterprise Server 11 SP4 to SUSE Linux Enterprise Server 12 SP0	No	No	No	No	No
SUSE Linux Enterprise Server 11 SP3 to SUSE Linux Enterprise Server 12 SP1	No	No	Yes	Yes	No
SUSE Linux Enterprise Server 11 SP4 to SUSE Linux Enterprise Server 12 SP1	No	No	No	No	No
SUSE Linux Enterprise Server 12 SP0 to SUSE Linux Enterprise Server 12 SP1	No	Yes	Yes	Yes	No
SUSE Linux Enterprise Server 12 SP0 to SUSE Linux Enterprise Server 12 SP2	No	No	No	No	No
SUSE Linux Enterprise Server 12 SP1 to SUSE Linux Enterprise Server 12 SP2	No	Yes	Yes	Yes	No
SUSE Linux Enterprise Server 12 SP2 to SUSE Linux Enterprise Server 12 SP3	Yes (DS220 and DS7000 scale-up only)	Yes	Yes	Yes	No
Red Hat Enterprise Linux 6.5 to Red Hat Enterprise Linux 6.6	No	No	No	Yes (scale-up only)	No
Red Hat Enterprise Linux 6.6 to Red Hat Enterprise Linux 7.2	No	No	Yes	Yes	No
Red Hat Enterprise Linux 7.2 to Red Hat Enterprise Linux 7.3	No	Yes (scale-up only)	Yes	Yes	No
Red Hat Enterprise Linux 7.3 to Red Hat Enterprise Linux 7.4	Yes (DS220 scale-up only)	Yes (scale-up only)	Yes	Yes	No