



## Hitachi Solution for the SAP HANA Platform Firmware and Software Matrix

**Note:** Configurations added since the last support matrix release are shown in **red** text.

### Introduction

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

If a combination does not appear on the operating system 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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## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using Hitachi Advanced Server DS7000

**Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS7000 with Intel Cascade Lake Processors in a Scale-up Configuration using Hitachi Virtual Storage Platform F350, VSP G350**

Component		Version
Hitachi Advanced Server DS7000	Technical set	20.03 or higher
	BMC firmware version	33.32.03 (Build 4) or higher
	BIOS version	BIOS_CCL041.27.02.105 or higher
	Main FPGA	2.7.0.DBG0 or higher
	MP3CPLD	2.4.9.0 or higher
	MP3IOCPLD	2.6.0 or higher
	WEO FPGA	0.0.0.0 or higher
	WEO BCM	FF.0F or higher *
	PEB FLASH	2.B.9 or higher
DCPMM Firmware (for DCPMM only)		01.02.00.5321
Hitachi Virtual Storage Platform F350, VSP G350 (for appliance)		88-03-22-20/00 or higher
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)		88-03-22-x0/00 or higher
SAP HANA	SLES 12 SP4	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
Mellanox MT27710 10/25 GbE PCIe card driver	SLES 12 SP4	4.5-1.0.1 <del>or higher</del>
Mellanox MT27710 10/25 GbE PCIe card firmware		14.23.1020 <del>or higher</del>
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card	SLES 12 SP4	12.0.0-9 <del>or higher</del>
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware		12.0.261.15 <del>or higher</del>
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP4

\* With partitions containing multiple nodes, WEO BCM sometimes might show on master module as 1.00 and on slave module as FF.0F. This can be ignored.

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using Hitachi Advanced Server DS220

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS220 with Intel Cascade Lake procesors in a scale-up configuration using internal or external storage*

Component		Version
Hitachi Advanced Server DS220	Hitachi Rebranded BMC firmware revision	4.60.06 or higher
Hitachi Advanced Server DS220	Hitachi Rebranded BIOS version	S5BH3B13.H01 or higher
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)		88-03-22-x0/00 or higher
SAP HANA	SLES 12 SP4	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) driver	SLES 12 SP4	2.3.2-k or higher
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) firmware	SLES 12 SP4	5.51 or higher
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver (for external storage only)	SLES 12 SP4	12.0.0.9 or higher
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware (for external storage only)	SLES 12 SP4	12.0.261.15 or higher
QS3516 MegaRAID storage controller (RAID) card Driver (for internal SSD only)	SLES 12 SP4	07.704.04.00-rc1 or higher
QS3516 MegaRAID storage controller (RAID) card Firmware (for internal SSD only)	Package Version	50.6.0-1482 (MR 7.6)
	Firmware Version	5.060.00-1455 or higher
Intel S4510 SSD firmware Version		XCV10110
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP4

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using Hitachi Advanced Server

Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS7000 with Intel SkyLake processors in a scale-up configuration using Hitachi Virtual Storage Platform F350, VSP G350, VSP G200

Component		Version
Hitachi Advanced Server DS7000	Technical set	7.2 or higher
	BMC firmware version	33.27.02 (Build 6) or higher
	BIOS version	BIOS_SKL040.59.01.104 or higher
	Main FPGA	2.5.9.DBG1 or higher
	MP3CPLD	2.4.8.0 or higher
	MP3IOCPLD	2.6.0 or higher
	WEO FPGA	0.0.0.0 or higher
	WEO BCM	FF.0F or higher *
Hitachi Virtual Storage Platform F350, VSP G350 (for appliance)		88-03-22-20/00 or higher
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)		88-03-22-x0/00 or higher
Hitachi Virtual Storage Platform G200 (for appliance)		83-05-29-x0/00 or higher
SAP HANA	SLES 12 SP2	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 7.4	
	SLES 12 SP3	
Mellanox MT27710 10/25 GbE PCIe card driver	SLES 12 SP2	4.1-1.0.2 <del>or higher</del>
	RHEL	3.0-1 or higher
	SLES 12 SP3	4.4-2.0.7 <del>or higher</del>
Mellanox MT27710 10/25 GbE PCIe card firmware		14.21.1000 <del>or higher</del>
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	SLES 12 SP2	11.1.0.1 <del>or higher</del>
	RHEL 7.4	11.2.0.6 or higher
	SLES 12 SP3	11.4.0.7-4 <del>or higher</del>
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware		11.4.204.34 <del>or higher</del>
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP2 or SLES 12 SP3
Red Hat Enterprise Linux Server		7.4

\* With partitions containing multiple nodes, WEO BCM sometimes might show on master module as 1.00 and on slave module as FF.0F. This can be ignored.

## Hitachi Solution for the SAP HANA Platform in a Scale-out Configuration using Hitachi Advanced Server DS7040

Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS7040 in a scale-out configuration using Hitachi Virtual Storage Platform F700 or VSP G700

Component		Version
Hitachi Advanced Server DS7040	Technical set	7.2 or higher
	BMC firmware version	33.27.02 (Build 6) or higher
	BIOS version	BIOS_SKL040.59.01.104 or higher
	Main FPGA	2.5.9.DBG1 or higher
	MP3CPLD	2.4.8.0 or higher
	MP3IOCPLD	2.6.0 or higher
	WEO FPGA	0.0.0.0 or higher
	WEO BCM	FF.0F or higher
	PEB FLASH	2.B.9 or higher
Hitachi Virtual Storage Platform F700 or VSP G700		88-03-22-60/00 or higher
SAP HANA	HANA 2.0 SPS02	Refer to SAP Note 2235561 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	HANA 2.0 SPS03	
Mellanox MT27710 10/25 GbE PCIe card driver	SLES 12 SP2	4.1-1.0.2 or higher
	SLES 12 SP3	4.4-2.0.7
	RHEL 7.4	4.4-2.0.7 or higher
Mellanox MT27710 10/25 GbE PCIe card firmware	SLES 12 SP2	14.21.1000 or higher
	SLES 12 SP3	
	RHEL 7.4	14.23.1020 (MT_2420110004) or higher
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	SLES12SP2	11.1.0.1 or higher
	SLES12SP3	11.4.0.7-4
	RHEL 7.4	11.2.0.6 or higher
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware		11.4.204.34 or higher
Cisco 93180YC-EX switch	BIOS version	07.56 or higher
	NXOS version	7.0(3)4(7) or higher
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP2 with High Availability Extension
		SLES 12 SP3 with High Availability Extension
Red Hat Enterprise Linux Server		RHEL 7.4 with High Availability Add-on

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using Hitachi Advanced Server DS220

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS220 in a scale-up configuration using internal or external storage*

Component	Version		
Hitachi Advanced Server DS220 Hitachi Rebranded BMC firmware Revision	4.27.06 or higher		
Hitachi Advanced Server DS220 Hitachi Rebranded BIOS version	3A10.H8 or higher		
Hitachi Virtual Storage Platform Fx00 or VSP Gx00 (for TDI)	88-03-22-x0/00 or higher		
SAP HANA	SLES 12 SP2	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)	
	RHEL 7.3		
	SLES 12 SP3		
	RHEL7.4		
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) Driver	SLES12 SP4		
	SLES 12 SP2	2.1.26 <b>or higher</b>	
	RHEL 7.3	1.6.27-k_dup7.3 or higher	
	SLES 12 SP3	1.6.27-k <b>or higher</b>	
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) Driver	RHEL 7.4	2.1.14-k_dup7.4 <b>or higher</b>	
	SLES12 SP4	2.3.2-k	
	Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) firmware	5.51 <b>or higher</b>	
	Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	SLES 12 SP2	11.1.0.1 <b>or higher</b>
RHEL 7.3		11.1.0.2 or higher	
SLES 12 SP3		11.4.0.7-4 <b>or higher</b>	
RHEL 7.4		11.2.0.6 or higher	
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver	SLES12 SP4	12.0.0.9 or higher	
	Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware	12.0.261.15 <b>or higher</b>	
	Broadcom 9460-16i MegaRAID storage controller (RAID) PCIe card driver	SLES 12 SP2	07.702.06.00 <b>or higher</b>
		RHEL 7.3	07.702.06.00 or higher
SLES 12 SP3		07.701.17.00-rc1 <b>or higher</b>	
RHEL 7.4		07.704.04.00 or higher	
Broadcom 9460-16i MegaRAID storage controller (RAID) PCIe card driver	SLES12 SP4	07.704.04.00-rc1	
	Package version	50.3.0-0707 (MR 7.3)	
	Firmware version	50.30.00-0945 or higher	
	Intel S4500 SSD firmware version	SCV10121	
SUSE Linux Enterprise Server for SAP Applications	SLES 12 SP2 or SLES12 SP3 or SLES12 SP4		
Red Hat Enterprise Linux Server	RHEL 7.3 or RHEL 7.4		

## Hitachi Solution for the SAP HANA Platform in a Scale-up Configuration using Hitachi Advanced Server DS240

*Required software and firmware levels for Hitachi Solution for the SAP HANA Platform using Hitachi Advanced Server DS240 in a scale-up configuration using internal or external storage*

Component		Version
Hitachi Advanced Server DS240 Rebranded BMC firmware revision		4.23.06
Hitachi Advanced Server DS240 Rebranded BIOS version		3A02.H2
SAP HANA	SLES 12 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 7.4	Support_Matrix.pdf)
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) driver	SLES 12 SP3	1.6.27-k or higher
	RHEL 7.4	2.1.14-k_dup7.4 or higher
Intel XXV710 dual port SFP28 (LP-MD2) PCIe card (i40e) firmware		6.02 or higher
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card driver (for external storage only)	SLES 12 SP3	11.4.0.7-2 or higher
	RHEL 7.4	11.2.0.6 or higher
Broadcom 2-port LPe31002-M6 16 Gb/s HBA card firmware (for external storage only)		11.4.204.34 or higher
QS3516 MegaRAID storage controller (RAID) card driver (for internal SSD only)	SLES 12 SP3	07.701.17.00-rc1
	RHEL 7.4	07.704.04.0
QS3516 MegaRAID storage controller (RAID) card firmware (for internal SSD only)	Package Version	50.4.0-1036
	Firmware Version	5.040.00-1123
Intel S4500 SSD firmware version		SCV10121
SUSE Linux Enterprise Server for SAP Applications		SLES 12 SP3
Red Hat Enterprise Linux Server		RHEL 7.4

## Hitachi Unified Compute Platform 1000 for SAP HANA in a Scale-up Configuration using Haswell (HSW) or Broadwell (BDW) Processors in the Rack Optimized Server for Solutions, 2U Single Node

*Required software and firmware levels for Hitachi Unified Compute Platform 1000 for the SAP HANA Platform in a scale-up configuration using Haswell (HSW) or Broadwell (BDW) processors in the Rack Optimized Server for Solutions, 2U Single Node D51B-2U Server*

Component		Version
BMC firmware revision	HSW D51B-2U	3.38.00 or higher
	BDW D51B-2U	3.45.01 or higher
BIOS version	HSW D51B-2U	S2B_3A21 or higher
	BDW D51B-2U	S2B_3B04 or higher
BMC chipset	HSW D51B-2U	AST2400 or higher
	BDW D51B-2U	AST2400 or higher
SAP HANA	SLES 12	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
LSI/Avago MegaRAID CacheCade		CacheCade Pro 2.0 or higher
SUSE Linux Enterprise Server for SAP Applications		SLES 12 or SLES 12 SP1 or SLES 12 SP2 or SLES12 SP3
Red Hat Enterprise Linux Server		RHEL 7.2



## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-up Configuration using Hitachi Compute Blade 2500 Chassis, 520x B3 Server Blade, and Hitachi Virtual Storage Platform G200

Required software and firmware levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-up configuration using Hitachi Compute Blade 2500 with 520x B3 server blades and Hitachi Virtual Storage Platform G200

Component		Version
Hitachi Compute Blade 2500 SVP Firmware		A0310 or higher
Hitachi Compute Blade 2500 SEL Dictionary		A0105 or higher
520x B3 server blade BMC integrated Firmware		11-23 or higher
520x B3 server blade EFI Firmware		11-23 or higher
Hitachi Virtual Storage Platform G200		83-05-29-x0/00 or higher
Rack Optimized Server for Solutions, 2U four node (optional server)		3.16.00 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 12	4.12.18.3146 or higher
	SLES 12 SP1	4.12.20.4110 or higher
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252 or higher
	SLES 12 SP3	4.12.22.4334 or higher
	RHEL 7.3	4.7.21.4294 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Driver		RHEL 7.4
Hitachi 16 Gb/s Fibre Channel Adapter Firmware		40-05-07 or higher
Intel10 GbE ixgbe LAN Driver	SLES 12 or SLES 12 SP1 or SLES 12 SP2	4.4.6-h1 or higher
	RHEL 7.2	4.4.6-h1 or higher
	SLES 12 SP3	5.3.5-h1a or higher
	RHEL 7.3	4.5.4-h1 or higher
	RHEL 7.4	5.2.4-h1 or higher
Intel 10 GbE ixgbev LAN Driver (LPAR only)	SLES 12	2.16.4 or higher
	SLES 12 SP1	3.2.2 or higher
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	4.5.1-h2
	RHEL 7.3	4.0.3 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Driver		RHEL 7.4
SAP HANA	SLES 12	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	RHEL 7.3	
Hitachi 16 Gb/s Fibre Channel Adapter Driver		RHEL 7.4
Microsoft® Windows Server® 2012 R2		Standard Edition
Microsoft® Windows Server® 2012 R2		For the management server, a rack optimized server for solutions, 2U Four Node
SUSE Linux Enterprise Server for SAP Applications		SLES 12 or SLES 12 SP1 or SLES 12 SP2 or SLES 12 SP3
Red Hat Enterprise Linux Server		RHEL 7.2 or RHEL 7.3 or RHEL 7.4

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-out Configuration using Hitachi Compute Blade 2500 with 520X B3 Server Blades and Hitachi Virtual Storage Platform G800

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using Hitachi Compute Blade 2500 with 520X B3 server blades and Hitachi Virtual Storage Platform G800*

Component		Version
Hitachi Compute Blade 2500 SVP Firmware		A0305-A-1550 or higher
Hitachi Compute Blade 2500 SEL Dictionary		A0104 or higher
520x B3 server blade BMC Integrated Firmware		11-16 or higher
520x B3 server blade EFI Firmware		11-21 of higher
Hitachi Virtual Storage Platform G800		83-05-29-60/00 or higher
Hitachi NAS Platform 4060	For HNAS based Solution	12.5.4038.xx
	For GFS2 based Solution	N/A
SMU Software	For HNAS based Solution	12.5.4038.xx
	For GFS2 based Solution	N/A
SMU CentOS	For HNAS based Solution	6.2
	For GFS2 based Solution	N/A
Rack Optimized Server for Solutions, 2U four node		3.16.00 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 12	4.12.18.3146 <b>or-higher</b>
	SLES 12 SP1	4.12.20.4110
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252 <b>or-higher</b>
	SLES 12 SP3	4.12.21.4310 <b>or-higher</b>
	RHEL 7.3	4.7.21.4294 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Firmware	RHEL 7.4	4.7.21.4294 or higher
		40-05-00 <b>or-higher</b>
Intel10 GbE ixgbe LAN driver	SLES 12 or SLES 12 SP1 or SLES 12 SP2	4.4.6.-h1 <b>or-higher</b>
	RHEL 7.2	4.4.6.-h1 or higher
	SLES 12 SP3	5.3.5-h1- <b>or-higher</b>
	RHEL 7.3	4.5.4-h1or higher
	RHEL 7.4	5.2.4-h1 or higher
Intel 10 GbE ixgbev LAN driver (LPAR only)	SLES 12	2.16.4 <b>or-higher</b>
	SLES 12 SP1	3.2.2 <b>or-higher</b>
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	TBD
	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
Brocade ICX switch		8.0.20c or higher
Brocade VDX switches		6.0.2a or higher
SAP HANA	SLES 12	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	RHEL 7.4	
Microsoft® Windows Server® 2012 R2		Standard Edition For the management server, either the rack optimized server for solutions, 2U Four Node or CR 210H
VMware vSphere (for configuration using vSMU/HNAS only)		5.5 update 2 or 6.0 update 2
SUSE Linux Enterprise Server for SAP Applications	For HNAS based Solution	SLES 12 or SLES 12 SP1 or SLES 12 SP2 or SLES 12 SP3
	For GFS2 based Solution	SUSE 12 SP1 or SLES 12 SP2 with High Availability Extension (HAE)
Red Hat Enterprise Linux Server	For HNAS based Solution	RHEL 7.2 or RHEL 7.3 or RHEL 7.4
	For GFS2 based Solution	TBD

**Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-up Configuration using Hitachi Compute Blade 2500 Chassis with 520x B2 Server Blades and Hitachi Virtual Storage Platform G200**

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-up configuration using Hitachi Compute Blade 2500 chassis with 520x B2 server blades and Hitachi Virtual Storage Platform G200*

Component		Version
Hitachi Compute Blade 2500 SVP Firmware		A0310 or higher
Hitachi Compute Blade 2500 SEL Dictionary		A0105 or higher
520x B2 server blade <b>BMC Integrated</b> Firmware		09-63 or higher
520x B2 server blade <b>EFI</b> Firmware		09-63 or higher
Hitachi Virtual Storage Platform G200 storage		83-05-29-x0/00 or higher
Hitachi 16 Gb Fibre Channel Adapter Driver	SLES 11 SP3	4.11.18.3038 <b>or higher</b>
	RHEL 6.6	4.6.18.2766 or higher
	SLES 12	4.12.18.3146 <b>or higher</b>
	SLES 12 SP1	4.12.20.4110 <b>or higher</b>
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252 <b>or higher</b>
	SLES 12 SP3	4.12.22.4334 <b>or higher</b>
Hitachi 16 Gb Fibre Channel Adapter Firmware		40-05-07 <b>or higher</b>
Intel10 GbE ixgbe LAN driver	SLES 11 SP3	3.21.2-h1 <b>or higher</b>
	RHEL 6.6	3.23.2-h1 <b>or higher</b>
	SLES 12 or SLES 12 SP1 or SLES 12 SP2	4.4.6-h1 <b>or higher</b>
	RHEL 7.2	4.4.6-h1 or higher
	SLES 12 SP3	5.3.5-h1a <b>or higher</b>
	RHEL 7.3	4.5.4-h1 or higher
Intel 10 GbE ixgbev LAN Driver (LPAR only)	RHEL 7.4	5.2.4-h1 or higher
	SLES 12	2.16.4 <b>or higher</b>
	SLES 12 SP1	3.2.2 <b>or higher</b>
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	4.5.1-h2
SAP HANA	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
SLES 12 SP2		
SLES 12 SP3		
SUSE Linux Enterprise Server for SAP Applications		SLES 11 SP3 or SLES 12 or SLES 12 SP1 or SLES 12 SP2 or SLES 12 SP3
Red Hat Enterprise Linux Server		RHEL 6.6 or RHEL 7.2 or RHEL 7.3 or RHEL 7.4

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-out Configuration using Hitachi Compute Blade 2500 with 520X B2 Server Blades and Hitachi Virtual Storage Platform G800

*Required software and firmware levels Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using Hitachi Compute Blade 2500 with 520X B2 server blades and Hitachi Virtual Storage Platform G800*

Component		Version
Hitachi Compute Blade 2500 SVP Firmware		A0305-A-1550 or higher
Hitachi Compute Blade 2500 SEL Dictionary		A0104 or higher
520x B2 server blade BMC Integrated Firmware		09-57 or higher
520x B2 server blade EFI Firmware		09-61 or higher
Hitachi Virtual Storage Platform G800		83-05-29-x0/00 or higher
Hitachi NAS Platform 4060		12.5.4038.xx
SMU Software		12.5.4038.xx
SMU CentOS		6.2
Rack Optimized Server for Solutions, 2U four node		3.16.00 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 11 SP3	4.11.18.3038 <b>or higher</b>
	RHEL 6.6	4.6.18.2766 or higher
	SLES 12	4.12.18.3146 <b>or higher</b>
	SLES 12 SP1	4.12.20.4110 <b>or higher</b>
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252 <b>or higher</b>
	SLES 12 SP3	4.12.21.4310 <b>or higher</b>
	RHEL 7.3	4.7.21.4294 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Firmware		40-05-00 or higher
Intel10 GbE ixgbe LAN Driver	SLES 11 SP3	3.21.2-h1 <b>or higher</b>
	RHEL 6.6	3.23.2-h1 or higher
	SLES 12 or SLES 12 SP1 or SLES 12 SP2 <b>or RHEL 7.2</b>	4.4.6.-h1 <b>or higher</b>
	RHEL 7.2	4.4.6.-h1 or higher
	SLES 12 SP3	ixgbe-5.3.5-h1 <b>or higher</b>
	RHEL 7.3	4.5.4-h1 or higher
	RHEL 7.4	5.2.4-h1 or higher
Intel 10 GbE ixgbevfn LAN Driver (LPAR only)	SLES 12	2.16.4 <b>or higher</b>
	SLES 12 SP1	3.2.2 <b>or higher</b>
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	TBD
	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
Brocade ICX switch		7.4.00 or higher
Brocade VDX switches		6.0.2a or higher
SAP HANA	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
	RHEL 7.3	
RHEL 7.4		
Microsoft® Windows Server® 2012 R2		Standard Edition For the management server, a rack optimized server for solutions, 2U Four Node
SUSE Linux Enterprise Server for SAP Applications		SLES 11 SP3 or SLES 12 or SLES 12 SP1 or SLES 12 SP2 or SLES 12 SP3
Red Hat Enterprise Linux Server		RHEL 6.6 or RHEL 7.2 or RHEL 7.3 or RHEL 7.4

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-out Configuration using Hitachi Compute Blade 2500 with 520X B2 Server Blades and Hitachi Virtual Storage Platform G1000

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using Hitachi Compute Blade 2500 with 520X B2 server blades and Hitachi Virtual Storage Platform G1000*

Component	Version	
Hitachi Compute Blade 2500 SVP Firmware	A0305-A-1550 or higher	
Hitachi Compute Blade 2500 SEL Dictionary	A0104 or higher	
520x B2 server blade BMC Integrated Firmware	09-57 or higher	
520x B2 server blade EFI Firmware	09-61 or higher	
Hitachi Virtual Storage Platform G1000	80-06-65-00/00 or higher	
Hitachi NAS Platform 4060	12.5.4038.xx	
SMU Software	12.5.4038.xx	
SMU CentOS	6.2	
Rack Optimized Server for Solutions, 2U four node	3.16.00 or higher	
Hitachi 16 Gb/s Fibre Channel Adapter Driver	SLES 11 SP3	4.11.18.3038 <del>or higher</del>
	RHEL 6.6	4.6.18.2766 or higher
	SLES 12	4.12.18.3146 <del>or higher</del>
	SLES 12 SP1	4.12.20.4110 <del>or higher</del>
	RHEL 7.2	4.7.18.3234 or higher
	SLES 12 SP2	4.12.21.4252 <del>or higher</del>
	SLES 12 SP3	4.12.21.4310 <del>or higher</del>
	RHEL 7.3	4.7.21.4294 or higher
Hitachi 16 Gb/s Fibre Channel Adapter Firmware	4.7.21.4294 or higher	
Hitachi 16 Gb/s Fibre Channel Adapter Firmware	40-05-00- <del>or higher</del>	40-05-00- <del>or higher</del>
	SLES 11 SP3	3.21.2-h1 <del>or higher</del>
	RHEL 6.6	3.23.2-h1 or higher
	SLES 12 or SLES 12 SP1 or SLES 12 SP2 <del>or RHEL 7.2</del>	4.4.6.-h1 <del>or higher</del>
	RHEL 7.2	4.4.6.-h1 or higher
	SLES 12 SP3	ixgbe-5.3.5-h1 <del>or higher</del>
	RHEL 7.3	4.5.4-h1 or higher
Intel10 GbE ixgbe LAN Driver	RHEL 7.4	5.2.4-h1 or higher
	SLES 12	2.16.4 <del>or higher</del>
	SLES 12 SP1	3.2.2 <del>or higher</del>
	RHEL 7.2	2.16.4 or higher
	SLES 12 SP3	TBD
Intel 10 GbE ixgbev LAN Driver (LPAR only)	RHEL 7.3	4.0.3 or higher
	RHEL 7.4	TBD
	Brocade ICX switch	7.4.00 or higher
	Brocade VDX switches	6.0.2a or higher
SAP HANA	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
Microsoft® Windows Server® 2012 R2	RHEL 7.3	Standard Edition
	RHEL 7.4	For the management server, either the rack optimized server for solutions, 2U Four Node or CR 210H
VMware vSphere (for configuration using vSMU or Hitachi NAS Platform only)		5.5 update 2 or 6.0 update 2
SUSE Linux Enterprise Server for SAP Applications		SLES 11 SP3 or SLES 12 or SLES 12 SP1 or SLES 12 SP2 or SLES 12 SP3
Red Hat Enterprise Linux Server		RHEL 6.6 or RHEL 7.2 or RHEL 7.3 or RHEL 7.4

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-up Configuration using 520X B1 Server Blades and Hitachi Unified Storage VM

Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-up configuration using 520X B1 server blades and Hitachi Unified Storage VM

Component		Version
Hitachi Compute Blade 500 SVP Firmware		A0360 or higher
Hitachi Compute Blade 500 SEL Dictionary		A0203 or higher
Hitachi Compute Blade 500 Equipment Parameter		1026 or higher
520X Server Blade BMC Integrated Firmware		07-74 or higher
520X Server Blade EFI Firmware		07-74 or higher
Hitachi Unified Storage VM		73-03-63 or higher
Be2net Driver	SLES 11 SP3	10.0.800.0_3.0.76 or higher
	RHEL 6.6	10.0.800.0_3.0.76 or higher
	SLES 12	10.6.144.21 or higher
	SLES 12 SP1	11.1.207.0 or higher
	RHEL 7.2	10.6.144.2707 or higher
	SLES 12 SP2	11.1.215.11 or higher
	SLES 12 SP3	11.4.1186.0-1 or higher which is not supported for retpoline. 11.1.0.0 which is supported for retpoline.
	RHEL 7.3	11.1.215.8 or higher
LoM firmware	SLES 11 SP3/ RHEL 6.6	10.2.370.16
	SLES 12/RHEL 7.2	10.6.144.2704
	SLES 12 SP1	11.1.215.0
	SLES 12 SP2	11.1.215.0
	SLES 12 SP3	11.4.1179.0 when skyhawk driver is 11.4.1186.0-1 11.1.215.0 when skyhawk driver is 11.1.0.0
	RHEL 7.3	11.1.215.0
SAP HANA	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
SUSE Linux Enterprise Server for SAP Applications		SLES 11 SP3 or SLES 12 or SLES 12 SP1 or SLES12 SP2 or SLES 12 SP3
Red Hat Enterprise Linux Server		RHEL 6.6 or RHEL 7.2 or RHEL 7.3 or RHEL 7.4

## Hitachi Unified Compute Platform for SAP HANA Platform in a Scale-out Configuration using 520X B1 Server Blades and Hitachi Virtual Storage Platform G1000

*Minimum software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using 520X B1 server blades and Hitachi Virtual Storage Platform G1000*

Component		Version
Hitachi Compute Blade 500 SVP Firmware		A0355-B-10924 or higher
Hitachi Compute Blade 500 SEL Dictionary		A0203 or higher
Hitachi Compute Blade 500 Equipment Parameter		1026 or higher
520X B1 Server Blade BMC Integrated Firmware		07-68 or higher
520X B1 Server Blade EFI Firmware		07-72 or higher
Hitachi Virtual Storage Platform G1000		80-06-65-00/00 or higher
Hitachi Compute Rack 210H		01-08-00 or higher
Hitachi NAS Platform 4060		12.5.4038.xx
SMU Software		12.5.4038.xx
SMU CentOS		6.2
Rack Optimized Server for Solutions, 2U four node		3.16.00 or higher
Be2net Driver	SLES 11 SP3	10.0.800.0_3.0.76 or higher
	RHEL 6.6	10.0.800.0_3.0.76 or higher
	SLES 12	10.6.144.21 or higher
	SLES 12 SP1	11.1.207.0 or higher
	RHEL 7.2	10.6.144.2707 or higher
	SLES 12 SP2	11.1.215.11 or higher
	SLES 12 SP3	11.4.1186.0-1 or higher
	RHEL 7.3	11.1.215.8 or higher
LAN on Motherboard (LoM) firmware	RHEL 7.4	11.4.1178.0 or higher
	SLES 11 SP3/ RHEL 6.6	10.2.370.16
	SLES 12/RHEL 7.2	10.6.144.2704
	SLES 12 SP1	11.1.215.0
	SLES 12 SP2	11.1.215.0
	SLES 12 SP3	11.4.1179.0
RHEL 7.3	11.1.215.0	
RHEL 7.4	11.4.1179.0	
Brocade ICX switch		7.4.00 or higher
Brocade VDX switches		4.1.3b or higher
SAP HANA	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES 12 SP2	
	SLES 12 SP3	
RHEL 7.4		
Microsoft® Windows Server® 2012 R2		Standard Edition For use on the management server, either the rack optimized server for solutions, 2U Four Node or CR 210H
SUSE Linux Enterprise Server for SAP Applications		SLES 11 SP3 or SLES 12 or SLES 12 SP1 or SLES 12 SP2 or SLES 12 SP3
Red Hat Enterprise Linux Server		RHEL 6.6 or RHEL 7.2 or RHEL 7.3 or RHEL 7.4

## Hitachi Unified Compute Platform for SAP HANA in a Scale-out Configuration using 520X B1 Server Blades and Hitachi Unified Storage VM

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using 520X B1 server blades and Hitachi Unified Storage VM*

Component	Version	
Hitachi Compute Blade 500 SVP Firmware	A0355-B-10924 or higher	
Hitachi Compute Blade 500 SEL Dictionary	A0203 or higher	
Hitachi Compute Blade 500 Equipment Parameter	1026 or higher	
520X B1 Server Blade BMC Integrated Firmware	07-68 or higher	
520X B1 Server Blade EFI Firmware	07-72 or higher	
Hitachi Unified Storage VM	73-03-63 or higher	
Hitachi Compute Rack 210H	01-08-00 or higher	
Hitachi NAS Platform 4060	12.5.4038.xx	
SMU Software	12.5.4038.xx	
SMU CentOS	6.2	
Rack Optimized Server for Solutions, 2U four node	3.16.00 or higher	
Be2net Driver	SLES 11 SP3	10.0.800.0_3.0.76 <span style="color: red;">or higher</span>
	RHEL 6.6	10.2.469.0 or higher
	SLES 12	10.6.144.21 <span style="color: red;">or higher</span>
	SLES 12 SP1	11.1.207.0 <span style="color: red;">or higher</span>
	RHEL 7.2	10.6.144.2707 or higher
	RHEL 7.3	<span style="color: red;">11.1.215.8 or higher</span>
	SLES 12 SP2	11.1.215.11 <span style="color: red;">or higher</span>
	SLES 12 SP3	11.4.1186.0-1 <span style="color: red;">or higher</span>
LAN on Motherboard (LoM) firmware	RHEL 7.4	11.4.1178.0 or higher
	SLES 11 SP3/ RHEL 6.6	10.2.370.16
	SLES 12/RHEL 7.2	10.6.144.2704
	SLES 12 SP1	11.1.215.0
	SLES 12 SP2	11.1.215.0
Brocade ICX switch	SLES12 SP3	11.4.1179.0
	RHEL 7.3	<span style="color: red;">11.1.215.0</span>
	RHEL 7.4	11.4.1179.0
Brocade VDX switches	7.4.00 or higher	
SAP HANA	6.0.2a or higher	
	SLES 11 SP3	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	RHEL 6.6	
	SLES 12	
	SLES 12 SP1 or RHEL 7.2	
	SLES12 SP2	
	SLES12 SP3	
RHEL 7.3		
RHEL 7.4		
Microsoft® Windows Server® 2012 R2	Standard Edition	
SUSE Linux Enterprise Server for SAP Applications	For use on the management server, either the rack optimized server for solution 3U for racks 2U Hitachi Compute Blade 210H or solution 3U for racks 2U Hitachi Compute Blade 210H	
Red Hat Enterprise Linux Server	RHEL 6.6 or RHEL 7.2 or RHEL 7.4	



## Hitachi Unified Compute Platform for SAP HANA in a Scale-up Configuration using X57A2 Server Blades and Hitachi Unified Storage 130

*Required software and firmware Levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-up configuration using X57A2 server blades and Hitachi Unified Storage 130*

Component		Version
Hitachi Compute Blade 2000 SVP Firmware		A0355-D-7333 or higher
Hitachi Compute Blade 2000 X57A2 BMC Firmware		06-02 or higher
Hitachi Compute Blade 2000 X57A2 EFI Firmware		07-49 or higher
Hitachi Unified Storage 130		0955/A or higher
Emulex Fibre Channel HBA driver	SLES 11 SP2	8.3.5.48.3p <i>or higher</i>
	SLES 11 SP3	8.3.7.10.7p <i>or higher</i>
	SLES 11 SP4	10.4.8000.0 <i>or higher</i>
Intel10 GbE LAN driver	SLES 11 SP2	3.14.5 <i>or higher</i>
	SLES 11 SP3	3.21.2-h1 <i>or higher</i>
	SLES 11 SP4	4.3.13 <i>or higher</i>
SAP HANA	SLES 11 SP2	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 11 SP3	
	SLES 11 SP4	
SUSE Linux Enterprise Server for SAP Applications		SLES 11 SP2 or SP3 or SP4
Fusion-io ioDrive2	SLES 11 SP2	3.2.4
	SLES 11 SP3	3.2.6
	SLES 11 SP4	3.2.14

## Hitachi Unified Compute Platform for SAP HANA in a Scale-out Configuration using X57A2 Server Blades and Hitachi Virtual Storage Platform

*Required software and firmware levels for Hitachi Unified Compute Platform for the SAP HANA Platform in a scale-out configuration using X57 A2 server blades and Hitachi Virtual Storage Platform*

Component	Version	
Hitachi Compute Blade 2000 SVP Firmware	A0355-D-7333 or higher	
Hitachi Compute Blade 2000 X57A2 BMC Firmware	06-02 or higher	
Hitachi Compute Blade 2000 X57A2 EFI Firmware	07-49 or higher	
Hitachi Virtual Storage Platform	70-06-02-00 or higher	
Hitachi NAS Platform 3080 or NAS Platform 4060	12.5.4038.xx	
SMU Software	12.5.4038.xx	
SMU CentOS	6.2	
SUSE Linux Enterprise Server for SAP Applications	SLES 11 SP2 or SP3 or SP4	
Hitachi Compute Rack 210H	1205-10-02 or higher	
Emulex Fibre Channel HBA Driver	SLES 11 SP2	8.3.5.48.3p <b>or higher</b>
	SLES 11 SP3	8.3.7.10.7p <b>or higher</b>
	SLES 11 SP4	10.4.8000.0 <b>or higher</b>
Intel 10 GbE LAN driver	SLES 11 SP2	3.14.5 <b>or higher</b>
	SLES 11 SP3	3.21.2-h1 <b>or higher</b>
	SLES 11 SP4	4.3.13 <b>or higher</b>
Rack Optimized Server for Solutions, 2U four node	3.16.00 or higher	
Brocade ICX switch	7.4.00 or higher	
Brocade VDX switches	4.1.3b or higher	
SAP HANA	SLES 11 SP2	Refer to SAP Note 2235581 (attachment SAP_HANA_OS_Release_Support_Matrix.pdf)
	SLES 11 SP3	
	SLES 11 SP4	
Microsoft® Windows Server® 2012 R2	Standard Edition For use on the management server, either the rack optimized server for solutions, 2U Four Node or Hitachi Compute Rack 210H	
SUSE Linux Enterprise Server for SAP Applications	SLES 11 SP2 or SP3 or SP4	