

Dell Hybrid Cloud System for Microsoft Cloud Platform System Standard

Version 1.5.13 Support Matrix based on release 1905

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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About this Manual

This manual provides information about supported software and hardware configurations for Dell EMC Hybrid Cloud System for Microsoft.

This manual is valid for all versions of Dell EMC Hybrid Cloud System for Microsoft.

NOTE: The information in this manual is subject to change without notice. Contact your Dell EMC Support representative for more information.

NOTE: Where appropriate, this manual lists both the minimum supported version and the latest supported version. Dell EMC recommends using the latest supported version.

IMPORTANT: The recommendations and guidelines in this document are based on industry best practices, CPS Standard architecture requirements, and Dell EMC lab testing. If not followed, the functionality and or management of the solution may not work as designed or expected, and problem resolution may be limited, delayed, or not viable.

CAUTION: The addition of any non-DHCS hardware to your system will cause the Patch and Update process to fail.

Revision History

Table 1. Document Revisions

Revision	Date	Changes from Previous Revision
A00	December 2015	Initial release of the <i>Dell Hybrid Cloud System for Microsoft Support Matrix</i>
A02	February 2016	Updated the firmware matrix for release 1.0.2: <ul style="list-style-type: none"> • Near-line SAS drives • iDRAC • Fixed table headers
A03	May 2016	Updated the matrix for release 1.1: <ul style="list-style-type: none"> • BIOS • Firmware • Drivers • Additional HDDs and SSDs • Updates to support Intel E5 v4 processors
A04	July 2016	Updated the matrix for release 1.1.1: <ul style="list-style-type: none"> • BIOS • Firmware • Drivers • Additional hard drives

Revision	Date	Changes from Previous Revision
A05	August 2016	Updated the matrix for release 1.1.2: <ul style="list-style-type: none"> · BIOS · Firmware · Drivers · Additional hard drives
A06	September 2016	Updated the matrix for release 1.1.3: <ul style="list-style-type: none"> · Hard drive firmware
A07	October 2016	Updated the matrix for release 1.1.4: <ul style="list-style-type: none"> · Document template
A08	November 2016	Updated the matrix for release 1.1.5: <ul style="list-style-type: none"> · BIOS · iDRAC · Switch firmware · Hard drive firmware
A09	December 2016	Updated the matrix for release 1.1.6: <ul style="list-style-type: none"> · Document version numbers
A10	February 2017	Updated the matrix for release 1.3: <ul style="list-style-type: none"> · BIOS · iDRAC · Switch firmware · Firmware and drivers
A11	March 2017	Updated the matrix for release 1.3.1: <ul style="list-style-type: none"> · Additional SSDs
A12	May 2017	Updated the matrix for release 1.4 (1703): <ul style="list-style-type: none"> · BIOS · Firmware and drivers
A13	June 2017	Updated the matrix for release 1.4.1 (1705): <ul style="list-style-type: none"> · Expander and non-expander backplane firmware
A14	July 2017	Updated the matrix for release 1.4 (1703b): <ul style="list-style-type: none"> · BIOS · Firmware
A15	August 2017	Updated the matrix for release 1.4.2 (1706): <ul style="list-style-type: none"> · Additional HDDs

Revision	Date	Changes from Previous Revision
A16	September 2017	Updated the matrix for release 1.4.3 (1707): <ul style="list-style-type: none"> · Document version numbers
A17	October 2017	Updated the matrix for release 1.4.4 (1708): <ul style="list-style-type: none"> · BIOS · Firmware and drivers
A18	November 2017	Updated the matrix for release 1.4.5 (1709): <ul style="list-style-type: none"> · BIOS · iDRAC · Firmware and drivers
A19	January 2018	1.4.6 (1710): No updates. Releasing for version consistency.
A20	January 2018	Updated the matrix for release 1.4.7 (1712): <ul style="list-style-type: none"> · BIOS
A21	March 2018	Updated the matrix for release 1.4.8 (1802): <ul style="list-style-type: none"> · BIOS · iDRAC · Firmware and drivers
A22	April 2018	1.5 (1803): No updates. Releasing for version consistency.
A23	May 2018	Updated for release 1.5.1 (1804): <ul style="list-style-type: none"> · Firmware and drivers
A24	June 2018	1.5.2 (1805): No updates. Releasing for version consistency.
A25	July 2018	Updated for release 1.5.3 (1806): <ul style="list-style-type: none"> · Firmware and drivers
A26	August 2018	Updated for release 1.5.4 (1807): <ul style="list-style-type: none"> · Added minimum supported versions for hard drives.
A27	September 2018	Updated for release 1.5.5 (1808): <ul style="list-style-type: none"> · Minor fixes
A28	October 2018	Updated for release 1.5.6 (1809) <ul style="list-style-type: none"> · Minor fixes
A29	November 2018	Updated for release 1.5.7 (1810) <ul style="list-style-type: none"> · Firmware and drivers
A30	December 2018	Updated for release 1.5.8 (1811) <ul style="list-style-type: none"> · Firmware and drivers

Revision	Date	Changes from Previous Revision
A31	January 2019	1.5.9 (1812): No updates. Releasing for version consistency.
A32	March 2019	Updated for release 1.5.10 (1901): <ul style="list-style-type: none"> · Drivers
A33	April 2019	Updated for release 1.5.11 (1902): <ul style="list-style-type: none"> · BIOS
A34	April 2019	1.5.12 (1903): No updates. Releasing for version consistency.
A35	June 2019	1.5.13 (1905): Updates to iDRAC.

Introduction

The *Dell Hybrid Cloud System for Microsoft Support Matrix* describes supported software and hardware for Dell Hybrid Cloud System for Microsoft.

Support Matrix

Compute Nodes

The Dell Hybrid Cloud System for Microsoft solution supports the following component driver and firmware versions for compute nodes:

Table 2. C6300 and C6320

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
Fan Control Board	Firmware	C6300 Chassis	Fan Control Board	V0213	2.13
Intel X520 (10 GB NDC)	Driver	C6320	Network — Tenant	M1P35 Minimum supported version: M4PJN	18.8.0 Minimum supported version: 16.5.0
PERC H330	Driver	C6320	SAS HBA — Internal	6V4WY	6.604.06.00
Chipset	Driver	C6320	Intel C610 series	JTN83	10.1.2.85
BIOS	Firmware	C6320	BIOS	7PHW3	2.9.1
CPLD	Firmware	C6320	CPLD	6KF0V	1.0.0
iDRAC	Firmware	C6320	iDRAC	40T1C	2.63.60.61
Intel X520 (10 GB NDC)	Firmware	C6320	Network — Tenant	YHF9V Minimum supported version: DKGC0	18.8.9 Minimum supported version: 16.5.20
PERC H330	Firmware	C6320	SAS HBA — Internal	76W42	25.5.5.0005
Intel SSDSC2BX400G4R	Firmware	C6320	400 GB Boot SSD	RXYF1 Minimum supported version: 8MD67	DL2D Minimum supported version: DL29
Hitachi HUC101860CSS204 (12 Gbps)	Firmware	C6320	600 GB Boot HDD	HY2HP Minimum supported version: 89VK3	FJ23 Minimum supported version: FJ11
Hitachi HUC101860CSS204 (6 Gbps)	Firmware	C6320	600 GB Boot HDD	H89FV	FJ05

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
Hitachi HUC109060CSS600 (6 Gbps)	Firmware	C6320	600 GB Boot HDD	F5NH4	N440
Hitachi HUC101860CSS200	Firmware	C6320	600 GB Boot HDD	3M7RX	FU29
Seagate ST600MM0088 (6 Gbps)	Firmware	C6320	600 GB Boot HDD	0YHRW Minimum supported version: 40R7R	TS05 Minimum supported version: TS04
Seagate ST600MM0088 (12 Gbps)	Firmware	C6320	600 GB Boot HDD	KKNKX	TT31
Seagate ST600MM0006 (6 Gbps)	Firmware	C6320	600 GB Boot HDD	8FF65 Minimum supported version: 68NGY	LS0C Minimum supported version: LS0B
Seagate ST600MM0238	Firmware	C6320	600 GB Boot HDD	64GYN	BS04
Toshiba AL14SEB060N (12 Gbps)	Firmware	C6320	600 GB Boot HDD	NK8T7 Minimum supported version: 5CJXP	DM06 Minimum supported version: DM03
Toshiba AL13SEB600 (6 Gbps)	Firmware	C6320	600 GB Boot HDD	MCM30	DE11

Storage

The Dell Hybrid Cloud System for Microsoft solution supports the following component driver and firmware versions for storage hardware:

Table 3. R730 and MD14x0

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
Intel X520 (10 GB NDC)	Driver	R730	Network — Data Center	M1P35 Minimum supported version: HP103	18.8.0 Minimum supported version: 16.5.0
Dell SAS 12 HBA	Driver	R730	SAS HBA — External	R7HG1 Minimum supported version: GX4V1	2.51.21.2 Minimum supported version: 2.50.75.01
PERC H330	Driver	R730	SAS HBA — Internal	6V4WY	6.604.06.00
Chipset	Driver	R730	Intel C600/C610/C220/C2000 series	JTN83	10.1.2.85

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
Non-expander Storage Backplane	Firmware	R730	Backplane	HRP1V	2.25
Expander Storage Backplane	Firmware	R730	Backplane	HYPYY	3.35
BIOS	Firmware	R730	BIOS	T9YX9	2.9.1
iDRAC	Firmware	R730	iDRAC	40T1C	2.63.60.61
Intel X520 (10 GB NDC)	Firmware	R730	Network — Tenant	YHF9V Minimum supported version: 6FD9P	18.8.9 Minimum supported version: 16.5.20
Dell SAS 12 HBA	Firmware	R730	SAS HBA — External	W2X85 Minimum supported version: 3VHN7	16.17.00.03 Minimum supported version: 03.17.01.00
PERC H330	Firmware	R730	SAS HBA — Internal	76W42	25.5.5.0005
Hitachi HUC101830CSS204 (12 Gbps)	Firmware	R730	Storage — 300 GB Boot HDD	HY2HP Minimum supported version: 89VK3	FJ23 Minimum supported version: FJ11
Hitachi HUC101830CSS204 (6 Gbps)	Firmware	R730	Storage — 300 GB Boot HDD	H89FV	FJ05
Hitachi HUC109030CSS600 (6 Gbps)	Firmware	R730	Storage — 300 GB Boot HDD	F5NH4	N440
Seagate ST300MM0006 (6 Gbps)	Firmware	R730	Storage — 300 GB Boot HDD	8FF65 Minimum supported version: 68NGY	LSOC Minimum supported version: LS0B
Seagate ST300MM0008 (12 Gbps)	Firmware	R730	Storage — 300 GB Boot HDD	KKNKX	TT31
Toshiba AL13SEB300 (6 Gbps)	Firmware	R730	Storage — 300 GB Boot HDD	MCM30	DE11
Toshiba AL14SEB030N (12 Gbps)	Firmware	R730	Storage — 300 GB Boot HDD	NK8T7 Minimum supported version: 5CJXP	DM06 Minimum supported version: DM03
Hitachi HUC101860CSS204 (6 Gbps)	Firmware	R730	Storage — 600 GB Boot HDD	H89FV	FJ05
Hitachi HUC109060CSS600 (6 Gbps)	Firmware	R730	Storage — 600 GB Boot HDD	F5NH4	N440
Hitachi HUC101860CSS204 (12 Gbps)	Firmware	R730	Storage — 600 GB Boot HDD	HY2HP	FJ23

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
				Minimum supported version: 89VK3	Minimum supported version: FJ11
Hitachi HUC101860CSS200	Firmware	R730	Storage — 600 GB Boot HDD	3M7RX	FU29
Seagate ST600MM0088 (12 Gbps)	Firmware	R730	Storage — 600 GB Boot HDD	KKNKX	TT31
Seagate ST600MP0005 (12 Gbps)	Firmware	R730	Storage — 600 GB Boot HDD	WHWFN Minimum supported version: KYWVC	VT32 Minimum supported version: VT31
Seagate ST600MM0238	Firmware	R730	Storage — 600 GB Boot HDD	64GYN	BS04
Toshiba AL14SEB060N (12 Gbps)	Firmware	R730	Storage — 600 GB Boot HDD	NK8T7 Minimum supported version: 5CJXP	DM06 Minimum supported version: DM03
Toshiba AL13SEB600 (6 Gbps)	Firmware	R730	Storage — 600 GB Boot HDD	MCM30	DE11
Sandisk LT0400MO (12 Gbps)	Firmware	MD14x0	JBOD 400 GB SSD	1HMP1 Minimum supported version: PFH20	D416 Minimum supported version: D40Z
Toshiba PX02SMF040 (12 Gbps)	Firmware	MD14x0	JBOD 400 GB SSD	HHD9K Minimum supported version: 2N3CV	A3B3 Minimum supported version: A3AE
Toshiba PX04SMB040 (12 Gbps)	Firmware	MD14x0	JBOD 400 GB SSD	WMGV3	AM04
Toshiba PX05SMB040Y (12 Gbps)	Firmware	MD14x0	JBOD 400 GB SSD	DKM6P	AS03
Sandisk LT0800MO (12 Gbps)	Firmware	MD14x0	JBOD 800 GB SSD	1HMP1 Minimum supported version: PFH20	D416 Minimum supported version: D40Z
Toshiba PX02SMF080 (12 Gbps)	Firmware	MD14x0	JBOD 800 GB SSD	HHD9K Minimum supported version: 2N3CV	A3B3 Minimum supported version: A3AE
Toshiba PX04SMB080 (12 Gbps)	Firmware	MD14x0	JBOD 800 GB SSD	WMGV3	AM04

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
Toshiba PX05SMB080Y (12 Gbps)	Firmware	MD14x0	JBOD 800 GB SSD	DKM6P	AS03
Sandisk LT1600MO (12 Gbps)	Firmware	MD14x0	JBOD 1.6 TB SSD	1HMP1 Minimum supported version: PFH20	D416 Minimum supported version: D40Z
Toshiba PX02SMB160 (12 Gbps)	Firmware	MD14x0	JBOD 1.6 TB SSD	HHD9K Minimum supported version: 2N3CV	A3B3 Minimum supported version: A3AE
Toshiba PX04SMB160 (12 Gbps)	Firmware	MD14x0	JBOD 1.6 TB SSD	WMGV3	AM04
Toshiba PX05SMB160Y (12 Gbps)	Firmware	MD14x0	JBOD 1.6 TB SSD	DKM6P	AS03
Hitachi HUC101812CSS204 (12 Gbps)	Firmware	MD1420	JBOD 1.2 TB HDD	HY2HP Minimum supported version: 89VK3	FJ23 Minimum supported version: FJ11
Hitachi HUC101812CSS204 (6 Gbps)	Firmware	MD1420	JBOD 1.2 TB HDD	H89FV	FJ05
Hitachi HUC101212CSS600 (6 Gbps)	Firmware	MD1420	JBOD 1.2 TB HDD	4DT2J	U5E2
Seagate ST1200MM0007 (6 Gbps)	Firmware	MD1420	JBOD 1.2 TB HDD	2DDG2	IS06
Seagate ST1200MM0088 (6 Gbps)	Firmware	MD1420	JBOD 1.2 TB HDD	0YHRW Minimum supported version: 40R7R	TS05 Minimum supported version: TS04
Seagate ST1200MM0088 (12 Gbps)	Firmware	MD1420	JBOD 1.2 TB HDD	KKNKX	TT31
Toshiba AL14SEB120N (12 Gbps)	Firmware	MD1420	JBOD 1.2 TB HDD	NK8T7 Minimum supported version: 5CJXP	DM06 Minimum supported version: DM03
Hitachi HUS726020ALS214 (12 Gbps)	Firmware	MD1400	JBOD 2 TB HDD	WFTGN	KJ03
Hitachi HUS724020ALS640 (6 Gbps)	Firmware	MD1400	JBOD 2 TB HDD	W21D1 Minimum supported version: J6G25	W350 Minimum supported version: W2F0
Seagate ST2000NM0023 (6 Gbps)	Firmware	MD1400	JBOD 2 TB HDD	8PRG2	GS14

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
				Minimum supported version: MNVH4	Minimum supported version: GS10
Seagate ST2000NM0005 (12 Gbps)	Firmware	MD1400	JBOD 2 TB HDD	297DW Minimum supported version: W80FT	MS06 Minimum supported version: MS05
Seagate ST2000NM0045 (12Gbps)	Firmware	MD1400	JBOD 2 TB HDD	RMDN6	DS04
Hitachi HUS724040ALS640 (6 Gbps)	Firmware	MD1400	JBOD 4 TB HDD	W21D1 Minimum supported version: J6G25	W350 Minimum supported version: W2F0
Hitachi HUS726040ALS214 (12 Gbps)	Firmware	MD1400	JBOD 4 TB HDD	WFTGN	KJ03
Hitachi HUS726040ALS210 (12 Gbps)	Firmware	MD1400	JBOD 4 TB HDD	PC27G	KU27
Seagate ST4000NM0023 (6 Gbps)	Firmware	MD1400	JBOD 4 TB HDD	8PRG2 Minimum supported version: MNVH4	GS14 Minimum supported version: GS10
Seagate ST4000NM0005 (12 Gbps)	Firmware	MD1400	JBOD 4 TB HDD	297DW Minimum supported version: W80FT	MS06 Minimum supported version: MS05
Seagate ST4000NM0025 (12Gbps)	Firmware	MD1400	JBOD 4 TB HDD	RMDN6	DS04
Toshiba MG04SCA40EN (12 Gbps)	Firmware	MD1400	JBOD 4 TB HDD	K3G1W Minimum supported version: T0FMV	DS07 Minimum supported version: DS04
Toshiba MG04SCA40ENY (12 Gbps)	Firmware	MD1400	JBOD 4 TB HDD	D2GG1	EG03
Hitachi HUS726060AL5214 (12 Gbps)	Firmware	MD1400	JBOD 6 TB HDD	FX9XX Minimum supported version: MTG3D	KF26 Minimum supported version: KK06
Seagate ST6000NM0034 (12 Gbps)	Firmware	MD1400	JBOD 6 TB HDD	DN6J2 Minimum supported version: Y9J1F	MS85 Minimum supported version: MS84

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
Seagate ST6000NM0095 (12Gbps)	Firmware	MD1400	JBOD 6 TB HDD	Y76GF	DS23
Hitachi HUH721008AL5200 (12Gbps)	Firmware	MD1400	JBOD 8 TB HDD	VJ59F	LS03
Hitachi HUH728080AL5204 (12 Gbps)	Firmware	MD1400	JBOD 8 TB HDD	TJ8NW Minimum supported version: FT5JT	GK23 Minimum supported version: GK04
Seagate ST8000NM0075 (12 Gbps)	Firmware	MD1400	JBOD 8 TB HDD	R2N0T Minimum supported version: T51M7	PS26 Minimum supported version: PS24
EMM/ESM	Firmware	MD14x0	EMM/ESM	4Y1JH	1.07

Backup

Backup is optional. The Dell Hybrid Cloud System for Microsoft solution supports the following component driver and firmware versions for backup hardware:

Table 4. R730xd

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
Intel X520 (10 GB NDC)	Driver	R730xd	Network — Data Center	M1P35 Minimum supported version: HP103	18.8.0 Minimum supported version: 16.5.0
PERC H730P	Driver	R730xd	SAS HBA — Internal	6V4WY	6.604.06.00
Chipset	Driver	R730xd	Intel C600/C610/C220/C2000 series	JTN83	10.1.2.85
Non-expander Storage Backplane	Firmware	R730xd	Backplane	HRP1V	2.25
Expander Storage Backplane	Firmware	R730xd	Backplane	HYPYY	3.35
BIOS	Firmware	R730xd	BIOS	T9YX9	2.9.1
iDRAC	Firmware	R730xd	iDRAC	40T1C	2.63.60.61
Intel X520 (10 GB NDC)	Firmware	R730xd	Network — Tenant	YHF9V Minimum supported version: 6FD9P	18.8.9 Minimum supported version: 16.5.20

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
PERC H730P	Firmware	R730xd	SAS HBA — Internal	F675Y	25.5.5.0005
Hitachi HUC101860CSS204 (12 Gbps)	Firmware	R730xd	Storage — 600 GB Boot HDD	HY2HP Minimum supported version: 89VK3	FJ23 Minimum supported version: FJ11
Hitachi HUC101860CSS200	Firmware	R730xd	Storage — 600 GB Boot HDD	3M7RX	FU29
Seagate ST600MM0088 (12 Gbps)	Firmware	R730xd	Storage — 600 GB Boot HDD	KKNKX	TT31
Seagate ST600MP0005 (12 Gbps)	Firmware	R730xd	Storage — 600 GB Boot HDD	WHWFN Minimum supported version: KYWVC	VT32 Minimum supported version: VT31
Seagate ST600MM0238	Firmware	R730xd	Storage — 600 GB Boot HDD	64GYN	BS04
Toshiba AL14SEB060N (12 Gbps)	Firmware	R730xd	Storage — 600 GB Boot HDD	NK8T7 Minimum supported version: 5CJXP	DM06 Minimum supported version: DM03
Hitachi HUS724040ALS640 (6 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	W21D1 Minimum supported version: J6G25	W350 Minimum supported version: W2F0
Hitachi HUS726040ALS214 (12 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	WFTGN	KJ03
Hitachi HUS726040ALS210 (12 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	PC27G	KU27
Seagate ST4000NM0023 (6 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	8PRG2 Minimum supported version: MNVH4	GS14 Minimum supported version: GS10
Seagate ST4000NM0005 (12 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	297DW Minimum supported version: W80FT	MS06 Minimum supported version: MS05
Seagate ST4000NM0025 (12 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	RMDN6	DS04
Toshiba MG03SCA400 (6 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	0NXTP	DG09
Toshiba MG04SCA40EN (12 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	K3G1W	DS07

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
				Minimum supported version: T0FMV	Minimum supported version: DS04
Toshiba MG04SCA40ENY (12 Gbps)	Firmware	R730xd	Storage — 4 TB DPM	D2GG1	EG03

Switches

The Dell Hybrid Cloud System for Microsoft uses Dell Networking S4048-ON, which is a 10/40GbE top-of-rack open networking switch. It is a high-density, 1RU 48-port 10GbE switch with six 40GbE uplinks and ultra-low-latency, non-blocking performance to ensure line-rate performance.

The solution supports the following firmware version:

Table 5. S4048-ON

Component	Type	Platform	Category	Software Bundle (SWB)	Supported Version
Dell Networking S4048-ON Switch	Firmware	N/A	Top-of-rack switch	N/A	9.13.0.0
Dell Networking O/S					Minimum supported version: 9.9(0.0P9)