

# Active System Manager Release 8.2 Compatibility Matrix



# Notes, cautions, and warnings



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



**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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# Overview

Active System Manager (ASM) is Dell's unified management product that provides a comprehensive infrastructure and workload automation solution for IT administrators and teams. ASM simplifies and automates the management of heterogeneous environments, enabling IT to respond more rapidly to dynamic business needs. IT organizations today are often burdened by complex data centers that contain a mix of technologies from different vendors and cumbersome operational tasks for delivering services while managing the underlying infrastructure. These tasks are typically performed through multiple management consoles for different physical and virtual resources, which can dramatically slow down service deployment. ASM features an enhanced user interface that provides an intuitive, end-to-end infrastructure and workload automation experience through a unified console. This speeds up workload delivery and streamlines infrastructure management, enabling IT organizations to accelerate service delivery and time to value for customers.

This document contains information about virtual appliance and software requirements of ASM, and the resources supported by ASM such as chassis, servers, storage, network switches, and adapters.

## What's New in this Release

Active System Manager 8.2 is focused on expanding capabilities around workload deployment, adding new capabilities around managing existing environments, and improving the granularity of information shown around the current state of environments under management.

The highlights of compatibility matrix of Active System Manager release 8.2 include the following:

- Storage: Dell Storage SC9000 arrays, Dell EqualLogic PS6610
- Expanded support for Intel 10 Gb interface cards
- Support for VSAN Ready Node configuration for the Dell PowerEdge R730xd server platform. For more information on VSAN Ready Node configuration, see [https://www.vmware.com/resources/compatibility/pdf/vi\\_vsan\\_rn\\_guide](https://www.vmware.com/resources/compatibility/pdf/vi_vsan_rn_guide).
- Added support for RHEL 7.1 and 7.2
- Added support for CentOS 7.1 and 7.2

# Active System Manager Appliance Requirements

Active System Manager runs as a virtual appliance on a Dell server configured with the following hardware and software:

**Table 1. Active System Manager Appliance Requirements**

Resources	Minimum Requirement
vCPUs	4 vCPUs
Memory	16 GB
Disk Space	115 GB

## Hypervisor and Management Requirements

**Table 2. Hypervisor and Management Requirements**

Software Component	Supported Version
VMware vSphere	<ul style="list-style-type: none"><li>• 5.1</li><li>• 5.5</li><li>• 6.0</li></ul>
Microsoft System Center Virtual Machine Manager (SCVMM)	<ul style="list-style-type: none"><li>• 2012</li><li>• 2012 R2</li></ul>

## Browser Requirements

To display Active System Manager (ASM) correctly, a system must have a minimum 1024 x 768 screen resolution and a Web browser that meets minimum requirements based on the operating system.

**Table 3. Browser Requirements**

<b>Operating System</b>	<b>Internet Explorer</b>	<b>Mozilla Firefox</b>	<b>Google Chrome</b>
Microsoft Windows Server 2012	Version 9 or Later	Version 26 or Later	Version 32 or Later
Microsoft Windows Server 2012 R2	Version 9 or Later	Version 26 or Later	Version 32 or Later
Microsoft Windows Server 2008	Version 9 or Later	Version 26 or Later	Version 32 or Later
Microsoft Windows Server 2008 R2	Version 9 or Later	Version 26 or Later	Version 32 or Later
Microsoft Windows 7	Version 9 or Later	Version 26 or Later	Version 32 or Later
Red Hat Enterprise Linux 6.5 and 7.0	Not Supported	Version 26 or Later	Version 32 or Later
Cent OS 6.5 and 7.0	Not Supported	Version 26 or Later	Version 32 or Later

## Supported Resources

This section provides information about the resources supported by Active System Manager (ASM). The information has been segmented based on the resource types.

### Supported Physical Server Operating System

**Table 4. Supported Physical Server Operating System**

Software Component	Supported Version
Microsoft Windows	<ul style="list-style-type: none"> <li>• 2008 R2</li> <li>• 2012</li> <li>• 2012 R2</li> </ul>
Red Hat Enterprise Linux	<ul style="list-style-type: none"> <li>• 6.5–7.2</li> </ul>
CentOS	<ul style="list-style-type: none"> <li>• 6.5–7.2</li> </ul>

### Supported Hypervisor

**Table 5. Supported Hypervisor**

Software Component	Supported Version
Microsoft Windows	<ul style="list-style-type: none"> <li>• 2012</li> <li>• 2012 R2</li> </ul>
VMware	<ul style="list-style-type: none"> <li>• 5.1 (The ASM appliance includes update 03 build 2323236)</li> <li>• 5.5 (The ASM appliance includes update 03 build 3248547)</li> <li>• 6.0 (The ASM appliance includes update 01 build 3073146)</li> </ul>

### Supported Element Manager

Dell Enterprise Manager allows an administrator to manage and monitor multiple Storage Centers, FluidFS clusters, and Fluid Cache for SAN clusters.

**Table 6. Supported Element Manager**

Software Component	Supported Version
Dell Enterprise Manager	15.1.10.89



## Supported Virtual Machine Operating System

Table 7. Supported Virtual Machine Operating System

Software Component	Supported Version
Microsoft Windows	<ul style="list-style-type: none"><li>• 2008*</li><li>• 2008 R2</li><li>• 2012</li><li>• 2012 R2</li></ul>
Red Hat Enterprise Linux	<ul style="list-style-type: none"><li>• 6.5 -7.2</li></ul>
CentOS	<ul style="list-style-type: none"><li>• 6.5 -7.2</li></ul>

\* It is supported only as a virtual machine and it must be created through cloning.

## Supported OS Installation and Boot Locations

Table 8. Supported OS Installation and Boot Locations

Boot Location	Microsoft Windows	Red Hat Enterprise Linux	ESXi	Hyper-V
HDD	X	X	X	X
SD			X	
SAN	X	X	X	X

## Supported PowerEdge Chassis

Table 9. Supported PowerEdge Chassis

Chassis	Supported Version
Dell PowerEdge M1000e	<ul style="list-style-type: none"><li>• CMC 4.5-5.10</li></ul>
Dell PowerEdge FX2	<ul style="list-style-type: none"><li>• CMC 1.10-1.30</li></ul>

## Supported 12<sup>th</sup> Generation of PowerEdge Servers

The following table provides information on the supported 12<sup>th</sup> generation of PowerEdge servers:

**Table 10. Supported 12<sup>th</sup> Generation of PowerEdge Servers**

Resource	BIOS Version		iDRAC Version		Lifecycle Controller Version	
	From	To	From	To	From	To
Dell PowerEdge C6220 II*	2.5.3	2.5.3	NA	NA	NA	NA
Dell PowerEdge M420	2.1.7	2.4.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge M520	2.1.3	2.4.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge M620	2.2.7	2.5.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge M820	2.0.20	2.3.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge R420	2.1.2	2.4.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge R520	2.1.2	2.4.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge R620	2.2.2	2.5.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge R720	2.2.2	2.5.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge R720xd	2.2.2	2.5.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge R820	2.0.20	2.3.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge R920	1.2.2	1.5.2	1.57. 57	2.21.21.21	1.4.2	2.21.21.21
Dell PowerEdge T620	2.2.2	2.5.2	1.57.57	2.21.21.21	1.4.2	2.21.21.21

\* Server configuration is not supported.

## Supported 13<sup>th</sup> Generation of PowerEdge Servers

The following table provides information on the supported 13th generation of PowerEdge servers:

**Table 11. Supported 13<sup>th</sup> Generation of PowerEdge Servers**

Resource	BIOS		iDRAC with Lifecycle Controller	
	From	To	From	To
Dell PowerEdge C6320	1.0.3	1.0.3	2.20.20.20	2.23.23.21
Dell PowerEdge FC430	1.0.6	1.1.5	2.10.10.10	2.21.21.21
Dell PowerEdge FC630	1.0.3	1.2.5	2.05.05.05	2.21.21.21
Dell PowerEdge FC830	1.0.7	1.1.5	2.11.10.10	2.21.21.21
Dell PowerEdge M630	1.0.3	1.2.5	2.05.05.05	2.21.21.21
Dell PowerEdge M830	1.0.7	1.2.1	2.11.10.10	2.21.21.21
Dell PowerEdge R430	1.0.2	1.2.6	2.06.05.05	2.21.21.21
Dell PowerEdge R530	1.0.2	1.2.6	2.06.05.05	2.21.21.21

Resource	BIOS		iDRAC with Lifecycle Controller	
	From	To	From	To
Dell PowerEdge R630	1.0.4	1.3.6	2.02.01.01	2.21.21.21
Dell PowerEdge R730	1.0.4	1.3.6	2.02.01.01	2.21.21.21
Dell PowerEdge R730xd	1.0.4	1.3.6	2.02.01.01	2.21.21.21
Dell PowerEdge R930	1.0.3	1.0.9	2.13.13.12	2.21.21.21
Dell PowerEdge T630	1.0.4	1.3.6	2.02.01.01	2.21.21.21

## Supported Cisco UCS Servers and Firmware Matrix

**Table 12. Supported Cisco UCS Servers and Firmware Matrix**

Resource	Firmware Supported	
	From	To
Cisco UCS B Series M1/M2/M3	N/A	N/A

 **NOTE:** ASM supports deployment of the operating system on the supported Cisco UCS servers. If you want to deploy operating system on Cisco UCS servers, you must apply required hardware configuration by using a service profile in UCS Manager.

## Supported Storage and Firmware Matrix

The following table provides information about the supported storage resources:

**Table 13. Supported Storage and Firmware Matrix**


Resources	Firmware Supported	
	From	To
Dell EqualLogic PS 4000 Series	7.0	8.1.1
Dell EqualLogic PS 6000 Series	7.0	8.1.1
Dell EqualLogic PS6610	8.1.1	8.1.1
Dell Storage MD1400	1.02	1.02
Dell Storage SC4020	6.5.3.10	6.6.5
Dell Storage SCv2000	6.6.5	6.6.5
Dell Compellent SC8000	6.3	6.6.5
Dell Compellent SC9000	6.7.4	6.7.4

## Supported Third-party Storage and Firmware Matrix

The following table provides information about the supported third-party storage resources:

**Table 14. Supported Third-party Storage and Firmware Matrix**

Resources	Firmware Supported	
	From	To
NetApp FAS 22xx (NFS Only)	ONTAP 8.0.4 (7 mode only)	ONTAP 8.0.4 (7 mode only)
NetApp FAS 32xx (NFS Only)	ONTAP 8.0.4 (7 mode only)	ONTAP 8.0.4 (7 mode only)
NetApp FAS 62xx (NFS Only)	ONTAP 8.0.4 (7 mode only)	ONTAP 8.0.4 (7 mode only)

 **NOTE:** NetApp is supported only for ESXi cluster deployment.

## Supported Network Switches

The following table provides information about the supported network switches:

**Table 15. Supported Network Switches**

Resource	Supported Version	
	From	To
Dell Networking N3000	6.2.0.5	6.2.1.6
Dell Networking N4000	6.2.0.5	6.2.1.6
Dell Networking S5000	9.7	9.9.0
Dell Networking S6000	9.3.0.0	9.9.0
Dell Networking S4048-ON	9.8.0	9.9.0
Dell Networking S4810	9.3.0.0	9.9.0
Dell Networking S4820T	9.5.0.1	9.9.0
Dell Networking MXL 10/40GbE blade switch	9.2.0.0	9.9.0
Dell Networking 8/4Gbps FC SAN Module	7.2.0.a	7.2.0.a
Dell PowerEdge M I/O Aggregator switch	9.2.0.0	9.9.0
Cisco Nexus 5500 series	6.0(2)N2(3)+	6.0(2)N2(3)+
Cisco Nexus B22 Fabric Extender*	N/A	N/A

Resource	Supported Version	
	From	To
Brocade 300	7.3.0c	7.3.0c
Brocade M5424**	7.2.0.a	7.3.0.c
Brocade M6505**	v7.2.0.a	v7.3.0.a
Brocade 6510	7.2.0.a	7.3.0.a
Brocade 6520	7.3.0.c	7.3.0.c
Flex IO Module for IOA and MXL	N/A	N/A
FN IO Aggregators for FX2	9.6.0.0	9.9.0
10GbE pass-through for FX2	N/A	N/A

\*On systems with Cisco Nexus B22 Fabric Extenders, certain servers may experience reduced network connectivity. This issue occurs because the servers may have additional ports than what is supported by the B22 Fabric Extender.

\*\* Access gateway mode only.

## Supported Adapters and Firmware Matrix

The following table provides information about the supported adapters:

**Table 16. Supported Adapters and Firmware Matrix**

Resource	Firmware Supported	
	From	To
Broadcom 57800 *	7.8	7.10.18
Broadcom 57810 -k Dual-Port 10Gb Mezzanine	7.8	7.10.18
Broadcom 57840-k Quad-Port 10GbE Mezzanine	7.8	7.10.18
Broadcom 57810 Dual-Port Gigabit NIC PCIe	7.8	7.10.18
Intel X520 Dual-Port 10 GbE adapter (non combo)	15.5.0, A00	16.5.20
Intel X520 /i350 Quad-Port 10 GbE/1 GbE adapter (combo)	16.5.20	16.5.20
QLogic QLE 2562 8Gb FC HBA	03.20.06	03.21.04
QLogic QME 2572 8Gb FC HBA	03.20.06	03.21.04
QLogic QLE 2662 16Gb FC HBA	03.10.07	03.11.09

Resource	Firmware Supported	
	From	To
QLogic QME 2662 16 Gb FC HBA	03.10.07	03.11.09
QLogic 57810 -k Dual-Port 10Gb Mezzanine	7.8	7.10.18
QLogic 57840-k Quad-Port 10GbE Mezzanine	7.8	7.10.18
QLogic 57810 Dual-Port Gigabit NIC PCIe	7.8	7.10.18

\* Configuration of 10 Gb ports only. 1 Gb ports are not configured.

## Supported Storage Controllers and Firmware Matrix

### Supported Storage Controllers on the 12<sup>th</sup> Generation of PowerEdge Servers

The following table provides information about the storage controllers supported on the 12<sup>th</sup> generation of PowerEdge servers:

**Table 17. Supported Storage Controllers on the 12<sup>th</sup> Generation of PowerEdge Servers**

Resource	From	To
PERC H310 and H310 mini	20.13.0-0007	20.13.1-0002
PERC H710 and H710 mini	21.3.0-0009	21.3.2-0005
PERC H710P and H710P mini	21.3.0-0009	21.3.2-0005
PERC H810	21.3.0-0009	21.3.2-0005

### Supported Storage Controllers on the 13<sup>th</sup> Generation of PowerEdge Servers

The following table provides information about the storage controllers supported on the 13<sup>th</sup> generation of PowerEdge servers:

**Table 18. Supported Storage Controllers on the 13<sup>th</sup> Generation of PowerEdge Servers**

Resource	From	To
PERC H330 and H330 mini	25.2.1-0003	25.3.0.0016
PERC H730 and H730 mini	25.2.1-0003	25.3.0.0016
PERC H730P and H730P mini	25.2.1-0003	25.3.0.0016
PERC H830	25.2.1-0003	25.3.0.0016

## Supported Storage Networking

The following table provides information about the supported storage networking devices:

**Table 19. Storage Devices**

	iSCSI Converged	iSCSI Diverged	Fibre Channel (FC)	Fibre Channel over Ethernet (FCoE)	Network File System (NFS)
Dell EqualLogic	ESX and Hyper-V	ESX and Hyper-V	Not applicable	Not applicable	Not applicable
Dell Compellent	Not supported	ESX and Hyper-V	ESX and Hyper-V	ESX	Not applicable
NetApp	Not supported	Not supported	Not supported	Not supported	ESX

## Supported Network Cards

The following table provides information about the supported network cards:

**Table 20. Supported network cards**

	Broadcom/QLogic CNA (Ethernet/iSCSI)	Broadcom/QLogic CNA (FCoE)	Intel NIC (Ethernet/iSCSI)	Intel NIC (FCoE)	QLogic FC HBA
ESXi	Supported	Supported	Supported	Supported	Supported
Hyper-V	Supported	Not supported	Supported*	Not supported	Supported

\*Supported with a single interface (converged fabric) carrying all LAN and SAN traffic.

## Supported Connectivity Protocols

The following table describes the supported OS installation methods and network cards:

**Table 21. Supported connectivity protocols**

	PXE (DHCP only)	Virtual Media (DHCP IP)	Virtual Media (Static IP)
Linux	Supported	Intel NICs only	Intel NICs only
Windows	Supported	Intel NICs only	Not supported
ESXi	Supported	Intel NICs only	Intel NICs only
Hyper-V	Supported	Intel NICs only	Not supported

## Supported vSAN Ready Node

Table 22. Supported vSAN Ready Node

Supported vSAN Node	Supported vSAN Version
HY-6 Series: Dell R730XD	6.2



**NOTE:** For more information on vSAN Ready Node, see [https://www.vmware.com/resources/compatibility/pdf/vi\\_vsan\\_rn\\_guide.pdf](https://www.vmware.com/resources/compatibility/pdf/vi_vsan_rn_guide.pdf).



## Other Documents You May Need

See <http://www.dell.com/asmdocs> for additional supporting documents such as:

- *Active System Manager Release 8.2 User's Guide*
- *Active System Manager Release 8.2 Release Notes*
- *Active System Manager Release 8.2 Installation Guide*
- *Active System Manager Release 8.2 API Reference Guide*
- *Active System Manager Release 8.2 SDK Reference Guide*
- *Active System Manager Integration for VMware vRealize Orchestrator User's Guide*

You can also see <http://www.dell.com/asmtechcenter> for how-to videos, white papers, blogs, and support forums.