Active System Manager Version 1.0.1
Quick Installation Guide

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.

Contents

Overview

Active System Manager is a simple, modular, and extensible management tool that automatically configures converged infrastructure based on physical workload requirements.

In this guide, you will learn how to install Active System Manager in your environment and configure the virtual appliance that hosts the solution.

⚠ CAUTION: For the latest version of the document, visit www.dell.com/support/manuals, and select Choose from a list of all Dell products. Then, click Software, Monitors, Electronics & Peripherals → Software → Enterprise System Management → Active System Manager v 1.0.1.

Virtual Appliance Requirements

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

- Two virtual CPUs
- 3.5 GB RAM
- Hypervisor - vSphere Client (5.0 or 5.1) with ESXi (5.0 or 5.1) or Hyper-V 2012

Device Requirements

Active System Manager requires the managed infrastructure environment to include specific devices configured with minimum firmware levels:

Chassis – One or more PowerEdge M1000e (with K-model switch) blade enclosures configured with:

- Midplane version 1.1 with end-to-end 10 GbE
- Dual Chassis Management Controller (CMC) with the most recent available firmware version
- Connectivity to 1 Gb out-of-band (OOB) management network
- Up to six power supplies
- FlexAddress turned off

Blade servers – Dell PowerEdge 12th generation servers (M820, M620, and/or M420) configured with:

- iDRAC7 Express or iDRAC7 Enterprise with firmware version 1.30.30
- Lifecycle Controller 2 with firmware version 1.1.0.1108
- Network Interface Card (NIC) with 10GBASE-KR and minimum Fabric A support

    – Broadcom – 57810-k Network Daughter Card (NDC) or mezzanine card with firmware version 7.4.8
- If using a RAID configuration:

    – PowerEdge H310 – firmware version 20.11.0-0002
    – PowerEdge H710 and H710P – firmware version 21.1.0-0007

    – PowerEdge S110 Software RAID – Windows Server 2008 (32-bit, 64-bit, and R2) firmware version 3.0.0.0134; PERC firmware version 3.0.0.0139

I/O Module

- PowerEdge M I/O aggregator with firmware version 8.3.17.2

Top-of-Rack (ToR) Switch – Minimum of two

- Dell Force10 S4810 with firmware version 8.3.12.0
- Cisco Nexus 5020 with firmware version 5.1(3)N2(1a)

External Storage

- EqualLogic PS6110 (iSCSI only) with firmware version 6.0.1
- EqualLogic PS6510 (iSCSI only) with firmware version 6.0.1
- Compellent SC8000 (iSCSI and FCoE) with firmware version 6.0 or higher

Software Requirements

To display Active System Manager correctly, a system must have a minimum 1024 x 770 screen resolution and a Web browser that meets minimum requirements based on the operating system:

- Windows 7, Windows Server 2008 R2

    – Internet Explorer 9 and 10

    > **NOTE:** For Internet Explorer 9, go to **Tools → Internet Options**. On the **Advanced** tab under **Security**, deselect the option **Do not save encrypted pages to disk**. Failing to make this configuration change will result in a lack of responsiveness from the Active System Manager user interface, due to encrypted communication between the Active System Manager virtual appliance and managed servers.

    – Firefox 9, 15, and 16

- Windows 8

    – Internet Explorer 9 and 10

    – Firefox 15 and 16

- Red Hat Enterprise Linux (RHEL) 6.2, 6.3, and 6.4

    – Firefox 9, 15, and 16

Installation and Quick Start

The following sections provide installation and quick start information, including step-by-step instructions for deploying and configuring Active System Manager in either vSphere Client or Hyper-V Manager.

> ✎ **NOTE:** Active System Manager supports installing one instance within a network environment. Exceeding this limit can cause conflicts in device communication.

Information Prerequisites

Before you begin the installation process:

- Gather TCP/IP address information to assign to the virtual appliance.
- Make sure that vCenter Server and vSphere Client or Hyper-V Server and Hyper-V Manager are currently running.
- Download the Active System Manager zip file (includes two executable file — one for VMWare and one for Hyper-V, and the readme file), and choose a location where it will be deployed.
- Determine the host on which the Active System Manager virtual appliance will be installed. You can use any host managed by the vCenter or Hyper-V Manager instance. After installation, make sure the appliance has network access by issuing a ping command to the hardware out-of-band (OOB) management network IP address from the appliance console.

> ✎ **NOTE:** The Active System Manager virtual appliance functions as a regular virtual machine; therefore, any interruptions or shut downs will impact overall functionality.

Installing Active System Manager

Before you begin, make sure that systems are connected and vCenter Server and vSphere Client or Hyper-V Server and Hyper-V Manager are running.

Deploying Active System Manager from vSphere Client

1. Double-click the executable file. The extraction process begins.
2. Save extracted files to a location accessible by vSphere Client. It is recommended to use a local drive or CD/DVD, because installing from a network location can take up to 30 minutes.
3. In vSphere Client, select **File → Deploy OVF Template**. The Deploy OVF Template wizard displays.
4. On the **Source** page, click **Browse** and then select the OVF package. Click **Next** to continue.
5. On the **OVF Template Details** page, review the information presented. Click **Next** to continue.
6. On the **Name and Location** page, enter a name with up to 80 characters. Then, select an **Inventory Location** where the template will be stored. Click **Next** to continue.
7. Depending on the vCenter configuration, one of the following options displays:

   - **If resource pools are configured** — On the **Resource Pool** page, select the pool of virtual servers to which the appliance virtual machine will be deployed.

- **If resource pools are NOT configured** — On the **Hosts/Clusters** page, select the host or cluster to which the appliance virtual machine will be deployed.

   Click **Next** to continue.

8. If there is more than one datastore available on the host, the **Datastore** page displays. Select the location to store virtual machine (VM) files, and click **Next** to continue.

9. On the **Disk Format** page, choose one of the following options:

   - To allocate storage space to virtual machines as it is needed, click **thin provisioned format**.
   - To pre-allocate physical storage space to virtual machines at the time a disk is created, click **thick provisioned format**.

   Click **Next** to continue.

10. On the **Ready to Complete** page, review the options you selected on previous pages and click **Finish** to run the deployment job. A completion status window displays where you can track job progress.

Deploying Active System Manager from Hyper-V Manager

1. Double-click the executable file. The extraction process begins.
2. Save extracted files to a location accessible by Hyper-V Manager. It is recommended to use a local drive or CD/DVD, because installing from a network location can take up to 30 minutes.
3. In Hyper-V Manager, select **File → Import Virtual Machine**. The Import Virtual Machine wizard displays.
4. On the **Locate Folder** page, click **Browse** and then select the folder that contains the Active System Manager Hyper-V files (Dell_ASM_HV-1.0.1.3004). Click **Next** to continue.
5. On the **Select Virtual Machine** page, select the virtual machine to import (there will only be one). Click **Next** to continue.
6. On the **Choose Import Type** page, select **Copy the virtual machine (create a new unique ID)**. Click **Next** to continue.
7. On the **Choose Destination** page, click **Browse** and then select the location of virtual machine folders or use the defaults. Click **Next** to continue.
8. On the **Choose Storage Folders** page, click **Browse** and then select the location of virtual hard disks or use the defaults. Click **Next** to continue.
9. On the **Summary** page, review the options you selected on previous pages and click **Finish** to copy the files and run the import job. A completion status window displays where you can track job progress.
10. When the job is complete, right-click the imported virtual machine and select **Settings**. Select **VM-Bus Network Adapter** in the left-hand pane, and configure the network by selecting the appropriate network as the virtual switch.
11. Start the virtual machine.

Configuring NTP for Hyper-V
When NTP is enabled in Active System Manager, time synchronization for the Active System Manager virtual machine must be disabled in the Hyper-V Manager.

1. In Hyper-V Manager, right-click the Active System Manager virtual machine and select **Settings**.
2. On the **Settings** screen, select **Integration Services** and deselect **Time synchronization**.
3. Click **OK**.

Configuring the Active System Manager Virtual Appliance

Before you configure Active System Manager in the Initial Setup wizard, you must configure these basic settings in the console:

1. For vSphere:

    a. In the vSphere Client **Home** window, click **Hosts and Clusters**.

    b. Expand the host/cluster or resource pool to which you deployed the Active System Manager virtual machine. Select the virtual machine, and then power it on.

    c. Click the **Console** tab, and then wait for the Active System Manager virtual appliance to finish booting.

2. For Hyper-V:

    a. In the Hyper-V Manager select the server to which you deployed the Active System Managervirtual machine.

    b. Select the virtual machine, and then select **Start**.

    c. Select the virtual machine and then select **Actions** → **Connect**. Wait for the Active System Manager virtual appliance to finish booting.

3. Enter the default user name *admin* for the **localhost login**, and set a password of your choice. The password must have at least 8 characters and include a number, a symbol, an uppercase letter, and a lowercase letter.

    > ✎ **NOTE:** To change the admin password in the future, select **Change admin password** in the Active System Manager console menu.

4. When the console menu displays, select **Configure Network** to configure the virtual appliance IP address and host name.

    > ✎ **NOTE:** By default, the operating system selects DHCP as the IP addressing method for the virtual appliance; however, it is strongly recommended to use a static IP address. The next best option is a DHCP reservation. Standard DHCP is not recommended.

    a) To configure the IP address, select **Device configuration** and then select the Ethernet controller. On the **Network Configuration** screen, select an addressing method and enter the required information.

    b) To configure the host name and DNS server(s), select **DNS configuration** and enter the host name and DNS information. Make sure to register the host name on the DNS server; the operating system will not automatically register it for you.

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ACTIVE SYSTEM MANAGER VIRTUAL APPLIANCE

Active System Manager Portal:
    https://10.255.6.81/skyhawkui/index.html

Use the <UP> and <DOWN> arrow keys to select an option:

    Configure network
    Change admin password
    Reboot this virtual appliance
    Reset this virtual appliance to factory settings
    Refresh this screen
    Log out

Press <ENTER> to continue.
```

Figure 1. Active System Manager Console Menu

Completing Initial Configuration

After completing the steps in this guide, you must configure Active System Manager in the Initial Setup wizard.

To access the Initial Setup wizard, log into Active System Manager by going to the URL displayed in the main console menu. For information on completing the Initial Setup wizard, see the *Active System Manager Version 1.0.1 User Guide*.