·I|III|II CISCO

Getting Started Installing or Upgrading Cisco Vision Dynamic Signage Director

Read this module before you perform an initial installation or upgrade of the Cisco Vision Dynamic Signage Director software. It includes the following topics:

- Before You Begin, page 11
- Hardware Prerequisites, page 12
- Overview of the Installation and Upgrade Process, page 16

Before You Begin

IMPORTANT: Read all reference content and prepare. **ONLY** use the procedure documented in Installation Tasks, page 19, or your installation will not work properly.

Be sure that you understand and have met the following prerequisites before you begin to install or upgrade the Cisco Vision Dynamic Signage Director software:

- Refer to the Release Notes for Cisco Vision Dynamic Signage Director Release 6.3 for the latest information about hardware and software requirements, changes, important notes, and caveats for your software release.
- Determine if you have compatible media player models and firmware versions available.

The media player firmware images are not bundled with the Cisco Vision Dynamic Signage Director software. Download the firmware image separately. For more information about supported firmware versions, see the Release Notes for Cisco Vision Dynamic Signage Director, Release 6.3.

- Be sure that you have a supported browser installed for access to Cisco Vision Dynamic Signage Director. See the Cisco Vision Content Planning and Specifications Guide, Release 6.3.
- To access the Cisco Integrated Management Controller (CIMC) for the software installation on a Cisco Integrated Management Controller (CIMC) server, see their documentation here.
 - Your computer meets the minimum browser and Flash player requirements for Cisco Vision Dynamic Signage Director, and also has Java 1.6 or later installed. The minimum Flash version is 22.0.0.209 (applies to both Mac OS and Windows).
 - You have a laptop connection with access to the Cisco Vision Dynamic Signage Director server network.
 - You have the IP address of the CIMC interface on the Cisco Vision Dynamic Signage Director server.
 - You have the CIMC interface login credential. The default credential is admin and password.

Note: It is difficult to recover from an interrupted installation process if the installation shell is accidentally closed or the network drops. We **strongly recommended** that you use a server console connection method that does not pose a risk to the success of upgrade completion, if the session breaks during upgrade. You also can use a monitor and keyboard that are directly connected to the Cisco Vision Dynamic Signage Director server to log into the TUI.

To learn more about the KVM console and the CIMC interface, see the Cisco UCS C-Series Integrated Management Controller Configuration guide that corresponds to your server release at: http://www.cisco.com/c/en/us/support/servers-unified-computing/ucs-c-series-integrated-management-control ler/products-installation-and-configuration-guides-list.html

Assess your installation environment and see Overview of the Installation and Upgrade Process, page 16 for more information and to find out what modules in this guide you should follow.

Hardware Prerequisites

You can install Release 6.3 on your own virtual machine to run the Cisco Vision Dynamic Signage Director software. Follow the requirements in this section to be sure that your virtual environment meets the minimum and tested specifications.

Release 6.3 introduces two more server profile deployment options. Now there is:

- Mini
- Small
- Standard
- Large

This section includes the following topics:

- Minimum Virtual Machine System Requirements for Cisco Vision Dynamic Signage Director, page 12
- VMware vSphere Tested Versions for Cisco Vision Dynamic Signage Director, page 16
- Restrictions for Virtual Machine Support, page 16

Minimum Virtual Machine System Requirements for Cisco Vision Dynamic Signage Director

Be sure that your configuration meets the minimum system requirements. This section details the minimum requirements for each deployment size.

Mini-Scale Server Deployment

For a mini-scale deployment, be sure that your configuration meets the minimum system requirements in Table 1 on page 13 and supports a VMware virtual machine environment with a compatible vSphere version (See VMware vSphere Tested Versions for Cisco Vision Dynamic Signage Director, page 16).

Note: Install Cisco Vision Dynamic Signage Director servers close to the DMPs that they operate with, such as at the remote venue edge. Cisco Vision Dynamic Signage Director communicates to the players over a LAN.

To maintain software licensing compliance, Cisco Vision Dynamic Signage Director servers must be installed in the following manner:

The Cisco Vision Dynamic Signage Director server is installed in a data center or in an enterprise data closet, or the Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment.

Table 1	Minimum System Requirements for a Virtualized Environment Running Mini-Scale Cisco Vision Dynamic
Signage Di	rector

System Component	Minimum Requirement
Processor	Two processors each equivalent to an Intel Xeon Processor E5-2640 (15 MB cache, 1.9 GHz clock, 7.20 GT/s Intel® QPI)
CPU Clock Speed (GHz)	1.9
CPU Cache (MiB)	9
Forward write (fwrite) operations per second	2,500
Local attached SSD (RAID10)	2 x 6 Gb/s
Virtual CPUs ¹	6
Virtual Disk Space	225 GB
Virtual RAM (VRAM)	8 GB ²

1. Hyperthreading can be used. Be sure that the BIOS is properly configured to enable it.

2. Reserve a minimum of 8 GB VRAM to install and operate the Mini/Smaller-Scale Cisco Vision Dynamic Signage Director system. Allow additional storage for the ESXi OS.

Small-Scale Server Deployment

For a small-scale deployment, be sure that your configuration meets the minimum system requirements in Table 2 on page 14 and supports a VMware virtual machine environment with a compatible vSphere version (See VMware vSphere Tested Versions for Cisco Vision Dynamic Signage Director, page 16).

Note: Install Cisco Vision Dynamic Signage Director servers close to the DMPs that they operate with, such as at the remote venue edge. Cisco Vision Dynamic Signage Director communicates to the players over a LAN.

To maintain software licensing compliance, Cisco Vision Dynamic Signage Director servers must be installed in the following manner:

The Cisco Vision Dynamic Signage Director server is installed in a data center or in an enterprise data closet, or the Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment.

The Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment, or the remote server hardware is installed in a data center or in an enterprise data closet..

Table 2Minimum System Requirements for a Virtualized Environment Running Smaller-Scale Cisco VisionDynamic Signage Director

System Component	Minimum Requirement
Processor	Two processors each equivalent to an Intel Xeon Processor E5-2640 (15 MB cache, 2.50 GHz clock, 7.20 GT/s Intel® QPI)
CPU Clock Speed (GHz)	2.5
CPU Cache (MiB)	15 to 19.25
Forward write (fwrite) operations per second	2,500
Local attached SSD (RAID10)	4 x 6 Gb/s
Virtual CPUs ¹	6-24
Virtual Disk Space	225 GB
Virtual RAM (VRAM)	8 GB ²

1. Hyperthreading can be used. Be sure that the BIOS is properly configured to enable it.

2. Reserve a minimum of 8 GB VRAM to install and operate the Smaller-Scale Cisco Vision Dynamic Signage Director system. Allow additional storage for the ESXi OS.

Standard-Scale Server Deployment

For a standard-scale deployment, be sure that your configuration meets the minimum system requirements in Table 3 on page 14 and supports a VMware virtual machine environment with a compatible vSphere version (See VMware vSphere Tested Versions for Cisco Vision Dynamic Signage Director, page 16).

Note: Install Cisco Vision Dynamic Signage Director servers close to the DMPs that they operate with, such as at the remote venue edge. Cisco Vision Dynamic Signage Director communicates to the players over a LAN.

To maintain software licensing compliance, Cisco Vision Dynamic Signage Director servers must be installed in the following manner:

- The Cisco Vision Dynamic Signage Director server is installed in a data center or in an enterprise data closet, or the Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment.
- The Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment, or the remote server hardware is installed in a data center or in an enterprise data closet..

Table 3	Minimum System Requirements for a Virtualized Environment Running Standard-Scale Cisco Visior
Dynamic S	gnage Director

System Component	Minimum Requirement
Processor	Two processors each equivalent to an Intel Xeon Processor E5-2640 (15 MB cache, 2.50 GHz clock, 7.20 GT/s Intel® QPI)
CPU Clock Speed (GHz)	2.5 to 3.5
CPU Cache (MiB)	15 to 19.25 (new)
Forward write (fwrite) operations per second	10,000
Local attached SSD (RAID10)	6 x 12Gb/s

System Component	Minimum Requirement
Virtual CPUs ¹	24
Virtual Disk Space	900 GB
Virtual RAM (VRAM)	32 GB ²

Table 3Minimum System Requirements for a Virtualized Environment Running Standard-Scale Cisco VisionDynamic Signage Director

1. Hyperthreading can be used. Be sure that the BIOS is properly configured to enable it.

2. Reserve a minimum of 32 GB VRAM to install and operate the Cisco Vision Dynamic Signage Director system. Allow additional storage for the ESXi OS.

Large-Scale Server Deployment

For a large-scale deployment, be sure that your configuration meets the minimum system requirements in Table 4 on page 15 and supports a VMware virtual machine environment with a compatible vSphere version (See VMware vSphere Tested Versions for Cisco Vision Dynamic Signage Director, page 16).

Note: Install Cisco Vision Dynamic Signage Director servers close to the DMPs that they operate with, such as at the remote venue edge. Cisco Vision Dynamic Signage Director communicates to the players over a LAN.

To maintain software licensing compliance, Cisco Vision Dynamic Signage Director servers must be installed in the following manner:

- The Cisco Vision Dynamic Signage Director server is installed in a data center or in an enterprise data closet, or the Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment.
- The Cisco Vision Dynamic Signage Director software is installed on the customer's choice of hardware that supports a VMware virtualized environment, or the remote server hardware is installed in a data center or in an enterprise data closet..

Table 4	Minimum System Requirements for a Virtualized Environment Running Large-Scale Cisco Vision
Dynamic Signage Director	

System Component	Minimum Requirement
Processor	Two processors each equivalent to an Intel Xeon Processor E5-2640 (15 MB cache, 2.50 GHz clock, 7.20 GT/s Intel® QPI)
CPU Clock Speed (GHz)	3.6 or greater
CPU Cache (MiB)	24
Forward write (fwrite) operations per second	10,000
Local attached SSD (RAID10)	6 x 12Gb/s
Virtual CPUs ¹	32
Virtual Disk Space	900 GB
Virtual RAM (VRAM)	60 GB ²

1. Hyperthreading can be used. Be sure that the BIOS is properly configured to enable it.

2. Reserve a minimum of 32 GB VRAM to install and operate the Cisco Vision Dynamic Signage Director system. Allow additional storage for the ESXi OS.

Overview of the Installation and Upgrade Process

Table 5 on page 16 provides additional information about the tested VM hardware and OS specifications to use when configuring a virtual machine to support Cisco Vision Dynamic Signage Director.

Table 5 Virtual Machine Hardware and OS Specifications Tested for Cisco Vision Dynamic Signage Director

System Component	Specification
VM Hardware	Version 8
Guest Operating System	RedHat Enterprise Linux 7 (64-bit)
Network Adapter	E1000
SCSI Controller	LSI Logic Parallel or LSI Logic SAS
Disk Provisioning	Thick

VMware vSphere Tested Versions for Cisco Vision Dynamic Signage Director

Cisco Vision Dynamic Signage Director has been tested with VMware ESXi, 6.7.0. Other versions should work, but they have not been tested.

Note: Any VMware license that does not allow your virtual machine to be set to the minimum requirements described in Table 5 on page 16 is not supported.

Restrictions for Virtual Machine Support

Be sure that you consider the following restrictions before you configure a virtual machine environment for Cisco Vision Dynamic Signage Director:

- When using a virtual machine environment, Cisco Technical Support only provides support for the Cisco Vision Dynamic Signage Director software. No support is provided for third-party hardware or the virtual OS environment installed by the customer.
- We recommend a dual virtual machine environment to support a primary and backup server using the standard Cisco Vision Dynamic Signage Director backup/restore and failover tools.
- Cisco has not tested and does not provide support for any VMware tools in a Cisco Vision Director system. If your site chooses to use backup, recovery or other tools outside of the Cisco Vision Dynamic Signage Director software to manage your virtual machines, you accept the risks and responsibility associated with securing your data.

Overview of the Installation and Upgrade Process

There are different tasks required to install or upgrade your Cisco Vision Dynamic Signage Director server for software Release 6.3 depending on your current server environment:

- Installing on a Virtual Machine for the First Time, page 17
- Upgrading an Existing Server Already Running Cisco Vision Director, page 17

Overview of the Installation and Upgrade Process

Installing on a Virtual Machine for the First Time

The installation process for a virtual machine running Cisco Vision Dynamic Signage Director software for the first time involves the following tasks:

- Verifying that your virtual machine meets the requirements listed in Minimum Virtual Machine System Requirements for Cisco Vision Dynamic Signage Director, page 12.
- Configuring the virtual machine specifications according to the tested specifications with Cisco Vision Dynamic Signage Director provided in Table 5 on page 16.
- Installing VMware client software.

Note: Cisco Vision Dynamic Signage Director has been tested with VMware ESXi, 6.7.0. Other versions have not been tested.

Any VMware license that does not allow your virtual machine to be set to the minimum requirements described in Minimum Virtual Machine System Requirements for Cisco Vision Dynamic Signage Director, page 12 is not supported.

- Loading the Cisco Vision Dynamic Signage Director software full ISO.
- Running the installation.
- Upgrading the media player firmware.

For detailed information, see Installing Cisco Vision Dynamic Signage Director for the First Time, page 19.

Upgrading an Existing Server Already Running Cisco Vision Director

Note: Always check the current Release Notes for the release from which you are updating. The upgrade paths and Service Pack information is always there and is the most current.

Upgrading From Cisco Vision Dynamic Signage Director Release 6.2

The only way to upgrade to Release 6.3 is from the latest release of Release 6.2. Check prior release Release Notes to verify that you are completing all the upgrades in order. The upgrade process from an existing Cisco Vision Dynamic Signage Director Release 6.2 system involves the following tasks:

- Upgrading the Cisco Vision Dynamic Signage Director software
- Upgrading the digital media player firmware

See Upgrading Cisco Vision Director Software, Language Packs, and Fonts, page 21 and Upgrading the DMP Firmware, page 35.

Repeat these processes until you have installed and are preparing to install Release 6.3. See Upgrading Cisco Vision Director Software, Language Packs, and Fonts, page 21 and Upgrading the DMP Firmware, page 35.

Overview of the Installation and Upgrade Process