Migrating the Cisco StadiumVision Director Server Environment to Platform 2 from the Cisco ADE 2140 Series Appliance

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This module describes how to migrate your Cisco StadiumVision Director data from the Cisco ADE 2140 (32-bit) server environment, to the Platform 2 (64-bit) server environment.

It includes the following topics:

Prerequisites for Server Migration

Before you begin the migration, be sure that the following requirements are met:

- You are migrating from a redundant Cisco ADE 2140 Series Appliance server environment to a redundant Cisco StadiumVision Platform 2 server environment.
- The existing primary and secondary Cisco ADE 2140 Series appliances are both running the same version of Cisco StadiumVision Director Release 2.4 software.
- The new primary and secondary Platform 2 servers are both running the same version of Cisco StadiumVision Director Release 2.4 software.

Tip The software version on the Cisco ADE 2140 Series appliances can start off being different than what you will be running on the new Platform 2 servers. However, ideally, both sets of redundant servers would all be running the same version that you want to run in production for simplicity of the migration.

- All servers are installed on the same local network and have unique IP addresses.
- You have chosen an appropriate down time to perform the migration when there is adequate time to complete and verify the migration before any scheduled events and to allow time to resolve any unexpected issues that might occur.

- Verify that a monitor and keyboard are connected to the Cisco StadiumVision Director server, or that you have a laptop computer connected to the same network as the Cisco StadiumVision Director server with an SSH client (such as PuTTY) to log in as installer and upgrade an existing server.
- Be sure that you have a secure FTP (SFTP) application to transfer any necessary software files to the Cisco StadiumVision Director server, such as backup files when doing server migration.

How to Perform the Server Migration

To perform the server migration, complete the following tasks:

- Running a Backup and Restore on the Cisco ADE 2140 Servers, page 58 (required)
- Promoting the Secondary Cisco ADE 2140 Server, page 59 (required)
- Upgrading the Active Secondary Cisco ADE 2140 Server to Production Version, page 59 (as needed)
- Upgrading the Primary and Secondary Platform 2 Servers to Production Version, page 59 (as needed)
- Replacing the Backup Script and Modifying the Timeout Value on the Primary and Secondary Platform 2 Servers, page 59 (required)
- Verifying the Cisco ADE 2140 and Platform 2 Server Software Versions, page 60 (required)
- Copying Backup Files From the Cisco ADE 2140 Server to the Primary Platform 2 Server, page 60 (required)
- Stopping Services and Shutting Down the Cisco ADE 2140 Servers, page 61 (required)
- Changing the IP Address on the Primary Platform 2 Server, page 61 (required)
- Running a Restore on the Primary Platform 2 Server, page 62 (required)
- Staging the Flash Template to All DMPs on the Primary Platform 2 Server, page 62 (required)
- Running a Backup and Restore on the Platform 2 Servers, page 63 (required)

Running a Backup and Restore on the Cisco ADE 2140 Servers

For more information about running backup and restore on a Cisco StadiumVision Director server, see the *Backing Up and Restoring Cisco StadiumVision Director Servers, Release 2.4* guide.

To run a backup and restore on the Cisco ADE 2140 servers, complete the following steps:

Step 1 Perform a backup of the currently active (primary) Cisco ADE 2140 server.

Step 2 Verify that the backup was successful.

Step 3 Perform a restore of system data from backup on the secondary Cisco ADE 2140 server.

Promoting the Secondary Cisco ADE 2140 Server

Follow the steps in the "Promoting a Standby Secondary Server to the Active Server" section of the *Cisco StadiumVision Director Server Redundancy, Release 2.4* guide.

Upgrading the Active Secondary Cisco ADE 2140 Server to Production Version

Note This task is only required if you did not upgrade the primary and secondary Cisco ADE 2140 servers to the latest Cisco StadiumVision Director Release 2.4 software that you want to run in production on the new Platform 2 server.

Follow the steps in the "Using the TUI Upgrade Utility to Update an Existing Release 2.4 Server" module.

Upgrading the Primary and Secondary Platform 2 Servers to Production Version

Note This task is only required if you did not upgrade the primary and secondary Platform 2 servers to the latest Cisco StadiumVision Director Release 2.4 software that you want to run in production.

Follow the steps in the "Using the TUI Upgrade Utility to Update an Existing Release 2.4 Server" module.

Replacing the Backup Script and Modifying the Timeout Value on the Primary and Secondary Platform 2 Servers

Note This task requires that you have obtained the "backup.cgi" file from your Cisco Systems representative.

To replace the backup script and modify the timeout value, complete the following steps:

Step 1 Log into the Cisco StadiumVision Director primary server using a SNE TAC account login credential.

Step 2 Go to the folder where the current backup script file is stored using the following command:

```
cd /var/www/cgi-bin/
```

Step 3 Rename the original backup.cgi file in this folder to another name using the following command:

```
sudo mv backup.cgi old_backup.cgi
```

Step 4 Using an SFTP client on the PC or laptop where you downloaded the new backup.cgi file, transfer the file to the "/tmp" folder.

Step 5 Move the backup.cgi file to the "/var/www/cgi-bin" folder on the primary Cisco StadiumVision Director server using the following command:

```
sudo mv /tmp/backup.cgi /var/www/cgi-bin
```

Step 6 After transferring the script, verify that the permissions and ownership of the backup.cgi script matches the rest of the scripts in the folder. To change the permissions, use the following commands:

```
sudo chown apache:apache backup.cgi
sudo chmod 755 backup.cgi
```

Step 7 Change the HTTPD timeout value from 120 to 5400 using the following commands:

```
cd /etc/httpd/conf/
sudo vi httpd.conf
```

Search for "Timeout" and increase the value from 120 to 5400.

Step 8 Restart HTTPD using the following command:

```
sudo service httpd restart
```

Step 9 Repeat this task on the secondary server.

Verifying the Cisco ADE 2140 and Platform 2 Server Software Versions

Before you proceed with the next task, verify that the active Cisco ADE 2140 server and both of the primary and secondary Platform 2 servers are running the latest version of Cisco StadiumVision Director Release 2.4 software that you plan to upgrade to in production.

Copying Backup Files From the Cisco ADE 2140 Server to the Primary Platform 2 Server

To move the data from your Cisco ADE 2140 server environment to the new primary Platform 2 server, you need to manually copy the backup files to the new primary Platform 2 server.

To copy backup files from the Cisco ADE 2140 server to the primary Platform 2 server, complete the following steps:

Step 1 On the active Cisco ADE 2140 server, go to the /var/sv/BACKUP directory.

Step 2 Find the following files and copy them:

- File ending in .chksum, which contains an MD5 checksum for the .tar file.
- File ending in .tar.

Note Both files must be copied because the restore process automatically uses both files to verify the MD5 signature.

Step 3 On the primary Platform 2 server, go to the /var/sv/BACKUP directory.

Step 4 Put the .chksum and .tar files that you copied from the Cisco ADE 2140 server into the Platform 2 server backup directory.

Stopping Services and Shutting Down the Cisco ADE 2140 Servers

Note The primary Cisco ADE 2140 server should already be shut down during the promotion of the secondary Cisco ADE 2140 server, but if it is not for some reason, repeat this procedure to shut it down.

To stop services and shut down the Cisco ADE 2140 servers, complete the following steps:

Step 1 Log into the active secondary server as a root user using an SSH client.

Step 2 Shut down the Cisco StadiumVision Director services using the following commands:

```
sudo service httpd stop
sudo service svd stop
sudo service liferay stop
sudo service mysql stop
```

Step 3 When the services are stopped, shut down the secondary server using the following command:

```
sudo shutdown -h now
```

Both Cisco ADE 2140 servers should now be shut down.

Changing the IP Address on the Primary Platform 2 Server

Note Before you begin this task, be sure that you know the IP address of the primary Cisco ADE 2140 server.

To change the IP address on the primary Platform 2 server, complete the following steps:

Step 1 Log into the primary Platform 2 server as a root user using an SSH client.

Step 2 Shut down the Cisco StadiumVision Director services using the following commands:

```
sudo service httpd stop
sudo service svd stop
sudo service liferay stop
sudo service mysql stop
sudo service svd-hornetq stop
```

Step 3 Enter the following command to open a text editor for the /etc/hosts file:

```
sudo vi /etc/hosts
```

Step 4 Change the IP address of the primary Platform 2 server to match the address of the primary CADE server as shown in the sample entry below:

primary-cade-ipaddress primary-platform2-hostname

Step 5 Change the IP address of the actual interface using the following command:

```
sudo system-configure-network
```

Step 6 Restart the network daemon to put the IP address change into effect on the server using the following command:

```
sudo service network restart
```

Step 7 Verify connectivity to the primary Platform 2 server using the ping command, as shown in the following example:

```
ping ip-address
```

Step 8 Restart Cisco StadiumVision Director services using the following commands:

```
sudo service mysql start
sudo service liferay start
sudo service svd start
sudo service httpd start
```

Running a Restore on the Primary Platform 2 Server

Follow the steps in the "Starting a Restore Manually for Immediate Execution" in the *Backing Up and Restoring Cisco StadiumVision Director Servers, Release 2.4* guide.

Staging the Flash Template to All DMPs on the Primary Platform 2 Server

To stage the flash template to all DMPs on the primary Platform 2 server, complete the following steps:

Step 1 Log into Cisco StadiumVision Director as an administrator.

Step 2 From the main menu, click **Control Panel**.

The Control Panel is opened in a new window.

Step 3 Select **Setup** > **Staging**.

Step 4 In the icon bar, click the Plus (+) icon to start manual staging.

The Start manual staging dialog box opens.

Step 5 In the Start manual staging dialog box, do the following:

- For Type, select **Flash template**.
- For Target, select **All configured DMPs**.

Step 6 Click **Start Staging**.

Running a Backup and Restore on the Platform 2 Servers

For detailed information about configuring the backup and restore environment and running a backup and restore, see the *Backing Up and Restoring Cisco StadiumVision Director Servers, Release 2.4* guide.

To run a backup and restore on the Platform 2 servers, complete the following steps:

Step 1 Using the Text Utility Interface (TUI), configure your backup and restore environment.

Step 2 Run a backup on the primary server.

Verify that the backup was successful.

Step 3 Run a manual restore from backup on the secondary server.

How to Roll Back the Server Migration

If for some reason you need to roll back your server environment to the original Cisco ADE 2140 servers, complete the following tasks:

- Stopping Services and Shutting Down the Primary and Secondary Platform 2 Servers, page 63 (required)
- Staging the Flash Template to All DMPs on the Secondary Cisco ADE 2140 Server, page 64 (required)
- Changing the IP Address on the Secondary Cisco ADE 2140 Server, page 64 (required)
- Downgrading the Secondary Cisco ADE 2140 Server Software, page 65 (as required)
- Powering on the Primary Cisco ADE 2140 Server, page 65 (required)
- Running a Backup and Restore on the Cisco ADE 2140 Servers, page 66 (required)
- Verifying the Migration Failback, page 66 (required)

Stopping Services and Shutting Down the Primary and Secondary Platform 2 Servers

Note Be sure to shut down the primary Platform 2 server first.

To stop services and shut down the Platform 2 servers, complete the following steps:

Step 1 Log into the primary Platform 2 server as a root user using an SSH client.

Step 2 Enter the following commands on the server:

```
sudo service httpd stop
sudo service svd stop
sudo service liferay stop
sudo service mysql stop
```

Step 3 When the services are stopped, shut down the server using the following command:

```
sudo shutdown -h now
```

Step 4 Log into the secondary Platform 2 server as a root user using an SSH client.

Step 5 Repeat Step 2 and Step 3 for the secondary server.

Both Platform 2 servers should now be shut down.

Staging the Flash Template to All DMPs on the Secondary Cisco ADE 2140 Server

This task should be performed on the original secondary Cisco ADE 2140 server.

To stage the flash template to all DMPs on the secondary Cisco ADE 2140 server, complete the following steps:

Step 1 Power on the original secondary Cisco ADE 2140 server.

Step 2 Log into Cisco StadiumVision Director as an administrator.

Step 3 From the main menu, click **Control Panel**.

The Control Panel is opened in a new window.

Step 4 Select **Setup > Staging**.

Step 5 In the icon bar, click the plus (+) icon to start manual staging.

The Start manual staging dialog box opens.

Step 6 In the Start manual staging dialog box, do the following:

- For Type, select **Flash template**.
- For Target, select **All configured DMPs**.

Step 7 Click **Start Staging**.

Changing the IP Address on the Secondary Cisco ADE 2140 Server

You need to know the original IP address of the secondary server to complete this task.

To change the IP address on the secondary Cisco ADE 2140 server, complete the following steps:

Step 1 Log into the secondary server as a root user using an SSH client.

Step 2 Display the contents of the /etc/hosts file using the following command:

```
cat /etc/hosts
```

Look for the localhost and secondary server hostname entries in the display from the /etc/hosts file, and confirm the IP address of the secondary server.

Note The system will run if only the localhost entry exists and the hostname entry is missing. The IP address of the secondary server must be changed back to its original IP address.

Step 3 Enter the following command to open a text editor for the /etc/hosts file:

```
sudo system-config-network
```

Step 4 Change the IP address of the secondary server to reflect its original address as a standby server:

```
ipaddress secondary-hostname
```

Step 5 Change the IP address of the actual interface using the following command:

```
sudo system-configure-network
```

Step 6 Restart the network daemon to put the IP address change into effect on the secondary server using the following command:

```
sudo service network restart
```

Step 7 Verify connectivity to the secondary server using the ping command, as shown in the following example:

```
ping ipaddress
```

Note If you cannot reach the secondary server, see the "Clearing the ARP Cache on the Switch" section in the of the *Cisco StadiumVision Director Server Redundancy, Release 2.4* guide and clear the ARP cache entry for the secondary IP address.

Downgrading the Secondary Cisco ADE 2140 Server Software

Note This task is only required if the secondary Cisco ADE 2140 server does not match the software version of the primary Cisco ADE 2140 server. This could happen if you upgraded the secondary server to the latest Cisco StadiumVision Director Release 2.4 software for compatibility with the new Platform 2 servers to which you were migrating.

To downgrade the secondary Cisco ADE 2140 server software, obtain the appropriate ISO upgrade image and follow the steps in the "Using the TUI Upgrade Utility to Update an Existing Release 2.4 Server" module of the *Cisco StadiumVision Director Software Installation and Upgrade Guide, Release 2.4* guide.

Powering on the Primary Cisco ADE 2140 Server

Before you power on the primary Cisco ADE 2140 server, be sure that you have completed the following tasks:

- You have changed the IP address on the secondary Cisco ADE 2140 server to remove any conflict with the primary server.

- You have confirmed that the primary and secondary Cisco ADE 2140 servers are running the same software version.

Running a Backup and Restore on the Cisco ADE 2140 Servers

For detailed information about configuring the backup and restore environment and running a backup and restore, see the *Backing Up and Restoring Cisco StadiumVision Director Servers, Release 2.4* guide.

To run a backup and restore on the Cisco ADE 2140 servers, complete the following steps:

Step 1 Log into the primary server as an installer.

Step 2 Using the TUI, configure your backup and restore environment to set up the directories.

Step 3 Run a backup on the primary server.

Verify that the backup was successful.

Step 4 Run a manual restore from backup on the secondary server.

Verifying the Migration Failback

Complete the steps documented in the "Migration Failback Checklist" section on page 67.

Migration Failback Checklist

Use the following checklist after you failback from an attempted migration to be sure that your Cisco StadiumVision Director software is running normally.

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List Item	Checkoff
1. Complete any specific verification steps documented for the installation of your particular software version as documented in the *Cisco StadiumVision Director Software Installation Guide*.	❑
2. Clear the browser cache.	❑
3. Verify that the Control Panel shows the Cisco StadiumVision Director version and build number that you installed.	❑
4. If you are using phone control, verify that the phones work.	❑
5. If using IP phones for local TV control, verify that channels can be successfully changed.	❑
6. Verify that channel names and favorites are properly set.	❑
7. If using suite commerce integration, verify that an order can be successfully placed using the IP phone.	❑
8. Verify that all devices are properly in the nonevent_group.	❑
9. Go to the Services Alert window in the Management Dashboard and make sure that all relevant services are green. **Tip** You might need to click the refresh button to be sure that all services are re-polled for status. If needed, you can Disable services that are not part of your installation	❑
10. Verify that all DMPs and TVs in the Management Dashboard are green.	❑
11. Start an existing event script and validate that screens display the expected content.	❑
12. Stop the event script and validate that screens are powered off.	❑
13. Make a minor edit to the event script and make sure it can be saved.	❑
14. Verify that VDM can push a new video file to the DMPs.	❑
15. If using dynamic menu boards, make a change to a menu item and verify that the change is reflected on the menu board.	❑