



# Backing Up and Restoring Cisco StadiumVision Director Servers

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**First Published: November 4, 2011**  
**Revised: March 22, 2012**

This module describes how to setup and schedule backups between a primary and secondary server, and restore data between them.

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## Prerequisites for Backing Up and Restoring Cisco StadiumVision Director Servers

Before you backup or restore Cisco StadiumVision Director servers, be sure that the following requirements are met:

- Be sure that you have an installer account on the Cisco StadiumVision Director server.
- Be sure that an SNE TAC account and login credential have been obtained for each server by your Cisco representative, or otherwise contact the Cisco Technical Assistance Center (TAC). This account will be needed to authenticate and obtain an access token for the Cisco StadiumVision server to create a temporary account with certain system-level privileges.

**Note**

To successfully configure the TUI backup configuration, the accounts that are created on both the primary and secondary Cisco StadiumVision Director servers from the SNE TAC credential must use the same username and password.

- You have the IP addresses for both the primary and backup server. You will need to provide this information during the Text Utility Interface (TUI) backup configuration.
- The IP address of the secondary server must be reachable on the network or the TUI backup configuration will fail.
- You have determined an appropriate time on the network to schedule automatic backups and restores.

## Restrictions for Backing Up and Restoring Cisco StadiumVision Director Servers

Consider the following restrictions when backing up and restoring Cisco StadiumVision Director servers:

**Caution**

The tasks described in this document apply only to a redundant server environment where *both* Cisco StadiumVision Director servers are running version 2.4 software.

- If you have to failover to your secondary Cisco StadiumVision Director server due to a problem on the primary, then your original backup configuration will be invalid due to the changes in IP addressing that are required on the secondary server.

Be aware that your scheduled backup process cannot fully operate by automatically transferring a copy of the backup to the secondary server until you use the TUI automatic backup configuration again to reset the IP addresses and directories for the primary and secondary servers. However, a backup will continue to be saved on the primary server.

- When you failback to the original primary server and are now using the original IP addressing configuration, you still will need to use the TUI automatic backup configuration again so that the backup directory can be re-established on the secondary server.
- A restore cannot run while an event script is running.

## Information About Backing Up and Restoring Cisco StadiumVision Director Servers

This section includes the following topics:

- [Change Summary, page 3](#)
- [Backup Environment, page 3](#)
- [What Cisco StadiumVision Director Data is Backed Up, page 3](#)
- [Backup Files and Directories, page 3](#)
- [Disk Storage and Maintenance, page 4](#)

## Change Summary

The following changes are made to backup and restore support in Cisco StadiumVision Director Release 2.4.0:

- A Text Utility Interface (TUI) main menu option has been added to automatically configure the backup and restore environment between the primary and secondary servers.
- With the new configuration utility you no longer have to manually create directories or copy backup files between the servers.

## Backup Environment

While you can run a backup for a network environment where there is only a single Cisco StadiumVision Director server, the recommended environment that is described in this document is a redundant environment. In a redundant environment, you are running Cisco StadiumVision Director on a primary server, with a secondary server connected to the same subnet where the backup data from the primary server is saved.

The backup process can be scheduled and also run manually.

## What Cisco StadiumVision Director Data is Backed Up

There are several areas of Cisco StadiumVision Director that need to be backed up. The backup process backs up the following areas of the Cisco StadiumVision Director server:

- Cisco StadiumVision Director database
- Cisco StadiumVision Director system configuration files
- Cisco StadiumVision Director content repository
- Proof of play report data in the `/var/sv/pofp/data` directory



### Caution

The Ad Insertion Manager database (`/var/sv/aim`), Video Distribution Manager content and proof of play raw data in the `/var/sv/pofp/raw` directory is *not* backed up.

## Backup Files and Directories

Cisco StadiumVision Director uses the following directories to store backup files:

- `/var/sv/BACKUP`—Primary server directory where a backup is stored.
- `/var/sv/RESTORE`—Secondary server directory where a copy of the primary backup is stored.

Each backup operation results in a tar file that contains separate compressed files. The file name uses the following format:

`sv-VER-YYYYMMDDHHMMSSZOFFSET.tar`

where:

- `VER` is the Cisco StadiumVision version the backup was created from.
- `YYYYMMDDHHMMSS` is the date and time of the backup with the year, month, day, hour, minute, second shown.

- *TZOFFSET* is the time zone offset of the server in relation to GMT.

A sample backup file name is “sv-2.4.147-20111017121212-0800.tar.”

To list the contents of a backup file, replace the “sv-2.4.147-20111017121212-0800.tar” with the backup file you would like to list and run the following:

```
tar tvf sv-2.4.147-20111017121212-0800.tar
```

## Disk Storage and Maintenance

Cisco StadiumVision Director automatically deletes backup files that are older than 10 days from the /var/sv/BACKUP and /var/sv/RESTORE directories. However, you should continue to monitor disk space because this removal is based on a time period and is not run based on any automatic monitoring of disk space.



### Note

If you have the Director Server enabled for monitoring (recommended), you can look for any alerts on the Director Server in the Service Alerts window in the Management Dashboard. To view the alert details, you can go to **Event Viewer > All Events > System**.

For a disk space alert based on the disk critical threshold set for the server, look for “DEGRADED” in the Sub Type column for the “Service Monitor” in the Source column.

## Restore Environment

As with backups, you can schedule the restore process or run it manually. When the manual restore screen is displayed, it lists backups from both the /BACKUP and /RESTORE directories, concatenated together. This allows you to run a manual restore on either the primary or the secondary server. An automated restore always uses the most recent backup file in the RESTORE directory.

The backup system assumes that Cisco StadiumVision Director runs with an automated High Available configuration. In this configuration, some of the Unix level files are different between the primary and secondary servers. Therefore, the Unix files are not automatically restored in the RestoreTask on the Dashboard.

Also, the schedule of tasks to run in the primary database and the secondary database will be different, due to the existence of the backup and restore tasks. Therefore, the schedule itself is not automatically restored.

## How to Backup a Cisco StadiumVision Director Server

This section includes the following tasks:

- [Setting Up the Primary and Backup Server Directories, page 5](#) (required)
- [Scheduling a Regular Backup, page 7](#) (required)
- [Starting a Backup Manually for Immediate Execution, page 8](#) (optional)
- [Verifying Backup Completion, page 9](#) (optional)
- [Viewing the Contents of a Backup File, page 10](#) (optional)

## Setting Up the Primary and Backup Server Directories

Beginning in Cisco StadiumVision Director Release 2.4, the configuration of the backup accounts and directories between the primary and backup server has been automated using a new TUI menu option.

You need to use the TUI to setup the Cisco StadiumVision Server environment to be able to run the backup and restore processes.

**Note**

The TUI is only used to configure the backup environment. You need to use the Management Dashboard to schedule or run any manual backups. For more information, see the [“Scheduling a Regular Backup” section on page 7](#) and [“Starting a Backup Manually for Immediate Execution” section on page 8](#).

To set up the primary and backup server directories, complete the following steps:

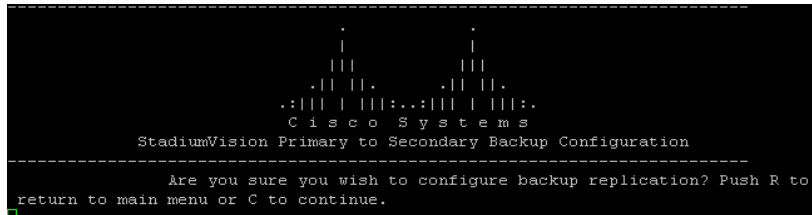
- Step 1** Use a directly connected console, or use an SSH client from a laptop computer that is connected to the Cisco StadiumVision Server network to run a secure login to the primary Cisco StadiumVision Director server using the IP address for your server.
- Step 2** When the login prompt appears, enter the **installer** userid followed by the installer password at the password prompt.
- Step 3** When the StadiumVision Director Configuration menu appears, type **r** and press Enter ([Figure 1](#)):

**Figure 1** TUI Main Menu Option for Automatic Backup and Restore Setup

```
StadiumVision Director Configuration Menu
-----
Please choose from the options below:
a. Configure IP information
b. Configure DNS information
c. Configure NTP
d. Set Hostname
e. Edit hosts file
f. Start / Stop Services
g. Ping a host
h. Display realtime logging
i. Set StadiumVision user password
j. Change installer password
k. Change MySQL password
l. Enable TAC user
m. Shutdown the StadiumVision server
n. Restart the StadiumVision server
o. Rerun StadiumVision initial configuration
p. Display system details
q. Upgrade StadiumVision server
r. Configure automatic backup and restore
x. Exit
Please enter option [a - q]:
r
```

**Step 4** When the backup configuration confirmation prompt appears, type **c** to continue (Figure 2):

**Figure 2** *TUI Backup Configuration Confirmation*



**Step 5** The backup configuration process begins. When the corresponding prompts for account information and IP addresses appear, type the following information and press Enter (Figure 3):

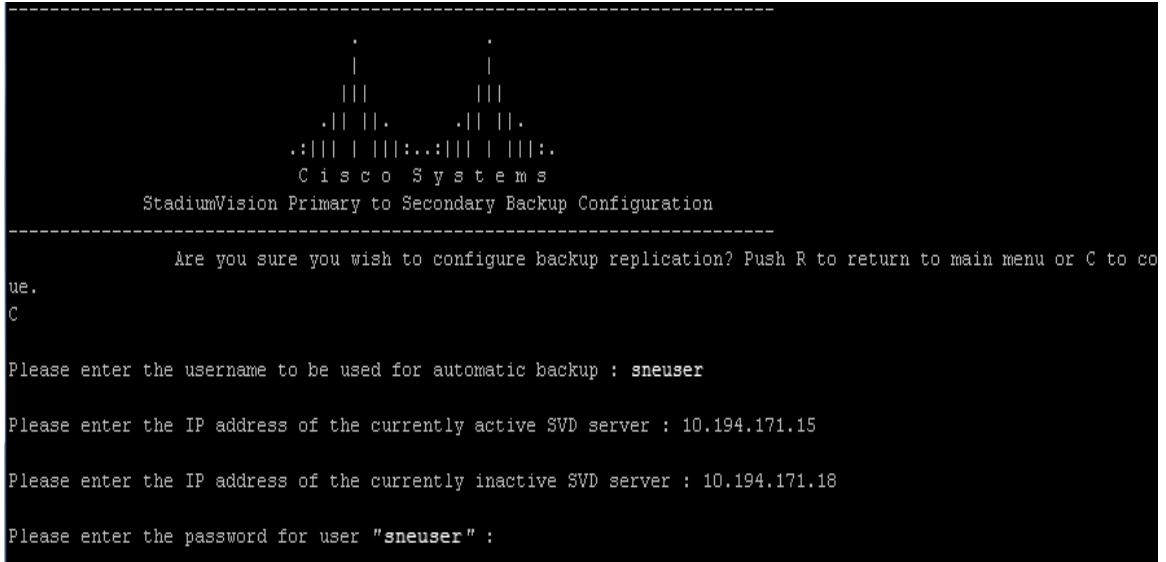
- SNE TAC account username with system-level privileges.



**Note** This should be the same account name on both servers.

- IP address of the Cisco StadiumVision Director primary server.
- IP address of the Cisco StadiumVision Director secondary server.
- Password for the specified SNE TAC account.

**Figure 3** *TUI Backup Configuration Prompts*



- Figure 4** *TUI Backup Configuration Verification*

```

      |           |
      ||          ||
      .|| ||.      .|| ||.
      .:|||| | |||:..:|||| | |||:.
      C i s c o   S y s t e m s

StadiumVision Primary to Secondary Backup Configuration
-----
Are you sure you wish to configure backup replication? Push R to
return to main menu or C to continue.

c

Please enter the username to be used for automatic backup :admin

Please enter the IP address of the currently active SVD server : 10.194.175.124

Please enter the IP address of the currently inactive SVD server : 10.194.175.134

Please enter the password for user "admin" :

#####
# Now testing supplied information #
#####

SSH access to "Active" StadiumVision Server... █

```

After you have configured the servers to support the backup process, you need to schedule backups using the Management Dashboard in the Cisco StadiumVision Director software.

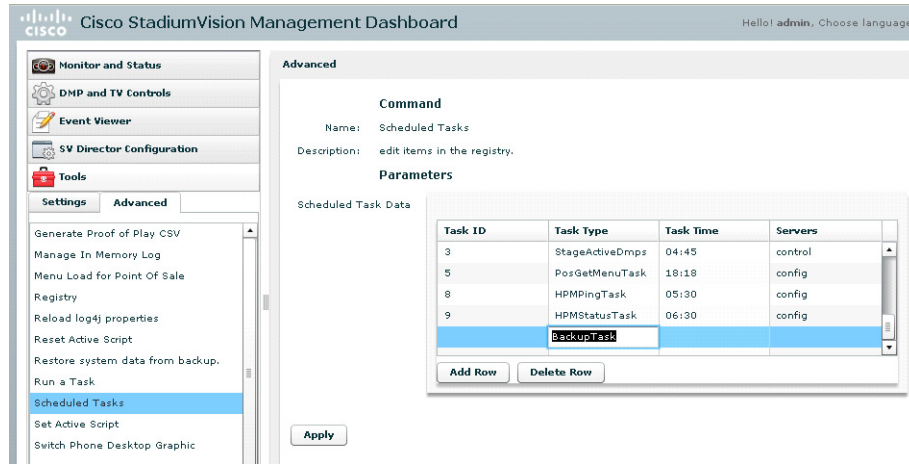


It is recommended that you schedule backups to occur while the Cisco StadiumVision Director servers are not actively running scripts or performing other event processing.

**To configure a backup to run on a regular schedule, complete the following steps:**

- 

Be sure to type the name of the task exactly as shown with upper and lowercase characters.

**Figure 5** Adding a Backup Task to Run on a Regular Schedule

- Step 6** Click in the Task Time column and specify the time (in 24:00 format) when you want the backup to run.
- Step 7** Click in the Servers column and type **config**.
- Step 8** Click **Apply**.

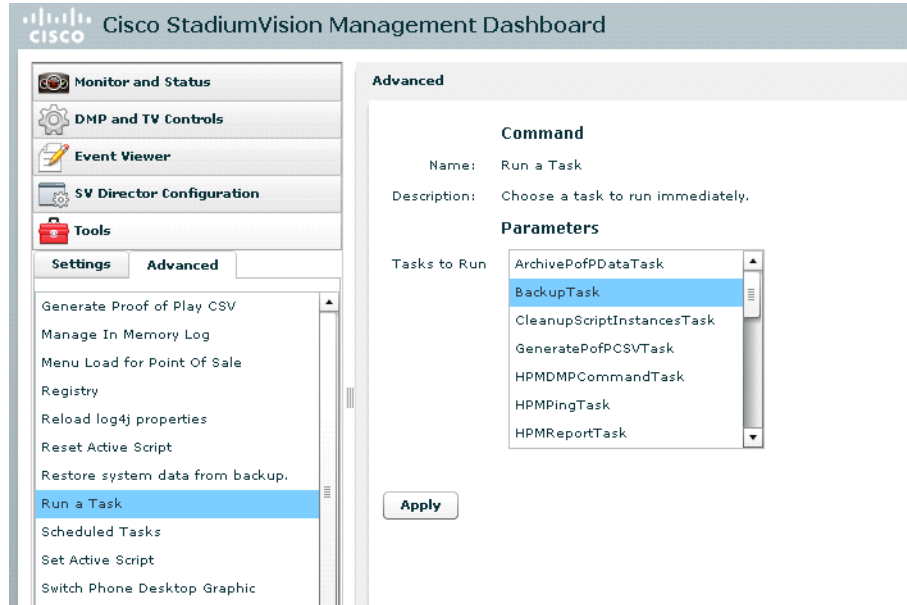
## Starting a Backup Manually for Immediate Execution

If you want to start a backup other than at the regularly scheduled time, the Cisco StadiumVision Director software also allows you to run a backup process immediately.

**To start a backup manually for immediate execution, complete the following steps:**

- Step 1** Log into Cisco StadiumVision Director as an administrator.
- Step 2** From the Cisco StadiumVision Director main menu, click **Management Dashboard**.  
The Cisco StadiumVision Management Dashboard is opened in a new window.
- Step 3** Select **Tools > Advanced > Run a Task**.
- Step 4** In the Tasks to Run box, select the **BackupTask** (Figure 6).



**Figure 6** Running a Scheduled Backup Task Manually

**Step 5** Click **Apply**.

The backup begins immediately.



**Note**

The “success” message that appears means that the backup task has started. It does not mean that the backup has completed.

## Verifying Backup Completion

To verify the backup process is complete, complete the following steps:

**Step 1** Go to the /var/sv/BACKUP directory.

**Step 2** Verify that the following files have recently been added:

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



**Note**

Messages from the backup process include the string “com.cisco.sv.backup” and are stored in the /opt/sv/servers/control/logs/sv\_dev\_debug.log file. However, be aware that the messages “Starting backup” and “Backup completed” will always appear in the log regardless of success. The “Backup completed” message does *not* necessarily mean that the backup was successful. If a log message appears before the “Backup completed” message (and after the “Starting backup” message) that includes the “com.cisco.sv.backup” string and also “ERROR,” then there is a problem.

## Viewing the Contents of a Backup File

To list the contents of a .tar backup file, use the **tar tvf** command as shown in the following example, where “sv-2.4.147-20111017121212-0800.tar” is the name of your backup file:

```
tar tvf sv-2.4.147-20111017121212-0800.tar
```

## How to Restore a Cisco StadiumVision Director Server

The Cisco StadiumVision Director software automatically copies backup files between the primary and secondary servers and verifies the MD5 checksum. You can configure the secondary server to mirror the primary server by scheduling a periodic restore of the primary’s backup content to the secondary server.



### Note

If for some reason you need to manually copy files between the servers, be sure that you copy both the .tar and .chksum files because the restore process automatically uses both files to verify the MD5 signature.

This section includes the following tasks:

- [Scheduling a Regular Restore, page 10](#) (optional)
- [Starting a Restore Manually for Immediate Execution, page 11](#) (optional)
- [Restarting the Local Control Service, page 12](#) (required after restore run)

## Scheduling a Regular Restore

You can use this task to schedule an automatic restore of the primary backup file to the secondary server on a regular basis. The regularly scheduled restore task restores all components except Unix files and scheduled tasks.

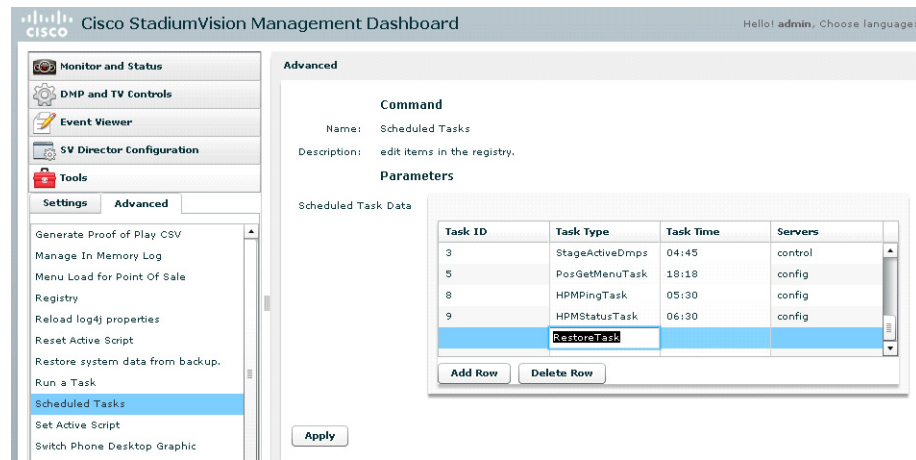
**To configure a restore to run on a regular schedule, complete the following steps:**

- Step 1** Log into the secondary Cisco StadiumVision Director server as an administrator.
- Step 2** From the Cisco StadiumVision Director main menu, click **Management Dashboard**.  
The Cisco StadiumVision Management Dashboard opens in a new window.
- Step 3** Select **Tools > Advanced > Scheduled Tasks**.
- Step 4** Click **Add Row** and scroll to the new blank line at the bottom of the box.
- Step 5** Click in the Task Type column and type **RestoreTask** ([Figure 7](#)).



### Note

Be sure to type the name of the task exactly as shown with upper and lowercase characters.

**Figure 7** Adding a Restore Task to Run on a Regular Schedule

- Step 6** Click in the Task Time column and specify the time when you want the restore to run, preferably sometime soon after your scheduled backup task completes.
- Step 7** Click in the Servers column and type **config**.
- Step 8** Click **Apply**.

## Starting a Restore Manually for Immediate Execution

If you want to start a restore other than at the regularly scheduled time, the Cisco StadiumVision Director software also allows you to run a restore from backup to begin immediately.

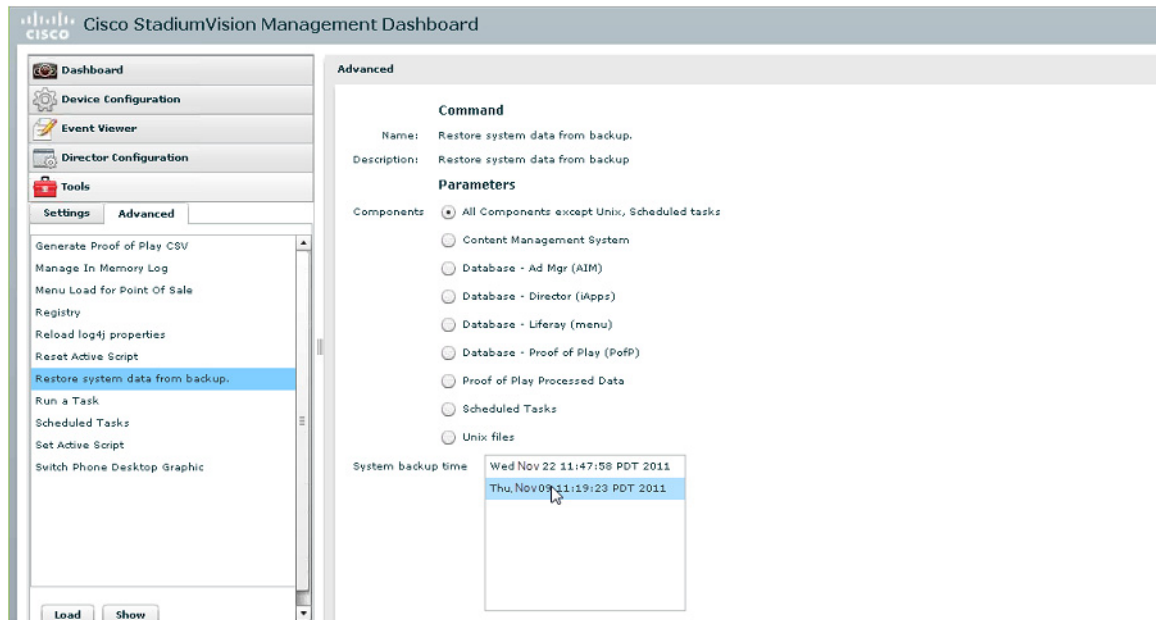


### Caution

You cannot successfully run the restore process while an event script is running.

**To start a restore manually for immediate execution, complete the following steps:**

- Step 1** Log into Cisco StadiumVision Director as an administrator.
- Step 2** From the Cisco StadiumVision Director main menu, click **Management Dashboard**.  
The Cisco StadiumVision Management Dashboard is opened in a new window.
- Step 3** Select **Tools > Advanced > Restore system data from backup**.
- Step 4** For Components, select the **All components except Unix, Scheduled tasks** (Figure 8).

**Figure 8** *Running a Restore Task Manually*

**Step 5** (Optional) If you do not want to restore the latest backup (the default), then in the System backup time box, select the date and time of the backup file that you want to restore (Figure 8).

**Step 6** Click **Apply**.

The restore begins immediately.

**Note**

If you need to also restore the scheduled tasks or any Unix files, you can rerun the Restore system data from backup and for Components, select **Scheduled Tasks** or **Unix files**.

## Restarting the Local Control Service

After you perform any restore on a Cisco StadiumVision Director server, you must stop and start the local control service (svd-localctl) to resume normal operation of the local control application programming interface (API).

**To restart the local control service, complete the following steps:**

- Step 1** Use a directly connected console, or use an SSH client from a laptop computer that is connected to the Cisco StadiumVision Server network to run a secure login to the primary Cisco StadiumVision Director server using the IP address for your server.
- Step 2** When the login prompt appears, enter the installer userid followed by the installer password at the password prompt.
- Step 3** When the StadiumVision Director Configuration menu appears, type the letter beside the option to Start / Stop Services (**f**) and press **Enter**.
- Step 4** Type the number beside the option to STOP service SVD-LOCALCTL (**14**) and press **Enter**.

- Step 5** Type the number beside the option to START service SVD-LOCALCTL (13) and press **Enter**.
- Step 6** Log out.

## Feature Information for Backing Up and Restoring Cisco StadiumVision Director Servers

Table 1 lists the release history for this feature.

**Table 1** *Feature Information for Backing Up and Restoring Cisco StadiumVision Director Servers*

Date	Releases	Feature Information
March 22, 2012	Release 2.4.0-147	The following updates were made: <ul style="list-style-type: none"><li>Modified the “<a href="#">Starting a Backup Manually for Immediate Execution</a>” section on page 8.</li><li>Modified the “<a href="#">Scheduling a Regular Restore</a>” section on page 10 to identify restoration of files not automatically restored.</li></ul>
February 16, 2012	Release 2.4.0-147	Added required task to restart the Local Control service after a restore is run.
November 4, 2011	Release 2.4.0-147	General availability release for Cisco StadiumVision Director Release 2.4. The following enhancements are introduced: <ul style="list-style-type: none"><li>Addition of an automatic backup and restore configuration option from the TUI main menu to ease setup of backups between primary and secondary servers.</li></ul>

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