



Cisco StadiumVision Director Software Installation and Upgrade Guide

Release 2.3

May 2011

Cisco Confidential

Corporate Headquarters Cisco Systems, Inc. 170 West Tasman Drive San Jose, CA 95134-1706 USA

http://www.cisco.com Tel: 408 526-4000

800 553-NETS (6387)

Fax: 408 526-4100

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at

www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

Copyright © 2011 Cisco Systems, Inc. All rights reserved.

Table of Contents

Preface	4
StadiumVision Director Installation Introduction	
StadiumVision Administrator Text Utility Interface (TUI)	5
Before You Begin	6
StadiumVision Director Installation	7
Creating an Installation DVD	7
Installing SV Director Release 2.3 from a DVD	8
Verifying the Installation	12
Configuring DMP DHCP Settings for Auto Registration	15
Removing AIM Software After Installation	15
StadiumVision Director Upgrade	18
Upgrade Notes for DMP 4310 Firmware Release 2744	18
Pre-requisites	19
Disabling the SNE TAC Account	21
Workflow for Upgrading SV Director	21
Upgrading from Release 2.2 to Release 2.3	22
Upgrading an Existing Release 2.3 System	25
Verifying the Upgrade	27
Checking for Duplicate MAC Address Entries	29
Clearing the Browser Cache	29
Checking Settings in the Management Dashboard	29
StadiumVision Director Multicast Configuration	31
Upgrading CUAE	32
Troubleshooting the Upgrade	33
Exporting / Importing the Image Gallery	34
Post-Install Checklist	36

Preface

This section contains information about the purpose, audience and revision history of this document.

Document Purpose

This document describes how to install and upgrade the StadiumVision Director software for Release 2.3

Document Audience

The intended audience is StadiumVision system administrators and Cisco Technical Field Engineers who are responsible for designing and deploying StadiumVision. It is expected that readers of this document are familiar with basic IP networking technology, have a general understanding of the sports and entertainment business, and understand the objectives and operations of live events.

Related Documentation

- StadiumVision Director Management Dashboard Guide
- StadiumVision Director Server Hardware Installation Guide
- Stadium Vision Video Delivery Design and Implementation Guide
- StadiumVision 2.3 Release Notes

Document History

Table 1. Revision History

Date	Revision	Author	Comments
4/27/2011	Rev 0	Trish McBride	First release for RELEASE 2.3 GA.
5/13/2011	Rev 1	Trish McBride	Updates for Build 78. Added CUAE upgrade procedure.
5/18/2011	Rev 2	Trish McBride	Additional Post installation check procedures, updated rpm and yum commands.
5/23/2011	Rev 3	Trish McBride	Changes to code commands for commenting out AIM and stopping tomcat.
5/31/2011	Rev 4	Trish McBride	Added procedure for Enabling SNE account; updated URL for SNETAC server.

Stadium Vision Director Installation Introduction

The guide provides instructions for:

- Creating an installation DVD for StadiumVision Director
- Installing StadiumVision from a DVD
- Upgrading from StadiumVision Release 2.2 to Release 2.3
- Upgrading CUAE
- Upgrading the StadiumVision Release 2.3 build
- Verifying the installation and upgrade
- Troubleshooting the installation and upgrade
- Exporting/Importing the Image Gallery

Stadium Vision Administrator Text Utility Interface (TUI)

StadiumVision Director 2.3 includes a StadiumVision Administrator Text Utility Interface (TUI) that provides options for verifying the SV Director installation and configuring settings for the customer's site. Additionally, you can use the TUI to perform routine system tasks such as modifying system configurations, changing passwords, and checking system logs. Remote TAC access and troubleshooting can both be facilitated from the TUI in the event of an SV Director outage or failure.

To access the TUI, you need either physical console or an SSH client such as PuTTY. Refer to the *StadiumVision Administrator Text User Interface Guide* for instructions on how to access and use the TUI.

Figure 1 shows the Stadium Vision Administrator TUI main menu.

Figure 1. Stadium Vision Administrator TUI Main Menu

```
Cisco Systems
    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
1. Enable TAC user
m. Shutdown the StadiumVision server.
n. Restart the StadiumVision server.
o. Rerun StadiumVision initial configuration
p. Display system details
x. Exit
Please enter option [a - p]:
```

Before You Begin...

- Install the appropriate browser. StadiumVision Director supports Mac and Windows: Internet Explorer 8 and FireFox 3.x. Other browsers, including Safari and Chrome, are not supported.
- Connect a monitor and keyboard to the SV Director Server.
- Connect the SV Director server to the network using the eth0 Ethernet port on the rear panel.

Stadium Vision Director Installation

This section provides instructions for installing SV Director on the Cisco UCS C200 M2 High-Density Rack-Mount Server (StadiumVision Server) and the Cisco Application Deployment Engine (CADE) 2140 Series appliance. Use these instructions if SV Director has never been installed on the SV Director server. If SV Director is already installed on the server and you want to upgrade to Release 2.3, see the section StadiumVision Director Upgrade.

The install program will:

- Automatically set up and initialize the hardware RAID controller 1.
- Wipe any existing partitions and zero out the Master Boot Record (MBR).
- Install the Cisco Stadium Vision software.



The Hardware RAID1 configuration happens automatically at installation as does partitioning. This is completely transparent to the user during the installation process.

Creating an Installation DVD

The SV Director server ships with an installation DVD which will perform a non-interactive install/upgrade of SV Director; therefore, you do not need to create a DVD in the normal deployment scenario. If you are a Cisco StadiumVision customer facing engineer (CFE) and need to create an installation DVD, use this procedure.

1. Download the appropriate ISO image and md5 checksum file for the SV Director server from the following location:

http://sande-svn.cisco.com/iso/2.3.0/

 For the Cisco StadiumVision Server (UCS C200), download the following 64 bit iso files where nn is the latest build number:

```
SV-DIRECTOR-FULL-2.3.0-nn-x86_64.iso.md5sum
SV-DIRECTOR-FULL-2.3.0-nn.x86_64.iso
```

 For the Cisco ADE 2140 StadiumVision Director server, download the following 32 bit iso files where *nn* is the latest build number:

```
SV-DIRECTOR-FULL-2.3.0-nn-i386.iso.md5sum
SV-DIRECTOR-FULL-2.3.0-nn.i386.iso
```

- 2. Burn the ISO to a DVD.
- 3. Distribute the DVD to the customer/partner.

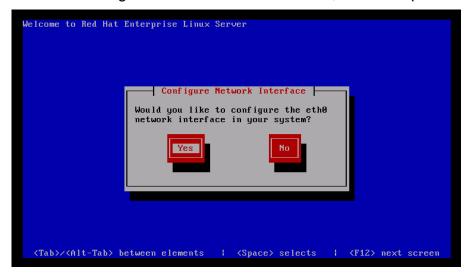
Installing SV Director Release 2.3 from a DVD

Use this procedure when SV Director is being installed for the first time at the installation site (e.g., SV Director has never been installed on the server).

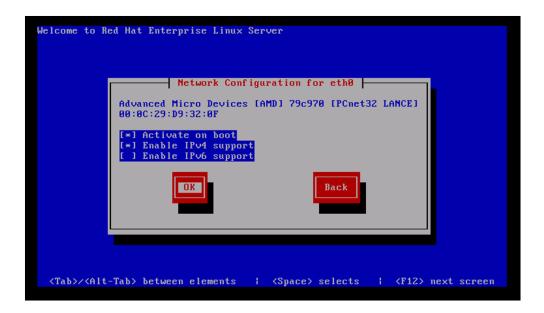
1. Insert the installation disk into the DVD drive, boot from it, and follow the prompts. The server will boot from the installation disk.



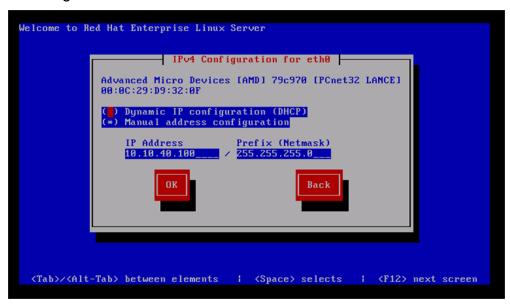
2. In the Configure Network Interface screen, click the space bar to select Yes:



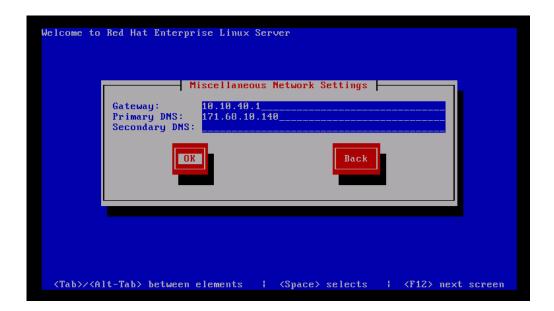
3. In the Network Configuration for eth0 screen, select 'Activate on boot' and 'Enable IPv4 support' and select OK:



- 4. In the IPv4 Configuration for eth0 screen, select 'Manual address configuration'.
- 5. Assign an IP address for the SV Director Server and select OK:



6. In the Miscellaneous Network Settings screen, assign a default gateway and select OK.

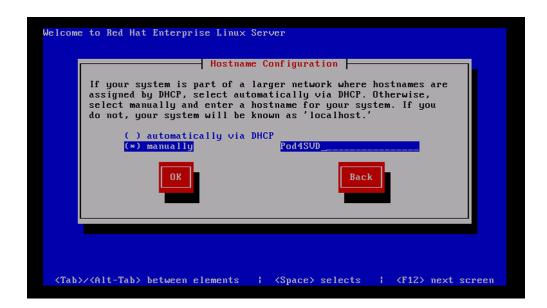


7. In the Hostname Configuration screen, select 'manually' and assign a host name for your system. Select OK.

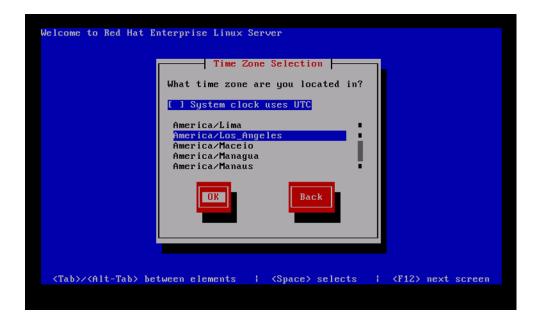


When specifying a hostname for the server, use a descriptive name that identifies the location/customer. For example:

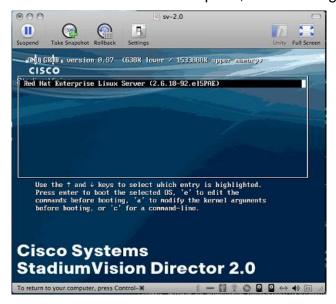
svd-<*customer-name*>-<1 for primary server, 2 for secondary server>



8. Set the time zone and select OK.



- 9. After this step, the SV Director software installs, the DVD is ejected, and the system reboots. This process takes about 30 minutes.
- 10. When the reboot is complete, the following screen displays.



11. Use the SV Director Administrator TUI to verify the SV Director installation and configure settings for the customer's site. Additionally, you can use the TUI to perform routine system tasks such as modifying system configurations, changing passwords, and checking system logs.

See <u>Verifying the Installation</u> (below) to verify that the SV Director installation was successful. For more details about how to use the TUI, refer to the *StadiumVision Director Administrator TUI Guide*.

Verifying the Installation

Use the Stadium Vision Administrator Text Utility Interface (TUI) to verify that the SV Director installation was successful.

1. Log in to the TUI:

User: installer

Password: cisco!123

```
.:||| | |||:..:||| | |||:.
           Cisco Systems
    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
1. Enable TAC user
m. Shutdown the StadiumVision server.
n. Restart the StadiumVision server.
o. Rerun StadiumVision initial configuration
p. Display system details
x. Exit
Please enter option [a - p]:
```

- 2. Select option 'p' to display system details.
- 3. Press SHIFT and Pg Up on your keyboard to scroll to the top of the screen and view IP information.
- 4. Note the primary IP address of the server. This will usually be the IP address set on the interface 'etho'.
- 5. When finished, press 'r' to return to the main menu.

```
Network Details
eth0
          Link encap:Ethernet HWaddr 00:0E:0C:EE:87:C2
          RX packets:1013665 errors:0 dropped:0 overruns:0 frame:0
          TX packets:580723 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:113084641 (107.8 MiB) TX bytes:74152730 (70.7 MiB)
          Memory:b8820000-b8840000
10
          Link encap:Local Loopback
          inet addr:127.0.0.1 Mask:255.0.0.0
UP LOOPBACK RUNNING MTU:16436 Metric:1
          RX packets:3776254 errors:0 dropped:0 overruns:0 frame:0
          TX packets:3776254 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:1852525821 (1.7 GiB) TX bytes:1852525821 (1.7 GiB)
                        Hosts File
127.0.0.1
                        DNS Info
; generated by /sbin/dhclient-script
search cisco.com
nameserver 171.70.168.183
nameserver 171.68.226.120
nameserver 64.102.6.247
                        NTP Server
# Use public servers from the pool.ntp.org project.
server O.rhel.pool.ntp.org
server 1.rhel.pool.ntp.org
server 2.rhel.pool.ntp.org
#broadcast 192.168.1.255 key 42  # broadcast server
#broadcast 224.0.1.1 key 42  # multicast server
#manycastserver 239.255.254.254  # manycast server
server 127.127.1.0 # local clock
                         Current Date/Time
Tue Feb 15 02:46:04 PST 2011
```

6. Select option 'g' to ping an alternate host on the network to verify IP connectivity.

```
Cisco Systems
                    StadiumVision Director Configuration Menu
                                 Ping A Host
Enter hostname or IP address to ping or type EXIT to go back to the main menu:
171.68.113.189
Press ENTER to begin pinging. Press CTRL-C to stop.
PING 171.68.113.189 (171.68.113.189) 56(84) bytes of data.
64 bytes from 171.68.113.189: icmp_seq=1 ttl=64 time=0.026 ms
64 bytes from 171.68.113.189: icmp_seq=2 ttl=64 time=0.018 ms
64 bytes from 171.68.113.189: icmp_seq=3 ttl=64 time=0.018 ms
64 bytes from 171.68.113.189: icmp_seq=4 ttl=64 time=0.019 ms
64 bytes from 171.68.113.189: icmp_seq=5 ttl=64 time=0.018 ms
64 bytes from 171.68.113.189: icmp seq=6 ttl=64 time=0.020 ms
 -- 171.68.113.189 ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 4999ms
rtt min/avg/max/mdev = 0.018/0.019/0.026/0.006 ms
           Press any key to return to main menu.
```

- 7. Verify that you can access SV Director:
 - a. From your laptop, open a browser window and type http://ipaddress:8080/StadiumVision/

where *ipaddress* is the IP Address of the SV Director Server.

The SV Director login screen shown in Figure 2 should display.

Figure 2. SV Director Login Screen



b. In the SV Director log in screen, log in with the credentials you specified during the installation process:

Username: admin
Password: admin

The SV Director Main Screen shown in Figure 3 should display.

Figure 3. SV Director Main Screen



Configuring DMP DHCP Settings for Auto Registration

To configure DMP DHCP settings for auto registration, launch the Dashboard and set the DHCP option in **Director Configuration > Global DMP settings > Common** to 'on'. This setting is defaulted to off.



The following conditions must be met for the auto registration feature to function:

- DMP DHCP set to 'on'.
- A DHCP server needs to be running with option 43 configured.
- DMPs using firmware 1932 and above.

Removing AIM Software After Installation

If the installation site does not use AIM, follow these steps to disable AIM:



This procedure requires that you first obtain an SNE TAC account.

1. Edit the Stadium Vision home page index.html and comment out lines 137-142.

```
sudo vi
/opt/sv/servers/config/webapps/StadiumVision/index.html
```

- a. Type the following in vi:137 (this will bring you to line 137).
- b. Add <!-- before the first line and --> at the end of the last line.

c. When done type :w to write the data and then :x to exit vi.

Figure 4. SVD Home page Before:

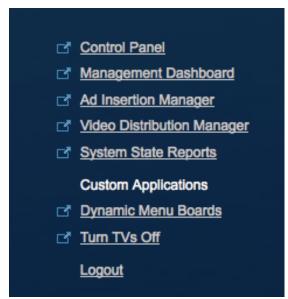
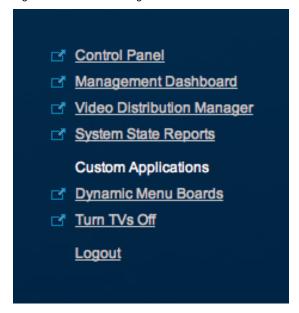


Figure 5. SVD Home Page After:



2. Remove the AIM package

When SV Director starts, it will still show a process named svd-aim running. You can ignore this process as it does not run the AIM web application.

Stadium Vision Director Upgrade

This section provides instructions for:

- SNE TAC Account Authentication and Login
- Upgrading an existing StadiumVision deployment to SV Director Release 2.3
- Upgrading CUAE
- Upgrading StadiumVision Director Release 2.3 to a later build.
- Verifying the Upgrade

An incremental upgrade is made available as a md5 checksum file and a zip file containing a series of RPM files.



Important! If you are using the Dynamic Menu Board with Image Gallery, you must export the images before you upgrade to Release 2.3 and then import them after you upgrade. If you do not export the images before upgrading to Release 2.3, you will lose all images in the Image Gallery. Refer to the Exporting/Importing the Image Gallery section for instructions. This is required only when upgrading from versions older than Release 2.3 build 57, including release 2.2.

Upgrade Notes for DMP 4310 Firmware Release 2744

StadiumVision release 2.3.0-78 comes bundled with the build 2744 firmware for the DMP 4310. This firmware is included for convenience only, and the DMPs are not automatically upgraded to this new version. However, when the 2.3.0-78 upgrade is applied to SV Director, the compliance policy is updated in anticipation of the build 2744 DMP upgrade. In order to avoid having all DMPs appear in the Management Dashboard as being non-complaint, complete a) or b) (but not both) as follows:

- a. In the Management Dashboard, select **Director Configuration > Auto Registration Settings** and make the following changes:
 - init.build = Thu Nov 4 00:27:27 PDT 2010 [b1932]
 - init.version = SE 2.2.1

-OR-

b. Upgrade all DMP 4310's to build 2744.

The recommended action is to upgrade to 2744 but either option will work.

Pre-requisites

- Obtain an SNE TAC account and login. See below.
- If you are doing an upgrade, determine which packages you have installed and which version of SV Director is currently installed on your system (you need an SNE TAC account and login to do this):

```
$ rpm -qa "sv*"
```

- Verify that you have StadiumVision Director release 2.2 or higher installed. You can only upgrade to release 2.3 from release 2.2.0 b58 and 2.2.1 b29.
- Process all outstanding Proof of Play Reports.
- If you are using the Dynamic Menu Board with Image Gallery, export the images. See important note above.
- SNE TAC Account Authentication and Login

In StadiumVision Release 2.3, you must authenticate with an internal Cisco server to obtain a secure token which will be verified by the SV Director server to allow access to the system. This authentication system replaces the previous method of gaining system access through the means of a pre-configured system account.



Only Cisco employees have access to this system. If you are not a Cisco employee and are in need of a SNE TAC account, contact Cisco TAC.

The following steps describe the SNE TAC account authentication and login workflow.

- 1. Enable TAC access:
 - a. Login as 'installer'.
 - b. Enable the TAC account (small 'L' from the main menu; then, option 2).
- c. Authenticate with the Internal Credential Server.

To obtain an access token, you will need to first authenticate against the credential server. The server is located at:

https://10.194.171.10/cgi-bin/SNETACAuth.cgi

You will be greeted with an HTACCESS prompt. Use your Cisco CEC credentials to log in.

d. Specify the UUID or IP address of the SV Director server:

SNE TAC Token Exchange
Token Generator
Stadium Vision server IP: Submit

e. Copy the token.

The authentication server will give you an access token for the SV Director server you have requested. Copy this token into your clipboard.

SNE TAC Token Exchange
Token Generator
Stadium Vision server IP: 171.68.113.189
Step 1: Copy the following token (if needed save it someplace as you will need it later)
VQ31v/EV7C;CF;jE65T3ndnBvAExxJo3yMy/E+9FKEXQFKPeuVAEdN=s236BB2BW LJaSsHI/39WkTevBe1EFMvxHoffxEf0F3oxjJnihpfO/Yo1vojBKiB/wSoLYcMbx VGdx8jp6ROiubolGZR9epbfXtj1l3xcTKXCWQGbVVUO=
Step 2: SSH (VPN in first if needed) into the StadiumVision server you are requesting access to using the username "snetac" and the default password
Step 3: Paste the copied token into the SSH session when prompted for a token
Step 4: Go through the password setting process whem prompted
Done! You are now setup with a SSH account with username "johcrowl" and the password you preiously entered into this system. This account will be active for the next 24 hours. You may extend and/or re-enable your account at anytime by going through this process again.

f. Log in to SV Director using the 'snetac' account:

Use an ssh client such as PuTTY to SSH into the SVD server. When asked for a username, use 'snetac' with the password 'cisco!123'. This will begin the token authentication process.



g. Paste your authentication token.

Once logged in to the SV Director as user 'snetac', you will be asked for your authentication token. Paste this into the SSH window and press ENTER. The SV Director server will attempt to authenticate your token.

```
III
                                III
                              . 1 1 1 1 .
                                           .11 11.
                           .:||| | |||:..:||| | |||:.
                             isco Systems
                        Stadiumvision Director TAC Access
Please enter your validation string and press ENTER:
VQ31v/HV7CjCFijE65T3ndnBvAKxxJo3yMy/H+9FkXxQfKPauVAWdNss2368B2BW
LJaSxH/S9WVxTcwDelEFMwxHoffxRfOFSowjJnihgOO/YolvojBKiB/wSoLYrMbx
VGdx8jp6R0iubo1GZR9epbfXtjI13xrTKXCWQGbVVUO=
Validating, please wait...Token is
VQ31v/HV7CjCFijE65T3ndnBvAKxxJo3yMy/H+9FkXxQfKPauVAWdNss2368B2BW
LJaSxH/S9WVxTcwDelEFMwxHoffxRfOFSowjJnihgOO/YolvojBKiB/wSoLYrMbx
VGdx8jp6R0iubolGZR9epbfXtjI13xrTKXCWQGbVVU0=
Authentication string verified.
We're going to create a user now.
Temporary user johcrowl has been created. Press ENTER to log in as user johcrowl.
```

- h. Change your password as directed.
- Once you have changed the password, make sure to logout and then login again in order to acquire the correct permissions. Failing to do so will cause certain tasks to fail, for example performing an upgrade.

Once your token has been verified, the SV Director server will create a temporary user account using your Cisco ID and the password you specify when prompted. You may now use your shell account to perform system tasks until 12:00 a.m. If you need continued shell access and log out of the system after this time, you will need to perform the authentication procedure again to gain access to the SV Director server.

Disabling the SNE TAC Account

After an upgrade and after you verify that SV Director is running properly, disable TAC access as follows.

- Login as 'installer'.
- j. Disable the TAC account (small 'L' from the main menu; then, option 2).

Workflow for Upgrading SV Director

Here is are the high-level steps for upgrading SV Director. Refer to the SV Director Backup and Restore Guide for instructions on how to backup and restore the primary and secondary servers.

- Download the .zip file and md5 checksum file from the following URL: http://www.cisco.com/en/US/products/ps11274/tsd_products_support_series_home.html
- k. Obtain a SNE TAC account and authenticate with the server.
 - See the <u>SNE TAC Account Authentication and Login</u> procedure.
- I. Backup the primary server (A) and restore to the secondary server (B).
 - See the Stadium Vision Director Backup and Restore Guide.
- m. Promote the secondary server (B) to become the primary server.

 See the *Promoting the Secondary Server to the Primary Server Guide*.
- n. Upgrade server B (now the primary server) to Release 2.3. See the appropriate upgrade procedure for your site:
 - Upgrading from Release 2.2 to Release 2.3
 - Upgrading an Existing Release 2.3 System
- o. Test and validate that the upgraded server B is working.
 - See the Verifying the Upgrade procedure.
- p. Upgrade server A (now the secondary server) to Release 2.3.
 - See the Promoting the Secondary Server to the Primary Server guide.
- q. Test and validate that server A is working.
 - See the <u>Verifying the Upgrade</u> procedure.

Upgrading from Release 2.2 to Release 2.3

- 1. Download the Stadium Vision Release 2.3 upgrade files from:
 - http://www.cisco.com/en/US/products/ps11274/tsd_products_support_series_home.html
 - For the Cisco StadiumVision Server (UCS C200), download the following 64 bit files where nn is the latest build number:
 - o SV-DIRECTOR-UPGRADE-2.3.0-nn.x86 64.zip
 - SV-DIRECTOR-UPGRADE-2.3.0-nn.x86 64.md5sum
 - For the Cisco ADE 2140 StadiumVision Director server, download the following 32 bit files where nn is the latest build number:
 - SV-DIRECTOR-UPGRADE-2.3.0-nn.i386.zip
 - SV-DIRECTOR-UPGRADE-2.3.0-nn.i386.md5sum
- r. If you are using the Dynamic Menu Board, export the Image Gallery prior to performing any upgrade steps. See Exporting / Importing the Image Gallery later in this document. This is required only when upgrading from versions older than 2.3 build 57, including release 2.2.
- s. Ssh to StadiumVision Director using your account created in the SNE TAC Authentication and Login Procedure.



Important! When logging in for the first time using the temp SNE TAC shell account, you need to log out and log back in before using the temp account to perform an upgrade. Failure to do so may cause the upgrade to fail.

t. Create a folder in your Linux home directory called sv-2.3.

```
mkdir \sim/sv-2.3
```

- u. Copy the ZIP file and md5sum files to this directory.
- v. Calculate the checksum of the zip file and compare it to the md5 checksum file.

```
md5sum *.zip
cat *.md5sum
```

Compare the two output strings and make sure they match.

- w. Unzip the files. The archive contains several rpm files. The syntax for unzipping the zip file with RPMs is 'unzip *.zip'.
- x. In your StadiumVision Director Linux window, stop the StadiumVision processes.

```
sudo service tomcat stop
sudo service liferay stop
ps -ef | grep java
```

The last step shows any running java processes. None should be running after you stop Tomcat and Liferay.

- y. Remove any software packages that are either obsolete or that may cause installation conflicts in Release 2.3:
 - Remove sv menu directories:

```
sudo rm -rf /opt/liferay-portal-5.2.3/tomcat-
6.0.18/webapps/sv_menu
sudo rm -rf /opt/liferay-portal-5.2.3/tomcat
6.0.18/work/Catalina/localhost/sv menu
```

 Remove old v2.2 components. These components will cause conflicts if not removed:

```
sudo rpm -e --nodeps sv-config sv sv-menu sv-vdm sv-iapps
sv-db sv-content sv-scripts aim
```



If the rpm command displays an error concerning package(s) not installed, remove those packages from the command above and re-run the command. For example if the rpm command says package AIM is not installed then remove AIM from the line and re-run the command.

z. Perform the upgrade using rpm and yum commands:

```
cd sv-2.3/
sudo rpm -Uvh --noscripts liferay-portal*.rpm
sudo rpm -Uvh sv-db*.rpm sv-aim*.rpm svd-server-aim*.rpm
sudo yum --nogpgcheck install *.rpm
```

aa. Answer "y" to the question "Is this ok [y/N]".

bb. Ignore this error as Tomcat and Liferay are already stopped.

```
Feb 9, 2011 10:11:12 AM org.apache.catalina.startup.Catalina stopServer
SEVERE: Catalina.stop:
java.net.ConnectException: Connection refused
       at java.net.PlainSocketImpl.socketConnect(Native Method)
       at java.net.PlainSocketImpl.doConnect(Unknown Source)
       at java.net.PlainSocketImpl.connectToAddress(Unknown Source)
       at java.net.PlainSocketImpl.connect(Unknown Source)
       at java.net.SocksSocketImpl.connect(Unknown Source)
       at java.net.Socket.connect(Unknown Source)
       at java.net.Socket.connect(Unknown Source)
        at java.net.Socket.<init>(Unknown Source)
       at java.net.Socket.<init>(Unknown Source)
org.apache.catalina.startup.Catalina.stopServer(Catalina.java:421)
       at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
       at sun.reflect.NativeMethodAccessorImpl.invoke(Unknown Source)
       at sun.reflect.DelegatingMethodAccessorImpl.invoke(Unknown
       at java.lang.reflect.Method.invoke(Unknown Source)
org.apache.catalina.startup.Bootstrap.stopServer(Bootstrap.java:337)
org.apache.catalina.startup.Bootstrap.main(Bootstrap.java:415)
```

cc. While installing SV-AIM, the following message is displayed:

```
New password from old for admgrdb: <password>
```

Take note of the password if you need to connect to MySQL database from the command line or from a MySQL GUI client. A random password is created per installation.

- dd. If you have any existing AIM media files in your server, verify that all files are copied and that no data corruption has occurred. Note that during installation, existing AIM media files will be migrated from /root to /var/sv/aim.
- ee. To free disk space and eliminate lengthy data migration on the next Stadium Vision Director update, remove the AIM directories under /root.

```
sudo rm -rf /root/asm_temp
sudo rm -rf /root/LocalSchedules
sudo rm -rf /root/MasterVideoLibrary2
```

ff. Perform a Dynamic Menu Board Image ID Refresh.

If the Dynamic Menu Board Image Gallery was exported in a previous step, follow the procedures to import / export images in the Image Gallery to re-import the Image Gallery before executing the following.

```
curl http://<Liferay Server
IP>:9090/sv menu/initialConfig?refresh=yes
```

gg. Reboot of the SV Director server.

hh. Verify the Upgrade. See Verifying the Upgrade section later in this guide.

Upgrading an Existing Release 2.3 System

Use this procedure to upgrade a SV Director Release 2.3 installation to a newer build. These steps assume that your system was installed from the Release 2.3 ISO and has already been configured.

1. Download the StadiumVision Release 2.3 upgrade files from:

http://www.cisco.com/en/US/products/ps11274/tsd_products_support_series_home.html

- For the Cisco StadiumVision Server (UCS C200), download the following 64 bit files where nn is the latest build number:
 - o SV-DIRECTOR-UPGRADE-2.3.0-nn.x86 64.zip
 - SV-DIRECTOR-UPGRADE-2.3.0-nn.x86_64.md5sum
- For the Cisco ADE 2140 StadiumVision Director server, download the following 32 bit files where *nn* is the latest build number:
 - o SV-DIRECTOR-UPGRADE-2.3.0-nn.i386.zip
 - SV-DIRECTOR-UPGRADE-2.3.0-nn.i386.md5sum
- ii. If you are using the Dynamic Menu Board, export the Image Gallery prior to performing any upgrade steps. See Exporting / Importing the Image Gallery later in this document.
- jj. Log in to StadiumVision Director using your account created in the SNE TAC Authentication and Login Procedure.



Important! When logging in for the first time using the temp SNE TAC shell account, you need to logout and log back in before using the temp account to perform an upgrade. Failure to do so may cause the upgrade to fail.

kk. From the Linux shell prompt, create a folder in your home directory called sv-2.3-b
sbuild number>. For example: sv-2.3-b78.

```
cd mkdir sv-2.3-b68
```

- II. Copy the .zip file and md5sum file to this directory.
- mm. Calculate the checksum of the zip file and compare it to the md5 checksum file.

```
md5sum *.zip
cat *.md5sum
```

Compare the two output strings and make sure they match.

- nn. Unzip the files. The archive contains several rpm files. The syntax for unzipping the zip file with RPMs is 'unzip *.zip'.
- oo. In your StadiumVision Director Linux window, stop the StadiumVision processes.

```
sudo service svd stop
sudo service liferay stop
ps -ef | grep java
```

The last step shows any running java processes. No java processes should be running when both liferay and SV Director has stopped.

pp. Enter the following command to proceed with the upgrade where "/sv2.3/" is the name of the directory you created in Step 1.

```
sudo rpm -FUvh ~/sv-2.3/*.rpm
```



When prompted for a password after you issue the sudo command, use the password you set as part of configuring a TAC account.

qq. Ignore this error as Tomcat and Liferay are already stopped.

```
Feb 14, 2011 6:17:12 PM org.apache.catalina.startup.Catalina stopServer
SEVERE: Catalina.stop:
java.net.ConnectException: Connection refused
       at java.net.PlainSocketImpl.socketConnect(Native Method)
       at java.net.PlainSocketImpl.doConnect(Unknown Source)
       at java.net.PlainSocketImpl.connectToAddress(Unknown Source)
       at java.net.PlainSocketImpl.connect(Unknown Source)
       at java.net.SocksSocketImpl.connect(Unknown Source)
       at java.net.Socket.connect(Unknown Source)
       at java.net.Socket.connect(Unknown Source)
       at java.net.Socket.<init>(Unknown Source)
       at java.net.Socket.<init>(Unknown Source)
org.apache.catalina.startup.Catalina.stopServer(Catalina.java:421)
       at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
       at sun.reflect.NativeMethodAccessorImpl.invoke(Unknown Source)
       at sun.reflect.DelegatingMethodAccessorImpl.invoke(Unknown
Source)
       at java.lang.reflect.Method.invoke(Unknown Source)
org.apache.catalina.startup.Bootstrap.stopServer(Bootstrap.java:337)
org.apache.catalina.startup.Bootstrap.main(Bootstrap.java:415)
```

- rr. If the installation site does not use AIM, remove the AIM software after Installation. See Removing AIM Software After Installation.
- ss. Reboot the SV Director server.
- tt. Verify the Upgrade. See Verifying the Upgrade section.
- uu. After the upgrade, and after you verify that SV Director is running properly disable TAC access:

- a. Log in as 'installer'.
- b. Disable the TAC account (small 'L' from the main menu; then, option 2).

Verifying the Upgrade

To verify that the upgrade was successful and that SV Director is up and running:

- 1. Open a browser window and type http://ipaddress:8080/StadiumVision/where ipaddress is the IP Address of the SV Director Server.
- vv. Enter your SV Director administrator credentials. When you first log in to SV Director, use the following log in credentials:

Username: admin Password: admin

Figure 6. SV Director Log in Screen



The SV Director Main Screen displays:

Figure 7. SV Director Main Screen



- ww. Click Control Panel on the Main screen.
- xx. Wait a few moments while SV Director loads resources. When complete, the SV Director Control Panel Setup screen should display in a separate window.

Figure 8. SV Director Control Panel Setup Screen



yy. Verify that you can access the SV Director menus and screens.

The version and build number is in the lower right corner of the screen. The build number indicates the version number for the SV Director rpms. Note that some RPMs have a different version number.

Figure 9. Viewing the SV Director Build Number

v2.3.0 Build 54 Copyright@ 2008 - 2010 Cisco Systems, Inc. All rights reserved.

Checking for Duplicate MAC Address Entries

You cannot have duplicate DMP MAC address entries in the SV Director database. After you have upgraded, check the following file to determine if there are any duplicated MAC addresses:

/var/sv/db/mysql/upgrade-invalidmac.csv

Clearing the Browser Cache

If using Firefox:

- 1. Go to 'Tools | Clear Recent History'.
- zz. For 'Time range to clear:' select 'Everything'.
- aaa. Click the 'Details' drop down box and check 'Cache' if it is not already checked.

bbb. Click Clear Now.

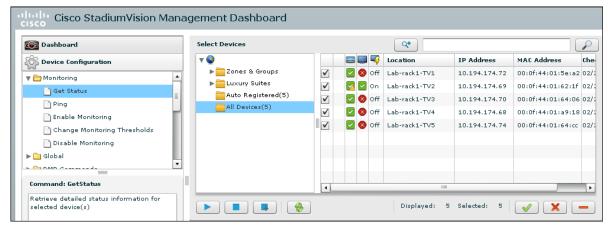
If using Internet Explorer:

- 1. Go to 'Tools | Clear Recent History'.
- ccc. Go to 'Tools | Delete Browsing History'.
- ddd. Check 'Temporary Internet Files' if it is not already checked.
- eee. Click **Delete**.

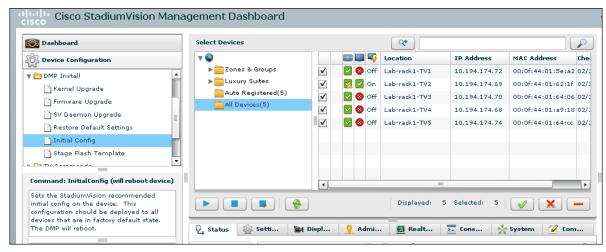
Checking Settings in the Management Dashboard

After performing an upgrade, verify the groups, zones, and DMPs as follows:

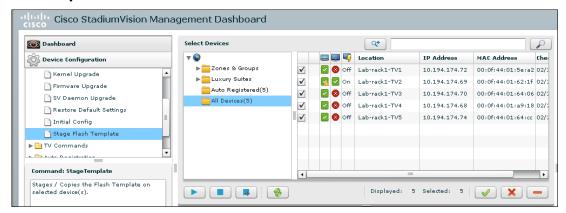
- 1. Open the Management Dashboard and verify all of your groups/zones and DMPs are present and in the Green state.
- fff. Perform a Get Status on all DMPs to update SV Director's record of DMP MAC addresses: **Device Configuration > Monitoring > Get Status**.



ggg. Send the **Device Configuration > DMP Install >Initial Config.**



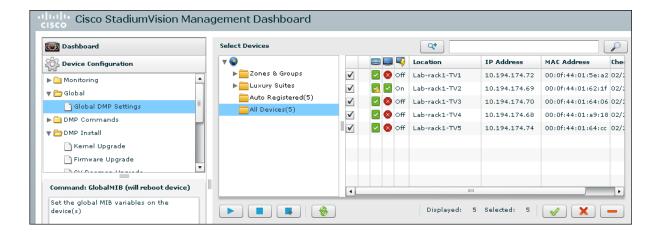
- hhh. Perform a **Get Status** to check whether all DMPs have successfully rebooted.
- iii. Stage the Flash template: **Device Configuration > DMP Install > Stage Flash Template**.



jjj. Send the **Device Configuration > Global > Global DMP Settings** command to deploy Global DMP Settings.

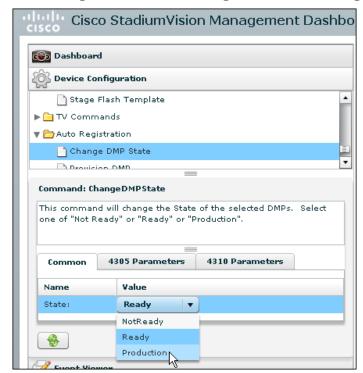


Important! There is an issue with enabling Medianet services the first time you send the **Global DMP Settings** command on a DMP. Therefore, you need to send this command twice to reboot the DMPs.



kkk. Perform a **Get Status** to ensure DMPs are in good health.

III. (Optional) Change the DMP State of healthy DMPs to 'Production': **Device Configuration > Auto Registration > Change DMP State**.



- mmm. Perform a **Get Status** to check the DMP State after a change.
- nnn. Investigate any DMPs that are not in the 'Normal' state.
- ooo. Configure the MulticastHostPort registry parameter.

Stadium Vision Director Multicast Configuration

StadiumVision Director Release 2.3 uses both unicast and multicast communications for DMP control-plane operations. The Connected Stadium design requires SV Director to use the 239.193.0.0 multicast group address range.

The multicast group address that SV Director uses for multicast control-plane traffic is defined using the 'MulticastHostPort' registry parameter.

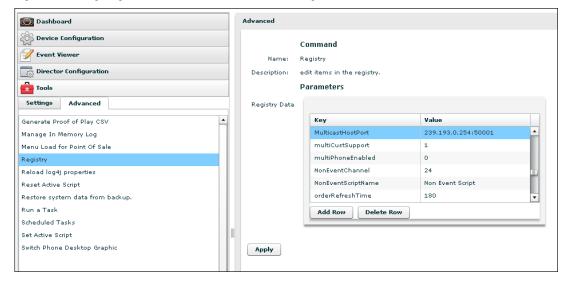
To configure the MulticastHostPort registry parameter:

- 1. From the SV Director main menu, select Management Dashboard.
- ppp. In the Management Dashboard, select **Tools > Advanced > Registry**.
- qqq. Scroll to the 'MulticastHostPort' key in the Parameter list.
- rrr. Click on the Value field and specify a multicast address in the address range of 239.193.0.0/24.

sss. Click Apply.

Refer to Figure 10.

Figure 10. Configuring Stadium Vision Director Multicast Settings



Upgrading CUAE

The CUAE no longer needs a database connection to SV Director.

- 1. Download the latest CUAE files from SV Director (LuxurySuite.mca, cuaephoneimages-<version-info>.zip). If you are using CUAE 8.5, download LuxurySuite 8.5.mca.
- ttt. After the file is downloaded, rename the file to LuxurySuite.mca and deploy per standard installation instructions.

For example, to retrieve the LuxurySuite.mca file use the URL:

http://<svdirector-ip>:8080/download/LuxurySuite.mca

or (for CUAE 8.5)

http://<svdirector-ip>:8080/download/LuxurySuite_8.5.mca

uuu. Download the cuaephoneimages and cucmitems zip files where <build> is the SV Director 2.3 build number that you are installing.

http://<svdirector-ip>:8080/download/cuaephoneimages-2.3.0-<build>.zip http://<svdirector-ip>:8080/download/cucmitems-2.3.0-<build>.zip

vvv. Log in to the CUAE MCEADMIN webpage, go to Applications and select the LuxurySuite application.

www. Disable then Uninstall.

xxx. Upload and install the new LuxurySuite application.

yyy. Configure with the SV Director IP Address.

Troubleshooting the Upgrade

If the Control Panel is unable to start up and hangs in one of its loading modules, (For example, "Loading dependencies for plugin: StadiumVisionUtils" fails):

- 1. Clear the browser cache by going to **Tools > Clear Recent History > Details**.
 - a. Choose the following settings:
 - Time Range to Clear: Everything
 - Details: Cache.
 - b. Click Clear Now.

zzz. Verify that you can open the SV Director Control Panel.

Exporting / Importing the Image Gallery

- 1. Before upgrading to SV Director Release 2.3, log in to Liferay as admin and navigate to the Image Gallery (http://liferayserver:9090/web/menu/imagegallery).
- aaaa. Click the configuration button in the right corner of the screen (the circle with three dots).



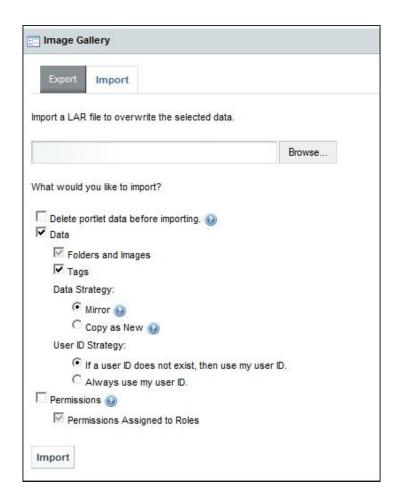
- bbbb. Select Export / Import.
- cccc. Select the **Export** tab.
- dddd. Click the **Export** button to export the .lar file to your desktop.



- eeee. Install Stadium Vision Release 2.3 as described previously.
- ffff. After installation, log in to Liferay as admin and go to the Image Gallery (http://liferayserver:9090/web/sv/imagegallery).
- gggg. Click the configuration button in the right corner of the screen (the circle with three dots).
- hhhh. Select Export / Import
- iiii. Click the **Import** tab.
- jjjj. Browse to the .lar file you exported to your desktop and, click Import.



If you upgraded to Release 2.3 before exporting the .lar file, follow this procedure to import images to a new location.



Post-Install Checklist

- Ensure that there are symlinks so that Tomcat will restart if the system is rebooted.
- If you are using phone control, verify that the phones work.
- Verify that channel names and favorites are properly set.
- Verify that all devices are properly in the nonevent_group.
- Verify that log4j.properties is set to INFO.
- Verify log rotation for catalina.out is in place
- Verify a cron tab is in place to purge logging files after 60 or 90 days.
- Verify that the http://host:8080/StadiumVision/diagnostics/ looks clean on the server.
- *Upgrade only*: Verify that the tools.js has been run manually if it did not succeed automatically and/or you are upgrading the database ahead of time.
- Enable localhost_access_log by editing /opt/apache-tomcat.../conf/server.xml. To do this, look for the section which looks like this:

```
<!-- Access log processes all example.
Documentation at: /docs/config/valve.html -->
<!--
<Valve
className="org.apache.catalina.valves.AccessLogValve"
directory="logs"
prefix="localhost_access_log." suffix=".txt"
pattern="common" resolveHosts="false"/>
-->
```

and then make sure to uncomment the section that has

```
<Valve
className="org.apache.catalina.valves.AccessLogValve"
directory="logs"</pre>
```

- Verify that the Control Panel UI shows the expected SVD version and build number. For example v2.3.0 Build 78.
- Check the Services Alert window in the Management Dashboard and make sure that all relevant services are showing green.
- Check that all DMPs and TVs in the Management Dashboard are showing green.
- Start an existing event script and validate that screens display the expected content.
- Stop the event script and validate that screens are powered off.
- Make a minor edit to the event script and make sure it can be saved.
- Verify that VDM can push a new video file to the DMPs.
- Perform a DB backup and restore.
- Failover the primary SVD to the secondary SVD.
- Run through the failover procedure.

- If using IP phones for local TV control verify that channels can be successfully changed.
- If using dynamic menuboards, make a change to a menu item in liferay and verify that the change is reflected on the menu board.
- If using suite commerce integration verify that an order can be successfully placed via the phone.

End of Document