



Cisco StadiumVision Solution Release Notes

Version 2.2 (Cisco StadiumVision Director Release 2.2.1-29)

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About This Document

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

Document Purpose

The purpose of this document is to provide information about the Cisco StadiumVision solution release 2.2, including what is new in this release, known caveats and issues, and best practices for upgrading to 2.2.

Document Audience

Audience is for Cisco Technical Engineers responsible for deploying the Cisco StadiumVision solution. It is expected that readers of this document are familiar with the Cisco StadiumVision solution.

Related Documentation

All Cisco StadiumVision documentation

Document History

Table 1. Revision History

Date	Revision	Comments
07/16/10	1	Initial draft for 2.2
07/29/10	2	Updated for build 38
8/2/10	3	Updated for build 41; added links to upgrade instructions on wiki
8/11/10	4	Updated for build 46.
8/24/10	5	Corrected DMP Upgrade processes and updated for build 48.
8/30/10	6	Added info on server racks; updated for build 52.
9/9/10	7	Updated for build 54.
10/15/10	8	Updated for 2.2.1
10/21/10	9	Added Headend caveats
10/28/10	10	Added Mgmt Dashboard features
11/09/10	11	Updated for build 29

What's New In This Release

The following summarizes the changes to the Cisco StadiumVision solution that are included in release 2.2.

Supported Software, Related Applications, and Head End Components

This FCS release of the solution supports Cisco StadiumVision Director: FCS Release 2.2.1, Build 29.

The following tables list the software levels of the related applications and head end components that were tested as part of the Cisco StadiumVision solution.

Table 2. Related Applications

Device	Hardware Configuration	Software Release
Cisco Unified IP Phone	7975	8.5.2es4
Cisco Unified Communications Manager	Varies by implementation ¹	6.1 or 7.1
Cisco Unified Applications Environment	MCS-7825-I3-IPC1	2.4.3

Table 3. Head End Components

Hardware/Device	Software Release
Cisco D9900 DCM	8.0.0
Cisco D9050 Encoder	V3.01.02
Cisco D9022 Encoder	V02.11.10
Cisco D9034 Encoder	V03.03.22
Cisco D9094 Encoder	V04L101
Cisco D9887 Receiver	6.3.2
Cisco D9858 Transcoder	2.52 or later
Cisco Spectra QAM Demodulator	N/A
DirecTV COM100 and COM24	ST01.00.35
DirecTV 3D and/or Sonic Tap	ST02.00.03
AdTec DPI-1200 Ad Server	1.2.17
AdTec TBGS	Windows 2003 Server and adManage Version 2.5.4
Catalyst 6500 Series	IP Base image 12.2.x or above

¹ For the recommended MCS for Unified Communications Manager, see http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_implementation_design_guides_list.html

Hardware/Device	Software Release
Catalyst 3750 E-series	IP Services image 12.2.x or above
Catalyst 3560 E-Series	IP Services image 12.2.x or above

Table 4. DMP Requirements

Device	Software Release	
DMP 4310G	Firmware: SE1.0.3, Build 1408 or 1932 (see caveats)	
DMP 4305G	Firmware: 5.1.1; Kernel: Linux version 2.4.22	

Note: Cisco StadiumVision Director currently works with DMP 4310Gs and DMP 4305Gs that meets the requirements specified above.

For information, see_Considerations for Upgrading DMPs.

Features Added in Version 2.2

Version 2.2 of Cisco Stadium Vision Director includes two releases, 2.2.1 and 2.2.0.

Version 2.2.1

The following features have been added to Cisco Stadium Vision version 2.2.1

Dynamic Menu Boards

Functionality has been added to Cisco StadiumVision Director to support the creation and maintenance of dynamic menu boards. This functionality leverages the Liferay container as a repository for images and other information associated with the menu displays. A new Vendor Type of Cisco has been added, which allows you to manually create a PoS implementation for use with the dynamic menu boards.

A new document, the *StadiumVision Dynamic Menu Board Feature Note* provides information about how to configure and use the dynamic menu board feature.

Note: Use of existing PoS implementations (Micros and Quest) has been incorporated into the UI, but not fully tested at this time.

Proof of Play

- "Auto csv gen" task has been removed from the scheduled tasks.
- Old proof of play database dump files under /var/sv/pofp/dbDump will automatically be deleted after 60 days.
- Proof of play data under /var/sv/pofp/data is now part of the system backup task.

 The Cisco StadiumVision Director user interface now allows users to delete unwanted proof of play data.

Content Staging Enhancements

The content staging interval is now configurable. The registery value "staging.interval" is set to 24 hours by default. You can change the interval using the Management Dashboard. To extend this value to beyond 7 days, you must also increase the "script.keepScriptInstancesDuration" registry value to more than the default value of 7 days. For example, to set the content staging interval to 14 days, update the "staging.interval" value to "336" hours and also increase the "script.keepScriptInstancesDuration" to "14" days.

PoS Demo Capability

To allow account teams and partners to demonstrate the PoS and commerce features of Cisco StadiumVision, you can now cache information from a "live" PoS implementation (such as Quest or Micros) for use in a stand-alone demonstration. The data can be used to illustrate the in-suite ordering capabilities of Cisco StadiumVision, but cannot be used to actually generate an order.

Dynamic Content Replacement

During an event, you can now replace content in an event script with other content. The "new" content must exist elsewhere in the event script (as the content must be prepositioned on the DMP.

Note: You cannot replace content in an event script with other content that does not already exist on the DMP to an event script. Nor can you add new content to an event script during an event.

Proof of play support has also been updated to support the dynamic replacement of content.

Renamed Templates and Actions

To address a potential problem regarding duplicate template names. the action names for default templates of the form **Set L-Wrapper** have now been converted to be consistent with the action names for user-defined templates, which is **Set** *template-name*. Below shows the mapping between previous and new names:

Old Action Name	New Action Name
Set L-Wrapper	Set 3-REGION-1366x768
Set Full Screen Video	Set FULLSCREEN-1366x768
Set Full Screen Message	Set 3-REGION-SINGLE-1366x768
Set Single Height L-Wrapper	Set 3-REGION-DOUBLE-1366x768
Set Double Height L-Wrapper	Set MESSAGING-1366x768

Set L-Wrapper 1920x1080	Set 3-REGION-1920x1080
Set Full Screen Video 1920x1080	Set FULLSCREEN-1920x1080
Set Single Height 1920x1080	Set 3-REGION-SINGLE-1920x1080
Set Double Height 1920x1080	Set 3-REGION-DOUBLE-1920x1080
Set Full Screen Message 1920x1080	Set MESSAGING-1920x1080

Ad Insertion Manager Enhancements

An ad play abort functionality has been added to AIM. This allows the user to dynamically stop the playing of an ad break. When you select Abort, the currently playing ad will complete. The channel on which ad play abort is initiated will become available to the user once the aborted ad is played out on delayed feed.

Management Dashboard Enhancements

- The DMP Search function has been enhanced to include a set of pre-defined search criteria. These include:
 - DMPs in critical / red state
 - DMPs in normal / green state
 - DMPs with SD card problems
 - DMPs with flash problems
 - DMPs that are unreachable
 - DMPs that have rebooted
 - DMPs that have fail-overed (not supported)
 - DMPs that are non-conforming
 - DMPs that are not ready (in factory default state)
 - DMPs with unknown Switch Interface
 - DMPs with known Switch Interface
- A Cancel button has been added to the main Dashboard window so that you can cancel a command that has been sent but not executed on one or more DMPs.
- You can now remove files that have been uploaded to the Dashboard.
- You can now change the logging level for the Console and System messages on the Console and System monitoring tabs at the bottom of the screen. Previously, you could change the logging level only through the SV Director server command line interface.

Four logging levels are supported: Debug (most detail), Info (default), Warn, Error (most terse). Only the administrator role can change the logging levels.

The logging level is applied to the SV Director server – not just to a single DMP. Therefore, when you change the logging level on either the Console tab or the System tab, the selected log level will be used to log all messages in both tabs.

Changing the logging level applies only to messages that are logged in the future. It does not affect log files that have already been created.

The new log setting is not saved when you restart the SV Director server. When you restart the server after changing the logging level, the server will return to the default setting (Info).

- You no longer need to refresh the window after you upload a file.
- The Dashboard main window displays the number of DMPs in the system and the number of DMPs selected.
- To add devices to the device list, you now double-click on the device group in the left-hand side of the Dashboard.
- The "Execute command on all devices" has been removed. This was the Play button at the bottom right corner of the Configuration Drawer.
- Alternative Softkey Mapping

To address customer requirements for a different placement of the Guide, Keypad, TV On, and TV Off softkeys in the IP Phone interface, SQL scripts have been created to accommodate alternative softkey mapping. The SQL scripts are explained in the *Local Control Areas Design and Implementation Guide*.

Version 2.2.0

The following features were added to Cisco Stadium Vision version 2.2.0

Cisco StadiumVision Director Hardware

Cisco StadiumVision Director now has its own hardware platform based on the Cisco C200. There is a Cisco StadiumVision bundle that includes both the hardware and software. The part numbers are as follows:

Hardware and Software bundle

 SV-DIRECTOR-K9 StadiumVision Director Base Software Kit + Preconfigured C200 Platform Bundle

Optional Scaling Licenses, multiples allowed or zero

- SV-DIR-10SVM StadiumVision Director 10 Video Mgmt Licenses
- SV-DIR-10SCL StadiumVision Director 10 Commerce Licenses
- SV-DIR-10ALT Stadium Vision Director 10 Alt Device Licenses
- SV-DIR-50DISP Stadium Vision Director 50 Display Licenses
- SV-DIR-1SVM Stadium Vision Director 1 Video Mgmt License
- SV-DIR-1SCL Stadium Vision Director 1 Commerce License
- SV-DIR-1ALT Stadium Vision Director 1 Alt Device License
- SV-DIR-5DISP Stadium Vision Director 5 Display Licenses

StadiumVision Director Multicast Support

Cisco StadiumVision Director 2.2.x uses both unicast and multicast communications for DMP control-plane operations. The multicast group address is defined in the Cisco StadiumVision Director "MulticastHostPort" registry parameter and must match the Anycast RP configuration on the Connected Stadium switches. See the section on StadiumVision Director New Multicast Configuration for more information.

Per-Area Channel Guide

Leveraging the venue-wide master channel list, Cisco StadiumVision Director now supports the creation of per-area channel guides, each of which can be assigned to one or more luxury suites or other areas where local TV control is provided. The per-area channel guides are a subset of the master channel list, meaning the channels numbers and descriptions are preserved. If a DMP is not associated with a luxury suite, bar, restaurant, or other area that supports local control, then it will use the default channel guide.

Role-Based Access

Cisco StadiumVision Director now supports multiple levels of user access based on a number of defined roles, which include Administrator, Event Operator, Content Manager, Support, and Help Desk. Access to various functions and panels within Cisco StadiumVision Director depends on the defined role. Some roles (Event Operator, Content Manager) will use the Control Panel. Other roles (Support, Help Desk) will use the Management Dashboard.

The following table indicates which role has access to which pages of the Control Panel.

Tab/Panel	Administrator	Event Operator	Content Manager
Setup/User Management	Yes	No	No
Setup/Zones & Groups	Yes	Yes	Yes
Setup/Staging	Yes	Yes	No
Setup/Channels	Yes	No	Yes
Setup/Devices	Yes	No	No
Setup/Luxury Suites	Yes	No	No
Setup/Proof of Play	Yes	No	No
Setup/Template Editor	Yes	No	Yes
Setup/Point of Sale	Yes	No	No
Setup/My Profile	No	Yes	Yes
Control	Yes	Yes	No
Content	Yes	No	Yes
Ticker	Yes	Yes	Yes
Schedule	Yes	No	Yes

The Support and Help Desk roles have access only to the Setup/My Profile page of the Control Panel. The table below indicates their level of access to the Management Dashboard. Note that only the Administrator can execute commands that modify the DMP configuration, such as "Upgrade Firmware."

Command Category	Command	Administrator	Support	Help Desk
Monitoring	Get Status	Yes	Yes	Yes
Monitoring	Ping	Yes	Yes	Yes
Global	Global DMP Settings	Yes	No	No
DMP Commands	Display IP	Yes	Yes	Yes
DMP Commands	Restart Flash	Yes	No	No
DMP Commands	Disable DHCP	Yes	No	No
DMP Commands	Enable DHCP	Yes	No	No
DMP Commands	Update MIB	Yes	No	No
DMP Commands	Send RS232	Yes	No	No
DMP Commands	Play SWF	Yes	No	No
DMP Commands	Stop SWF	Yes	No	No
DMP Commands	Play Media URL	Yes	No	No
DMP Commands	Stop Media URL	Yes	No	No
DMP Commands	Set Alpha Transparency	Yes	No	No
DMP Commands	Reboot Device	Yes	No	No
DMP Install	Kernel Upgrade	Yes	No	No
DMP Install	Firmware Upgrade	Yes	No	No
DMP Install	SVD Upgrade	Yes	No	No
DMP Install	Restore Default Settings	Yes	No	No
DMP Install	Initial Config	Yes	No	No
TV Commands	TV On	Yes	Yes	No
TV Commands	TV Off	Yes	Yes	No
TV Commands	Set Display Input	Yes	Yes	No
TV Commands	Set Display Banner	Yes	Yes	No
TV Commands	Set Closed Caption	Yes	Yes	No
TV Commands	Set Volume	Yes	Yes	No
TV Commands	Set Video Channel	Yes	Yes	No
Miscellaneous	Query Syslog	Yes	Yes	No
Switch Commands	Power Cycle DMP	Yes	No	No
Switch Commands	Cabling Test using TDR	Yes	Yes	No
Switch Commands	Ping Test	Yes	Yes	Yes

Note: The Concessionaire, while listed as a user type, is not operational in this release. This role will be fully implemented in a future release.

RBAC has not be implemented in AIM. AIM requires its own separate credentials.

Ad Hoc States

To allow venues to spontaneously change the graphic content, Cisco StadiumVision Director now supports the creation of ad-hoc states. This is useful in cases where a venue wants to play a video ad in Region 1 and needs to change the content in Region 2 to ensure that it is not displaying an advertisement for a competing sponsor. Ad-hoc states are associated with an event script and can be launched during the event when needed, similar to the delay or emergency states. You assign a duration for each ad-hoc playlist. When you launch the playlist, it will interrupt the playlist in the region, run for the

specified duration, and then return to the spot where the original playlist was interrupted.

The use of video content in an ad-hoc state is not currently supported.

Support for Mixed Mode (DMP 4305G and DMP 4310G)

To allow existing customers to expand their deployments, Cisco StadiumVision Director now allows operations in a mixed mode environment, where both DMP 4305Gs and DMP 4310Gs are deployed. There are limitations to how the DMPs can be mixed. See the section on Known Caveats and Issues for more information.

Proof of Play Data Compatibility with KORE

The format of the Proof of Play (PoP) data has been modified to accommodate post processing by KORE Systems (http://www.koresystems.com/). This post processing will aggregate PoP data across DMPs and generate reports that show information based on total playout per sponsor, rather than individual playouts per DMP.

Per Ad Timer

In previous releases, display time for ads was set globally at the playlist level. Cisco StadiumVision Director now allows the display time for an ad (or other content) to be configured for each ad in the playlist. When you add content to a playlist, you have the option of specifying the duration of each ad. The per-ad display time, if configured, overrides the global playlist time.

Additional IP Phone Interface Enhancements

The IP Phones user interface for TV control and ordering has been enhanced.

- TV control and ordering can now be associated with line buttons.
- When the user navigates to the channel guide on the phone, Cisco StadiumVision Director can be configured to automatically display the channel guide on the selected TVs.
- The Advanced page now shows only active/available options.
- If an IP Phone is configured in Cisco StadiumVision Director (Setup > Devices > IPPhones) but not associated with a suite, the phone will now display a user friendly error message if Cisco StadiumVision services are selected.

Video Playlists

Cisco StadiumVision Director now supports the use of video files in playlists with the following parameters:

- The video files must be MPEG-2 TS or MPEG-4.
- The video files must be prepositioned on the DMPs.

- The video files are defined in Cisco StadiumVision Director through the content tab using the "New External Content" option. You must specify the exact, full path of the file on the DMP and assign a Media Type of Video.
- The video playlist must be defined with a Type of "video" and can contain one or more video files.
- If the specified duration of the video playlist is different from the sum of the durations of the videos, the duration of the video playlist overrides.
 Therefore, it is important that the duration of the playlist and total duration of the included videos match.
- Video playlists can be played in the video region (Region 1) of the L-wrapper template or as full-screen.
- The use of video playlists in ad-hoc states is not currently supported.
- There is a brief transition time (black) when the video playlist starts and stops.

Control Panel Changes and Enhancements

The flow of the control panel has been enhanced to improve the usability of the product and to support new functionality.

- The Admin tab has been renamed as Setup.
- A Setup > User Management page has been added to support RBAC.
- Zones&Groups has been moved under the Setup tab.
- The Setup > Channel page has been modified to support per-area channel quides.
- The Setup > Proof of Play page has been modified to support report generation for KORE integration.
- The Schedule page has been reorganized to improve the flow for creating event scripts.
- The Control page has been redesigned to improve the flow for operating an event and to support ad-hoc states.
- The Content page has been redesigned to improve the flow for operating an event and to support video playlists.

Management Dashboard Changes and Enhancements

The following enhancements have been added to the Management Dashboard.

- Support for RBAC (as described previously).
- New switch-based commands to perform a PING test and run a TDR (Time Domain Reflectometer) to test cabling.
- You can now display all the MIB variables retrieved from a DMP.

- The Dashboard can now perform a bulk discovery of switches. Alternatively, you can also perform a bulk import of the mapping of DMPs to switches (in a CSV file).
- You can now search for DMPs using the name or MAC address.
- You can now search through MIB variables by name.
- Additional switch details are displayed.

Parameters have been added to the Registry to support new features, including:

- tvguide.autolaunch Enables the automatic displaying of the channel guide on the TV.
- ipPhoneError.SuiteNotFound An error message that is displayed on an IP phone which is not associated with a luxury suite.
- ipPhoneError.POSEventNotFound An error message that is displayed on the IP phone if the commerce integration does not have an Event configured.

To prevent unauthorized or unintentional use of the Emergency State, you should set the new "EmergencyPIN" parameter value in the Registry. For example if the EmergencyPIN is set to 1000, upon entering into an emergency state should now block unless you enter 1000. If the value EmergencyPIN is empty, or is if this parameter does not exist in the registry, any value is accepted.

A "periodic-5-seconds" parameter has been added. The existing "periodic" parameter indicates a task should run once every 30 seconds; the new "periodic-5-seconds" parameter indicates that a task should run every 5 seconds. This is only suggested for MulticastStateChangeTask.

- The LuxurySuite.mca file and the CUAE images have been modified. Make sure
 you update the CUAE Server with both the new application file and the new
 phone images.
- Ad Insertion Manager Enhancements
 - On the Schedule > Create/Edit page under Scheduled Breaks, the media display name is now shown instead of the physical file name.
 - On the Schedule > Create/Edit page, the Save button is not displayed while adding a new Ad/Break. Saving the schedule is performed in the Breaks view.
 - Media files can now be deleted using Administration > Media > Delete Media.
 - The creation of the CORBA IOR DB entries is now automated. This is a background task that happens while adding a new DCM device.
 - The user can now enter "Media Folder" info for an Adtec Media Hub.
- The BulkDMP tool has been updated to support Cisco StadiumVision 2.2.
 Previous releases of the BulkDMP tool are not compatible with Cisco

StadiumVision 2.2. The version of BulkDMP for release 2.2 is properly named to match the version of Cisco StadiumVision Director reported in the Web UI. For example, for SV Director 2.2.0-41, the bulk update tool would be at path

http://director-ip:8080/download/bulk_update-2.2.0-41.zip.

You should use the administrator user and role to upload bulk DMP information.

Features Added in Version 2.1

The following features have been added to Cisco Stadium Vision version 2.1.

Commerce Integration

• Support for Micros Systems, Inc.

In addition to Quest, Cisco StadiumVision Director now supports integration with Micros as a point of sale system. http://www.micros.com/

Simplified Configuration of Commerce Integration

A tab has been added in Cisco StadiumVision Director to allow for the configuration of Point of Sale integration. Configuration of commerce integration for the luxury suites previously required certain parameters to be configured in the Management Dashboard. Those parameters can now be configured in the SV Director main UI.

Luxury Suite ID now required only for Commerce Integration

In release 2.0, the luxury suite basic information included a field called "Ext Suite ID." This value was used to tie the suite to CUCM and was the parameter passed in from the CUCM StadiumVision service. As of release 2.1, the "Ext Suite ID" is no longer required by CUCM.

However, the parameter is still used for Commerce Integration. Because of this, the "Ext Suite ID" field was moved to the **Commerce Integration** tab. This field must contain the suite ID used by either Micros or Quest.

In the case of Micros, there are actually two fields that should be set. The "Ext Suite ID" field should be set to what Micros refers to as the "Suite ID" and the "External suite name" should be set to what Micros refers to as the "Suite Number".

Change to scheduled pull of PoS data

In release 2.0, to perform automatic (daily) pulls of data from the Quest server, you used the Management Dashboard to schedule a task called **QuestDataTask.** In release 2.1 (to accommodate different PoS systems), this task has been renamed to **PosGetMenuTask.**

Multi customer support changes

In release 2.0, there was a registry entry called "multiCustSupport," which indicated whether one or multiple customers could order from a suite. In release

2.1, this setting has been moved from the registry to the main SV Director UI under Commerce Integration > Vendor Installation.

Other registry changes

The following parameters were previously set in the registry. This information has now been integrated into the SV Director Control Panel under Admin > Point of Sale > Vendor Installation Info.

- QuestDataLoaderPath
- QuestServerIp
- QuestTerminalId
- Default PoSCustomerID
- DefaultPoSPassword
- multiCustSupport

Note: Some of the keywords for these parameters remain in the registry, but they are unused. They will be removed in a future release.

Troubleshooting and monitoring additions

Capabilities have been added to the StadiumVision Director Management Dashboard to monitor the Quest and Micros Point of Sale servers. On a periodic basis, the Management Dashboard issues a PING to the server, followed by a web service call to the application. If any issues are encountered, they are reflected in the Management Dashboard UI.

Ad Insertion Manager

Enhancements to ad playout capabilities

This release provides greater flexibility with open ended ad breaks, including the ability to view all available channels that have a corresponding verification file in TBGS and are currently not airing any ads, select from unplayed ads in a break, and select multiple ads to create a playlist.

Ad status information

A new option has been included that allows you to view the current ad playout status information.

Delete device configuration

In previous releases, devices could be added, but not deleted.

Device verification

You can now select a channel and verify that all devices associated with the ad insertion process for that channel are functioning correctly.

Ad sequence repetition

This release includes the ability to define any number of consecutive spots/ads inside a break as a "repeat sequence." Once the "repeat sequence" is defined for a particular break, AIM will replicate this "repeat sequence" over and over

inside the particular break until it reaches the maximum 999 allowed spots in a break.

Features Added in Version 2.0

For historical purposes, this section provides a list of features that were added in Cisco StadiumVision 2.0.

General

Support for DMP 4310

In Cisco StadiumVision release 1.5, only the Cisco DMP 4305 was supported. In release 2.0, support has been added for the Cisco DMP 4310. Cisco StadiumVision Director supports deployments of either DMP in a given venue, but not both. To function properly, the Cisco StadiumVision Director must "know" which type of DMPs are in the network. This information is configured in the StadiumVision registry. For more information, see the StadiumVision Director Management Dashboard User Guide.

Support for MPEG-4

With the addition of the Cisco DMP 4310, the Cisco StadiumVision solution can now deliver both MPEG-2 and MPEG-4 to the video endpoints. Changes have been made to the head end design (additional encoder choices, removal of the transcoder for DirecTV feeds) to incorporate MPEG-4 support.

StadiumVision Head End

Support for Redundant and Non-Redundant Architectures

The StadiumVision Head End Design and Implementation Guide now includes reference architectures for both redundant and non-redundant head end configurations.

Changes for Support of MPEG-4

If the venue is using DMP 4310s, MPEG-4 can be delivered to the video endpoints. Therefore, MPEG-4 encoders can be used with in-house feeds and the transcoder can be eliminated from the DirecTV bundle.

Note: It may be a more cost-effective strategy to use MPEG-2 for the in-house feeds. Both MPEG-2 and MPEG-4 can co-reside on the network.

Changes to the Ad Insertion Process

In release 1.5, the Ad Insertion Manager (AIM) was a separate entity – installed as a separate application on a separate Cisco ADE server. In release 2.0, AIM has been partially integrated in to Cisco StadiumVision Director: it is installed as part of the CD/DVD installation process, it resides on the same Cisco ADE as

Cisco StadiumVision Director, and it is accessible from the main StadiumVision Director page.

In addition, the iBoot-6500 is no longer required to trigger ad insertion on the DCM. Instead the Adtec XCP protocol is used to trigger the switch over between the delayed (with ad) feed and the non-delay (without ad) feed.

The Ad Insertion Manager now also supports "open-ended" ad breaks, which can be terminated at will, as opposed to fixed-length ad breaks which must run in their entirety.

StadiumVision Director General

- Renaming of Cisco Interactive Applications (iApps) for Cisco StadiumVision
 For legal reasons, Cisco Interactive Applications (iApps) for StadiumVision has been renamed to Cisco StadiumVision Director.
- CD/DVD-based StadiumVision Director installation process

To simplify the installation process for Cisco StadiumVision Director, an installation process has been developed. The installation file can be downloaded and burned to a CD or DVD, which can then be used to install the application on the Cisco ADE server at the venue.

The installation includes the StadiumVision Daemon, the phone images, and the StadiumVision services (.mca) file. It does not include the updated firmware and kernel for the DMP-4305.

Addition of the Management Dashboard

To aid in management of the solution, a Management Dashboard has been added to Cisco StadiumVision Director. This dashboard provides information on the health of the system (DMPs), and allows mass updates and configurations to be easily pushed to the DMPs. This dashboard also incorporates the functionality that was previously included in the StadiumVision Temporary Administrative Console.

Simplified Access to Temporary Administrative Console

In release 1.5, the Temporary Administrative (Admin) Console was accessed via a separate URL ((http://iApps_IP_address:8080/StadiumVision/tmpadmin/). In release 2.0, the functions of the Temporary Admin Console have been incorporated into the new Management Dashboard which is accessible from the new main StadiumVision Director page (http://SV Director IP address/StadiumVision/).

DMP Management via Management Dashboard

In addition to providing easy access to the functions previously included in the Temporary Admin Console, the Management Dashboard also provides an easy-to-use GUI for configuring DMP settings, viewing DMP status, and managing the DMPs on the StadiumVision network.

Enhancements to the StadiumVision Templates

The default templates that were provided in 1.5 are now available in both 1920x1080 and 1366x768 resolution. Only the 1366x768 templates can be used with a DMP 4305, regardless of the resolution of the attached TV.

In addition, Cisco StadiumVision Director now provides the capability to create custom templates, allowing you to customize the size and arrangements of the regions. With the DMP 4310, a non-video region can overlap a vide region - as the 4310 supports graphics with transparency/opacity. Cisco StadiumVision Director does not prevent the use of overlapping regions on a 4305, however this is not recommended as the outcome may be undesirable.

Modifications to Volume Control

Improvements have been made to the volume control for TVs.

 During implementation, you have three options for volume control strategy (as configured through Cisco StadiumVision Director):

External: The volume on the TV is be controlled by sending commands from the DMP to the TV (via RS-232)

Internal: The volume on the TV is controlled by changing the volume of the audio feed that is transmitted from the DMP.

None: The volume cannot be adjusted. This is useful for TVs that are used for video only where any audio is provided separately (such as in a bar).

- The granularity of the volume control has been increased and can be configured through Cisco StadiumVision Director.
- You can specify the number of times the RS-232 command for volume control is sent (repeated) when volume up or down is pressed on the IR remote or IP phone. The default is 1. You can also specify the delay between the repeated commands. This is to accommodate different behaviors in different TV models.
- Support for Basic Venue Transformation

To allow multi-use venues to change the "look and feel" of StadiumVision between events, support has been added to enable:

- Use of logos on the channel guide, such that the logo reflects the team participating in the current event.
- Use of different backgrounds on the IP phones in the luxury suites and other local control areas.

Note: Switching phone backgrounds can produce undesired visual effects and should be tested prior to implementation.

Support for Server Backup and Restore

Cisco StadiumVision Director now includes options to backup and restore the data from the server either to a local file or to another server. This provides the

ability to recover previous data in the event of a mis-configuration as well as enables a strategy for high-availability if redundant servers are used.

• Ad Insertion Manager Incorporated into Cisco StadiumVision Director In release 1.5, the Ad Insertion Manager (AIM) was a separate entity – installed as a separate application on a separate Cisco ADE server. In release 2.0, AIM has been partially integrated in to Cisco StadiumVision Director: it is installed as part of the CD/DVD installation process, it resides on the same Cisco ADE as Cisco StadiumVision Director, and it is accessible from the main StadiumVision Director page.

Luxury Suites and Local TV Control

• Improved User Interface on the Cisco IP Phone

The user interface for StadiumVision services (local TV control and commerce) has been improved. The access and control process have been streamlined and the made more intuitive.

Simplified Configuration of Luxury Suites

Configuration of StadiumVision luxury suites requires certain parameters to be configured within Cisco Unified Communications Manager (CUCM). One of these parameters is the luxury suite ID. In release 1.5, the installer could not control the assignment of the ID and was required to manually access the iApps database to obtain he luxury suite ID (in order to complete the CUCM configuration). In release 2.0, the luxury suite ID can be configured on the Admin>Luxury Suite>Basic page (as the Ext. Suite ID field). Manual access to the database is no longer required.

Simplified Configuration of Phone Services

In Cisco StadiumVision release 1.5, installers could define different Phone Services in Cisco Unified Communications Manager to enable just TV control, commerce integration, or both. In release 2.0, you can now specify which services are available to each phone through the StadiumVision Director UI.

When you define the phone for a luxury suite, you can select from two "service types" for the Cisco IP Phone: Luxury Suite and AdminOffice. The Luxury Suite service includes both the Video Management Services and the Commerce Services and is designed to be used with luxury suites. The AdminOffice service includes only the Video Management Services and is designed to be used in administrative back offices (and other locations where a Cisco IP phone is used for local TV control and commerce integration is not needed).

Simplified Access to Phone Services

To streamline the process for the user to access the phone services, the service page can now be displayed by default on the phone. (There is no longer a need for the luxury suite guest to press the services button.) Using CUCM, the phone

service can be configured to start when the phone idle timer kicks in after one second.

Improved Control of Phone Timeouts

In a luxury suite, when the suite guest navigates to a sub-page below the phone's home page, after a period of no activity (no input), the home page will be re-displayed. This inactive period can now be configured through StadiumVision Directory registry entries. The registry entry 'tvRefreshTime' determines the number of seconds until refresh when in the 'TV / Volume' service, and registry 'orderRefreshTime' determines the number of seconds until refresh when in the 'Order' service.

Channel Guide Improvements

Several improvements have been made to the channel guide:

- The guide is now available on the Cisco IP Phone.
- Icons can be associated with channels (must procure the icons locally; for use on IP Phone only, currently not supported on the TV)
- A description field has been added which allows you to specify what is playing on the channel (for display in the Channel Guide on the TV).

Changes to the Configuration of Favorite Channels

The Cisco StadiumVision solution provides for a short list (up to 10) of the favorite TV channels to be displayed on the local control device. In release 1.5 of the solution, these channels were configured by manually editing the database. The fields on the Admin > Channels page were read-only. In release 2.0, these fields have been enabled for input. You can now designate which channels are favorites (and the order in which they should be listed) from the Admin > Channels page. Editing the database is no longer required. Note, however, that due to improvements in the user interface of StadiumVision services on the Cisco IP Phone, favorite channels no longer used on the IP Phone. Favorites continue to be used on the third-party touch panels.

Support for TV Labels in Luxury Suites

In release 1.5, the TVs in a luxury suite were automatically assigned a number based on the order in which they were added to the suite in the iApps software. In release 2.0, the TVs in a luxury suite can now be assigned a text label, such as bar, kitchen, or main, through Cisco StadiumVision Director. These labels appear on the user interface of a Cisco IP Phone that is used to control the TVs in the suite. This improves the user experience.

Support for External Input Labels in Luxury Suites

As another improvement to the luxury suite user experience, you can now configure text labels for up to 4 external input devices.

Addition of Speed Dials to the Service Page

To further improve the luxury suite user experience, release 2.0 allows for the definition of up to 3 speed dials on the main StadiumVision services page.

These speed dials can be used to streamline the guest's access to venue departments, such as housekeeping or security.

Commerce Integration

Support for Multiple Customers per Luxury Suite

The StadiumVision luxury suite implementation allows for integration with a point of sale (PoS) application. If this integration is enabled, customers can use their Cisco IP Phone (or a third party device) to place orders for food, drink, and merchandise. In Cisco StadiumVision version 1.5, the solution allowed purchases to be made by only one customer (ID and PIN) per luxury suite. In Cisco StadiumVision 2.0, purchases can be made by multiple customers within the suite. In addition, the same customer can make purchases across multiple suites.

Cisco StadiumVision Director exchanges the user information (customer name and password) with the PoS server. If luxury suite multi-customer support has been enabled, when the luxury suite guest is ready to complete their order, they are asked to provide a customer name and password. This information is used to authenticate the order. If luxury suite multi-customer support has *not* been enabled, the customer is prompted to provide only a PIN at the end of the transaction.

Video Delivery

Support for Closed Captioning

In release 2.0 with a Cisco DMP 4310, closed captioning (if provided in the video feed) can be displayed on the TV. Central control of closed captioning is integrated in Cisco StadiumVision Director. Local control of closed captioning is provided on the Cisco IP Phone and the IR remote (but not through the third-party touch panels).

Enhanced IR Remote

The Cisco DMP 4310 includes a re-designed infra-red remote. This remote allows local control for channel selection and TV volume. It provides access to the channel guide and closed captioning. It also can be used to switch inputs to local devices, such as a DVD player.

- Support for 4310
 - Supports MPEG-4 video
 - Supports H.264 over MPEG2-TS video streams
 - Supports graphical overlay of video
 - RS-232 connector is a 3.5mm stereo jack
 - New IR remote and extended set of key-codes
 - 1920x1080 resolution graphics plane
 - Plays only Flash SWFs (no browser running on the 4310)

- Startup URL points to a Flash SWF file (not an HTML file)
- StadiumVision Daemon (SVD) functionality built-in (no need to install SVD)
- Secure HTTPS port 7777 used to get or set MIB variables
- Rsync performed over SSH
- MediaPlayer API changed from JavaScript to Flash Actionscript

The Cisco DMP 4310G provides 32 GB local storage as compared to the 1.75 GB local storage provided by the DMP 4305G. The DMP 4310G includes a new file system that is more resilient to power outages to protect data. It does not have an external SD card/slot; all internal storage is now onboard.

Management Dashboard

In release 2.0, Cisco StadiumVision Director has been enhanced to include a Management Dashboard interface that provides an easy-to-use GUI for configuring DMP settings, viewing DMP status, and managing the DMPs on the StadiumVision network. All DMP settings can be configured through the StadiumVision Director Management Dashboard.

Previously, the DMP Device Manager (DMPDM) interface that is natively installed on the DMP was used for configuring the DMP. The DMPDM interface is still available on the DMP; however, you should not need to use it.

Third-Party Touch Panels

The StadiumVision API for third-party touch panels has been updated with the following changes:

- New VolumeUp
- New VolumeDown
- New MuteToggle

Notes:

- Controls such as Up, Down, Left, Right should no longer be used.
- Favorites will be removed in a future release.

Known Caveats and Issues

The following summarizes the known caveats and issues with the Cisco Stadium Vision solution release 2.2.

General

- Do not position Cisco StadiumVision for use in live speaker environment. The delay characteristics of MPEG create either audio/video lip sync issues or delayed audio feedback problems.
- When the volume is set to zero via RS-232, the display automatically mutes. If the volume is adjusted after this, the volume banner will be displayed and indicate a change in value on the screen, but the display is still muted. It is recommended that the minimum volume string be something other than zero to prevent this from happening. Known displays to exhibit this behavior are: Sony Bravia KDL-32S5100, KDL-46S5100 and KDL-52S5100 displays using the MA2 chassis for RS232 control. It may affect other models which also use the MA2 chassis for RS232 control.

Headend

- The DirecTV COM100 has been discontinued and has been replaced by the COM200.
- The Cisco D9050 Encoder does not pass closed captioning data correctly. This
 issue is under investigation.
- The Cisco D9858 Transcoder does not pass DirecTV closed captions correctly.
 This issue is under investigation.
- There is an issue with the Cisco D9858 Transcoder and browser compatibility. Use Internet Explorer for best results. If Safari or Firefox are used, the login may fail and configuration changes may not be saved.
- Dual audio is not supported on DMP 4310G. The DMP will only decoder the first audio PID. The second will have to be mapped to a new stream out of the Cisco D9900 DCM while the first audio PID Is blocked to ensure that the second PID is played correctly on the DMP.

Video Endpoint (DMP)

This release supports both firmware 1408 and 1932. The following caveats apply to firmware 1932:

- The transition between an existing video feed to black is longer though the overall duration from the time when the trigger to change is invoked to when the channel is made visible on the screen is about the same.
- The init.FAILOVER_URL MIB, which is used by Cisco StadiumVision Director when setting global MIB settings, has been removed from the DMP firmware. This change will be accommodated in an upcoming release. For Cisco StadiumVision 2.2.x, do the following:
 - cd /opt/apache-tomcat-6.0.18/webapps/StadiumVision/WEB-INF/classes/
 - sudo vi application.properties
 - Search for "4310.deploy.init.FAILOVER" and comment out that line:
 #Globaldmpsetting.4310.deploy.init.FAILOVER_URL=<4310_FAILOVER_URL>
 - Restart tomcat.

Cisco Stadium Vision Director

- Before deploying Cisco StadiumVision Director release 2.2, you must upgrade the memory in the server to 16 GB.
- If you are deploying the new Cisco StadiumVision Director server, note the following:
 - The Cisco StadiumVision Director (C200) server and the associated rail mount kit is significantly longer than a Cisco ADE. This means that the server and rail kit will extend beyond the rear of a standard-depth data center rack/cabinet. While deeper cabinets that can accommodate the solution are generally available, it's important to understand that such cabinets may not have been purchased or installed ahead of time by the customer.
 - The Cisco StadiumVision Director (C200) server rail mount kit does not offer any means to attach to a rack or cabinet with drilled or threaded rails. The rail mount kit can be attached only to racks and cabinets with square-holed, server-style rails. As an alternative, you can use adapter brackets available from a third party: http://www.server-racks.com/mounting-cisco-ucs-sliderails-in-a-threaded-hole-rack.html
- When operating in mixed mode (using both DMP 4305G and 4310Gs), keep the following in mind:
 - You must specify the model of DMP when you add it to Cisco StadiumVision Director.
 - Only like model DMPs can be in a Group. You cannot have a group that contains both DMP 4305Gs and 4310Gs.
 - All DMPs must be at the same firmware version.

- You must create/use separate templates for DMP 4305Gs and 4310Gs. The templates should be named using a naming convention that makes it clear to which DMP model they apply.
- You should create separate content for DMP 4305Gs and 4310Gs. Content files are referenced by name. Therefore, the content files should be named using a naming convention that makes it clear to which DMP model they apply.
- Role-based access does not support login notification or lock outs. This means
 that a user can log in and overwrite the changes of another user if they access
 the same tab in Cisco StadiumVision Director. This will be addressed in a future
 release. In the interim, close communication is required by all Cisco
 StadiumVision Director users to ensure they do not overwrite each other's
 changes.
- Cisco StadiumVision Director release 2.2 is not compatible with prior versions of the BulkDMP tool. The version of the BulkDMP for release 2.2 is properly named to match the version of Cisco StadiumVision Director reported in the Web UI.
 For example, for SV Director 2.2.0-41, the bulk update tool would be at path http://director-ip:8080/download/bulk_update-2.2.0-41.zip.

You should use the administrator user and role to upload bulk DMP information.

- The following browsers are supported with Cisco StadiumVision Director:
 - Mac and Windows: Internet Explorer 8 and FireFox 3.x.
 Other browsers, including Safari and Chrome, are not support.
 - Other browsers, including Safari and Chrome, are not supported.
- If you are using Internet Explorer, when you first access the Management Dashboard, you must refresh the window.
- If more than one user is accessing the StadiumVision Director UI and are making configuration changes at the same time, the UI may become out of sync with the database (backend) and may reflect incorrect information.
- The keywords for the following parameters remain in the Management
 Dashboard > Advanced Tools > Registry. The functionality to set these values
 has been moved to the Control Panel. Any values set for these keywords in the
 registry are unused. These keywords will be removed in a future release.
 - QuestDataLoaderPath
 - QuestServerIp
 - QuestTerminalId
 - DefaultPoSCustomerID
 - multiCustSupport

Content and Event Scripts

• The Playlist Sources > Channel labeled "Channel – No Change" in the Schedule function has been removed. If your implementation currently uses this setting, remove this from your scripts before upgrading Cisco StadiumVision Director.

- Do not put important content, such as sponsored ads, into the first state or the
 first few seconds of an event script. It takes several seconds for the event script
 to appear while the DMP is initializing. Content may not appear on the display
 during that initial starting time. Also, this content may or may not appear in proof
 of play records.
- Do not use zero-duration items in a playlist with other items. Instead assign a very long duration time to the item. (Note that this will prevent proof of play from working for that item.)
- Changing the event script after it has started running can often cause the script
 to become unstoppable via the Control Panel. Therefore, the StadiumVision
 Director UI now prevents you from modifying an active script. If you need to
 make changes to a script, you must first stop the script. To stop the event script
 from the Control Panel, go to the Control tab, select the running event script, and
 click Stop Script. To stop the event script from the Management Dashboard, go
 to Tools > Advanced and select Reset Active Scripts.
- If you initiate an emergency state while in an ad hoc state, upon return from the emergency state you are return to the previous sequential state, not to the ad hoc state.
- To protect against overflows in RSS feeds, Cisco StadiumVision Director trims the number of RSS feed entries to a maximum message size of 15822 bytes. Each RSS ticker text consumes the following number of bytes against this maximum:
 - 32 bytes of message traffic overhead per ticker text
 - The size of the ticker text, after percent encoding (also known as URL encoding). See this <u>wikipedia article on percent encoding</u> for details. Note that the particular details of the specific characters which are and are not percent-encoded are those enforced by the java urlencode function. See <u>the java URLEncoder documentation</u> for greater detail.
 - If more RSS data exists than can fit into the 15822 bytes, the data is truncated. Extra entries will not be sent to the DMPs.
- Content file names should not contain spaces. Certain browsers will not recognize filenames with a space when uploading content. More importantly, proof of play does not recognize files that contain spaces. Content files with spaces in the name will not be accounted for in the proof of play data.
- Including video in the first state may cause unexpected results. It is recommended that you create a first state that only turns on the TVs. Then create a second state in which video and other content are included.
- The height of the ticker region in the single-height L-wrapper template is incorrect. It is 1920x165 and should be 1920x166. This will be corrected in a future release. As a workaround, you can create a custom template with the correct size ticker.

 With long-lived (multi-day) events, where the start times are more than 26 hours in the past, the content will be removed by the rsync task and TVs may go black depending on the configured content.

This is because event scripts were originally designed to be short-lived (running only for a few hours). The active repository is not a long-lived area. Instead, its contents are generated "from scratch" based on the pending and current event scripts. And only the event script start time is accounted for, not the event's duration. The current algorithm synchronizes content for events which will start or have started in the next / previous 26 hours (24 hours + a 2 hour window). Any scripts that do not fall within this window are excluded from the active area (and thus their contents are removed from the DMPs when the content is staged).

This behavior will change in upcoming releases. To address this issue in the existing release, you can remove the rsync task from the ScheduledTask list (as long as you are not depending on the scheduled event script starting) and instead use the Dashboard to immediately synchronize content and start the event scripts.

Video Playlists

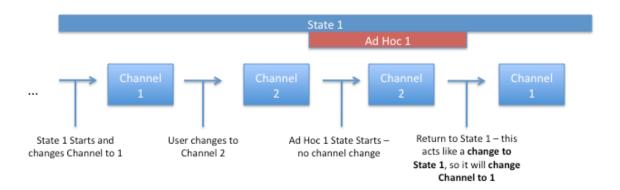
- There is a 2GB limitation on the size of local files on the DMP. Therefore, prepositioned videos cannot be more than 2GB.
- When using video playlists, you must specify the entire URL/path of the file that
 has been prepositioned on the DMP. No content validation is done, however, so
 be careful not to point to a file that corrupts the DMP.
- The use of video content and video playlists in an ad-hoc state is not supported.
- Do not include spaces in the names of groups that you plan to use with the Video Distribution Manager.

Local Control Areas

- The default setting for the tvguide.autolaunch is incorrectly set to 1. Prior to version 2.2.1, the default was set to 0. Therefore, when you upgrade to 2.2.1, you must change the setting in the registry.
- It is recommended that you avoid assigning a DMP to multiple Luxury Suites. If a DMP is assigned to more than one Luxury Suite, it will use the Per-Area Channel Guide associated with the last Luxury Suite to which it was assigned. For example if a DMP is added to Suite 1 and then added to Suite 2, it will use the Channel Guide defined for Suite 2.
- If the user changes the channel via an IP phone, IR remote, or 3rd-Party remote, the channel chosen by the user will override the currently playing video playlist with the selected video.

- If the template is full screen video or 3-region video, the template will not change, but the video will change to the selected channel.
- If the template is full screen signage, the signage will be replaced with full screen video showing the selected channel.
- If the DMP is showing a playlist of video, the entire playlist will be replaced by the single video channel. For example, if the playlist contains three videos, all three videos will stop and be replaced by selected channel.
- When the state changes on a DMP that is associated with a local control area (luxury suite, bar, restaurant, etc.), the script contents will override the user's local control.

Therefore, if you expect a DMP to be locally controlled, any states in use during that period should **not** change the template or channel. This is particularly important when using ad hoc states with locally controlled DMPs. Cisco StadiumVision Director will treat the return from an ad hoc as a state change, so if the base state has a channel setting, the channel on all locally controlled DMPs will return to the base channel when the ad hoc state ends.



- In the cucmitems-release-build.zip file (which contains the phone background images) the directory that contains the IP Phone 7975 images is incorrectly named 320x212x16. It should be named 320x216x16. While the misnaming of the directory does not have an impact, note that when you store these files in CUCM, you must upload them to a directory named 320x216x16.
- The definition of Favorites in Cisco StadiumVision Director is only for third-party devices. Also, this functionality will be removed in a future release.
- There is a defect that is preventing the use of the ordering confirmation message as it is configured in the registry. As a workaround, enter the following:

update sne_element set futureString1="Please confirm your order.#Total = \$ TOTAL##Delivery personnel will take#payment and finalize this#transaction. If you have any#queries about your order#please call#718-293-5555" where name ="msg1";

The value of futureString1 should be the contents of the message that should be displayed on the IP Phone.

Channel Guide

- The Channel name configured in Cisco StadiumVision Director should be limited to 12 characters or less. Due to the space allotted for channel names on the IP Phone interface, more than 12 characters may have undesirable results.
- The artwork used for the channel icons must be obtained locally with permission from the associated broadcasting company.
- In 2.0, the resolution of the channel icons used on the IP Phone in luxury suites was 20x20. In 2.1 and beyond, the resolution is 24x24.

Proof of Play

With Proof of Play report processing, there is a delay between the end of an
event and the availability of the reports via the UI. The UI may not indicate when
the report is ready to download, but you can force it with a refresh of the proof of
play list box from the StadiumVision Director UI. At that point, the UI will indicate
that files are ready to download by the arrow cursor becoming a hand when you
hover over report icon.

Dynamic Menu Board

- The dynamic menu board is removed by any IR or IP phone interaction, such as the channel change.
- The item prices shown in the theme are not hard-linked to the store. Therefore, once you create an item in a theme, if you change the price in the store, the item price shown in the theme are not automatically updated.
- Liferay portlet images can be viewed without authentication.
- Dynamic Instance(s) created through the StadiumVision Director Control Panel > Customer Application must match exactly the names of the Liferay Menu Themes.

Ad Insertion Manager

- The Ad Insertion Manager (AIM) has been tested with two Adtec DPI-1200s. In the future, additional Adtec DPI-1200s will be added.
- Firefox 3.6.8 (for PC and MAC) is the only supported/tested browser for AIM.
- When the Ad Insertion Manager encounters a bad ad file, the file is skipped but AIM will not stop. This occurs when AIM attempts to play an ad file that is either in the wrong format or has errors in the file. AIM will continue to skip ad files until a good one is encountered.

Resolved Defects

The following table lists defects that were reported in the previous release, which have been resolved in this release.

Headline			
Event script breaks when using Channel - No Change action			
SWF file in a state freezes after switching to another state and back.			
Problems deleting tags which were created via upload.			
Once a luxury suite Phone is removed you cannot add it back you reload the browser.			
Increase video playlist item duration to above 300 seconds.			
KORE report should group entries of same group with static full screen message for duration = 0 (static sign), change duration to 5 seconds to help handle the 1 second airtime drift.			
A number of race conditions in the caching of RS-232 serial commands.			
Further reduce memory footprint of Dashboard getStatus .			
Channel appears in content management without an icon .			
Deleting playlist/content when a filter is applied fails on UI.			
AIM: Not able to add a break after selecting a channel.			
AIM: Refresh button in Play Ads intermittently does not refresh the page.			
AIM: Stop radio button is available in open-ended playlist with one ad.			
AIM: Initiates stop from Current Play Status does not sync up with Play Ads.			
AIM: NPE on stop and subsquently replaying a break.			
AIM Early return time tuning not working in defined duration Breaks.			
AIM: Stopping the first ad will cause ads to stop early in next play.			
AIM: POP Export Data in on AIM is missing.			
Increase speed of proof of play KORE csv file generation.			
UI fails on collection insert/delete when filter is applied.			
Dashboard: TV commands do not work on 4305.			
UI fails on collection insert/delete when filter is applied.			
Control Panel allows user to save a DMP with duplicate IP address.			
Invisible wording on Channel Guide.			
Script validation error does not display all DMPs in error			
Cancel and Save buttons missing from playlist items panel.			
Dashboard: HTTP connections should be closed when not used.			
Dashboard: Null Pointer Exception when some MIB variables are absent.			
Dashboard: Discovered switch interface mapping not updated consistently.			
Need to press the Power button on the IR remote twice to turn the TV off when flash is started/restarted for the first time.			
Entering and exiting Channel Guide twice will revert to previous channel.			

Open Defects

The following table lists known defects in this release.

Identifier	Headline	Description
CSCtk08339	LifeRay: Language changes when the password is changed.	Symptom: When you change the password in the LifeRay portal, the language changes to Arabic. Workaround: Do not change the password.
CSCtj96147	Unable to generate Proof of Play for an event if Proof of Play is turned on for a Dynamic Menu Board playlist.	Symptom: If Proof of Play is turned on for a Dynamic Menu Board playlist the system is unable to generate Proof of Play for the entire event. Workaround: Ensure that Proof of Play is turned off for a Dynamic Menu Board playlist.
CSCtj93451	FlashTemplate: video template fails to change from LWrap to Fullscreen with no action assigned to playlist sources.	Symptom: When changing from an L-wrap template to full-screen video, the video is displayed in region-1 size (rather than fullscreen), and region-2 and region-3 are blank/black. Work around: None
CSCtj93482	FlashTemplate: Channel maybe reset when ad hoc state is toggled with states with no action or Channel-No Change	Symptom: When toggling between a series of states and an ad-hoc state, the DMP's channel may get reset to a previous channel. Workaround: Avoid use of ad-hoc states along with states with no actions / channel no-change.
CSCtj93511	FlashTemplate: Region-2 playlist maybe incorrectly played when changing to a state that has no action or Channel-NoChange	 Symptom: When changing states in a playlist that uses no action or Channel-No Change, the following has been observed: The last content of the playlist of the previous state is stuck in Region-2. The content of the current playlist runs on top of the "stuck" content. (NOTE: You can see this only when the content of the current playlist is smaller (or in a different shape) than the content of the previous playlist. The content of the current playlist is not playing in the expected order, meaning, the contents in the playlist are overlapping each other. Workaround: Avoid change state between no actions / channel no changes.

Identifier	Headline	Description
CSCtj76536	FlashTemplate: The Channel Guide and it's view screen are often out of sync of 1 to 2 seconds when the user brings the channel guide up or exit.	 Symptoms: User sees the Channel Guide View Screen pops up a couple of seconds (on either black TV screen, or L-wrap's region-2 and region-3 contents) prior ChannelGuide shows up These symptoms can occur in the following scenarios: After the flash template restarted (an event script, staging, restart the dmp and etc.), when you first attempt to bring the channel guide up (either via IP phone, or, IR), the view screen has shown 1 to 2 seconds before the guide itself. When you start an event script, if you attempt to bring the channel guide on the L-Wrap, you will see: L-wrap's region 1 gone to black, channel guide view screen appears on Region 2's content and while region 3 is still there. This may last 1 to 2 seconds until the channel guide kicks in. When using full-screen video or full-screen msg, and you attempt to bring up the channel guide, you will often see the view screen on black screen for a second or two, then channel guide will show up. Workaround: None
CSCtj88744	FlashTemplate: Channel guide view screen size banner may stay a couple of seconds when attempt to dismiss the channel guide	Symptoms: After you dismiss the channel guide (either via IR or IP Phone), the view screen size banner may stay a couple of seconds after the guide dismissed, even the region-2 contents has been already taking place (for the L-Wrap case). Workaround: None
CSCtj89964	The process status bar may pop up too soon to show the errors	Symptom: When adding new information (such as channel IDs or IP multicast addresses) that begin with similar names or numbers, an error message may pop up indicating (incorrectly) that an element with that address has already been added. Workaround: None
CSCtj89985	Manage Zones&Groups: Assigned and Unassigned tables can display incorrect information	Symptom: When you attempt to assign DMPs to a Group from an Assigned table (drag the DMPs from assigned table), then those DMPs may pop up in the Unassigned table (rather than show up in the assigned table). Workaround: Refresh the browser.

Identifier	Headline	Description
CSCtj93661	At times, the Dynamic Menu Board installation fails to refresh files.	Symptom: During installation sv-menu installed and the process then went to sleep for about 6 minutes (expected behavior).
		After which, the installer servlet started but eventually gave a "curl timeout" error and the install moved on.
		After the installation, the Liferay initial items were not installed (indicated by "Installed" flag = "false" in the database).
		Workaround:
		Stop Liferay and remove sv-menu package by using:
		sudo service liferay stop
		sudo rpmnodeps -e sv-menu
		Remove "/opt/liferay-portal-5.2.3/tomcat- 6.0.18/webapps/sv_menu" directory.
		3. Install sv-menu RPM again using:
		sudo rpmnoscripts -Uvh sv-menu-xxx.rpm
		4. Start Liferay by "sudo service liferay start".
CSCtj50785	VDM: Delete Selected button reappears wrong page after deleting video	Symptom: The Delete Selected button will delete the video however, the wrong page will reappear "Total number of uploaded videos:" Workaround: None.
CSCtj90851 Wh	When returning from an Ad Hoc	Symptom:
	state to a game state that has no action in Region 1 the Video Channel may get set to what was provisioned in the game state prior to the last game state.	With the following states:
		State 1 (Explicit action in Region 1)
		2. State 2 (Empty action in Region 1)
		3. Ad Hoc State 3 (Empty action in Region 1)
		If we traverse from "State 1"> "State 2"> "Ad Hoc State 3"> "State 2".
	The expected behavior is the video channel in Region 1 will not change after it was set in "State 1". However sometimes when returning from "Ad Hoc State 3" the TV will briefly display "State 1" before going to the intended state "State 2". As a result the video channel will get set.	
		Workaround: Introduce a new state with no action in Region 1 between "State 1" and "State 2". So wyoue have:
		State 1 (Explicit action in Region 1)
		1.1 State 1.1 (Empty action in Region 1) < New State
		2. State 2 (Empty action in Region 1)
		3. Ad Hoc State 3 (Empty action in Region 1)
		If you now traverse from "State 1"> "State 1.1"> "State 2"> "Ad Hoc State 3"> "State 2".
		The video channel should not change when returning from the Ad Hoc state.

Identifier	Headline	Description
CSCtj36090	1% DMPs getting stuck while loading initial config	Symptom: DMPs with 1138 firmware may get "stuck" while downloading their initial config. GetStatus from the Dashboard will list these DMPs in Red status with physical connectivity (unbroken chain icon on the Dashboard). Workaround: After the script has been started and it is in Running state and the DMPs have settled down after downloading the config from SVD, do a GetStatus from the Dashboard and make sure that the DMPs are UP. If they have a red status *and* have physical connectivity please do a soft reboot to recover them.
CSCtj51587	Channel Guide not showing channels x1	Symptom: The channel guide will not display channels that are a number which is divisible by 10 plus 1, such as 11, 21, 31, 41, etc. Workaround: None.
CSCtj54455	4310: show IP does not work after a long uptime	Symptom: After a lengthy uptime, the show IP command does not work on the DMP 4310G. Workaround: Reboot the DMP through the StadiumVision Director Management Dashboard once a week.
CSCtj48412	When logged in as non- Administrator role, numerous errors are generated in the log file.	Symptom: When logged into Control Panel as a non-Administrator role (Support, Event Operator, etc.) the sv_dev_debug.log file shows a large amount of permission errors dealing with "userInterfaceLog". Workaround: Login using the Administrator role instead.
CSCtj52247	Deleting last tag item from "By Tag" causes error.	Symptom: Deleting last tag item from "By Tag" in the Content page causes an error and sometimes causes the UI to crash. Workaround: Do not delete the last tag.
CSCtj52290	After ISO install all pre-populated playlists lost their contents.	Symptom: After using an ISO image to install Cisco StadiumVision Director, allthough the playlist shows a content item count it does not show the actual content. Workaround: Create new playlists instead of using ones that came with the ISO install.
CSCtj27219	Z-order when overlay regions are stacked is not correct.	Symptom: Z-order when overlay regions are stacked is not correct when using a 3 region template. The expected behavior is content in Region 3 will always be in front of Region 2 but it is not the case. When the content rotates, Region 2 content will be in front of the Region 3 content. Workaround: Use a 2 Region template instead.

Identifier	Headline	Description
CSCti29596	Stopping a script will skip the "end" state	Symptom: If the script is stopped by the user with the "stop" button, the "end" state will be skipped. Conditions: "End" state is a concept from V1.0, where the last state of the script is automatically marked "end." The configuration (actions) inside of this state is executed and then the script is stopped. With the change to the script control in V2.2, the "End" state concept no longer fits well with the rest of the system. To maintain backward compatibility, the current release will still mark the last state as "end." The "end" state is executed if the state before the "end" is a timed state and the script transitions to the "end" state when the timer expires. However, this "end" state will not be executed if the user presses the "stop" button to terminate a script. Workaround: It is recommended that the user configure an extra state and make it an empty state.
CSCti22032	Dashboard - Bulk Import Switch fails second time w/o browser refresh	Symptom: If you perform a bulk import of switch information, then import it again, the updated description doesn't show up in GUI, even after browser refresh. Workaround: Refresh the browser refresh before running the "Bulk Import Switch" command a second time.
CSCti15964	Discovered switch data is not used until browser refresh	Symptom: On occasion, when you select Dashboard > Tools > Settings > Switch Management > Import Switch or Dashboard > Tools > Settings > Switch Management > "Reimport MAC address to port mappings for selected switches" you need to refresh your browser before the mappings will allow switch commands, such as "Power Cycle DMP," to work. Workaround: Refresh the browser.
CSCti04341	Playlists with small number of items in them do not generate PoP	Symptom: Proof of Play reports are not generated for playlists that contain less than 3 items. Workaround: If PoP is required, create playlists that contain 3 or more items.
CSCti00843	Error message caused by loading StadiumVision/config/views/scriptI nstance/all	Symptom: Occasionally, an error message is displayed indicating loading of the URL fails. Conditions: The occurrence may appear random to the user, often after the user performs an unrelated action on the Control Panel UI. The potential cause for this error is the maximum concurrent connection from the browser to the server has been reached. Workaround: Click OK to dismiss the error, the UI should recover and continue to function normally. To reduce the likelihood of the error occurring, try increasing the concurrent connection limit in the browser. In Firefox, increase network.http.max-persistent-connections-per-server to 16. In addition, close any unused browser window/tab that loads StadiumVision applications, including the Dashboard, the dynamic menu board application, and the unused Control Panel application itself.

Identifier	Headline	Description
CSCth83427	Script states may not be visible on the Control Panel state list after a script is started	Symptom: When a script is started, the list of states will contain controls for the user to switch states and change the timing of states. When the states cannot be displayed all at once, a scrollbar will appear. In rare cases, there appears to be a gap between the last visible state and the first invisible state. The gap would mislead the user to think all states are displayed and thus some states are missing. Conditions: This appears to be an abnormal rendering of the Flash player. The scroll bar exists in this case to indicate additional states are invisible. The next state normally would be partially rendered to indicate that additional states can be reveal by using the scroll bar. Workaround: Click on the scroll bar. The state will be correctly rendered.
CSCti07043	SVFlashTemplate - unstaged ads get reported as played	Symptom: A corner case where when a content has been deleted from a DMP (or is never staged) after the event runs, the DMP reports the deleted ad as having been played, while failing to report as played another ad that actually was played. So for example with 3 ads, if the second is not staged, the first and third get played and the second and third get reported by the DMP as having been played. Workaround: None
CSCth96608	Channel Up/Down button is not working inside the Channel Guide.	Symptom: Pressing Channel Up or Channel Down on the remote doesn't change the selection within the Channel Guide. Workaround: Arrow keys need to be used to navigate the channel guide.
CSCth78768	In IE 8 Dashboard needs to be reloaded in order to start functioning.	Symptom: When you log in to SV Director using IE 8 (tested with IE 8.0.6001.18702) and launch the Dashboard, the Dashboard data will not load. Workaround: Reload the web page. This time it will complete loading.
CSCth89040	Return from adhoc behavior is wrong	Symptom: When in an ad-hoc state, the playlists controlled by a non-top most states does not return to where it left off. Workaround: None. Will be fixed in the next patch release.
CSCth96543	FlashTemplate Overscan: banner picks the wrong scaling ratio	Symptom: After changing x/y scaling in the Device Specs, the scaling of the modified TV type takes effect; however, the banner that is brought up when changing channels, volume, mute/unumte and other actions does not fit the target/overscan TV Workaround: None.
CSCti04060	Video Playlist overlap issue while changing state	Symptom: 1) There are three states with one state set to play a video playlist with two videos (items). 2) While the second video is playing, the state changes for a few seconds and then goes back to playing the first video. 3) For the first few seconds after the state change, the second video will be played before the first one starts from the beginning. Workaround: None.

Identifier	Headline	Description
CSCtf92997	There is a 2% chance the DMP will fail to tune to video channel specified in the event	Symptom: During an event state, a delay in downloading the config may cause the DMP to fail to tune to the video channel. Workaround: Recommend putting significant actions in the second state so that all the DMPs have a chance to download the config before the "set video channel request" or other actions are processed.
CSCte27062	Content files of the same size are not synchronized by staging	Symptom: The occurs only with content that has same name and same file size. 1) User updates an existing content file. 2) The updated content file has the same name and same file size. 3) This file may not get updated to DMPs during staging. NOTE: This occurs with content staging only, NOT staging SvFlashTemplate. Workaround: Update the Cisco StadiumVision Director registry value "stagingString" to replace "size-only" with the flag "checksum". Initiate content staging again. There is performance hit due to using MD5 checksum calculation during staging. Its recommended to reinstate the "size-only" flag afterward.
CSCte64215	The event state "Save As Draft" sometimes fails to save	Symptom: When creating and editing an event, clicking on the "Save as Draft" button sometimes will not save playlists and channels added to a screen template. The "Save as draft" button allows users to incrementally save and continue to work on configuring an event. The button also tags the event as in "draft" state so that it is not run by the server. When this error occurs, users will lose the configuration of the playlists and channels added to a screen template. Workaround: 1) If you notice this error during the configuration of an event, go the event summary page and click the "Save" button. This will bring you back to the event list. If the correct configuration is not saved, repeat the configuration but do not use the "Save as Draft" button. Instead, use the "Save" button on the summary page. 2) You can elect not to use the "Save as Draft" button. The "Save" button on the summary page will save all the configuration of the event.
CSCtf14224	Dashboard does not display status messages for commands in the console	Symptom: Status messages are not displayed in the Console window after a command has been selected for execution on a device or a set of devices. Workaround: The browser should be refreshed in order to reestablish the connection with the Cisco StadiumVision Director server.
CSCtf78654	Dashboard does not display CPU Usage for a 4310G DMP correctly	Symptom: CPU usage is not displayed correctly. At times the CPU usage for Last 1 minute, Last 5 minutes and Last 10 minutes is shown as -1. Workaround: None.

Identifier	Headline	Description
CSCtf10116	Some columns in the Dashboard device summary list are not sortable	Symptom: Column sorting for "SD Card" and "Flash Status" does not work. Selecting sort for these columns displays an error. Workaround: None.
CSCte96186	Dashboard does not support Safari browser	Symptom: The Dashboard cannot be accessed using the Safari browser. Workaround: Safari is not supported in the Cisco StadiumVision 2.0 release. The workaround is to use one of the supported browsers, Firefox or Internet Explorer.
CSCtj19001	AIM: Intermittently Low delay feed reverst to Live feed in next play if abort initiate in middle.	Symptom: When the abort is initiated in middle of the ad, intermittently the Low delay channel will revert to live feed. Workaround: None.
CSCtj18862	AIM:User is able to rerun aborted ad if abort is initiate within 2 sec after play.	Symptom: When the user aborts the ad within ~2-sec after the play is initiated, the aborted ad is able to rerun the ad in next play. Workaround: Do not initiate abort within ~2 sec after initiating the play.
CSCtj14099	AIM:Status message during aborted ad is not clear.	Symptom: After ad is aborted and while ad is still playing on Delay channel the Status message in Currently Active Playlists is not clear. Workaround: None.
CSCtj14129	AIM:Stop and abort options are available to Guest user.	Symptom: If the user loing to AIM as Guest while the ad is playing, on the Currnet play status page the Abort and Stop buttons are available to guest user. Workaround: None.

Identifier	Headline	Description
CSCtg51129	AIM: On occasion, AIM does not play the audio for advertisements.	Symptom: Audio is not played on certain advertisements. Workaround: It is possible this behavior is caused by the incorrect configuration of the Audio In/Out Block/Pass timer settings. Verify the Audio settings in AIM. In AIM Administration > Edit Device > Channel Name there are four delay timers: IN - Audio Block Timer (mS) IN - Audio Pass Timer (mS) OUT - Audio Pass Timer (mS) OUT - Audio Block Timer (mS) OUT - Audio Block Timer (mS) With audio and video become out of synch. AIM uses these delays to synchronize audio and video. A component track rule is defined in the DCM UI "http://x.x.x.x/TSComponentSettings" for low delay service with audio stream . AIM fetches this configured component track rule before instructing the DCM to switch to the delayed feed. AIM instructs the DCM to apply it to the output service and hence blocks the audio stream. AIM also momentarily stops/sleeps for "IN - Audio Block Timer" milliseconds. This will in effect allow video to pass through for "IN - Audio Block Timer" milliseconds AIM uses the same component rule again and allows the audio to pass by applying the pass rule on output service. The AIM thread again sleeps this time for "IN - Audio Pass Timer". After "IN - Audio Pass Timer" milliseconds . The DCM is instructed to set the output to delayed feed. This completes the DCM switch to delayed feed. The other two timers are similarly used by AIM during the switch back to the low-delay feed.
CSCtg74606	AIM: At times AIM will fail to stop playing ads.	Symptom: On rare occasions, AIM will fail to stop playing ads. Workaround: Reset the Adtec DPI.

Third-Party Touch Panels

- With Crestron devices, the channel control function which is used to pull up the channel guide and act as a remote touch pad does not work. However, Crestron provides a Guide function on their touch panel that allows users to scroll through the guide.
- The volume control function on the Crestron device only shows four (4) levels of volume. Therefore, the device does not take advantage of the enhanced volume granularity configurable through Cisco StadiumVision Director.
- The ability to provide channel icons (in the channel lineup) to third-party devices requires that the device have Ethernet connectivity.

IR Remote

- The colored buttons (labeled A, B, C and D) are reserved for future use and currently do not provide access to any functionality.
- Use caution when using the IR remote in an area with multiple TVs as the "IR spray" may cause changes to take place on TVs other than the target TV.
- The external input button does not work in this release.

Video Delivery (DMP)

- The firmware and kernel required for the DMP 4305G are not included in the Cisco StadiumVision Director installation. You must obtain those separately.
- Default passwords are different for a Cisco DMP 4310G than for a Cisco DMP 4305G.
- The login credentials must be changed upon first login. The default credentials are "admin" and "default." The new password must contain:
 - At least 1 capital letter (ie: 'C')
 - At least 1 number (ie: '1')
 - At least 8 characters (ie: 'Cisco123')
- The login credentials must also be changed after a "Factory Default Reset."
- The Quick Start Guide for the DMP 4310G indicates incorrectly that wireless connectivity is supported. It is not.
- Dual audio is not supported on DMP 4310G. The DMP will only decoder the first audio PID. The second will have to be mapped to a new stream out of the DCM while the first audio PID Is blocked to ensure that the second PID is played correctly on the DMP.
- DNS settings are not required for the DMP to operate in the Cisco StadiumVision solution. In fact, if the DMP is configured with an DNS server that is unreachable, the solution will not function properly. Therefore, it is recommended that you disable DNS on the DMPs.
- There is an issue when using adhesives to attach DMPs to TVs because of the heat generated by the TV. The appropriate adhesive depends on the TV model (due to the plastic composition). 3M offers several types of Velcro with different adhesives. Contact your local 3M representative to determine the correct Velcro to use with your TVs. See the StadumVision Video Endpoint (DMP) Design and Implementation Guide for more information.
- Closed Captioning support (EIA-608-B, CEA-608-E, and EIA-708-D) on the DMP 4310G is useful in North America only. Do not assume it will work in others parts of the world.
- There are issues with the DMP decoding the MPEG-4 AAC LATM audio.

- When using Cisco StadiumVision Director 2.0 with DMP 4305Gs, ensure that you do the following (in order) via the StadiumVision Management Dashboard:
 - Apply the Initial Config
 - Upgrade the Kernel
 - Upgrade the Firmware
 - Apply the Global DMP Settings
 - Push the SV Daemon
 - Push the Flash template

See the Stadium Vision Director Management Dashboard Operations Guide for more information.

 Cisco Security Advisory: A vulnerability exists in the Cisco Digital Media Player that could allow an unauthenticated attacker to inject video or data content into a remote display. http://www.cisco.com/warp/public/707/cisco-sa-20100303-dmp.shtml

Caution: DO NOT use a DMP 4305G power supply with a DMP 4310G. The connector is the same, but the voltage is different and can result in damage to the device.

Upgrading from Release 2.x

This section provides information about upgrading from release 2.1 and release 2.0.

Upgrading from Release 2.1 to Release 2.2

For those who are upgrading from release 2.1, keep the following in mind that the MCA file and the phone graphics have been updated. When upgrading from 2.0, upgrade the .mca file in CUAE (as described below) and load the new phone graphics (as described in the *StadiumVision Local Control Areas Design and Implementation Guide*).

Note: The Playlist Sources > Channel labeled "Channel – No Change" in the Schedule function has been removed. If your implementation currently uses this setting, remove this from your scripts before upgrading Cisco StadiumVision Director.

Upgrading from Release 2.0 to Release 2.2

For those who are upgrading from release 2.0, keep the following in mind:

- The suite ID configured in CUCM is no longer used. If you already have suite IDs configured in CUCM, there is no need to remove them. They will have no affect on the operations of Cisco StadiumVision Director 2.1 or later releases.
- Certain parameters related to PoS integration have been moved from the Registry to the Control Panel. However, some of these (as noted in the Caveats section) remain in the Registry. DO NOT configure the PoS parameters in the Registry. They will be ignored. Ensure that you configure these parameters through the Control Panel.

When upgrading from 2.0, upgrade the .mca file in CUAE (as described below).

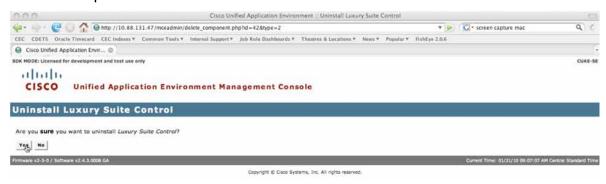
Upgrade the CUAE MCA File

The LuxurySuite.mca file and the phone images for version 2.2 have changed. Therefore, you must load the new files into CUAE. Instructions for loading the mca file and the phone images are included in the *StadiumVision Local Control Areas* and Commerce Integration Design Guide. Prior to loading the new .mca file, it is advisable that you backup the existing file.

To backup a previous .mca file:

1. Create an upgrades directory under C:\ (if it does not already exist).

- 2. Create YYYY-MM-DD directory under C:\upgrades (where YYYY-MM-DD is date of upgrade).
- 3. Create mcafile directory under C:\upgrades\YYYY-MM-DD.
- 4. Backup C:\Program Files\Cisco Systems\Unified Application Environment\AppServer\Applications\LuxurySuite to C:\upgrades\YYYY-MM-DD\mcafile (to preserve old mca file information).
- 5. Record CUAE Application config parameters into C:\upgrades\YYYY-MM-DD\cuaeparameters.txt or doc.



Cisco Stadium Vision Director New Multicast Configuration

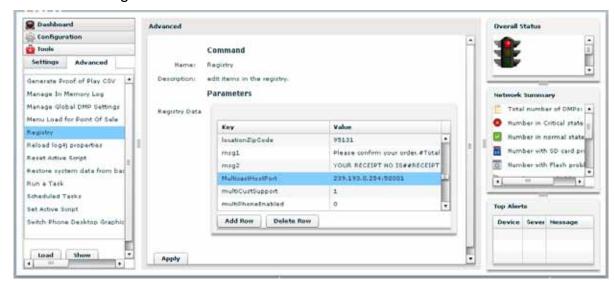
Cisco StadiumVision Director 2.2.x uses both unicast and multicast communications for DMP control-plane operations. The Connected Stadium design requires that Cisco StadiumVision Director to use 239.193.0.0 multicast group address range.

Configuring Cisco StadiumVision Director Multicast Settings

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

To configure the MulticastHostPort parameter:

- 1. From the Stadium Vision Director main menu, select Management Dashboard.
- 2. In the Management Dashboard, select **Tools>Advanced>Registry**.
- 3. Scroll to the "MulticastHostPort" key in the Parameter list.
- 4. Click on the Value field and specify a multicast address in the 239.193.0.0/16 address range.



5. Click Apply.

Verifying Connected Stadium Configurations

To verify that an existing Connected Stadium deployment supports the Cisco StadiumVision Director multicast capability, verify the configurations on the core and access switches.

Core Switches

Core switches configured as Anycast RPs should have a second loopback configured and advertised as a /32 host address within the routing protocol. It should be the same IP address on both core switches. MSDP is configured to use the loopback0 defined on the core switches.

```
interface loopback0
description Management Loopback and MSDP ***DO NOT REMOVE***
ip address 10.106.248.1/32
ip router eigrp 500
interface loopback5
description AnyCast RP Address General Multicast ***DO NOT REMOVE***
ip address 10.106.248.5/32
ip router eigrp 500
ip pim rp-address 10.106.248.5 group-list 239.193.0.0/16
ip msdp originator-id loopback0
ip msdp peer 10.106.248.1 connect-source loopback0
ip msdp peer 10.106.248.2 connect-source loopback0
ip msdp reconnect-interval 1
ip msdp group-limit 800 source 0.0.0.0/0
ip msdp sa-limit 10.106.248.1 2000
ip msdp sa-limit 10.106.248.2 2000
```

Access Switches

Each access switch must be configured to use the Anycast RPs in the core switches to route the Cisco StadiumVision Director multicast control traffic to the connected DMPs.

The standard prioritycast configuration for video is as follows:

```
ip pim rp-address 10.106.248.241 prioritycast-grp-acl !
ip access-list standard prioritycast-grp-acl permit 239.192.0.0 0.0.0.255
```

Additionally each switch also needs:

```
ip pim rp-address 10.106.248.5 anycast-grp-acl !
ip access-list standard anycast-grp-acl permit 239.193.0.0 0.0.15.255
```

Considerations for Upgrading DMPs

Cisco StadiumVision Director currently works with DMP 4310Gs and DMP 4305Gs that meets the requirements specified below.

Table 5. DMP Requirements

Device	Software Release
DMP 4310G	Firmware: SE1.0.3, Build 1138 or Build 1408
DMP 4305G	Firmware: 5.1.1; Kernel: Linux version 2.4.22

For step-by-step instructions for installing DMPs, see the *StadiumVision Video Endpoint (DMP) Design and Implementation Guide.*

Upgrading DMP 4305Gs

When using Cisco StadiumVision Director 2.x with DMP 4305Gs, ensure that you do the following (in order) via the StadiumVision Management Dashboard:

- Apply the Initial Config
- Upgrade the Kernel
- Upgrade the Firmware
- Upgrade the StadiumVision Daemon
- Apply Global DMP settings (as needed)

See the Stadium Vision Video Endpoint (DMP) Design and Implementation Guide for more information.

Downgrading DMP 4305Gs

With newer DMP 4305Gs (for example, if new DMP 4305Gs are added to an existing deployment or a defective DMP 4305G is replaced with a newer one), the DMP may be shipped with a later version of firmware and the kernel than is supported by Cisco StadiumVision Director. In this case, the firmware and kernel need to be "downgraded" to enable communication between the DMP and Cisco StadiumVision Director.

Because the Cisco StadiumVision Director cannot communicate with DMPs that have a later release of the firmware, you cannot use the Management Dashboard to load the correct firmware and kernel. Also, DMPDM release 5.2 no longer supports the set_param?init.ROOT_disable=0 command. Therefore, you can not ssh into the DMP using sysmng or root.

To downgrade the firmware and kernel, do the following:

- 1. Enable TAC access via the GUI.
- 2. From SSH, load the appropriate kernel and firmware manually on a per DMP basis.
- 3. Once the correct firmware is loaded, use the dashboard to:
 - Upgrade the StadiumVision Daemon
 - Apply the Global DMP Settings

See the Stadium Vision Video Endpoint (DMP) Design and Implementation Guide for more information.

Note: When you enable TAC access, you are required to set a password (other than 'default'). This password then becomes the ssh password for the DMP. Therefore, during this downgrading process remember that your new DMPs will have a different userid/password combination from the existing DMPs. After you have downgraded the firmware, you can change the password back to default, so that all DMPs in the venue have the same login credentials.

Upgrading DMP 4310Gs

When using Cisco StadiumVision Director 2.x with DMP 4310Gs, ensure that you do the following (in order) via the StadiumVision Management Dashboard:

- · Apply the Initial Config
- Stop All Video and Flash on the DMP
- Upgrade the Firmware
- Restart the Video and Flash on the DMP
- Apply Global DMP settings (as needed)

Note: When you upgrade firmware on the DMP 4310G, the SV Daemon is also upgraded. You cannot upgrade the SV Daemon separately on a DMP 4310G.

See the Stadium Vision Video Endpoint (DMP) Design and Implementation Guide for more information.