



StadiumVision



## Cisco StadiumVision Mobile Reporter Administration Guide

Release 1.2.0  
March 28, 2013

Americas Headquarters  
Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
<http://www.cisco.com>  
Tel: 408 526-4000  
800 553-NETS (6387)  
Fax: 408 527-0883

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

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

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

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

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

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

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

*Cisco StadiumVision Mobile Reporter Administration Guide*  
© 2013 Cisco Systems, Inc. All rights reserved.



## CONTENTS

<b>Preface</b>	<b>iii</b>
Document Purpose	iii
Document Audience	iii
Related Documentation	iii
<b>Using the Cisco StadiumVision Mobile Reporter Reporting Functionality</b>	<b>1</b>
Accessing the StadiumVision Mobile Reporter GUI	1
Uploading Event Schedule Information	2
Marketing Reports	4
Introduction to Marketing Reports on the Cisco StadiumVision Mobile Reporter	5
Important Terminology	5
Unique Video Viewers	6
Video Viewing Time	6
SVM Client Demographic	6
Concurrent SVM Clients	7
Maintenance Window	7
Marketing Reports Navigation and Showing Detail	7
<b>Cisco StadiumVision Mobile Reporter Architecture and Administration</b>	<b>13</b>
Overview of the StadiumVision Mobile Reporter	13
User Roles and Capabilities	14
Cisco StadiumVision Mobile Reporter Text Utility Interface	14
Logging into the TUI	15
File Editor	15
Using the TUI	16
System Settings	19
System Accounts	20
Services Control	20
Server Administration	21
Troubleshooting	21
Setting the StadiumVision Mobile Reporter User Time Zone	23
About Databases, Backups, and Managing Disk Utilization	24
Changing the Data Purge Schedule	25
Performing a Backup	25

- Performing a Restore 26
- Disk Utilization Report 27
- Current Users Report 27
- Viewing StadiumVision Mobile Reporter Alerts 28
- Using Output Triggers with Cisco StadiumVision Director 30
- Accessing Administrative Interfaces 30



# Preface

---

Revised: April 18, 2013,  
Cisco StadiumVision Mobile Release 1.2.0

**Table 1**      *Document Revision History*

Date	Description
March 28, 2013	Initial release of Cisco StadiumVision Mobile Reporter.

## Document Purpose

This document describes how to administer the StadiumVision Mobile Reporter on a Cisco UCS C220 server.

## Document Audience

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

## Related Documentation

See the [Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer Installation and Upgrade Guide](#) for information about installing the StadiumVision Mobile Reporter software.

# Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as an RSS feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service. Cisco currently supports RSS Version 2.0.



# Using the Cisco StadiumVision Mobile Reporter Reporting Functionality

Revised: March 28, 2013

This section contains the following sections:

- [Accessing the StadiumVision Mobile Reporter GUI, page 1](#)
- [Uploading Event Schedule Information, page 2](#)
- [Marketing Reports, page 4](#)
  - [Maintenance Window, page 7](#)
  - [Marketing Reports Navigation and Showing Detail, page 7](#)

## Accessing the StadiumVision Mobile Reporter GUI

The StadiumVision Mobile Reporter GUI provides access to the various marketing reports. To access the StadiumVision Mobile Reporter GUI, use a web browser to navigate to the IP address specified during the StadiumVision Mobile Reporter installation.

- Log into the StadiumVision Mobile Reporter as administrator with the following admin role credentials:

username = admin  
password = cisco!123

- Log into the StadiumVision Mobile Reporter

**Table 1**      *Login Credentials*

Device	URL	Usage	User Name and Password
StadiumVision Mobile Reporter	<a href="http://svm:8080/reporter/dashboard.svm">http://svm:8080/reporter/dashboard.svm</a>	Client report login	'marketing' - marketing charts 'admin' - server administration chart default password: cisco!123

**Table 1** Login Credentials (continued)

Device	URL	Usage	User Name and Password
StadiumVision Mobile Streamer	<a href="http://svm:8080/reporter/streamer.up">http://svm:8080/reporter/streamer.up</a>	Configuration	GUI: Log in as 'admin' default password: cisco!123 Command line: manufac default password: cisco!123
Cisco Integrated Management Controller (CIMC) running on a Cisco UCS C220	<a href="http://reporter_or_streamer_ip_address">http://reporter or streamer ip address</a>	Configuration	'admin' - CIMC initial configuration default password: password



**Note** It is recommended to change the default password.

**Figure 1** StadiumVision Mobile Reporter Login

## Uploading Event Schedule Information

The event schedule is used by the StadiumVision Mobile Reporter to know when event data is to be collected and processed into predefined reports and charts. The Event and Season reports depend on the the event schedule to define a time period for each event and for the sports season.

This schedule is used to present the charts. When an event transpires, the Live Event reports will begin to show data from the start of the event. At some point in time after an event is over (the next night), the charts in categories for Event Report and Season Report will be updated with the latest summary data from the most recent event.

To create an event schedule, use the included template (accessed via the Event Upload button shown in [Figure 2](#)) when logged in as admin. Alternatively, navigate to the following path to download the event schedule spreadsheet template:

<http://<stadiumvision mobile reporter ip address>:80/EventSchedule.xlsx>

Note the following conditions regarding the event schedule spreadsheet:

- A spreadsheet application such as Microsoft Excel should be used to populate the spreadsheet
- Event times must be at the start of the hour (for example, 4:00)
- Spreadsheet should be saved as Unicode Text or as a tab separated text file (a sample is shown in [Figure 3](#))

[Figure 4](#) shows the Event Upload dialog box used to download a template and to upload the populated spreadsheet.



Figure 2 StadiumVision Reporter Event Upload Button



Figure 3 Event Schedule Spreadsheet Sample

	A	B	C	D	E	F
1	#Subject	Start Date	Start Time	End Date	End Time	Notes
2	Jets vs. Giants	11/9/2012	7:00 AM	11/9/2012	8:00 PM	none
3	Jets vs. Giants,Gates Open	11/9/2012	8:00 AM	11/9/2012	10:00 AM	none
4	Jets vs. Giants,Gates Close	11/9/2012	4:00 PM	11/9/2012	6:00 PM	none
5	Jets vs. Panthers	11/10/2012	7:00 AM	11/10/2012	8:00 PM	none
6	Jets vs. Panthers,Gates Open	11/10/2012	8:00 AM	11/9/2012	10:00 AM	none
7	Jets vs. Panthers,Gates Close	11/10/2012	4:00 PM	11/9/2012	6:00 PM	none
8	Jets vs. Chargers	11/11/2012	7:00 AM	11/11/2012	8:00 PM	none
9	Jets vs. Chargers,Gates Open	11/11/2012	8:00 AM	11/9/2012	10:00 AM	none
10	Jets vs. Chargers,Gates Close	11/11/2012	4:00 PM	11/9/2012	6:00 PM	none
11	Jets vs. Nicks	11/12/2012	7:00 AM	11/12/2012	9:00 PM	none
12	Giants vs. Panthers	11/13/2012	7:00 AM	11/13/2012	10:00 PM	none
13	Chargers vs. Panthers	11/13/2012	8:00 AM	11/13/2012	11:00 PM	none
14	Nicks vs. Giants	11/14/2012	9:00 AM	11/14/2012	10:00 PM	none

Figure 4 StadiumVision Mobile Reporter Event Upload Dialog Box



To create and upload an event schedule, use the following procedure:

- 
- Step 1** Log into the StadiumVision Mobile Reporter as admin.
  - Step 2** Click on the Event Upload button.
  - Step 3** Click on the Download Template button.
  - Step 4** Populate the spreadsheet with the appropriate event data, remembering that events must begin and end at the start of the hour (for example, 4:00 PM).
  - Step 5** Save the spreadsheet.
  - Step 6** Click on the Upload button to load the event schedule.
  - Step 7** Verify that the event schedule has been uploaded by logging into the StadiumVision Mobile Reporter as the marketing user, and click on the Select an Event button. View the event schedule and verify that the uploaded schedule appears in the list as shown in [Figure 7](#).
- 

## Marketing Reports

When logged in as the marketing user, the reports in [Table 1](#) are available via the web browser user interface.

Report Type	Report	Description
Live Report	Current and Peak Concurrent Video Viewers	Displays both the current and peak number of StadiumVision Mobile video viewers.
	Unique Video Viewers	Displays the unique numbers of StadiumVision Mobile video viewers.
	Total Video Viewing Time	Displays the total time StadiumVision Mobile video has been viewed up to the current time.
	SVM Client Demographic	Displays the current number of StadiumVision Mobile clients by client operating system.
	Concurrent SVM Clients	Displays the concurrent number of StadiumVision Mobile clients.
Event Report Season Report	Peak Concurrent Video Viewers	Displays both the peak number of StadiumVision Mobile video viewers, by event or by season.
	Unique Video Viewers	Displays the unique numbers of StadiumVision Mobile video viewers, by event or by season.
	Total Video Viewing Time	Displays the total time StadiumVision Mobile video has been viewed for an event or a season.
	SVM Client Demographic	Displays the current number of StadiumVision Mobile clients by client operating system, for an event or a season.
	Concurrent SVM Clients	Displays the concurrent number of StadiumVision Mobile clients for an event or a season.

## Introduction to Marketing Reports on the Cisco StadiumVision Mobile Reporter

The marketing user has access to 5 report types. Each of these 5 reports has two distinct presentation views. One view is the event view, which presents data collected during the span of one specific event. The other view is the season view, which presents summarized data for all of this seasons events that have been completed so far.

The Reporter UI distinguishes between the event view for past events and the event view for a live event happening right now. This separation is mostly a navigational one, as the live and historical event views are almost identical.

### Important Terminology

In order to maximize report comprehension, the following terminology should be noted.

Term	Definition
Client	A generic Wi-Fi device, such as a tablet or smartphone, which may or may not be running an SVM client app.
SVM Client	An Android or iOS client with an SVM app installed.
Video Viewer	An SVM client that is watching a video channel.
Concurrent	Used to describe clients that are performing the same task at the same time. For example clients watching the same channel at the same time are concurrent viewers of that channel.
Peak Concurrent Video Viewers	The event report shows the highest number of SVM clients that concurrently viewed each of the available video channels during a specific event. The live event report has a unique twist in that in addition to peak viewers it also shows the current number of viewers watching each channel right now.  The season report shows the highest number of SVM clients that concurrently viewed video for each of the past events, regardless of channel.

#### Example:

1. A group of 20 clients (A) watch the in-house channel for the entire game.
2. A second group of 10 clients (B) watch the in-house channel for the first half. At half time they switch to ESPN. Finally, right before the start of the 2nd half all 10 clients are turned off.
3. A third group of 5 clients (C) show up during the second half, and watch ESPN for the remainder of the game.

As a result the event report shows 30 peak viewers for the in-house channel, and 10 peak viewers for ESPN. The season report shows 30 peak viewers for the event.

## Unique Video Viewers

The event report shows the number of unique SVM clients that watched each of the available video channels during a specific event. A client is uniquely identified by its MAC address, and is only counted once per channel it viewed, even if it left a channel and resumed viewing it later. A client that watches multiple channels during the event is counted as one unique viewer for each of the channels it viewed.

The season report shows the total number of unique SVM clients that viewed video for each of the past events, regardless of channel watched. Hence each unique client is counted once per event only.

### Example:

1. A group of 20 clients (A) watch the in-house channel for the entire game.
2. A second group of 10 clients (B) watch the in-house channel for the first half. At half time they switch to ESPN. And right before the start of the 2nd half all 10 clients are turned off.
3. A third group of 5 clients (C) show up during the second half, and watch ESPN for the remainder of the game.

As a result the event report shows 30 unique viewers for the in-house channel, and 15 unique viewers for ESPN. The season report shows 35 unique viewers for the event.

## Video Viewing Time

The event report shows the total duration that each channel was viewed during a specific event. This is calculated by summing up the number of minutes watched by each of the clients that tuned to this channel. It makes no difference if a client watched a channel once for 30 minutes or twice for 15 minutes.

The season report shows the total number of minutes of video viewed across all channels, broken down by event. This aggregate number is a simple summation of the minutes recorded for each individual channel for that event.

### Example:

1. A group of 20 clients (A) watch the in-house channel for 10 minutes each.
2. A second group of 10 clients (B) watch the in-house channel for 20 minutes each. The same clients also watch ESPN for 10 minutes each.

As a result the event report shows the in-house channel being watched for 400 minutes, and the ESPN channel being watched for 100 minutes. The season report shows that a total of 500 minutes was watched during this event.

## SVM Client Demographic

The event report shows the total number of unique Android and iOS clients that used the SVM client app at some point during the event. This includes devices that never tuned to a channel to watch video. The fact that the SVM client was launched, and briefly ran in the foreground, is sufficient for that client to be recorded. Hence the client demographic count is likely to be higher than that shown for the same event on the 'Unique Video Viewers' season.

### Example:

1. A group of 20 Apple iOS clients (A) watch the in-house channel during the first half.
2. A group of 15 Android clients (B) watch the in-house channel during the second half.

3. A group of 10 Apple iOS clients (C) use the SVM enabled app for in seat ordering only. They never tune to any of the video channels.
4. A group of 5 Android clients (D) use the SVM enabled app for way finding only. They never tune to any of the video channels.

As a result the event report shows 30 unique Apple iOS clients and 20 unique Android clients. The season report also shows 30 iOS and 20 Android clients for this event.

## Concurrent SVM Clients

The event report shows the number of SVM clients that were active at the same (concurrent) over the course of the event. This includes clients that are not tuned to a video channel. The fact that the SVM client is launched, and running in the foreground, is sufficient for that client to be recorded. Hence the concurrent SVM client count reported here is likely to be higher than that shown for the same event on the 'Peak Video Viewers' season report.

### Example:

1. A group of 20 clients (A) were watching the in-house channel at 5:13 PM.
2. A group of 10 clients (B) were using the SVM enabled app for in seat ordering at 5:13 PM. Hence it is a given that they were not also watching video at that time.
3. The time of peak SVM activity is at 6:03 PM, when there are a total of 100 concurrently active SVM clients, including groups A and B.

As a result the event report shows 30 active clients at 5:13 PM. The season report captures the peak value of the event chart, which in this case is 100 concurrent clients.

## Maintenance Window

Reports for an event begin generation at 3:00 a.m. by default. If an event occurs at 10:00 p.m., the reports will be available after the 3:00 a.m. generation cycle.



Note

---

The StadiumVision Mobile Reporter performs maintenance from 3:00 a.m. to 6:00 a.m. Do not schedule events to run during the maintenance window.

---

## Marketing Reports Navigation and Showing Detail

[Figure 5](#) depicts the navigation path for the various reports on the StadiumVision Mobile Reporter. Reports are organized into three categories: Live Reports, Historical Reports, and the Season Reports.

- Live Reports—provide real-time reports
- Event Reports—provide reports for a specific event
- Season Reports—provide cumulative reports over a span of time

[Figure 6](#) displays a sample report, showing the right and left navigation arrows to scroll through the reports, as well as the Live Report and Historical Report buttons to select a report type. The Select an Event drop-down menu shown in [Figure 7](#).

Several reports offer additional details for an event by clicking on the data point in the chart, and clicking on the **show details** button, as shown in [Figure 8](#).

Figure 5 Marketing Reports Navigation

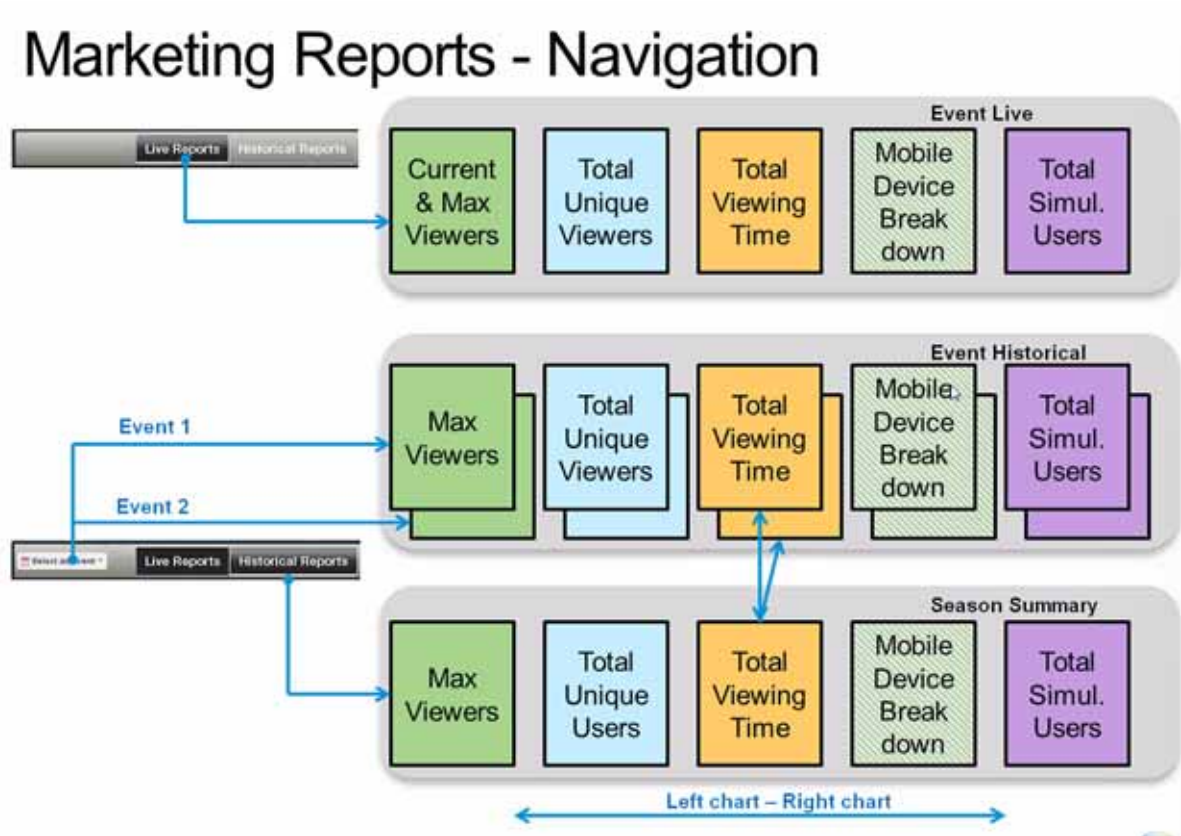


Figure 6 Choosing a Report Type



Figure 7 Choosing an Event

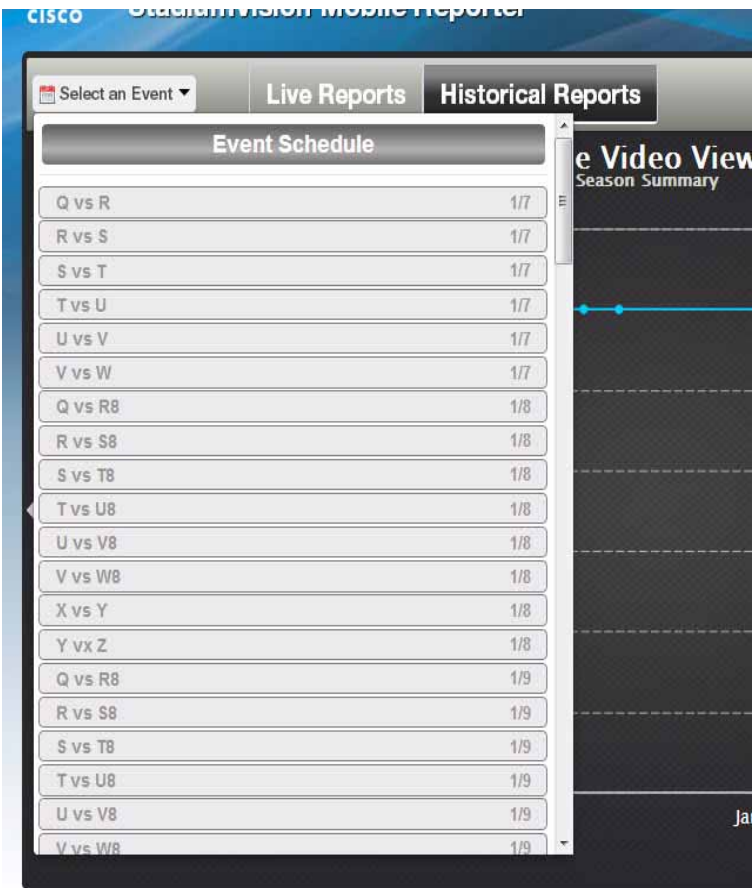
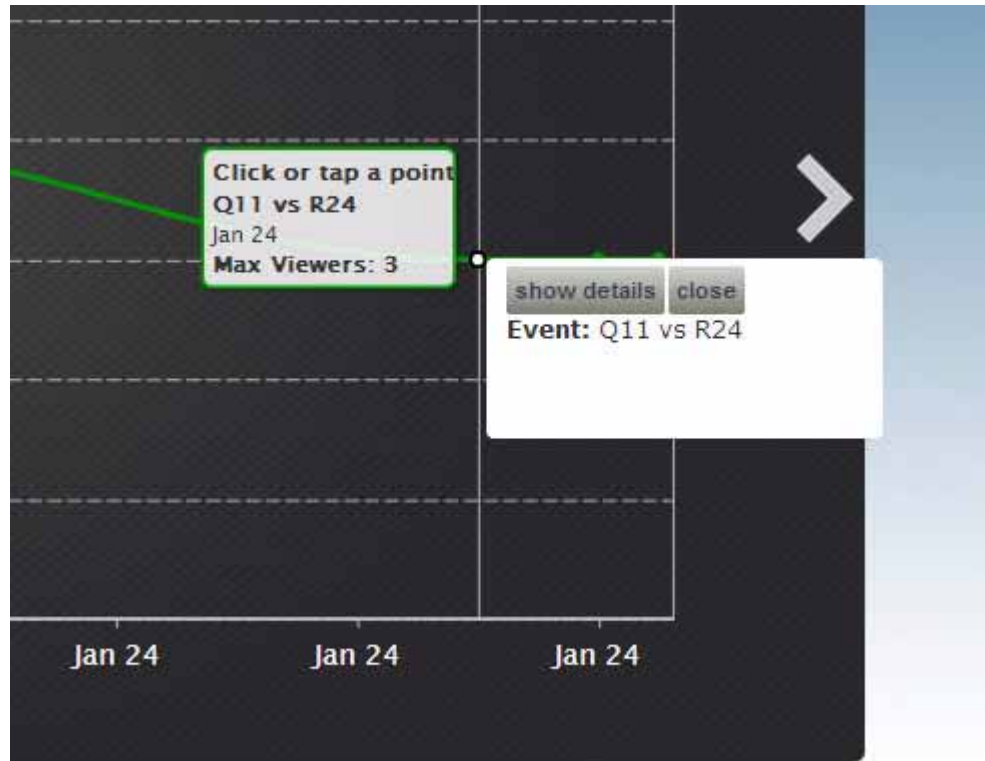




Figure 8 Sample Report Time Point Detail







# Cisco StadiumVision Mobile Reporter Architecture and Administration

---

This module contains information that system administrators will use to configure and maintain the StadiumVision Mobile Reporter, and contains the following sections:

- [Overview of the StadiumVision Mobile Reporter, page 13](#)
- [User Roles and Capabilities, page 14](#)
- [Cisco StadiumVision Mobile Reporter Text Utility Interface, page 14](#)
  - [Logging into the TUI, page 15](#)
  - [Using the TUI, page 16](#)
  - [Setting the StadiumVision Mobile Reporter User Time Zone, page 23](#)
  - [About Databases, Backups, and Managing Disk Utilization, page 24](#)
  - [Disk Utilization Report, page 27](#)
  - [Current Users Report, page 27](#)
  - [Viewing StadiumVision Mobile Reporter Alerts, page 28](#)
- [Using Output Triggers with Cisco StadiumVision Director, page 30](#)
- [Accessing Administrative Interfaces, page 30](#)

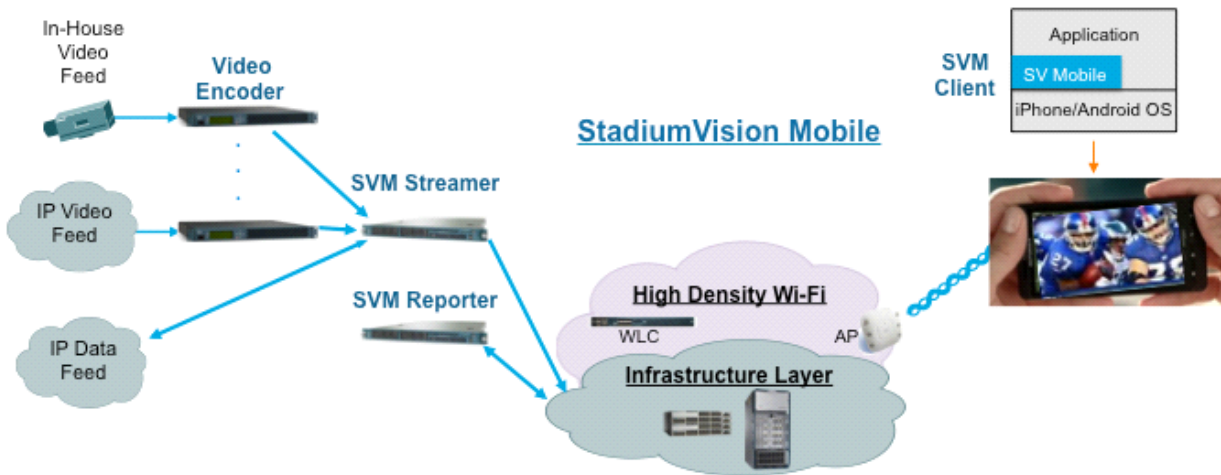
## Overview of the StadiumVision Mobile Reporter

The StadiumVision Mobile Reporter works in conjunction with the StadiumVision Mobile Streamer, SDK, and client application to provide quality of experience statistics. It collects and processes data from the StadiumVision Mobile Streamer, SDK, and client application, and provides wireless network analysis via reports and live event charts. [Figure 1](#) depicts the StadiumVision Mobile Reporter in the StadiumVision Mobile solution.

The Reporter accepts data from mobile devices in the stadium which are running an application based on the StadiumVision Mobile Client SDK. The clients report their data periodically and frequently, perhaps once per minute or more. The Reporter is designed to efficiently process large amounts of data and summarize it in multiple and flexible ways.

## REVIEW DRAFT—CISCO CONFIDENTIAL

Figure 1 Cisco StadiumVision Mobile Architecture



## User Roles and Capabilities

The Cisco StadiumVision Mobile Reporter has two users enabled by default: Admin and Marketing.

The **admin** user role provides technical tools with the following features:

- System monitoring reports
  - Disk utilization
  - Current number of users)
- System alerts
- Event upload function for event statistics

The **marketing** user role provides marketing information with the following reports on both a live and historical basis:

- Maximum Viewers
- Total unique viewers
- Total viewing time
- Mobile device break down

## Cisco StadiumVision Mobile Reporter Text Utility Interface

The StadiumVision Mobile Reporter Text Utility Interface (TUI) provides a console-based text interface for use by system installers and on-site troubleshooting personnel. The TUI can be used to perform routine system tasks such as modifying system configurations, changing passwords, and checking system logs. Remote TAC access and troubleshooting can both be facilitated from the TUI in the event of a StadiumVision Mobile Reporter outage or failure.

*REVIEW DRAFT—CISCO CONFIDENTIAL*

## Logging into the TUI

To access the TUI, you need either physical console access or an SSH client such as PUTTY. Log in from the console or over SSH with the following credentials:

```
username = installer
password = cisco!123
```

You will be prompted to change the password on your first successful login. You also have the option of changing the password via the TUI.

## File Editor

Several of the TUI options open server system files for you to modify using the Unix system vi editor. The following configuration files are editable from the TUI:

- DNS information—/etc/resolv.conf
- NTP server information—/etc/ntp.conf
- Server host information—/etc/hosts

Before modifying configuration files, you should be familiar with the simple editing techniques used within the vi editor. [Table 1](#) describes some of the more common vi Editor commands.

**Table 1** Common vi Editor Commands

Command	Description
<b>ZZ</b> or <b>:wq</b>	Exit vi and save changes.
<b>:q!</b>	Exit vi without saving changes.
Esc key	Exit current mode and enter vi command mode.
<b>Cursor Movement</b>	
<b>h</b>	Move left (backspace).
<b>j</b>	Move down.
<b>k</b>	Move up.
<b>l</b>	Move right.
Enter key	Move to the beginning of the next line.
<b>Inserting</b>	
<b>a</b>	Append character after cursor.
<b>i</b>	Insert character before cursor. Enters INSERT mode.
<b>r</b>	Replace character under cursor with next character typed.
<b>R</b>	Keep replacing character until [Esc] is pressed.
<b>Deleting</b>	
<b>db</b>	Delete word before cursor.
<b>dd</b>	Delete line under cursor.
<b>dw</b>	Delete word under cursor.
<b>x</b>	Delete character under cursor.

*REVIEW DRAFT—CISCO CONFIDENTIAL**Table 1 Common vi Editor Commands (continued)*

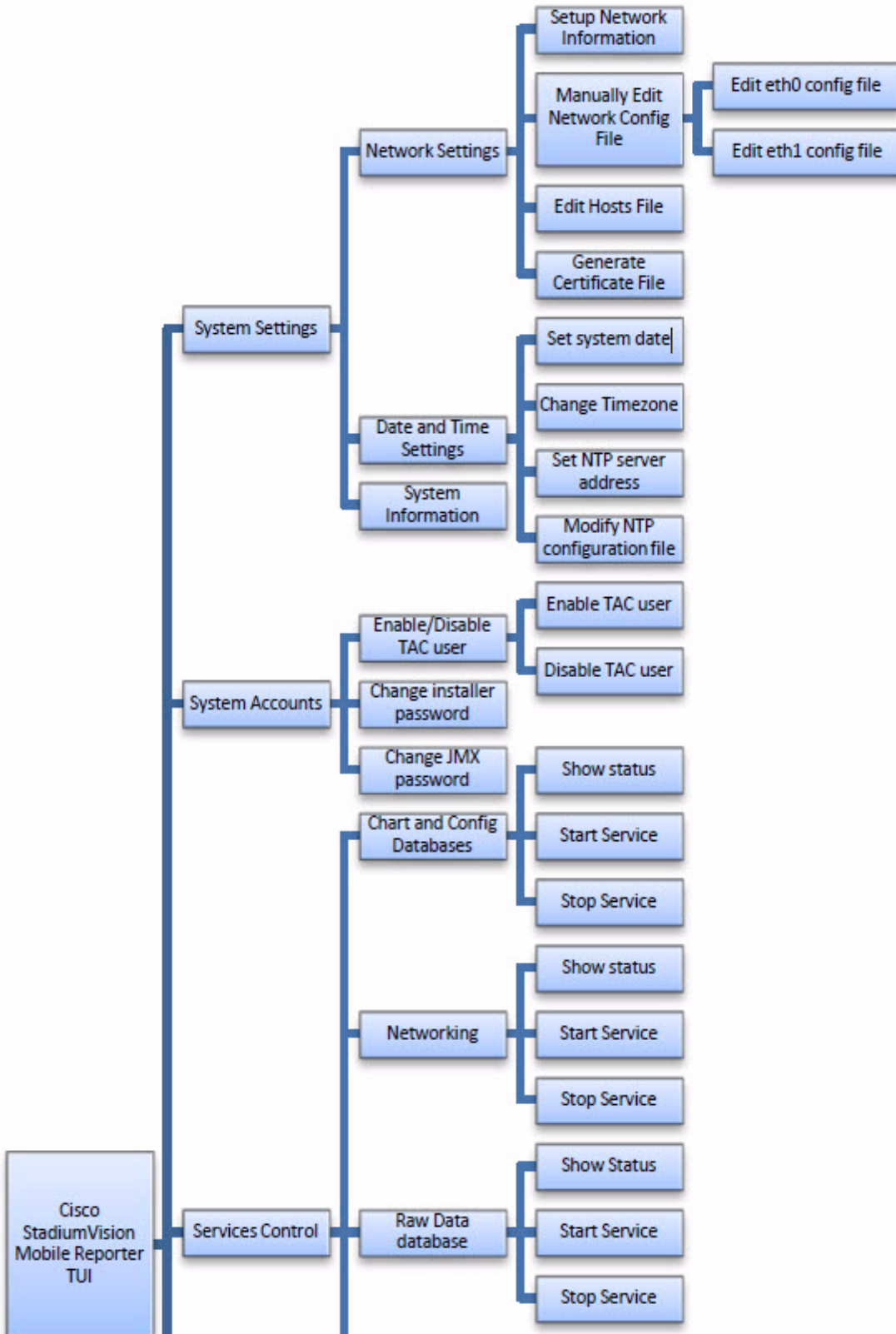
Command	Description
<b>P</b>	Undo deletion of characters, words, or lines before cursor.
<b>p</b>	Undo deletion of characters, words, or lines after cursor.

## Using the TUI

[Figure 2](#) shows an overall view of the StadiumVision Mobile Reporter TUI.

REVIEW DRAFT—CISCO CONFIDENTIAL

Figure 2 Cisco StadiumVision Mobile Reporter TUI Hierarchy







## REVIEW DRAFT—CISCO CONFIDENTIAL

The following sections provide a brief description of each TUI menu item.

- [System Settings, page 19](#)
- [System Accounts, page 20](#)
- [Services Control, page 20](#)
- [Server Administration, page 21](#)
- [Troubleshooting, page 21](#)

## System Settings

### Network Settings

#### Setup Network Information

Allows for configuration of network devices and the DNS server

#### Manually edit network config file

- Edit eth0 config file - allows for configuration of Ethernet port 0
- Edit eth1 config file - allows for configuration of Ethernet port 1

#### Edit hosts file

Uses the vi editor to modify the /etc/hosts file

#### Generate certificate file

Generates a new networked certificate file

### Data and time settings

The system date, timezone, and NTP server address should be set during the installation process. If these items were not configured during installation, it is critical to configure these items to avoid time drift and to ensure accurate reporting.

#### Set system date

Manually sets the date.

#### Change timezone

Allows for setting the timezone. Choose a number next to the correct timezone.

#### Set NTP server address

Allows for setting the Network Time Protocol (NTP). Enter an IP address for a valid NTP server.

#### Modify NTP configuration file

Allows for manually editing the NTP configuration file.

### System Information

Displays network information for eth0 and eth1 ports, hosts file, DNS information, and NTP server information.

## REVIEW DRAFT—CISCO CONFIDENTIAL

### System Accounts

#### Enable/Disable TAC user

- Enable TAC user  
Enables a Cisco TAC representative to remotely troubleshoot the StadiumVision Mobile Reporter. This will allow for remote shell access which will be used for remote troubleshooting purposes. Always disable this access once you complete troubleshooting the system.
- Disable TAC user  
Disables remote shell access.

#### Change installer password

Changes the installer password.

#### Change JMX password

Changes the Java Management Extensions password, which may be used to allow JMX clients to monitor and troubleshoot the Reporter.

### Services Control

#### Charts and Config Database

Allows the user to show the status of the charts and configuration database, and to start or stop the charts and configuration database service.

- Show Status - displays the overall service status
- Start Service - starts the service
- Stop Service - stops the service

#### Networking

- Networking status - displays the status of ports eth0 and eth1
- Restart networking - restarts the networking service

#### Raw Data Database

The StadiumVision Mobile Reporter contains two databases: the raw data database, where the unprocessed event data is collected, and the charts and config database

- Show Status - displays the status of the raw data database service
- Start Service - starts the raw data database service
- Stop Service - stops the raw data database service

#### StadiumVision Mobile Reporter Services

- Show Status - displays the svmreporter service status
- Start Service - starts the svmreporter service
- Stop Service - stops the svmreporter service

## REVIEW DRAFT—CISCO CONFIDENTIAL

### Web Server

- Show Status - displays the httpd service status
- Start Service - starts the httpd service
- Stop Service - stops the httpd service

## Server Administration

### Display Software Version

Displays the installed software version.

### Upgrade Server

Provides a way to upgrade the StadiumVision Mobile Reporter software by choosing an ISO image from a list. See the “[Upgrading StadiumVision Mobile Reporter Using the Web Browser User Interface](#)” section in the *Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer Installation and Upgrade Guide*.

### Setup automatic data archive

On a nightly basis, backups are done of the chart and config database. Also a nightly archive of the raw data database is performed. These file archives are available to download via HTTP download as shown in [Table 3](#). The file archives are automatically removed from the StadiumVision Mobile Reporter after 20 days.

### Reboot

Reboots the StadiumVision Mobile Reporter.

### Power Off

Powers the StadiumVision Mobile Reporter off.

## Troubleshooting

### Ping a host

Allows for connectivity testing by pinging an IP address.

### View logs

Log files are written as events transpire. The log files are available to be downloaded via HTTP. The log files are intended for a Cisco TAC representative to aid in troubleshooting. The log files are rotated out of the system, typically after 20 days.

- System logs
  - System console messages (/var/log/messages)
  - Authentication/Authorization logs (/var/log/secure)
  - Driver messages (dmesg)
  - Tail log
  - View log
  - Authentication/Authorization logs
- Web Server logs (httpd)

## REVIEW DRAFT—CISCO CONFIDENTIAL

- Web Server access log (/var/log/httpd/error\_log)
  - Tail log
  - View log
- Web Server error log
  - Tail log
  - View log
- Charts database logs
  - Chart and Config data database log
    - Tail log
    - View log
  - Chart and Config data database stdout file
    - Tail log
    - View log
- Raw data database log
  - Raw database log for today
    - Tail log
    - View log
- StadiumVision Mobile Reporter Log
  - catalina.out
    - Tail log
    - View log
  - catalina.2012-12-11.log
    - Tail log
    - View log
  - localhost.2012-12-11.log
    - Tail log
    - View log
  - localhost\_access\_log.2012-12-11.txt
    - Tail log
    - View log
  - svmreporter.log
    - Tail log
    - View log

### Repair databases (re-index data)

- Repair Raw Data database

### Rebuild databases (lose data)

- Rebuild Raw Data database (data will be lost)

*REVIEW DRAFT—CISCO CONFIDENTIAL*

- Rebuild Chart and Config database (data will be lost)
- Re-seed Chart and Config database

## Setting the StadiumVision Mobile Reporter User Time Zone

The StadiumVision Mobile Reporter has the default users marketing and admin, and a default time zone setting of Pacific Standard Time (PST). If the user browser or device is set to Pacific Standard Time (PST) and if the events are occurring in the EST time zone, the user can change the reports timestamp to the Eastern Standard Time (EST) time zone.

Each user time zone can be changed by using the following procedure:



**Note** Access to the StadiumVision Reporter CLI requires administrator access.

- 
- Step 1** SSH to the StadiumVision Mobile Reporter.
- Step 2** Execute the `./cassandra-cli` shell command.
- Step 3** Within the CLI console, execute the following commands:
- use** `BDASchema`;
  - set** `Users['marketing']['gmtoffset']='-8'`;
  - set** `Users['admin']['gmtoffset']='-8'`;
- '-8' can be changed according to the desired time zone offset listed in [Table 2](#).
- 

**Table 2** *Time Zones and Offsets*

Time Zone Offset	Time Zone Abbreviation	Time Zone Description
0	GMT	Greenwich Mean Time
+1	ECT	European Central Time
+2	EET	European Eastern Time
+2	ART	(Arabic) Egypt Standard Time
+3	EAT	Eastern African Time
+3.5	MET	Middle East Time
+4	NET	Near East Time
+5	PLT	Pakistan Lahore Time
+5.5	IST	India Standard Time
+6	BST	Bangladesh Standard Time
+7	VST	Vietnam Standard Time
+8	CTT	China Taiwan Time
+9	JST	Japan Standard Time
+9.5	ACT	Central Australia Time
+10	AET	Eastern Australia Time

*REVIEW DRAFT—CISCO CONFIDENTIAL*

Time Zone Offset	Time Zone Abbreviation	Time Zone Description
+11	SST	Solomon Standard Time
+12	NST	New Zealand Standard Time
-11	MIT	Midway Islands Time
-10	HST	Hawaii Standard Time
-9	AST	Alaska Standard Time
-8	PST	Pacific Standard Time
-7	PNT	Phoenix Standard Time
-7	MST	Mountain Standard Time
-6	CST	Central Standard Time
-5	EST	Eastern Standard Time
-5	IET	Indiana Eastern Time
-4	PRT	Atlantic Standard Time
-3.5	CNT	Canada Newfoundland Time
-3	AGT	Argentina Standard Time
-3	BET	Brazil Eastern Time
-1	CAT	Central Africa Time

## About Databases, Backups, and Managing Disk Utilization

There are two databases in the Reporter: the raw data database, and the chart and configuration data database. The configuration database is never deleted. The raw data can potentially use up all available disk space, and therefore the data must be periodically purged.

On a daily basis, a backup of both databases is done at around 4:00 AM. The data files can be viewed by going to the URL <http://svm:8080/reporter/jsp/svmbackup.jsp>. These files are kept on the Reporter for 20 days and can be downloaded from that location. The backup files are listed below:

### Chart and Configuration data backup file:

- ChartAndConfigData.MMDDHHMI.tgz (where YYYYMMDDHHMI is the year/month/day/hour/minute)

### Raw data backup files:

- MonitorEvent.YYYYMMDDHHMI.bson.gz
- CepResults.YYYYMMDDHHMIbson.gz
- StreamerEvent.YYYYMMDDHHMI.bson.gz
- SvmMobileMapEvent.YYYYMMDDHHMI.bson.gz

In StadiumVision Mobile Reporter release 1.2, there is an automated scheduled to remove all the raw data in the reporter. It happens every 6 months, on June 1 and December 1, at 5:30AM. Just prior to the data purge, an archive file of the existing data will be created and available at the above URL.

## REVIEW DRAFT—CISCO CONFIDENTIAL

### Changing the Data Purge Schedule

To change the purge schedule, a change should be made to the 'crontab' file. From a shell terminal session, use the following command:

```
$sudo crontab -e
```

This invokes vi editor, and you will see two lines like the following:

```
# purge mongo raw data every 6 months at 5:00 AM
0 05 01 Jun,Dec *
/var/svm/bin/purgeMongoData.sh/opt/sv/servers/svmreporter/logs/purgeMongo.log 2>&1
```

Modify the second line as desired, according to crontab conventions. For example, if you would like to purge data every 3 months, change "Jun,Dec" to "Mar,Jun,Sep,Dec".

### Performing a Backup

Download the backup file on a regular basis. The purpose of performing a backup is to maintain a copy of the files in the event that the reporter machine becomes unusable or hard drive failure.

---

**Step 1** Access the following link in a web browser:

<http://reporter ip adress:8080/reporter/jsp/svmbackup.jsp>



---

**Note** After a fresh install, no backup files will exist.

---

A list of files will appear, as shown below:

*REVIEW DRAFT—CISCO CONFIDENTIAL*

Please select a raw data export file from the list below. This will be downloaded to your client machine for further processing in Mongo.

Filename	Date	Size
<a href="#">ChartAndConfigData.201212200402.tgz</a>	Thu Dec 20 04:02:00 PST 2012	3,988,594
<a href="#">StreamerEvent.201212200402.bson.gz</a>	Thu Dec 20 04:02:00 PST 2012	953,071
<a href="#">MonitorEvent.201212200402.bson.gz</a>	Thu Dec 20 04:02:00 PST 2012	34,350
<a href="#">CepResults.201212200402.bson.gz</a>	Thu Dec 20 04:02:00 PST 2012	1,007,222
<a href="#">SvmMobileMapEvent.201212200402.bson.gz</a>	Thu Dec 20 04:02:00 PST 2012	37,012,189
<a href="#">ChartAndConfigData.201212210402.tgz</a>	Fri Dec 21 04:02:00 PST 2012	4,419,767
<a href="#">MonitorEvent.201212210402.bson.gz</a>	Fri Dec 21 04:02:00 PST 2012	52,348
<a href="#">CepResults.201212210402.bson.gz</a>	Fri Dec 21 04:02:00 PST 2012	1,592,574
<a href="#">StreamerEvent.201212210402.bson.gz</a>	Fri Dec 21 04:02:00 PST 2012	1,456,353
<a href="#">SvmMobileMapEvent.201212210402.bson.gz</a>	Fri Dec 21 04:02:00 PST 2012	50,677,352
<a href="#">MonitorEvent.201212220402.bson.gz</a>	Sat Dec 22 04:02:00 PST 2012	70,096
<a href="#">ChartAndConfigData.201212220402.tgz</a>	Sat Dec 22 04:02:00 PST 2012	4,851,750
<a href="#">CepResults.201212220402.bson.gz</a>	Sat Dec 22 04:02:00 PST 2012	2,160,837
<a href="#">StreamerEvent.201212220402.bson.gz</a>	Sat Dec 22 04:02:00 PST 2012	1,939,023
<a href="#">SvmMobileMapEvent.201212220402.bson.gz</a>	Sat Dec 22 04:02:00 PST 2012	63,353,504
<a href="#">ChartAndConfigData.201212230402.tgz</a>	Sun Dec 23 04:02:00 PST 2012	5,266,139
<a href="#">MonitorEvent.201212230402.bson.gz</a>	Sun Dec 23 04:02:00 PST 2012	88,146
<a href="#">StreamerEvent.201212230402.bson.gz</a>	Sun Dec 23 04:02:00 PST 2012	2,500,867
<a href="#">CepResults.201212230402.bson.gz</a>	Sun Dec 23 04:02:00 PST 2012	2,770,391
<a href="#">SvmMobileMapEvent.201212230402.bson.gz</a>	Sun Dec 23 04:02:00 PST 2012	79,175,193
<a href="#">ChartAndConfigData.201212240402.tgz</a>	Mon Dec 24 04:02:00 PST 2012	5,568,109
<a href="#">MonitorEvent.201212240402.bson.gz</a>	Mon Dec 24 04:02:00 PST 2012	106,299
<a href="#">CepResults.201212240402.bson.gz</a>	Mon Dec 24 04:02:00 PST 2012	3,189,152
<a href="#">StreamerEvent.201212240402.bson.gz</a>	Mon Dec 24 04:02:00 PST 2012	3,069,843
<a href="#">SvmMobileMapEvent.201212240402.bson.gz</a>	Mon Dec 24 04:02:00 PST 2012	90,144,735
<a href="#">CepResults.201212250402.bson.gz</a>	Tue Dec 25 04:02:00 PST 2012	3,552,039
<a href="#">MonitorEvent.201212250402.bson.gz</a>	Tue Dec 25 04:02:00 PST 2012	124,264

Step 2 Identify the following backup files:

**Chart and Configuration data backup file:**

- ChartAndConfigData.MMDDHHMI.tgz (where YYYYMMDDHHMI is the year/month/day/hour/minute)

**Raw data backup files:**

- MonitorEvent.YYYYMMDDHHMI.bson.gz
- CepResults.YYYYMMDDHHMIbson.gz
- StreamerEvent.YYYYMMDDHHMI.bson.gz
- SvmMobileMapEvent.YYYYMMDDHHMI.bson.gz

Step 3 Copy the backup files from the list onto a backup drive.

## Performing a Restore

This procedure requires that you first obtain an SNE TAC account. To restore the chart and config database, use the following procedure.

Step 1 Log on with an **snetac** account to access the command line prompt.



*REVIEW DRAFT—CISCO CONFIDENTIAL*

- Step 2** Copy the ChartAndConfigData.MMDDHHMI.tgz backup file onto the reporter machine via a file transfer mechanism.
- Step 3** Run the restore script '**restoreCassandra.sh**' using the backup filename.

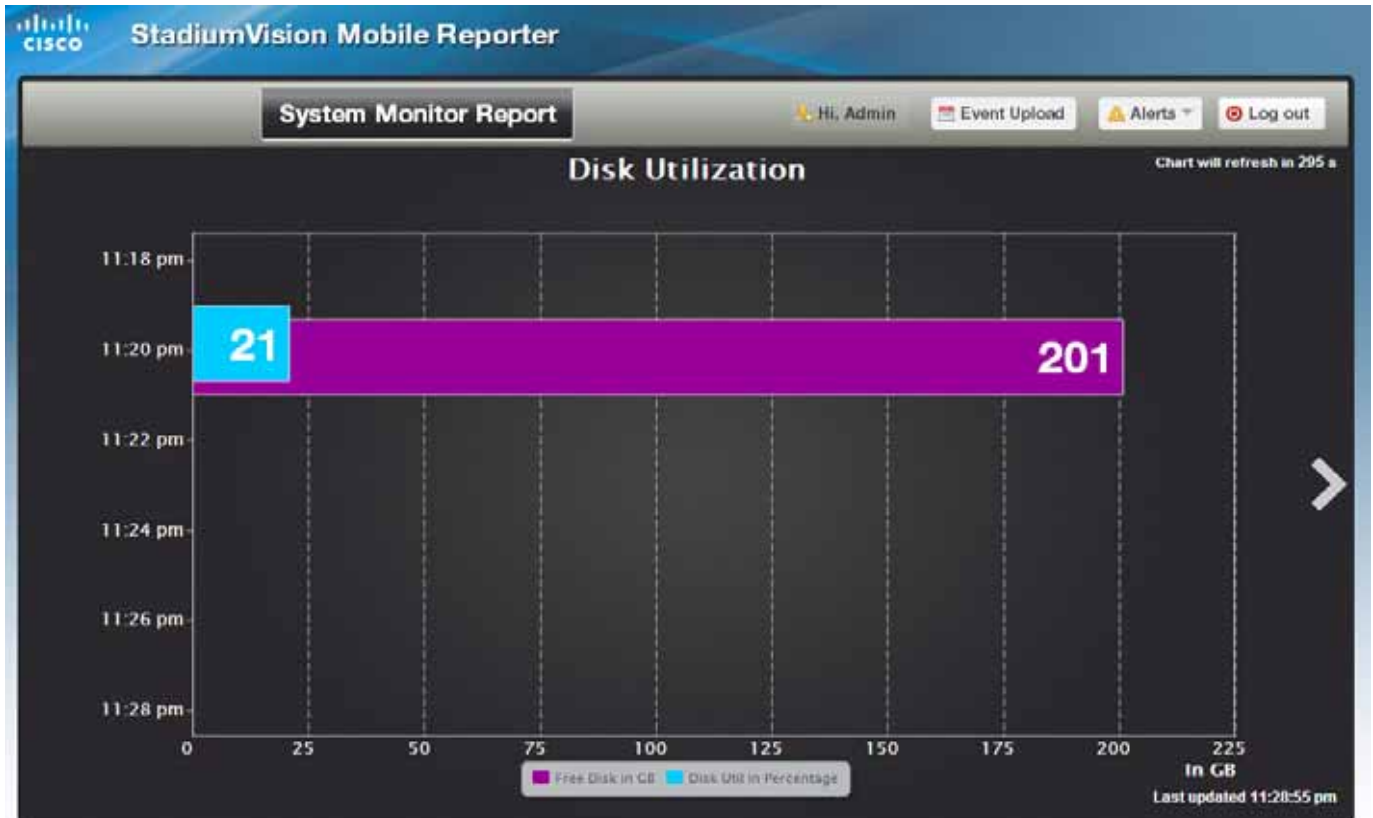
```
/var/svm/bin/restoreCassandra.sh /tmp/ChartAndConfigData.11140402.tgz
```

This script will stop and start the SVM tomcat and chart and config database processes. Output will go to the console but also to the system log (/var/log/messages) and the chart and config database log (/var/log/restoreCassandra.out).

## Disk Utilization Report

The Admin role in the StadiumVision Mobile Reporter GUI provides a graphic report of the current disk utilization, as shown in [Figure 4](#).

**Figure 4** Disk Utilization Report

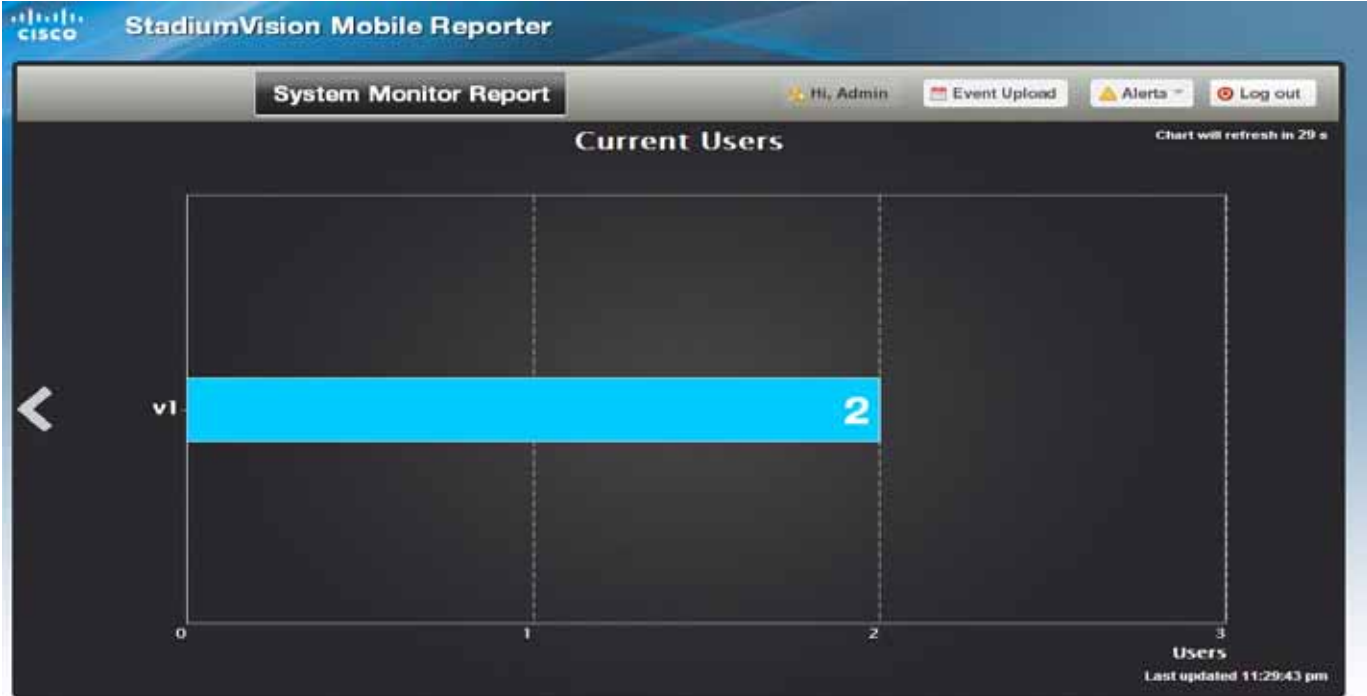


## Current Users Report

The StadiumVision Mobile Reporter provides a report that depicts the current number of unique clients using StadiumVision Mobile, as shown in [Figure 5](#).

*REVIEW DRAFT—CISCO CONFIDENTIAL*

Figure 5 Current Users Report



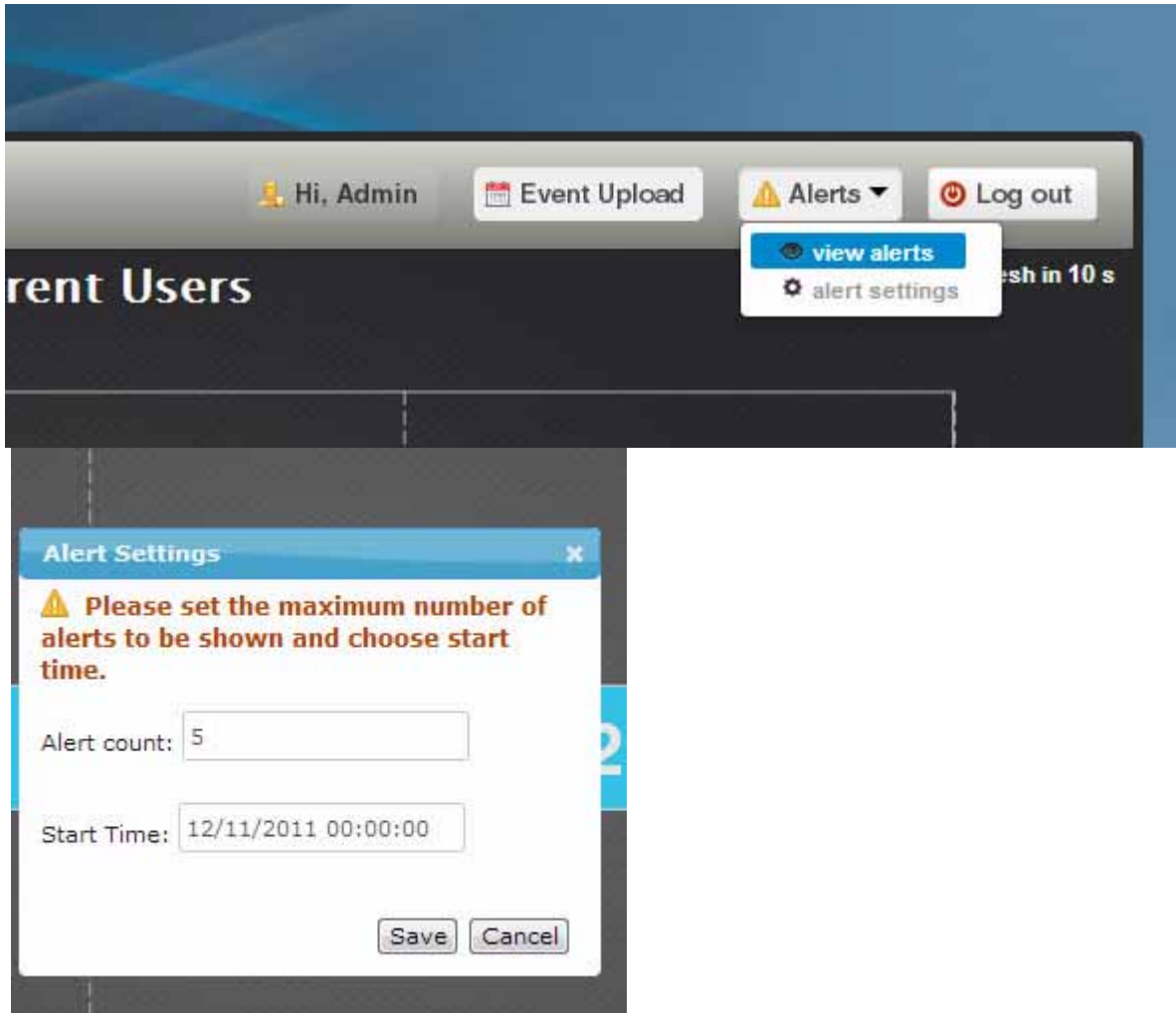
## Viewing StadiumVision Mobile Reporter Alerts

The StadiumVision Mobile Reporter alerts the admin user as to high, medium, and low threshold alerts. To access the alerts, click on the Alerts button, and choose View Alerts as shown in [Figure 6](#).

The number of alerts displayed, as well as the start time of the alerts can be configured by clicking on the **alert settings** option on the Alerts drop-down menu. The alerts list is shown in [Figure 7](#).

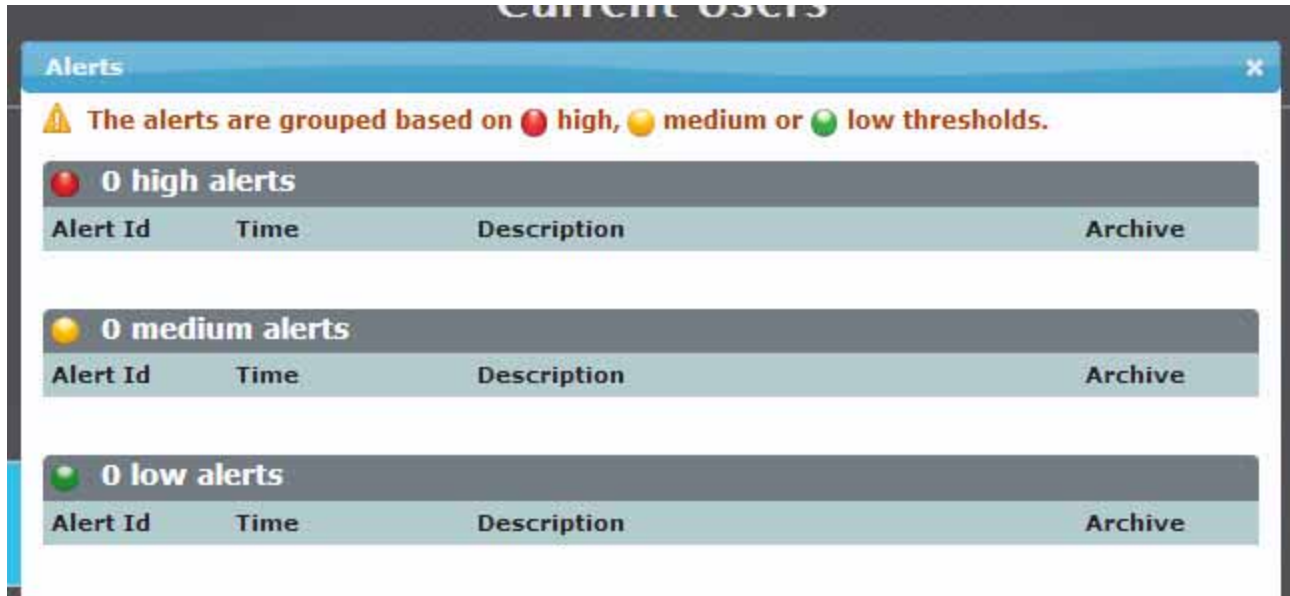
REVIEW DRAFT—CISCO CONFIDENTIAL

Figure 6 Alerts Button and Settings



## REVIEW DRAFT—CISCO CONFIDENTIAL

Figure 7 Alerts Listing



## Using Output Triggers with Cisco StadiumVision Director

For more information on configuring output triggers with Cisco StadiumVision Director, refer to the *Configuring Cisco StadiumVision Director for External Triggers, Release 3.1* document.

## Accessing Administrative Interfaces

Table 3 lists URLs and addresses to access various StadiumVision Mobile Reporter interfaces and functions.

Table 3 StadiumVision Mobile Reporter Interface URLs and Addresses

URL	Usage
http://svm:8080/reporter/upload	SDK 1.1 streamer and mobile devices
http://svm:8080/reporter/client.up	SDK 1.2+ mobile client devices
http://svm:8080/reporter/streamer.up	SDK 1.2+ streamer
http://svm:8080/reporter/dashboard.svm	Client report login
http://svm:8080/reporter/jsp/svmbackup.svm	Data archive and backups
http://svm:8080/reporter/eventupload.svm	Event schedule upload
http://svm/EventSchedule.txt	Event schedule template
ssh installer@reporter IP address	StadiumVision Mobile Reporter TUI