



# 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:

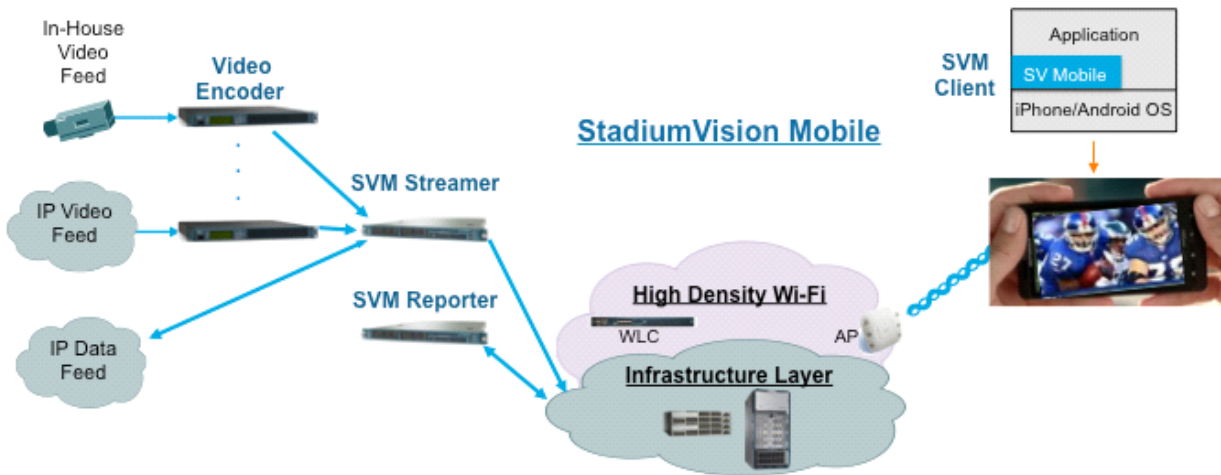
- [Overview of the StadiumVision Mobile Reporter, page 25](#)
- [User Roles and Capabilities, page 26](#)
- [Cisco StadiumVision Mobile Reporter Text Utility Interface, page 26](#)
- [About Databases, Backups, and Managing Disk Utilization, page 36](#)
- [Configuring Failover Between Cisco StadiumVision Mobile Reporters, page 41](#)
- [Service Quality Reporting and Cisco Prime Infrastructure Integration, page 43](#)
- [Troubleshooting and CLI Access \(Cisco Personnel Only\), page 43](#)
- [Accessing Administrative Interfaces, page 45](#)

## 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 Cisco StadiumVision Mobile Reporter in the Cisco StadiumVision Mobile solution.

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

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.

## 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 can change 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.
<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.

Figure 2 Cisco StadiumVision Mobile Reporter TUI Hierarchy

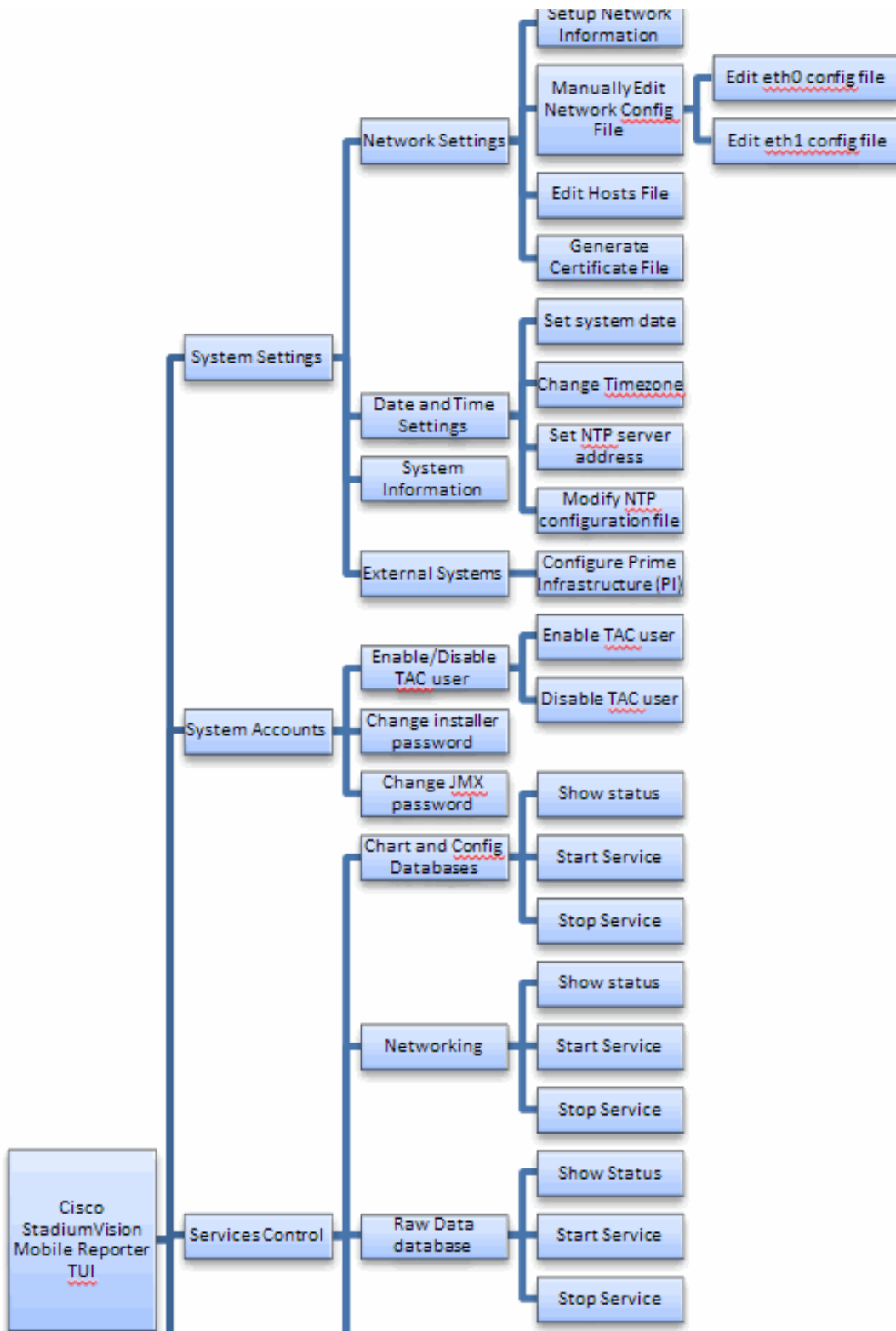
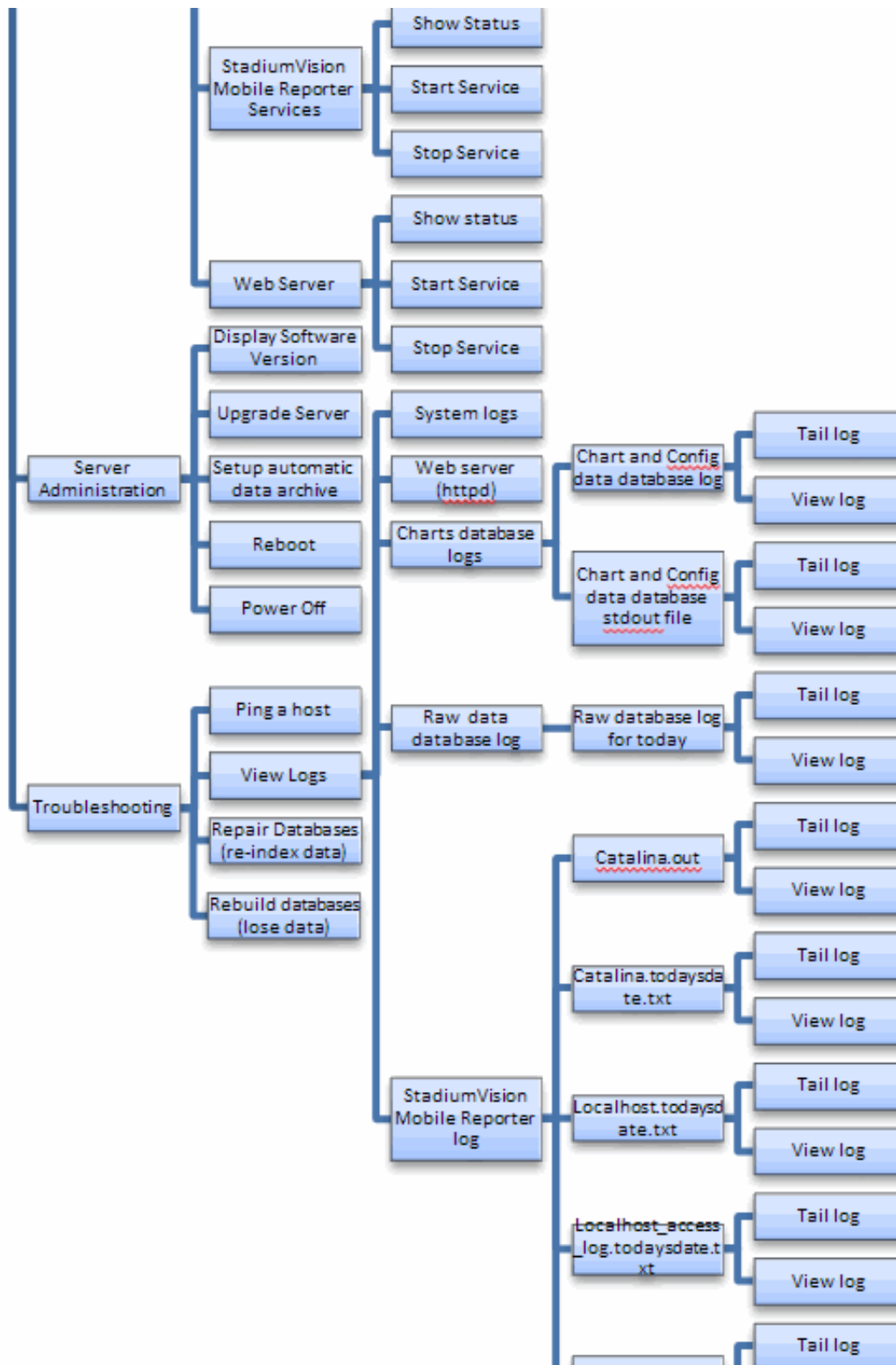


Figure 3 Cisco StadiumVision Mobile Reporter TUI Hierarchy (continued)



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

- [System Settings, page 31](#)
- [System Accounts, page 33](#)
- [Services Control, page 34](#)
- [Server Administration, page 34](#)
- [Troubleshooting, page 35](#)

## 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.

## External Sources

### Configure Prime Infrastructure (PI) system on the Cisco StadiumVision Mobile Reporter

Allows configuration of the Prime Infrastructure for service quality reporting. When this option is selected, the user provides the following information:

- The IP address of the Prime Infrastructure (PI) server
- A user name with access to the API on the Prime Infrastructure (PI)
- A user password
- A list of SSIDs that are to be used, separated by commas. If the SSID contains a space, surround it with double quotes. Example:

```
svmdata,sande-guest,"Stadium Center"
```

### Perform the Configuration

1. In PI, configure a user which in the admin group. This is the user account for the Cisco StadiumVision Mobile Reporter configuration above.
2. Make sure https is allowed for API calls if you have a firewall.

For more details about Prime Infrastructure and service quality reporting, see the [“Service Quality Reporting and Cisco Prime Infrastructure Integration”](#) section on page 43.

### Troubleshoot the Configuration

To troubleshoot communication between Cisco StadiumVision Mobile Reporter and Cisco Prime Infrastructure (PI), use the curl command (see example). Note the following:

- Pay attention to the "200 OK" part of the output. Anything other than 200 indicates an error. For example, incorrect credentials will give you a "401 Unauthorized".
- A misconfigured firewall will result in the lack of any response.

```
[user@reporter mongo]$ curl -i -k -u apil
'https://10.194.172.75/webacs/api/v1/data/AccessPoints.json?.full=true&clientCount=gt(0) '
Enter host password for user 'biff':
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
Set-Cookie: JSESSIONID=F0C78493D4E62D8009A547DD61F74169; Path=/webacs; Secure
Content-Range: instances 0-4/5
Date: Thu, 18 Jul 2013 21:59:22 GMT
Content-Type: application/json
Content-Length: 3961
(remainder of example text removed)
{"queryResponse":{"@type":"AccessPoints","@rootUrl":"https://10.194.172.75/webacs/api/v1/data","@requestUrl":"https://10.194.172.75/webacs/api/v1/data/AccessPoints?.full=true&clientCount=gt(0)","@responseType":"listEntityInstances","@count":"5","@first":"0","@last":"4","entity":[{"@url":"https://10.194.172.75/webacs/api/v1/data/AccessPoints/6251248","@type":"AccessPoints","@dtoType":"accessPointsDTO","accessPointsDTO":{"@id":"6251248","@displayName":"6251248","adminStatus":"ENABLE","bootVersion":"12.4.2.4","clientCount":8,"clientCount_2_4GHz":6,"clientCount_5GHz":2,"controllerIpAddress":"10.194.205.53","controllerName":"sjc29-wlc2-bottom","countryCode":"US","ethernetMac":"1c:df:0f:95:dc:65","hheapEnabled":false,"ipAddress":"10.194.175.250","location":"in the cube","lwappUpTime":145558800,"macAddress":"40:f4:ec:4b:9e:60","model":"AIR-CAP3502E-A-K9","name":"sjc28-svmdemo-3502E-ap3","serialNumber":"FTX1504K0TJ","softwareVersion":"7.2.110.104","status":"CLEARED","type":"AP3500E","upTime":868736700}},{"@url":"https://10.194.172.75/webacs/api/v1/data/AccessPoints/6251265","@type":"AccessPoints","@dtoType":"accessPointsDTO","accessPointsDTO":{"@id":"6251265","@displayName":"6251265","adminStatus":"ENABLE","bootVersion":"12.4.23.0","clientCount":3,"clientCount_2_4GHz":2,"clientCount_5GHz":1,"controllerIpAddress":"10.194.168.2","controllerName":"qa29-5508-WLC1","countryCode":"US","ethernetMac":"64:9e:f3:8e:fb:65","hheapEnabled":false,"ipAddress":"10.194.168.12","lo
```



```

cation":"default
location", "lwapUpTime":196977900, "macAddress": "08:d0:9f:17:f0:80", "model": "AIR-CAP3502I-A-K9", "name": "Lab172-12", "serialNumber": "FTX1547K6EG", "softwareVersion": "7.2.110.101", "status": "CLEARED", "type": "AP3500I", "upTime": 196984700}}, {"@url": "https://10.194.172.75/webacs/api/v1/data/AccessPoints/15862848", "@type": "AccessPoints", "@dtoType": "accessPointsDTO", "accessPointsDTO": {"@id": "15862848", "@displayName": "15862848", "adminStatus": "ENABLE", "bootVersion": "12.4.2.4", "clientCount": 2, "clientCount_2_4GHz": 1, "clientCount_5GHz": 1, "controllerIpAddress": "10.194.168.2", "controllerName": "qa29-5508-WLC1", "countryCode": "US", "etherneMac": "30:e4:db:d9:55:03", "hheapEnabled": false, "ipAddress": "10.10.10.60", "location": "default
location", "lwapUpTime": 5750200, "macAddress": "64:ae:0c:00:0a:a0", "model": "AIR-CAP3502P-A-K9", "name": "SVM-Pod3-DavidN", "serialNumber": "FTX1530E3ZZ", "softwareVersion": "7.2.110.101", "status": "CLEARED", "type": "AP3500P", "upTime": 158081600}}, {"@url": "https://10.194.172.75/webacs/api/v1/data/AccessPoints/22485469", "@type": "AccessPoints", "@dtoType": "accessPointsDTO", "accessPointsDTO": {"@id": "22485469", "@displayName": "22485469", "adminStatus": "ENABLE", "bootVersion": "12.4.23.5", "clientCount": 1, "clientCount_2_4GHz": 0, "clientCount_5GHz": 1, "controllerIpAddress": "10.194.205.53", "controllerName": "sjc29-wlc2-bottom", "countryCode": "US", "etherneMac": "b0:fa:eb:e3:a6:9c", "hheapEnabled": false, "ipAddress": "10.10.98.159", "location": "default
location", "lwapUpTime": 8161400, "macAddress": "70:10:5c:1e:db:20", "model": "AIR-CAP3502P-A-K9", "name": "Boulder-2", "serialNumber": "FTX1720K15Q", "softwareVersion": "7.2.110.104", "status": "CLEARED", "type": "AP3500P", "upTime": 8168600}}, {"@url": "https://10.194.172.75/webacs/api/v1/data/AccessPoints/22485471", "@type": "AccessPoints", "@dtoType": "accessPointsDTO", "accessPointsDTO": {"@id": "22485471", "@displayName": "22485471", "adminStatus": "ENABLE", "bootVersion": "12.4.23.5", "clientCount": 1, "clientCount_2_4GHz": 1, "clientCount_5GHz": 0, "controllerIpAddress": "10.194.205.53", "controllerName": "sjc29-wlc2-bottom", "countryCode": "US", "etherneMac": "00:06:f6:ee:77:9a", "hheapEnabled": false, "ipAddress": "10.10.98.155", "location": "default
location", "lwapUpTime": 8620200, "macAddress": "70:10:5c:1e:d5:d0", "model": "AIR-CAP3502P-A-K9", "name": "Boulder-1", "serialNumber": "FTX1720E138", "softwareVersion": "7.2.110.104", "status": "CLEARED", "type": "AP3500P", "upTime": 8627400}}}}

```

### Removing the PI Configuration

If the PI is unconfigured, the `svmreporter` service must be restarted. See the [“Services Control” section on page 34](#) for details.

## 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

### 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 2](#). The file archives are automatically removed from the Cisco StadiumVision Mobile Reporter after 20 days.

**Reboot**

Reboots the Cisco StadiumVision Mobile Reporter.

**Power Off**

Powers the Cisco 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`)
  - 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)
- Rebuild Chart and Config database (data will be lost)
- Re-seed Chart and Config database

## 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.

## 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:

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

A restore is typically required for one of two reasons:

1. The Cisco StadiumVision Mobile Reporter has suffered a catastrophic failure, and is being rebuilt from scratch or being replaced with a spare server.
2. The Cisco StadiumVision Mobile Reporter has suffered data loss or corruption, and needs to be rolled back to an earlier known good state.

In scenario 1., first install the Cisco StadiumVision Mobile Reporter software by following the directions in the *Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer Installation and Upgrade Guide*.

Make sure to configure the DNS and NTP servers, timezone, and SNETAC account (see the “[Troubleshooting and CLI Access \(Cisco Personnel Only\)](#)” section on page 43), as these parameters are not included in the restore. Once this has been completed, continue with the restore steps below.

In scenario 2., go directly to the restore steps that follow:

- 
- Step 1** Log on with an SNETAC account to access the command line prompt.
- Step 2** Use the `scp` command to copy the `ChartAndConfigData.MMDDHHMI.tgz` and `CepResults.MMDDHHMI.bson.gz` backup files from your laptop to a chosen restore folder (Reporter /tmp is used in the following examples, however, see the recommendations in the note below).



---

**Note** It is suggested to not use `/tmp` as the suggested location, as it is small.

Use a directory somewhere in the root partition such as `/opt/sv/servers/svmreporter/logs` or `/opt/sv/servers/svmreporter/restore` (the latter of which would need to be created).

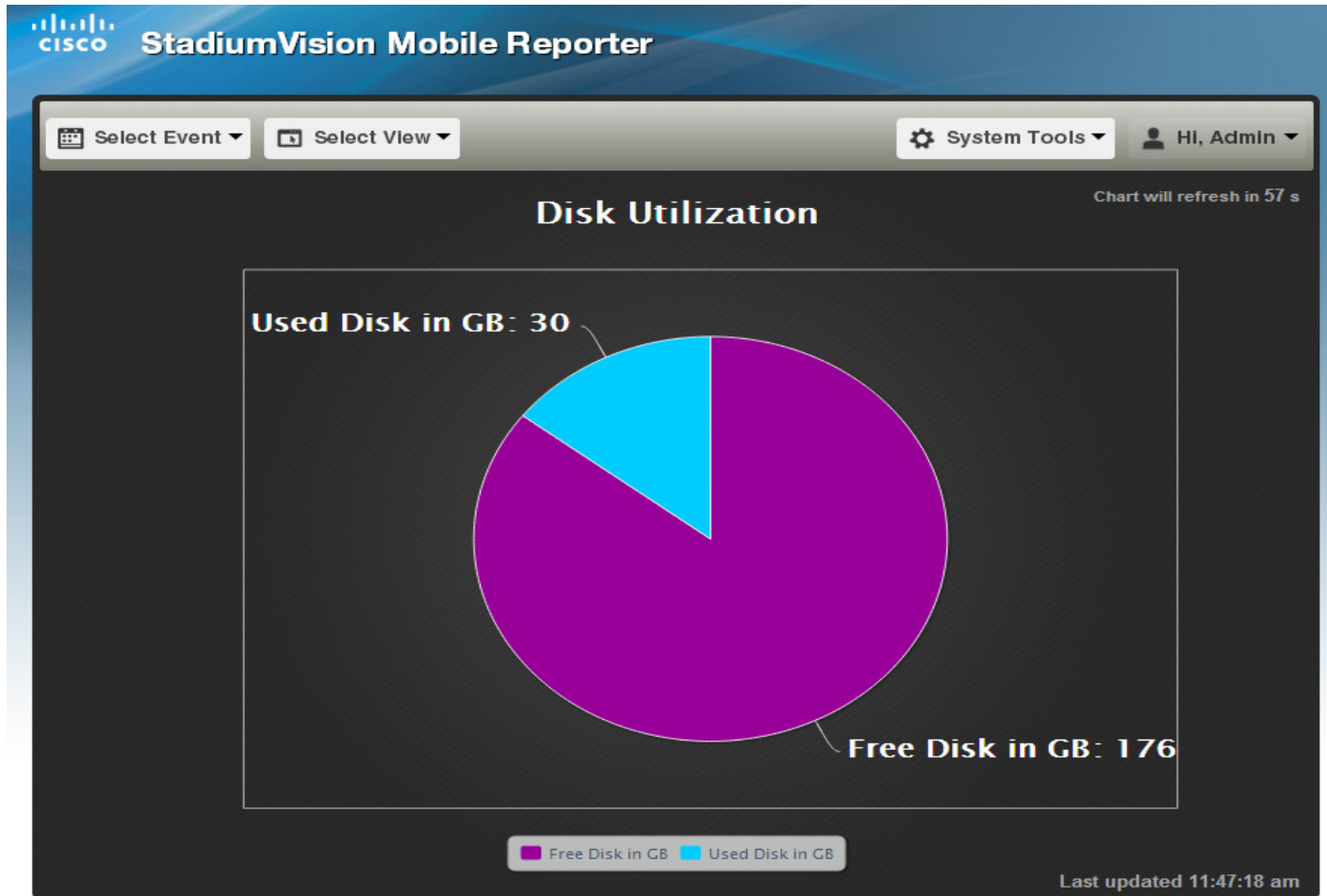
---

- Step 3** Run the restore script '`restoreCassandra.sh`' and '`restoreMongo.sh`' to restore the two backup files. For example:
- `/var/svm/bin/restoreCassandra.sh /tmp/ChartAndConfigData.11140402.tgz`
  - `/var/svm/bin/restoreMongo.sh /tmp/CepResults.11140402.bson.gz`
- Step 4** Wait for the script to stop and start the SVM tomcat and chart and config database processes (see the “[Services Control](#)” section on page 34 for details).
- 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`).
- Step 5** Once the script has completed verify that the restore was successful as follows:
- Verify that the PI connection is operational. See the “[External Sources](#)” section on page 32 for more information.
  - Login as the admin and verify that the expected event schedule appears, and that CSV files for all past events are present.
  - Login as the marketing user and verify that all historical events and season charts are present.
- 

## 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

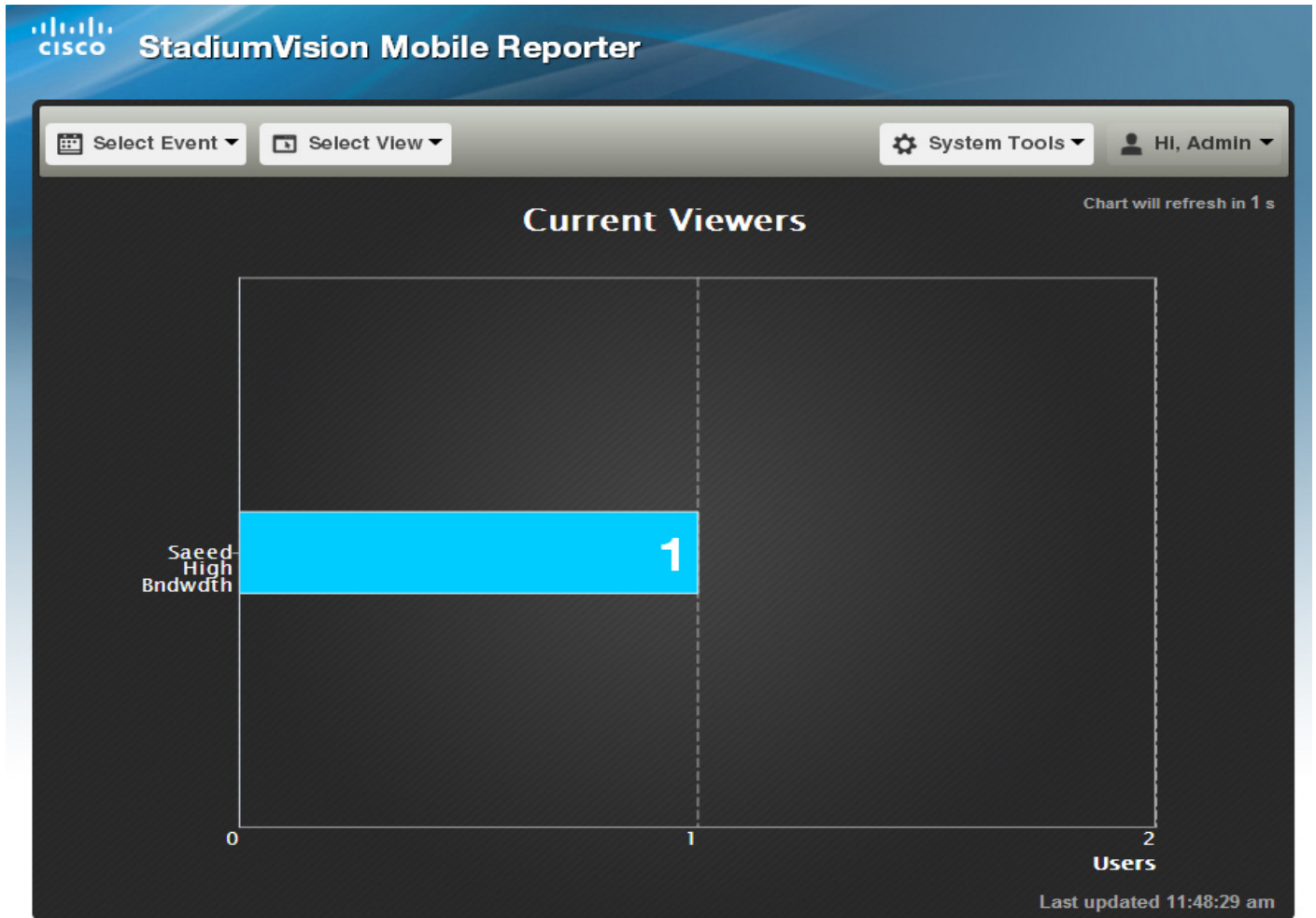


## Current Viewer Report

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



Figure 5 Current Viewers Report



## Configuring Failover Between Cisco StadiumVision Mobile Reporters

To configure the initial failover setup for between two Cisco StadiumVision Mobile Reporters, use the following procedures.

- 
- Step 1** Install two Cisco StadiumVision Mobile Reporters. referred to here as primary and secondary. Assign each Cisco StadiumVision Mobile Reporter its own unique IP address.
  - Step 2** Configure them identically, i.e. same DNS and NTP server, same timezone, same PI integration, etc. Anything that is configured via TUI should be repeated on both pri and sec.
-

## Performing a Manual Failover

To perform a manual failover, use the following procedure:

Perform a backup using the procedure in the [“Performing a Backup” section on page 37](#). Download the following files from the primary Cisco StadiumVision Mobile Reporter to your laptop:

- ChartAndConfigData.\*.tgz
- CepResults.\*.bson.gz

**Step 3** Use the documented procedure to restore the two files onto the secondary reporter.

**Step 4** On the defaults tab on the active streamer, change the Reporter url to point to the secondary Reporter.

---

# Service Quality Reporting and Cisco Prime Infrastructure Integration

Starting with Cisco StadiumVision Mobile Release 1.3, the Cisco StadiumVision Mobile Reporter is integrated with the Cisco Prime Infrastructure (PI), which is the management infrastructure used to configure a wireless network and access points (APs).

The quality reporting feature has the following benefits:

- Every device with a Cisco StadiumVision Mobile application is also a telemetry point for Cisco StadiumVision Mobile metrics.
- Cisco StadiumVision Mobile Reporter collects, aggregates and reports by client, AP and AP area.
- AP groupings are created based on a common prefix in the AP names.
- Area reporting requires integration with Cisco Prime Infrastructure 1.2 or later.

Configuration of the Prime Infrastructure (PI) is performed in the Text Utility Interface (TUI). For more details on configuring Cisco Prime Infrastructure, see the [“Configure Prime Infrastructure \(PI\) system on the Cisco StadiumVision Mobile Reporter”](#) section on page 32.

## Troubleshooting and CLI Access (Cisco Personnel Only)

For troubleshooting, Cisco support personnel will need to create a TAC account to have full access to the CLI.

- 
- Step 1** From the TUI, select **System accounts, Enable/Disable TAC user**, and **Enable TAC user account**. Confirmation that the TAC account has been enabled appears on the screen.
- Step 2** Access the SNE TAC Token Exchange at <http://10.194.171.10/cgi-bin/SNETACAuth.cgi>.
- Step 3** Generate an authentication key by entering the IP address of the Cisco StadiumVision Mobile Reporter and clicking the Submit button. A sample screen is shown in [Figure 6](#).
- Step 4** Copy the generated token (if needed save it someplace as you will need it later).
- Step 5** SSH (VPN in first if needed) into the Cisco StadiumVision Mobile server you are requesting access to using the username "snetac" and the default password
- Step 6** Paste the copied token into the SSH session when prompted for a token.
- Step 7** Go through the password setting process when prompted.

An SSH account is now set up with username you specified, and the password you previously entered into this system. This account will be active for the next 24 hours. You may extend and/or re-enable your account at any time by going through this process again.

---

**Figure 6** SNE TAC Token Exchange

## SNE TAC Token Exchange

[Token Generator](#)

Stadium Vision server IP:

**Step 1: Copy the following token (if needed save it someplace as you will need it later)**

```
BVpiwX5W/R9zq3x11abRtZHpSbkwY7UgG811Y675...CMbu#XH
x3JqEygqMuMtFadaTehocvWdNIbtEm...
IGhouYejr1t1UPqcYI5A83jWzPSGj2 /...
```

**Step 2: SSH (VPN in first if needed) into the StadiumVision server you are requesting access to using the username "snetac" and the default password**

**Step 3: Paste the copied token into the SSH session when prompted for a token**

**Step 4: Go through the password setting process when prompted**

**Done!** You are now setup with a SSH account with username "snetac" and the password you previously entered into this system. This account will be active for the next 24 hours. You may extend and/or re-enable your account at anytime by going through this process again.

# Accessing Administrative Interfaces

Table 2 lists URLs and addresses to access various StadiumVision Mobile Reporter interfaces and functions.

**Table 2** StadiumVision Mobile Reporter Interface URLs and Addresses

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

