



StadiumVision



## **Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer Installation and Upgrade Guide**

Release 2.1  
June 12, 2015

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## Preface

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**First Published: May 26, 2015**

**Revised: June 12, 2015**

This document describes how to install the Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer software.

The intended audience is Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer system administrators, Cisco Technical Field Engineers who are responsible for designing and deploying Cisco 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.

## Document Revision History

[Table 1](#) lists the technical changes made to this document since it was first published.

**Table 1** *Document Revision History*

<b>Date</b>	<b>Description</b>
June 12, 2015	Added <a href="#">“Removing the Undisciplined Local Clock”</a> section on page 17 describing how to remove the undisciplined local clock from Cisco StadiumVision Mobile Streamer and Reporter when operating as a leaf node in a NTP network.
June 8, 2015	Modified the title of the upgrading module to include Reporter and Streamer.
May 26, 2015	Initial release of Cisco StadiumVision Mobile 2.1.

# Document Organization

Module	Description
<a href="#">Getting Started Installing or Upgrading Cisco StadiumVision Mobile Software</a>	Provides an overview of required actions before installing Cisco StadiumVision Mobile software.
<a href="#">Installing Cisco StadiumVision Mobile Software for the First Time</a>	Describes installing Cisco StadiumVision Mobile software for new installations.
<a href="#">Using the Software Manager to Upgrade Cisco StadiumVision Mobile Software for Reporter and Streamer</a>	Describes using the software manager to perform an upgrade of Cisco StadiumVision Mobile software.
<a href="#">Appendix A: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server</a>	Describes using the Cisco Integrated Management Controller (CIMC) on a Cisco UCS C220.
<a href="#">Appendix B: Port Reference</a>	Identifies the ports used by Cisco StadiumVision Mobile.

## Related Documentation

See the *Cisco StadiumVision Mobile Reporter Administration Guide* and *Cisco StadiumVision Mobile Streamer Administration Guide* for information about operating the Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer.

<http://www.cisco.com/c/en/us/support/video/stadiumvision/tsd-products-support-maintain-and-operate.html>

## 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.



# Getting Started Installing or Upgrading Cisco StadiumVision Mobile Software

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**First Published: May 26, 2015**

**Revised: June 12, 2015**

Read this module before you perform an initial installation or upgrade of the Cisco StadiumVision Mobile software. It includes the following topics:

- [Before You Begin, page 1](#)
- [Hardware Prerequisites, page 2](#)
- [Overview of the Installation and Upgrade Process, page 3](#)

## Before You Begin

Be sure that you understand and have met the following prerequisites before you begin to install or upgrade Cisco StadiumVision Mobile hardware:

- Refer to the *Release Notes for Cisco StadiumVision Mobile Release 2.1* for the latest information about hardware and software requirements, changes, important notes, and caveats for your software release available at:

[http://www.cisco.com/c/en/us/td/docs/Sports\\_Entertainment/StadiumVision/Mobile/release/notes/2\\_1/SV\\_Mobile\\_Relnotes\\_2\\_1.html](http://www.cisco.com/c/en/us/td/docs/Sports_Entertainment/StadiumVision/Mobile/release/notes/2_1/SV_Mobile_Relnotes_2_1.html)

- Be sure that you have a supported browser (Google Chrome or Mozilla Firefox) installed for access to Cisco StadiumVision Mobile (refer to the release notes for the supported versions).

When using a Cisco UCS C220 server, observe the following guidelines before starting the installation:

- Do *not* alter the RAID configuration prior to installation
- Verify the boot order in the BIOS (by pressing **F2** while booting) prior to installation



### Note

If you are doing a fresh installation on a previously configured system, a full install will erase the Cisco StadiumVision Mobile Streamer or Cisco StadiumVision Mobile Reporter configuration. Perform a backup prior to installing to preserve configuration data. See the *Cisco StadiumVision Mobile Streamer Administration Guide* or *Cisco StadiumVision Mobile Reporter Administration Guide* for instructions on performing a backup available at:

<http://www.cisco.com/c/en/us/support/video/stadiumvision/products-maintenance-guides-list.html>

# Hardware Prerequisites

Before starting an installation or upgrade, make sure the prerequisite hardware and cabling have been installed and set up:

- Set up the server hardware.  
See the *Cisco UCS C220 Server Installation and Service Guide* for additional installation information available at:  
[http://www.cisco.com/en/US/docs/unified\\_computing/ucs/c/hw/C220/install/C220.pdf](http://www.cisco.com/en/US/docs/unified_computing/ucs/c/hw/C220/install/C220.pdf)
- Connect a monitor, keyboard, and mouse to the Cisco UCS C220.
- Connect the Cisco UCS C220 to the network using the **eth0** Ethernet port on the rear panel.
- Connect the power cord.

The Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer are supported on the following platforms:

- Cisco UCS C220—Uses Cisco Integrated Management Controller (CIMC) to perform the installation.
- Virtualized environment—Be sure that your configuration meets the minimum system requirements in [Table 1](#) and [Table 2](#) in order to support a VMware ESX virtualized environment.

**Table 1** Minimum System Requirements for a Virtualized Environment running Cisco StadiumVision Mobile Streamer

System Component	Minimum Requirement
Virtual Disk Space	80 GB  <b>Note</b> The hard drives must be configured as a single logical volume. A RAID volume is strongly recommended.  <b>Note</b> Thin provisioning is not recommended.
Processor	Processor equivalent to an Intel Xeon Processor E5-2460 (15 MB cache, 2.50 GHz clock, 7.20 GT/s Intel® QPI)
Virtual RAM (VRAM)	16 GB
Virtual CPUs	4

**Table 2** Minimum System Requirements for a Virtualized Environment running Cisco StadiumVision Mobile Reporter

System Component	Minimum Requirement
Virtual Disk Space	300 GB  <b>Note</b> The hard drives must be configured as a single logical volume. A RAID volume is strongly recommended.  <b>Note</b> Thin provisioning is not supported.
Processor	Dual processor equivalent to an Intel Xeon Processor E5-2460 (15 MB cache, 2.50 GHz clock, 7.20 GT/s Intel® QPI)



**Table 2** *Minimum System Requirements for a Virtualized Environment running Cisco StadiumVision Mobile Reporter (continued)*

System Component	Minimum Requirement
Virtual RAM (VRAM)	48 GB
Virtual CPUs	24

#### VMware vSphere ESX Tested Versions for Cisco StadiumVision Mobile

Cisco StadiumVision Mobile 2.1 has been tested with vSphere Client version 5.1.0, build 786111 and VMWare vCenter Server version 5.1.0, build 947673. Cisco StadiumVision Mobile is supported on all versions of vSphere 5.1 and 5.5.



#### Note

Any VMware license that does not allow your virtual machine to be set to the minimum requirements described in [Table 1](#) and [Table 2](#) is not supported.

#### Restrictions for Virtual Server Support

Be sure that you consider the following restrictions before you configure a virtual server environment for Cisco StadiumVision Mobile:

- Migrating from Cisco StadiumVision Mobile Release 1.3 to a Cisco StadiumVision Mobile Release 2.0 or 2.1 virtualized environment is not supported.
- When using a virtual server environment, Cisco Technical Support only provides support for the Cisco StadiumVision software and Cisco UCS servers. No support is provided for third-party hardware or the virtual OS environment installed by the customer.
- Cisco has not tested and does not provide support for any VMware tools in a Cisco StadiumVision system. If your site chooses to use backup, recovery or other tools outside of the Cisco StadiumVision Mobile software to manage your virtual servers, then you accept the risks and responsibility associated with securing your data.

## Overview of the Installation and Upgrade Process

This section describes the prerequisite actions before performing an installation, and contains the following sections:

- [Upgrading from Release 2.0, page 4](#)
- [Installing on a Cisco UCS C220 for the First Time, page 4](#)
- [Installing on a Virtual Server for the First Time, page 5](#)



#### Note

If you are running Cisco StadiumVision Mobile Streamer or Reporter as a leaf node in a NTP network (as most are) then you should remove the undisciplined local clock to avoid having two clock sources. For additional information, refer to [“Removing the Undisciplined Local Clock” section on page 17](#). Remove the undisciplined local clock on any new installation or upgrade that sets an NTP server.

## Upgrading from Release 2.0

The upgrade process for an existing server running Cisco StadiumVision Mobile Release 2.0 involves the following tasks:

- Downloading the upgrade ISO from Cisco.com.
- Running the installation.



### Note

Cisco StadiumVision Mobile Reporter build 2.0.1-1 is the only supported build for Cisco StadiumVision Mobile Release 2.1. If you are using Reporter build 2.0.0-365, you must upgrade to 2.0.1-1.

For detailed information, see the “[Using the Software Manager to Upgrade Cisco StadiumVision Mobile Software for Reporter and Streamer](#)” module.

## Installing on a Cisco UCS C220 for the First Time

The installation process for a new Cisco StadiumVision Mobile server running Cisco StadiumVision Mobile Release 2.1 involves the following tasks:

- Be sure the CIMC firmware is up to date; configure CIMC (see “[Appendix A: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server](#)”).
- Verify the preinstalled software version.  
Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer come preinstalled with a released image of Cisco StadiumVision Mobile software. Depending on the timing of your hardware shipment with available software releases, this image might not be the latest released version. Therefore, after you install your hardware, it is important that you power on and access the Cisco StadiumVision Mobile software to verify the software version. As necessary, you can upgrade the software following the guidelines in this guide and in the *Cisco StadiumVision Mobile Release Notes* available at:  
<http://www.cisco.com/c/en/us/support/video/stadiumvision/products-release-notes-list.html>
- Obtain the full ISO from [stadiumvision-pm@cisco.com](mailto:stadiumvision-pm@cisco.com) if you need the full install ISO file for a fresh install.
- After installation, restart the Streamer Service or reboot it by using the TUI.

[Table 3](#) lists the platform, type of media, and file to use to perform a fresh installation.

**Table 3** Cisco StadiumVision Mobile Fresh Installation Media and ISO File Type

Product	Platform	Media	File to Use
Cisco StadiumVision Mobile Streamer or Cisco StadiumVision Mobile Reporter	Cisco UCS C220	Hard drive	Full ISO
	Cisco UCS C220	CIMC remote mount	

## Installing on a Virtual Server for the First Time

The installation process for a virtual server running Cisco StadiumVision Mobile software release 2.1 for the first time involves the following tasks:

- Verify that your virtual server meets the requirements listed in [Table 1](#) and [Table 2](#).
- Install VMWare ESX hypervisor software.
- Obtain the full ISO from [stadiumvision-pm@cisco.com](mailto:stadiumvision-pm@cisco.com) if you need the full install ISO file for a fresh install.
- Load the Cisco StadiumVision Mobile Release 2.1 (full ISO).
- Run the installation.
- After installation, restart the Streamer Service or reboot it using the TUI.





# Installing Cisco StadiumVision Mobile Software for the First Time

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**First Published: May 26, 2015**

**Revised: June 12, 2015**

This module provides instructions for installing Cisco StadiumVision Mobile Reporter or Cisco StadiumVision Mobile Streamer software on the Cisco UCS C220, as well as the requirements for installing Cisco StadiumVision Mobile software on a VM (virtual machine), and contains the following sections:

- [Installation Tasks, page 9](#)
- [Configuring the Network Setup, page 13](#)
- [What To Do Next, page 16](#)

## Prerequisites

Refer to the release notes for Cisco StadiumVision Mobile for the latest information about hardware and software requirements, changes, important notes, and caveats for your software release.

### Cisco UCS C220 Servers

Be sure that the following requirements are met before you upgrade your server:

- Your new server is installed in its production location. For more information, see the *Cisco UCS C220 Server Installation and Service Guide* available at:  
[http://www.cisco.com/en/US/docs/unified\\_computing/ucs/c/hw/C220/install/C220.pdf](http://www.cisco.com/en/US/docs/unified_computing/ucs/c/hw/C220/install/C220.pdf)
- You have completed the initial server setup and configured the Cisco UCS C-Series Integrated Management Controller (CIMC) interface.
- To configure the CIMC, you will need an additional IP address for the server and should be prepared to change the default login and password. Be sure that the server is configured for standalone mode with the following settings:
  - DHCP—Disabled
  - NIC redundancy—None
  - Boot order—Virtual CD/DVD, HDD

For more information, see the [Appendix A: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server](#) module.

- You have the network information required to configure the Ethernet connection on the Cisco StadiumVision Mobile server, such as:
  - IP address (IPv4 only) and network mask

**Note**


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The Cisco StadiumVision Mobile server should be configured with a static IP address or a non-expiring DHCP lease.

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- Default gateway address
  - DNS server address
  - Hostname
- The Cisco StadiumVision Mobile server is connected to the network and has power.
- Power on the server and verify the boot order in the BIOS (by pressing F2 while booting) prior to installation.
- To access the Cisco Integrated Management Controller (CIMC) for the software installation, the following requirements are met:
  - Your computer meets the minimum browser requirements for Cisco StadiumVision Mobile, and also has Java 1.6 or later installed.
  - You have a laptop connection with access to the Cisco StadiumVision Mobile server network.
  - You have the IP address of the CIMC interface on the Cisco StadiumVision Mobile server.
  - You have the CIMC interface login credential. The default credential is admin and password.

When using a Cisco UCS C220 server, observe the following guidelines before starting the installation:

**Caution**


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Do *not* alter the RAID configuration prior to installation

---

- Verify the boot order in the BIOS (by pressing **F2** while booting) prior to installation

**Caution**


---

If you are doing a fresh installation on a previously configured system, a full install will erase the Cisco StadiumVision Mobile Streamer or Cisco StadiumVision Mobile Reporter configuration. Perform a backup prior to installing to preserve configuration data. See the *Cisco StadiumVision Mobile Streamer Administration Guide* or *Cisco StadiumVision Mobile Reporter Administration Guide* for instructions on performing a backup.

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**Virtualized Server Environment**

Installing Cisco StadiumVision Mobile in a virtualized server environment includes setting up your server environment, running the full ISO for Cisco StadiumVision Mobile, and configuring the network. For more information see the [“Hardware Prerequisites”](#) section on page 2, the [“Installing on a Virtual Server for the First Time”](#) section on page 5, in the [“Getting Started Installing or Upgrading Cisco StadiumVision Mobile Software”](#) module.

# Installation Tasks

This section provides a high-level overview of the installation process, and contains the following sections.

- [Obtaining the ISO File, page 9](#)
- [Installing from the Hard Drive, page 9](#)
- [Installing using CIMC, page 10](#)
- [Installing on a Virtual Server with Release 2.1 for the First Time, page 13](#)
- [Configuring the Network Setup, page 13](#)
- [Logging into the TUI, page 16](#)
- [Setting the Server Time Zone, page 16](#)
- [Setting the Server Date and Time, page 17](#)
- [Configuring NTP, page 17](#)
- [Removing the Undisciplined Local Clock, page 17](#)

Table 4 lists the platform, type of media, and file to use to perform a fresh installation.

**Table 4** Cisco StadiumVision Mobile Fresh Installation Media and ISO File Type

Product	Platform	Media	File to Use
Cisco StadiumVision Mobile Streamer or Cisco StadiumVision Mobile Reporter	Cisco UCS C220	Hard drive	Full ISO
	Cisco UCS C220	CIMC remote mount	

## Obtaining the ISO File

Obtaining the Full ISO from [stadiumvision-pm@cisco.com](mailto:stadiumvision-pm@cisco.com) if you need the full install ISO file.

## Installing from the Hard Drive

To install from the hard drive, complete the following steps:

- 
- Step 1** Be sure the CIMC firmware is up to date; configure CIMC (see [“Appendix A: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server”](#)).
  - Step 2** Power on the server.
  - Step 3** When the server console shows a login prompt proceed to the [“Configuring the Network Setup”](#) section on page 13.
- 



### Note

Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile Streamer come preinstalled with a released image of Cisco StadiumVision Mobile software. Depending on the timing of your hardware shipment with available software releases, this image might not be the latest released version. Therefore, after you install your hardware, it is important that you power on and access the Cisco StadiumVision Mobile software to verify the software version. As necessary, you can upgrade the software following the guidelines in this guide and in the Cisco StadiumVision Mobile Release Notes.

## Installing using CIMC

To install using CIMC, complete the following steps:

- 
- Step 1** Verify that CIMC firmware and BIOS are up to date.
- Step 2** Configure CIMC (see “[Appendix A: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server](#)”).





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**Note** At this release, the CIMC 1.5.1 firmware version is the minimum tested version.

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- Step 3** Connect a second Ethernet cable to the CIMC Ethernet port marked **M**.
- Step 4** Power on the server.
- Step 5** Start CIMC and perform a virtual DVD mount:
- a. Access CIMC from a web browser:  
[https://ip\\_address/login.html](https://ip_address/login.html)
  - b. Click the **Add Exception** button.



### This Connection is Untrusted

You have asked Firefox to connect securely to **10.194.168.139**, but we can't confirm that your connection is secure.

Normally, when you try to connect securely, sites will present trusted identification to prove that you are going to the right place. However, this site's identity can't be verified.

**What Should I Do?**

If you usually connect to this site without problems, this error could mean that someone is trying to impersonate the site, and you shouldn't continue.

▶ **Technical Details**

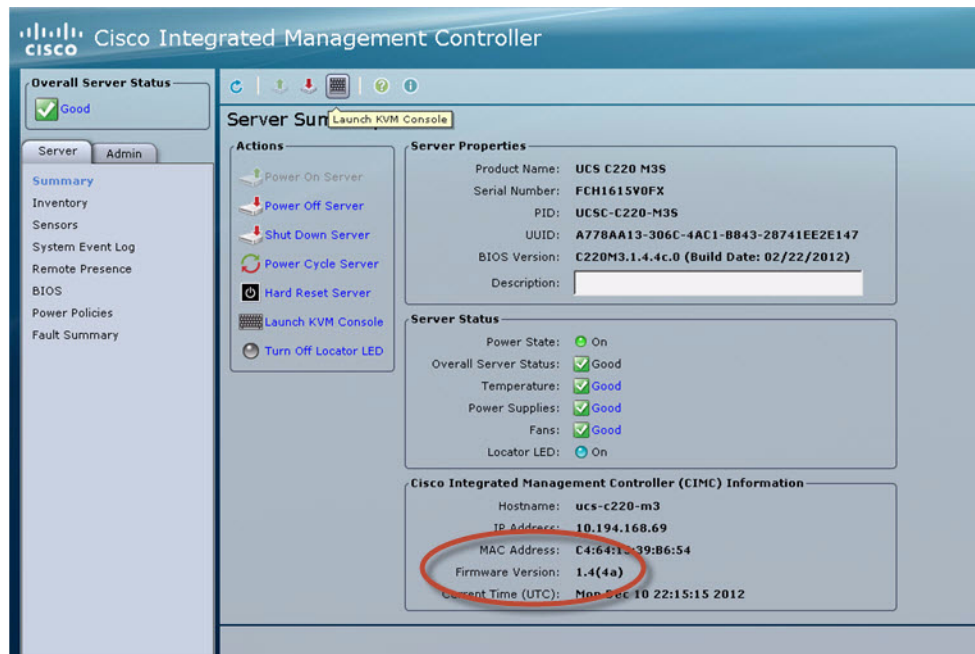
▼ **I Understand the Risks**

If you understand what's going on, you can tell Firefox to start trusting this site's identification. **Even if you trust the site, this error could mean that someone is tampering with your connection.**

Don't add an exception unless you know there's a good reason why this site doesn't use trusted identification.

- c. Click **Confirm Security Exception** to get to the CIMC login page. The default login credentials are:  
user: admin  
password: password
- d. Click on the **Launch KVM Console** at the top of the CIMC interface to launch the KVM console.





The KVM tab provides a view of the system diagnostics or command prompt execution. The Virtual Media tab provides the virtual CD/DVD setup for ISO installation.

- e. Click on Add Image tab under the KVM Console Virtual Media tab.
- f. Navigate to the ISO file.

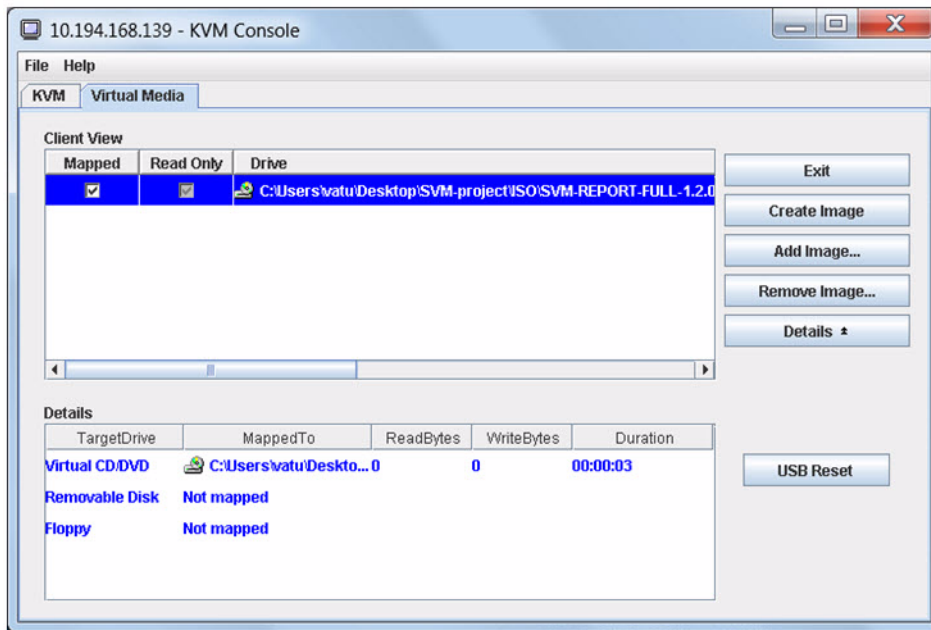
**Note**

CIMC can experience slow performance. If slow performance occurs, clear the browser cache.

**Note**

If the installation seems to suspend operation on a Cisco UCS C220, you might need to restart the installation by remapping the ISO image, and power cycling the Cisco UCS C220 server.

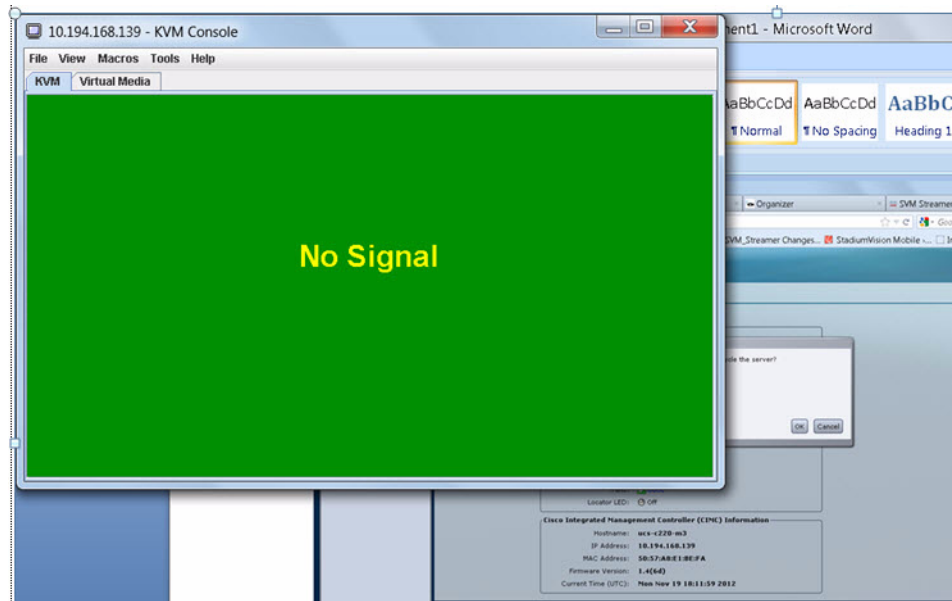
- g. Click the check box for the Mapped option under Client View to select the ISO source.
- h. Confirm that the Virtual CD/DVD has been added under the Virtual Media tab, Virtual CD/DVD.



- i. Double click on **Virtual CD/DVD** and observe the read bytes counter increasing (this refreshes the read bytes).
- j. Close the KVM tab to start viewing the installation process.
- k. On the CIMC interface under Server Summary, click **Power Cycle Server** to start the installation process.



- l. On the KVM Console/KVM terminal, confirm that the system is restarting and booting up from the Virtual CD/DVD.



- Step 6** When the server console shows a login prompt proceed to the [“Configuring the Network Setup”](#) section on page 13.

## Installing on a Virtual Server with Release 2.1 for the First Time

The installation process for a virtual server running Cisco StadiumVision Mobile software release 2.1 for the first time involves the following tasks:

- Verify that your virtual server meets the requirements listed in [Table 1](#) and [Table 2](#) in the [“Getting Started Installing or Upgrading Cisco StadiumVision Mobile Software”](#) module.
- Install VMWare ESX hypervisor software.



### Note

Any VMware license that does not allow your virtual machine to be set to the minimum requirements described in [Table 1](#) and [Table 2](#) in the [“Getting Started Installing or Upgrading Cisco StadiumVision Mobile Software”](#) module is not supported.

- Load the Cisco StadiumVision Mobile Release 2.1 (full ISO).
- Run the installation.
- After installation, restart the Streamer Service or reboot by using the TUI.

## Configuring the Network Setup

This part of the installation process is common to all platforms and all Cisco StadiumVision Mobile software, and should be done after the initial software installation.

To configure the network setup, complete the following steps:

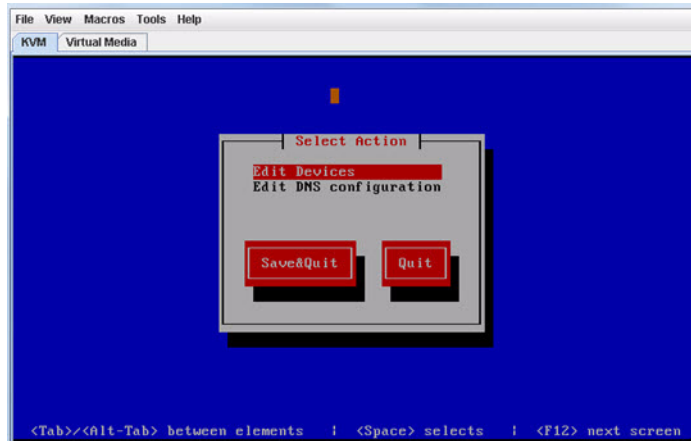
**Step 1** Select **Network Configuration** from the menu.



**Note**

The network configuration window displays for approximately sixty minutes. If the window disappears, continue the network configuration using the TUI.

**Step 2** Select **Edit Devices** and press **Enter**.



**Step 3** Select **eth0** and press **Enter**.

**Step 4** In the Ethernet Configuration, enter the network information. When done, select **OK** and press **Enter**.



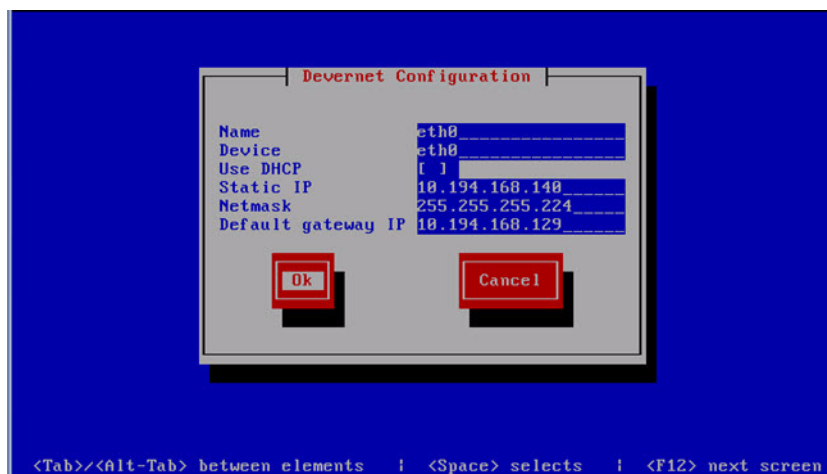
**Note**

The Linux screen is mislabeled “Devernet Configuration.”

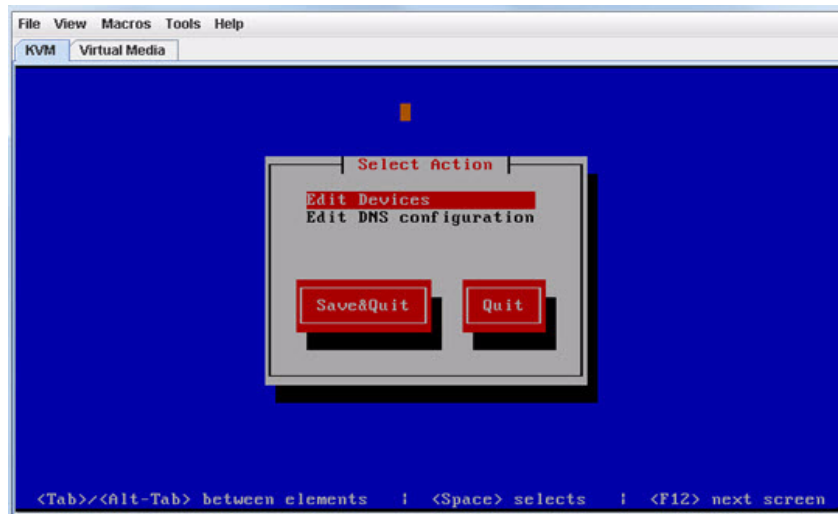


**Note**

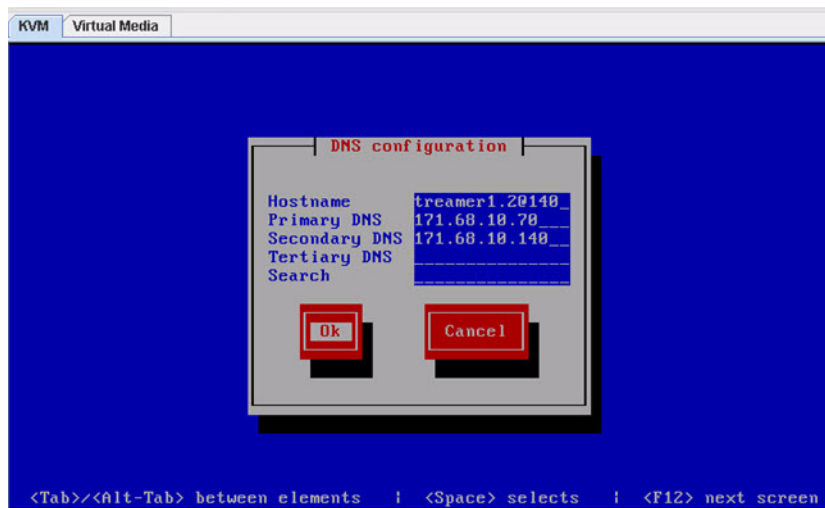
The Cisco StadiumVision Mobile Streamer or Cisco StadiumVision Mobile Reporter must use a static IP address.



- Step 5** Select **OK** and press the Enter key.
- Step 6** Select **Edit DNS configuration** and press **Enter**.



- Step 7** Enter DNS information. When done, select **OK**, and press **Enter**.



**Note** Do not use a period ('.') as part of the hostname.

- Step 8** Select **Save & Quit** and press **Enter**.
- Step 9** Select **Exit** and press **Enter**.

After this step, the Cisco StadiumVision Mobile software installs and the system reboots. This process takes up to 30 minutes. The installation should be completed. Validate the installation by logging into the Cisco StadiumVision Mobile Streamer or Cisco StadiumVision Mobile Reporter.



## Setting the Server Date and Time

To set the server date and time, complete the following tasks:

**Note**

Set the server date and time for both the Cisco StadiumVision Mobile Reporter and the Cisco StadiumVision Mobile Streamer.

- Step 1** Log into the TUI using the procedure in the [“Logging into the TUI”](#) section.
- Step 2** In the TUI, go to **System Settings > Date and Time Settings > Set system date.**
- Step 3** Enter the date using the following format:

MMDDHHMIYYYY for Month Day Hour Minute Year

## Configuring NTP

To configure the Network Time Protocol (NTP), complete the following tasks:

**Note**

Configure NTP for both the Cisco StadiumVision Mobile Reporter and the Cisco StadiumVision Mobile Streamer.

- Step 1** Log into the TUI using the procedure in the [“Logging into the TUI”](#) section.
- Step 2** In the TUI, go to **System Settings > Date and Time Settings > Set NTP server address.**
- Step 3** Set the NTP server address.

**Note**

For the Cisco StadiumVision Mobile Reporter, it is critical that NTP be properly configured in order to provide accurate reports.

## Removing the Undisciplined Local Clock

To remove the undisciplined local clock, complete the following tasks:

**Note**

Remove the undisciplined local clock for both the Cisco StadiumVision Mobile Reporter and the Cisco StadiumVision Mobile Streamer if you are running them as a leaf node in a NTP network.

- Step 1** Log into the TUI using the procedure in the [“Logging into the TUI”](#) section.
- Step 2** In the TUI, go to **System Settings > Date and Time Settings > Modify NTP configuration file.**
- Step 3** Delete the following section to remove the undisciplined clock:

```
# Undisciplined Local Clock. This is a fake driver intended for backup  
# and when no outside source of synchronized time is available.  
server 127.127.1.0 # local clock  
fudge 127.127.1.0 stratum 10
```

**Step 4** Repeat the steps above to remove the undisciplined clock from both the Cisco StadiumVision Mobile Reporter and the Cisco StadiumVision Mobile Streamer.

**Note**

---

Remove the undisciplined local clock on any new installation or upgrade that sets an NTP server.

---





# Using the Software Manager to Upgrade Cisco StadiumVision Mobile Software for Reporter and Streamer

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**First Published: May 26, 2015**

**Revised: June 12, 2015**

This module describes using the Cisco StadiumVision Mobile Software Manager to:

- Upgrade an existing server already running Cisco StadiumVision Mobile (Release 2.0 or later) to a later release in the supported upgrade path for Cisco StadiumVision Mobile Streamer and Cisco StadiumVision Reporter software.

This module includes the following topics:

- [Best Practices, page 19](#)
- [Prerequisites, page 20](#)
- [Information About Using the Software Manager to Update Existing Cisco StadiumVision Mobile Software, page 20](#)

## Best Practices



### Caution

---

Do not alter the RAID configuration prior to upgrade.

---

Before you begin upgrading an existing Cisco StadiumVision Mobile server, consider the following best practices:

- Choose an appropriate down time to perform the upgrade on the Cisco StadiumVision Mobile server when there is adequate time to complete and verify the upgrade before any scheduled events and to allow time to resolve any unexpected issues that might occur.
- Refer to the release notes available on [Cisco.com](http://Cisco.com) for the latest information about hardware and software requirements, changes, important notes, and caveats for your software release.

- Pay particular attention to the required hardware and software versions for other devices supporting your Cisco StadiumVision solution and be sure that you upgrade those devices as needed. For example, generally only certain firmware versions are supported for the DMP hardware, or a new firmware version is needed to provide additional functionality supported by the Cisco StadiumVision Mobile software.
- Perform a backup and restore of the primary and secondary servers:
  - Perform a backup of the currently active primary server.
  - Restore the backup data onto the standby secondary server.




---

**Note** The config service must be running on the secondary server to do the restore.

---

For more information about performing a backup and restore on a Cisco StadiumVision Mobile Server, see the “Backing Up and Restoring Cisco StadiumVision Mobile Servers” module of the *Cisco StadiumVision Mobile Server Administration Guide* available at:

[http://www.cisco.com/c/en/us/td/docs/Sports\\_Entertainment/StadiumVision/Director/admin/guides/server/3\\_0/Backup\\_Restore\\_SV\\_Director\\_Servers.html](http://www.cisco.com/c/en/us/td/docs/Sports_Entertainment/StadiumVision/Director/admin/guides/server/3_0/Backup_Restore_SV_Director_Servers.html)

## Prerequisites

Be sure that the following requirements are met before you upgrade your server:

- Your server is running a minimum of Cisco StadiumVision Mobile Release 2.0 or higher.
- Follow the tasks described in the *Cisco StadiumVision Mobile Installation and Upgrade Guide*.
- You have the IP address and network access to the Cisco StadiumVision Mobile server where you want to upload the ISO upgrade image. You will need to use this information as part of the URL to access the ISO upload utility.
- You have a supported browser version for Cisco StadiumVision Mobile. For more information about the latest supported browsers, see the latest release notes available at:

<http://www.cisco.com/c/en/us/support/video/stadiumvision/products-release-notes-list.html>

## Information About Using the Software Manager to Update Existing Cisco StadiumVision Mobile Software

The ISO upgrade procedure for Cisco StadiumVision Mobile includes the following tasks:

1. Downloading an ISO service pack or upgrade file from the software download site on Cisco.com at <http://software.cisco.com/download/navigator.html?mdfid=283479662&i=rm>
2. Uploading the ISO file from your laptop to the Cisco StadiumVision Mobile server using the upload utility through your browser.
3. Installing the ISO image using the install function in the Software Manager.

## ISO Upgrade Files

You can store multiple ISO upgrade files on a Cisco StadiumVision Mobile server. The files will be displayed with a version number and the ISO filename in the Software Manager web browser interface for you to select which file to install.

## Disk Maintenance

There is no automatic aging of ISO upgrade files, but you can delete files directly in the Software Manager. You can also determine disk utilization using the TUI: File system Disk Usage. Troubleshooting > Disk Monitoring > File System Disk Usage.

Additional information about disk monitoring and utilization can be found in the *Cisco StadiumVision Mobile Streamer Administration Guide* and *Cisco StadiumVision Mobile Reporter Administration Guide* available on Cisco.com at:

<http://www.cisco.com/c/en/us/support/video/stadiumvision/products-maintenance-guides-list.html>

## Upgrade Tasks

To upgrade your Cisco StadiumVision Mobile server, complete the following tasks:

- [Obtaining ISO Upgrade Files, page 21](#) (required)
- [Uploading and Installing an ISO Upgrade File to the Cisco StadiumVision Mobile Server, page 22](#) (required)

## Obtaining ISO Upgrade Files

Be sure to download the upgrade files to a location, such as a laptop computer, where you can access them for installation onto the Cisco StadiumVision Mobile server.

**To download an ISO upgrade file, complete the following steps:**

- 
- Step 1** Obtain the upgrade ISO.
- Step 2** (Optional) To verify the integrity of your upgrade file from the download, you can use the Software Manager UI to verify the checksum on the .iso file.

The md5 checksum is calculated by the system, and is shown on the Software Manager UI. Compare what is shown on the UI and the downloaded md5 checksum displayed on the Cisco.com software download page.

The values should match. If they do not, retry the download.

---

## Uploading and Installing an ISO Upgrade File to the Cisco StadiumVision Mobile Server

After you have downloaded the ISO upgrade file from Cisco.com, you will use the Software Manager to both upload the file to the Cisco StadiumVision Mobile server and to install the upgrade image.



### Note

If you are running Cisco StadiumVision Mobile Streamer or Reporter as a leaf node in a NTP network (as most are) then you should remove the undisciplined local clock to avoid having two clock sources. For additional information, refer to [“Removing the Undisciplined Local Clock” section on page 17](#). Remove the undisciplined local clock on any new installation or upgrade that sets an NTP server.

## Prerequisites

Be sure that you know the IP address of the Cisco StadiumVision Mobile server where you want to upload the file, and you have a supported browser version for Cisco StadiumVision Mobile.

**To upload an ISO upgrade file to the Cisco StadiumVision Mobile server, complete the following steps:**

- 
- Step 1** Log into Cisco StadiumVision Mobile as an administrator.
  - Step 2** Select **System\_Tools > Software\_Manager**.
  - Step 3** From the **Upgrade** tab, click **Upload**.
  - Step 4** Navigate to the location of the ISO upgrade file that you downloaded from Cisco.com. Select the file that you want to upload and click **Open**. The file is sent to the server.

When the ISO upload is complete, one of the following occurs:

- The image is validated and uploaded successfully, a message will display stating that the ISO image has been uploaded.
- The image upload failed for some reason and you will need to retry the upload again.



### Caution

The upload might take several minutes. Do *not* refresh or reload the Software Manager page while the upload process is running. Any interruption will corrupt the ISO image being uploaded.

- Step 5** Highlight the upgrade file, then click **Install** ([Figure 1](#)).

Figure 1 ISO File Selection and Upload

The screenshot shows the 'StadiumVision Mobile Streamer Software Manager' interface. At the top, there is a 'Cisco' logo and the title. Below the title, there is a 'Upgrade' section with three buttons: 'Upload', 'Install', and 'Delete'. Underneath, there is a section titled 'ISO List' which contains a table with the following columns: Version, Name, Size, Date, Checksum, and Status. The table lists several ISO files for different versions of the software.

Version	Name	Size	Date	Checksum	Status
2.0.0-514	SVM-STREAM-UPGRADE-2.0.0-514.x86_64.iso	109.8 MB	Wed Mar 26 23:03:44 2014	8e771cbffe4090454bec3eac2c3af80f	Old
2.0.0-515	SVM-STREAM-UPGRADE-2.0.0-515.x86_64.iso	109.8 MB	Wed Mar 26 23:30:25 2014	01f924b8e6911843177ef9c6c863dc66e	Old
2.0.0-516	SVM-STREAM-UPGRADE-2.0.0-516.x86_64.iso	109.8 MB	Thu Mar 27 01:11:22 2014	26dd6615707b7e166506dacb5a150faf	Old
2.0.0-532	SVM-STREAM-UPGRADE-2.0.0-532.x86_64.iso	110.1 MB	Tue Apr 8 01:05:02 2014	38b440b57a92f04578ffaa160d89e0ff	Old
2.0.0-546	SVM-STREAM-UPGRADE-2.0.0-546.x86_64.iso	110.1 MB	Mon Apr 21 23:50:57 2014	72d7df5ccfede8ba5ce850493d07c325	Old
2.0.2-15	SVM-STREAM-UPGRADE-2.0.2-15.x86_64.iso	110.1 MB	Tue May 6 01:23:59 2014	e0157ac248d3c66bc0243ed7425c981e	Up1
2.0.2-19	SVM-STREAM-UPGRADE-2.0.2-19.x86_64.iso	110.1 MB	Tue May 6 22:29:59 2014	bb5b9710ca25c8bd9b246864742a3407	Up1
2.0.2-25	SVM-STREAM-UPGRADE-2.0.2-25.x86_64.iso	110.1 MB	Wed May 7 22:54:33 2014	6ee5958e90dc3bafec6090ce5a566708	Up1
2.0.2-29	SVM-STREAM-UPGRADE-2.0.2-29.x86_64.iso	110.1 MB	Thu May 8 22:52:23 2014	3ff3226e5a5a247487557fdffac1f085	Up1
2.0.2-30	SVM-STREAM-UPGRADE-2.0.2-30.x86_64.iso	110.1 MB	Fri May 9 00:05:13 2014	8834b5a260d86c699a0da97c699436da	Up1

At the bottom of the table, there is a 'Log' link.

**Step 6** The installation process begins, and status messages are displayed.

**Step 7** After the installation is complete, Cisco StadiumVision Mobile services are restarted.





# Appendix A: CIMC Configuration and Firmware Upgrade Guidelines on the Cisco UCS C220 Server

---

**First Published: May 26, 2015**

This document provides guidelines for configuring the Cisco Integrated Management Controller (CIMC) interface and performing the initial configuration, and upgrading the CIMC/BIOS firmware on the Cisco UCS C220 servers for Cisco StadiumVision Mobile.



**Note**

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Use the information in this appendix only as a guide to the tasks that you need to perform for CIMC configuration or upgrade, but follow the procedures in the referenced Cisco UCS documents.

---

This section includes the following topics:

- [CIMC Initial Configuration, page 25](#) (required)
- [CIMC Firmware Upgrade Guidelines, page 27](#) (as required)

## CIMC Initial Configuration

This section includes the following topics:

- [Prerequisites, page 25](#)
- [CIMC Initial Configuration Summary, page 26](#)

## Prerequisites

Be sure that the following requirements are met before you do the CIMC initial configuration:

- You have a monitor, keyboard, and mouse that you can connect to the server.
- You have the following information for configuring the internal Cisco Integrated Management Controller (CIMC) interface:
  - You have an additional IP address for static configuration.

**Tip**

This is a different IP address than the IP address that you configure for the eth0 network interface on the Cisco StadiumVision server.

- You have the VLAN ID if the server will be installed on a network VLAN.
- You are prepared to change the default CIMC login password.
- You have a laptop with access to the Cisco StadiumVision network.
- Your computer meets the minimum browser and Flash player requirements for the Cisco StadiumVision server, and also has Java 1.6 or later installed.

See the release notes for your Cisco StadiumVision product and release at:

[http://www.cisco.com/en/US/products/ps11274/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps11274/prod_release_notes_list.html)

- You have a copy of or access to the following documents on Cisco.com:
  - *Cisco UCS C220 Server Installation and Service Guide*  
Familiarize yourself with the “Initial Server Setup” topic of the “Installing the Server” chapter.
  - *Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 1.4*

(or the version that corresponds to your firmware release found at:

[http://www.cisco.com/en/US/products/ps10739/products\\_installation\\_and\\_configuration\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps10739/products_installation_and_configuration_guides_list.html).)

## CIMC Initial Configuration Summary

This section provides an overview of the basic tasks to be completed when performing the initial CIMC configuration in standalone mode for a Cisco StadiumVision server after you have unpacked and inspected it and prepared it for installation.

**To perform the CIMC initial configuration, complete the following tasks:**

	Description
	<p><b>Configuring the CIMC Interface</b></p> <p><b>Note</b> The instructions for configuring the CIMC interface are found in the “Initial Server Setup” topic of the “Installing the Server” chapter in the <i>Cisco UCS C220 Server Installation and Service Guide</i>.</p>
<b>Step 1</b>	During bootup, press <b>F8</b> when prompted to open the BIOS CIMC Configuration Utility.
<b>Step 2</b>	Configure the CIMC interface with the following settings: <ul style="list-style-type: none"> <li>• DHCP—Disabled. You must change this option to enter a static IP address.</li> <li>• CIMC IP—IPv4 address for your CIMC interface, with corresponding subnet mask.</li> <li>• VLAN—Dependent on client network.</li> <li>• Change the CIMC password. The default credential is <b>admin</b> and <b>password</b>.</li> </ul>
<b>Step 3</b>	Press <b>F10</b> to save your configuration and reboot the server.



	Description
	<p><b>Configuring the NIC Properties</b></p> <p><b>Note</b> Information about configuring the NIC properties are found in the “Initial Server Setup” topic of the “Installing the Server” chapter in the <i>Cisco UCS C220 Server Installation and Service Guide</i>.</p>
<b>Step 4</b>	From a laptop with access to the Cisco StadiumVision network, use a browser and type the IP address that you configured for the CIMC interface to connect to the CIMC console.
<b>Step 5</b>	Log into the CIMC console with username <b>admin</b> and the password that you configured in <a href="#">Step 2</a> .
<b>Step 6</b>	<p>From the <b>Admin</b> tab, click <b>Network</b>, and go to the <b>Network Settings</b> page.</p> <p>In the NIC Properties box configure the following settings and save your changes:</p> <ul style="list-style-type: none"> <li>• NIC mode—Dedicated</li> <li>• NIC Redundancy—None</li> </ul>
	<p><b>Configuring the Server Boot Order</b></p> <p><b>Note</b> The instructions for configuring the server boot order are found in the “Managing the Server Boot Order” section of the “Managing the Server” chapter of the <i>Cisco UCS C-Series Servers Integrated Management Controller GUI Configuration Guide, Release 1.4</i></p>
<b>Step 7</b>	From the <b>Server</b> tab, click <b>BIOS</b> .
<b>Step 8</b>	<p>Configure the following boot order and save your changes:</p> <ul style="list-style-type: none"> <li>• Virtual CD/DVD</li> <li>• HDD</li> </ul>

## CIMC Firmware Upgrade Guidelines

This section includes the following topics:

- [Before You Begin, page 27](#)
- [Prerequisites, page 28](#)
- [CIMC/BIOS Firmware Upgrade Summary, page 28](#)

### Before You Begin

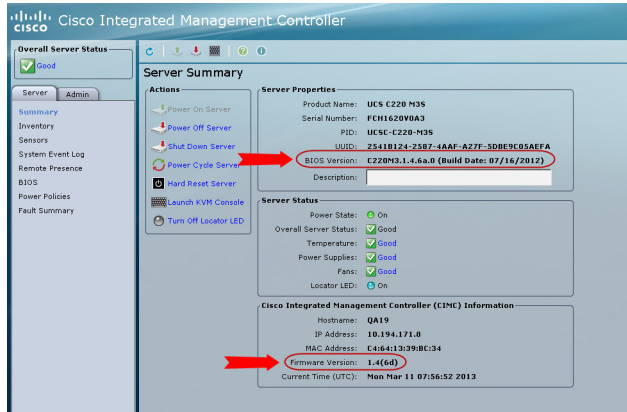
See the release notes for your Cisco StadiumVision product and release at:

[http://www.cisco.com/en/US/products/ps11274/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps11274/prod_release_notes_list.html)

- Find the minimum CIMC/BIOS versions tested for your Cisco StadiumVision Mobile platform.

- From your Cisco StadiumVision platform, verify the CIMC and BIOS firmware versions in the CIMC console (Figure 1).

**Figure 1** Firmware Verification From the CIMC Console



#### Note

Unless there is another reason why an upgrade has been found to be needed, no upgrade should be needed if your server firmware is at the minimum tested version (or later) for the Cisco StadiumVision release that you are running.

## Prerequisites

Be sure that the following requirements are met before you perform a CIMC/BIOS firmware upgrade:

- You have a copy of or access to the following documents on Cisco.com:
  - Release Notes for Cisco UCS C-Series Software, Release 1.4(6)*  
(or the version that corresponds to your firmware release found at: [http://www.cisco.com/en/US/products/ps10739/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps10739/prod_release_notes_list.html))
  - Cisco Host Upgrade Utility Release 1.4(6) Quick Start Guide*  
(or the version that corresponds to your firmware release found at: [http://www.cisco.com/en/US/products/ps10493/products\\_user\\_guide\\_list.html](http://www.cisco.com/en/US/products/ps10493/products_user_guide_list.html))

Familiarize yourself with all of the requirements in these documents to perform your CIMC/BIOS firmware upgrade.

- You have access to Cisco.com to download the firmware ISO file.

## CIMC/BIOS Firmware Upgrade Summary



#### Caution

Be sure to follow the requirements in the release notes and the Host Upgrade Utility (HUU) guide for your firmware, including making sure that you upgrade both the CIMC and BIOS at the same time and from the HUU ISO file.

To perform the CIMC/BIOS firmware upgrade, complete the following tasks:

	Description
<b>Step 1</b>	<p>Using the release notes for the firmware version that you need to install, find the name of the ISO file that applies to the Cisco UCS C220 server for that firmware.</p> <p><b>Note</b> The release 1.4(x) firmware HUU ISO files are platform-specific.</p>
<b>Step 2</b>	<p>Follow the instructions in the Host Upgrade Utility guide:</p> <p><b>Note</b> The Cisco UCS C220 server does not have a CD/DVD drive.</p> <ul style="list-style-type: none"><li>• Go to Cisco.com and download the HUU ISO file.</li><li>• Follow the instructions to load the ISO that you downloaded and be sure that both the CIMC and BIOS firmware are upgraded together.</li></ul>





## Appendix B: Port Reference

**First Published: May 26, 2015**

The following tables identify the default ports used by Cisco StadiumVision Mobile:

- [Cisco StadiumVision Mobile Ports, page 31](#)
- [Cisco StadiumVision Mobile Reporter Ports, page 32](#)
- [Cisco StadiumVision Mobile Client Ports, page 32](#)

### Cisco StadiumVision Mobile Ports

The Cisco StadiumVision Mobile ports are divided into tables for Cisco StadiumVision Mobile Streamer, Cisco StadiumVision Mobile Reporter and Cisco StadiumVision Mobile client ports.

#### Cisco StadiumVision Mobile Streamer Ports

[Table 1](#) lists the ports used by Cisco StadiumVision Mobile Streamer server instances only during troubleshooting access from a PC.

**Table 1** *Cisco StadiumVision Mobile Streamer Input Ports*

Originator	Protocol	Port	Target Application	Usage	Supported Software Version
Management computer	TCP	22	TUI	Streamer TUI.	1.2 or later
Management computer	TCP	80	Streamer	Web user interface.	1.0 or later
Cisco StadiumVision Mobile Streamer UI or other REST application	TCP	4040 (configurable)	Streamer	Streamer REST interface.	1.0 or later

## Cisco StadiumVision Mobile Reporter Ports

Table 2 and Table 3 list the ports used by Cisco StadiumVision Mobile Reporter server instances only during troubleshooting access from a PC.

**Table 2** Cisco StadiumVision Mobile Reporter Input Ports

Originator	Protocol	Port	Target Application	Usage	Supported Software Version
Management computer	TCP	22	SSH	Reporter TUI.	1.2 or later
Management computer	TCP	7150	JMX	Unsupported JMX management client; can be disabled when not debugging.	1.2 or later
Cisco StadiumVision Mobile Reporter User and Management	TCP	80	Reporter	Web user interface.	1.0 or later
Cisco StadiumVision Mobile Reporter User and Management, Cisco StadiumVision Mobile Streamer, mobile clients	TCP	8080	Reporter	Web user interface.	1.0 or later

**Table 3** Cisco StadiumVision Mobile Reporter Output Ports

Originator	Protocol	Port	Target Application	Usage	Supported Software Version
Cisco StadiumVision Mobile Reporter	HTTPS	443	—	Reporter to Prime Infrastructure (PI) server.	1.3 or later
Cisco StadiumVision Mobile Reporter	NTP	—	—	Reporter to NTP server.	1.2 or later
Cisco StadiumVision Mobile Reporter	ICMP	—	ping	Reporter to PI server.	1.3 or later

## Cisco StadiumVision Mobile Client Ports

The Cisco StadiumVision Mobile client SDK does not expose ports. It listens on a well known multicast address for the multicast address of content to offer. It also publishes statistics to the reporter if reporters are configured in the advertisements.