Application Media Server (AMS)

Hardware Setup Guide

Doc Version 2.3

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AMS Hardware Setup Guide document history

Part Number	TransAct Software Version	Document Version	Release Date	Document Changes
250-0218-01 rev A	TAC 5.0 and up TAT 5.0 and up TAP 4.7 and up RGB Director 1.0 and up	2.3	06/17/2013	Added RGB *Director*-specific verbiage and specifications.
250-0213-01 rev A	TAC 5.0 and up TAT 5.0 and up TAP 4.7 and up	2.2	06/05/2013	Corrections made: • AMS Hardware specs update • Removed AMS IP config instructions via iDRAC LCD • Added serial cable console access instructions
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250-0082-01 rev A	4.6	1.0	12/16/2010	Production Release
250-0082-01 rev B			07/29/2011	Removed version number.

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Table of Contents

CHAPTER 1

Introduction

The Application Media Server (AMS) is a 1RU hardware server platform that RGB provides for the TransAct and RGB *Director* software products. AMS is specifically designed for the scalable, high concurrency needs of today's new media environments, and can run one of several software applications, including *Packager*, *Transcoder*, *Encoder/Transcoder*, *Commander,* or *RGB Director*. RGB additionally offers the AMS TransAct *Encoder/Transcoder* application with an integrated SDI card for encoding baseband video and audio.

The AMS provides a minimum mean time between failures (MTBF) of 100,000 hours when running the TransAct application, making the AMS an extremely durable hardware appliance requiring minimal ongoing maintenance.

Figure 1. RGB's TransAct AMS

This guide describes installation and initial configuration for the AMS.

Document Organization

This guide is organized as follows:

- Chapter 1, "Introduction," (this chapter) describes the contents and conventions used in the *AMS Hardware Setup Guide*.
- Chapter 2, "Installing AMS," describes the tools, precautions, and steps necessary to install the system in the network, including initial configuration parameters.
- Chapter 3, "LCD Screen & Troubleshooting," provides descriptions of the AMS LCD screen, information on contacting RGB Customer Support, and additional documentation resources.

Document Audience

This guide is for system administrators and operators who are responsible for hardware installation and maintenance of the *Packager*, *Transcoder*, *Encoder/Transcoder*, *Commander,* or the *RGB Director*. You should be familiar with general video and networking terminology, and should be familiar with basic installation of hardware. You should also be familiar with Community ENTerprise Operating Systems (CentOS) and Red Hat Enterprise Linux (RHEL) operating systems and commands.

Document Conventions

Table 1 provides an easy way to recognize important information in the text.

Table 1. Document Conventions

When you see:	It means:
	**Notes** are indicated by the icon shown at left, and point out information that may not be part of the text but provide tips and other helpful advice.
	**Cautions** are indicated by the icon on the left, and let you know that an action may have undesirable consequences if the instructions are not followed correctly. Cautions also indicate that failure to follow guidelines could cause damage to equipment or loss of data.
	**Warnings** are indicated by the icon on the left, and indicate that failure to take the necessary precautions or to follow guidelines could cause harm to equipment and personnel.
Clicking any blue link takes you to the item to which the link refers.	

Graphics Used

In some cases, the screens shown in this manual may have been slightly modified after the manual was released, or may appear slightly different on different browsers.

All efforts have been made to ensure that the latest images are used. In all cases, the functionality described is current at the time of writing.

Reprint Notice

Portions of this user guide contain text and/or graphics from the documentation resources listed in Chapter 3, "Additional Documentation Resources" on page 33, and have been reprinted with permission from Dell.

CHAPTER 2

Installing AMS

This chapter describes how to install your AMS appliance. Please refer to your product's software documentation for application-specific information.

In This Chapter:

Package Contents

The AMS appliance consists of the components listed below. Completely unpack all of the contents from the box, inspect each item for damage, and ensure that you have all of these components:

- Dell R620 PowerEdge 1RU server (the AMS);
- One set of two (2) sliding rack rails (tool-less assembly);
- Two (2) power supply cords;
- RGB AMS locking bezel;
- For TransAct applications: documentation on CD[1].
- *For Encoder/Transcoder appliance only:*
  - SDI expansion card (pre-installed in the AMS):
  - Ships with four (4) BNC Female-to-DIN 1.0/2.3 RG-59 SDI cables - 1 foot each.

1. If you purchased RGB *Director* for your AMS, documentation and software is available via FTP download. Please contact RGB Customer Support to request FTP access information.

Pre-loaded Software

The following software components will come pre-loaded on the AMS based on your order.

Note: *If you require original software image files, please contact RGB Customer Support. See "Contacting RGB Customer Support" on page 33 for details.*

- CentOS 6.3 64-bit Operating System—For *Transcoder*, *Encoder/Transcoder*, and *Commander*
  -OR-
  CentOS 5.8 64-bit Operating System—For *Packager* or RGB *Director*
- TransAct software application—either *Packager*, *Transcoder*, *Encoder/Transcoder*[2], or *Commander*
  -OR-
  Director software application

Note: *If any of these components are missing or damaged, do not continue with installation. Contact RGB for assistance in obtaining any missing parts or for parts replacement.*

Warning: *Installation of the equipment must comply with local and national electrical codes.*

AMS Hardware Overview and Functionality

In order to provide for maximum MTBF and minimal ongoing maintenance, RGB uses the Dell PowerEdge R620 rack server as its AMS hardware platform. This section describes the server's hardware components and functionality.

Hardware Components

The AMS on the r620 platform contains the following basic hardware components[3]:

- Redundant power supplies (hot-plug);
- 8 Hard drives (hot-plug);
- Redundant fans (hot-plug);
- 292 GB or 500 GB hard disk space;
- 32 or 64 GB RAM (up to 768 GB capacity);
- 2.5MB Cache per core (8 x 2.5);
- Based on specific appliance and application ordered, one of the following CPU options:
  - Intel Xeon E5-2620 2.00GHz, 1333MHz
  - Intel Xeon E5-2690 2.90GHz, 1600Mhz
  - Intel Xeon E5-2650 2.00GHz, 1600Mhz
- PCI Expansion slot with SDI-integrated PCI card (*Encoder/Transcoder* only);
- 4 (or 6) x 1GigE port;
- Internal dual SD module.

2. The TransAct *Encoder/Transcoder* requires different hardware than the TransAct *Transcoder*; when the *Encoder/Transcoder* is purchased, an SDI expansion card is included. However, both *Transcoder* and *Encoder/Transcoder* use the same software application.
3. For a complete list of components, refer to "Additional Documentation Resources" on page 33.

AMS Front View

Figure 2. AMS - Front View

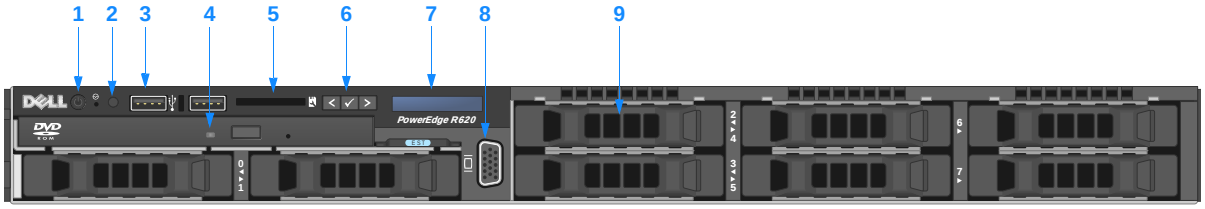


Table 2. AMS - Front Panel

Item	Indicator, Button, or Connector	Icon	Description
1	Power-on indicator, button		The power-on indicator lights when the system power is on. The power button controls the power supply output to the system.
2	System identification button[a]		The identification buttons on the front and back panels can be used to locate a particular system within a rack. When one of these buttons is pressed, the LCD panel on the front and the system status indicator on the back flashes blue until one of the buttons is pressed again.
3	USB connector (2)		Allows you to insert USB devices to the system. The ports are USB 2.0-compliant.
4	Optical DVD drive		One SATA DVD-ROM drive or DVD+/-RW drive.
5	vFlash media card slot		Allows you to insert a vFlash media card.
6	LCD menu buttons		Allows you to navigate the control panel LCD menu. **Left** button (**<**) —Moves the cursor back in one-step increments **Select** button (✔) —Selects the menu item highlighted by cursor **Right** button (**>**) —Moves the cursor forward in one-step increments. During message scrolling: • Press once to increase scrolling speed • Press again to stop • Press again to return to default scrolling speed • Press again to repeat the cycle
7	LCD panel		Displays system ID, status information, and system error messages. The LCD lights blue during normal system operation. The LCD lights amber when the system needs attention, and the LCD panel displays an error code followed by descriptive text.

Table 2. AMS - Front Panel

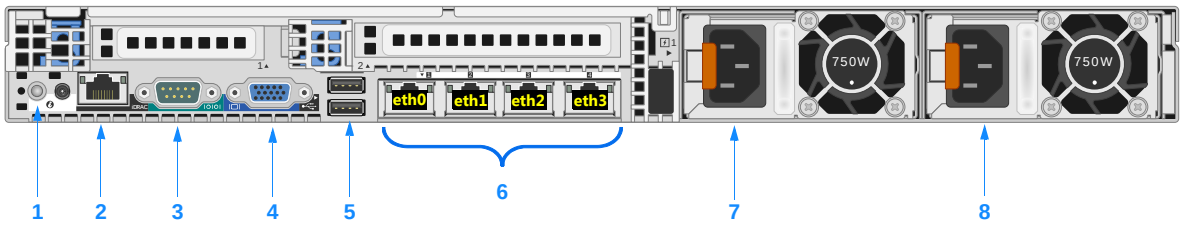
Item	Indicator, Button, or Connector	Icon	Description
8	Video (VGA) connector		Allows you to connect a VGA display to the system.
9	Hard drives (8)		Up to eight 2.5 inch hot-swappable hard drives. Up to four 2.5 hot-swappable hard drives and up to two 2.5 inch Dell PowerEdge Express Flash devices (PCIe SSDs).

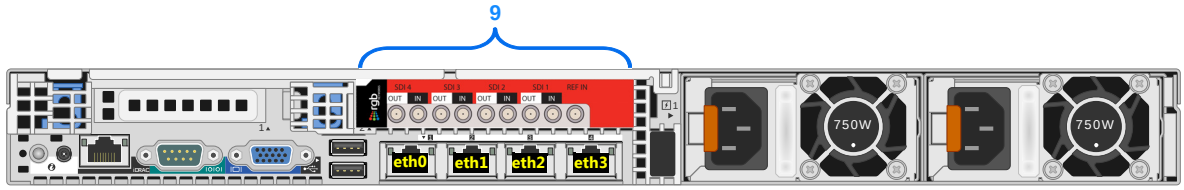
a. Press to toggle the system ID on and off. If the system stops responding during POST, press and hold the system ID button for more than five seconds to enter BIOS progress mode.

AMS Rear View

Figure 3. AMS - Rear Panel

Packager, Transcoder, Commander, RGB Director





Encoder/Transcoder (with SDI card)

Table 3. AMS - Rear Panel

Item	Indicator, Button, or Connector	Icon	Description
1	System identification button[a]		The identification buttons on the front and back panels can be used to locate a particular system within a rack. When one of these buttons is pressed, the LCD panel on the front and the system status indicator on the back blink until one of the buttons is pressed again.
2	iDRAC7 Enterprise port		Not used. *NOTE:* The port is available for use only if the iDRAC7 Enterprise license is installed on your system.
3	Serial connector		Allows you to connect a serial device to the system.

Table 3. AMS - Rear Panel

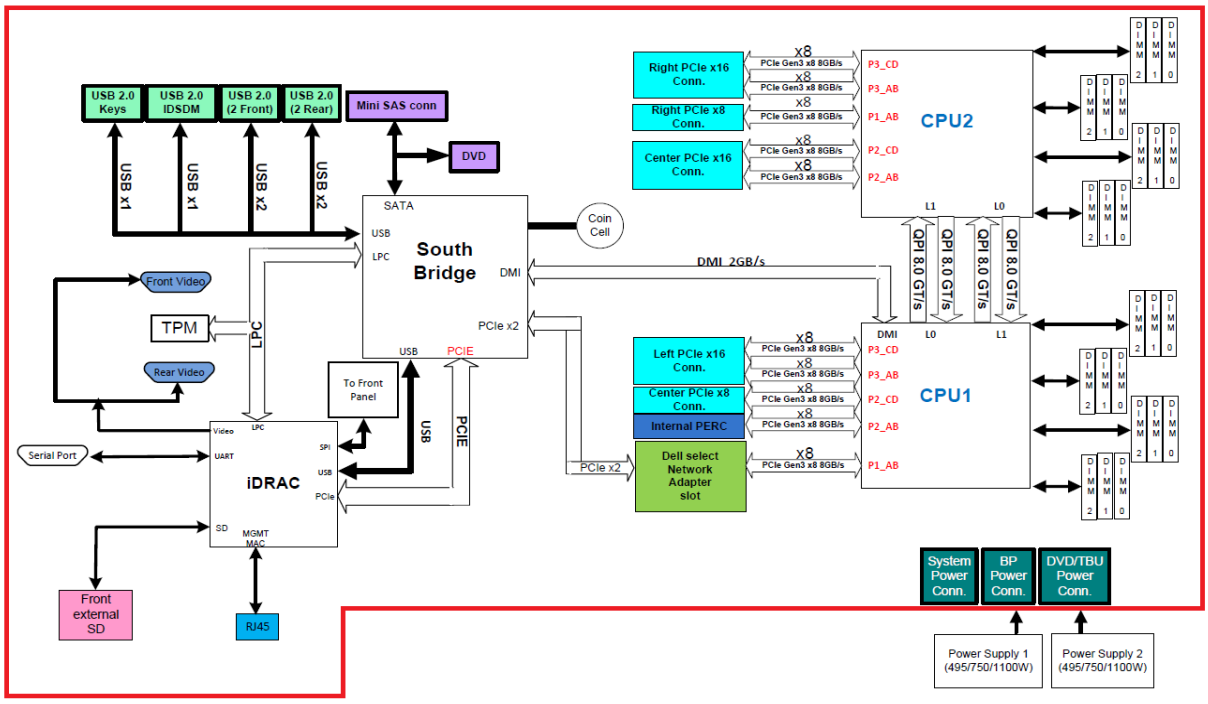
Item	Indicator, Button, or Connector	Icon	Description
4	Video (VGA) connector		Allows you to connect a VGA display to the system.
5	USB connector (2)		Allows you to insert USB devices to the system. The ports are USB 2.0-compliant.
6	Ethernet connectors (4)		Four integrated 10/100/1000 Mbps NIC connectors • Ports must be used to connect to GigE networks for file and stream delivery. • One of the 4 ports acts as dual usage for System Management and Content ingest / delivery. This may be any one of the 4 ports. • When viewing a TransAct or RGB *Director* product in their respective GUIs, GigE ports 1-4 are mapped as follows: Physical Port 1 = eth0 Physical Port 2 = eth1 Physical Port 3 = eth2 Physical Port 4 = eth3
7	Power supply (PSU1)		AC—750 W
8	Power supply (PSU2)		AC—750 W
9	Serial Digital Interface (SDI) PCI expansion ports (9) *SDI Card is only available for the Encoder/Transcoder*		TransAct *Encoder*/*Transcoder* SDI card Allows you to connect raw video and audio input feeds for encoding to the *Encoder*/*Transcoder*. 9 mini-BNC connectors are installed on the card as follows (from **right** to **left**): Reference In: This port is not used SDI1 — IN: SDI Input port #1 SDI1 — OUT: SDI Output port #1 (Not used) SDI2 — IN: SDI Input port #2 SDI2 — OUT: SDI Output port #2 (Not used) SDI3 — IN: SDI Input port #3 SDI3 — OUT: SDI Output port #3 (Not used) SDI4 — IN: SDI Input port #4 SDI4 — OUT: SDI Output port #4 (Not used)

a. Press to toggle the system ID on and off. If the system stops responding during POST, press and hold the system ID button for more than five seconds to enter BIOS progress mode.

Functional Block Diagram

Figure 4 provides a functional block diagram of the Dell R620 PowerEdge server

Figure 4. Functional Block



Warnings and Operational Specifications

Before You Begin

- Read these installation instructions before connecting the system to the power source.
- Only trained and qualified personnel should install or service the equipment.
- Installation of the equipment must comply with local and national electrical codes.
- This product requires short-circuit (overcurrent) protection. Install only in accordance with national and local wiring regulations.
- To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables.

FCC Class A Warning

Warning: *Equipment modification without the expressed consent of RGB Networks, Inc. may result in non-compliance with FCC requirements for Class A or Class B digital devices. This device is subject to FCC regulations, and therefore should not be modified. RGB is not responsible for correcting any equipment interference as a result of equipment modifications not approved by RGB.*

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. This unit is likely to cause harmful interference if used in a residential area, in which case the user will be required to take action in correcting the interference.

Environmental Requirements

The Ethernet ports of the AMS appliance and the file servers used for inbound and outbound content must be attached to a gigabit ethernet network. The AMS appliance has four 10/100/1000 Mbps Ethernet ports on the rear of the device.

Safety Warnings

Rack-Mounting Guidelines

Before rack-mounting the chassis ensure that the equipment rack complies with the following guidelines:

- The width of the rack measured between the two front mounting strips or rails must be 18.99 inches (482.4 mm).
- The depth of the rack measured from the rack mounting ears to any obstruction such as a rear rack door or wall must be at least 29.73 inches (700.5 mm).
- The rack must have sufficient vertical clearance to insert the chassis. The chassis height is as follows:
  - 1.68 inches (42.8 mm) (1RU)

Warning: *To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:*

- When mounting this unit be careful not to overbalance the rack. This unit should be mounted at the bottom of the rack if it is the only unit in the rack.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
- If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.

Note: *RGB recommends that you maintain a minimum air space of 6 inches (15 cm) between the chassis air vents and any other equipment or walls to prevent overheating.*

Supply Circuit Guidelines

Before rack-mounting the AMS, ensure that the supply circuit complies with the following guidelines:

- Voltage: 100 – 240 Volts AC.
- Frequency: 50 / 60 Hz
- Current: 10 amps AC **maximum** (for both PSUs)

Warning: *Care should be taken not to overload the supply circuit.*

Operating and Storage Guidelines

Please adhere to the following guidelines, as described in Table 4.

Table 4. Operating and Storage guidelines.

Item	Specification
POWER	
Wattage	495 W, 750 W, or 1100 W
Voltage	100-240 V AC, autoranging, 50/60 Hz
Coin-cell battery	3 V CR2032 Lithium coin cell
Current	10 A – 5 A (X 2) (with 750 W AC power supply unit)
ENVIRONMENTAL	
Temperature, ambient operating	50°F (10°C) to 95°F (35°C)
Temperature, ambient non-operating and storage	-40°F (-40°C) to 149°F (65°C)
Humidity (RH), ambient (non-condensing) operating	10% to 80%
Altitude (Operating)	–15.2 m to 3048 m (–50 to 10,000 ft) Note: For altitudes above 2950 ft, the maximum operating temperature is derated 1º F per 550 ft.
Altitude (Storage)	–15.2 m to 10,668 m (–50 ft to 35,000 ft)
PHYSICAL CHARACTERISTICS	
Dimensions (H x W x D)	1.68 x 18.99 x 29.73 inches (42.8 mm x 482.4 mm x 700.5 mm) Chassis requires 1RU rack space
Weight (max configuration)	40.96 lb (18.58 kg)
Weight (empty)	18.92 lb (8.58 kg)

Warning: *Only qualified and trained personnel should install or replace this equipment.*

Environmental Product Disposal Information

Dispose of this product in accordance with local and national disposal regulations (if any), including those governing the recovery and recycling of waste electrical and electronic equipment (WEEE).

Installing the AMS

This section describes how to physically rack and install the AMS at your site.

Overview

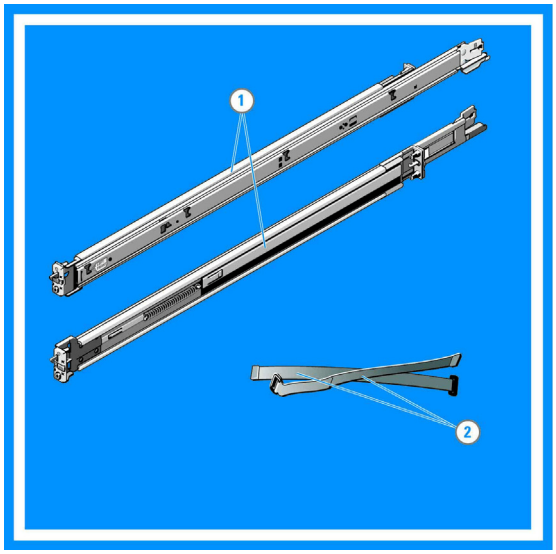
Installing the AMS consists of the following steps:

1. Installing the Sliding Rack Rails & Mounting the AMS;
2. Connecting the Power Supply Line Cords;
3. Connecting the Ethernet Cables to a gigabit (10/100/1000 Mbps) ethernet port set for auto-negotiation into your network switch;
   - RGB recommends using a gigabit ethernet switch for optimal performance.
4. Connecting to AMS for Console Access for initial setup of networking parameters;
   - After this initial configuration, further administration is performed through the GUI Management Console.
5. Installing the RGB Locking Bezel.

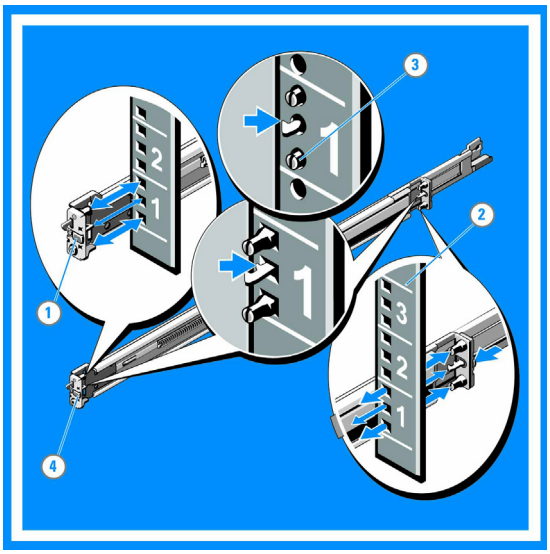
Installing the Sliding Rack Rails & Mounting the AMS

The AMS comes with one set of two (2) sliding rack rails. Following are the installation steps:

1. **Identifying the Rail Kit Contents**
   - Locate the components for installing the rail kit assembly:
     - Two A7 Dell ReadyRails II sliding rail assemblies **(1)**
     - Two hook and loop straps **(2)**

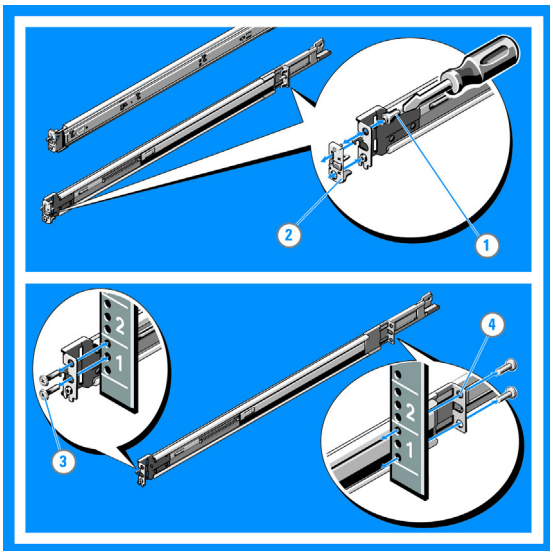


2. **Installing and Removing Tool-less Rails**
(Square Hole or Round Hole Racks)



- Position the left and right rail end pieces labeled **FRONT** facing inward and orient each end piece to seat in the holes on the front side of the vertical rack flanges **(1)**.
- Align each end piece in the bottom and top holes of the desired U spaces **(2)**.
- Engage the back end of the rail until it fully seats on the vertical rack flange and the latch clicks into place.
- Repeat these steps to position and seat the front-end piece on the vertical rack flange **(3)**.
- To remove the rails, pull the latch release button on the end piece midpoint and unseat each rail **(4)**.

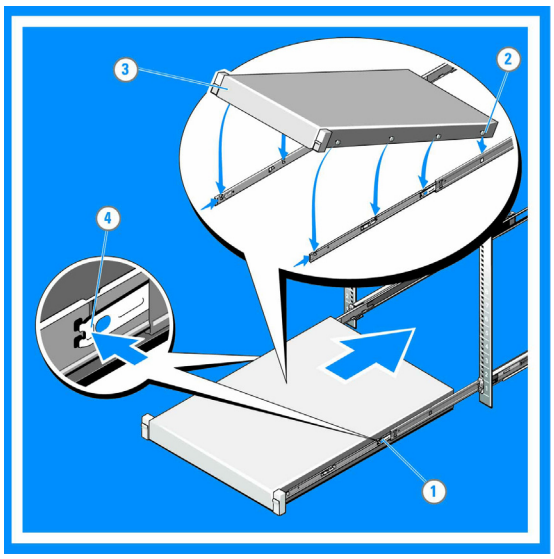
3. **Installing and Removing Tooled Rails**
(Threaded Hole Racks)



- Remove the pins from the front and rear mounting brackets using a flat-tipped screwdriver **(1)**.
- Pull and rotate the rail latch subassemblies to remove them from the mounting brackets **(2)**.
- Attach the left and right mounting rails to the front vertical rack flanges using two pairs of screws **(3)**.
- Slide the left and right back brackets forward against the rear vertical rack flanges and attach them using two pairs of screws **(4)**.

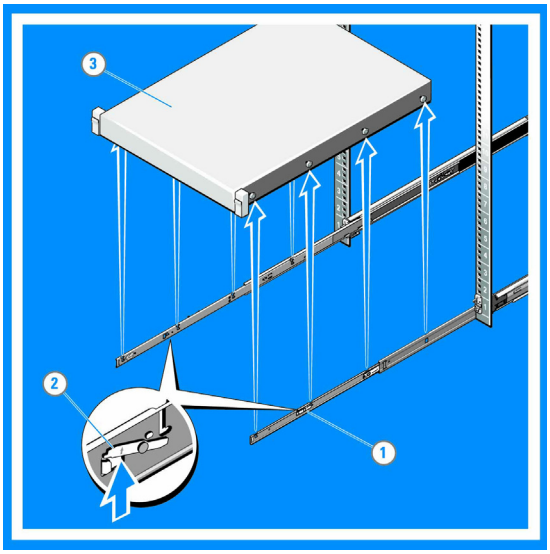
4. Installing the AMS in a Rack

- Pull the inner slide rails out of the rack until they lock into place **(1)**.
- Locate the rear rail standoff on each side of the system and lower them into the rear J-slots on the slide assemblies **(2)**.
- Rotate the system downward until all the rail standoffs are seated in the J-slots **(3)**.
- Push the system inward until the lock levers click into place.
- Press the slide-release lock buttons on both rails and slide the system into the rack **(4)**.

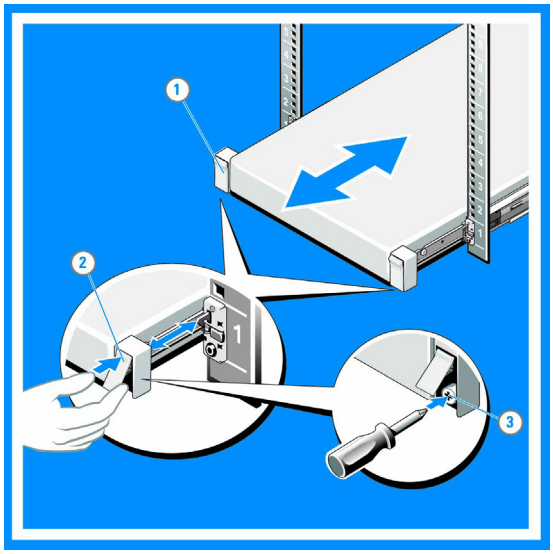


5. Removing the System From the Rack

- Locate the lock levers on the sides of the inner rails **(1)**.
- Unlock each lever by rotating it up to its release position **(2)**.
- Grasp the sides of the system firmly and pull it forward until the rail standoffs are at the front of the J-slots.
- Lift the system up and away from the rack and place it on a level surface **(3)**.



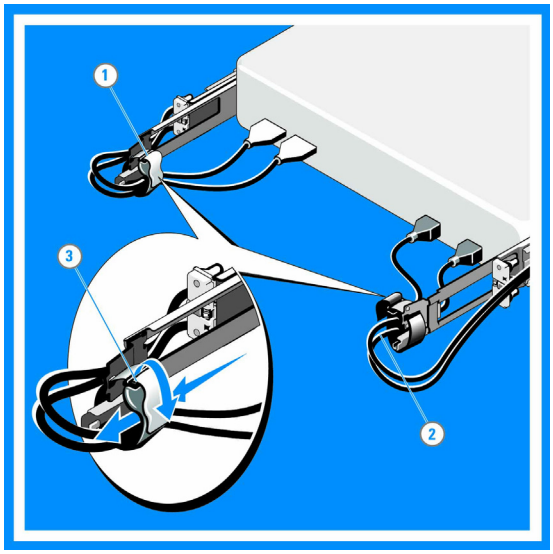
6. Engaging and Releasing the Slam Latch



NOTE: For systems not equipped with slam latches, secure the system using screws, as described in step 3 of this procedure.

- Facing the front, locate the slam latch on either side of the system **(1)**.
- The latches engage automatically as the system is pushed into the rack and are released by pulling up on the latches **(2)**.
- To secure the system for shipment in the rack or for other unstable environments, locate the hard-mount screw under each latch and tighten each screw with a #2 Phillips screwdriver **(3)**.

7. Routing the Cables



NOTE: If you did not order the optional CMA, use the two hook and loop straps provided in the rail kit to route the cables at the back of your system.

- Locate the outer CMA brackets on the interior sides of both rack flanges **(1)**.
- Bundle the cables gently, pulling them clear of the system connectors to the left and right sides **(2)**.
- Thread the hook and loop straps through the tooled slots on the outer CMA brackets on each side of the system to secure the cable bundles **(3)**.

Connecting the Cables to the AMS Appliance

There are three types of cables you can connect to the AMS appliance:

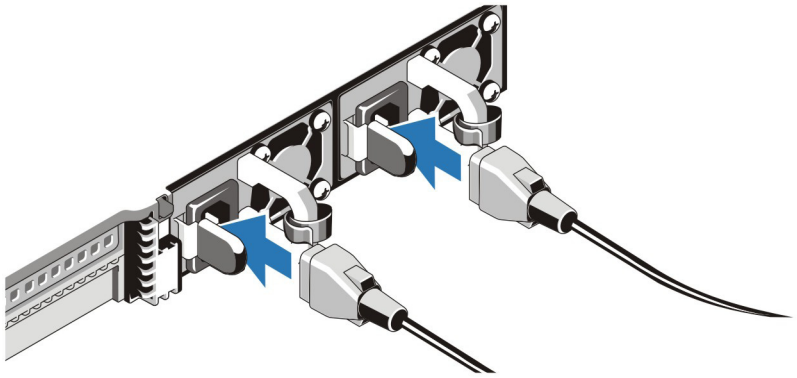
- Power supply cords (required, provided)
- Ethernet cable (required, not provided)
- Mini-BNC[4] for input audio and video to SDI ports (required and provided with SDI card)

Note: *Refer to Figure 3 on page 12 and Table 3 on page 12 for a diagram and description of all AMS rear panel connections.*

Connecting the Power Supply Line Cords

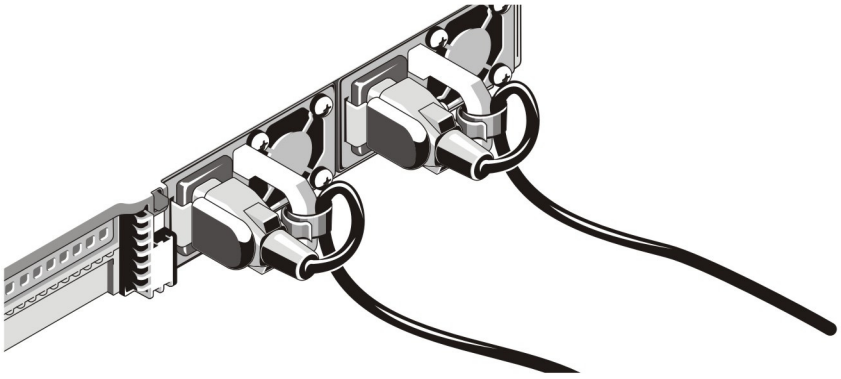
1. Plug the two (2) power supply line cords provided with your AMS appliance to the power supply modules located on the rear panel of the appliance. There are two power supply modules in the AMS appliance.

Figure 5. Connect power cords



2. Bend the system power cable(s), as shown below in Figure 6 and attach to the cable strap.

Figure 6. Attach cable straps



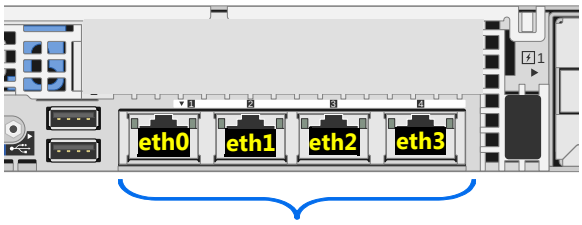
3. Plug the other end of the power cable(s) into a grounded electrical outlet or a separate power source such as an uninterruptable power supply (UPS) or a power distribution unit (PDU).

4. Applies only for a TransAct *Encoder/Transcoder* product.

Connecting the Ethernet Cables

1. Connect up to four (4) Ethernet 10/100/1000 cables to the Ethernet ports on the rear of the box.

Figure 7. Ethernet cable connection.



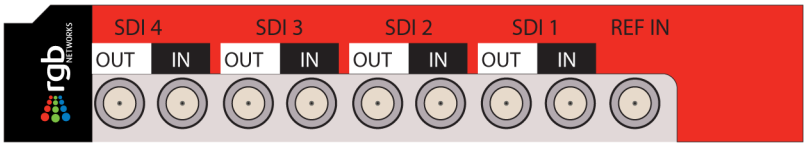
- You must connect at least one Ethernet cable to at least one port (eth0) in order to manage the system.

Note: *The AMS appliance and any file server(s) it uses must be connected to a gigabit ethernet network.*

Connecting the SDI Input Feeds (for a TransAct *Encoder/Transcoder* only)

1. If your AMS contains the TransAct *Encoder/Transcoder* application with optional SDI encoding integration, connect up to four (4) of the provided BNC Female-to-DIN 1.0/2.3 RG-59 SDI cables.

Figure 8. SDI Input connections.



Mini-BNC, Male Input

Mini-BNC Female to DIN 1.0/2.3 RG-59 SDI Cable - 1'

Connecting to AMS for Console Access

Connecting to the AMS console via a keyboard and monitor or a terminal emulation program provides the following benefits:

- Enables local access to the AMS application software when access to the Web-based GUI is not available;
- Acts as backup access to the TransAct software if there are network problems.
- Provides the ability to statically configure the IP address instead of the default DHCP method.

Note: *RGB recommends against DHCP assignment for all live network systems. All TransAct and RGB Director applications should be configured with static IP addresses.*

Connection Options For Console Access

There are two ways to connect to the AMS console:

- Connect with a USB Keyboard and VGA Monitor;
  —OR—
- Connect with a serial cable.

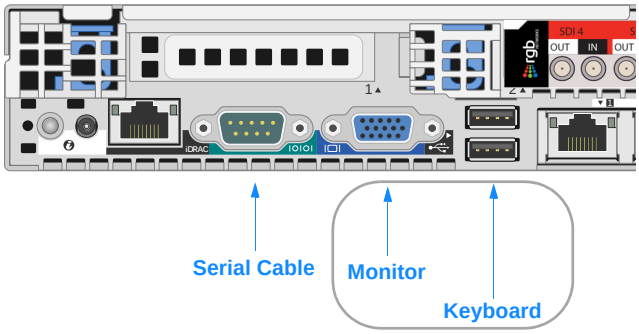
To connect a USB keyboard and VGA monitor to the AMS, use the VGA and USB ports on the *back* of the AMS appliance, as shown in Figure 9.

To connect a serial cable to the AMS, connect a null modem serial cable from a computer to the serial port on the AMS rear panel. See Figure 9.

- On the computer, open a terminal emulation program such as *Hyperterminal* or *Putty*, and use the following settings to connect:

Baud	115200
Data bits	8
Flow control	None
Stop bits	1

Figure 9. USB + VGA & Serial Connection.

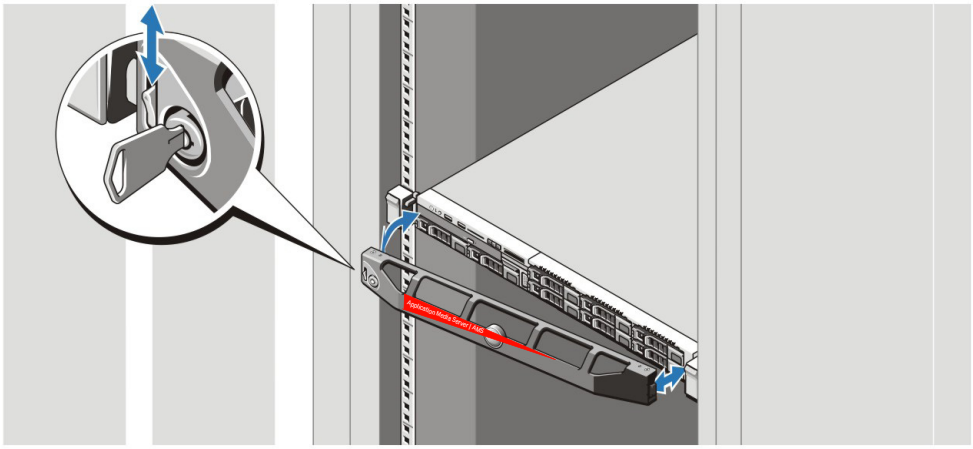


Installing the RGB Locking Bezel

After you have connected all necessary cables, RGB recommends that you install the locking bezel over the front panel of the AMS chassis (included in your shipment). The locking bezel provides security against unauthorized access to the AMS, such as hard drive removal.

1. Follow the diagram below to insert and lock the bezel:

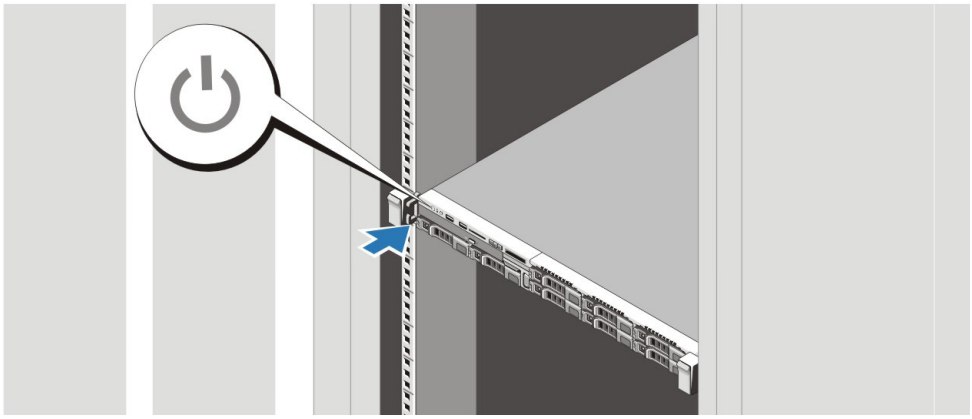
Figure 10. Locking bezel.



Turning the AMS Appliance On or Off

To turn the AMS appliance on or off, press the **Power/Sleep** button located on the control panel on the front of the chassis.

Figure 11. Press the Power/Sleep button on the AMS appliance.



Performing Initial Configuration for the AMS Appliance

By default, the TransAct or RGB *Director* software is configured to obtain an IP address dynamically via DHCP. **RGB recommends you set the IP address statically.**

Configure a Static IP and Network Parameters

Initial static IP configuration of the AMS can be performed in one of two ways:

- Using the Command Line Interface (CLI) from the system console.
- Using the DHCP-assiged IP address for GUI access

CLI Method

1. Connect to the AMS appliance using one of the two connection methods described in the section titled, "Connecting to AMS for Console Access" on page 22.

Note: *You must be logged into an account with **admin** permissions to perform this step (default account is **admin**).*

2. When prompted to login, enter the administrative username: **admin**.
3. Enter the default password: **ripcode!**
4. Change to the system tree of CLI commands by typing **system** and pressing the [Enter] key.
5. Configure the IP address using the **ip address** command syntax as shown below (where the bold lettering is the command to enter):

```
admin (system)> ip address static [IP address] mask [network mask] gate-
way [Gateway IP] iface 0
```

For example, this command sets the static IP, netmask, and gateway on Interface 0:

```
admin (system)> ip address static 10.10.10.221 mask 255.255.255.0 gateway
10.10.10.1 iface 0
```

Note: *When this command is issued, the IP address change is stored and will take effect when you execute the* **`ip restart`** *command, or reboot the AMS. Once you reboot the AMS, you will need to login to the system via its Web-based GUI client using the new IP address.*

Caution! *For RGB Director applications, you must perform additional steps to complete IP and network configuration, otherwise connectivity problems may arise. To complete configuration, follow the instructions in the section titled, "Completing Static IP and Network Configuration for RGB Director" on page 28.*

DHCP Method

By default, the AMS is configured to use DHCP for obtaining its IP address, subnet mask, and default gateway address. If you wish to use the TransAct or RGB *Director* GUI to configure a static IP address after it has obtained its addressing via DHCP, there is no need to access the command line interface (CLI). Simply open a Web browser[5] to the IP address from a remote administrative computer with access to the AMS device's subnet and use the following login credentials for initial access:

```
Login: admin
Password: ripcode!
```

5. For RGB Director applications, you must use a Firefox browser for HTML GUI access.

Completing AMS Configuration

Once you have installed and wired the AMS, and assigned it a static IP address, you are now ready to complete the system configuration through its Web-based application. The sections below describe initial login access for both TransAct and RGB *Director* applications.

Logging in to a TransAct System for Configuration

If your AMS appliance has been loaded with a TransAct application—*Packager, Encoder/Transcoder, Transcoder,* or *Commander*—system configuration is performed through the TransAct WebGUI Management Console, an example of which is shown in Figure 12.

To log in to a TransAct application device, proceed as follows:

1. Point your Web browser to the AMS IP address (as defined in "Configure a Static IP and Network Parameters" on page 25).

   Figure 12 shows an example of a TransAct *Packager* GUI Management Console login window.

   Figure 12. AMS appliance Login menu (*Packager* shown)

2. Enter the default administrative Username: **admin**.
3. Enter the default administrative Password: **ripcode!**
4. Click the **Login** button.
5. Refer to the *User Guide* of your TransAct software application for system configuration and usage.

Logging in to an RGB *Director* System for Configuration

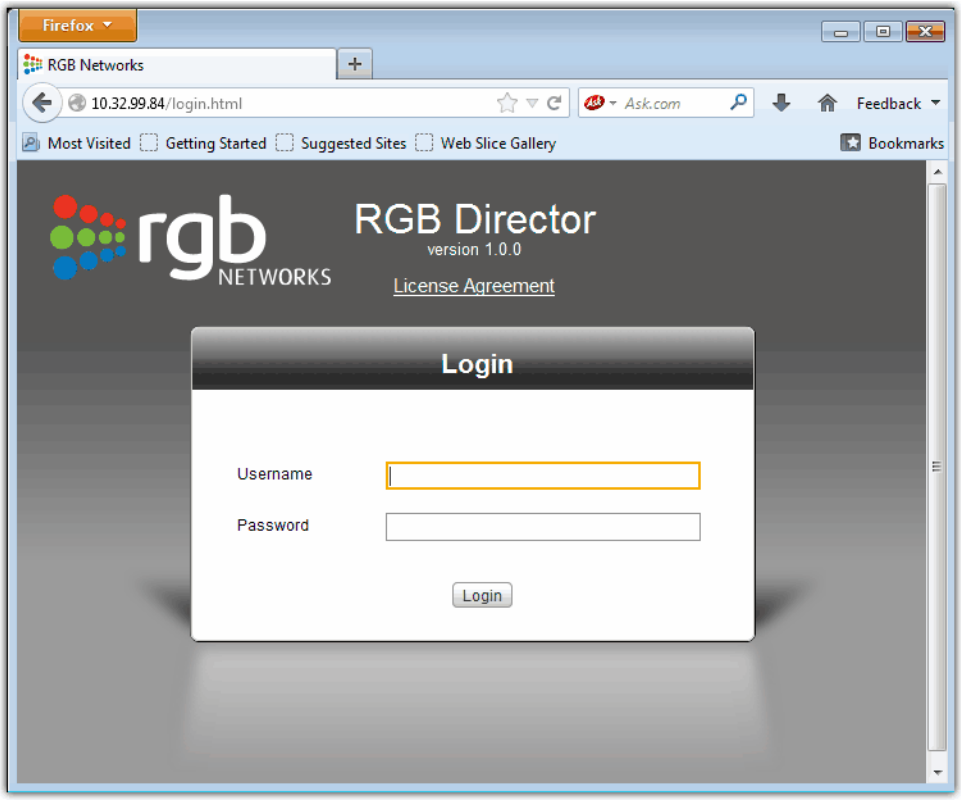
If your AMS appliance has been loaded with RGB *Director*, system configuration is performed through *Director's* HTML GUI via a *Firefox* Web browser, an example of which is shown in Figure 13.

To log in to an RGB *Director* system, proceed as follows:

1. Use a *Firefox* browser to point to the RGB *Director* IP address (as defined in "Configure a Static IP and Network Parameters" on page 25).

   Figure 13 shows an example of an RGB Director HTML GUI login window.

Figure 13. RGB Director Login window



2. Enter the default administrative Username: **admin**.
3. Enter the default administrative Password: **ripcode!**
4. Click the **Login** button.

Completing Static IP and Network Configuration for RGB *Director*

If you configured the RGB Director's IP and network parameters via the CLI, you need to perform additional configuration steps in the HTML GUI to ensure changes are populated in Director's database.

To complete IP and network configuration, proceed as follows:

1. Using the new static IP address, log in to *Director*'s GUI from a *Firefox* Web browser on a remote or local administrative computer.

   Login: **`admin`**
   Password: **`ripcode!`**

2. Click the **Devices** tab and navigate to the following menu: **Devices --> Network**.

3. Click the "**+**" box to expand the **[Director**_*ip-address*]** container and click through to the **Interfaces** container expansion.

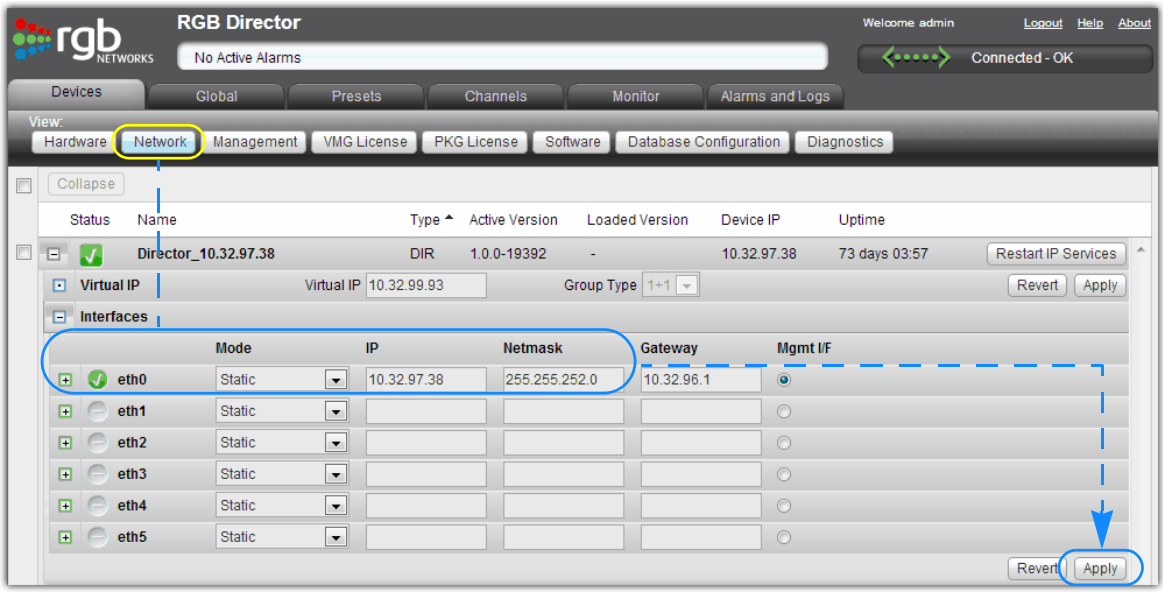
Set Mode, IP, and Netmask

4. In the **eth0** entry, select or confirm the **Mode** field is set to **Static**.

5. Enter the same **IP** and **Netmask** addresses that you entered via the CLI in **step 5 on page 25.**

6. Click the **Apply** button to save the IP and Netmask settings.

   This figure shows the **Devices --> Network --> Interfaces** --> **eth0** container settings for Static IP and Netmask:



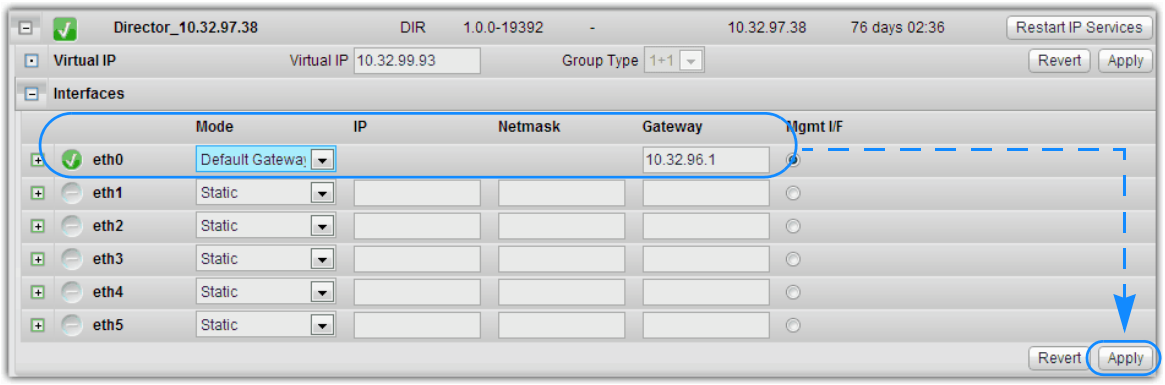
Set Default Gateway

7. In the same **eth0** entry, click the drop-down arrow in the **Mode** field and select **Default Gateway**.

8. Enter the same **Gateway** IP address that you entered via the CLI in **step 5 on page 25.**

9. Click the **Apply** button to save the Default Gateway settings.

This figure shows the **eth0** settings when **Default Gateway** is selected from the **Mode** field:



Set Host Name

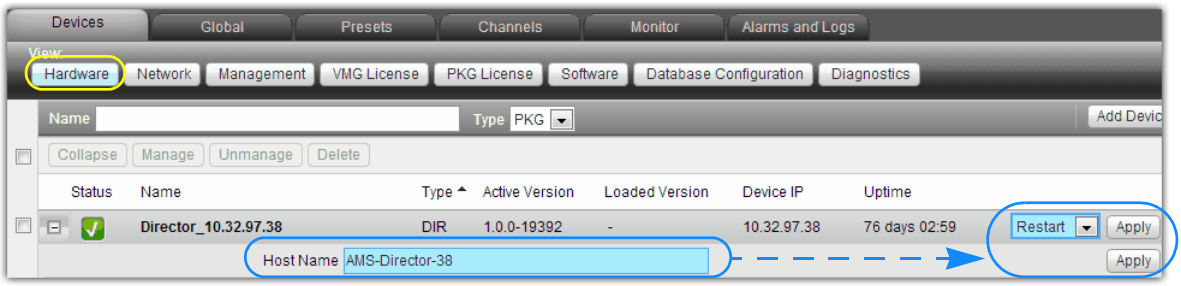
10. Click the **Devices** tab and navigate to the following menu: **Devices --> Hardware**.

11. Click the "**+**" box to expand the **[Director**_*ip-address*]** container.

12. Enter the desired host name (up to 255 characters) in the **Host Name** field.

13. Click **Apply**.

This figure shows the **Host Name** and **Restart** settings in the **Devices --> Hardware** menu:



Restart *Director* Services

14. In the same window, select the **Restart** option to restart *Director*'s services and effect all IP parameter changes immediately (IP address, Netmask, Default Gateway, and Host Name).

15. Click **Apply**.

Once you have configured *Director*'s IP address and host name parameters, you may configure all remaining system parameters. Refer to the *Director User Guide, Release 1.0* for instructions.

Note: *To prepare VMG2 devices for Director management, refer to the following document:* ***VMG Gen2 Safe Mode Guide*** *(Part number: 250-0217-01, Rev A).*

CHAPTER 3

LCD Screen & Troubleshooting

This chapter provides information on the LCD screen located on the front panel of the AMS, contact information for RGB Customer Support, and additional links to Dell documentation resources.

In This Chapter:

AMS LCD Screen

This section describes configuration and viewing options from the LCD screen of the AMS. There are three basic menus involved: **Home** screen, **Setup** menu, and **View** menu.

Home Screen

The LCD Home screen on the front panel of the AMS displays user-configurable information about the system. This screen is displayed during normal system operation when there are no status messages or errors. When the system is in standby mode, the LCD backlight turns off after five minutes of inactivity if there are no error messages.

Below is a description of the navigation buttons and their usage:

page 11	LCD menu buttons		Allows you to navigate the control panel LCD menu. **Left** button (**<**) —Moves the cursor back in one-step increments **Select** button (✔) —Selects the menu item highlighted by cursor **Right** button (**>**) —Moves the cursor forward in one-step increments. During message scrolling: • Press once to increase scrolling speed • Press again to stop • Press again to return to default scrolling speed • Press again to repeat the cycle

Getting to the Home Screen

Press one of the three navigation buttons (Left, Select, or Right) to view the **Home** screen.

To navigate to the **Home** screen from another menu, continue to select the *up arrow* until the **Home** icon is displayed, and then select the **Home** icon.

From the **Home** screen, press the *Select* button to enter the main menu.

Setup Menu

When you select an option in the **Setup** menu, you must confirm the option before proceeding to the next action.

Table 5. AMS LCD - Setup Menu

Option	Description
iDRAC	Sets the network mode of the iDRAC7 management port. ***Note***: the iDRAC setting on the LCD panel does *not* set the IP address of the Eth0 management port for TransAct application management. To set the IP address of your TransAct appliance, you must access the AMS console from the rear of the AMS as described in "Connecting to AMS for Console Access" on page 22.
Set error	Select **SEL** to display LCD error messages in a format that matches the IPMI description in the SEL. This is useful when trying to match an LCD message with an SEL entry. Select **Simple** to display LCD error messages in a simplified user-friendly description. See System Error Messages for a list of messages in this format.
Set home	Select the default information to be displayed on the LCD Home screen. See **View Menu** to see the options and option items that can be set as the default on the Home screen.

View Menu

When you select an option in the **View** menu, you must confirm the option before proceeding to the next action.

Table 6. AMS LCD - View Menu

Option	Description
iDRAC	Displays the **IPv4** or **IPv6** addresses for the iDRAC7. ***Note***: the iDRAC setting on the LCD panel does *not* set the IP address of the Eth0 management port for TransAct application or RGB *Director* management. To set the IP address of your TransAct or RGB *Director* appliance, you must access the AMS console from the rear of the AMS as described in "Connecting to AMS for Console Access" on page 22.
MAC	Displays the MAC addresses for **iDRAC**, **iSCSI**, or **Network** devices.
Name	Displays the name of the **Host**, **Model**, or **User String** for the system
Number	Displays the **Asset tag** or the **Service tag** for the system.

Table 6. AMS LCD - View Menu

Option	Description
Power	Displays the power output of the system in BTU/hr or Watts. The display format can be configured in the **Set home** submenu of the **Setup** menu.
Temperature	Displays the temperature of the system in Celsius or Fahrenheit. The display format can be configured in the **Set home** submenu of the **Setup** menu.

Contacting RGB Customer Support

RGB Customer Support is available 24x7. If after reviewing this setup guide you still require assistance, please contact RGB Customer Support via any of the following methods:

Table 7. Contacting RGB Customer Support

Method	Contact Information
E-mail	support@rgbnetworks.com
Internet	http://www.rgbnetworks.com/support/rgb-customer-portal.php
Inside North America	1.877.RGB.NETW // (1.877.742.6389)
Outside the North America	+1.408.701.2800

Additional Documentation Resources

Additional documentation for the Dell R620 PowerEdge Enterprise Server may be found at the following link:

http://www.dell.com/support/Manuals/us/en/19/product/poweredge-r620