8e6 Technologies

8e6® R3000 | Internet Filter

QUICK START
GUIDE

Model: R3000

HL-005-001, HL-015-001, SL-004-001, SL-014-001, MSA-004-001

Release: 2.2.00 / Updated: 03.23.09

8E6 R3000 INTERNET FILTER QUICK START GUIDE

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Part# R3000ul-QSG-090323

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R3000 INTERNET FILTER INTRODUCTION

Thank you for choosing to evaluate the 8e6 Technologies R3000 Internet Filter. The R3000 tracks end users' online activity, and can be configured to block specific Web sites or service ports, thereby protecting your organization against lost productivity, network bandwidth issues, and possible legal problems that can result from the misuse of Internet resources. This product also features expansive library categories, instant message and peer-to-peer blocking, user authentication, and intuitive screens and fields for ease of use when configuring and maintaining the server, as well as managing user and group filtering profiles.

The R3000 HL and SL server models include RAID technology for fault tolerance and high performance.

Quick setup procedures—to implement the best filtering practices for the scenarios described in the first paragraph—are included in the Best Filtering Practices section that follows the Conclusion of this guide.

About this Document

This document is divided into the following sections:

- **Introduction** - This section is comprised of an overview of the R3000 product and how to use this document

- **Service Information** - This section provides 8e6 Technologies contact information

- **Preliminary Setup Procedures** - This section includes instructions on how to physically set up the R3000 in your network environment

- **Install the Server** - This section explains how to configure the R3000 for filtering

- **Conclusion** - This section indicates that the quick start steps have been completed

- **Best Filtering Practices** - This section includes a chart of library categories organized into Threat Class Groups, accompanied by filtering scenarios and directions for implementing the best filtering practices to secure your network, prevent excessive bandwidth usage, and increase productivity

- **LED Indicators and Buttons** - This section explains how to read LED indicators and use LED buttons for troubleshooting the unit

- **Regulatory Specifications and Disclaimers** - This section cites safety and emissions compliance information for the R3000 models referenced in this document

- **Index** - An alphabetized list of some topics included in this document

Conventions Used in this Document

The following icons are used throughout this document to call attention to important information pertaining to handling, operation, and maintenance of the server; safety and preservation of the equipment, and personal safety:

NOTE: The "note" icon is followed by additional information to be considered.

WARNING: The "warning" icon is followed by information alerting you to a potential situation that may cause damage to property or equipment.

CAUTION: The "caution" icon is followed by information warning you that a situation has the potential to cause bodily harm or death.

IMPORTANT: The "important" icon is followed by information 8e6 recommends that you review before proceeding with the next action.

The "book" icon references the R3000 User Guide. This icon is found in the Best Filtering Practices section of this document.

SERVICE INFORMATION

The user should not attempt any maintenance or service on the unit beyond the procedures outlined in this document.

Any initial hardware setup problem that cannot be resolved at your internal organization should be referred to an 8e6 Technologies solutions engineer or technical support representative.

8e6 Corporate Headquarters (USA)

Local	:	714.282.6111
Domestic US	:	1.888.786.7999
International	:	+1.714.282.6111

8e6 Taiwan

Taipei Local	:	2397-0300
Domestic Taiwan	:	02-2397-0300
International	:	886-2-2397-0300

Procedures

When calling 8e6 Technologies regarding a problem, please provide the representative the following information:

• Your contact information.

• Serial number or original order number.

• Description of the problem.

• Network environment in which the unit is used.

• State of the unit before the problem occurred.

• Frequency and repeatability of the problem.

• Can the product continue to operate with this problem?

• Can you identify anything that may have caused the problem?

PRELIMINARY SETUP PROCEDURES

Unpack the Unit from the Carton

Inspect the packaging container for evidence of mishandling during transit. If the packaging container is damaged, photograph it for reference.

Carefully unpack the unit from the carton and verify that all accessories are included. Save all packing materials in the event that the unit needs to be returned to 8e6 Technologies.

The carton should contain the following items:

- 1 R3000 unit
- 1 AC Power Cord, 2 AC Power Cords for HL servers
- 1 Serial Port Cable
- 1 CAT-5E Crossover Cable
- Rack Mount Brackets (2)
- 1 End User License Agreement (EULA)
- 1 envelope containing a CD-ROM with PDFs of the R3000 User Guide and R3000 Authentication User Guide.

  The latest version of the R3000 User Guide and R3000 Authentication User Guide can be obtained from our Web site at **http://www.marshal8e6.com/Support/R3000/documentation.asp**

NOTES: A coupler is included in the carton if a three-foot CAT-5E crossover cable is packaged with your unit instead of a 14-foot CAT-5E crossover cable. For HL and SL servers, 1 bezel to be installed on the front of the chassis also is included, as well as 1 spare parts kit. For HL servers, this kit contains a hard drive and power supply. For SL servers, this kit contains a hard drive.

Inspect the server and accessories for damage. If the contents appear damaged, file a damage claim with the carrier immediately.

WARNING: To avoid danger of suffocation, do not leave plastic bags used for packaging the server or any of its components in places where children or infants may play with them.

Select a Site for the Server

The server operates reliably within normal office environmental limits. Select a site that meets the following criteria:

- Clean and relatively free of excess dust.

- Well-ventilated and away from sources of heat, with the ventilating openings on the server kept free of obstructions.

- Away from sources of vibration or physical shock.

- Isolated from strong electromagnetic fields and noise caused by electrical devices such as elevators, copy machines, air conditioners, large fans, large electric motors, radio and TV transmitters, and high-frequency security devices.

- Access space provided so the server power cord can be unplugged from the power supply or the wall outlet—this is the only way to remove the AC power cord from the server.

- Clearance provided for cooling and airflow: Approximately 30 inches (76.2 cm) in the back and 25 inches (63.5 cm) in the front.

- Located near a properly earthed, grounded, power outlet.

Rack Mount the Server

Rack Setup Precautions

⚠️ **Warning:**

Before rack mounting the server, the physical environment should be set up to safely accommodate the server. Be sure that:

- The weight of all units in the rack is evenly distributed. Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

- The rack will not tip over when the server is mounted, even when the unit is fully extended from the rack.

- For a single rack installation, stabilizers are attached to the rack.

- For multiple rack installations, racks are coupled together.

- Reliable earthing of rack-mounted equipment is maintained at all times. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

- A power cord will be long enough to fit into the server when properly mounted in the rack and will be able to supply power to the unit.

- The connection of the server to the power supply will not overload any circuits. Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

- The server is only connected to a properly rated supply circuit. Reliable earthing (grounding) of rack-mounted equipment should be maintained.

- The air flow through the server's fan or vents is not restricted. Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

- The maximum operating ambient temperature does not exceed 104°F (40°C). If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.

⚠️ *WARNING: Extend only one component at a time. Extending two or more components simultaneously may cause the rack to become unstable.*

Rack Mount Instructions for HL Servers

Rack Setup Suggestions

• Determine the placement of each component in the rack before you install the rails.
• Install the heaviest server components on the bottom of the rack first, and then work up.

Identify the Sections of the Rack Rails

You should have received two rack rail assemblies with the 8e6 server unit. Each of these assemblies consists of two sections: An inner fixed chassis rail that secures to the unit (A), and an outer fixed rack rail that secures directly to the rack itself (B). Two pairs of short brackets to be used on the front side of the outer rails are also included.
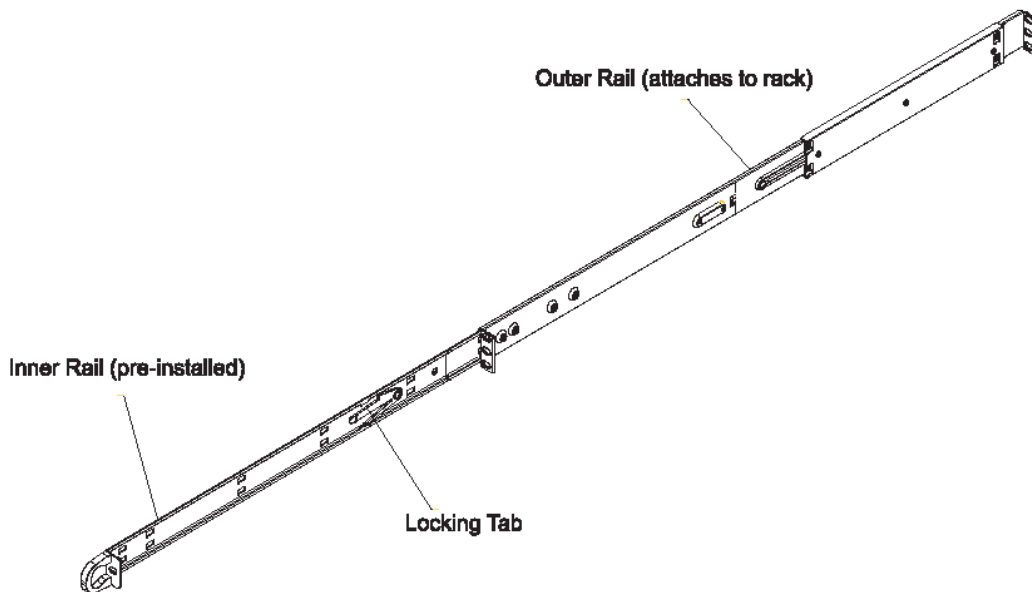
Install the Inner Rails

Both the left and right side inner rails have been pre-attached to the chassis. Proceed to the next step.

Install the Outer Rails

Begin by measuring the distance from the front rail to the rear rail of the rack. Attach a short bracket to the front side of the right outer rail and a long bracket to the rear side of the right outer rail. Adjust both the short and long brackets to the proper distance so that the rail can fit snugly into the rack. Secure the short bracket to the front side of the outer rail with two M4 screws and the long bracket to the rear side of the outer rail with three M4 screws. Repeat these steps for the left outer rail.

Locking Tabs: Both chassis rails have a locking tab, which serves two functions. The first is to lock the server into place when installed and pushed fully into the rack, which is its normal position. Secondly, these tabs also lock the server in place when fully extended from the rack. This prevents the server from coming completely out of the rack when you pull it out for servicing.
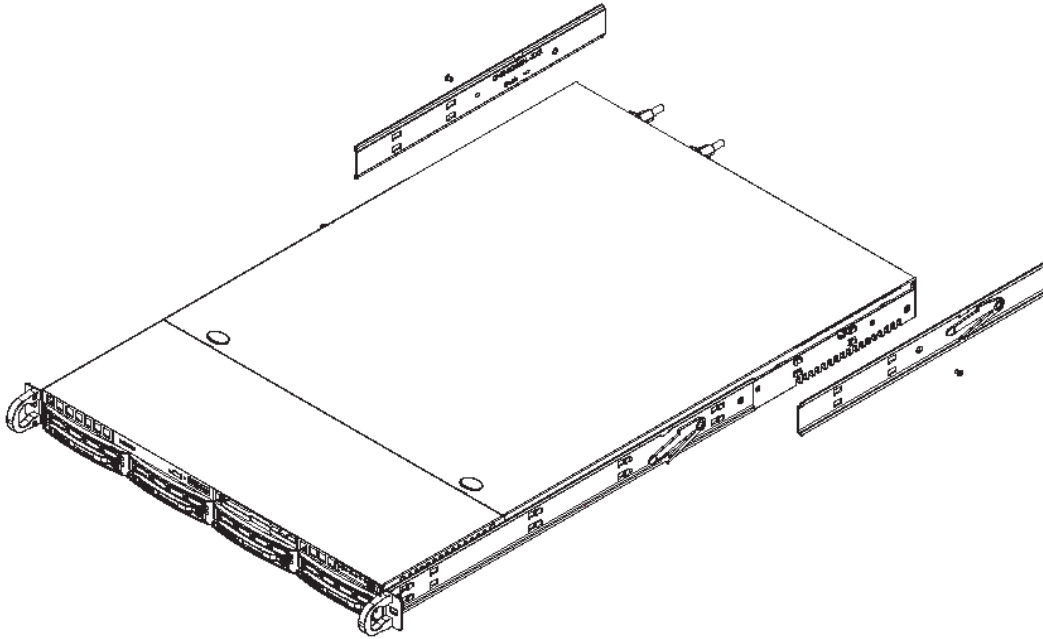
Install the Server into the Rack

You should now have rails attached to both the chassis and the rack unit. The next step is to install the server chassis into the rack. Do this by lining up the rear of the chassis rails with the front of the rack rails. Slide the chassis rails into the rack rails, keeping the pressure even on both sides (you may have to depress the locking tabs when inserting).

When the server has been pushed completely into the rack, you should hear the locking tabs "click."
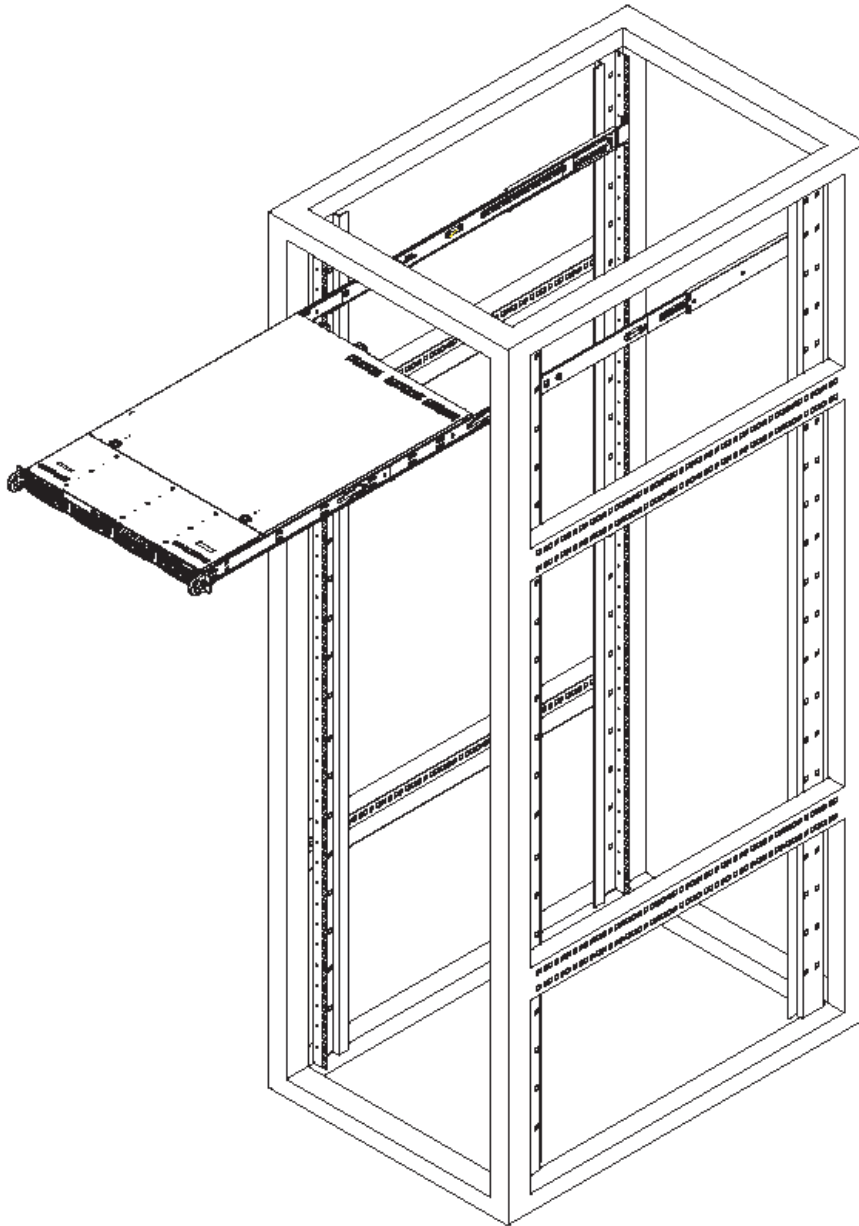
Install the Server into a Telco Rack

If you are installing the 8e6 server unit into a Telco type rack, use two L-shaped brackets on either side of the chassis (four total). First, determine how far follow the server will extend out the front of the rack. A larger chassis should be positioned to balance the weight between front and back. If a bezel is included on your server, remove it. Then attach the two front brackets to each side of the chassis, then the two rear brackets positioned with just enough space to accommodate the width of the telco rack. Finish by sliding the chassis into the rack and tightening the brackets to the rack.
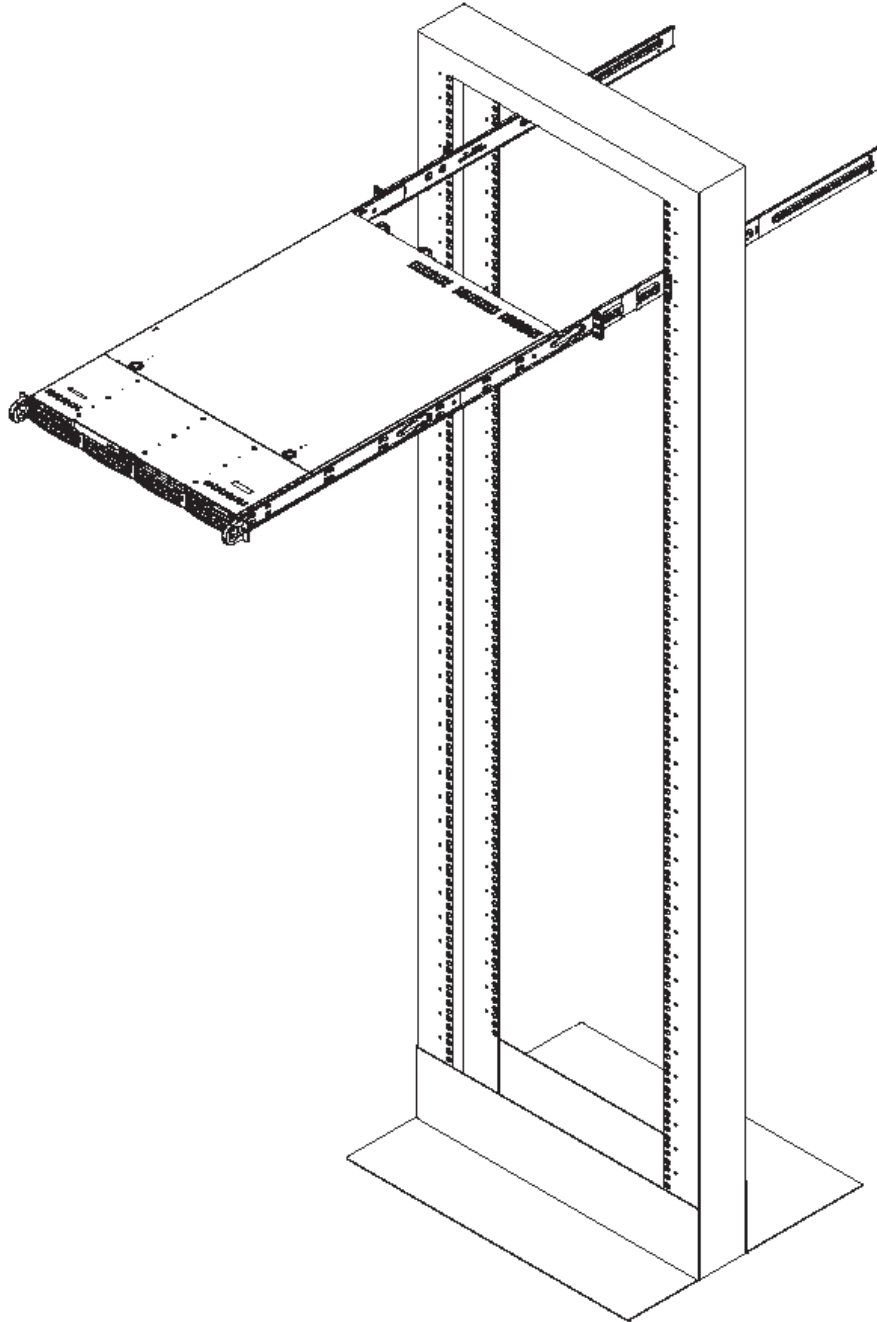
Rack Mount Instructions for SL Servers

Rack Setup Suggestions

- Determine the placement of each component in the rack before you install the rails.
- Install the heaviest server components on the bottom of the rack first, and then work up.

Install the Inner Slides

1. Locate the right inner slide, (the slide that will be used on the right side of chassis when facing the front panel of the chassis).

2. Align the four (4) square holes on the right inner slide against the hooks on the right side of the chassis as show below on the left.

3. Securely attach the slide to the chassis with two M4 flat head screws and repeat the steps 1-3 to install the left inner slide to the left side of the chassis.

Four(4) hooks on the right side of the chassis

Four 4 square holes on the right inner slide

two M4 screws

Slide the long bracket into the short bracket

Adjust the distance between the brackets
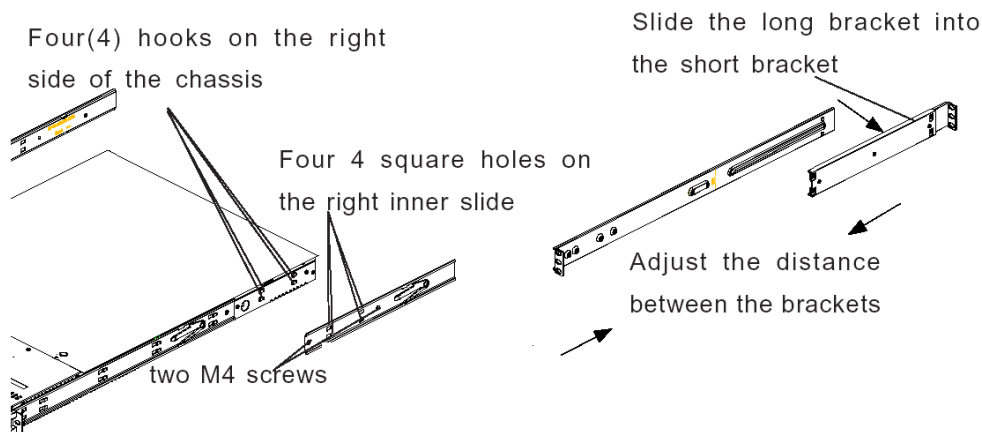
Install the Outer Slides

1. Measure the distance from the front rail of the rack to the rear rail of the rack.

2. Attach a short bracket to the rear side of the right outer slide, and a long bracket to the front side of the right outer slide as shown above on the right.

3. Adjust the short and long brackets to the proper distance so that the chassis can snugly fit into the rack.

4. Secure the slides to the cabinet with screws.

5. Repeat steps 1-4 for the left outer slide.

Install the Slide Assemblies to the Rack

1. After you have installed the short and long brackets to the outer slides, you are ready to install the whole slide assemblies (outer slides with short and long brackets attached) to the rack. (See the previous page.)

2. Use M5 screws and washers to secure the slide assemblies into the rack as shown below:

Slide assemblies (-outer slides with long & short brackets attached)

Secure the Slide assemblies to the rack with screws and washers

M5 screws & washers
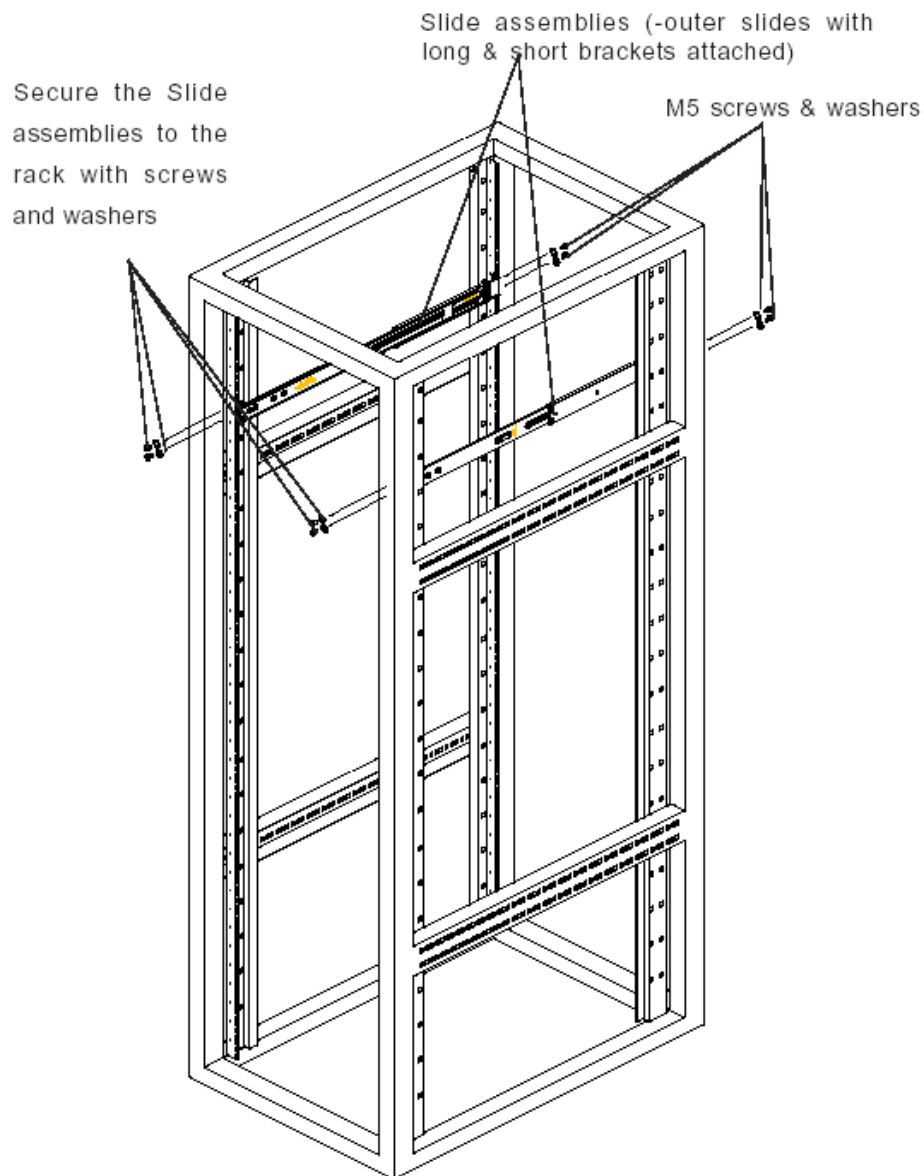
Install the Chassis into the Rack

1. Push the inner slides, which are attached to the chassis, into the grooves of the outer slide assemblies that are installed in the rack as shown below:

Inner slides

Grooves of the outer slide assemblies
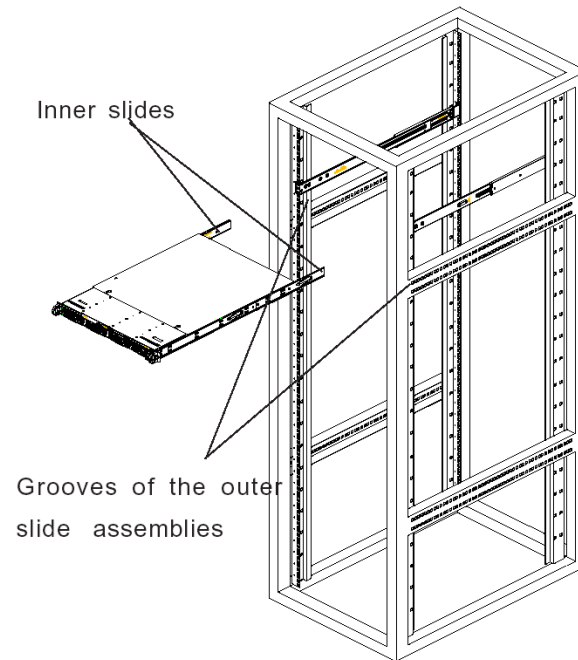
2. Push the chassis all the way to the back of the outer slide assemblies as shown below:

Push the chassis into the back of the outer slide assemblies

Rack Mount Instructions for MSA Servers

Optional: Install the Chassis Rails

NOTE: If your chassis does not come with chassis rails, please follow the procedure listed on the last page of this sub-section to install the unit directly into the rack.

CAUTION: Please make sure that the chassis covers and chassis rails are installed on the chassis before you install the chassis into the rack. To avoid personal injury and property damage, please carefully follow all the safety steps listed below:
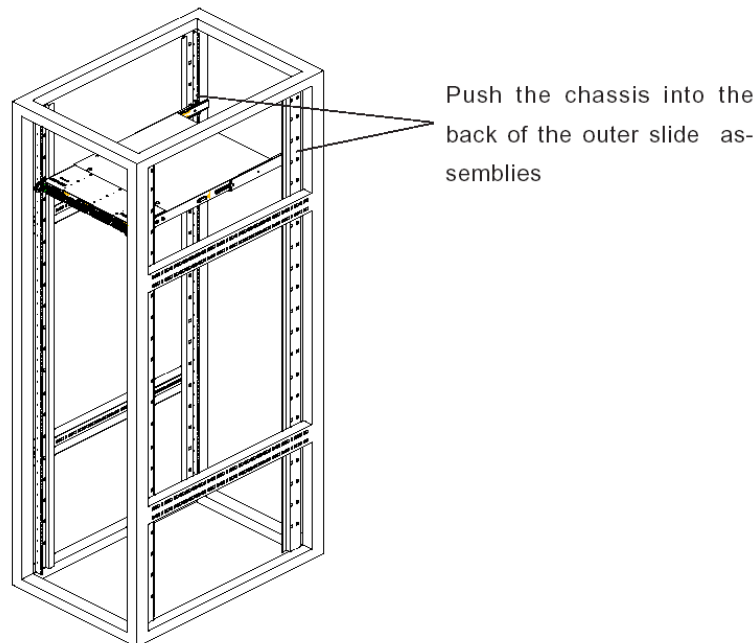
Before installing the chassis rails:
- *Close the chassis using the chassis cover.*
- *Unplug the AC power cord(s).*
- *Remove all external devices and connectors.*

1. Included in the shipping package are a pair of rail assemblies. In each rail assembly, locate the inner rail and the outer rail.

2. Press the locking tab to release the inner rail from its locking position and pull out the inner rail from the rail assembly.

NOTE: The inner rails are to be attached to the chassis and the outer rails are to be installed in the rack.

Outer rail (to be installed in the rack)

Pull out the Inner rail (to be attached on the chassis)

Press the Locking Tab
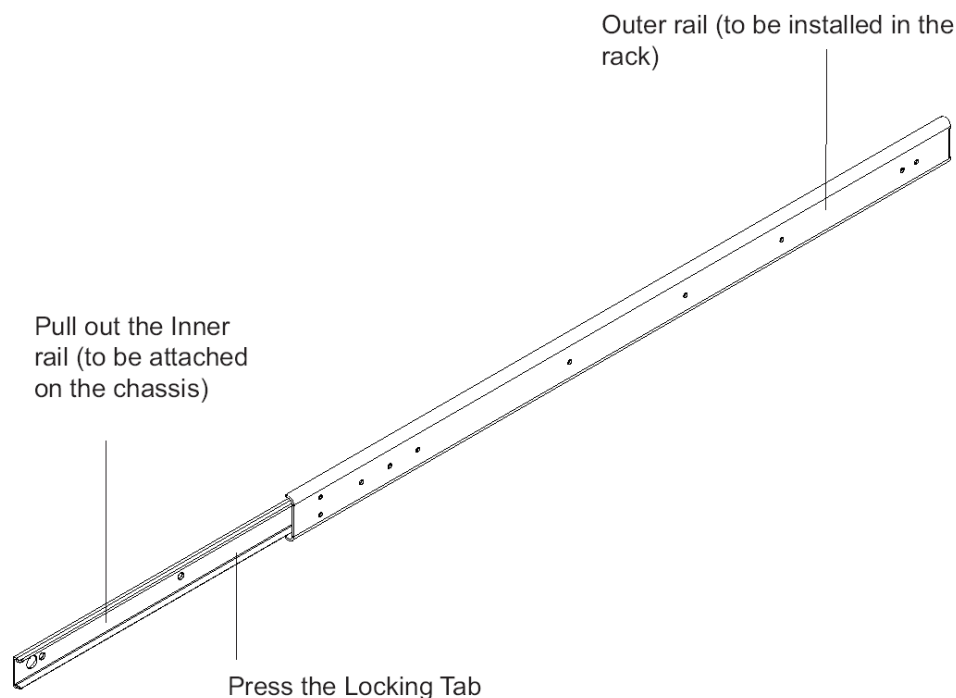
3. Locate the three holes on each side of the chassis and locate the three corresponding holes on each of the inner rail.
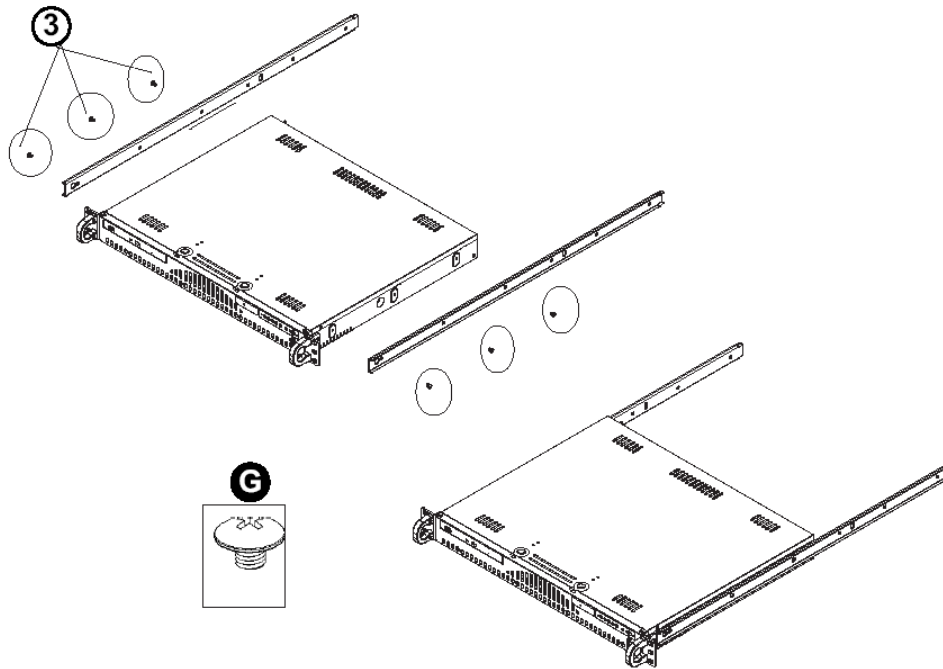
4. Attach an inner rail to each side of the chassis and secure the inner rail to the chassis by inserting three Type G screws through the holes on each side of the chassis and the inner rail. (See the diagram below for a description of the Type G screw.)
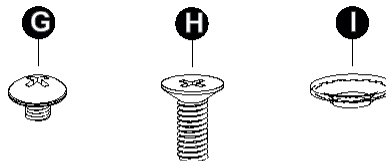
G. Round head M4 x 4 mm [0.157]

H. Flat head M5 x 12 mm [0.472]

I. Washer for M5

5. Repeat the above steps to install the other rail on the chassis.

Optional: Install the Traditional UP Racks

After you have installed the inner rails on the chassis, you are ready to install the outer rails of rail assemblies to the rack.

NOTE: The rails are designed to fit in the racks with the depth of 28" to 33".

- *Determine the placement of each component in the rack before you install the rails.*
- *Install the heaviest server components on the bottom of the rack first, and then work up.*

---

1. In the package, locate a pair of front (short) and rear (long) brackets. Please note that the brackets are marked with Up/Front Arrows (front) and Up/Rear arrows (rear).

2. Secure the front (short) bracket (marked with the Up/Front arrows) to the outer rail with two Type G screws. (See the previous page for a description of the Type G screw.)

3. Attach the rear (long) bracket to the other end of the outer rail and secure the rear (long) bracket to the outer rail with a Type G screw as shown below.

4. Measure the depth of your rack and adjust the length of the rails accordingly.

5. Repeat the same steps to install the other outer rail on the chassis.

6. Secure both outer rail assemblies to the rack with Type H screws and Type I washers. (See the previous page for descriptions of Type H and Type I hardware components.)
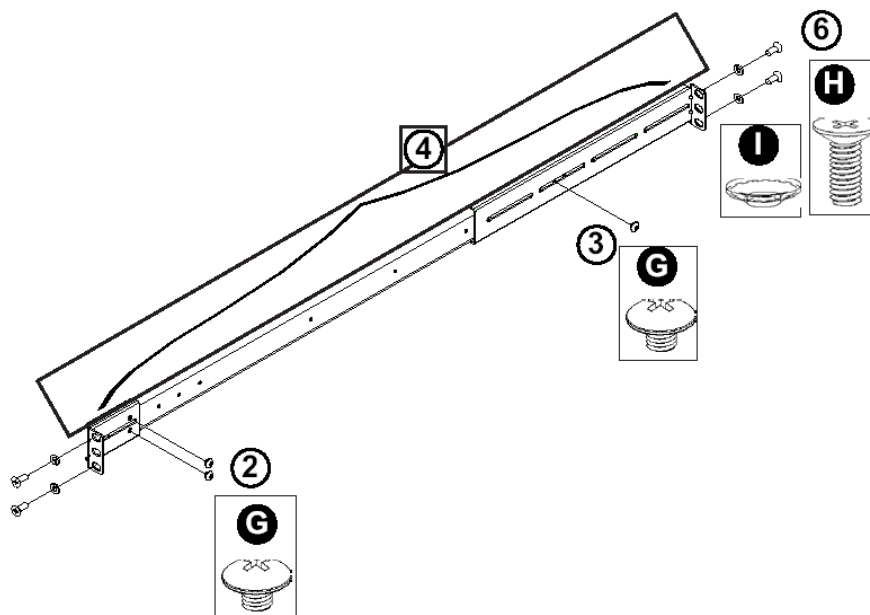
7. Slide the chassis into the rack as shown below.

NOTE: The chassis may not slide into the rack smoothly or easily when installed the first time. Some adjustment to the slide assemblies might be needed for easy installation.

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8. You will need to release the safety taps on both sides of the chassis in order to completely remove the chassis out of the rack.
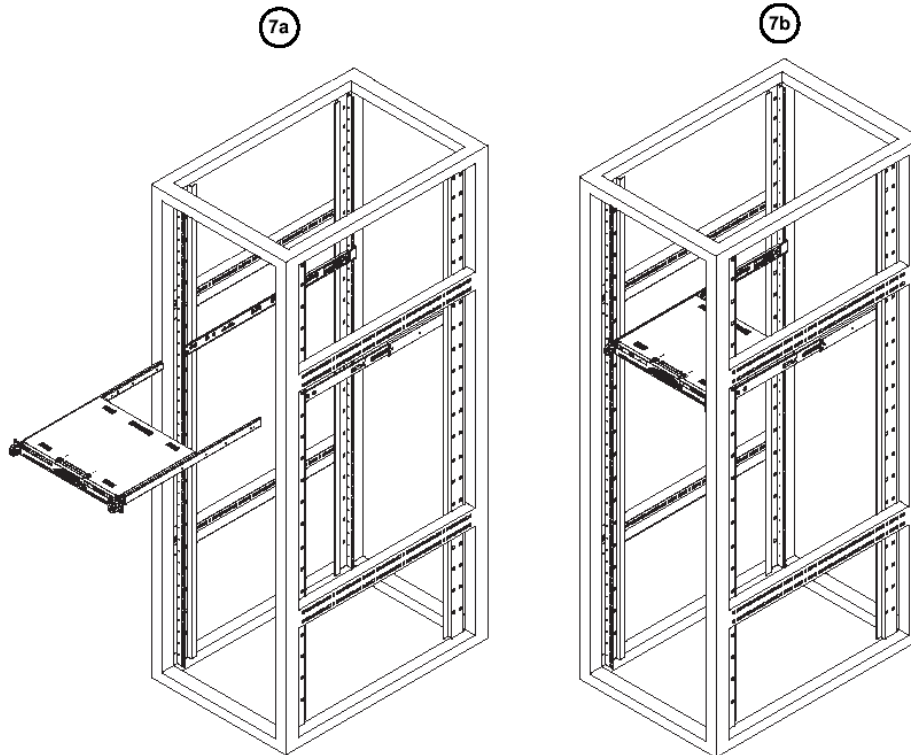
Optional: Install the Open Racks

After you have installed the inner rails on the chassis, you are ready to install the outer rails of rail assemblies to the rack.

NOTE: The rails are designed to fit in the racks with the depth of 28" to 33".

- *Determine the placement of each component in the rack before you install the rails.*
- *Install the heaviest server components on the bottom of the rack first, and then work up.*

---

1. In the package, locate a pair of front (short) and rear (long) brackets. Please note that the brackets are marked with Up/Front Arrows (front) and Up/Rear arrows (rear).

2. Secure the front (short) bracket (marked with the Up/Front arrows) to the outer rail with two Type G screws as shown below.
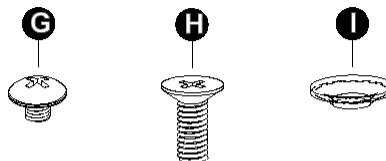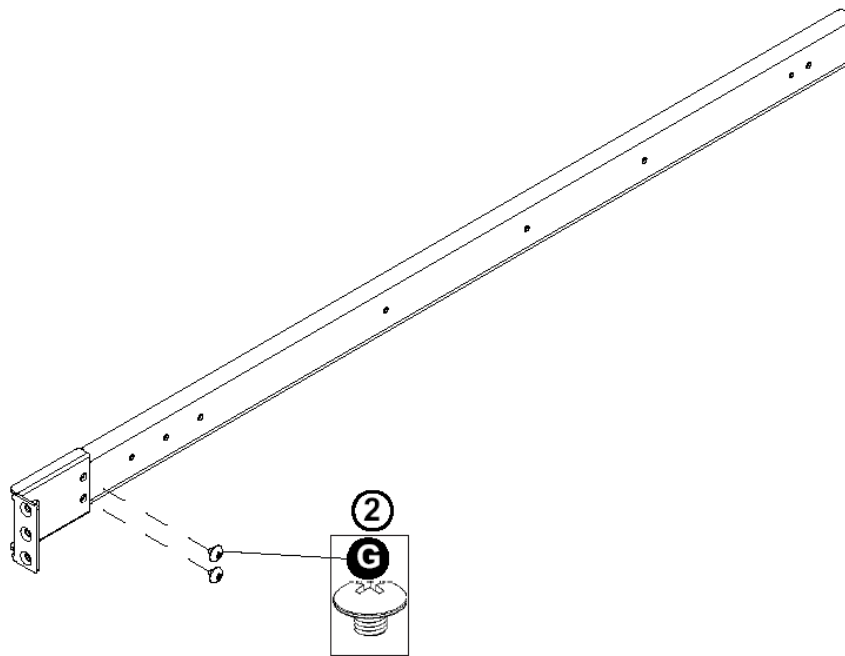
G. Round head M4 x 4 mm [0.157]

H. Flat head M5 x 12 mm [0.472]

I. Washer for M5

3. Attach the front (short) bracket to the front end of the rack, and secure it to the rack with two Type H screws and Type I washers as shown below. (See the previous page for descriptions of Type H and Type I hardware components.)

4. Attach the rear (long) bracket to the rear end of the rack, and secure it to the rack with two Type H screws and Type I washers as shown below. Repeat the same steps to install the other outer rail to the other side of rack.
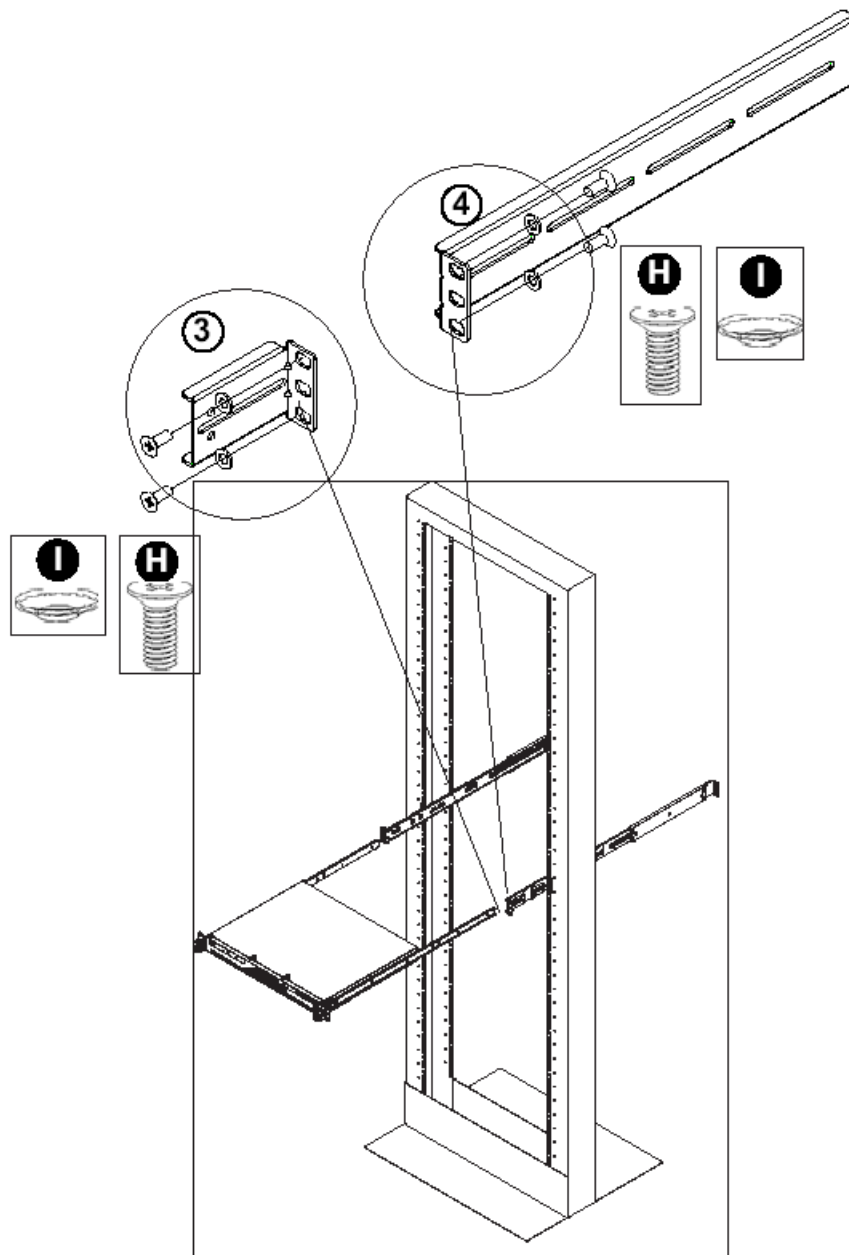
5. Measure the depth of your rack and adjust the length of the rails accordingly. Then, secure the rails to the chassis with Type G screws.

6. Slide the inner rails which are attached to the chassis into the outer rails on the rack.
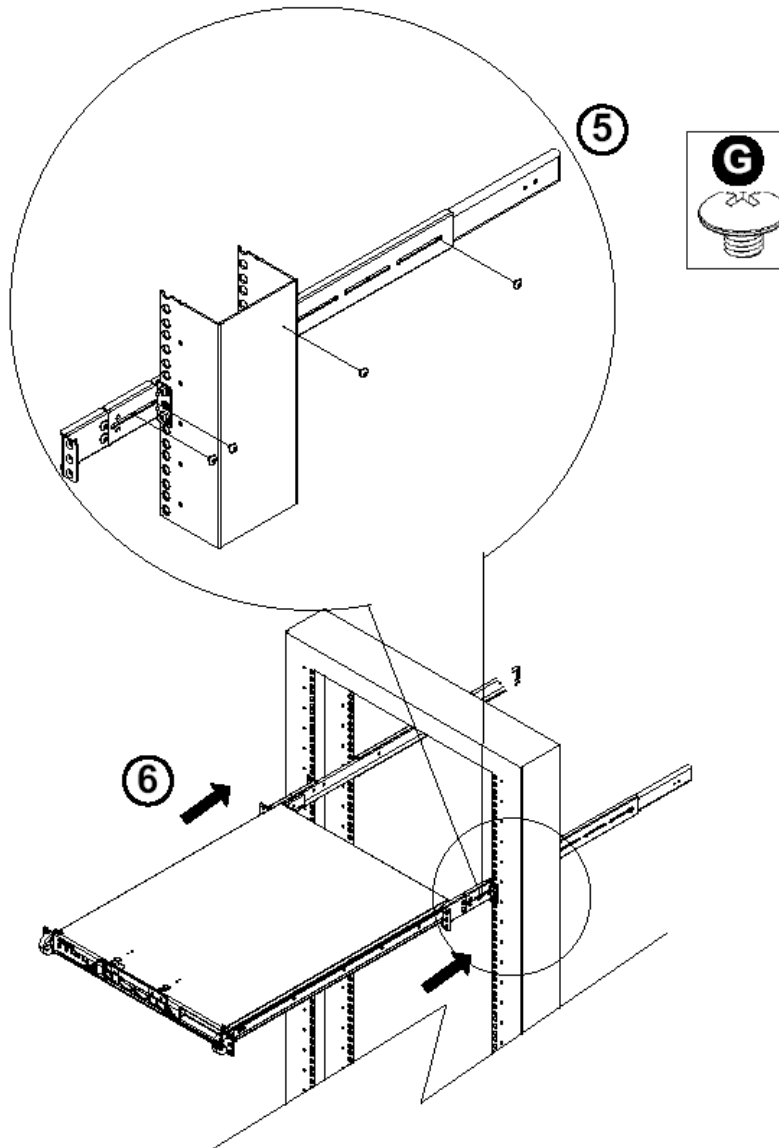
Install the Chassis into the Rack

☠ *CAUTION: Before installing the chassis into the rack:*

• *Make sure that the rack is securely anchored onto an unmovable surface or structure before installing the chassis into the rack.*
• *Unplug power cord(s) of the rack before installing the chassis into the rack.*
• *Make sure that the system is adequately supported. Make sure that all the components are securely fastened to the chassis to prevent components falling off from the chassis.*
• *The rack assembly should be properly grounded to avoid electric shock.*
• *The rack assembly must provide sufficient airflow to the chassis for proper cooling.*
• *Please make sure that all components and all chassis covers are properly installed in the chassis before you install the chassis into the racks; otherwise, out-of-warranty damage may occur.*

Slide the chassis into the rack and secure it with two screws on each side of the rack as shown in the picture.

slide into rack and secure with two screws on each side
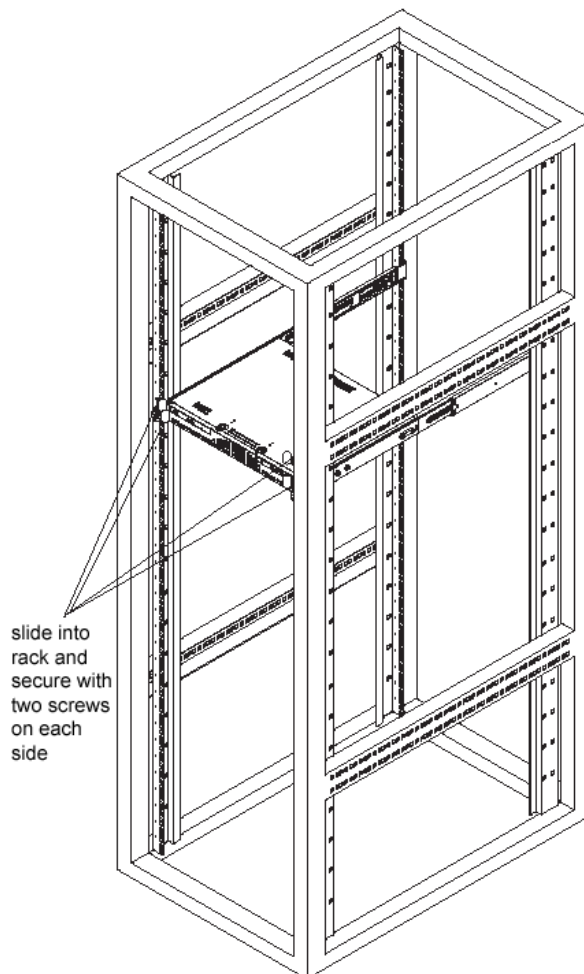
Install the SL or HL Server Bezel

After rack mounting an SL or HL server, the bezel should be installed on the front end of the chassis.

NOTE: This portion of the installation process requires you to unpack the bezel. The bezel has been packaged separately from the unit to prevent damage during shipping.

A. Hold the bezel upright and facing towards you (Fig. 1).

Fig. 1 - Front of bezel

B. Note that each end of the bezel contains two raised bumps (Fig. 2).

Fig. 2 - Bumps on right end of bezel   **Fig. 3 - Grooves in right U-shaped handle**

C. Align these bumps along the two parallel grooves inside each U-shaped aluminum chassis handle affixed to the front end of the chassis rail (Fig. 3).

D. Push the bezel towards the front of the chassis, inserting the USB B-type plug on the back of the bezel (Fig. 4) into the USB port on the chassis.
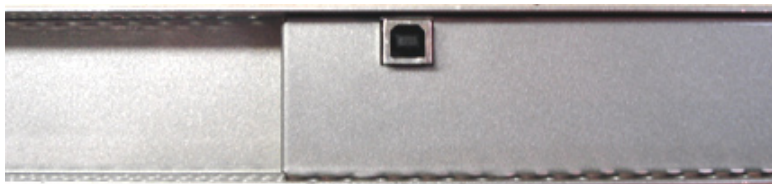
Fig. 4 - Section of back of bezel with USB B-type plug

Check the Power Supply

This server is equipped with a universal power supply that handles 100-240 V, 50/60 Hz. A standard power cord interface (IEC 950) facilitates power plugs that are suitable for most European, North American, and Pacific Rim countries.

Power Supply Precautions

⚠ **Warning:**

- Use a regulating uninterruptible power supply (UPS) to protect the server from power surges, voltage spikes and to keep the server operating in case of a power failure.

- In geographic regions that are susceptible to electrical storms, 8e6 highly recommends plugging the AC power cord for the server into a surge suppressor.

- Use appropriately rated extension cords or power strips only.

- Allow power supply units to cool before touching them.

General Safety Information

Server Operation and Maintenance Precautions

⚠ **Warning:**

Observe the following safety precautions during server operation and maintenance:

⚠ *WARNING: If the server is used in a manner not specified by the manufacturer, the protection provided by the server may be impaired.*

⚠ *WARNING: 8e6 Technologies is not responsible for regulatory compliance of any server that has been modified. Altering the server's enclosure in any way other than the installation operations specified in this document may invalidate the server's safety certifications.*

☠ *CAUTION: Never pile books, papers, or other objects on the chassis, drop it, or subject it to pressure in any other way. The internal circuits can be damaged, and the battery may be crushed or punctured. Besides irreparable damage to the unit, the result could be dangerous heat and even fire.*

☠ *CAUTION: There are no user-serviceable components inside the chassis. The chassis should only be opened by qualified service personnel. Never disassemble, tamper with, or attempt to repair the server. Doing so may cause smoke, fire, electrical shock, serious physical injury, or death.*

⚠ *WARNING: In HL servers, multiple sources of supply exist. Be sure to disconnect all sources before servicing.*

- Do not insert objects through openings in the chassis. Doing so could result in a short circuit that might cause a fire or an electrical shock.

- Do not operate the server in an explosive atmosphere, in the presence of flammable gases.

- To ensure proper cooling, always operate the server with its covers in place. Do not block any openings on the chassis. Do not place the server near a heater.

- Always exit the software application properly before turning off the server to ensure data integrity.

- Do not expose the server to rain or use near water. If liquids of any kind should leak into the chassis, power down the server, unplug it, and contact 8e6 Technologies technical support.

- Disconnect power from the server before cleaning the unit. Do not use liquid or aerosol cleaners.

AC Power Cord and Cable Precautions

⚠ **Warning:**

- The AC power cord for the server must be plugged into a grounded, power outlet.

- Do not modify or use a supplied AC power cord if it is not the exact type required in the region where the server will be installed and used. Replace the cord with the correct type.

- Route the AC power cord and cables away from moving parts and foot traffic.

- Do not allow anything to rest on the AC power cord and cables.

- Never use the server if the AC power cord has been damaged.

- Always unplug the AC power cord before removing the unit for servicing.

Electrical Safety Precautions

⚠ **Warning:**

Heed the following safety precautions to protect yourself from harm and the server from damage:

CAUTION: Dangerous voltages associated with the 100-240 V AC power supply are present inside the unit. To avoid injury or electrical shock, do not touch exposed connections or components while the power is on.

- To prevent damage to the server, read the information in this document for selection of the proper input voltage.

- Do not wear rings or wristwatches when troubleshooting electrical circuits.

- To avoid fire hazard, use only the specified fuse(s) with the correct type number, voltage, and current ratings. Only qualified service personnel should replace fuses.

- Qualified service personnel should be properly grounded when servicing the unit.

- Qualified service personnel should perform a safety check after any service is performed.

Motherboard Battery Precautions

Caution:

The battery on the motherboard should not be replaced without following instructions provided by the manufacturer. Only qualified service personnel should replace batteries.

The battery contains energy and, as with all batteries, a malfunction can cause heat, smoke, or fire, release toxic materials, or cause burns. Do not disassemble, puncture, drop, crush, bend, deform, submerge or modify the battery. Do not incinerate or expose to heat above 140°F (60°C).

There is a danger of explosion if the battery on the motherboard is installed upside down, which will reverse its polarities.

CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISPOSE OF THE USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

ATTENTION: IL Y A DANGER D'EXPLOSION S'IL Y A REPLACEMENT INCORRECT DE LA BATTERIE, REMPLACER UNIQUEMENT AVEC UNE BATTERIE DU MÊME TYPE OU D'UN TYPE ÉQUIVALENT RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU REBUT LES BATTERIES USAGÉES CONFORMÊMENT AUX INSTRUC-TIONS DU FABRICANT.

WARNING: Users in Member States should consult Article 20 of Directive 2006/66/EC of the European Parliament and of the Council before disposing the motherboard battery.

INSTALL THE SERVER

Step 1: Setup Procedures

This step requires you to link the workstation to the R3000. You have the option of using the text-based Quick Start setup procedures described in Step 1A, the Administrator console setup procedures described in Step 1B, or, if you have an SL or HL unit, the LCD panel setup procedures described in Step 1C.

Quick Start Setup Requirements

The following hardware can be used for the Quick Start setup procedures:

- R3000 with AC power cord
- either one of two options:
    - PC monitor with AC power cord and keyboard, or
    - PC laptop computer with HyperTerminal and serial port cable (and USB DB9 serial adapter, if there is no serial port on your laptop)

Go to Step 1A to execute Quick Start Setup Procedures.

Administrator Console Setup Requirements

The following hardware is required for the Administrator console setup procedures:

- R3000 with AC power cord
- CAT-5E crossover cable
- PC laptop computer, or PC monitor with AC power cord and keyboard

Go to Step 1B to execute Console Setup Procedures.

LCD Panel Setup Requirements (for SL and HL Units)

The following hardware is required for LCD panel setup procedures, if using an SL or HL unit:

- R3000 SL or HL with AC power cord(s)
- Bezel with LCD panel mounted on chassis front

Go to Step 1C to execute LCD Panel Setup Procedures.

Step 1A: Quick Start Setup Procedures

Link the Workstation to the R3000

Monitor and Keyboard Setup

A. Connect the PC monitor and keyboard cables to the rear of the chassis (see Fig. 1 for an SL or MSA unit, and Fig. 2 for an HL unit).

B. Turn on the PC monitor.

C. Power on the R3000 by dropping down the face plate and pressing the large button at the right of the front panel (see Fig. 3 for an SL unit, Fig. 4 for an MSA unit, and Fig. 5 for an HL unit).

Once the R3000 is powered up, proceed to the Login screen instructions.

Serial Console Setup

A. Using the serial port cable (and USB DB9 serial adapter, if necessary), connect the laptop to the rear of the chassis (see Fig. 1 for an SL or MSA unit, and Fig. 2 for an HL unit).

B. Power on the laptop.

C. Power on the R3000 by pressing the large button on the front panel (see Fig. 3 for an SL unit, Fig. 4 for an MSA unit, and Fig. 5 for an HL unit).

Fig. 1 - Portion of SL and MSA chassis rear
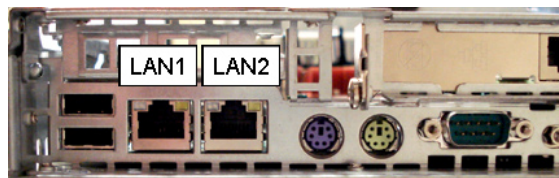
Fig. 2 - Portion of HL chassis rear
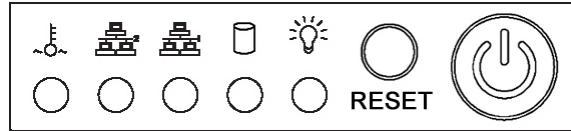
Fig. 3 - Diagram of SL chassis front panel, power button at far right
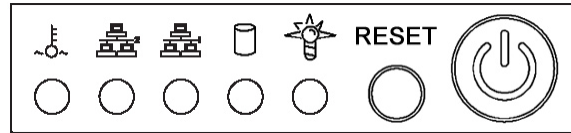
Fig. 4 - Diagram of MSA chassis front panel, power button at far right

Button   LED
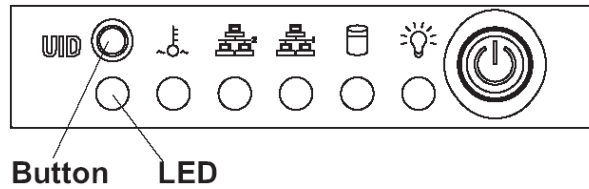
Fig. 5 - Diagram of HL chassis front panel, power button at far right

Once the R3000 is powered up, proceed to the instructions for HyperTerminal Setup Procedures.

HyperTerminal Setup Procedures

If using a serial console, follow these procedures to create a HyperTerminal session on the serial console.

A. Launch HyperTerminal by going to Start > Programs > Accessories > Communications > HyperTerminal:

B. In the Connection Description dialog box, enter any session **Name**, and then click **OK** to open the Connect To dialog box:

C. At the **Connect using** field, select the COM port assigned to the serial port on the laptop (probably "COM1"), and then click **OK** to open the Properties dialog box, displaying the Port Settings tab:
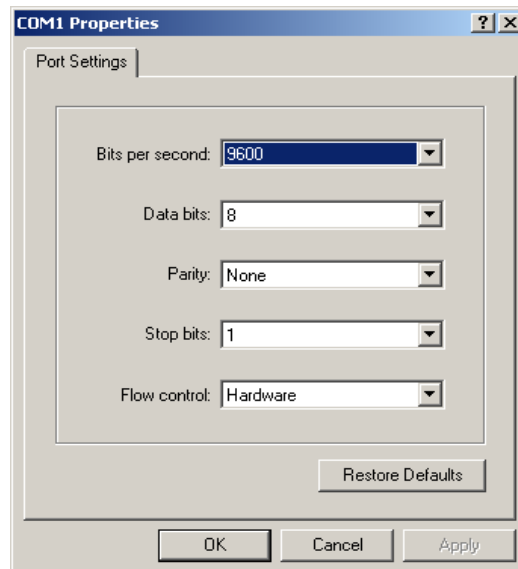
D. Specify the following session settings:

- Bits per second: 9600
- Data bits: 8
- Parity: None
- Stop bits: 1
- Flow control: Hardware

E. Click **OK** to connect to the HyperTerminal session:
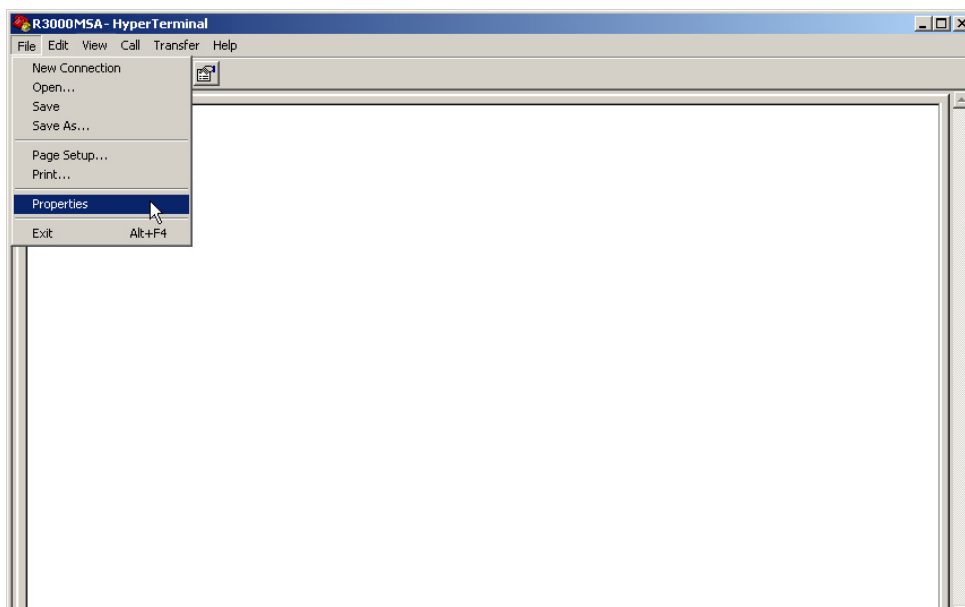
F. In the HyperTerminal session window, go to File > Properties to open the Properties dialog box, displaying the Connect To and Settings tabs:
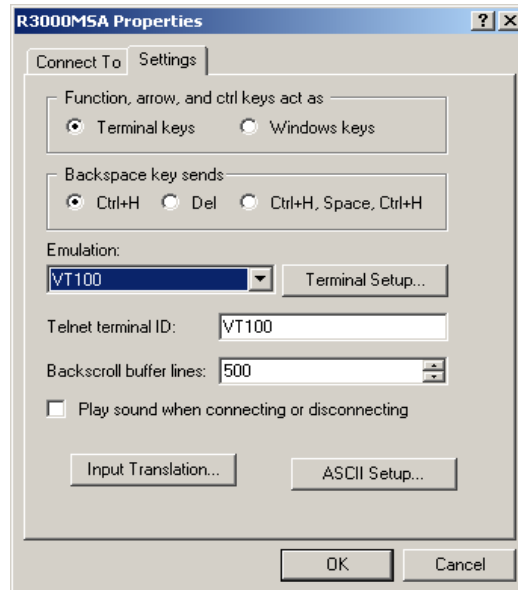
G. Click the Settings tab, and at the **Emulation** menu select "VT100".

H. Click **OK** to close the dialog box, and to go to the login screen.

NOTE: If using a HyperTerminal session, the login screen will display with black text on a white background.

![8e6 logo]

Login screen

The login screen displays after powering on the R3000, or creating a HyperTerminal session.

---

*NOTE: If the screensaver currently displays on your screen, press the **Enter** key to display the login screen.*

A. At the **login** prompt, type in **menu**.

B. Press the **Enter** key to display the Password prompt.

C. At the **Password** prompt, type in the following: **#s3tup#r3k**

D. Press **Enter** to display the Quick Start menu screen.

Quick Start menu screen
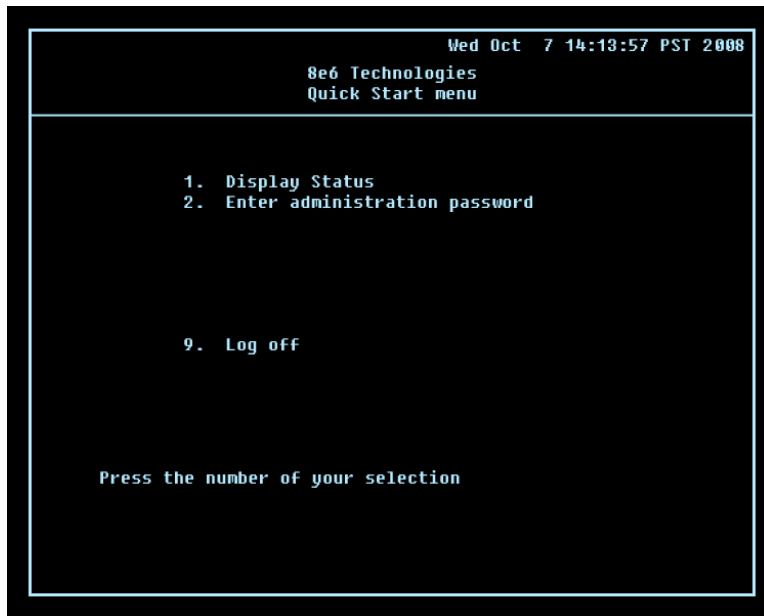

```
                                  Wed Oct  7 14:13:57 PST 2008
                           8e6 Technologies
                           Quick Start menu


              1.  Display Status
              2.  Enter administration password




              9.  Log off



      Press the number of your selection
```

A. At the **Press the number of your selection** prompt, press **2** to select the Quick Start setup process.

B. At the login prompt, re-enter your password: **#s3tup#r3k**

C. Press **Enter** to display the administration menu where you can begin using the Quick Start setup procedures.

Quick Start menu: administration menu

A. At the **Press the number of your selection** prompt, press **2** to select the "Quick Start Setup" process.

The Quick Start menu takes you to the following configuration screens to make entries:

- Change filtering mode
- Configure network interface LAN1
- Configure network interface LAN2
- Configure default gateway
- Configure DNS servers
- Configure host name
- Time Zone regional setting

NOTE: See the Network screens for Operation Mode, LAN Settings, and Regional Setting in Step 1B for content included in the Quick Start setup screens.

B. After making all entries using the Quick Start setup procedures, press **X** to return to the Quick Start menu screen. Or, to verify the status of the R3000 and review the entries you made using the Quick Start setup, press **1** to view the System Status screen.

NOTES: *Changing your password using option C, "Change Quick Start password", will change the password for the console menu but not the R3000 console login screen. Option A, "Reset system to factory defaults", should only be used by an 8e6 Technologies technical representative. Option D, "Reset admin console account", should be used for resetting the administrator console username and password to the factory default 'admin'/'user3' and for unlocking all IP addresses currently locked.*

System Status screen

The System Status screen contains the following information:

- **Operation Mode** specified in screen 3 (Change filter mode)
- **Capturing Interface** specified in screen 4 or 5 (Configure network interface LAN1 or LAN2)
- **Management and Blocking Interface** specified in screen 4 or 5 (Configure network interface LAN1 or LAN2)
- **lan1 IP** address and netmask specified in screen 4, and current status ("Active" or "Inactive")
- **lan2 IP** address and netmask specified in screen 5, and current status ("Active" or "Inactive")
- **Default gateway** IP address specified in screen 6 (Configure default gateway)
- **R3000 host name** specified in screen 8 (Configure host name)
- **DNS server IP address(es)** specified in screen 7 (Configure DNS servers)
- **Regional timezone setting** specified in screen 9 (Time Zone regional setting)
- Current status of the R3000
- Current R3000 software **Version** installed
- Library update status

> *NOTE: Modifications can be made at any time by returning to the specific screen of the Quick Start procedures.*

Log Off, Disconnect the Peripherals

A. After completing the Quick Start setup procedures, return to the Quick Start menu screen and press **9** to log out.

B. Disconnect the peripherals from the R3000.

Step 1B: Console Setup Procedures

Preliminary Setup

Create a "setup workstation" using a Windows-based laptop or desktop machine with a network card and Internet Explorer 5.5 (or later). The setup workstation will be used for accessing the R3000 server on the network and configuring the unit.

NOTE: The Java Plug-in version specified for the R3000 software version must be installed on your workstation. If your workstation does not have Java Runtime Environment, you will be prompted to install it.

Workstation Configurations

A. From the desktop of the setup workstation, follow the procedures for your machine type:

- **Windows XP** - go to Start > Control Panel. Open Network Connections. Right-click the link for LAN or High-Speed Internet and choose Properties.
- **Windows 2000** - right-click the My Network Places icon and select Properties. Right-click the correct Local Area Connection and choose Properties.
- **Windows NT** - right-click the Network Neighborhood icon and select Properties.
- **Windows ME** - right-click the My Network Places icon and select Properties.

B. Click on **Internet Protocol (TCP/IP)** to highlight it (Windows NT and ME users should select the Protocols or Configuration tab and choose **TCP/IP Protocol**).

C. Click the **Properties** button.

WARNING: Be sure to make note of the current network settings on the setup workstation as you will need to return them for further setup procedures.

D. Choose the option **Use the following IP address** (Windows NT and ME users should choose the option **Specify an IP Address**).

E. Type in the **IP address** of 1.2.3.1.

F. Type in the **Subnet mask** (netmask) of 255.0.0.0 and click **OK**.

G. Close the LAN connection properties box.

Link the Workstation to the R3000

The procedures outlined in this sub-section require the use of the CAT-5E crossover cable.

A. Plug one end of the CAT-5E crossover cable into the R3000's **LAN 2** port.

NOTE: When facing the rear of the chassis, the LAN 2 port is the port on the right.

Portion of SL and MSA chassis rear
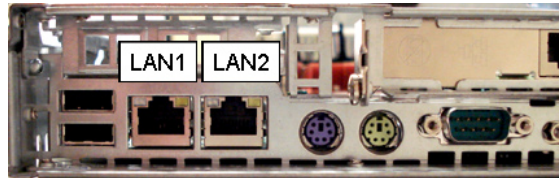
Portion of HL chassis rear

B. Plug the other end of the CAT-5E crossover cable into the setup workstation's network card.

NOTE: If a CAT-5E coupler was packaged with your unit, this coupler can be used if the crossover cable is not long enough for your setup. Plug one end of the CAT-5E crossover cable into the R3000, and the other end into the coupler. Plug a standard CAT-5E cable into the other end of the coupler, and the free end of the standard CAT-5E cable into the setup workstation.

C. Plug the R3000 into a power source with an appropriate rating.

WARNING: It is strongly suggested you use an uninterruptible power supply.

D. Power on the R3000 by lowering the bezel and pressing the large button at the right of the front panel (see diagrams below):
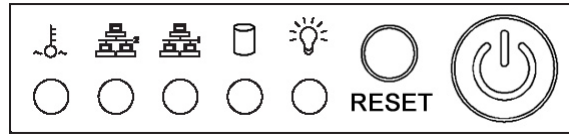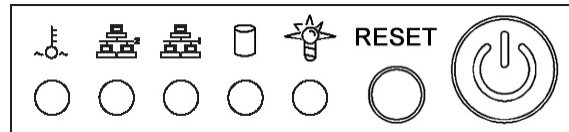
Diagram of SL chassis front panel, power button at far right

Diagram of MSA chassis front panel, power button at far right

Button   LED
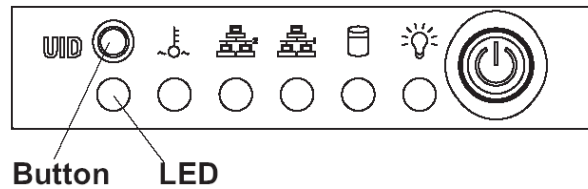
Diagram of HL chassis front panel, power button at far right

The Boot Up Process

The boot-up process may take 5 - 10 minutes. When the drive light remains off for 30 seconds, the system is booted up. (See the LED Indicators and Buttons section for a description of front panel LED indicators and buttons.)

If you wish to verify that the unit has been booted up, you can perform the following test on your workstation:

1. Go to your taskbar and click Start > Run.
2. In the dialog box, type in *cmd* (type in *command* if using Windows ME).
3. Click **OK.**
4. In the cmd.exe window, type in *ping 1.2.3.4*
5. Press **Enter** on your keyboard.

If you receive a reply, the unit is up.

Network Setup

When the R3000 is fully booted, you can configure network settings. For this step, you will need your network administrator to provide you the host name, gateway address, and two unused IP addresses.

Access the R3000 Administrator Console

A. Launch Internet Explorer from the setup workstation.

B. Type in **http://1.2.3.4:88** in the address field.

C. Click **Go** to open the R3000 Introductory Window:
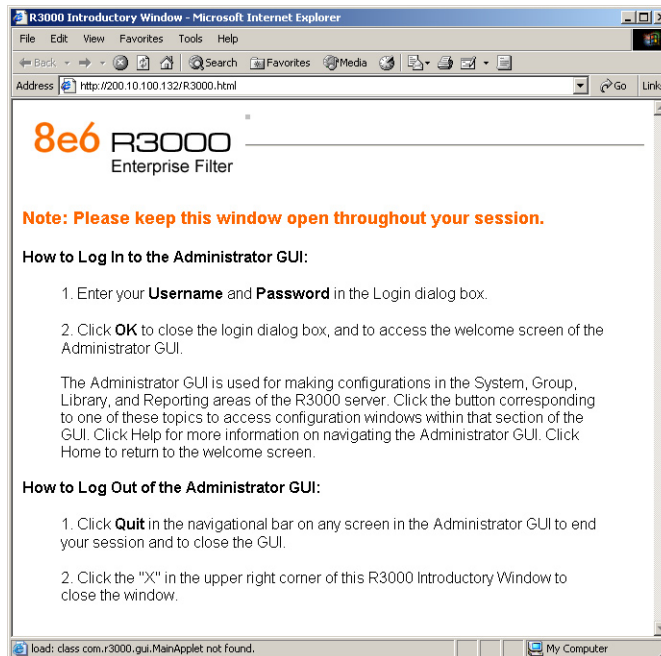
![note icon] **NOTE:** *This window must be left open throughout your session.*

The Introductory Window displays minimized when the login dialog box of the R3000 Administrator console application opens (see image on the next page).

Log in to R3000 Administrator Console

In the login dialog box, you need to enter the generic Username and Password:

A. In the **Username** field, type in *admin*.

B. In the **Password** field, type in *user3*.

C. Click **OK** to close the login dialog box and to go to the main screen of the R3000 Administrator console:

Network

Click the **System** button at the top of the screen to go to the System section of the console:
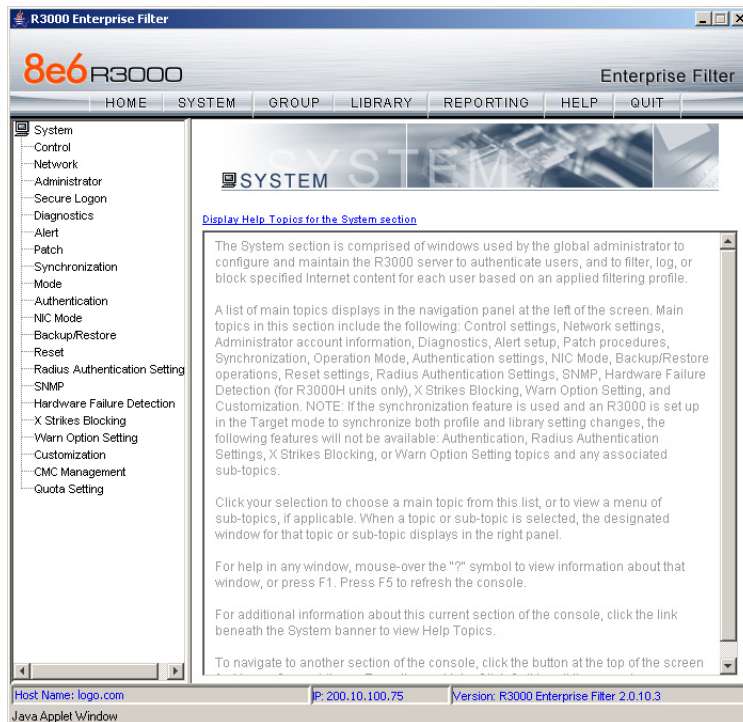
In this section of the console you will:

- Specify the operation mode the R3000 will use for filtering the network, listening to traffic, and sending traffic
- Configure LAN settings the R3000 will use on your network
- Select NTP servers the R3000 will use for time synchronization with Internet clocks
- Indicate the region in which the R3000 is geographically located

---

*NOTE: After saving your entries in each of these windows (Operation Mode, LAN Settings, NTP Servers, Regional Setting), you may be prompted to restart or reboot the server. Click **OK** to acknowledge the contents of the alert box, and then proceed to the next sub-step **without** restarting or rebooting the server.*

Network: Operation Mode

From the navigation panel at the left of the screen, click Mode and choose Operation Mode from the pop-up menu:
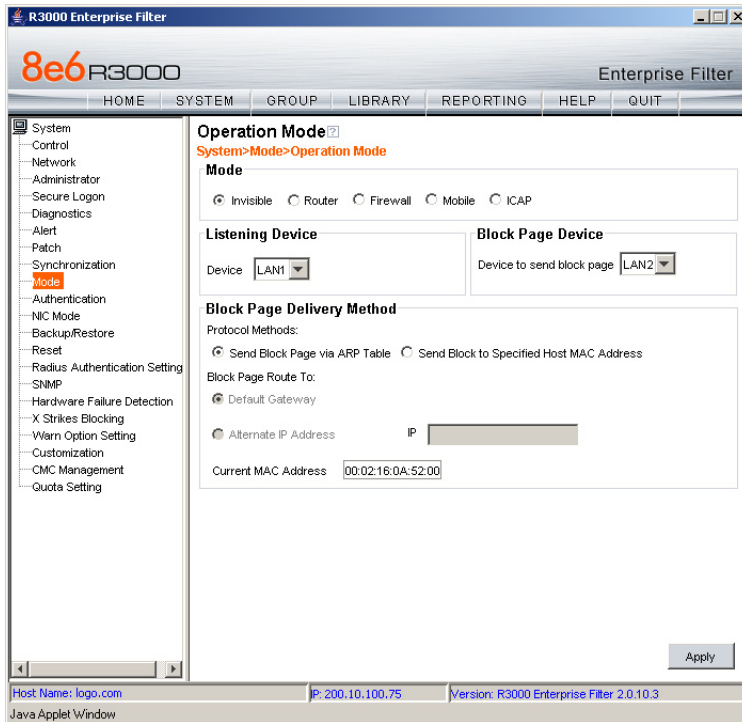
Make the following entries in the Operation Mode window:

A. In the Mode frame, select the operational mode the R3000 will use for filtering: Invisible, Router, Firewall, Mobile, or ICAP.

NOTE: Refer to the appendix in the R3000 User Guide for information on configuring the R3000 to use the Mobile mode option with the 8e6 Mobile Client.

B. In the Listening Device frame, select the device for listening to traffic:

- **For the invisible mode**: "LAN1" is generally used as the default listening device
- **For the router or firewall mode**: Select the network card that will be used to "listen to"—as opposed to "send"—traffic on the network

C. In the Block Page Device frame, select the device for sending block pages to client PCs:

- **For the invisible mode**: The block page device should be a different device than the one selected in the Listening Device frame—"LAN2" is generally used as the default device for sending block pages
- **For the router or firewall mode**: The device should be the same as the one selected in the Listening Device frame

D. Click **Apply**.

Network: LAN Settings

From the navigation panel, click Network and choose LAN Settings from the pop-up menu:
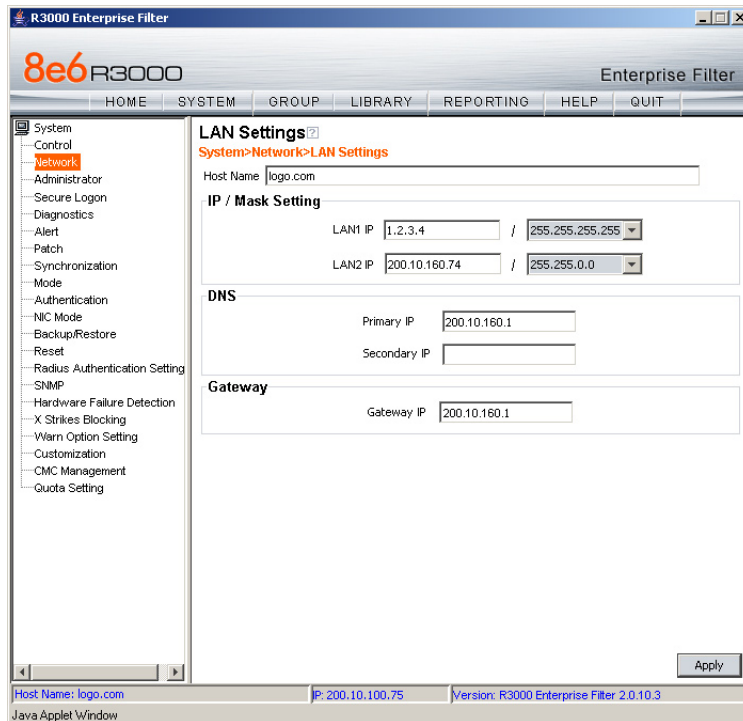
Make the following entries for the R3000 in the LAN Settings window:

A. Enter the **Host Name** that includes your domain name, for example R3000SERVER. myserver.com (the NetBIOS name must be capitalized). It is important to enter something identifiable, because once the product is registered, this host name is used by 8e6 Technologies to recognize your account for library updates. This name needs to be a valid DNS entry.

NOTE: The entry made in this field should not include any spaces, and can only include alphanumeric characters and the following symbols: underscore (_), dash (-), and period (.).

B. Enter the **LAN1 IP** address and specify the subnet for LAN 1, the R3000's first Ethernet Network Interface Card (NIC).

    For the invisible mode, you may use a non-routeable IP address for the listening interface and a subnet mask of 255.255.255.255 (32 bites).

C. Enter the **LAN2 IP** address and subnet for LAN 2, the R3000's second Ethernet NIC. The subnet selection is usually 255.255.0.0 (16 bites) or 255.255.255.0 (24 bites), *but cannot be 255.255.255.255 (32 bites)*.

For the router or firewall mode, the LAN 1 IP address should be in a different subnet than the LAN 2 IP address.

⚠ *WARNING: For the router and firewall mode, do not use the same subnet for LAN 1 and LAN 2 or the console will become inaccessible.*

D. Enter the **Primary IP** address of the first DNS name server. The R3000 uses this name server to resolve the domain name requested by users from the LAN.

E. Enter the **Secondary IP** address of the second DNS name server. The R3000 will use this name server to resolve the domain name requested by users from the LAN if the first DNS isn't working.

F. Enter the **Gateway IP** address for the default router or firewall that is the main gateway for the entire network. The R3000 will use this IP address to communicate outside the network.

⚠ *WARNING: Be sure to take note of the LAN 1 and LAN 2 IP addresses and host name you assigned to the R3000. It is strongly suggested you document and store this information as it is now the only way of communicating with the R3000.*

G. Click **Apply**.

Network: NTP Servers

From the navigation panel, click Network and choose NTP Servers from the pop-up menu:
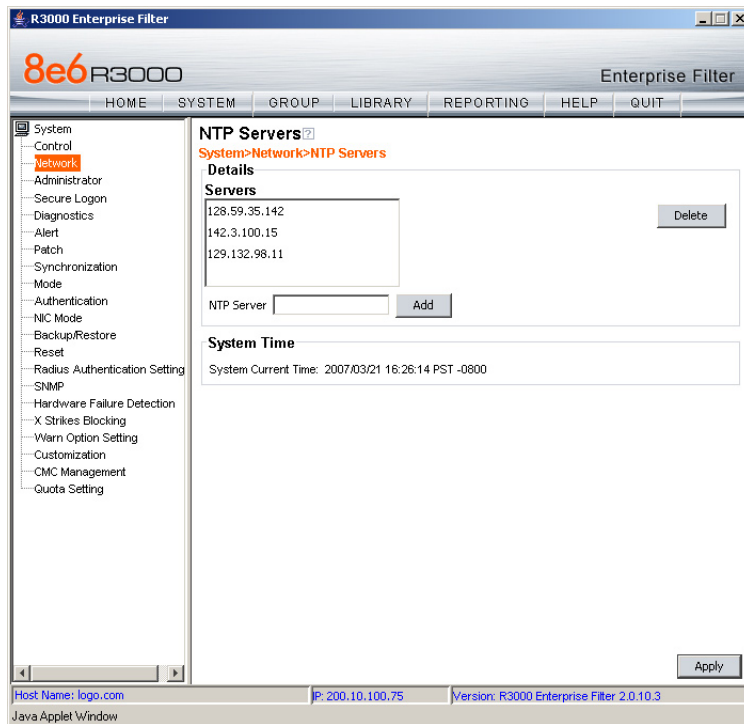
The NTP Servers window is used for specifying the Network Time Protocol (NTP) servers to be used by the R3000, so that the R3000 is synchronized with computer clocks on the Internet.

Note that the following server IP addresses display in the Servers list box: 128.59.35.142, 142.3.100.15, 129.132.98.11. If necessary, any of these servers can be deleted by selecting the IP address and clicking **Delete**.

NOTE: If you need to find another NTP server to use, most university Web sites provide these servers for public usage.

A. In the **NTP Server** field, enter the IP address of the primary NTP server you wish to use for clock settings on your server.

B. Click **Add** to include this IP address in the Servers list box.

C. Enter two more NTP servers, following the procedures in sub-steps A and B. These will be the secondary and tertiary NTP servers, in order as they appear in the list box.

D. Click **Apply**.

NOTE: If the primary server fails, the secondary will be used. If the secondary server fails, the tertiary server will be used.

Network: Regional Setting

From the navigation panel, click Network and choose Regional Setting from the pop-up menu:
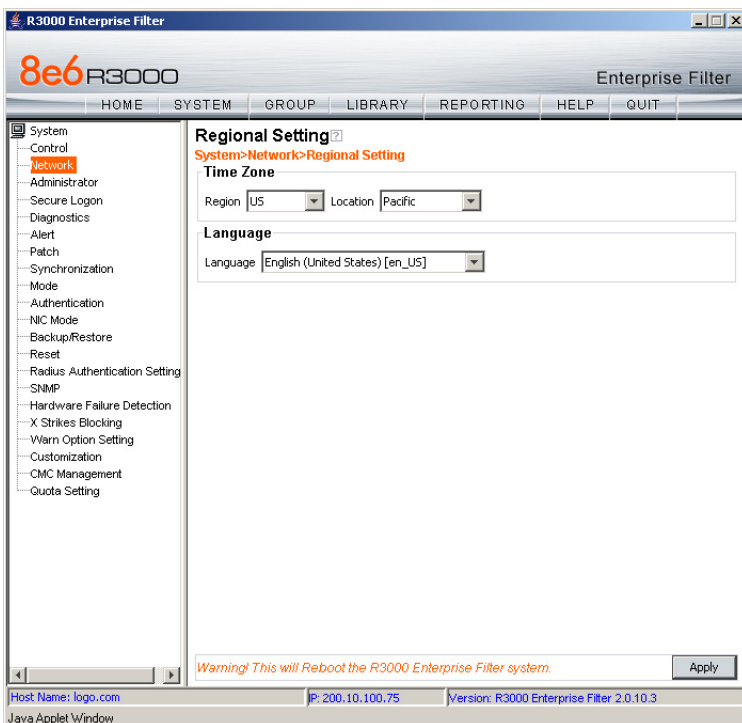
Make the following selections in the Regional Setting window:

A. At the **Region** pull-down menu, select your country from the available choices.

B. At the **Location** pull-down menu, select the time zone for the specified region.

    If necessary, select a language set from the **Language** pull-down menu to display that text in the console.

C. Click **Apply** to apply your settings, and to reboot the R3000.

Physically Connect the R3000 to the Network

Once your R3000 network parameters are set, you must physically connect the unit to your network. This step requires two standard CAT-5E cables.

NOTE: This section requires you to restart the R3000. If you wish to relocate the R3000 before connecting it to the network, you must first shut down the server instead of restarting it. To shut down the R3000, go to the navigation panel, click Control, and then select ShutDown. Once the server is shut down, you must power on the R3000 and then log back into the Administrator console.

A. Restart the server using the steps defined below (i-iii). These steps must always be performed when restarting the R3000. ***Never*** reset the server by using the power or reset buttons.

   i.   From the navigation panel of the System section of the console, click Control and select Reboot from the pop-up menu to display the Reboot window.
   ii. Click the **Reboot** button.
   iii. From the time you click Reboot, you have approximately 2 minutes to perform sub-steps B through E while the R3000 goes through the reboot process.

B. Disconnect the crossover cable from the R3000.

C. Plug one end of a standard CAT-5E cable into the R3000's LAN 1 port.

D. Plug the other end of the CAT-5E cable into an open port on the network hub that handles the Internet traffic you wish to filter.

E. Repeat sub-steps B and C for the R3000's LAN 2 port.

F. Wait until the reboot process has completed, indicated by the drive light staying off for 30 seconds. This process may take 5 to 10 minutes. Proceed to Step 2.

NOTE: If you receive a connection failure message during the reboot process, please disregard it, as this often occurs when there is a change in the IP address.

NOTE:To restart the browser window, close both the R3000 Administrator console and the R3000 Introductory Window. Begin a new session by opening a new browser window and then logging back into the Administrator console.

Step 1C: LCD Panel Setup Procedures

On an SL or HL unit, the R3000 can be configured using the LCD panel on front of the chassis bezel. When the bezel is placed on the front of the chassis, with the USB plug inserted into the USB port, the default LCD screen displays with the following message:

8e6 Technologies

Display Initializing
Please Wait

To the right of the LCD screen, the keypad displays, consisting of the following keys: up arrow, down arrow, left arrow, right arrow, checkmark, and "X".

LCD Menu

Press the "X" key to display the LCD Menu:

In the LCD panel, an arrow displays to the left of the currently selected menu item. Use the up or down arrow keys to navigate the menu. After making your menu selection, press the checkmark key to accept your selection.

NOTE: On the LCD Menu, press "X" to toggle the display between the main menu and the following information: "R3000 Enterprise Filter (software version number)", "Filtering Status (Active, Inactive)", and "Last Library Update: MMDD/ YYYY".

8e6 menu

When "**8e6 >**" is selected, the following menu items display on the screen:

- Current Patch Level
- Filtering Mode >
- IP / LAN1 >
- IP / LAN2 >
- LAN 1 Link Status
- LAN 2 Link Status
- Gateway
- DNS 1 >
- DNS 2 >
- Host Name >

- Regional Setting (Time Zone, date, time)
- Reset Admin Console Password
- Restore to Factory
- Reboot >
- Shutdown >

NOTE: Navigation tips in the 8e6 menu:
- *Use the up / down arrow key to scroll up / down the menu*
- *Press the checkmark key to choose the current selection*
- *Press the "X" to go back to the previous screen*

Make a selection from the menu, and press the checkmark key to go to that screen.

Current Patch Level

When the Current Patch Level option is selected, "R3000 Enterprise Filter" and the version number of the currently installed build displays.

Filtering Mode

When the Filtering Mode option is selected, the Filtering Mode screen displays.

A. At the **Mode** field, use the left / right arrow keys to view and choose from the available options: Invisible, Router, Firewall, Mobile, ICAP.

B. Press the checkmark key to go to the Save Changes screen.

C. On the Save Changes screen:

- Choose **Yes** to accept your changes and to return to the 8e6 menu.
- Choose **No** to return to the Mode field.

IP / LAN1 and LAN2

When the IP / LAN 1 (LAN 2) option is selected, the IP / LAN 1 (LAN 2) screen displays with the following menu items:

- Configure LAN 1 (2) IP
- Change LAN1 (2) Netmask

A. Choose **Configure LAN 1 (2) IP** and press the checkmark key to go to the Configure LAN 1 (2) IP screen.

B. Use the up / down keys to increase / decrease the current value, and the left / right arrow keys to navigate across the line.

C. Press the checkmark key to accept your entry and to return to the previous screen.

D. Choose **Change LAN1 (2) Netmask** and press the checkmark key to go to the Change LAN1 (2) Netmask screen.

E. Use the up / down keys to increase / decrease the current value, and the left / right arrow keys to navigate across the line.

F. Press the checkmark key to accept your entry and to return to the previous screen.

G. Press the "X" key to return to the 8e6 menu.

LAN 1 and 2 Link Status

When the LAN 1 (LAN 2) Link Status option is selected, the LAN 1 (LAN 2) Link Status screen displays with the following menu items:

- Change NIC Mode
- Lan1 (2) Status

NOTE: For Lan1 (2) Status, the current Lan1 (2) status displays: "auto" or "Disconnected"—the latter displays if the NIC card is not connected to the network.

A. Choose **Change NIC Mode** and press the checkmark key to go to the Change NIC Mode screen with the following options:

- Modes
- Note

NOTE: If "Note" is selected, and the right arrow key is pressed, the following message displays: "Remember to reboot the machine for these changes to take effect."

B. Choose **Modes**, and use the left / right arrow keys to view the available NIC mode selections.

C. After making a selection, press the checkmark key to display the Save Changes? screen:

- Choose **Yes** to save your changes and to return to the 8e6 menu.
- Choose **No** to return to the previous screen.

Gateway

When the Gateway option is selected, the Gateway screen displays with the Configure Gateway IP menu item.

A. Choose **Configure Gateway IP** and press the checkmark key to go to the Configure Gateway IP screen.

B. Use the up / down keys to increase / decrease the current value, and the left / right arrow keys to navigate across the line.

C. Press the checkmark key to accept your entry and to return to the previous screen.

D. Press the "X" key to return to the 8e6 menu.

DNS 1 and 2

When the DNS 1 (2) option is selected, the DNS 1 (2) screen displays with the Configure DNS IP 1 (2) menu item.

A. Choose **Configure DNS IP 1 (2)** and press the checkmark key to go to the Configure DNS IP 1 (2) screen.

B. Use the up / down keys to increase / decrease the current value, and the left / right arrow keys to navigate across the line.

C. Press the checkmark key to accept your entry and to return to the previous screen.

D. Press the "X" key to return to the 8e6 menu.

Host Name

When the Host Name option is selected, the Host Name screen displays with the Configure Hostname menu item.

A. Choose **Configure Hostname** and press the checkmark key to go to the Configure Hostname screen.

B. Use the arrow keys to navigate the menu. Press the right arrow key to view the alphabets in first uppercase and then lowercase, numbers from 0-9, and lastly the symbol characters.

NOTE: Entry tips:

The entry made in this field should not include any spaces, and can only include alphanumeric characters and the following symbols: underscore (_), dash (-), and period (.).

> *NOTE: Navigation tips:*
>
> • *If the down arrow key is pressed first—instead of the right arrow key—the symbol characters display first.*
> • *Press the "X" key to remove a character and move the cursor to the first position in the line.*

C. Press the checkmark key to return to the previous screen.

D. Press the "X" key to return to the 8e6 menu.

Regional Setting (Time Zone, date, time)

When the Regional Setting (Time Zone, date, time) option is selected, the Regional Setting (Time Zone, date, time) screen displays with the Region menu item.

A. Choose **Region**, and use the left / right arrow keys to view the available region selections.

B. After making a selection, press the checkmark key to display the Choose a Location screen.

C. Choose **Location**, and use the left / right arrow keys to view the available location selections.

D. After making a selection, press the checkmark key to display the Save Changes? screen:

  • Choose **Yes** to save your changes and to return to the 8e6 menu.
  • Choose **No** to return to the previous screen.

Reset Admin Console Password

When the Reset Admin Console Password option is selected, the Reset Admin Console screen displays with a WARNING menu item.

A. Choose ***** WARNING ***** to display the message screen:

  *** WARNING *** The Admin console username/password will be reset to 'admin'/'user3' and all locked IPs will be unlocked.

B. After reading the warning message, select one of two options on the screen:

  • Choose **Yes, reset it now!** to reset the password and to return to the 8e6 menu.
  • Choose **No, cancel reset** to return to the previous screen.

Restore to Factory

When the Restore to Factory option is selected, the Restore to Factory screen displays with WARNING menu item.

A. Choose the WARNING menu item to display the message screen:

WARNING: All configurations and library customizations will be deleted, and the Admin GUI password will be reset to 'admin'/'user3'.

B. After reading the warning message, select one of two options on the screen:

- Choose **Yes, reset unit now** to reset the R3000 and to return to the 8e6 menu.
- Choose **No, cancel reset** to return to the previous screen.

Reboot

When the Reboot option is selected, the Reboot screen displays with two menu items.

A. Choose one of two options:

- **Yes, reboot now!!!** - This selection reboots the R3000.
- **No, cancel reboot** - This selection returns you to the previous screen.

B. Press the "X" key to return to the 8e6 menu.

Shutdown

When the Shutdown option is selected, the Shutdown screen displays with two menu items.

A. Choose one of two options:

- **Yes, shutdown now!!** - This selection shuts down the R3000.
- **No, cancel shutdown** - This selection returns you to the previous screen.

B. Press the "X" key to return to the 8e6 menu.

LCD Options menu

When "**LCD Options >**" is selected, the following menu items display on the screen:

- Heartbeat
- Backlight
- LCD Controls >

Make a selection from the menu, and press the checkmark key to go to that screen.

Heartbeat

When the Heartbeat option is selected, the Heartbeat screen displays.

A. Press the checkmark or right arrow key three times to view each of the three available options:

- heartbeat feature enabled (checkbox populated with "x")
- heartbeat feature disabled (checkbox empty)
- check for a heartbeat now (checkbox populated with checkmark, and blinking heartbeat symbol displayed in the line above)

B. After making your selection, press the "X" key to return to the previous screen.

Backlight

When the Backlight option is selected, the Backlight screen displays.

A. Press the checkmark or right arrow key three times to view each of the three available options:

- backlight feature enabled (checkbox populated with "x" and backlight turns on)
- backlight feature disabled (checkbox empty and backlight turns off)
- display the backlight now (checkbox populated with checkmark, and backlight turns on)

B. After making your selection, press the "X" key to return to the previous screen.

LCD Controls

When the LCD Controls option is selected, the LCD Controls screen displays with the following menu items: Contrast, On Brightness, Off Brightness.

A. Choose one of the menu selections and press the checkmark key to go to that screen:

- **Contrast** - In the Contrast screen, use the left / right arrow keys to decrease / increase the text and screen contrast.
- **On Brightness** - In the On Brightness screen, use the left / right arrow keys to decrease / increase the brightness of a screen with a feature that is enabled.
- **Off Brightness** - In the Off Brightness screen, use the left / right arrow keys to decrease / increase the brightness of a screen with a feature that is disabled.

B. After making your selection, press the "X" key to return to the previous screen.

Step 2: Test the R3000 Console Connection

Now that the R3000 is physically installed on your network and you have configured its network settings, you need to test the unit to see if it is set up properly.

A. Restore the setup workstation you used for the Network Setup to its original settings, and connect it to the network hub to create a "network workstation." (You could also use another workstation already on the network that has Internet access.)

B. Launch IE on the network workstation, and enter the IP address you assigned to LAN 1 (Step 1A, Quick Start menu: administration menu; Step 1B, Network: LAN Settings, sub-step B; or Step 1C, IP / LAN1 and LAN2). Be sure to include the port information **:88** in the address field. For example, if the R3000 were assigned an IP address of 10.10.10.10, you would enter **http://10.10.10.10:88** in the browser window's address field.

C. Click **Go**. You should be prompted to log into the Administrator console, giving the Username and Password.

If you can access the R3000 Administrator console, the R3000 is functioning on your network and you should proceed to Step 3.

If you cannot access the R3000 Administrator console, please verify the status of the LAN connection in Windows on the network workstation, and then try enabling/disabling the LAN connection. If that fails to work, check the following:

- The R3000 is turned on.
- The R3000 is connected to the same hub as your router/firewall.
- Can the PC normally connect to the Internet?
- Is the PC able to ping LAN 1 of the R3000?
- Is the R3000 plugged into a switch instead of a hub?
- Is there a caching server?
- Can the R3000 ping the filtered PC? (Refer to the System Command window in the Diagnostics section of the R3000 User Guide)
- Did you restart the R3000 after changing the network settings?
- Do you have both LAN ports connected to your network hub?
- If still unsuccessful, contact an 8e6 Technologies solutions engineer or technical support representative.

Step 3: Test Filtering or the Mobile Client Connection

Test Filtering

If this R3000 has been set up in the Invisible, Router, or Firewall mode, once you have accessed the R3000 Administrator console, you should test filtering.

A. Test the R3000's filtering by opening a browser window on a network workstation, and then going to the following empty sites to test pornography filtering:

- **http://test.8e6.net**
- **http://test.marshal8e6.com.tw**
- **http://testsite.marshal.com**

B. You should receive a block page for each URL tested. If you do not, contact an 8e6 Technologies solutions engineer or technical support representative.

Test the Mobile Client Connection

If this R3000 has been set up in the Mobile mode, you do not need to test filtering. Instead, once you have accessed the R3000 Administrator console, you should verify that the Mobile Client can reach the R3000.

A. Use a workstation on which the Mobile Client is installed that is not on a filtered portion of the LAN. Open a browser window on a network workstation, and then go to a few test sites you set up to be blocked by the Mobile Client.

B. The connections should be blocked, and the block pages served by the R3000 should display in the browser's Address field. If you do not receive a block page for each tested URL, contact an 8e6 Technologies solutions engineer or technical support representative.

Step 4: Set Library Updates

After verifying that the R3000 is correctly installed on your network, you need to activate R3000 library updates. Library updates are critical for filtering as new sites are added to the 8e6 library each day. To activate updates, visit the 8e6 Technologies Web site and enter the activation code that was issued to you by e-mail (also included on the product invoice).

NOTE: Port 443 (HTTPS) must be open for outgoing requests so that the R3000 can receive library updates.

Activate and Register the R3000

Be sure you have a valid host name chosen before activating your account.

A. Open an Internet browser window and go to **http://www.8e6.com/external/activate-8e6.html**.

B. After reading through the online End User License Agreement, click **Accept** to go to Step 2 of the activation process.

C. Enter your activation code.

D. Click **Submit** to go to the R3000 Activation and Registration page.

E. Verify that your serial number and activation code are the same as shown on this registration page.

F. Fill out the information on this page, including the host name for the public DNS server. *The entry of the unique host name you've chosen is mandatory in order to receive library updates.*

G. After all information is entered, click **Activate** to activate your service. You should receive confirmation that the R3000 at your host name has been activated.

You may wish to print the confirmation page for future reference in dealing with technical issues.

Perform a Complete Library Update

Your R3000 was shipped with the latest library update for the current software release. However, as new updates continually become available, before you begin using the R3000 you must perform a complete library update to ensure you have the latest library updates.

To download the latest library updates, go to the R3000 Administrator console.

A. Click the **Library** button at the top of the screen.

B. From the navigation panel, click Updates and select Manual Update from the menu:
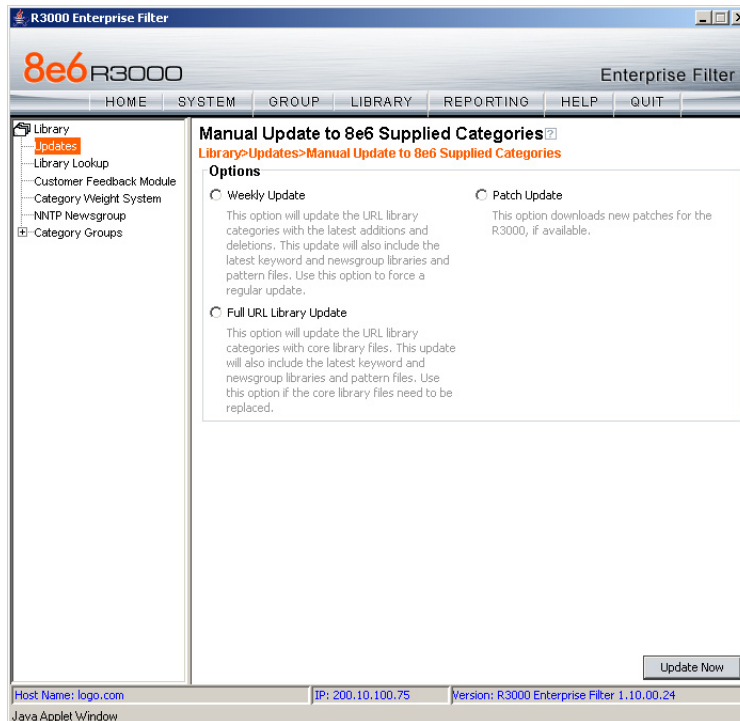
C. In the Manual Update to 8e6 Supplied Categories window, click the radio button corresponding to **Full URL Library Update**.

D. Click **Update Now** to begin the update process.

Monitor the Library Update Process

To verify that the library is being updated:

A. From the navigation panel, click Updates and select Library Update Log from the menu.

B. In the Library Update Log window, click **View Log** to display the update activity:
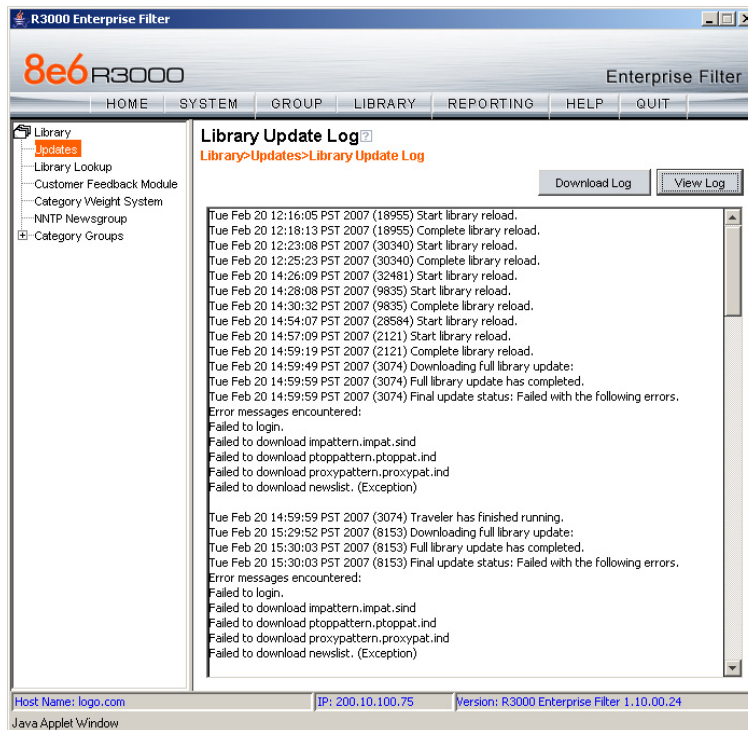
*NOTE: You will be notified in the log when the library has been completely updated by the message: "Full URL Library Update has completed." If this message does not yet display, click **View Log** again to view the latest information.*

WARNING: At the conclusion of this step, your R3000 will be actively filtering your network. The R3000 is initially set to filter pornography sites on all of your network traffic associated with the hub to which it is connected.

CONCLUSION

Congratulations; you have completed the R3000 quick start procedures. Now that the R3000 is filtering your network, the next step is to set up groups and create filtering profiles for group members.

To activate a default filter profile more appropriate for your operations, or to specify a more limited IP range to filter, consult Chapter 2: Group screen in the Global Administrator Section of the R3000 User Guide. Refer to Chapter 1: System screen for information on how to give end users access to acceptable HTTPS sites if strict HTTPS filtering settings are used.

Obtain the latest R3000 User Guide at **http://www.marshal8e6.com/Support/R3000/documentation.asp**

IMPORTANT: 8e6 recommends proceeding to the Best Filtering Practices section to implement setup procedures for the filtering scenarios described within that section.

BEST FILTERING PRACTICES

Threat Class Groups

8e6's filtering library currently consists of 103 library filtering categories, each placed in one of the 20 filtering category groups defined in the interface: Adult Content, Bandwidth, Business/Investments, Community/Organizations, Education, Entertainment, Government/Law/Politics, Health/Fitness, Illegal/Questionable, Information Technology, Internet Communication, Internet Productivity, Internet/Intranet Misc., News/Reports, Religion/Beliefs, Security, Shopping, Society/Lifestyles, Travel/Events, and Custom Categories.

Outside of the interface, we have also grouped these library categories into four Threat Class Groups, based on the type of security level that best defines them:

- Threats/Liabilities
- Bandwidth/Productivity
- General/Productivity
- Pass/Allow

Threats/Liabilities	Bandwidth/Productivity		General/Productivity		Pass/Allow
Adult Content	**Bandwidth**	**Internet Productivity**	**Business/Investments**	**Information Technology**	**Custom Categories**
Child Pornography	Image Servers/Search Engines	Adware	Employment	Dynamic DNS	Intranet/Internal Servers
Explicit Art	Internet Radio	Banner/Web Ads	Financial Institution	Freeware/Shareware	Company Internal
Obscene/Tasteless	Peer-to-Peer (P2P) File Sharing	Fantasy Sports	General Business	Information Technology	School District Internal
Pornography/Adult Content	Video Sharing	Free Hosts	Online Trading/Brokerage	Internet Service Providers	**Always Allow Categories**
R-rated	VoIP	Web Hosts	Real Estate	Portals	Partner or business-related
Security	Web-based storage	Remote Access	**Community/Organizations**	Search Engines	
Bad Reputation Domains	Streaming Media	Generic Remote Access	Community Organizations	Web-based Newsgroups	NOTE: The only 8e6 filtering category
Botnet	Flash Video	GoToMyPC	Local Community	**Internet/Intranet Misc.**	in the Pass/Allow group is
Hacking	Generic Streaming Media	Remote Desktop	**Education**	Domain Landing	Intranet/Internal Servers in the
Malicious Code/Virus	QuickTime Video	Virtual Network Computing	Education	Edge Content Servers	Custom Categories category group.
Phishing	Real Time Streaming Protocol	pcAnywhere	Educational Games	Invalid Web pages	This category must be maintained by
Spyware	Windows Media Video	**Shopping**	Online Classes	Reviewed/Miscellaneous	your administrator. The other listings
Web-based Proxies/Anonymizers	**Internet Communication**	Online Auction	Reference	**News/Reports**	under Pass/Allow are suggested
Illegal/Questionable	Chat	Shopping	**Entertainment**	News	topics you might wish to set up.
Criminal Skills	Message Boards		Art	Sports	
Dubious/Unsavory	Online Communities		Comics	Weather/Traffic	
Hate & Discrimination	Web-based Productivity Apps		Entertainment	**Religion/Beliefs**	
Illegal Drugs	Web logs/Personal Pages		Gambling	Paranormal	
School Cheating	Web-based E-mail		Humor	Religion	
Terrorist/Militant/Extremist	Instant Messaging (IM)		Kids	**Society/Lifestyles**	
	Generic IM		Movies & Television	Alcohol	
	Google Chat		Music Appreciation	Animals/Pets	
	Google Talk		Online Greeting Cards	Books & Literature/Writings	
	ICQ_and_AIM		Restaurants/Dining	Dating/Personals	
	MSN_Messenger		Theater	Fashion	
	Meebo		Games	Lifestyle	
	My Space IM		**Government/Law/Politics**	Recreation	
	PoPo		Government	Self-Defense	
	QQ		Legal	Social Opinion	
	ToToMoMo		Military Appreciation	Tobacco	
	Wang Wang		Military Official	Weapons	
	Yahoo_IM		Political Opinion	**Travel/Events**	
			Health/Fitness	Tickets	
			Fitness	Travel	
			Health/Medical	Vehicles	
			Holistic		
			Self Help		

Please review the Filtering Scenarios sub-section for information on configuring the R3000 to fulfill the filtering scenarios assigned to each of the four Threat Class Groups.

Filtering Scenarios

This collection of filtering scenarios is designed to help you get started filtering the network. Each scenario is followed by R3000 setup information. Please consult the "How to" section in the index of the R3000 User Guide for pages containing detailed, step-by-step instructions on configuring and/or using the tools and features in that scenario.

I. Threats/Liabilities

1. Category block

Block categories that threaten your network/organization. In pertinent profiles, block access to the Security category group and other categories containing content that threaten your organization.

To block categories in a profile, go to:
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

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In the R3000 User Guide index, see:
• How to: use library categories in a profile

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2. Rule block

Use a rule to block categories that threaten your network/organization. Create a rule that blocks access to the Security category group and other categories containing content that threaten your organization, and then apply this rule to pertinent profiles. Or use a defined rule—such as the 8e6 CIPA Compliance rule, if in the educational sector—to block related categories.

To create a rule and block categories in a profile, go to:
- GROUP: Group > Global Group > Rules
- Group > IP > member > member profile > Category tab
  or Group > Global Group > Global Group Profile > Category tab

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In the R3000 User Guide index, see:
• How to: use rules
• How to: use library categories in a profile

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3. X-Strike on blocked categories

Lock out users from workstations after "X" number of attempts are made to access content that could endanger your network/organization. Enable and configure the X Strikes Blocking feature, specifying categories that threaten your organization. Enable the X Strikes Blocking filter option in applicable profiles. The user receives a block page and is locked out of Internet/Intranet access after the specified number of "strikes" are made to any of these categories.

To block categories in a profile using the X Strikes Blocking feature, go to:
- SYSTEM: System > X Strikes Blocking > Configuration tab, and Categories tab
- GROUP: Group > IP > member > member Profile > Filter Options tab, X Strikes Blocking enabled
  or GROUP: Group > Global Group > Global Group Profile > Filter Options tab (X Strikes Blocking enabled)

In the R3000 User Guide index, see:
- *How to: set up X Strikes Blocking*
- *How to: set up profile options*

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4. Custom Lock, Block, Warn, X Strikes, Quota pages

Customize a lock, block, warning, X Strikes, or quota page. Modify page contents to point to a URL within your organization, send a request to your administrator's email address, or include verbiage of your choice that informs users of their Internet usage activities that triggered the page.

To customize pages, go to:
- SYSTEM: System > Customization > Common Customization window, and other applicable customization windows

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In the R3000 User Guide index, see:
- *How to: customize pages*

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5. URL Keywords

Block access to network-endangering content via URL keywords. In pertinent library categories, enter URL keywords to be blocked. Block these categories in applicable profiles.

To set up URL keywords to be blocked, go to:
- LIBRARY: Library > Category Groups > category > URL Keywords
- GROUP: Group > IP > member > member Profile > Filter Options tab (URL Keyword Filter Control enabled)
  or GROUP: Group > Global Group > Global Group Profile > Filter Options tab (URL Keyword Filter Control enabled)

In the R3000 User Guide index, see:
• How to: set up URL Keywords
• How to: set up profile options

6. Search Engine Keywords

Block access to network-endangering content via search engine keywords. In pertinent library categories, enter SE keywords to be blocked. Block these categories in applicable profiles.

To set up Search Engine Keywords to be blocked, go to:
• LIBRARY: Library > Category Groups > category > Search Engine Keywords
• GROUP: Group > IP > member > member Profile > Filter Options tab (Search Engine Keyword Filter Control enabled)
  or GROUP: Group > Global Group > Global Group Profile > Filter Options tab (Search Engine Keyword Filter Control enabled)

In the R3000 User Guide index, see:
• How to: set up Search Engine Keywords
• How to: set up profile options

7. Custom Category (blocked)

Add a category to block content that could endanger your network/organization. Create a custom category with contents tailored to safeguard your organization. Block this category in appropriate profiles.

To set up a custom category and block it, go to:
• LIBRARY: Library > Category Groups > Custom Categories > Add Category
• GROUP: Group > IP > member > member Profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

In the R3000 User Guide index, see:
• How to: set up a custom category
• How to: use library categories in a profile

8. Minimum Filtering Level

At the root level, block categories that could endanger your network/organization. Configure the Minimum Filtering Level to block specified categories, and do the same in the Global Group Profile.

To configure the minimum filtering level, go to:
- GROUP: Group > Global Group > Minimum Filtering Level
- Group > Global Group > Global Group Profile > Category tab

In the R3000 User Guide index, see:
- *How to: configure the Minimum Filtering Level*
- *How to: use library categories in a profile: Global Group Profile*

9. Override Account bypass

Use an Override Account to grant a user access to categories blocked at the root level. To grant designated users access to globally-blocked categories, set up an Override Account at the Global Group level, or enable the option to allow the Minimum Filtering Level to be bypassed with an Override Account, and then set up the Override Account at the group level.

To set up an override account at the Global Group level, go to:
- GROUP: Group > Global Group > Override Account window

To configure the bypass feature and set up a group level override account, go to:
- GROUP: Group > Global Group > Minimum Filtering Level > Min. Filter Bypass
- Group > IP > group > Override Account window

In the R3000 User Guide index, see:
- *How to: set up an Override Account: Global Group*
or:
- *How to: configure the Minimum Filtering Level: Bypass Options*
- *How to: set up an Override Account: Group profile*

10. Exception URL bypass

Use exception URLs to grant users access to URLs blocked at the root. To grant users access to globally-blocked URLs, enable the exception URL bypass option in the Minimum Filtering Level. For these users, add the exception URLs in their profiles.

To set up the Exception URL bypass feature and let users bypass blocked URLs, go to:
- GROUP: Group > Global Group > Minimum Filtering Level > Min. Filter Bypass
- Group > IP > member > Exception URL window

In the R3000 User Guide index, see:
• How to: configure the Minimum Filtering Level: Bypass Options
• How to: set up Exception URLs

11. Proxy Patterns

Prevent users from using proxy patterns to bypass the Internet filter. Enable Pattern Blocking for all users. In the profile, block Security > Web-based Proxies/Anonymizers.

To set up the proxy pattern blocking feature and apply it to profiles, go to:
- SYSTEM: System > Control > Filter window
- GROUP: Group > IP > member > member Profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

In the R3000 User Guide index, see:
• How to: configure filtering
• How to: use library categories in a profile

12. File type blocking

Prevent users from downloading and using executable files that may threaten your network security. Create a custom category for file extensions and add ".exe" to the URL Keyword list. Other files you might include in the list are: .dll, .ocx, .scr, .bat, .pif, .cpl, .cmd, .hta, .lnk, .inf, .sys, .vbs, .vb, .wsc, .wsh, .wsf. Do NOT include ".com" in the list, or the files will not be found and blocked. In the applicable profiles, block this custom category and enable both URL Keyword Filter Control and extension options.

To set up file type blocking and apply this feature to profiles, go to:
- LIBRARY: Library > Category Groups > Custom Categories > Add Category
- Library > Custom Categories > category > URL Keywords
- GROUP: Group > IP > member > member Profile > Category tab, and Filter Options tab (URL Keyword Filter Control and extension options enabled)
  or GROUP: Group > Global Group > Global Group Profile > Category tab, and Filter Options tab (URL Keyword Filter Control and extension options enabled)

In the R3000 User Guide index, see:
- *How to: set up a custom category*
- *How to: set up URL Keywords: Custom Categories*
- *How to: use library categories in a profile*
- *How to: set up profile options*

II. Bandwidth/Productivity

1. Time Quota/Hit Quota

Limit time spent in PASSED categories to prevent excessive bandwidth usage and increase productivity. Enable the Quota Settings feature, and configure the Seconds Per Hit. Set up pertinent categories in the user's profile with quotas so the user is notified and then locked out of those categories after all minutes in the quota have been used.

To set up the quota feature and configure profiles to use this feature, go to:
- SYSTEM: System > Quota Setting window
- GROUP: Group > IP > member profile > Category tab (Quota column)
  or Group > Global Group > Global Group Profile > Category tab (Quota column)

In the R3000 User Guide index, see:
- *How to: set up Quotas*
- *How to: use library categories in a profile*

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2. Overall Quota

Restrict all quota time in a profile to improve bandwidth usage and productivity. Cap the amount of time a user spends in all quota-marked categories by enabling the Overall Quota option and specifying the number of minutes the end user can visit quota-marked categories before being notified and then locked out of these categories.

To set up the quota feature and configure profiles to use the Overall Quota feature, go to:
- SYSTEM: System > Quota Setting window
- GROUP: Group > IP > member profile > Category tab (Overall Quota)
  or Group > Global Group > Global Group Profile > Category tab (Overall Quota)

> *In the R3000 User Guide index, see:*
> *• How to: set up Quotas*
> *• How to: use library categories in a profile*

3. Time Based Profiles

Schedule a profile to be used at a specific time. Set up one or more profiles for each user or group to be active at a scheduled time.

To set up Time Profiles, go to:
- GROUP: Group > IP > member > Time Profile window

> *In the R3000 User Guide index, see:*
> *• How to: set up a Time Profile*

4. Warn option with low filter settings

Warn users before they access unacceptable content that their Internet activities are logged. Set HTTPS filtering at the "low" level, and then configure the number of minutes for the interval the warning page will re-display for any user who attempts to access content deemed unacceptable. In the end user's profile, set the Warn categories.

To set up and use the warn option, go to:
- SYSTEM: System > Control > Filter window
- System > Warn Option Setting window
- GROUP: Group > IP > member > member profile > Category tab (Warn column)
  or GROUP: Group > Global Group > Global Group Profile > Category tab (Warn column)

In the R3000 User Guide index, see:
- *• How to: configure filtering*
- *• How to: configure the Warn Option Setting*
- *• How to: use library categories in a profile*

5. Warn-strike

Warn users before they access unacceptable content and may be locked out of the Internet. Enable the Warn feature along with X Strikes Blocking. After the end user is warned for the designated number of times defined in X Strikes Blocking, that user is locked out of all Internet/intranet access.

To set up and use the warn option with X Strikes Blocking, go to:
- • SYSTEM: System > X Strikes Blocking window
- • System > Warn Option Setting window
- • GROUP: Group > IP > member > member profile > Category Profile tab (Warn column), and Filter Options tab (X Strikes Blocking enabled)
  or GROUP: Group > Global Group > Global Group Profile > Category tab (Warn column), and Filter Options tab (X Strikes Blocking enabled)

In the R3000 User Guide index, see:
- *• How to: set up X Strikes Blocking*
- *• How to: configure the Warn Option Setting*
- *• How to: use library categories in a profile*
- *• How to: set up profile options*

6. P2P patterns

Block P2P services. Enable Pattern Blocking for all users. In the profile, block Bandwidth > Peer-to-peer/File Sharing category.

To block P2P services, go to:
- • SYSTEM: System > Control > Filter window
- • GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

In the R3000 User Guide index, see:
- *• How to: configure filtering*
- *• How to: use library categories in a profile*

7. **IM patterns**

Block IM services. Enable Pattern Blocking for all users. In the profile, block Internet Communication > Chat and Instant Messaging (IM) categories.

To block IM services, go to:
- SYSTEM: System > Control > Filter window
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

In the R3000 User Guide index, see:
• How to: configure filtering
• How to: use library categories in a profile

8. **Game patterns**

Block game patterns. Enable Pattern Blocking for all users. In the profile, block Entertainment > Games category.

To block game patterns, go to:
- SYSTEM: System > Control > Filter window
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

In the R3000 User Guide index, see:
• How to: configure filtering
• How to: use library categories in a profile

9. **Streaming Media patterns**

Block streaming media patterns. Enable Pattern Blocking for all users. In the profile, block Bandwidth > Streaming Media category.

To block streaming media patterns, go to:
- SYSTEM: System > Control > Filter window
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

In the R3000 User Guide index, see:
• How to: configure filtering
• How to: use library categories in a profile

10. Remote Access patterns

Block remote access patterns. Enable Pattern Blocking for all users. In the profile, block Internet Productivity > Remote Access category.

To block remote access patterns, go to:
- SYSTEM: System > Control > Filter window
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

---

In the R3000 User Guide index, see:
- *How to: configure filtering*
- *How to: use library categories in a profile*

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11. HTTPS settings

Establish the security level for HTTPS site access. Configure HTTPS filter settings in the Filter window. Choose "None" if you do not want the R3000 to filter HTTPS sites, "Low" if you want the R3000 to filter HTTPS sites without having the R3000 communicate with IP addresses or hostnames of HTTPS servers, "Medium" if you want the R3000 to communicate with HTTPS servers in order to get the URL from the certificate for URL validation only (this is the default setting), or "High" if you want the R3000 to communicate with HTTPS servers to obtain the certificate with a very strict validation of the return URL.

To configure HTTPS settings, go to:
- SYSTEM: System > Control > Filter window

In the R3000 User Guide index, see:
- *How to: configure filtering*

---

12. Category block

Block the Bandwidth category. Set the Bandwidth category to be blocked in pertinent profiles.

To block the Bandwidth category, go to:
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

---

In the R3000 User Guide index, see:
- *How to: use library categories in a profile*

---

13. Rule block

Use a rule to block the Bandwidth category. Create a rule that blocks the Bandwidth category and apply this rule to pertinent profiles.

To create and block a rule for the Bandwidth category, go to:
- GROUP: Group > Global Group > Rules
- Group > IP > member > member profile > Category tab
  or Group > Global Group > Global Group Profile > Category tab

---

In the R3000 User Guide index, see:
  • How to: use rules
  • How to: use library categories in a profile

---

14. SE Keywords

Block specific search engine keywords to restrict access to bandwidth-consumptive categories. In pertinent library categories, enter URL keywords to be blocked. Block these categories in the profile.

To set up search engine keywords and block them in a profile, go to:
- LIBRARY: Library > Category Groups > category group > category > Search Engine Keywords
- GROUP: Group > IP > member > member Profile > Filter Options tab (Search Engine Keyword Filter Control enabled)
  or GROUP: Group > Global Group > Global Group Profile > Filter Options tab (Search Engine Keyword Filter Control enabled)

In the R3000 User Guide index, see:
  • How to: set up Search Engine Keywords
  • How to: set up profile options

---

15. URL Keywords

Block specific URL keywords to restrict access to bandwidth-consumptive categories. In pertinent library categories, enter SE keywords to be blocked. Block these categories in the profile.

To set up and block URL keywords in a profile, go to:
- LIBRARY: Library > Category Groups > category group > category > URL Keywords
- GROUP: Group > IP > member > member Profile > Filter Options tab (URL Keyword Filter Control enabled)
  or GROUP: Group > Global Group > Global Group Profile > Filter Options tab (URL Keyword Filter Control enabled)

In the R3000 User Guide index, see:
- *How to: set up URL Keywords*
- *How to: set up profile options*

---

16. Custom Block/Warn/X Strikes/Quota pages

Customize a block, warning, X Strikes, or quota pages. Modify page contents to point to a URL within your organization, send a request to your administrator's email address, or include verbiage of your choice that informs users of their Internet usage activities that triggered the page.

To customize pages, go to:
- SYSTEM: System > Customization > Common Customization window, and other applicable customization windows

---

In the R3000 User Guide index, see:
- *How to: customize pages*

---

17. Real Time Probe information

Monitor Internet usage activity in real time. Enable Real Time Probe reporting. Create a probe to monitor Internet traffic by category, user IP address, username, or URL. Set up a schedule for the probe to run during a specific time period.

To enable and use Real Time Probe reporting, go to:
- REPORTING: Report > Real Time Probe > Configuration tab
- Real Time Probe > Go to Real Time Probe Reports GUI link > Real Time Probe Reports > Create tab

---

In the R3000 User Guide index, see:
- *How to: set up Real Time Probes*

III. General/Productivity

1. Warn Feature with higher thresholds

Warn users before they access unacceptable content. Set HTTPS filtering at the "high" level to block certificates that may be questionable. Configure Warning settings. In the end user's profile, apply the warn option to pertinent categories. The end user may not be able to access all requested sites due to high settings, and will receive the warning message for excessive Internet usage.

To set up and use the warn option with high filter settings, go to:
- SYSTEM: System > Control > Filter window
- System > Warn Option Setting window
- GROUP: Group > IP > member profile > Category tab (Warn column)
  or GROUP: Group > Global Group > Global Group Profile > Category tab (Warn column)

In the R3000 User Guide index, see:
- *How to: configure filtering*
- *How to: configure the Warn Option Setting*
- *How to: use library categories in a profile*

2. Warn-strike with higher thresholds

Warn users before they access unacceptable content and may be locked out of the Internet. Set HTTPS filtering at the "high" level, configure Warning settings, and enable X Strikes Blocking. In the end user's profile, set the Warn categories, and enable X Strikes Blocking. The end user may not be able to access all requested sites due to high settings, and will receive the warning message for excessive Internet usage. After being warned for the designated number of times defined in X Strikes Blocking, that user is locked out of all Internet/Intranet access.

To set up and use the warn option, go to:
- SYSTEM: System > Control > Filter window
- System > X Strikes Blocking window
- System > Warn Option Setting window
- GROUP: Group > IP > member > member profile > Category tab (Warn column), and Filter Options tab (X Strikes Blocking enabled)
  or GROUP: Group > Global Group > Global Group Profile > Category tab (Warn column), and Filter Options tab (X Strikes Blocking enabled)

In the R3000 User Guide index, see:
- *How to: configure filtering*
- *How to: set up X Strikes Blocking*
- *How to: configure the Warn Option Setting*
- *How to: use library categories in a profile*
- *How to: set up profile options*

3. Time Quota/Hit Quota

Limit time spent in PASSED categories to increase productivity. Enable the Quota Settings feature, and configure the Seconds Per Hit. Set up pertinent categories in the user's profile with quotas so the user is notified and then locked out of those categories after all minutes in the quota have been used.

To set up the Quota feature and use quotas in profiles, go to:
- SYSTEM: System > Quota Setting window
- GROUP: Group > IP > member > profile > Category tab (Quota column)
  or GROUP: Group > Global Group > Global Group Profile > Category tab (Quota column)

In the R3000 User Guide index, see:
- *How to: set up Quotas*
- *How to: use library categories in a profile*

---

4. Time Based Profiles

Schedule a profile to be used at a specific time. Set up one or more profiles for each user or group to be active at a scheduled time.

To set up and use time profiles, go to:
- GROUP: Group > IP > member > Time Profile window

In the R3000 User Guide index, see:
- *How to: set up a Time Profile*

---

5. Overall Quota

Restrict all quota time in a profile to improve productivity. Cap the amount of time a user spends in all quota-marked categories by enabling the Overall Quota option and specifying the number of minutes the end user can visit quota-marked categories before being notified and then locked out of these categories.

To set up the quota feature and configure profiles to use the Overall Quota feature, go to:
- SYSTEM: System > Quota Setting window
- GROUP: Group > IP > member profile > Category tab (Overall Quota)
  or Group > Global Group > Global Group Profile > Category tab (Overall Quota)

In the R3000 User Guide index, see:
- *How to: set up Quotas*
- *How to: use library categories in a profile*

---

6. Customize an 8e6 Supplied Category

Include region-specific content in an 8e6 Supplied category. Add/delete content to/from an existing 8e6 Supplied Category that only includes content pertinent to your organization or region that should be blocked. Apply this category to a profile.

To customize and use an 8e6 Supplied Category in a profile, go to:
- LIBRARY: Library > Category Groups > category group > category (add/delete URLs, URL Keywords, Search Engine Keywords)
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

> *In the R3000 User Guide index, see:*
> *• How to: set up URLs in categories: 8e6 Supplied Categories*
> *• How to: use library categories in a profile*

7. Local category adds/deletes

Include region-specific content in a Custom category. Set up a custom category that only includes content pertinent to your organization or region that should be blocked. Apply this category to a profile.

To create a Custom Category and use it in a profile, go to:
- LIBRARY: Library > Category Groups > Custom Categories > Add Category (add URLs, URL Keywords, Search Engine Keywords)
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

> *In the R3000 User Guide index, see:*
> *• How to: set up a custom category*
> *• How to: use library categories in a profile*

8. Custom Block/Warn/X Strikes/Quota pages

Customize a block, warning, X Strikes, or quota pages. Modify page contents to point to a URL within your organization, send a request to your administrator's email address, or include verbiage of your choice that informs users of their Internet usage activities that triggered the page.

To customize pages, go to:
- SYSTEM: System > Customization > Common Customization window, and other applicable customization windows

> *In the R3000 User Guide index, see:*
> *• How to: customize pages*

IV. Pass/Allow

1. Always Allow Custom Category

Create a white list custom category. Set up an Always Allow category and add all URLs deemed acceptable. Apply this category to all pertinent profiles.

To create a white list custom category and use it in a profile, go to:
- LIBRARY: Library > Category Groups > Custom Categories > Add Category (add URLs, URL Keywords, Search Engine Keywords)
- GROUP: Group > IP > member > member profile > Category tab
  or GROUP: Group > Global Group > Global Group Profile > Category tab

---

In the R3000 User Guide index, see:
- *How to: set up a custom category*
- *How to: use library categories in a profile*

---

2. URL exceptions

Use Exception URLs to let specified individuals bypass the Minimum Filtering Level. Enable the option to bypass the Minimum Filtering Level using exception URLs. Enter the exception URLs in the applicable profile.

To set up the Exception URL bypass feature and let users bypass blocked URLs, go to:
- GROUP: Group > Global Group > Minimum Filtering Level > Min. Filter Bypass
- Group > IP > member > Exception URL window

In the R3000 User Guide index, see:
- *How to: configure the Minimum Filtering Level: Bypass Options*
- *How to: set up Exception URLs*

---

3. IP exceptions

Use Exception URLs to grant individuals access to IPs blocked by the Minimum Filtering Level. Enable the option to bypass the Minimum Filtering Level using exception URLs. Enter the exception Internet/intranet IP addresses in the applicable profile.

To set up the Exception URL bypass feature and let users bypass blocked IP addresses, go to:
- GROUP: Group > Global Group > Minimum Filtering Level > Min. Filter Bypass
- Group > IP > member > Exception URL window

In the R3000 User Guide index, see:
- *How to: configure the Minimum Filtering Level: Bypass Options*
- *How to: set up Exception URLs*

---

4. Override Accounts

Set up override accounts to grant specified users access to URLs blocked for general users. Enable the option to bypass the Minimum Filtering Level using an override account. Create the override account profile, including the accessible categories. To grant designated users access to globally-blocked categories, set up an Override Account at the Global Group level, or enable the option to allow the Minimum Filtering Level to be bypassed with an Override Account, and then set up the Override Account at the member level.

To set up an override account at the Global Group level, go to:
- GROUP: Group > Global Group > Override Account window

To configure the bypass feature and set up a group level override account, go to:
- GROUP: Group > Global Group > Minimum Filtering Level > Min. Filter Bypass
- Group > IP > group > Override Account window

In the R3000 User Guide index, see:
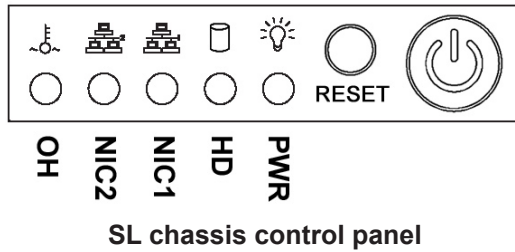*• How to: set up an Override Account: Global Group*
or:
• How to: configure the Minimum Filtering Level: Bypass Options
• How to: set up an Override Account: Group profile

LED INDICATORS AND BUTTONS

SL and MSA Units

Front LED Indicators and Buttons for Hardware Status Monitoring

LED indicators and buttons for hardware status monitoring display on the front panel, located on the right side of the SL and MSA chassis (see diagrams below).

SL chassis control panel

LED Indicator Key
PWR = Power
HD = HDD Activity
NIC1 = LAN 1
NIC2 = LAN 2
OH = Overheat

MSA chassis control panel
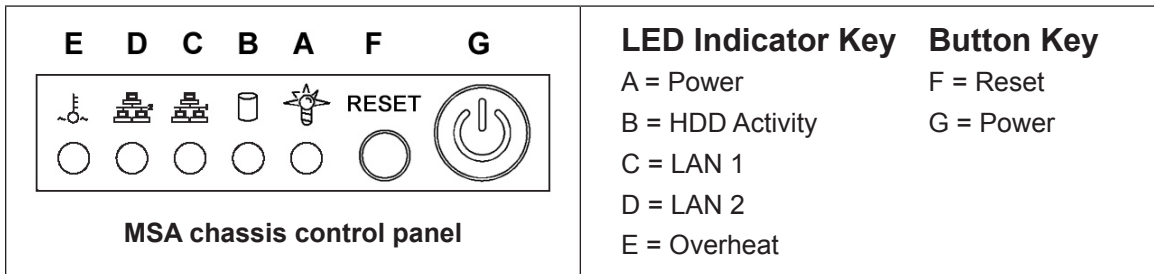
LED Indicator Key	Button Key
A = Power	F = Reset
B = HDD Activity	G = Power
C = LAN 1	
D = LAN 2	
E = Overheat	

LED indicators alert you to the status of a feature on the unit while buttons let you perform a function on the unit.

LED Indicator	Color	Condition	Description
Power	Green	On	System On
		Off	System Off
HDD	Amber	Blinking	HDD Activity
		Off	No HDD Activity
LAN 1 & LAN 2	Green	On	Link Connected
		Blinking	LAN Activity
		Off	Disconnected
Overheat	Red	On	System Overheated
		Off	System Normal

HL Unit

Front LED Indicators and Buttons for Hardware Status Monitoring

On an HL unit, the following control panel buttons, icons, and LED indicators for hardware status monitoring display on the right side of the front panel:
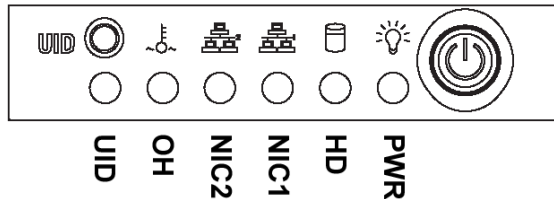
HL chassis control panel

LED Indicator Key
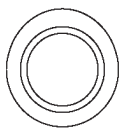PWR = Power
HD = HDD Activity
NIC1 = LAN 1
NIC2 = LAN 2
OH = Overheat
UID = Unique IDentifier

The buttons and LED indicators for the depicted icons function as follows:

UID (button) – On an HL unit, when the UID button is pressed, a steady blue LED displays on both the front and rear of the chassis (see also Rear of Chassis). These indicators are used for easy location of the chassis in a large stack configuration. The LED remains on until the button is pressed a second time.

Overheat/Fan Fail (icon) – This LED is unlit unless the chassis is overheated. A flashing red LED indicates a fan failure. A steady red LED (on and not flashing) indicates an overheating condition, which may be caused by cables obstructing the airflow in the system or the ambient room temperature being too warm.

**NIC2** (icon) – A flashing green LED indicates network activity on LAN2.

NIC1 (icon) – A flashing green LED indicates network activity on LAN1.

HDD (icon) – In addition to displaying in the control panel, this icon also displays on the front panel on each hard drive carrier. A green LED indicates hard drive activity. An unlit LED on a drive carrier may indicate a hard drive failure.

Power (icon) – The LED is unlit when the server is turned off. A steady green LED indicates power is being supplied to the unit's power supplies. (See also Rear of Chassis.) A steady amber LED—or an unlit LED—may indicate a disconnected or loose power supply cord.
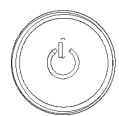
Power (button) – When the power button is pressed, the main power to the server is turned on. When the power button is pressed again, the main power to the server is removed but standby power is still supplied to the server.

Rear LED Indicators for Hardware Status Monitoring

UID (LED indicator) – On the rear of the HL chassis, to the left of the power supplies, a steady blue UID LED indicator displays when the UID button on the control panel is pressed. This LED remains lit until the UID button is pressed again.

VGA Port   **Button/LED**
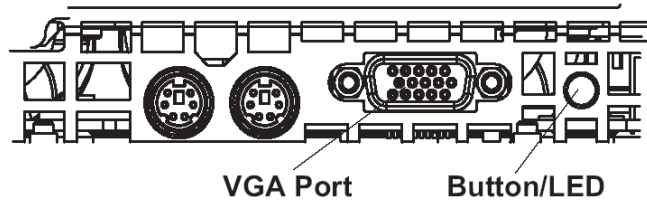
Power Supplies (LED indicators) – The power supplies are located at the right on the rear of the chassis. An LED indicator is located above each of the power plugs.

Power Supplies

Power Plug   Power Plug
LED   LED
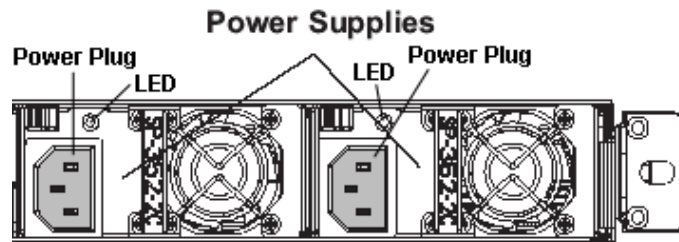
HL and SL Units

Front LED Indicators for Software and Hardware Status Monitoring

On an HL or SL unit, the following LED indicators for software and hardware status monitoring display on the left side of the front panel:

◯ **FLTR**

◯ **LIBR**

◯ **RAID**

◯ **UPDT**

**left side of the
front panel**

LED Indicator Key

FLTR = Filtering Status

LIBR = Library Update Status

RAID = Hard Drive Status

UPDT = Software Update Status

LED Indicator	Color	Condition	Description
FLTR	Green	On	Filtering traffic
	Amber	On	Library being uploaded or one or more processes being started
	Red	On	Not filtering traffic
LIBR	Green	On	Library updated within the past two days or less
	Amber	On	Library updated more than two days ago, but within the past three days
	Red	On	Library updated more than three days ago
RAID	Green	On	RAID mode enabled and running
		Off	RAID mode is inactive
	Red	On	Hard drive fault or failure
UPDT	Amber	On	Software update detected
		Off	No software update detected

REGULATORY SPECIFICATIONS AND DISCLAIMERS

Declaration of the Manufacturer or Importer

Safety Compliance

USA:	UL 60950-1 2nd ed. 2007
Europe:	Low Voltage Directive (LVD) 2006/95/EC to CB Scheme EN 60950: 2006
International:	UL/CB to IEC 60950-1:2006

Electromagnetic Compatibility (EMC)

USA:	FCC CFR 47 Part 15, Verified Class A Limit
Canada:	IC ICES-003 Class A Limit
Europe:	EMC Directive, 2004/108/EC & Low Voltage Directive (LVD) 2006/95/EC
Taiwan:	Bureau of Standards and Metrology Inspection (BSMI) CNS 13438: 2006

Federal Communications Commission (FCC) Class A Notice (USA)

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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Declaration of Conformity

Models: HL-005-001, HL-015-001, SL-004-001, SL-014-001, MSA-004-001

Electromagnetic Compatibility Class A Notice

Industry Canada Equipment Standard for Digital Equipment (ICES-003)

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sure le matériel brouilleur du Canada.

English translation of the notice above:

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Bureau of Standards Metrology and Inspection (BSMI) - Taiwan

BSMI EMC STATEMENT -- TAIWAN

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成設頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

8e6

EC Declaration of Conformity

European Community Directives Requirement (CE)

Declaration of Conformity

Manufacturer's Name:	8e6 Technologies
Manufacturer's Address:	828 W. Taft Avenue
	Orange, CA 92865

Application of Council Directive(s):	Low Voltage	• 2006/95/EC
	EMC	• 2004/108/EC

Standard(s):	Safety	• EN60950: 2006
	EMC	• EN55022: 2006
		• EN55024: 1998 +A2:2003
		• EN61000-3-2: 2000
		• EN61000-3-3: 2001

Product Name(s):   Internet Appliance

Product Model Number(s): HL-005-001, HL-015-001,
                          SL-004-001, SL-014-001, MSA-004-001

Year in which conformity is declared: 2008

All hardware components supplied in this unit's shipping carton are certified by our vendors to be RoHS compliant.

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).

Location:	Orange, CA, USA	Signature:	
Date:	January 21, 2008	Full Name:	Gregory P. Smith
		Position:	Director of Engineering Operations

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