Trustwave®

Security Reporter
Appliance Installation Guide
Version 5.2.10

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Legal Notice

Formatting Conventions

This manual uses the following formatting conventions to denote specific information.

FORMAT AND SYMBOLS	MEANING
Blue Underline	A blue underline indicates a Web site or email address.
Bold	Bold text denotes UI control and names such as commands, menu items, tab and field names, button and check box names, window and dialog box names, and areas of windows or dialog boxes.
`Code`	Text in this format indicates computer code or information at a command line.
Italics	Italics are used to denote the name of a published work, the current document, or another document; for text emphasis; or to introduce a new term. In code examples italics indicate a placeholder for values and expressions.
[Square brackets]	In code examples, square brackets indicate optional sections or entries.
	Note: This symbol indicates information that applies to the task at hand.
	Tip: This symbol denotes a suggestion for a better or more productive way to use the product.
	Caution: This symbol highlights a warning against using the product in an unintended manner.
	Warning: This symbol alerts you that a situation has the potential to cause bodily harm or death, or significant damage to property or equipment
	More documentation: This symbol highlights a reference to additional information in the Security Reporter Administrator Guide.

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1 Trustwave SR Appliance Introduction

Thank you for choosing to install the Trustwave Security Reporter appliance. The Security Reporter (SR) from Trustwave consists of the best in breed of Professional Edition reporting software consolidated into one unit, with the capability to generate reports of end user Internet activity and blocked requests from Trustwave Web Filter or Secure Web Gateway (SWG) appliances.

For new installations, you have the option to use an Equus SR 300, 500, 700 or 730 model.

Logs of end user Internet activity from a Web Filter or Secure Web Gateway are fed into SR, giving you an overall picture of end user productivity in a bar chart dashboard, and the ability to interrogate massive datasets through flexible drill-down technology, until the desired view is obtained. This "view" can be memorized and saved to a user-defined report menu for repetitive, scheduled execution and distribution.

Web Filter logs provide content for dynamic, graphical snapshots of network Internet traffic. Drilling down into the URL categories quickly identifies the source of user-generated Web threats. SWG logs provide content for bar charts detecting security threats on the network so that prompt action can be taken to terminate them before they become a liability on your network.

Using the SR, threats to your network are readily targeted, thus arming you with the capability to take immediate action to halt the source, secure your network, and protect your organization against lost productivity, network bandwidth issues, and possible legal problems that can result from the misuse of Internet and intranet resources.

Quick setup procedures to implement the best reporting practices are included in the Best Reporting Practices section that follows the Conclusion of this guide.

1.1 About this Document

This document is divided into the following sections:

- **Introduction** - This section provides an overview of the SR product and information about how to use this document

- **Service Information** - This section provides Trustwave contact information

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

- **Install the Server** - This section explains how to configure the SR for reporting

- **Best Reporting Practices** - This section includes reporting scenarios and instructions for implementing the best reporting practices to capture a snapshot of end user activity on your network that tells you whether or not policies are being enforced

- **Evaluation Mode** - This section gives information on using the SR in the evaluation mode

- **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 specified SR models

- **Appendices** - Appendix A explains how to set up the optional NAS (Fibre Channel Connected Storage Device or "SAN") unit. Appendix B explains how to install the optional Ethernet Tap device on your network for bandwidth monitoring.

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

1.2 Security Reporter Models 505, 705 and 735

Note: These hardware models are no longer available for new purchase. Details are provided here for the use of customers who may wish to use an older unit.

Please refer to the appropriate IBM documentation when installing Security Reporter model 505 that uses IBM System x3250 M3 hardware, or model 705 or 735 that uses IBM System x3620 M3 hardware.

Note: Integrated Management Module User's Guide explains how to configure and use the IMM tool to troubleshoot the unit and maintain its health. As of July 2011, this document was made available at http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5079770&brandind=5000008.

1.2.1 Model 505

1.2.1.1 System x3250 M3 Installation and User's Guide

IBM System x3250 M3 Types 4251, 4252, and 4261 Installation and User's Guide contains instructions on installing and configuring Security Reporter model 505, and viewing and using LED indicators and buttons on this unit. Also included is technical support, warranty, safety, and emissions compliance information. As of July 2011, this document was made available at http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5082564&brandind=5000008

1.2.1.2 System x3250 M3 Rack Installation Instructions

See the Rack Installation Instructions document on the IBM System x Documentation CD for complete rack installation and removal instructions.

1.2.2 Models 705 and 735

1.2.2.1 System x3620 M3 Type 7376 Installation and User's Guide

IBM System x3620 M3 Type 7376 Installation and User's Guide contains instructions on installing and configuring Security Reporter models 705 and 735, and viewing and using LED indicators and buttons on these units. Also included is technical support, warranty, safety, and emissions compliance information. As of July 2011, this document was made available at http://www-947.ibm.com/support/entry/portal/docdisplay?brand=5000008&Indocid=MIGR-5084233

1.2.2.2 System x3620 M3 Rack Installation Instructions

Rack Installation Instructions for IBM System x3620 M3 contains information on rack mounting Security Reporter models 705 and 735. As of July 2011, this document was made available at http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5084236&brandind=5000008

2 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 a Trustwave solutions engineer or technical support representative.

For technical assistance or warranty repair, please visit http://www.trustwave.com/support/.

2.1 Trustwave Technical Support Call Procedures

When calling Trustwave 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?

2.2 IBM System Support

If troubleshooting Security Reporter model 505, 705 or 735, visit IBM's Systems Support Web site at http://www.ibm.com/systems/support/. Select **IBM System x** and choose **System x3250 M3** for model 505, and **System x3620 M3** for model 705 or 735, and then click **Finish**.

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3 Preliminary Setup Procedures

3.1 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 Trustwave.

The carton should contain the following items:

- 1 Security Reporter appliance (SR)

- 1 serial port cable

- For **300** models, the following items are also included in the carton:

  - 1 power adapter with power cord

  - 1 set of 4 pressure sensitive feet to be affixed to the bottom corners of a non-rack mounted unit

- For 300 models, If you have purchased the optional 1U two-unit tray for mounting the half-U server(s) in a rack, this item will be shipped in a separate carton.

- For **500 and 700** series models, the following items are also included in the carton:

  - 1 AC power cord for 500 models, 2 AC power cords for 700 series models

  - 1 bezel to be installed on the front of the chassis for 700 and 730 models

  - 1 set of rack mounting rails

  - Optional: 1 five-foot CAT-5E crossover cable, if you have a 700 series model and have purchased the NAS (Fibre Channel Connected Storage Device or "SAN") unit.

- For **505, 705 and 735** models, the following items are also included in the carton:

  - 1 AC power cord for 505 models, 2 AC power cords for 705 and 735 models

  - 1 set of rack mounting rails

At your option, a tap kit can be purchased from Trustwave.

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.

Tip: Please consult the Security Reporter User Guide for information about RAID and hardware maintenance. User Guides for the SR product can be obtained from http://www.trustwave.com/support/sr/documentation.asp.

3.2 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.

3.2.1 300 Model Server Setup Procedures

3.2.1.1 Set Top Applications

If you have a 300 series server you do not wish to rack mount, apply the pressure sensitive feet (that came with the server) to the bottom corners of the unit, and then place the unit in a location that meets server site selection criteria.

3.2.1.2 Optional 1U 2-Unit Tray Kit Applications

If you have purchased the optional 1U 2-unit tray kit for rack mounting one or two 300 series servers, proceed to the instructional "300 Series Appliance Tray Installation" document packaged within the 1U 2-unit tray kit's shipping carton.

When you have finished installing the 300 series server(s) in your server rack, continue to the Install the Server section of this Installation Guide.

3.3 Rack Mount the Server

3.3.1 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.

3.3.2 Rack Mount Instructions for 500 Model Servers

3.3.2.1 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.

3.3.2.2 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.
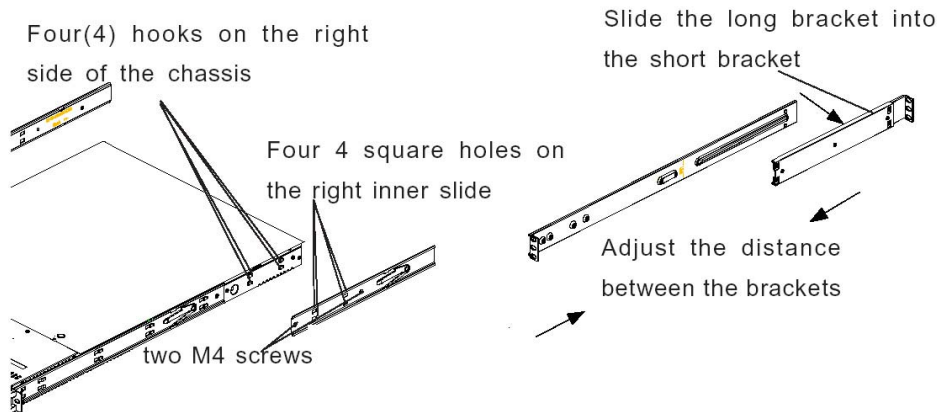
3.3.2.3 Install the Outer Slides

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.

3.3.2.4 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:
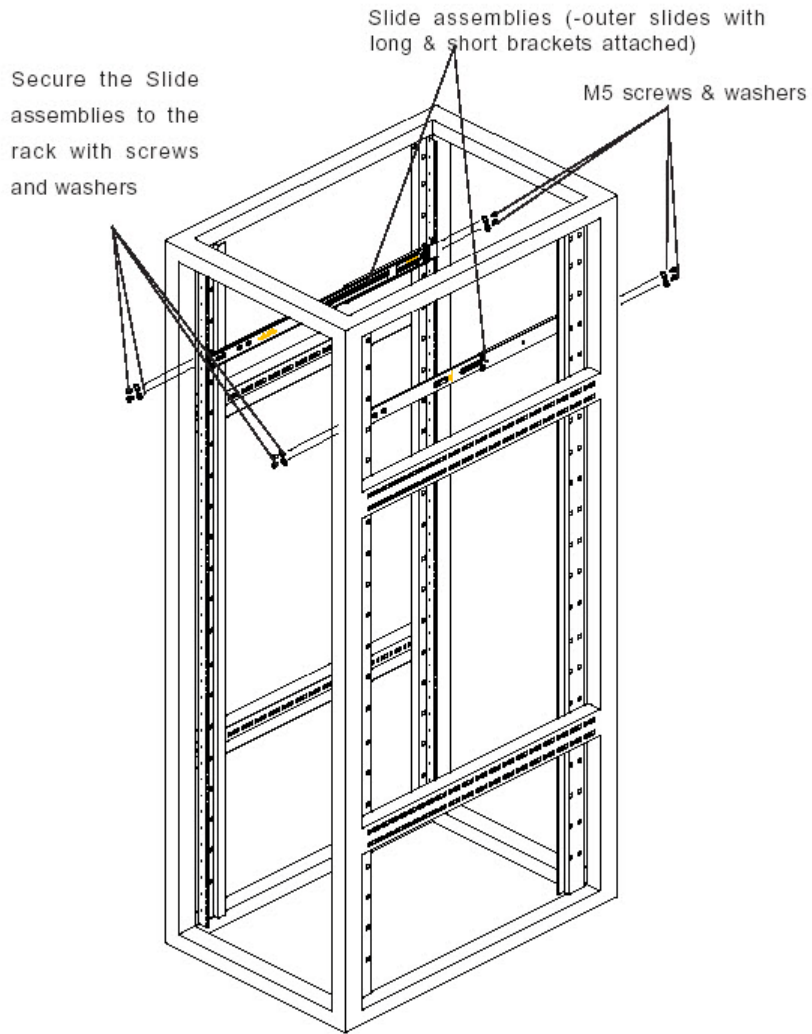
3.3.2.5 Install the Chassis into the Rack

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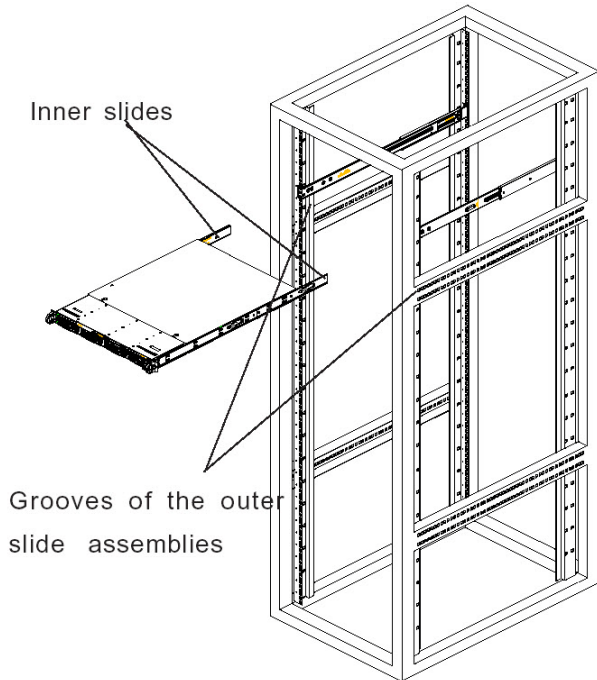
2. Push the chassis all the way to the back of the outer slide assemblies as shown below:

Push the chassis into the
back of the outer slide as-
semblies
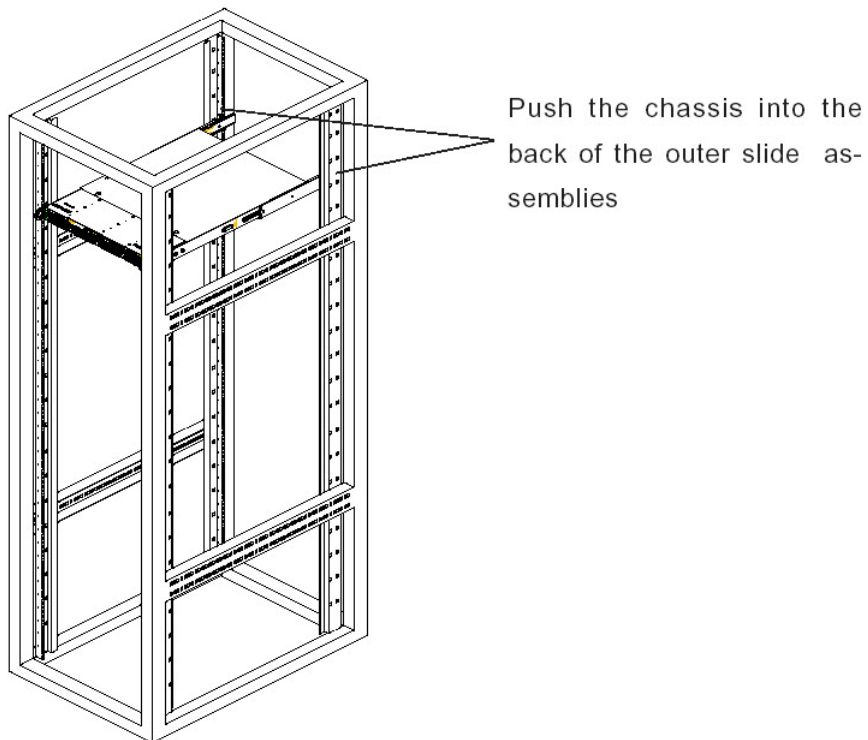
3.3.3 Rack Mount Instructions for 700 and 730 Model Servers

3.3.3.1 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.

3.3.3.2 Identify the Sections of the Rack Rails

The chassis package includes two rack rail assemblies in the rack mounting kit. Each assembly consists of two sections: an inner fixed chassis rail that secures directly to the server chassis and an outer fixed rack rail that secures directly to the rack itself.
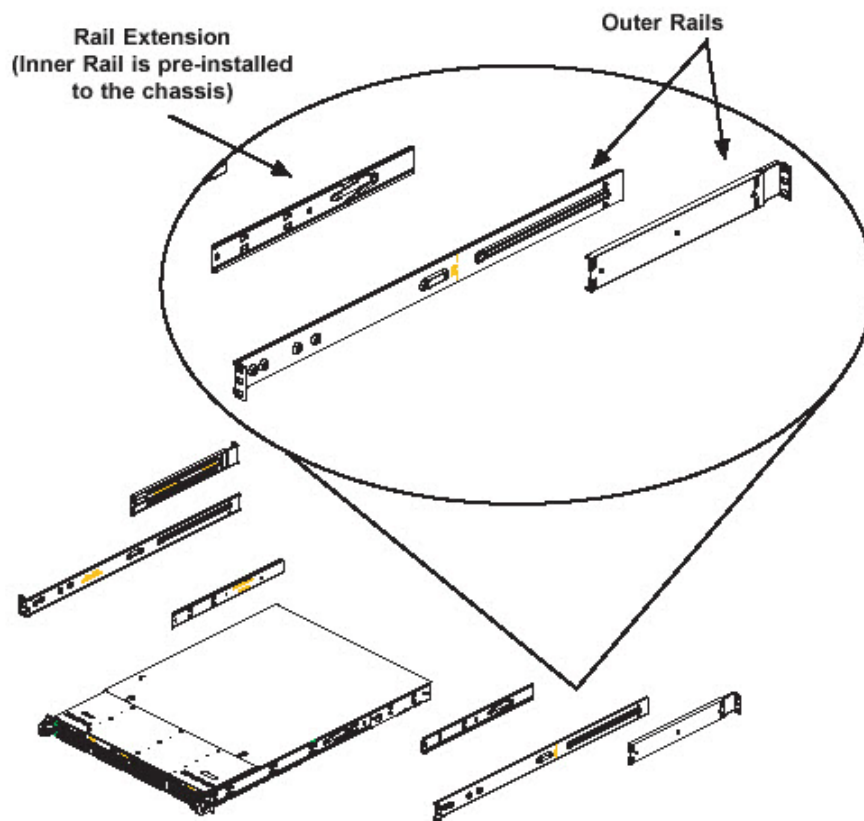
The 700 and 730 chassis includes a set of inner rails in two sections: inner rails and inner rail extensions. The inner rails are pre-attached and do not interfere with normal use of the chassis if you decide not to use a server rack. Attach the inner rail extension to stabilize the chassis within the rack.

3.3.3.3 Install the Inner Rails

1. Place the inner rack extensions on the side of the chassis aligning the hooks of the chassis with the rail extension holes. Make sure the extension faces "outward" just like the pre-attached inner rail.

2. Slide the extension toward the front of the chassis.

3. Secure the chassis with 2 screws as illustrated.

4. Repeat steps 1-3 for the other inner rail extension.
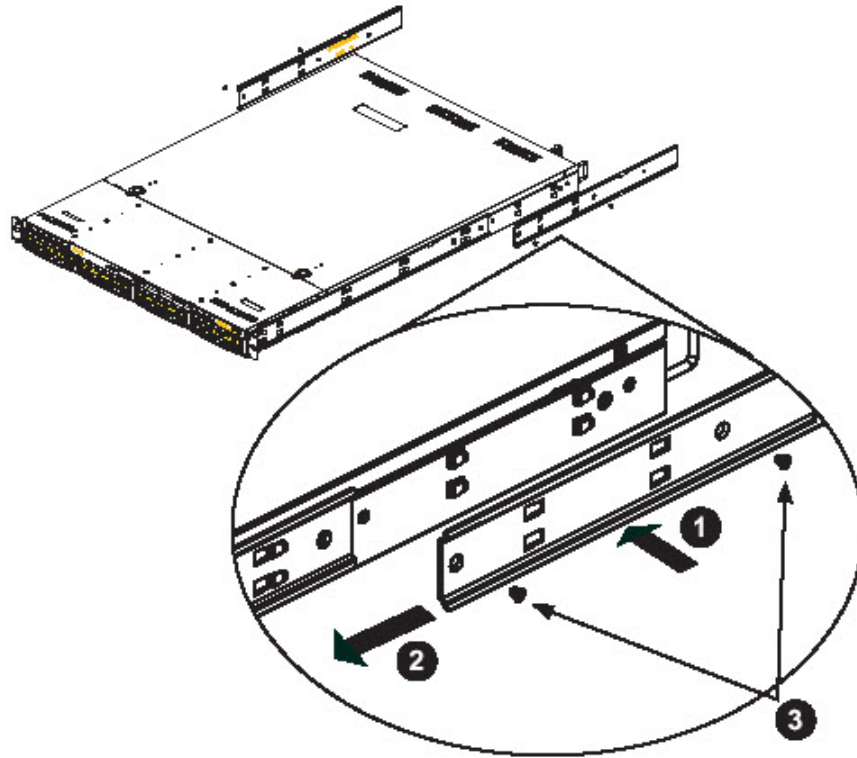
3.3.3.4 Install the Outer Rails

1. Attach the short bracket to the outside of the long bracket. You must align the pins with the slides. Also, both bracket ends must face the same direction.

2. Adjust both the short and long brackets to the proper distance so that the rail fits snugly into the rack.

3. Secure the long bracket to the front side of the outer rail with two M5 screws and the short bracket to the rear side of the outer rail with three M5 screws.

4. Repeat steps 1-3 for the left outer rail.

Secure to the
Front of the Rack

Attach Outer Racks
together

Secure to the
Rear of the Rack
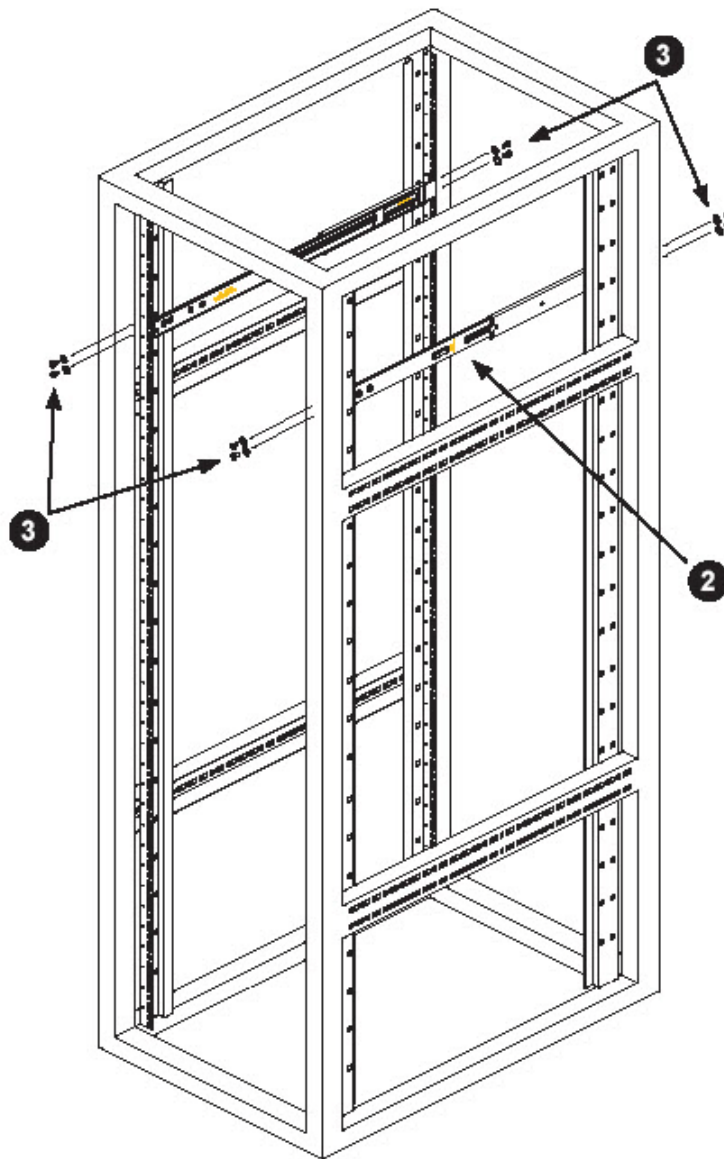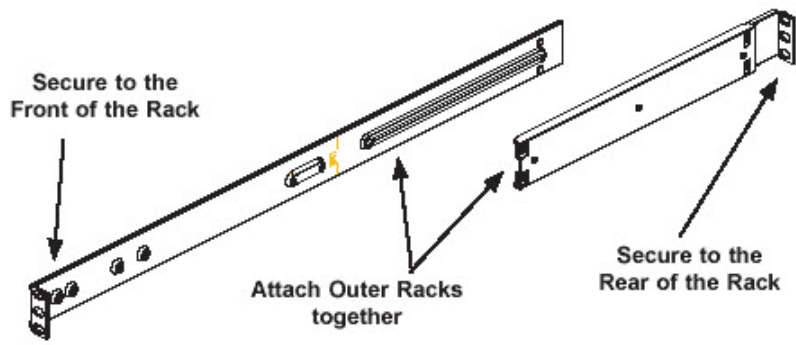
3.3.3.5 Install the Server into the Rack

1. Confirm that chassis includes the inner rails (A) and rail extensions (B). Also, confirm that the outer rails (C) are installed on the rack.

2. Line chassis rails (A and B) with the front of the rack rails (C).

3. 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".

4. (Optional) Insert and tightening the thumbscrews that hold the front of the server to the rack.
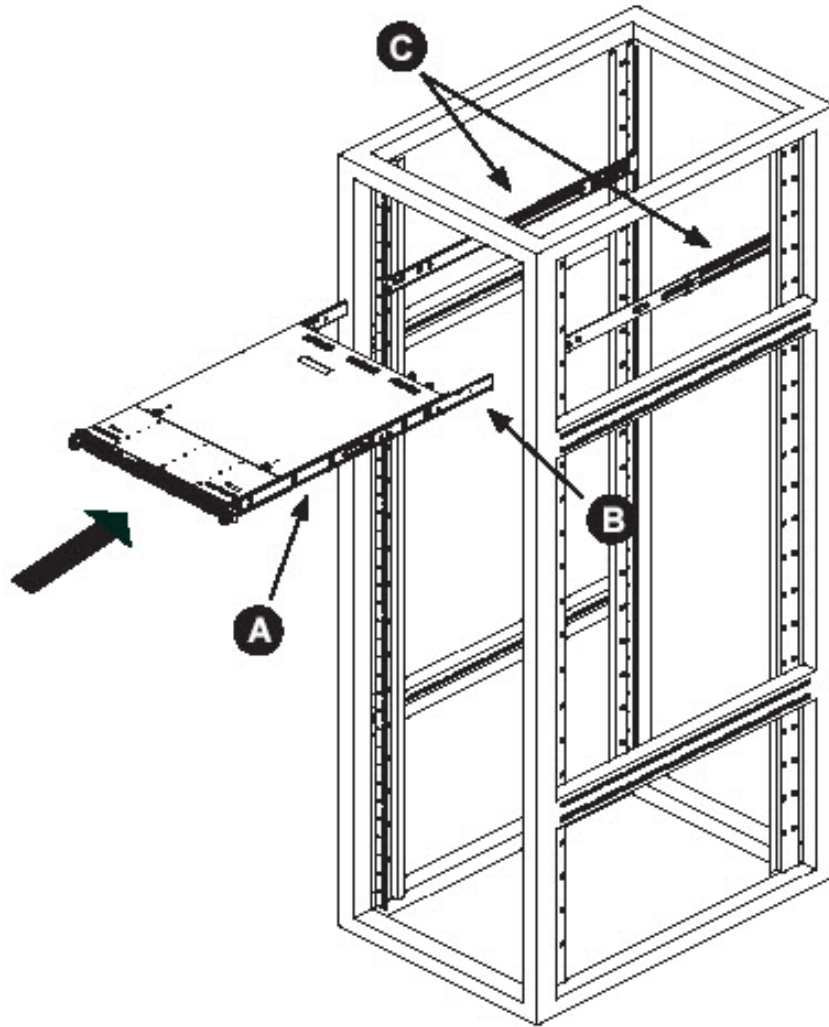
3.3.3.6 Install the Server into a Telco Rack

If you are installing the server into a Telco type rack, follow the directions given on the previous pages for rack installation. The only difference in the installation procedure will be the positioning of the rack brackets to the rack. They should be spaced apart just enough to accommodate the width of the Telco rack.
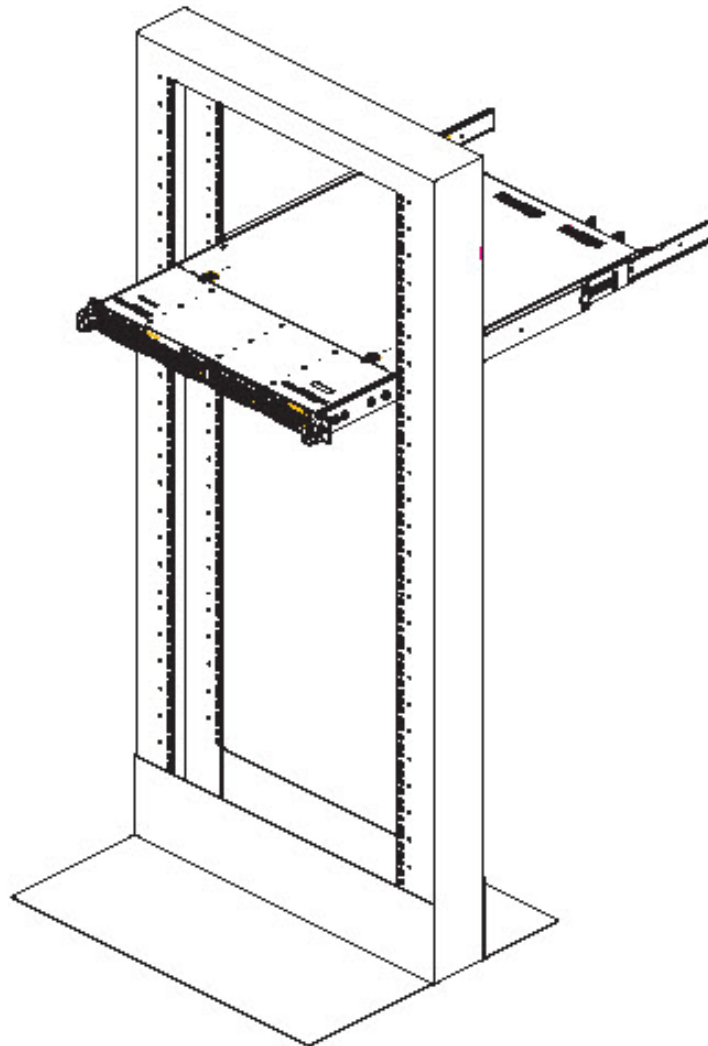
3.3.4 Install the Bezel on the 500, 700, and 730 Model Chassis

After rack mounting a 500, 700, or 730 model 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.

1. Hold the bezel upright and facing towards you.

2. Note the short pair of end pins on the left side, and the longer pair of fixed pins on the inside top towards the middle.
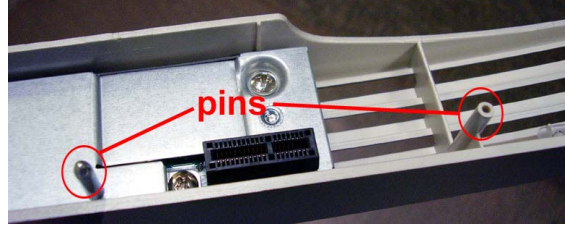
3. Note the end pin holes on the inside of the U-shaped, aluminum rail handles on both ends of the chassis rails. Note also that the holes for the longer pair of pins are located on the front of the chassis above the third hard drive bay.

4. Insert the end pins into the holes of the left U-shaped handle.
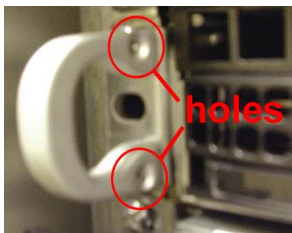
5. Align the bezel with the front of the chassis, and then gently push the bezel towards the front of the chassis, inserting the pins on the inside of the bezel into the holes on the front of the chassis.

6. Press in the release knob on the right side of the bezel to retract the end pins on that side, and then release the knob to let the end pins extend into the holes of the right U-shaped handle.

3.4 Check the Power Supply

The 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.

3.4.1 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, Trustwave 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.

3.5 General Safety Information

3.5.1 Server Operation and Maintenance Precautions

Caution: Observe the following safety precautions during server operation and maintenance.

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

Caution: Trustwave 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.

Warning: 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

Warning: 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 700 series 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 Trustwave technical support.

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

3.5.2 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

3.5.3 Electrical Safety Precautions

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

Warning: 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.

3.5.4 Motherboard Battery Precautions

Warning: 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 INSTRUCTIONS DU FABRICANT.

Caution: 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.

4 Install the Server

4.1 Setup Procedures

This step requires you to set up parameters for the SR to function on the network. If using a 300, 500, 700, or 730 server, you have the option of using the text-based Quick Start setup procedures described in Section 4.2, or the LCD panel setup procedures described in Section 4.3.

Tip: Quick Start with a PC monitor and keyboard provides the best experience with minimum requirements.

If using a 505, 705 or 735 server, proceed to the text-based Quick Start setup procedures described in Section 4.2.

4.1.1 Quick Start Setup Requirements

The following hardware is required for the Quick Start setup procedures:

- SR with AC power cord(s), and power adapter if using a 300 series model.

- either one of two options:

    a. PC monitor with AC power cord and keyboard, or

    b. PC laptop computer with terminal emulator software such as HyperTerminal or PuTTY, a serial port crossover cable (null modem cable), and also a USB DB9 serial adapter if there is no serial port on your laptop

Go to Section 4.2 to execute Quick Start Setup Procedures.

4.1.2 LCD Panel Setup Requirements

The following hardware is required for LCD panel setup procedures:

- SR with AC power cord(s), and power adapter if using a 300 series model.

Go to Section 4.3 to execute LCD Panel Setup Procedures.

Note: LCD setup does not support IPv6. To configure an IPv6 address for the SR, you must use the Quick Start with a serial or console connection.

4.2 Quick Start Setup Procedures

4.2.1 Storage Device Setup (for Attached Storage Units)

If you have a NAS (Fibre Channel Connected Storage Device or "SAN") that will be used with the SR, you will need to connect it to the SR at this point. Refer to Appendix B for instructions on how to connect the Fibre Channel Connected Storage Device.

4.2.2 Link the Workstation to the SR

4.2.2.1 Monitor and Keyboard Setup

1. Connect the PC monitor and keyboard cables to the rear of the SR chassis.

2. Turn on the PC monitor.

3. Proceed to the next set of instructions: Power on the SR.

4.2.2.2 Serial Console Setup

1. Using the serial port null modem cable (and USB DB9 serial adapter, if necessary), connect the laptop to the rear of the chassis.

Figure 1: Rear of 300 series chassis with serial port identified
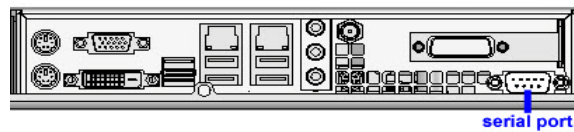
Figure 2: Portion of 500 series chassis rear with serial port identified
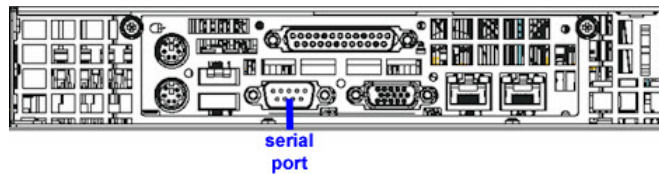
Figure 3: Portion of 700 series chassis rear with serial port identified
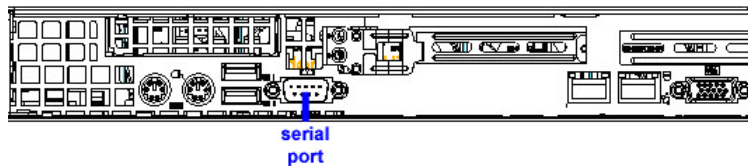
Figure 4: Rear of 505 model chassis, serial port circled in red
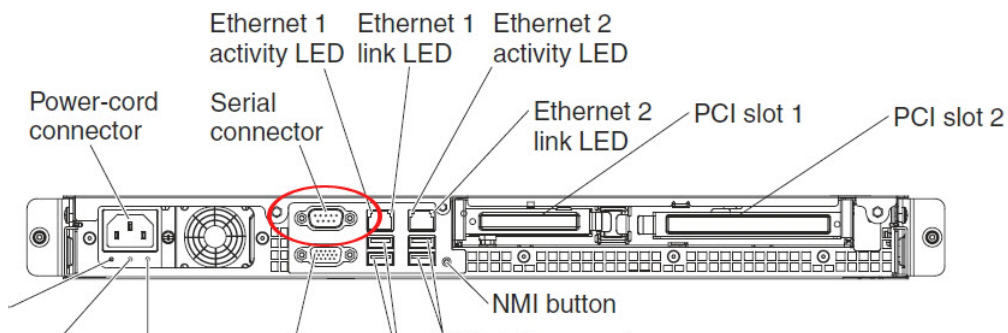
Figure 5: Rear of 705 / 735 model chassis, serial port circled in red

The following illustration shows the connectors on the rear of the server.
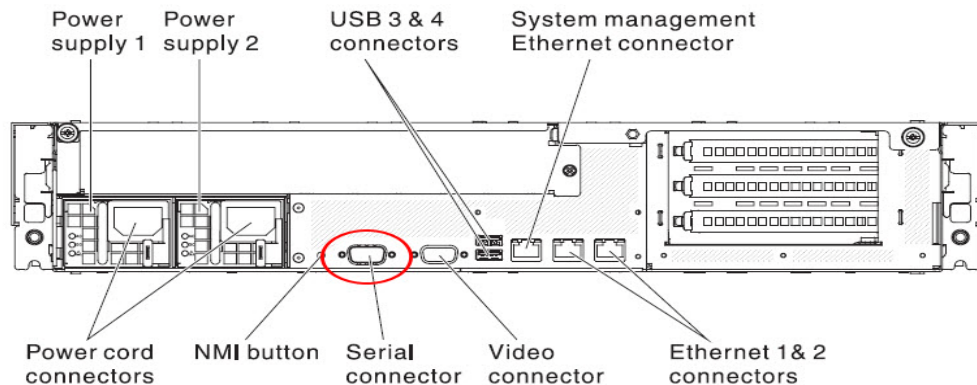
2. Power on the laptop.

3. Proceed to the next set of instructions: Power on the SR.

4.2.3 Power on the SR

4.2.3.1 Power up a 300 Model

1. Make sure the power adapter is plugged into the back of the chassis and connected to the power cord.

2. Plug the power cord into a power source with an appropriate rating.

> ⚠ **Caution:** It is strongly suggested you use an uninterruptible power supply.

3. Go to the LCD panel on the front of the chassis, and press down the green check mark key for three seconds.
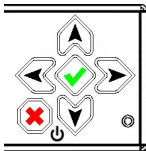
4. When the LCD panel displays a message that indicates the SR is running, proceed to the following set of instructions:

   • For Monitor and Keyboard Setup, go to Login screen.

   • For Serial Console Setup, go to Section 4.2.4.

4.2.3.2 Power up a 500, 700, or 730 Model

1. Make sure the power cord(s) is/are plugged into the back of the chassis.

2. Plug the power cord(s) into a power source with an appropriate rating.

⚠️ **Caution:** It is strongly suggested you use an uninterruptible power supply.

3. Remove the bezel and press the large button at the right of the front panel.

4. Replace the bezel on the front of the chassis. When the LCD panel displays a message that indicates the SR is running, proceed to the following set of instructions:

  • For Monitor and Keyboard Setup, go to Login screen.

  • For Serial Console Setup, go to Section 4.2.4.

4.2.3.3 Power up a 505 Model

1. Make sure the power cord is plugged into the back of the chassis.

2. Plug the power cord into a power source with an appropriate rating.

⚠️ **Caution:** It is strongly suggested you use an uninterruptible power supply.

3. Using a stylus or similar tool, depress the small white power button at the left of the front panel.
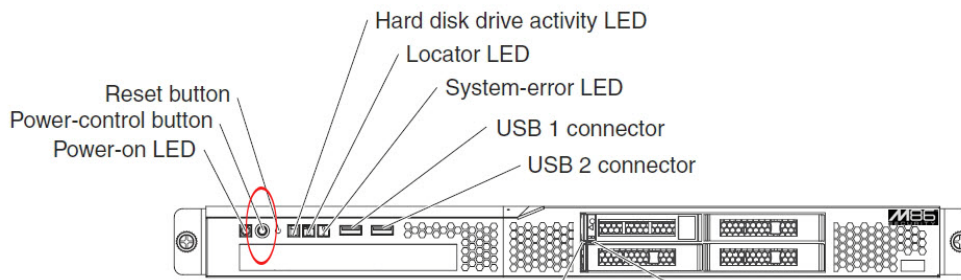
4. When the server powers up, as indicated by the power supply LED button being steadily lit, proceed to the following set of instructions:

• For Monitor and Keyboard Setup, go to Login screen.

• For Serial Console Setup, go to Section 4.2.4.

4.2.3.4 Power up a 705 or 735 Model

1. Make sure the power cord(s) is/are plugged into the back of the chassis.

2. Plug the power cord(s) into a power source with an appropriate rating.

⚠️ **Caution:** It is strongly suggested you use an uninterruptible power supply.

3. Using a stylus or similar tool, depress the small white power button at the right of the front panel.
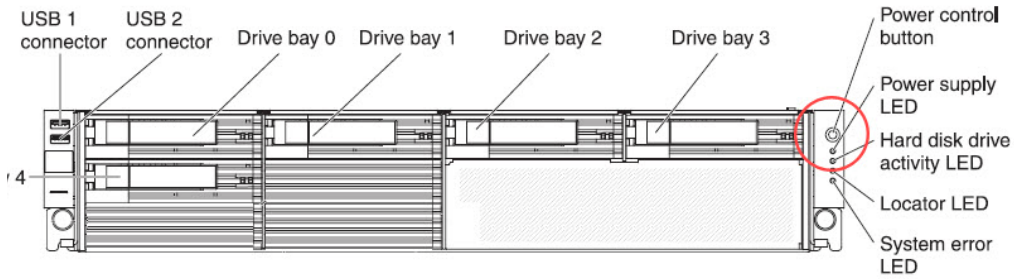
4. When the server powers up, as indicated by the green power supply LED button being lit, proceed to the following set of instructions:

- For Monitor and Keyboard Setup, go to Login screen.

- For Serial Console Setup, go to Section 4.2.4.

4.2.4 Serial Connection Setup Procedures

To configure Web Filter using a serial port connection using HyperTerminal or another terminal program, please specify these session settings:

- 9600 bits per second

- 8 data bits

- no parity

- 1 stop bit

- hardware (RTS/CTS) flow control

- VT100 emulation settings

Note: For a detailed walk-through of HyperTerminal setup, see Appendix A.

4.2.5 Login screen

The login screen displays after powering on the SR unit using a monitor and keyboard, or after creating a serial console session.

Note: If using a serial console session, the login screen will display with black text on a white background. If the screensaver currently displays on your screen, press the **Enter** key to display the login screen.

1. At the **login** prompt, type in: `menu`

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

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

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

4.2.6 Quick Start menu screen

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

```
                                    Tue Oct   4 17:43:56 PDT 2016
                            Trustwave
                            Quick Start Menu


               1.   Display Status
               2.   Enter Administration Password
               9.   Log off













        Press the number of your selection_
```

2. At the login prompt, re-enter your password: `#s3tup#r3k`

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

4.2.7 Quick Start setup

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

```
                                    Tue Oct   4 17:44:34 PDT 2016
                            Trustwave
                            Quick Start Menu


               1.   Display Status
               2.   Quick Start Setup
               3.   Configure Network Interface LAN1
               4.   Configure Hostname
               5.   Configure Time Zone
               A.   Configure Wizard Credentials
               B.   Reboot System
               C.   Change Quick Start Password
               D.   Unlock Global Admins
               X.   Exit Administration Menu




        Press the number of your selection_
```

- The Quick Start setup process takes you to the following configuration screens to make entries:

  - Configure network interface LAN1

  - Configure Hostname

- Configure Time Zone regional configuration and locality

- Configure setup wizard credentials (user name and password)

> **Note:** Please make a note of the LAN 1 IP address and hostname you assign to the SR server, as well as the username and password you create for logging into the "setup wizard", as you will need to use this information in later steps of the installation procedure.

2. 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 SR and review the entries you made using the Quick Start setup, press **1** to view the System Status screen.

> **Note:** To configure an individual screen from the Quick Start menu, press the number or alphabet corresponding to that menu option, as described in the following sub-sections.

4.2.7.1 Configure network interface LAN1

1. From the Quick Start menu, press **3** to go to the Configure Network Interface screen for LAN1.

```
                              Tue Oct  4 17:44:52 PDT 2016
                          Trustwave
                Configure Network Interface (LAN1)


             Ctrl-h to backspace, Enter to accept


    IPv4/Prefix          172.20.91.25/16
    IPv4 Gateway         172.20.0.1
    IPv6/Prefix
    IPv6 Gateway
    DNS 1                172.20.0.31
    DNS 2                172.20.0.32




             Press S to save, X to Skip, Q to Quit

             Press any other key to try again_
```
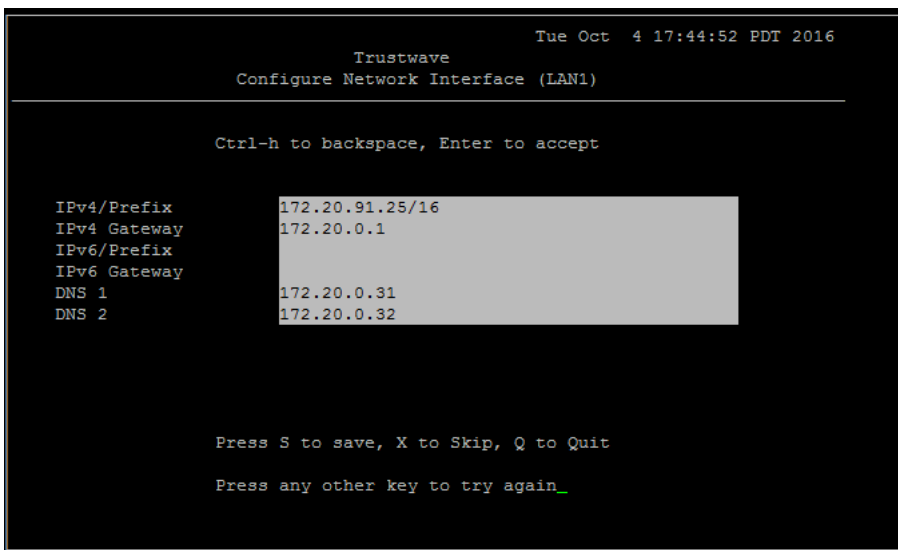
2. Enter all available information from the following:

> **Note:** You must enter at least one IP address and gateway (either IPv4 or IPv6), and a DNS server address for each IP address type that you enter.
>
> Press Enter to step through the LAN1 entries. You will be able to cancel any change after stepping through all entries.

- IPv4 address and CIDR specification of the local network ("Prefix")

- IPv4 gateway

- IPv6 address and CIDR specification of the local network ("Prefix")

- IPv6 Gateway

- DNS1

- DNS2 (optional)

3. Press **S** to confirm the change, **X** to skip any change to LAN1 settings and go on to the next setting, or **Q** to quit the Quick Start.

4.2.7.2 Configure host name

1. From the Quick Start menu, press **4** to go to the Configure hostname screen.

2. At the **Enter host name** prompt, type in the hostname and press **Enter**.

3. Press **Y** to confirm, or press any other key to cancel this change.

4.2.7.3 Time Zone regional setting

1. From the Quick Start menu, press **5** to go to the Time Zone regional configuration screen.

2. Select a region using up-arrow and down-arrow keys. Press **Y** when you have selected the appropriate region, or press **Esc** to cancel this change.

> **Note:** If this server is located in the USA, please select "US" and not "America".

3. After you select the region, you may be prompted to select the locality within the selected region. Select the locality and press **Y** to confirm, or press **Esc** to cancel the change.

> **Note:** After making any change to this menu selection, you must reboot the server to make your settings effective.

4.2.7.4 Configure setup wizard user

1. From the Quick Start menu, press **A** to go to the Configure Wizard user screen.

2. At the **user name** field, type in the new username to be used by the global administrator for the SR Wizard user setup process and press **Enter**.

> **Note:** The username 'admin' cannot be used since it is already the default username. The default password is 'testpass'.

3. At the **password** field, type in the new password for the username you entered and press **Enter**.

> **Note:** The username and password you enter and save here will be used by the global administrator for Single Sign-On access in the SR user interface.

4. Press **S** to confirm the change, **X** to skip any change to LAN1 settings and go on to the next setting, or **Q** to quit the Quick Start.

4.2.7.5 Additional Administrative Options

The options described below are available on the menu, but are not required for the quick start setup process.

4.2.7.5.1 Reboot system

1. From the Quick Start menu, press **B** to go to the Reboot confirmation screen.

2. At the **Really reboot the system?** prompt, press **Y** to continue, or press any other key to cancel reboot.

4.2.7.5.2 Change Quick Start password

1. From the Quick Start menu, press **C** to go to the Change Administrator Password screen.

   Note: This option will change the password used for accessing the Quick Start menu (the default password is `#s3tup#r3k`) but will not change the global administrator's Single Sign-On password used for accessing the SR user interface via its login window (the default password is 'testpass'). Option D, "Reset Admin account", should be used for resetting the SR login password (the default account reset password is 'reporter1!') and for unlocking all IP addresses currently locked.

2. At the **Enter the new administrator password** prompt, type in the new password to be used for accessing the Quick Start menu and press **Enter**.

3. At the **Re-enter the new administrator password** prompt, re-type the password you just entered and press **Enter**, or press **Esc** to cancel the change.

4.2.7.5.3 Reset Admin account

1. From the Quick Start menu, press **D** to go to the Reset admin GUI account confirmation screen that displays the following message:

   • Reset admin account password? Are you sure?
     NOTE: This process will also unlock the admin account and unlock all currently locked IPs.

   Caution: This option resets the global administrator's Single Sign-On password to 'reporter1!' and will unlock all IP addresses currently locked.

2. Press **Y** to continue, or press any other key to cancel admin account reset.

4.2.8 System Status screen

```
                                  Mon Oct  3 18:31:36 PDT 2016
                          Trustwave
                System Status - updates every 10 seconds

        3.5.0.153
          Model          := SRVM
          Serial Number :=
          Timezone       := US/Pacific
          Hostname       := sr-25.tn.m86.local

        LAN1 UP
          172.20.91.25/16

        Default Gateways
          172.20.0.1

        DNS
          172.20.0.31
          172.20.0.32



        Press any key to return to menu...
```

The System Status screen displays the following information:

- **Current Version** of software installed

- **LAN1 IP** address and netmask specified in screen 3, and current status ("UP" or "DOWN")

- **Default gateway IP** address specified in screen 5 (Configure default gateway)

- **SR host name** specified in screen 7 (Configure host name)

- **DNS server IP address(es)** specified in screen 6 (Configure DNS servers)

- **Regional timezone setting** specified in screen 8 (Time Zone regional setting)

> **Note:** Modifications can be made at any time by returning to the specific screen of the Quick Start setup procedures. To access the System Status screen from the Quick Start setup screen, press **1** and then **Enter**.

4.2.9 Log Off, Disconnect the Peripherals

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

2. Disconnect the peripherals from the SR.

Proceed to Section 4.4: Physically Connect the Unit to the Network.

4.3 LCD Panel Setup Procedures

4.3.1 Storage Device Setup (for Attached Storage Units)

If you have a NAS (Fibre Channel Connected Storage Device or "SAN") that will be used with the SR, you will need to connect it to the SR at this point. Refer to Appendix B for instructions on how to connect the Fibre Channel Connected Storage Device.

4.3.2 LCD Panel

1. Connect the AC power cord(s) to the back of the chassis and plug the cord(s) into a UPS power supply unit.

2. Power on the server following the instructions in Section 4.2.

4.3.2.1 LCD panel keypad

To configure the SR via the LCD panel on front of the chassis bezel, use the keypad located to the right of the LCD screen.

The keypad consists of the following keys:

- On a 300 model: Up arrow, down arrow, left arrow, right arrow, check mark, and "X" keys.

- On a 500, 700, or 730 model: Up, down, left, right, CANCEL, and ENTER keys.

300 model keypad at left, 500 and 700 model keypad at right

To display software status information about the SR, press the right (arrow) key. To go to the LCD Menu, press "X" / CANCEL. Pressing "X" / CANCEL again returns you to the software status display.

4.3.2.2 LCD Menu

The LCD Menu tree includes the following two main menu selections:

- LCD Options - This choice includes options for viewing the LCD display and monitoring the SR once it is configured and running on the network. Information about using LCD Options is included in this document after the Trustwave menu sub-section.

- Trustwave menu - Many of the menu items in this sub-section are used for configuring the SR unit.

The menu tree displays an arrow 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 check mark / ENTER key to accept your selection.

4.3.3 Trustwave menu

When the Trustwave menu option is selected from the LCD Menu tree, the following menu items display in the panel, the entire list which is viewable by using the navigation keys:

- SR Patch Level >

- Serial Number >

- IP / LAN1 > *

- Gateway > *

- DNS 1 > *

- DNS 2 > *

- Host Name > *

- Regional Setting (Time zone, date, time) *

- Configure Setup *

- Reset Admin Account

- Reboot >

- Shutdown >

Note: When using the Trustwave menu to execute quick start setup procedures, be sure to configure all menu items marked in the list above with an asterisk (*).

Please make a note of the LAN 1 IP address and hostname you assign to the SR server, as well as the username and password you create for logging into the "SR Wizard", as you will need to use this information in later steps of the installation procedure.

Tip: Navigation tips in the Trustwave menu:
- Use the up / down (arrow) key to scroll up / down the menu
- Press the check mark / ENTER key to choose the current selection
- Press the "X" / CANCEL key to go back to the previous screen

Make a selection from the menu, and press the check mark / ENTER key to go to that screen

4.3.3.1 IP / LAN1

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

- Configure LAN 1 IP

- Change LAN1 (Netmask)

1. Choose **Configure LAN 1 IP** and press the check mark / ENTER key to go to the Configure LAN 1 IP screen.

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

3. Press the check mark / ENTER key to accept your entry and to return to the previous screen.

4. Choose **Change LAN1 Netmask** and press the check mark / ENTER key to go to the Change LAN1 (2) Netmask screen.

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

6. Press the check mark / ENTER key to accept your entry and to return to the previous screen.

7. Press the "X" / CANCEL key to return to the Trustwave menu.

4.3.3.2 Gateway

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

1. Choose **Configure Gateway IP** and press the check mark / ENTER key to go to the Configure Gateway IP screen.

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

3. Press the check mark / ENTER key to accept your entry and to return to the previous screen.

4. Press the "X" / CANCEL key to return to the Trustwave menu.

4.3.3.3 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.

1. Choose **Configure DNS IP 1 (2)** and press the check mark / ENTER key to go to the Configure DNS IP 1 (2) screen.

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

3. Press the check mark / ENTER key to accept your entry and to return to the previous screen.

4. Press the "X" / CANCEL key to return to the Trustwave menu.

4.3.3.4 Host Name

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

1. Choose **Configure Hostname** and press the check mark key to go to the Configure Hostname screen.

2. Use the up, down, left, right (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:** Navigation tips:
> • If the down (arrow) key is pressed first—instead of the right (arrow) key—the symbol characters display first.
> • Press the "X" / CANCEL key to remove a character and move the cursor to the first position in the line.

3. Press the check mark / ENTER key to return to the previous screen.

4. Press the "X" / CANCEL key to return to the Trustwave menu.

4.3.3.5 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.

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

2. After making a selection, press the check mark / ENTER key to display the Choose a Location screen.

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

4. After making a selection, press the check mark / ENTER key to display the Save Changes? screen:

   • Choose **Yes** to save your changes and to return to the Trustwave menu. You must now reboot the server in order for your changes to be effective.

   • Choose **No** to return to the previous screen.

4.3.3.6 Configure Setup Wizard User

When the Configure Setup Wizard User option is selected, the Configure Setup Wizard User screen displays with two menu selections:

• Choose **Change User** to reset the global administrator's Single Sign-On username for accessing the SR login window (this is the username entered and saved during the SR Wizard setup process) and to return to the main menu.

> **Note:** The username 'admin' cannot be used since it is already the default username. The default Single Sign-On password is 'testpass'.
>
> • Choose **Change Password** to reset the password for the SR Wizard username and to return to the Trustwave menu.

4.3.3.7 Additional Administrative Options

The options described below are available on the menu, but are not required for the quick start setup process.

4.3.3.7.1 SR Patch Level

When the SR Patch Level option is selected, "Security Reporter" and the version number of the currently installed software build displays.

4.3.3.7.2 Serial Number

When the Serial Number option is selected, the serial number of the chassis displays.

4.3.3.7.3 Reset Admin Account

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

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

   • *** WARNING *** The Admin console password will be reset to 'reporter1!' and all locked IPs will be unlocked.

2. 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 Trustwave menu.

   • Choose **No, cancel reset** to return to the previous screen.

4.3.3.7.4 Reboot

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

1. Choose one of two options:

    • **Yes, reboot now!!!** - This selection reboots the SR.

    • **No, cancel reboot** - This selection returns you to the previous screen.

2. Press the "X" / CANCEL key to return to the Trustwave menu.

4.3.3.7.5 Shutdown

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

1. Choose one of two options:

    • **Yes, shutdown now!!** - This selection shuts down the SR.

    • **No, cancel shutdown** - This selection returns you to the previous screen.

2. Press the "X" / CANCEL key to return to the main menu.

4.3.4 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 check mark / ENTER key to go to that screen.

4.3.4.1 Heartbeat

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

1. Press the check mark / ENTER or right (arrow) key three times to view each of the three available options:

    • heartbeat feature enabled (populated field)

    • heartbeat feature disabled (empty field)

    • check for a heartbeat now (blinking heartbeat symbol displayed in the line above)

2. After making your selection, press the "X" / CANCEL key to return to the previous screen.

4.3.4.2 Backlight

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

1. Press the check mark / ENTER or right (arrow) key three times to view each of the three available options:

    • backlight feature enabled (populated field, backlight turns on)

    • backlight feature disabled (empty field, backlight turns off)

    • display the backlight now (populated field, backlight turns on)

2.   After making your selection, press the "X" / CANCEL key to return to the previous screen.

4.3.4.3 LCD Controls

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

1.   Choose one of the menu selections and press the check mark / ENTER or right (arrow) 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.

2.   After making your selection, press the "X" / CANCEL key to return to the previous screen.

4.4 Physically Connect the Unit to the Network

Now that your SR network parameters are set, you can physically connect the unit to your network. This step requires a standard CAT-5E cable. An additional CAT-5E cable is required if an Ethernet Tap unit will be installed for bandwidth monitoring.

1.   Plug one end of a standard CAT-5E cable into the SR's LAN 1 port, the port on the left.

Figure 6: Rear of 300 model chassis with LAN ports identified
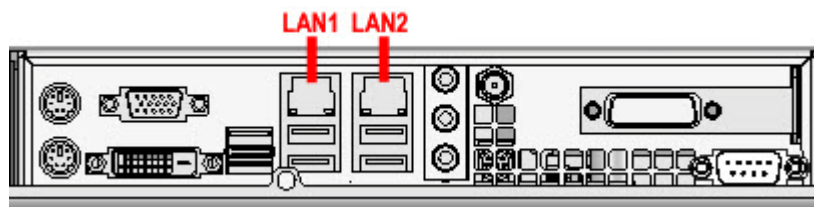
Figure 7: Portion of 500 model chassis rear with LAN ports identified
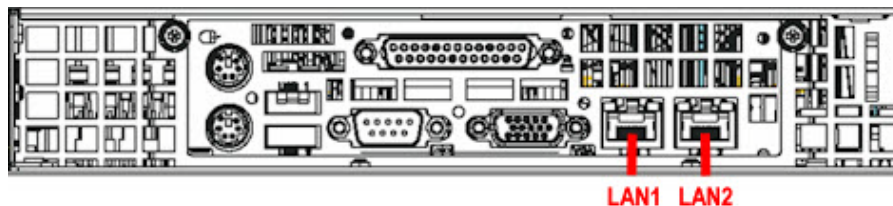
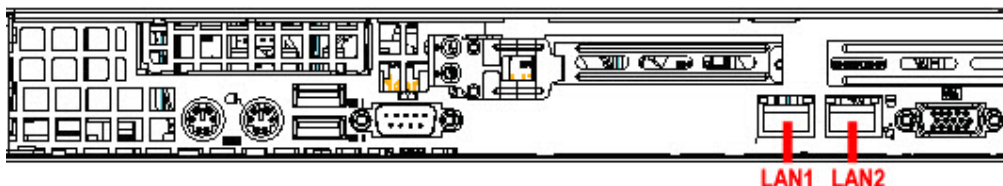Figure 8: Portion of 700 / 730 model chassis rear with LAN ports identified

Figure 9: Portion of 505 model chassis rear with LAN ports identified
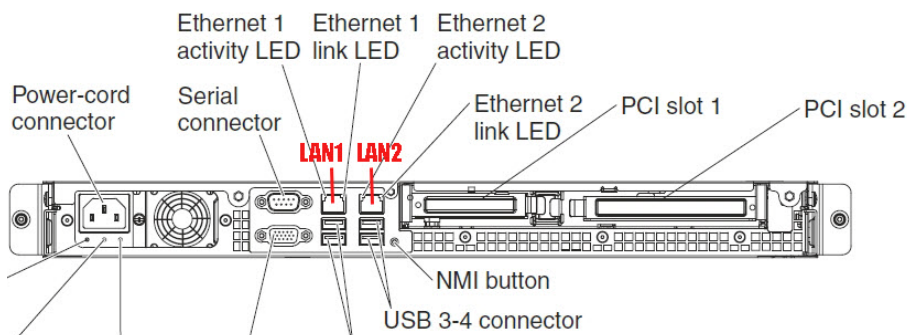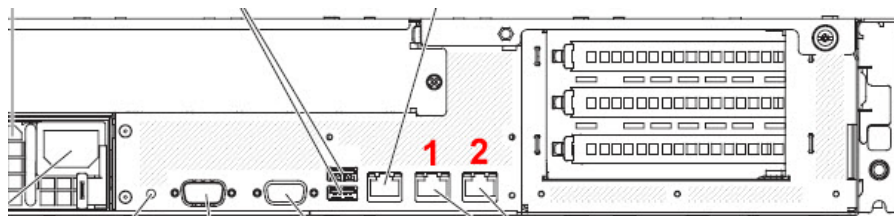

Figure 10: Portion of 705 / 735 model chassis rear with LAN 1 and LAN 2 ports identified

2. Plug the other end of the CAT-5E cable into an open port on the network hub to which the Web-access logging device (Web Filter or SWG) is connected.

4.4.1 Bandwidth Management

If you choose to install an Ethernet Tap for bandwidth monitoring, you will need to connect it to the SR at this point. Refer to Appendix C for instructions on how to connect an Ethernet Tap unit.

Note: In order to monitor bandwidth on the SR, both inbound and outbound traffic must be sent to the SR through use of a port span, tap, or other similar device.

4.5 Access the SR and its Applications Online

Next you will access the SR and its applications online. For this step you will need your network administrator to provide you the following information:

- IP range and netmask of machines on the network that the Security Reporter application will use for monitoring bandwidth on your network

- Web Filter or SWG IP address, and port number to be used between the Web Filter or SWG and the SR

4.5.1 Access the SR via its LAN 1 IP Address

1. Launch a supported web browser. Minimum browser versions suggested are:

    - Internet Explorer 11

    - Edge 14

    - Firefox 30

    - Safari 8

    - Google Chrome 35

    Note: The System Configuration interface requires a HTML5 compliant browser.

2. In the address line of the browser window, enter the URL (web address) of the Web Filter interface.

    - The URL is like `https://{the LAN 1 IP address}:8443`

    - (HTTPS and port 1443 are used for a secure network connection).

    - For example, if the LAN 1 IP address is 10.10.10.10 type in `https://10.10.10.10:8443`.

3. Click **Go**
   The browser will display a security certificate issue page. This is expected behavior in the Security Reporter setup.

4. Accept the security certificate to proceed to the login page.

    Tip: For a full walk-through of accepting certificates in common browsers, see "Accept and/or install a Security Certificate" on page 51.

If the security issue page does not display in your browser, verify the following:

- The SR is powered on.

- Can the administrator workstation normally connect to the Internet?

- Is the administrator workstation able to ping the SR's LAN 1 IP address? (To ping the SR using the Command Prompt in Windows, go to Start | All Programs | Accessories | Command Prompt, type in `Ping` and the IP address using the x.x.x.x format—in which each 'x' represents an octet—and then press **Enter**.)

- If pinging the IP address of the SR is unsuccessful, try restarting the network service or rebooting the SR.

- If still unsuccessful, contact a Trustwave solutions engineer or technical support representative.

> **Note:** On a newly installed unit, reports will remain inaccessible until logs are transferred to the SR and the database is built.

4.5.2 Accept the End User License Agreement

1. In the Security Reporter login window, enter your **Username** and **Password**, and then click **Login** to proceed:

You may be prompted to accept a security exception for the SR application, after which the EULA Agreement dialog box opens:

2. After reading the End User License Agreement, click **Yes** to accept the EULA, close the EULA Agreement dialog box, and open the Security Reporter Wizard Login window.

4.5.3 Log in to the Security Reporter Wizard

1. In the **Username** field of the Login window, type in the username specified in the Configure setup wizard user screen:

2. In the **Password** field, type in the password specified in the wizard screen.

3. Click **Login** to close the login window and to go to the Security Reporter wizard screen.

4.5.4 Use the SR Wizard to Specify Application Settings

At minimum, the Main Administrator section must be populated and saved. The Web Filter Setup or SWG Setup section should be populated, if you have the necessary data at this time.

> **Note:** If the Web Filter or SWG section is not populated at this time, the required information must be provided in the Device Registry panel of the user interface before the SR can function on your network.

4.5.4.1 Enter Main Administrator Criteria

1. Enter the **Username** the global administrator will use when logging into the Security Reporter. The global administrator has the highest level of permissions in all user applications in SR.

2. Enter the **Email** address of the global administrator, who will be notified via email regarding system alerts.

3. Enter the **Password** to be used with that username, and enter the same password again in the **Confirm Password** field.

4. Select a Log Data Source (Secure Web Gateway or Web Filter). If you do not want to enter the log data source information in the Wizard, select **None** and then click **Save**.

> **Note:** SWG or Web Filter entries are not required during this Wizard setup process, but if not entered during this process, must be configured in the device registry in order to generate reports from the SR.

4.5.4.2 Web Filter Setup

1. Enter the **Server Name** of the Web Filter to be used with the Security Reporter, which is any name you wish to associate with that Web Filter.

2. Enter the **Server IP** address of the Web Filter server to be used with the Security Reporter.

3. Click the "Set as Source" check box if this Web Filter will be designated the primary Web Filter to be associated with the Security Reporter. Otherwise, leave the check box blank.

4. Click **Add** to include your entries in the list box below.

    Notes:
    - Additional Web Filters can be included by following the above steps again.
    - The Source Web Filter is designated by an "X" in the Source column of the list box.
    - To specify a Source Web Filter server from available entries in the list box, select the Server Name and then click Set as Source.
    - To remove a Web Filter server from the list, select the Server Name from the list box and then click Remove.

5. Click **Save** at the bottom right of the screen to save your settings and to go to the login window of the Security Reporter user interface.

4.5.4.3 SWG Setup

1. In the Secure Web Gateway Setup section, type in the **Name** and/or **Description** for the SWG.

2. Click **Add** to include the server criteria in the list box below.

> **Tip:** To remove the SWG from the list box, select it and then click **Remove**. To add an additional SWG, enter another name and description and then click **Add.**

3. Type in the **Password (for SWG user)** and type this same password again in the **Confirm Password** field. The password entered here will be used by all SWG Policy Servers set up in the Device Registry panel to provide security when the SWGs send logs to this SR.

> **Note:** The password entered in this field must be added in the user interface of each SWG that will send logs to this SR.

4. Click **Save** at the bottom right of the screen to save your settings and to go to the login window of the Security Reporter user interface.

4.6 Generate SSL Certificate

The SR provides a generic self-signed SSL certificate that allows connection to the user interface over HTTPS. As best practice you should generate a new certificate that includes the DNS name of the SR. The new certificate can be a self-signed certificate, or a certificate signed by a Certificate Authority. The steps below describe how to generate a self-signed certificate. For full details of other options, see the SR Administrator Guide.

4.6.1 Generate a Self-Signed Certificate for the SR

This step guides you through the process of generating a self-signed certificate so your browser will recognize the SR as an accepted application..

> **Caution:** Generating the self-signed certificate will restart the Report Manager. If the DNS name of the SR changes, a new certificate must be created and possibly added to each client workstation's trusted certificate list.

1. In the Security Reporter login window, type in the **Username** and **Password** set up during the SR wizard.

1. Click **Login** to access the Report Manager application.

2. In the navigation toolbar, hover over the Administration menu link and select **HTTPS Configuration** to open the HTTPS Configuration window. The left panel shows the currently installed certificate.

3. On the right panel of the HTTPS Configuration window, click **Self-Signed**.

4. Complete all fields using appropriate values.

    •   **Common Name**: Hostname of the server, such as `sr.example.local`.

    •   **Organization Name**: Name of your organization, such as `Example`.

    •   **Organizational Unit Name**: Name of your department, such as `Administration`.

    •   **Locality (City)**: Name of your organization's city or principality, such as `Orange`.

    •   **State or Province Name**: Full name of your state or province, such as `California`.

    •   **Country**: Two-character code for your country, such as `US`.

    •   **Email**: Network administrator email address.

5. Click **Apply.** Accept the warning presented. The SSL certificate will be stored on the SR, and the Report Manager will be restarted. All connections to the SR will now use this certificate. Administrators who connect must install the certificate as trusted on their workstations (or make a security exception) in order for their machines to communicate with the SR website.

    Note: Although the Security Reporter login window may re-display right away, the service will take a few minutes to restart.

    If you do not want to generate and apply the certificate, click **Back** or navigate away from the page.

4.6.2 Accept and/or install a Security Certificate

The procedures below allow you to access the SR using any certificate that is in use, including the default certificate..

    Note: If you want to access SR using Edge, perform all required browser configuration using Internet Explorer (run as administrator).

4.6.2.1 Install the Certificate in Internet Explorer

This procedure to accept and install the SR security certificate was verified with IE 11 in Windows 7.

1. In the page "There is a problem with this website's security certificate.", click **Continue to this website (not recommended)**.
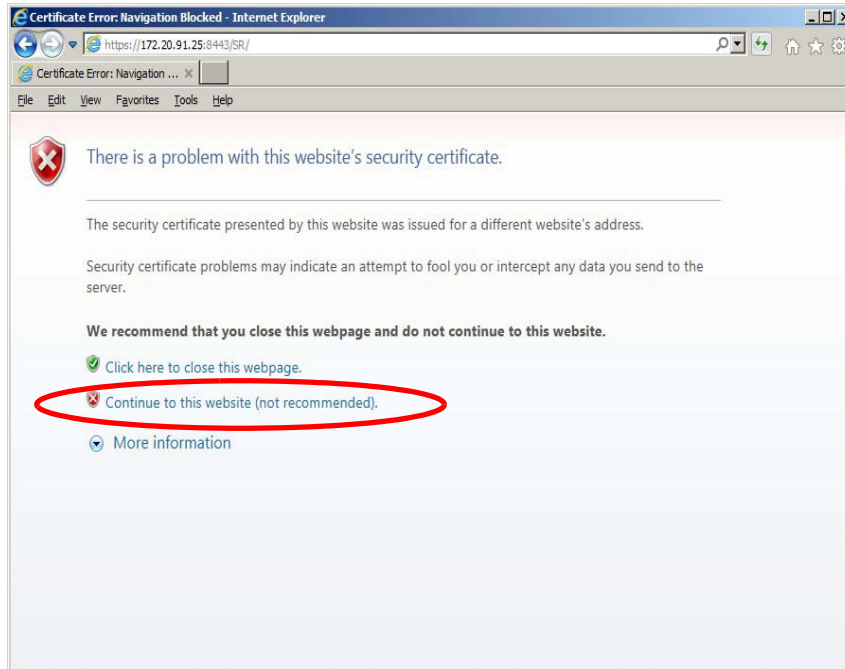

2. Selecting this option displays the SR Welcome window.

3. From the toolbar, select Tools | Internet Options to open the Internet Options box.

4. Select the Security tab, click **Trusted sites**, and then click **Sites** to open the Trusted sites box.

5. In the Trusted sites box, confirm the URL displayed in the field matches the IP address of the SR, and then click **Add** and **Close**.

6. Click **OK** to close the Internet Options box.

7. Refresh the current Web page by pressing the **F5** key on your keyboard.

8. Again, in the page "There is a problem with this website's security certificate.", click **Continue to this website (not recommended).** Note the red background to the URL bar and the Certificate Error button.
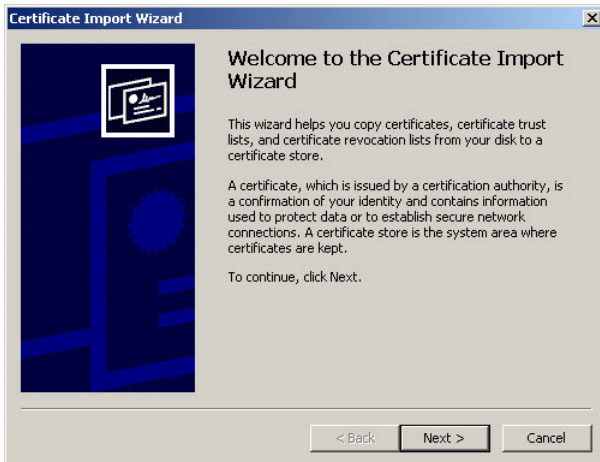
52
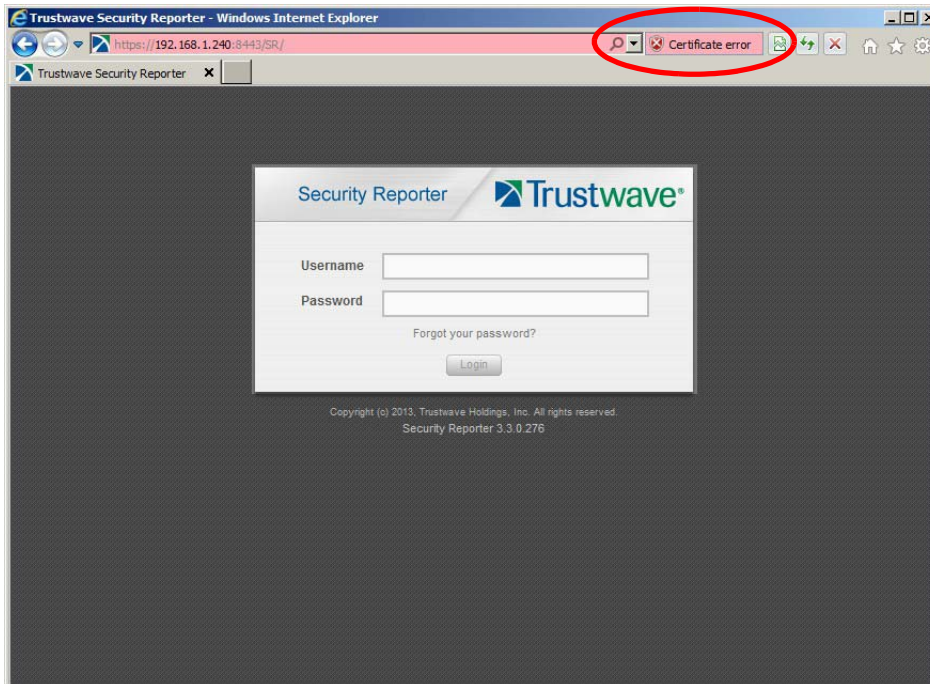
9. Click **Certificate Error** to open the Certificate Invalid box:
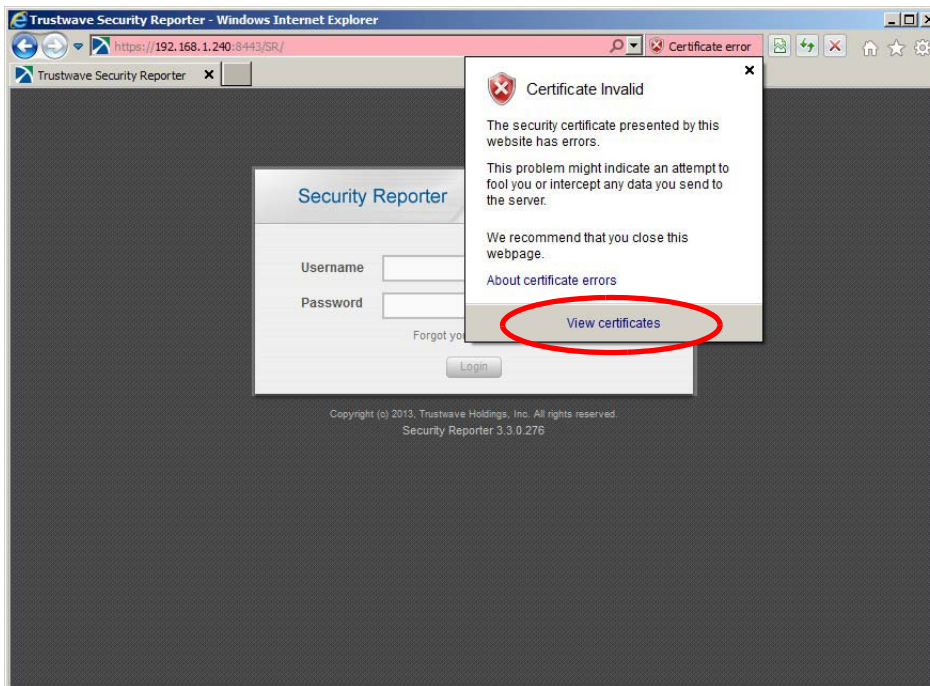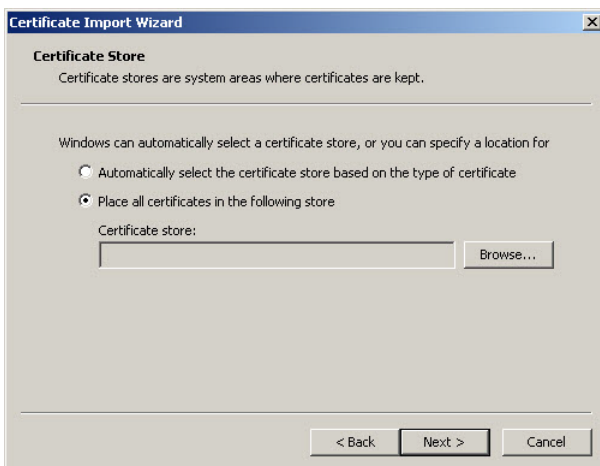

10. Click **View certificates** to open the Certificate window that includes the hostname you assigned to the SR:
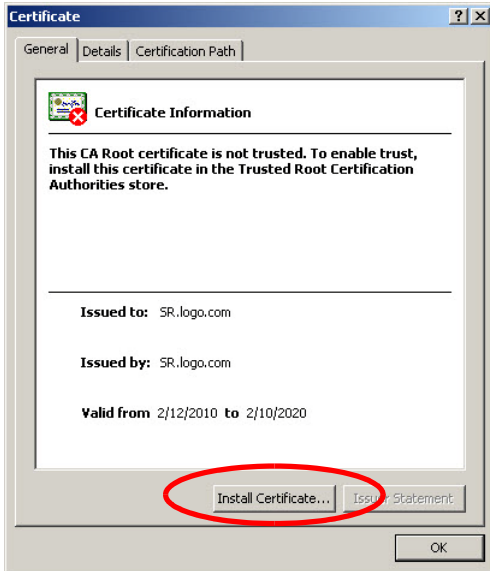
11. Click **Install Certificate...** to launch the Certificate Import Wizard:

12. Click **Next >** to display the Certificate Store page:

13. Choose the option "Place all certificates in the following store" and then click **Browse...** to open the Select Certificate Store box:

14. Choose "Trusted Root Certification Authorities" and then click **OK** to close the box.

15. Click **Next >** to display the last page of the wizard:
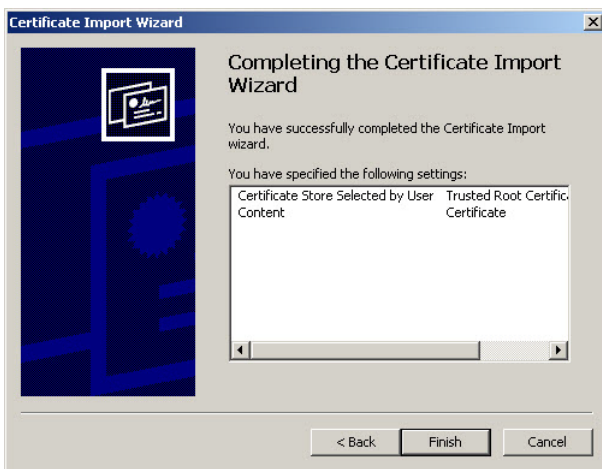
16. Click **Finish** to close the wizard and to open the Security Warning dialog box asking if you wish to install the certificate:

17. Click **Yes** to install the certificate and to close the dialog box. When the certificate is installed, the alert window opens to inform you the certificate installation process has been completed.

18. Click **OK** to close the alert box, and then close the Certificate window.

Now that the security certificate is installed, you will need to map the SR's IP address to its hostname. Proceed to Map the SR's IP Address to the Server's Hostname.

4.6.2.2 Map the SR's IP Address to the Server's Hostname

You should create an entry in your organization's DNS (Domain Name Service) to map the IP address of the SR to a hostname in the domain.

You can also map the IP address locally on a workstation.

1. From your workstation, launch Windows Explorer and enter `C:\WINDOWS\system32\drivers\etc` in the Address field to open the folder where the hosts file is located:
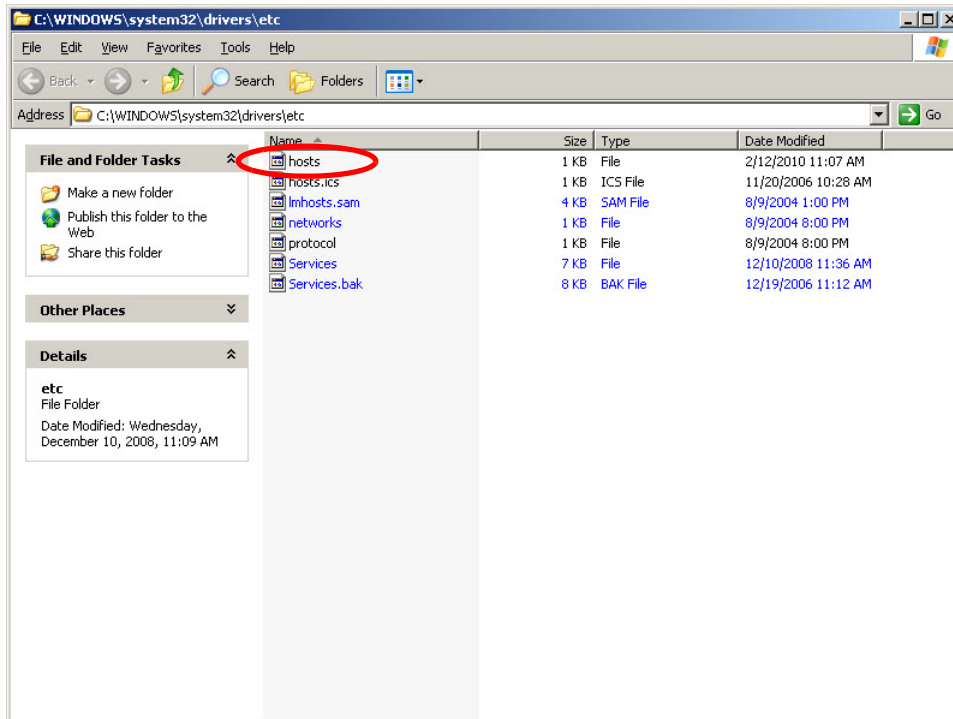

2. Double-click "hosts" to open a window asking which program you wish to use to open the file. Double-click "Notepad" or "TextPad" to launch the hosts file using that selected program.

> **Note:** To save the file in this location, you may need to run the program as administrator. You can also save the edited file in another location and then move it to the required location.
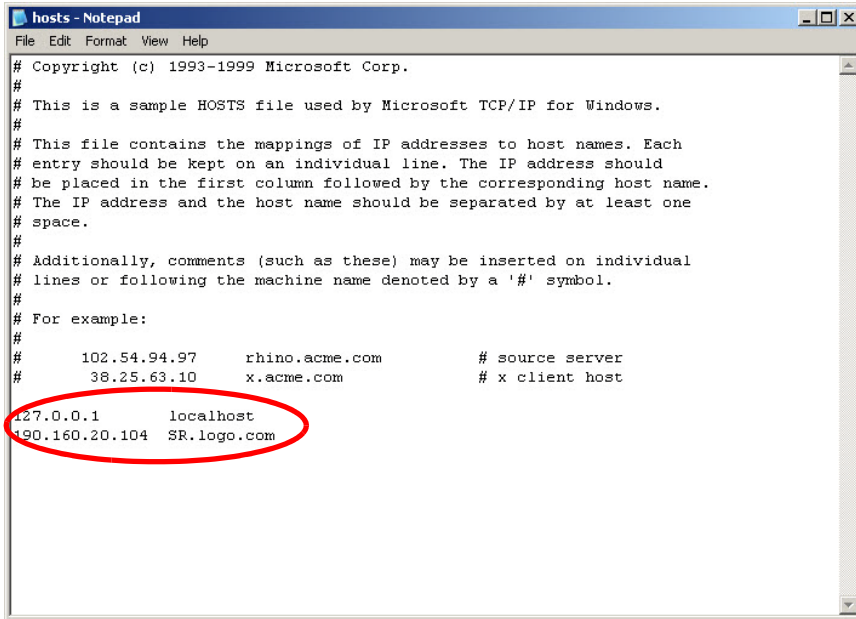
3. Enter a line in the hosts file with the SR's IP address and its hostname—as entered during the Configure host name screen of the Quick Start Setup Procedures—and then save and close the file.

4. In the address field of your newly opened IE browser, from now on you will need to use the SR's hostname instead of its IP address—that is `https://hostname:8443/SR/` would be used instead of `https://x.x.x.x:8443/SR/`. Click **Go** to open the SR Welcome window:
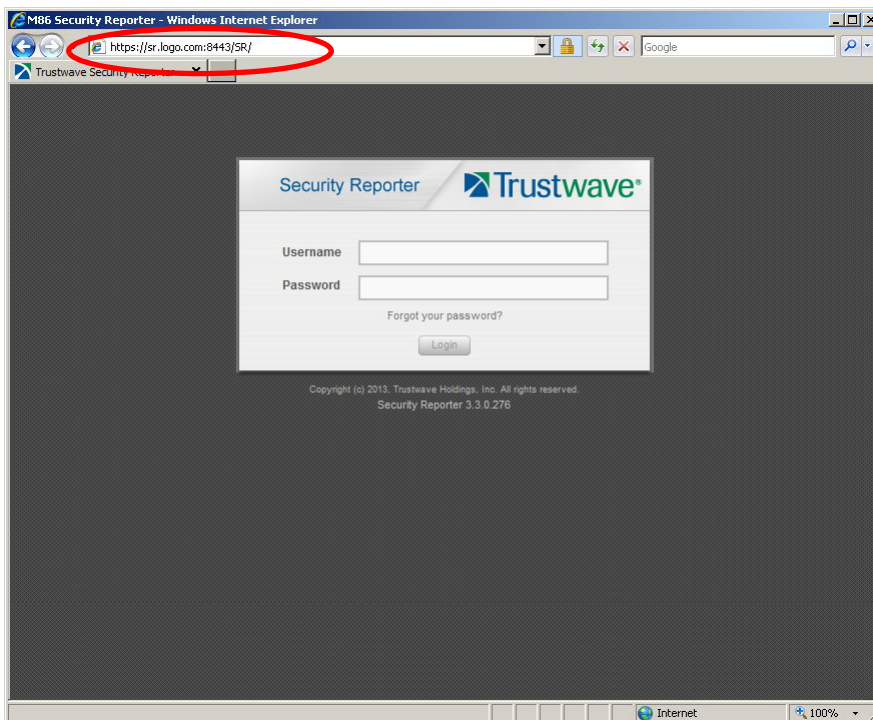
4.6.2.3 Temporarily accepting the certificate in Chrome

Note: Chrome uses the operating system certificate store. To install the certificate for Chrome, Trustwave recommends you use Internet Explorer to install and trust the certificate, and also that you create a DNS or hosts file entry that matches the name in the certificate. Follow the instructions for Internet Explorer, above.

This procedure to temporarily accept the security certificate was verified with Chrome version 53 on Windows 7.

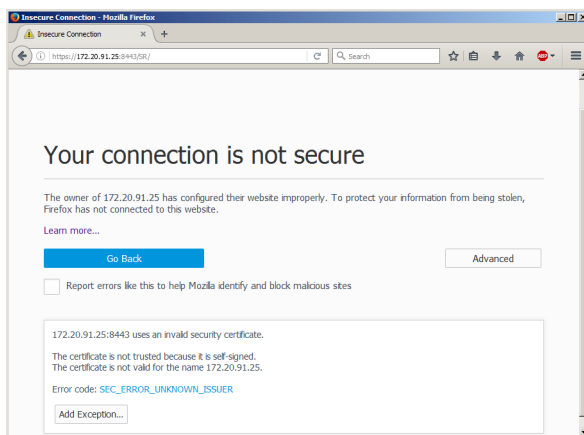1. On the page headed **Your connection is not private**, click **Advanced**.
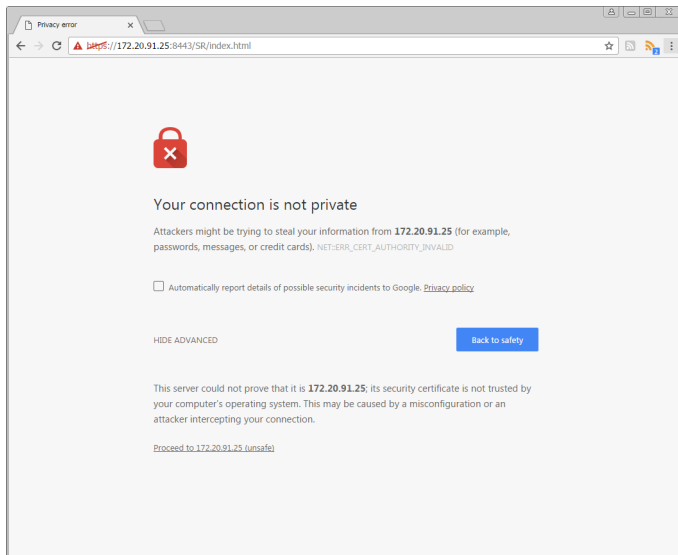
2. Click **Proceed to [ip address] (unsafe)**.

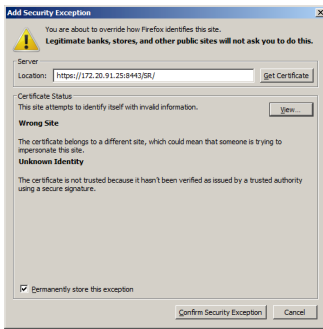### 4.6.2.4 Adding a Certificate Exception in Firefox

This procedure to accept the security certificate and create a permanent exception was verified with Firefox version 49 on Windows 7.

1. On the page headed **Your connection is not secure**, click **Advanced**.

2. Click **Add Exception**.

3. Ensure that the box **Permanently store this exception** is checked.

4. Click **Confirm Security Exception**.

4.6.2.5 Adding a Certificate Exception in Safari

With current versions of Safari, a window headed "Safari can't verify the identity of the website..." opens:

1. Click **Show Certificate** to open the certificate information box at the bottom of this window:

2. Click the "Always trust..." check box and then click **Continue**:

3. You will be prompted to enter your password in order to install the certificate.

4.7 Additional Setup for Web Filter Devices

To use a Web Filter with the SR, you must add the Web Filter in the SR's Device Registry panel (if you did not do so during the SR Wizard installation process), and you must set up the Web Filter to transfer logs to the SR.
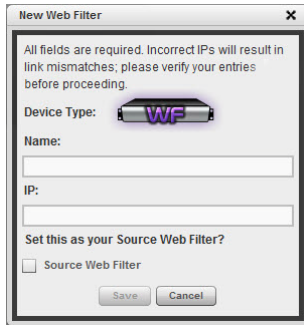
4.7.1 Add a Web Filter Device

1. In the navigation toolbar, with the Administration tab selected, click **Device Registry** to display the Device Registry panel:
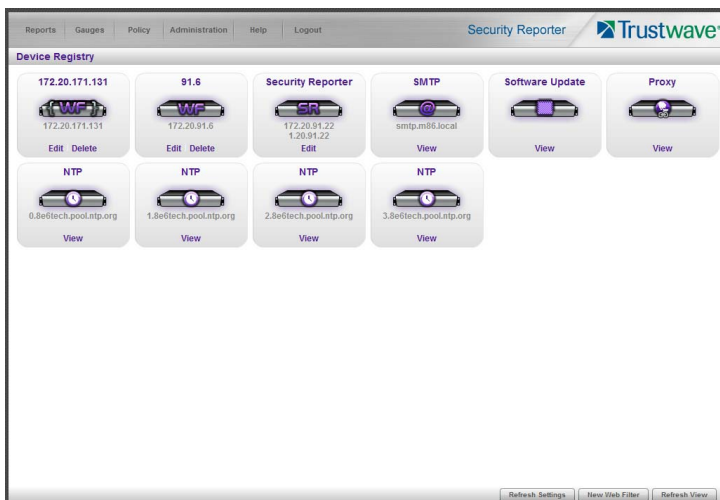
2. At the bottom of the Device Registry panel, click **New Web Filter** to open the New Web Filter window.

    Note: If the **New Web Filter** button is not present, make sure no SWG or LDAP servers are configured.

3. Type in the server **Name**.

4. Type in the **IP** address of the server.

5. If this Web Filter will be the source server, click the **Source Web Filter** check box.

6. Click **Save** to save and process your information, and to return to the Device Registry panel where an icon representing the Web Filter device you added now displays.

4.7.2 Set up Web Filter Log Transfers

This step can be performed any time during SR setup, but must be completed in order for the SR to receive logs from the Web Filter.

1. Access the user interface of the Web Filter.

2. Choose the **Reporting** link at the top of the screen to display the Reporting section of the Administrator console.

3. From the navigation panel at the left of the screen, choose **Report Configuration** to display the Report Configuration window.

4. Select **Trustwave Security Reporter** to display the Trustwave Security Reporter tab:
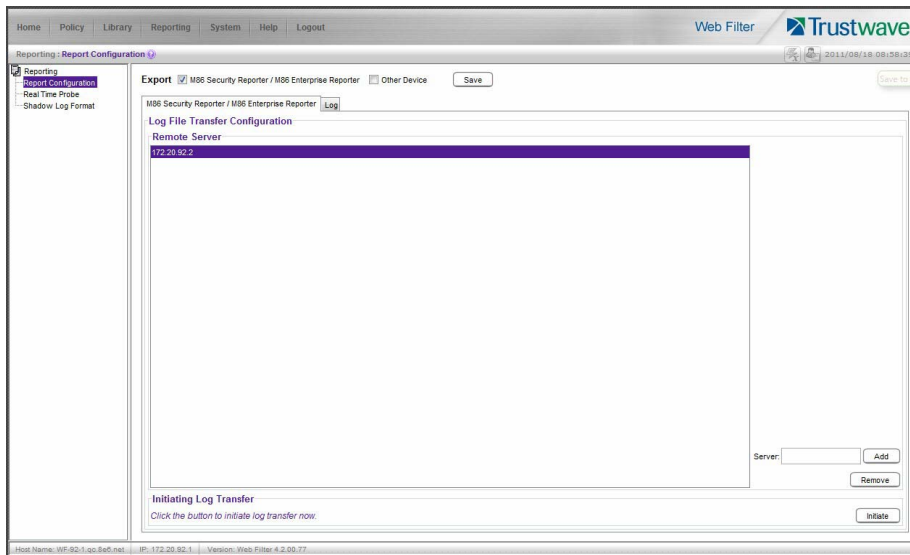
5. In the **Server** field, enter the LAN 1 IP address you assigned to your SR, and then click **Add** to include this IP address in the Remote Server list box.

6. Click **Save**. Your Web Filter is now set to transfer its log files to your SR via HTTPS.

> **Note:** Trustwave recommends that you wait for 1 - 2 hours after the initial installation so sufficient data is available for viewing.

4.8 Additional Setup for SWG Devices

To use a SWG with SR, you will need to add the SWG in the SR's Device Registry panel (if the device(s) were not added during the SR Wizard installation process).
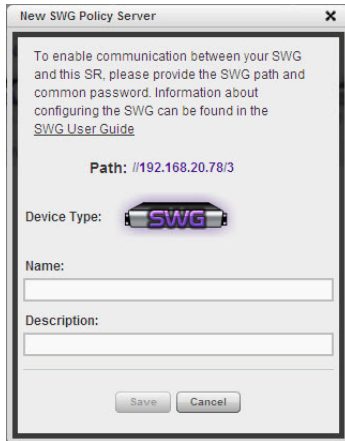
4.8.1 Add a SWG Device

1. In the navigation toolbar, with the Administration tab selected, click **Device Registry** to display the Device Registry panel:
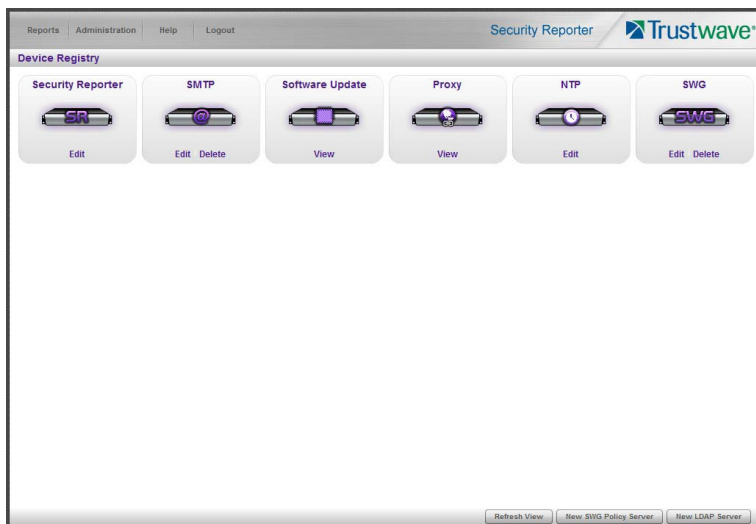
2. At the bottom of the Device Registry panel, click **New SWG Policy Server** to open the New SWG Policy Server window.

> **Note:** If the **New SWG Policy Server** button is not present, make sure no Web Filter servers are configured.

The following information displays and cannot be edited: Path, Device Type (SWG).

Tip: Make a note of the Path. You will need to enter this information in the SWG to allow the SWG to transfer logs to this SR (see Section 4.9). The Path consists of the IP address of the SR, and a unique number for each configured SWG policy server.

3. Enter a **Name** for the device and/or a **Description** for the device.

4. If this is the first SWG you have entered and you did not previously enter a common password for the SWG, enter the **Password** and make this same entry again in the **Confirm Password** field.

5. Click **Save** to save and process your information, and to return to the Device Registry panel where an icon representing the SWG device you added now displays.

All SWG devices use the common password that you configured in the Secure Web Gateway Setup section of the SR Wizard (or in the Add SWG dialog described above, if you did not configure it in the SR wizard). To change this password if required, edit any configured SWG device and click **Change Common Password**.

4.9 Set up SWG Log Transfers

This step can be performed any time during SR setup, but must be completed in order for the SR to receive logs from the SWG.

The instructions below are valid for SWG software version 10.0 and above.

4.9.1 Configure SWG to Send Logs to the SR

1. Access the SWG user interface (Management Console).

2. Navigate to Administration | System Settings | Trustwave Devices.

    •   Depending on the SWG version this page could also be named M86 Devices or SWG Devices.

3. In the Devices tree, find the SWG's IP address and drill down to Log Server | Log Properties.

4. In the Log Properties panel, click the **Log Archiving** tab:
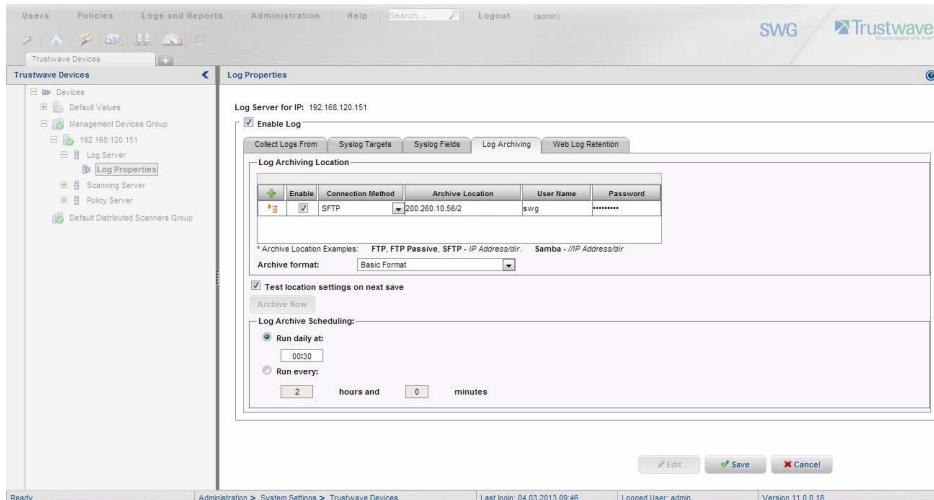
5. Click **Edit** to activate the elements in this tab.

    - In Log Archiving Location, click the '**+**' (plus character) in the table header to add a new row in the table, and specify the following criteria to the right of the check mark in the Enable column:

    - **Connection Method**: Select "SFTP" from the pull-down menu.

    - **Archive Location**: Type in the Path information that you noted when setting up this SWG in the SR Device Registry. The Path will be the IP address of this SR, a slash character (/) and an integer. Do not include the leading //. For example: `200.260.10.56/2`.

    - **User Name**: Type in the SWG's Username from the Device Registry, which is `swg` (in lower case characters).

    - **Password**: Type in the common password for SWG transfer as configured on the SR.

    Note: Be sure "Extended Format" is selected for Archive format, and Log Archive Scheduling specifies the correct interval you wish to use for sending logs from the SWG to the SR.

6. Click **Save** to save your settings.

4.9.2 Policy Settings

1. Navigate to Policies | Default Policy Settings and verify if the settings in Enable Emergency Policy and Default Policy Values are the ones you wish to use for sending logs to the SR.

2. To modify any settings, click **Edit** to activate all elements in this panel:
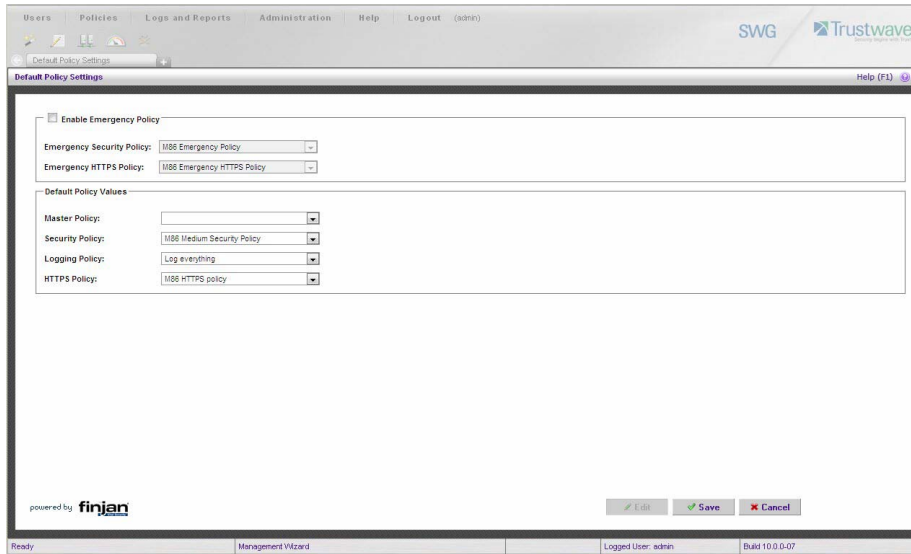
3. Make your selections from the pull-down menu(s).

4. Click **Save** to save your edit(s).

4.10 Set Self-Monitoring

1. In the SR Report Manager navigation toolbar, select Administration | System Configuration to display the Server Status panel screen of the System Configuration administrator console.

2. From the Server pull-down menu, choose **Self-Monitoring** to display the Self Monitoring screen:
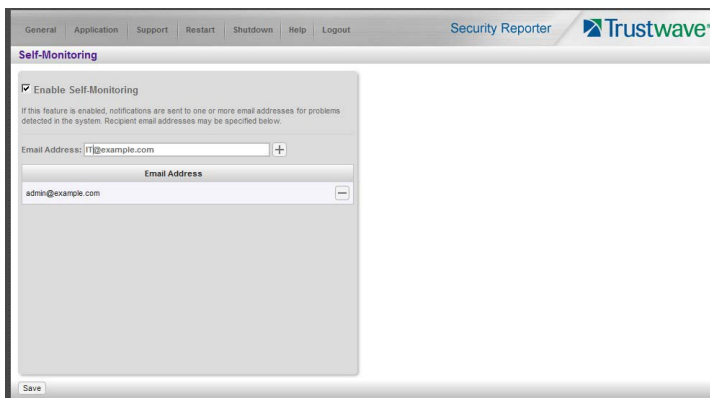
3. Choose **Enable Self-Monitoring** to activate monitoring.

4. Enter one or more email addresses of individuals (or distribution groups) in your organization that you would like notified if the SR detects any problems when processing data.

5. Click **Save**.

4.11 Single Sign-On Access, Default Username/Password

4.11.1 Single Sign-On Access

The Single Sign-On (SSO) access feature is available for the global administrator account set up during the wizard hardware installation process. To enable this feature, be sure this same username and password combination is saved in the Web Filter (System | Administrator) for an 'Admin' account type. Also be sure the hostname for the SR server and Web Filter are entered in the hosts file. Thereafter, whenever accessing the Web Filter via the menu link in the SR user interface, the Web Filter splash screen displays, bypassing the Web Filter login window.

> **Tip:** With a secure connection, the first time you attempt to access the Web Filter (Administration > Web Filter) from within the SR in your browser you may encounter a connection warning. This may occur if you have not accessed the WF with that browser and accepted the security certificate.
>
> To resolve this issue, navigate directly to the Web Filter user interface in your browser. You will be prompted to accept the security certificate. For details of how to accept the security certificate for your browser, follow the instructions at: http://www.trustwave.com/software/8e6/ts/wf-sec-cert.html

4.11.2 Default Usernames and Passwords

Without setting up Single Sign-On access for the global administrator account, default usernames and passwords for the SR application and Web Filter are as follows:

APPLICATION	USERNAME	PASSWORD
Security Reporter	admin	testpass
Web Filter	admin	user3

Note that since the default username for both the Security and Web Filter are identical (*admin*), but the passwords are dissimilar, the SSO feature will not function. Thus, in order to use SSO, Trustwave recommends setting up an administrator account in the Web Filter that matches the global administrator account set up in the SR.

4.12 Next Steps

Congratulations; you have completed the SR installation procedures. Now that the SR server is set up on your network you will need to be sure the Web-access logging device you are using is sending log files to the SR database. Once the SR database is populated—this generally takes a full day—the Report Manager can be used for generating reports.

Initially, you will only be able to report on IP addresses. To implement user names in SR reports using a Web Filter, please consult the System Configuration Section of the Security Reporter User Guide. Refer to the Reports Section, Real Time Reports Section, and Security Reports Section of the Security Reporter User Guide for information on generating reports.

For real time and security reports, the next step is to set up user groups or administrator groups. For real time reports, you will set up and configure gauges thereafter.

Obtain the latest Security Reporter User Guide at http://www.trustwave.com/support/sr/documentation.asp.

Note: If you cannot view reports, or if your specific environment is not covered in the Security Reporter User Guide, contact a Trustwave solutions engineer or technical support representative.

5 Best Reporting Practices

This Best Reporting Practices section is provided to help you get started using the Report Manager user interface. The main areas of focus in this section are summary and drill down reporting.

In this section you will learn how to:

- access Summary Reports to obtain a high level snapshot of end user Internet activity

- use Drill Down Reports to conduct an investigation of specific Internet activity

- modify a report view

- generate a report view grouped by two sets of criteria

- generate a summary report view and a detail report view

- create a new report view

- export a report view to an output format

- save a report

- schedule a report to run on a regular basis to capture Internet activity at set intervals of time

- create a Custom Category Group

- generate a summary report and a detail report for a custom category group

- create a custom User Group

- generate a summary report and a detail report for a single user group

> **Note:** The SR must collect data for a full day in order to generate Summary Reports. To use Drill Down Reports, the SR must collect data for a few hours. Therefore, it would be best to wait a day after the SR has been installed and fully operational before beginning any of the exercises described in this section.

5.1 Reports Usage Scenarios

This collection of reporting scenarios is designed to help you use the Report Manager to create typical snapshots of end user Internet activity. Each scenario is followed by setup information. Please consult the "How to" section in the index of the Security Reporter User Guide for pages containing detailed, step-by-step instructions on configuring and/or using the tools and features described in that scenario.

5.1.1 Summary Report and Drill Down Report exercise

In this exercise you will learn how to use Summary Reports to obtain a high level overview of end user activity, and then use Drill Down Reports to obtain more detailed information on specific user activity. You will also learn that there are two basic types of Drill Down Reports (summary and detail), and various types of reports you can generate for each of these two basic drill down report types.

5.1.1.1 Use Summary Reports for a high level activity overview

From the navigation menu, select Reports | Summary to display yesterday's "Top 20 Users by Blocked Requests" Summary Report containing pre-generated data. Since the data has already been captured from the previous day, the report loads quickly in your browser:
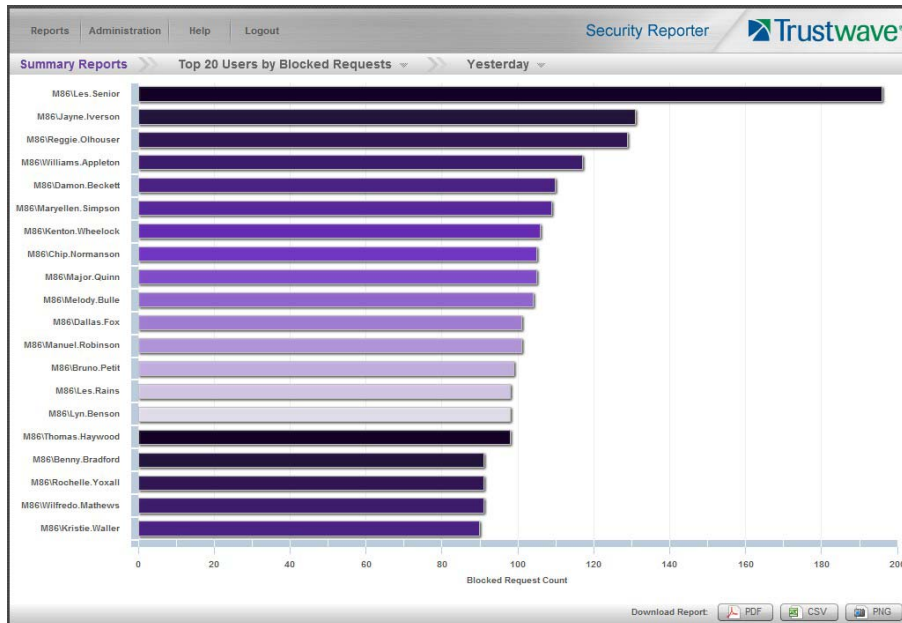
From the menu at the top of the panel you can select a type of report and a date scope.

For instance, you can choose Top 20 categories by page count. This report shows the top 20 categories that were most frequently visited by users yesterday.

Review the list of categories in this pre-generated report. In a later step you will need to select the category to be further investigated.

> In the Security Reporter *Administrator Guide* index, see:
> • How to: generate a Summary Report

5.1.1.2 Further investigate using a Summary Drill Down Report

Now you will use a Drill Down Report to find out which user(s) are visiting sites in the category you've targeted for investigation.

From the navigation menu, go to Reports | Drill Down | Category to display the generated Summary Drill Down Report view, ranking categories in order by the most visited.

> **Note:** Hovering over a bar in the chart displays the name of the record along with the total count used in that record.

Beneath the bar chart is a table containing rows of records. Columns of pertinent statistics display for each record.

The bottom portion of the report view panel includes a link to the Report Wizard, used for modifying the current report view, downloading, emailing, saving, and/or re-running the report:

Note that the drill down report view has been generated for yesterday's activity by default.

To continue this investigation using data from yesterday's Summary Report, you must create a new report from this current report view.

> In the Security Reporter *Administrator Guide* index, see:
> • How to: generate a Drill Down Report

5.1.1.3 Create a new report using yesterday's date scope

1. At the bottom left of the Summary Drill Down Report view, click **Report Wizard** to open the Report Wizard for the Category type of report:
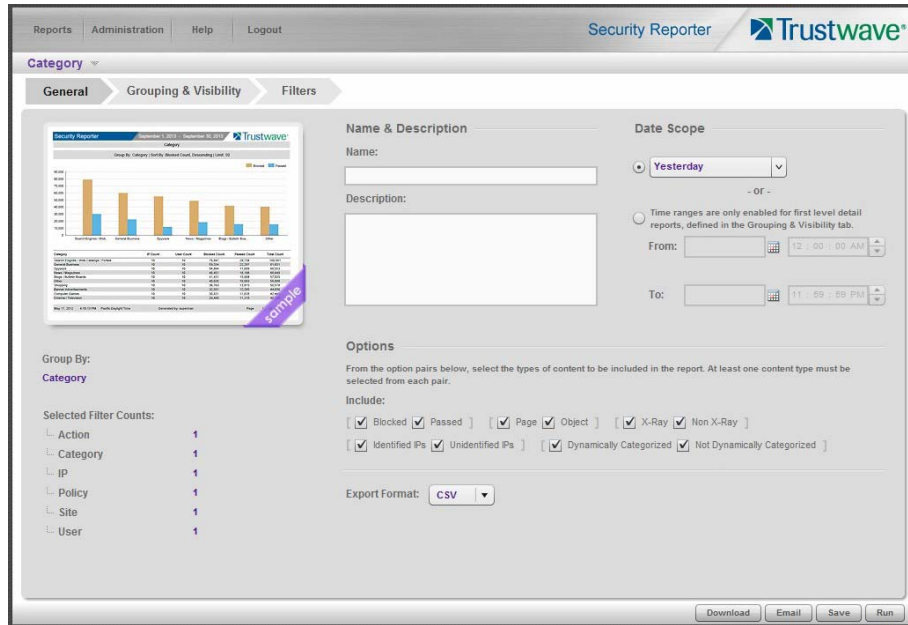
The Report Wizard is comprised of three tabs used for specifying reporting criteria: General, Grouping & Visibility, and Filters. The bottom right of the panel includes the Download, Email, Save, and Run buttons.

For this exercise, we will only use the default General tab.

2. By default, "Yesterday" is selected as the **Date Scope**. You can select other scopes using the menu or the date controls.

3. Click **Run** to accept your selection. The regenerated Category report displays data for the selected date scope in the Summary Drill Down Report view.

> In the Security Reporter *Administrator Guide* index, see:
> • How to: create a new report from the current report view

5.1.1.4 Create a report grouped by two report types

1. To continue this exercise, select the record for the category you wish to further investigate.

> **Note:** If necessary, scroll down to view the entire list of categories in the report view.

2. Now, to find out who is visiting sites in this category, you will need to identify the user(s).

Since there are two sets of criteria you need for this exercise, you must drill down into the selected category and also specify that you wish to view user IP addresses, thereby creating a report view grouped by two report types.

Note the Count columns to the right of the Category column, each with clickable links.

Click the **IP Count** link corresponding to the targeted category:

After executing the last command, note that user IP addresses now display in the first column of the report view instead of categories.

> In the Security Reporter *Administrator Guide* index, see:
> • How to: use count columns and links

For the last step of this exercise, you will select a user from the current Summary Drill Down Report view and then drill down further to see which URLs that user visited, thereby creating a Detail Drill Down Report view.

5.1.1.5 Create a Detail Drill Down Report to obtain a list of URLs

1. To investigate the activity of a specific user listed in the current Summary Drill Down Report view, select that user's record and then click the hyperlink in a detail column such as the Blocked Count, Passed Count, or Total Count. The results display in the Detail Drill Down Report view:

Note that the Detail Drill Down Report view contains columns of information pertaining to the user's machine and setup on the network, sites visited, categorized URLs, and clickable links to access pages the user viewed. Records for blocked user requests display in red text.

2. In this report view, click any URL link to open the page for that URL.

> **Caution:** Visiting a URL can present a security risk if the content of the visited page is malicious. Use caution, particularly when viewing URLs that were blocked for security reasons.

> In the Security Reporter *Administrator Guide* index, see:
> • How to: create a detail Blocked Count report from a summary report

You have now learned how to access Summary Reports and to use Drill Down Reports to conduct an investigation. You have also learned how to change the date scope of a Drill Down Report to create a new report, generate a report view grouped by two report types, and drill down into the current summary report view to create a detail report view.

These tools and other tools can be used separately or combined to create many different types of reports to fulfill different purposes.

5.1.2 'Group By' Report and Export Report exercise

In this exercise you will learn how to display only the top 10 records of a summary drill down 'group by' report view, export that report view in the PDF output format, and then view the results of the generated PDF file.

5.1.2.1 Drill down to view the most visited sites in a category

1. From the top panel, go to Reports | Drill Down | Category to generate a Summary Drill Down Report view, ranking categories in order by the most visited to the least visited:
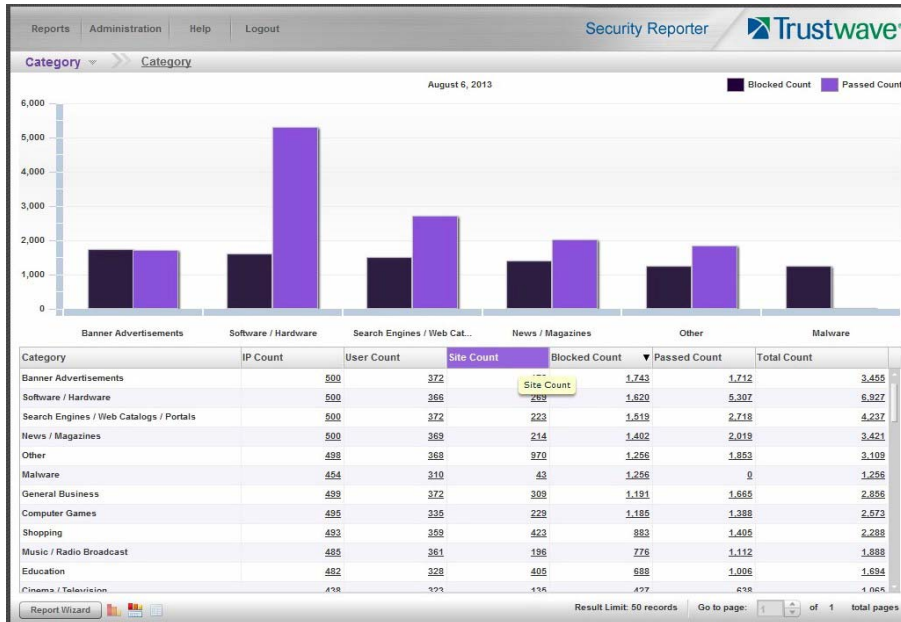
2. To find out which sites were visited in a popular category, target the category and then click the **Site Count** link corresponding to that category to create a report view grouped by two report types:

Note that URLs/IP addresses of sites users visited in the category now display in the first column of the modified report view, instead of category names.

In the Security Reporter *Administrator Guide* index, see:

- How to: generate a Drill Down Report
- How to: use count columns and links

5.1.2.2 Export a report for the top five site records

1. Now, to only display the top five sites users visited in the top category, navigate to **Report Wizard.**

2. On the General tab, choose an **Export format** of "PDF".

   Note: The default export format is CSV because production reports with large amounts of data are most efficiently generated in this format.

3. Click the Grouping & Visibility tab:
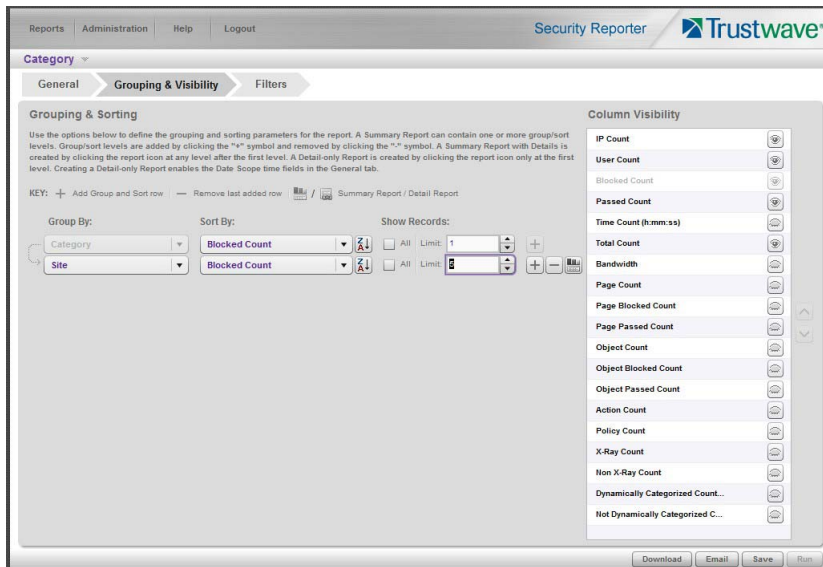
4. In the Group & Sort by section, for **Show Records**, type in 1 for the record Limit.

5. Click the "+" symbol to add the next level to the report, and select **Group by** "Site".

6. Under **Show Records**, type in a Limit of 5 records.

7. Click **Download** to begin the export process using the PDF export format. When the export process has been completed, the PDF file opens in a separate browser window:

Security Reporter		August 6, 2013		Trustwave®	
		Category			

Group By: Category | Sort By: Blocked Count, Descending | Limit: 1

Group By: Site | Sort By: Blocked Count, Descending | Limit: 5

Category : Banner Advertisements

Site	IP Count	User Count	Blocked Count	Passed Count	Total Count
doubleclick.net	368	294	462	287	749
msn.com	340	277	399	194	593
fastclick.net	160	145	128	74	202
falkag.net	193	157	65	187	252
yahoo.com	190	164	59	193	252
Total	1,251	1,037	1,113	935	2,048

Total Items: 5

May 4, 2014	4:07:55 PM	Pacific Daylight Time	Generated by: admin	Page 1 of 1

The generated PDF file for the report includes a list of the top 10 Sites records for the selected category, as well as the following counts for each record in the report: IP Count, User Count, Blocked Count, Passed Count, Time Count (h:mm:ss), and Total Count. The Total and Total items display at the end of the report.

In the Security Reporter *Administrator Guide* index, see:

- How to: display only a specified number of records
- How to: export a report
- How to: print or save an exported report

You have now learned how to modify a Summary Drill Down Report view grouped by two report types to include only the top 5 records, and then export that content for viewing in the PDF format.

Variations of this exercise can be performed to generate and export countless reports using criteria of your specifications.

5.1.3 Save and schedule a report exercise

In this exercise you will learn how to save report view criteria, and then create a schedule for running a report on a regular basis using that criteria. While a Summary Drill Down Report is used in this exercise, these steps also apply to a Detail Drill Down Report.

5.1.3.1 Save a report

1. To use specific criteria for a report you wish to run again, navigate to Report Wizard and configure settings in the tabs:
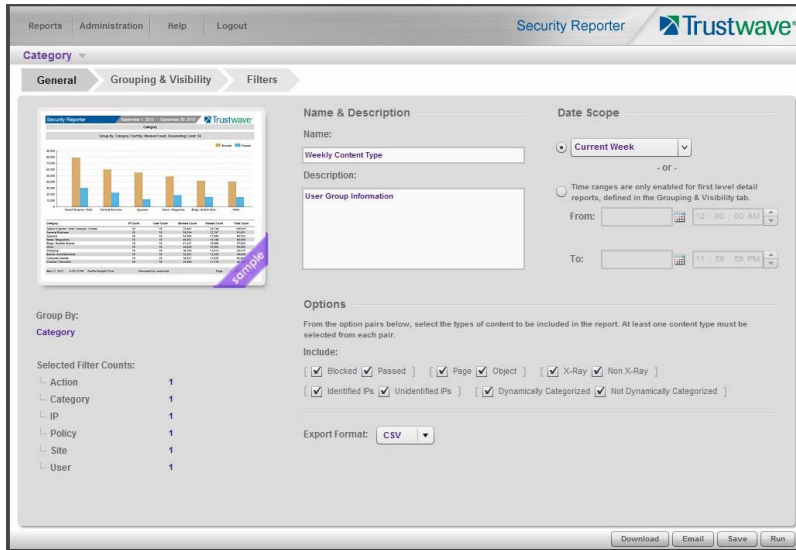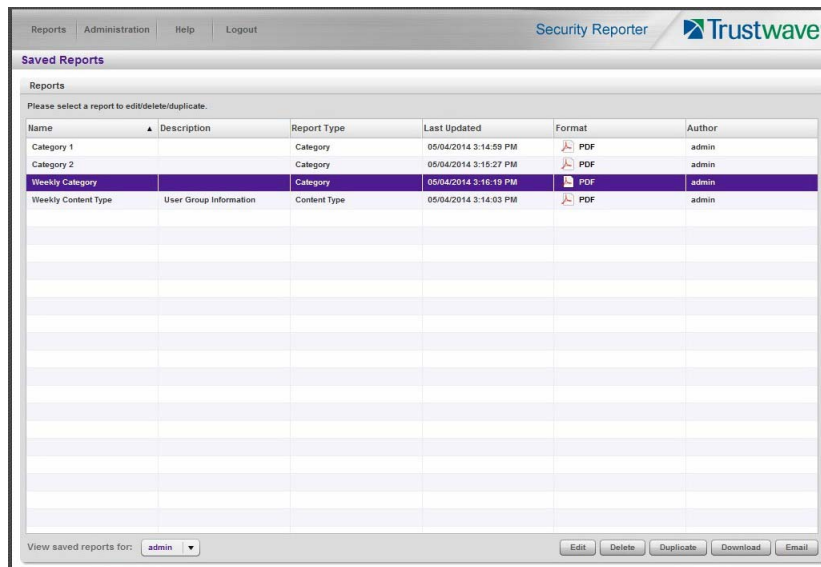
In order to save the report settings, you must at least enter a **Name** for the report in the General tab.

2. Click **Save** at the bottom of the panel to save the report.

Note: Saved reports can be edited at any time. These reports are accessed by going to Reports | Saved, and then choosing the report from the **Reports list**:
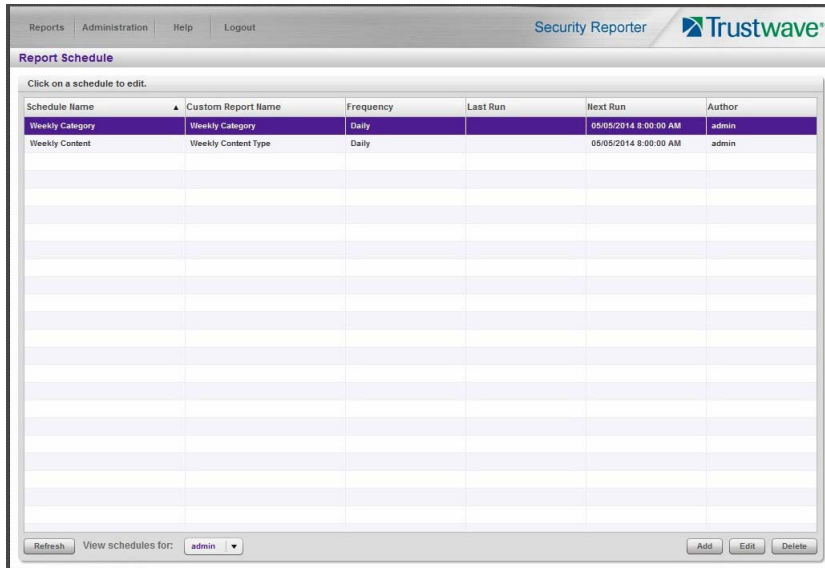

In the Security Reporter *Administrator Guide* index, see:

• How to: save a Drill Down report

• How to: edit a saved Drill Down report

5.1.3.2 Schedule a recurring time for the report to run

Now that you've saved the report, you can schedule a time for the report to run.

1. Navigate to Reports | Schedule to display the Report Schedule panel:

2. Click **Add** to go to the Add Schedule panel:

3. Enter a **Schedule Name**, select the **Report to Run**, and specify the run **Frequency** (Daily, Weekly, Monthly, Once) and pertinent criteria.

4. Click **Save** to save your settings and add the schedule to the Report Schedule panel list.

In the Security Reporter *Administrator Guide* index, see:

• How to: schedule a Drill Down report to run

You have now learned how to save a report and schedule the report to run at a designated time.

Reports created for a variety of purposes can be scheduled to run on different dates and times to capture records of specified user activity as necessary.

5.1.4 Create a Custom Category Group and generate reports

After you've run a few summary and detail reports for the top visited categories, you might want to generate reports targeting specified categories only. To do so, you must first create a Custom Category Group.

5.1.4.1 Create a Custom Category Group

1. To create a Custom Category Group, choose Administration | Custom Category Groups from the navigation menu:
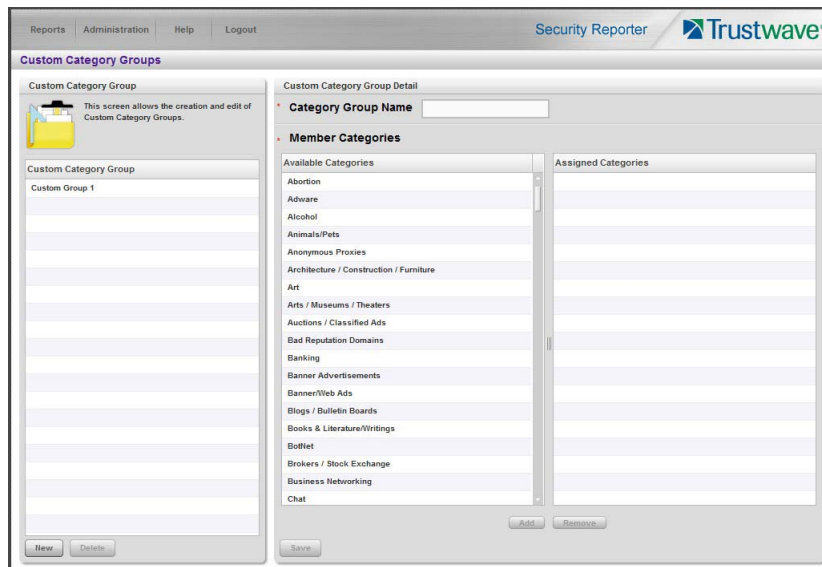
2. Type in the **Category Group Name** to be used.

3. Choose the Available Categories and click **Add** to include each category in the Assigned Categories list box.

4. Click **Save** to save your settings and to display the name of the group you added in the Custom Category Group list box.
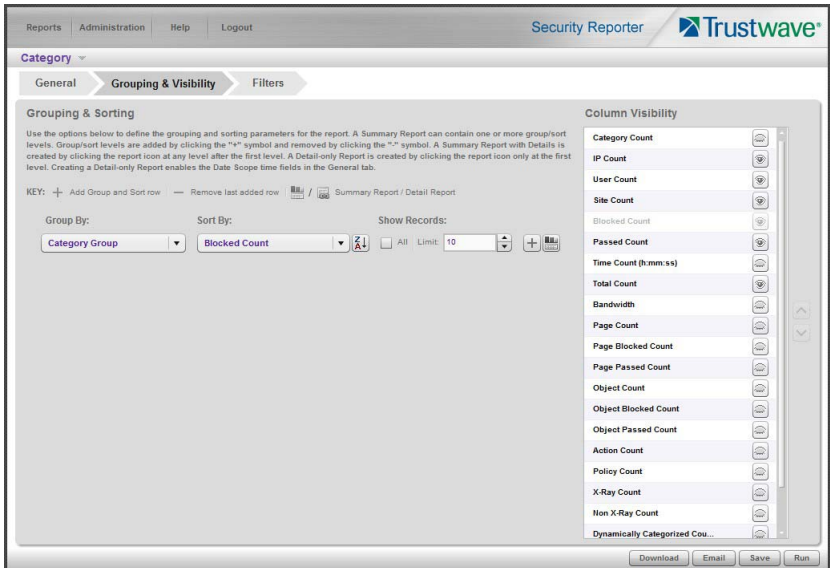
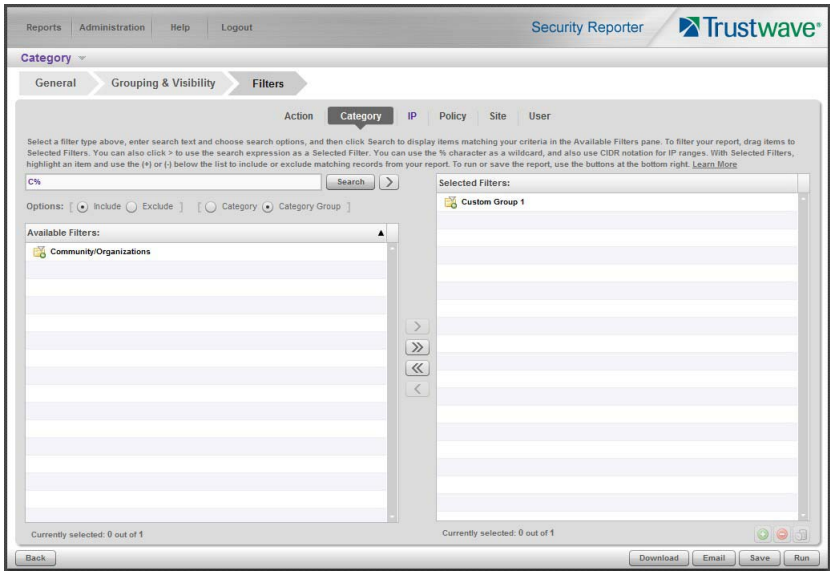> In the Security Reporter *Administrator Guide* index, see:
> *   How to: add a Custom Category Group

5.1.4.2 Run a report for a specified Custom Category Group

1. To create a report for the Custom Category Group you created, choose Reports | Drill Down | Report Wizard from the navigation menu.

2. Specify reporting criteria in the General tab.

3. In the Grouping & Visibility tab, specify the report will **Group By** "Category Group":

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4. In the Filters tab, select the Category filter, choose the Category Group option, and then search for the custom category group you created:

5. After adding the custom category to the Selected Filters list box, click **Run** to begin generating the report view. The finished report view displays in the Drill Down report panel:
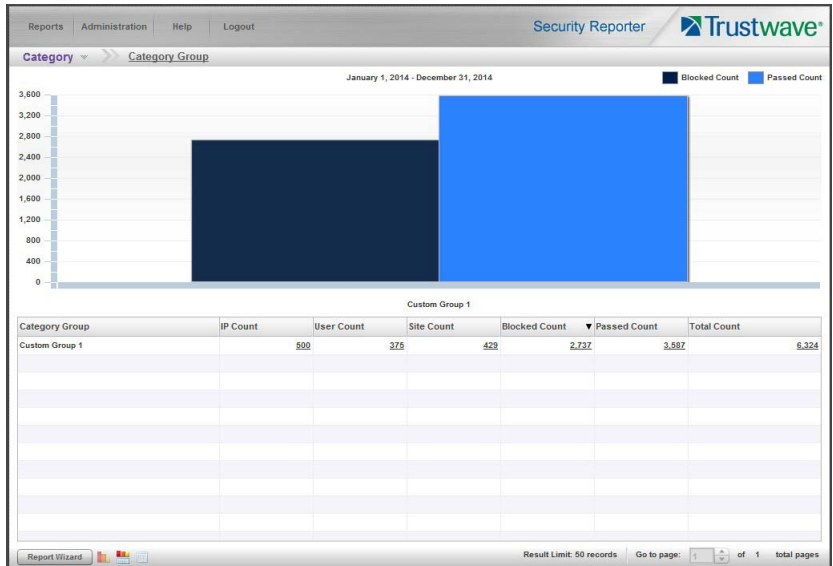
In the Security Reporter *Administrator Guide* index, see:

• How to: generate a Custom Category Group report

5.1.5 Create a custom User Group and generate reports

In addition to running reports for various custom category groups, you might want to create one or more custom user groups and run reports for these user groups.

Note: In order to generate reports for a custom user group, the user group must be created a day in advance, since the list of users is updated each day automatically based on group definitions and latest usage data.

5.1.5.1 Create a custom User Group

1. To create a user group, navigate to Administration | User Groups:

2. Choose an existing user group from the User Groups list and then click **New** to display the New User Groups panel:
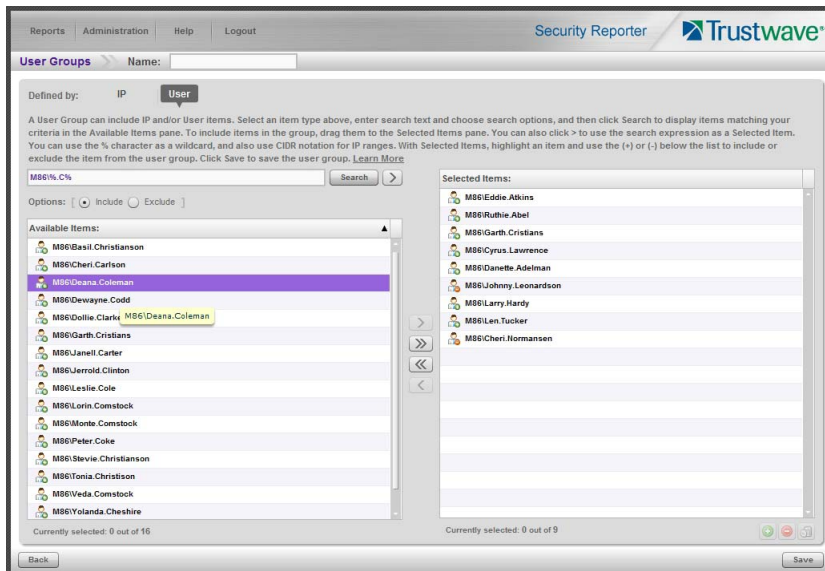

3. Enter at least three characters for the group **Name** (at the top of the screen). This action activates the **Save** button.

4. On the User Group panel:

    > Tip: For more help and examples on the User Group panel see the Learn More link from the text at the top of the panel.

    a. At the top of the panel, click the IP or User item type tab to work with that item type. A group can contain items of one or both types.

    b. The Selected Items list is initially populated with the IP addresses or Users that are members of the base group.

    c. In the search field, enter a search term. You can use the % character one or more times as a wildcard (matching one or more characters). For the IP type, you can also enter ranges in CIDR notation (for example, `10.160.0.0/24` or `2001:db8::/32`).

    d. Choose a search option (Include or Exclude) to indicate whether you want to find items that match, or do not match, the search terms.

    e. Use the search text in one of two ways:

        •   Click **Search** to perform the query. Results appear in the Available Items list box below. You can add one or more filters from the list to Selected Items.

        •   Click the ⟩ button to add the search text directly to Selected Items. The text including any wildcards will be evaluated each time the groups is used for a report.

f. To add items from Available Items to Selected Items, select and drag the items, or click to select, and then click the single right arrow ⟩ to move the filter(s) to the Selected Items list box. Use the double right arrow ⟫ to move all items.
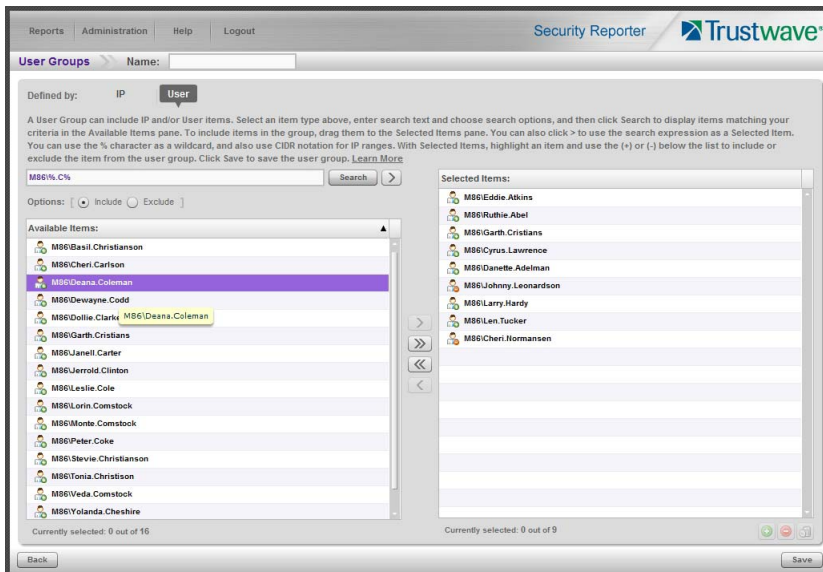
🔆 Tip: To remove any item or items from the Selected Items list box, select the items and click the single left arrow (or click the trash icon 🗑 at the bottom of the list). Use the double left arrow to remove all items.

5. You can include or exclude items matching a Selected Item from the group.

- To include items matching a Selected Item, highlight it and then click the ⊕ at the bottom of the list. The item icon shows the green **+** to indicate it is included.

- To exclude items matching a Selected Item, highlight it and then click the ⊖ at the bottom of the list. The item icon shows the red **-** to indicate it is excluded.

🔆 **Tip:** Each group must have at least one Included Selected Item. If you remove all included items from the group, +% (include all items) is added automatically. When you add an Included Selected Item, +% is removed automatically.

6. When you have finished editing both the IPs and Users lists, click **Save** to save your edits, and to re-display the User Groups panel where the user group you added now displays in the list.

📄 In the Security Reporter *Administrator Guide* index, see:
- How to: add a user group

## 5.1.5.2 Generate a report for a custom User Group

Once the custom User Group is recognized by the SR (on the following day), reports can be generated.

1. To generate a summary or detail report for a custom User Group, navigate to Reports | Drill Down | Report Wizard, and click the Grouping & Visibility tab.
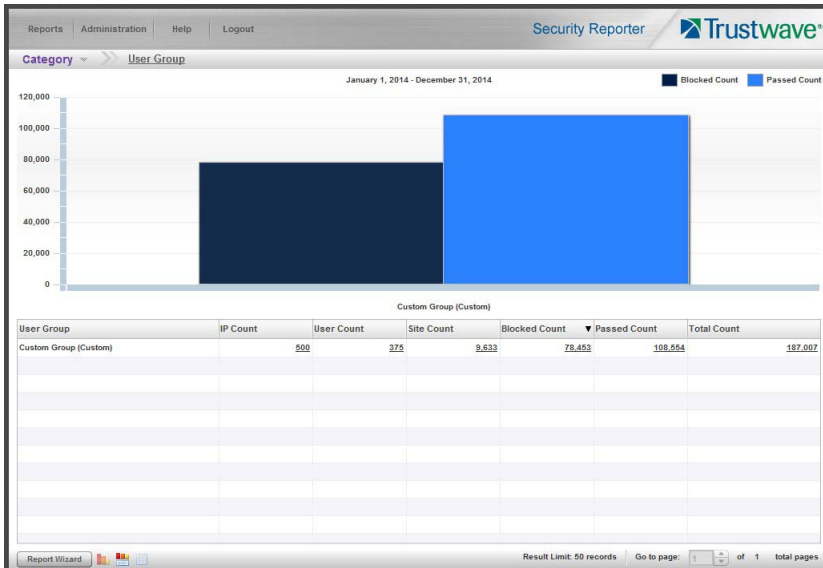
2. For **Group By**, choose "User Group" from the menu:
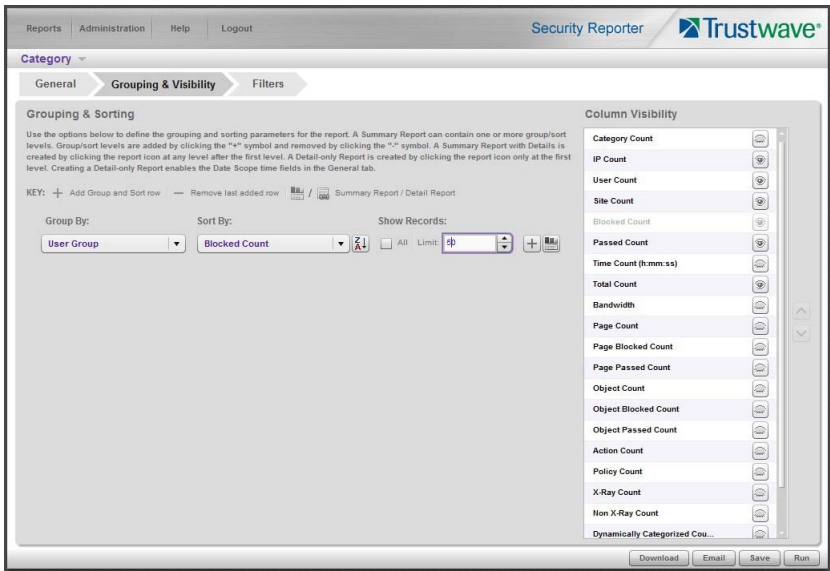
3. In the Filters tab, choose the User filter, select the User Group option, search for the user group you created, and then add it in the Selected Filters list box:
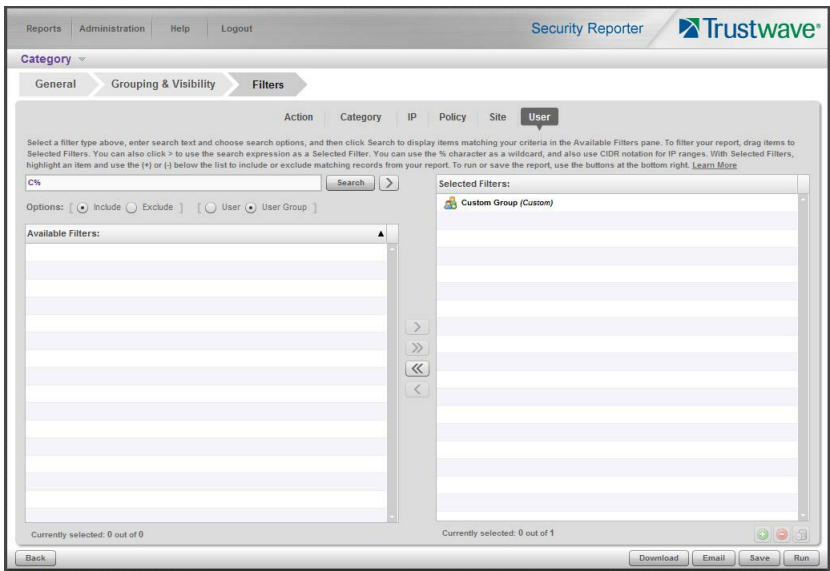
4. Click **Run** to begin generating the report view. The finished report view displays in the Drill Down report panel:

> In the Security Reporter *Administrator Guide* index, see:
> • How to: use the Report Wizard to generate a User Group report

5.1.5.3 Access the Saved Reports panel

A saved Drill Down report can be edited any time as follows:

1. Navigate to Reports | Saved.

2. Select the report name from the list:

3. Click **Edit** to go to the Report Wizard panel where the report can be updated and saved.

> In the Security Reporter *Administrator Guide* index, see:
> • How to: access saved Drill Down reports

6 Using the SR in the Evaluation Mode

In Evaluation Mode, only the latest 14 days of data is available for reporting. Data for earlier dates is stored but cannot be reported on.

Evaluation mode does not limit any other functionality. In Evaluation Mode the SR can be fully configured and all reporting options are available.

When using the SR in Evaluation Mode, the Report Manager user interface and the Server Information screen display differently than they do in registered (standard) mode.

6.1 Report Manager Banner

In evaluation mode, the Report Manager banner displays 'EVALUATION MODE' beneath the Security Reporter name/link.
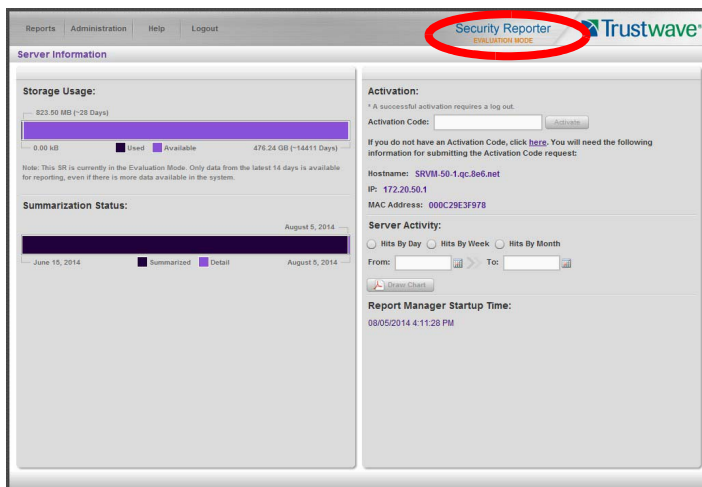
Hover over the '**EVALUATION MODE**' link to display a definition of 'Evaluation Mode'. Click this link to launch the SR Server Information screen.

Note: The Server Information screen is available to all administrators through this link (the Administration menu item is visible only to Global Administrators).

6.2 Server Information Screen

For an SR unit currently in evaluation mode, the Server Information screen includes the Activation section, as shown above, as well as an additional note in the Storage Usage section reminding you of the limits on data available for reporting.

You have the option to use the SR in the evaluation mode, or to change the evaluation mode in one of two ways: by extending the evaluation period, or by registering the SR so that it can be used in the registered mode.

6.3 Change the Evaluation Mode

When the designated evaluation period has expired or is about to expire, you can request an extension to your evaluation period, or register the unit and use it in the registered mode.

1. In the Activation section of the sever information screen, you will find the **Hostname** of the Server, **IP** address, and **MAC Address** (hardware address of the LAN1 network interface).

2. In the message "If you do not have an Activation Code, click <u>here</u>.", click the link '**<u>here</u>**' to open the Product Activation page at the Trustwave Web site.

3. In this Web page:

    a. Enter your following information: Contact Details, Company Information, and Security Reporter Information.

    b. Choose the Activation Type: "Evaluation Extension" or "Full Activation."

4. Click **Send Information**. Trustwave will review the request and issue you an activation code (subject to contractual considerations).

5. When you receive the code, return to the Activation Page and enter the activation code in the **Activation Code** field.

6. Click **Activate** to display the confirmation message in the Activation Page pop-up box:

    *   If you have extended the evaluation period for the unit, the following message displays: "It is now in evaluation mode ('X' days)!" where 'X' represents the number of days in the new evaluation period.

If you have registered the unit, the following message displays: "Your box has been activated!"

7 LED Indicators and Buttons

7.1 Front Control Panels on 500 and 700 Series Units

Control panel buttons, icons, and LED indicators display on the right side of the 500 and 700 series model front panel. The buttons let you perform a function on the unit, while an LED indicator corresponding to an icon alerts you to the status of that feature on the unit.
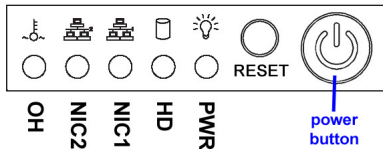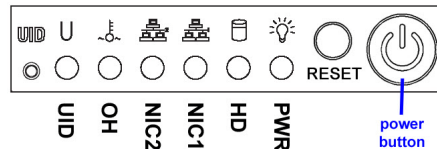
500 series chassis front panel   *700 series chassis front panel*

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

ITEM	EXPLANATION
	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.
	UID (button) and **U** icon – On a 700 series unit, when the UID button is pressed, a steady blue LED displays on both the front and rear of the 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. On a 500 series unit, the LED is a steady green with link connectivity, and unlit if there with no link connectivity.
	NIC1 (icon) – A flashing green LED indicates network activity on LAN1. On a 500 series unit, the LED is a steady green with link connectivity, and unlit if there with no link connectivity.
	HDD (icon) – In addition to displaying in the control panel, this icon also displays on the front panel on each hard drive carrier. Hard drive activity is indicated by a flashing amber LED in the control panel, and a flashing green LED on a drive carrier. An unlit LED on a drive carrier may indicate a hard drive failure.
RESET	**RESET** (button) – The RESET button is used for rebooting the server.

ITEM	EXPLANATION
💡	**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.

7.2 Rear Panel on the 700 Series Unit

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.

UID (LED indicator) – On the rear of the 700 series chassis, to the right of the LAN ports, 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.

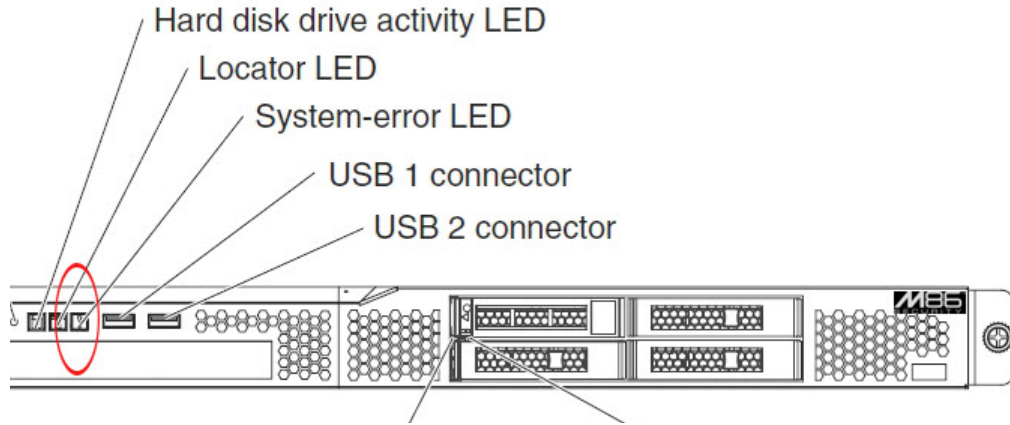

7.3 Front Control Panel on a 300 Series Unit

In addition to executing functions listed in the LCD panel menu, the keypad on the front of the server is also used for performing basic server functions.

- **Boot up** - Depress and hold the check mark key for 3 seconds.

- **Reboot** - Depress and hold the check mark key for 10 seconds.

- **Shut down** - Depress and hold the 'X' key for 10 seconds.

## 7.4 Chassis Panel on a 505 Model

For diagrams and descriptions of the 505 model's front and rear panel components and their usage, please see "Server controls, LEDs, and power" in the IBM System x3250 M3 Types 4251, 4252, and 4261 Installation and User's Guide. As of July 2011, this manual can be downloaded from http://www-947.ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5082564&brandind=5000008

Note: A lit System-error amber LED (located on the left side of the front panel) indicates one or more system error issues. To troubleshoot system errors, use IBM's Integrated Management Module (IMM). Please consult IBM's Integrated Management Module User's Guide for information on configuring and using IMM. As of July 2011, this document was made available at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5079770&brandind=5000008.

7.5 Chassis Panels on 705 and 735 Models

For diagrams and descriptions of the 705 and 735 model's front and rear panel components and their usage, please see "Server controls, LEDs, and power" in the IBM System x3620 M3 Type 7376 Installation and User's Guide. As of July 2011, this document can be downloaded from http://www-947.ibm.com/support/entry/portal/docdisplay?brand=5000008&lndocid=MIGR-5084233
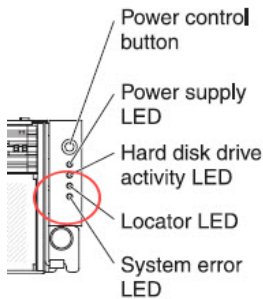
Note: A lit System-error amber LED (located on the left side of the front panel) indicates one or more system error issues. To troubleshoot system errors, use IBM's Integrated Management Module (IMM). Please consult IBM's Integrated Management Module User's Guide for information on configuring and using IMM. As of July 2011, this document was made available at http://www-947.ibm.com/support/entry/portal/docdisplay?lndocid=MIGR-5079770&brandind=5000008.

8 Regulatory Specifications and Disclaimers

The information in this section pertains to SR models 300, 500, 700, and 730.

8.1 Declaration of the Manufacturer or Importer

8.1.1 Safety Compliance

USA:	UL 60950-1 1st ed. 2007
Europe:	Low Voltage Directive (LVD) 2006/95/EC to CB Scheme IEC 60950-1: 2001
Canada	CSA C22.2 No. 60950-1 1st ed. 2006
International:	IEC 60950-1 1st ed. 2001

8.1.2 Electromagnetic Compatibility (EMC)

USA:	FCC CFR47 Part 15 Subpart B
Canada:	IC ICES-003 Class A Limit
Europe:	EMC Directive, 2004/108/EC

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

Note: 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.

8.1.4 FCC Declaration of Conformity

Models: 300-002-007, 500-002-007, 700-001-007, 700-013-007

8.1.5 Electromagnetic Compatibility Class A Notice

8.1.5.1 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.

8.1.6 EC Declaration of Conformity

8.1.6.1 European Community Directives Requirement (CE)

Manufacturer's Name:	M86 Security
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	• EN60950-1:2001+A11:2004
	EMC	• EN55022:2006+A1:2007
		• EN55024:1998+A2:2003
		• IEC CISPR 22:2008
		• IEC CISPR 24:1997+A1:2001+ A2:2002
		• EN61000-3-2:2006
		• EN61000-3-3:2008
		• CFR47 Part 15 Subpart B: 2009

Product Name(s):	Security Appliance
Product Model Number(s):	300-002-007, 500-002-007, 700-001-007,700-013-007

Year in which conformity is declared:	2010

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: April 5, 2010	Full Name:	Gregory P. Smith
	Position:	Director, Engineering Operations

Appendices

Appendix A: HyperTerminal setup procedures

If you want to use a serial port connection for the initial configuration of the SR, you can use the following procedures to launch HyperTerminal and connect to the SR.

Note: HyperTerminal is available with Windows XP, but it is not included in later Windows OS versions. If you do not have an equivalent type of terminal emulator program installed on your workstation, Hilgraeve, Inc., the maker of HyperTerminal, offers HyperTerminal Private Edition for Windows Vista and Windows 7. A free trial of HyperTerminal is available on Hilgraeve's Web site at http://www.hilgraeve.com/hyperterminal.html (accessed October 2016).

1. Launch HyperTerminal by going to Start | Programs | Accessories | Communications | HyperTerminal:
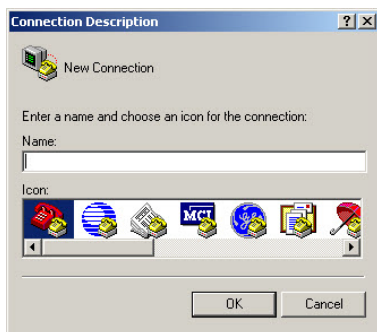
2. In the Connection Description dialog box, enter any session **Name**, and then click **OK** to open the Connect To dialog box:

3. 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:
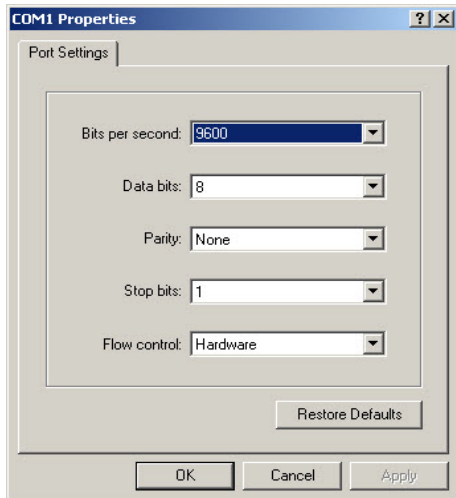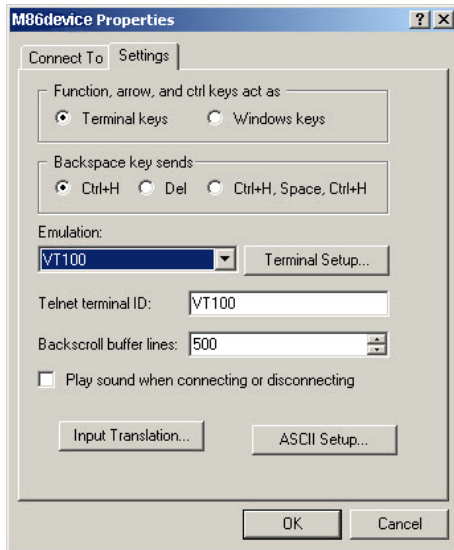
4. Specify the following session settings:

    *   Bits per second: 9600

    *   Data bits: 8

    *   Parity: None

    *   Stop bits: 1

    *   Flow control: Hardware

    *   VT100 emulation settings

5. Click **OK** to connect to the HyperTerminal session:
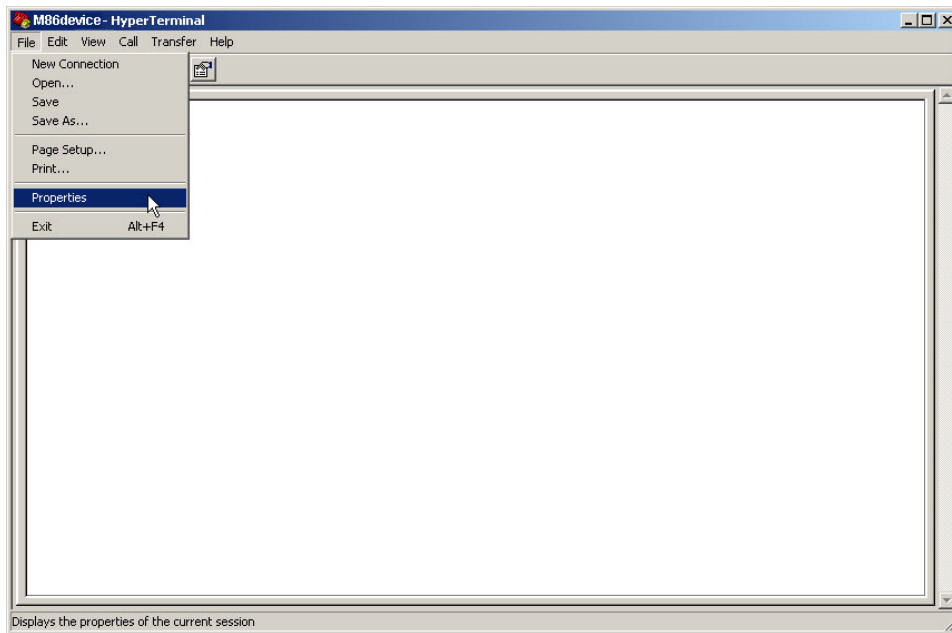
6. In the HyperTerminal session window, go to File | Properties to open the Properties dialog box, displaying the Connect To and Settings tabs:

7. Click the Settings tab, and at the **Emulation** menu select "VT100".

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

Appendix B: Fibre Channel Connected Storage Device

This appendix pertains to the installation of the optional NAS (Fibre Channel Connected Storage Device or "SAN") unit.

B.1 Preliminary Setup Procedures

B.1.1 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 Trustwave.

The carton should contain the following items:

• 1 Nexsan Technologies unit

• 1 mounting kit

• 1 accessory kit containing:

    • 2 AC power cords

    • 1 fibre channel cable

B.1.2 Other Required Installation Item

In addition to the contents of the Nexsan carton, you will need the following item to install the storage device:

- 1 CAT-5E crossover cable

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

> **Note:** Refer to the SR safety precautions. In addition to being applicable to the SR, this information also applies to this storage device unit.

B.1.3 Rack Mount the Server

B.1.3.1 Rack Mount Components

The following items are needed to install rails for rack mounting:

- 1 slide kit and mounting hardware

- 1 pair Accuride slide rails

B.1.4 Rack Setup Precautions

> **Caution:** Before rack mounting the unit, the physical environment should be set up to safely accommodate the unit. Be sure that:
> - The weight of all units in the rack is evenly distributed. Hazardous conditions may be created by an uneven weight distribution.
> - The rack will not tip over when the unit 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.
> - The rack is grounded and will maintain a reliable ground at all times.
> - A power cord will be long enough to fit into the unit when properly mounted in the rack and will be able to supply power to the unit.
> - The connection of the unit to the power supply will not overload any circuits.
> - The unit is only connected to a properly rated supply circuit. Reliable earthing (grounding) of rack-mounted equipment should be maintained.
> - The air flow through the unit's fan or vents is not restricted.
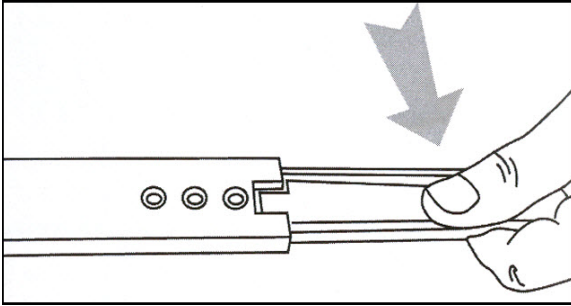> - The maximum operating ambient temperature does not exceed 104°F (40°C).

> **Note:** Always make sure the rack is stable before extending a component from the rack.
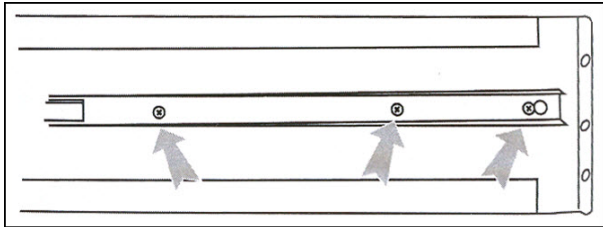
> ⚠ **Caution:** Extend only one component at a time. Extending two or more components simultaneously may cause the rack to become unstable.

1. Remove inner slide rail as shown. Press down on latch to release.

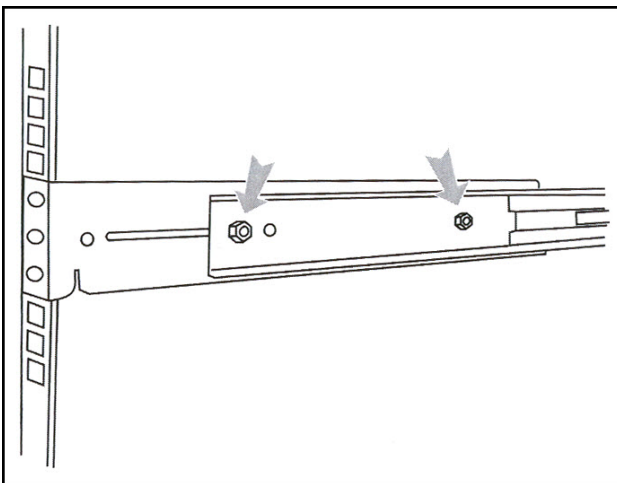2. Attach inner slide rail to chassis using 3 screws as shown.

> 🔍 **Note:** When attaching the extended brackets, attach them loosely at first. Adjust the length to fit the cabinet, and then tighten.

3. Attach left and right rear (long) extended brackets to the outer rail using 2 screws, 2 washers, and 2 nuts for each bracket.

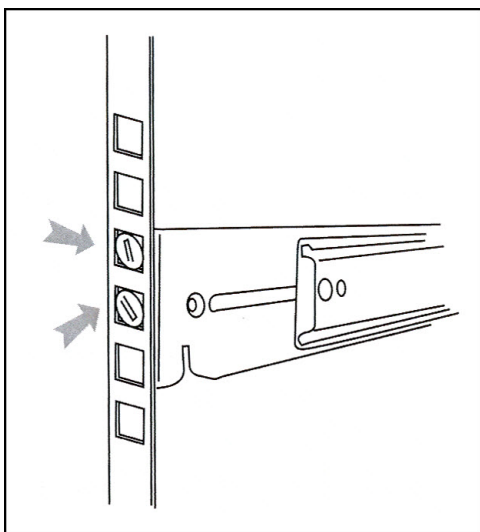> 🔍 **Note:** Make sure the flange is on the bottom edge

4. Attach left and right front (short) extended brackets to the outer rail using 2 screws, 2 washers, and 2 nuts for each bracket.

> **Note:** Make sure the flange is on the bottom edge.
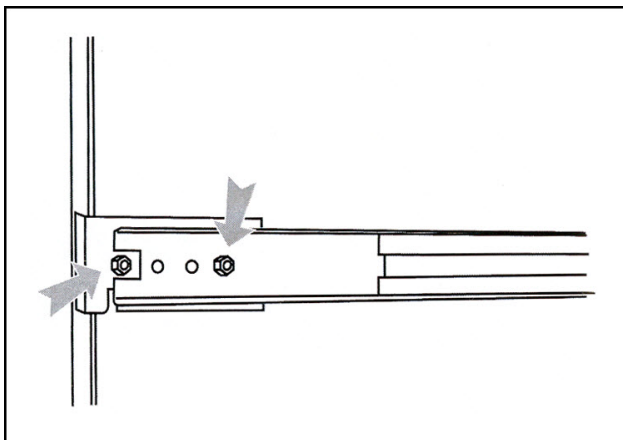
5. Attach outer rail to chassis using 4 screws and cage nuts per rail, 2 at each end.

6. Slide chassis into outer rail carefully, making sure the chassis is level with the slide.

> **Note:** It's easier if the drives and power supplies are removed first before sliding the chassis into the outer rail.

B.2 Install the Unit

B.2.1 Link the SR Unit with the Fibre Channel Connected Device

This step is a continuation from the Storage Device Setup (for Attached Storage Units) portion of Step 1A or 1B in the SR section. The procedures outlined in this step require the use of a CAT-5E crossover cable and the fibre channel cable.

B.2.1.1 Connect the SR to the Storage Device

To connect a 730 model:

1. Plug one end of the CAT-5E crossover cable into the SR unit's LAN 3 port—the port to the left, located in the upper right section on the rear of the SR unit (see Figure 1, LAN3 port on a 730 model).

2. Plug the fibre channel cable into the port on the lower right section of the SR unit (see Figure 1, fibre channel port on a 730 model).
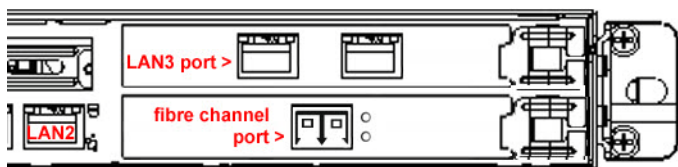
Proceed to Section B.2.1.2: Connect the Storage Device.

To connect a 735 model:

1. Plug one end of the CAT-5E crossover cable into the SR unit's LAN 2 port (see Figure 2, LAN2 port on a 735 model).

2. Plug the fibre channel cable into the port in the middle slot on the right section of the SR unit (see Figure 2, fibre channel port on a 735 model).
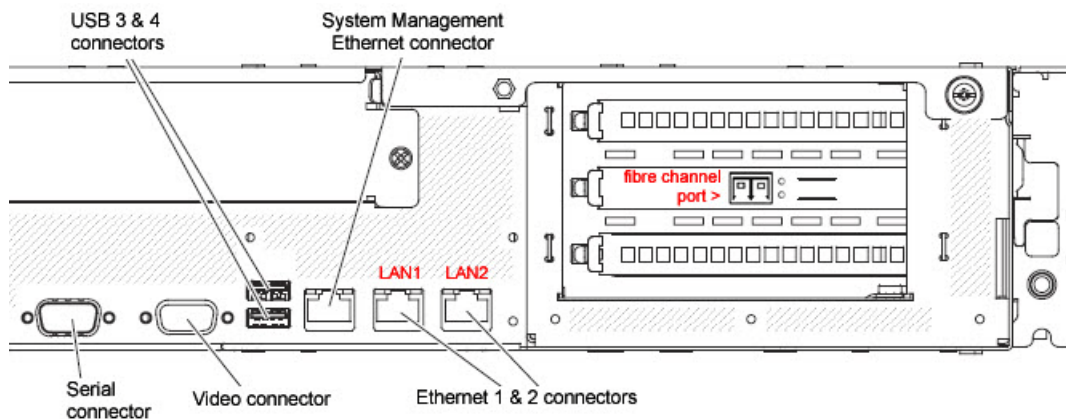
Proceed to Section B.2.1.2: Connect the Storage Device.

B.2.1.2 Connect the Storage Device

1. Plug the other end of the fibre channel cable into the storage device's HOST "1" channel (see Item A in the picture below).
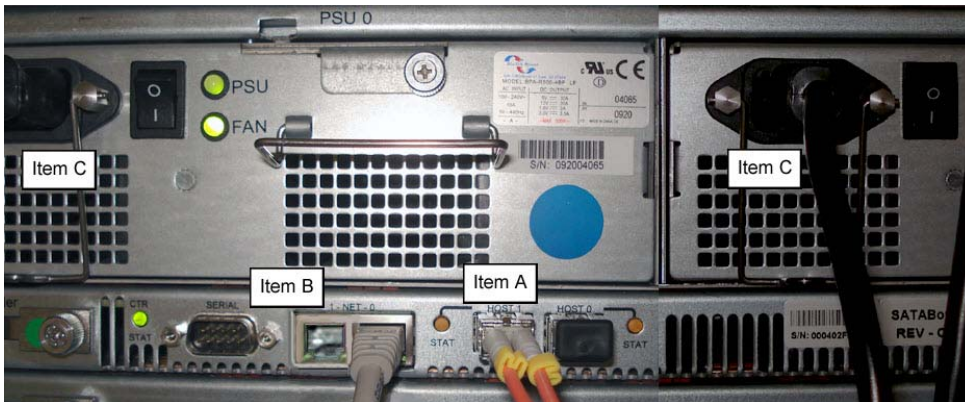
2. Plug the other end of the CAT-5E crossover cable into the storage device's NET "0" (zero) port (see Item B in the picture above).

3. Plug the storage device's AC power cords into the rear sections of the unit (see Item C in the picture above).
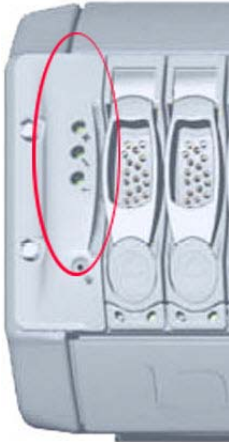

Figure 1:

4. Plug the loose ends of the AC power cords into a power source with an appropriate rating. It is strongly suggested you use an uninterruptible power supply.

⚠️ **Caution:** Be sure all drives are installed in the storage device unit before powering on the unit. Be sure the SR unit is not powered on.

5. Turn on the power switches at the back of the storage device, which are positioned to the right of the power cord connectors. The boot-up process may take up to 5 minutes. When the unit is booted up, the three vertical LED lights at the left of the front panel will be lit up.

Once all LED lights are lit, the SR can be powered on.

Continue to configure SR network parameters following Section 4.1 of this *Guide.*

B.2.2 Shut Down, Restart Procedures

Follow the procedures in this section if you need to shut down or restart the storage device.

B.2.2.1 Shut Down the Storage Device Unit

If you need to shut down the storage device, always follow these steps:

1. Power off the SR unit first.

> **Note:** For shut down procedures, refer to the Shutdown instructions in Section 4.2.7.5 of this *Guide.*

2. Power off the storage device next by turning off both switches in the back of the unit.

B.2.2.2 Restart the Storage Device Unit

The storage device must be restarted after a power failure. In this instance, the storage device may already be turned on, but needs to be booted up again.

> **Caution:** You must **always** power on the storage device **before** powering on the SR unit. Since the storage device is an information database, if you experience a power interruption or if you power off the storage device without going through the standard shut down procedures, you may lose data and/or damage the file system.
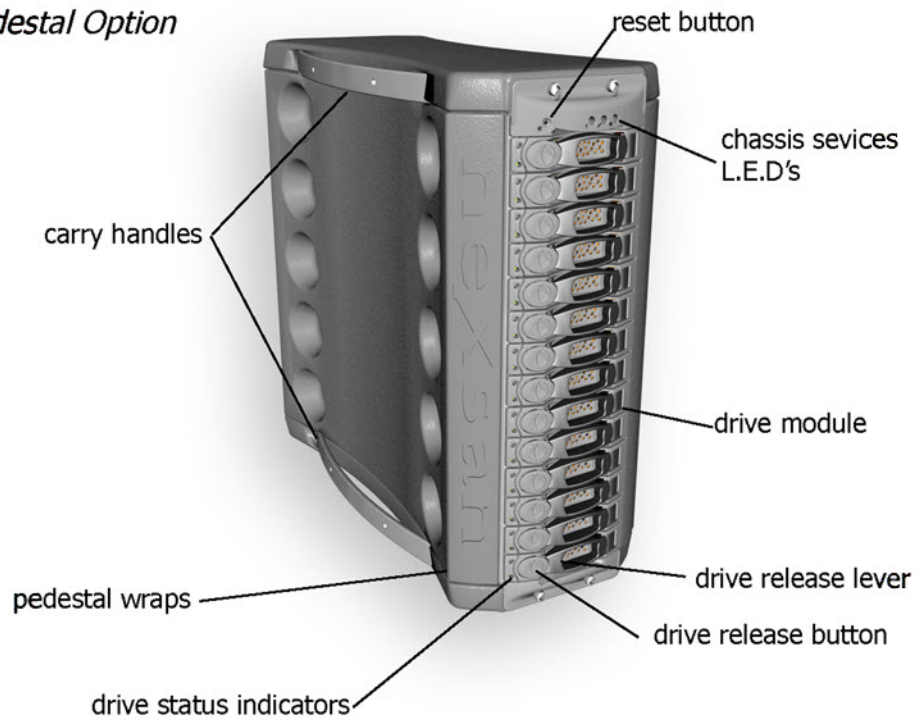
To restart the storage device, press the power button on the front panel. The boot-up process may take up to 5 minutes.

B.3 Physical Components
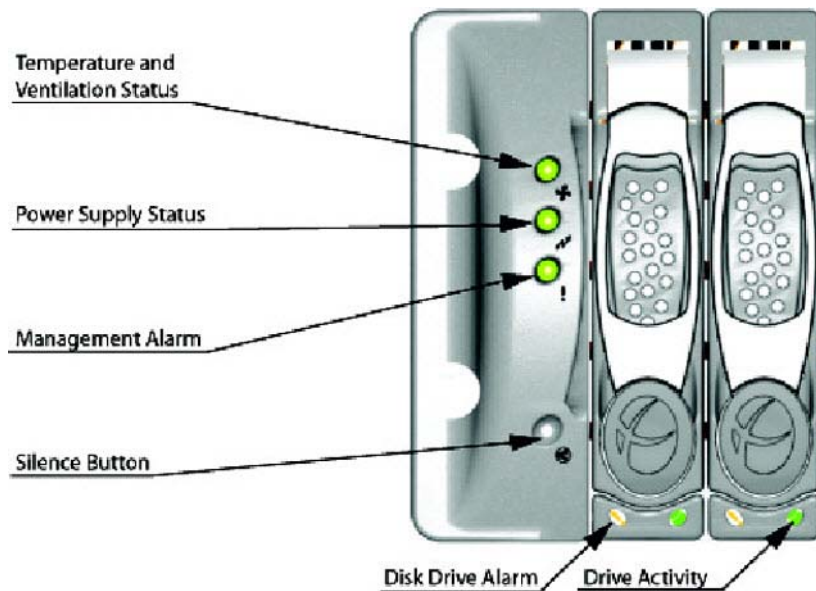
Rack Mount Option
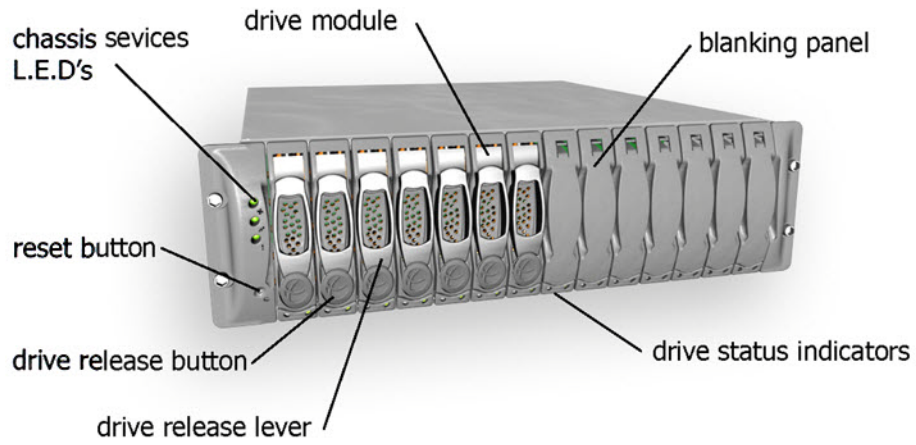
Pedestal Option

B.3.1 LED Display

B.3.1.1 Temperature and Ventilation Status

When the LED is green, the blowers are operating at an acceptable RPM, and the internal temperature sensors are within acceptable limits.

The LED alternates green and red to indicate a predicted failure of one blower or an alarmingly rapid increase in temperature.

If the LED is red, a blower has failed or the unit is too hot, and an audible alarm will sound.

B.3.1.2 Power Supply Status

The LED is green if both power supplies are functional.

The LED is red if either power supply has failed, and an audible alarm will sound. In this scenario, an authorized service personnel should examine the LEDs on each power supply module to determine which has failed.

> ⚠️ **Caution:** Inadvertently removing the functional, surviving power supply will result in system failure and possible data loss.

B.3.1.3 Management Alarm

A green LED indicates nominal status.

A red LED indicates RAID controller or non-PSU/Blower enclosure errors.

B.3.1.4 Silence Button

Insert a thin object to temporarily silence the audible alarm. This button also is used for confirming creation in the RAID configuration mode.

B.3.1.5 Disc Drive Alarm

The LED is illuminated yellow if a drive is suspected to be bad.

B.3.1.6 Disk Drive Activity

The LED is illuminated green when an installed drive is in a "ready" state. During activity, the LED will flicker.

Appendix C: Optional Ethernet Tap Installation

This appendix pertains to the optional installation of the Ethernet Tap unit for bandwidth monitoring.

Note: In order to monitor bandwidth on the SR, both inbound and outbound traffic must be sent to the SR through use of a port span, tap, or other similar device.

C.1 Preliminary Setup Procedures

The instructions in this section pertain to the use of a NetOptics 10/100BaseT Tap that can be purchased from Trustwave.

C.1.1 Unpack the Ethernet Tap Unit from the Box

Open the NetOptics Ethernet Tap box and verify that all accessories are included. Save all packing materials in the event that the unit needs to be returned to Trustwave.

The NetOptics box should contain the following items:

- 1 NetOptics 10/100BaseT Tap

- 2 power supply units

- 2 AC power cords

- 2 crossover cables

- 2 straight through cables

- 1 installation guide

C.1.2 Other Required Installation Items

In addition to the contents of the NetOptics box, you will need the following item to install the Ethernet Tap unit:

- 1 standard CAT-5E cable

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

C.2 Install the Ethernet Tap Unit

This step is a continuation from Step 2: Physically Connect the Unit to the Network. The procedures outlined in this step require the use of a CAT-5E cable.

1. Provide power to the Ethernet Tap by connecting both power cords from the unit to the power source.

2. If a designated source Web Filter (to be used with the Security Reporter) is already installed on the network, disconnect the cable that connects this Web Filter to the switch.
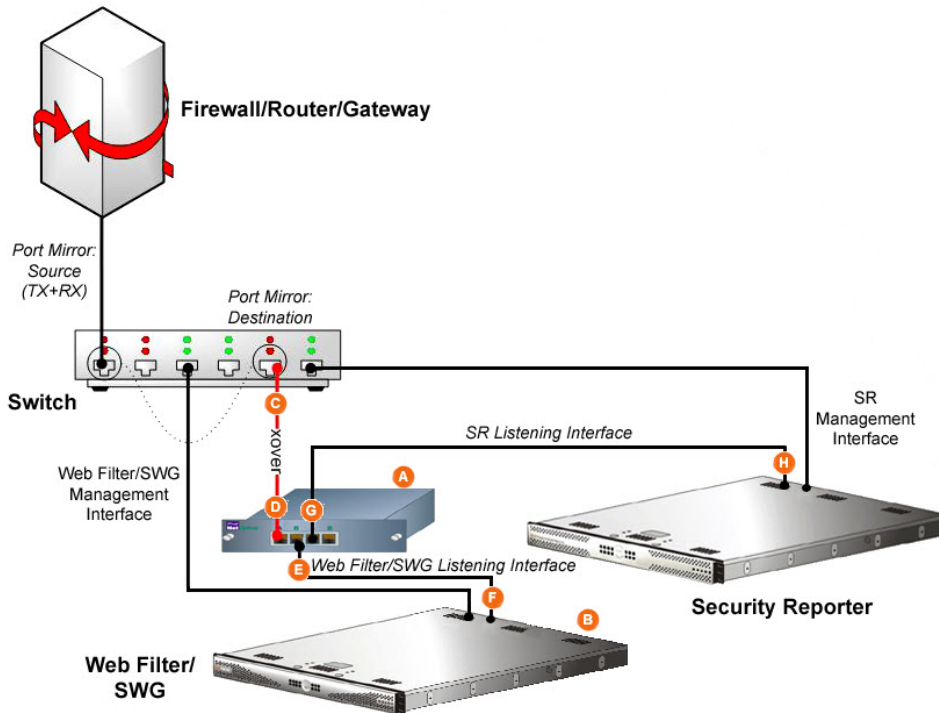

   If the designated Web Filter has not yet been installed, disregard this sub-step and proceed to sub-step C.

3. Using a crossover cable, connect one end to the Switch's port configured to be the destination port of the Port Mirror.

   If adding a Security Reporter to an existing installation, this port would be the port that was originally occupied by the listening interface of the Web Filter.

4. Connect the other end of the crossover cable to the Ethernet Tap's Network A port.
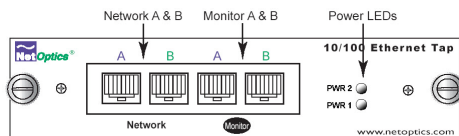
5. Using a straight through cable, connect one end to the Ethernet Tap's Network B port.

6. Connect the other end of the straight through cable to the listening interface of the Web Filter.

7. Using the second straight through cable, connect one end to the Ethernet Tap's Monitor A port.

8. Connect the other end of the second straight through cable to the Security Reporter's listening interface.

9. Proceed to Step 3: Access the SR and its Applications Online.

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