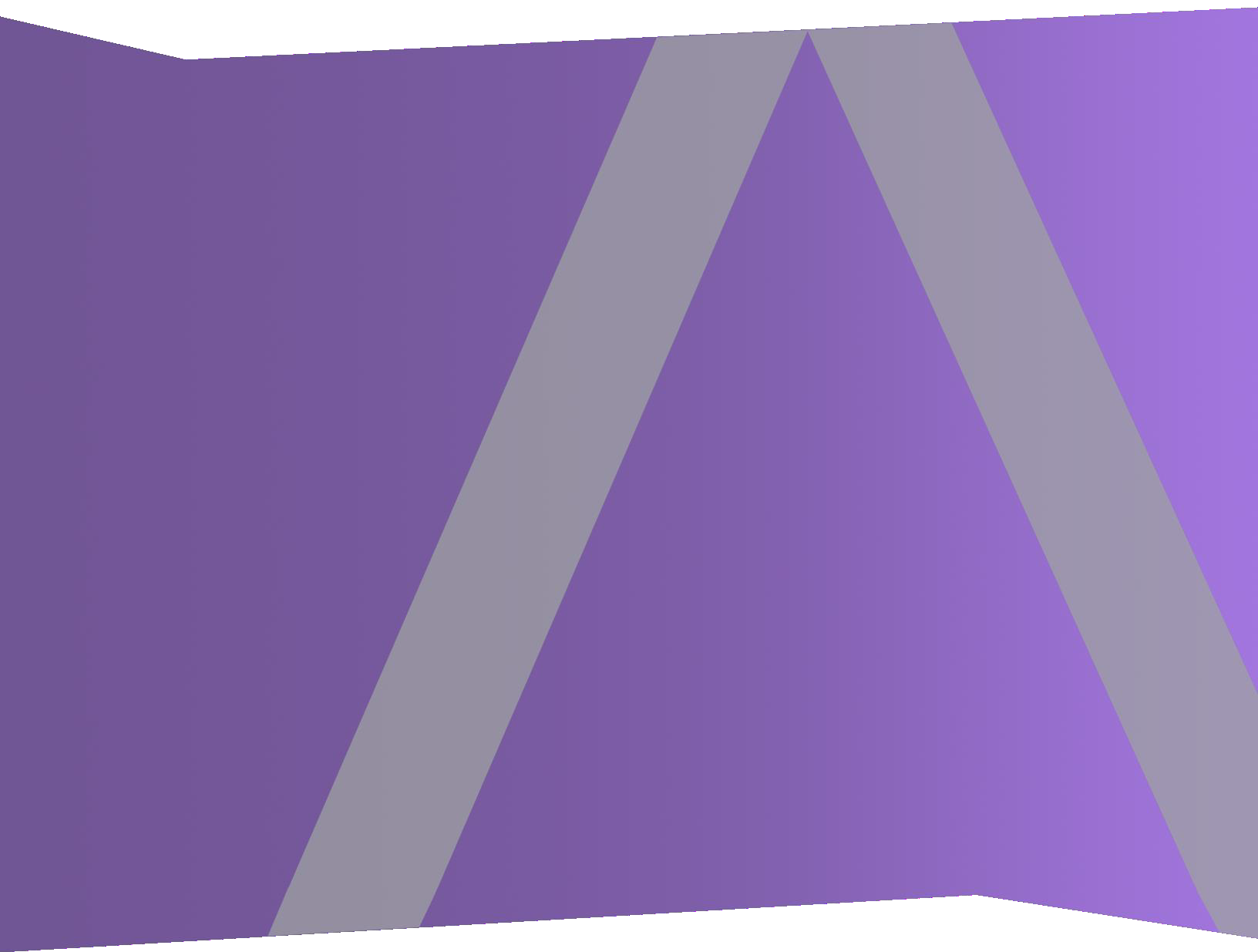




# Series 4 Appliances Setup Guide



Copyright © 1994-2017 Dell Inc. or its subsidiaries. All Rights Reserved.

## **Contact Information**

RSA Link at <https://community.rsa.com> contains a knowledgebase that answers common questions and provides solutions to known problems, product documentation, community discussions, and case management.

## **Trademarks**

For a list of RSA trademarks, go to [www.emc.com/legal/emc-corporation-trademarks.htm#rsa](http://www.emc.com/legal/emc-corporation-trademarks.htm#rsa).

## **License Agreement**

This software and the associated documentation are proprietary and confidential to EMC, are furnished under license, and may be used and copied only in accordance with the terms of such license and with the inclusion of the copyright notice below. This software and the documentation, and any copies thereof, may not be provided or otherwise made available to any other person.

No title to or ownership of the software or documentation or any intellectual property rights thereto is hereby transferred. Any unauthorized use or reproduction of this software and the documentation may be subject to civil and/or criminal liability.

This software is subject to change without notice and should not be construed as a commitment by EMC.

## **Third-Party Licenses**

This product may include software developed by parties other than RSA. The text of the license agreements applicable to third-party software in this product may be viewed on the product documentation page on RSA Link. By using this product, a user of this product agrees to be fully bound by terms of the license agreements.

## **Note on Encryption Technologies**

This product may contain encryption technology. Many countries prohibit or restrict the use, import, or export of encryption technologies, and current use, import, and export regulations should be followed when using, importing or exporting this product.

## **Distribution**

EMC believes the information in this publication is accurate as of its publication date. The information is subject to change without notice.

December 2017

# Contents

---

<b>About this Document</b> .....	<b>4</b>
<b>S4 R620 Appliances Hardware Description</b> .....	<b>5</b>
Package Contents .....	7
Customer Supplied Materials .....	7
Front View of the Series 4 Appliances .....	8
Rear View of the Series 4 Appliances .....	9
Series 4 Specifications (Except ESA, MA, Hybrid, Warehouse, and AIO) .....	10
S4 ESA, MA, Hybrid, Warehouse, and All-in-One Specifications .....	10
<b>Install a Deep-Rack Adapter for an R620 Appliance</b> .....	<b>11</b>
<b>Connect the Appliance to the Network</b> .....	<b>14</b>
Prerequisites .....	14
Connect to the Appliance Console .....	15
<b>Additional 10.6 and Earlier Installation Tasks</b> .....	<b>16</b>
Configure Network Parameters .....	16
Specify the Network Clock Source .....	17
Best Practices .....	17
Set Time on the NetWitness Server using the NwConsole Utility .....	18
Finish Appliance Setup in NetWitness Suite .....	19
Log On to NetWitness Suite .....	19
Open the Online Help .....	19
<b>Additional 11.0 and Later Installation Tasks</b> .....	<b>20</b>

## About this Document

---

This document is a step-by-step guide for installing the RSA Series 4 (S4) NetWitness Suite appliances (hosts) and connecting them to your network.

The hardware setup instructions in this document are for hardware only; they do not apply to a specific release of NetWitness Suite software. After completing the hardware setup, please continue setup and configuration of the NetWitness Suite appliances as described in the NetWitness Suite online documentation at RSA Link (<https://community.rsa.com/docs/DOC-40370>).

This document is not a replacement for the original manufacturer's documentation; it contains information specifically for the NetWitness Suite appliances.

**Note:** When viewing a printed guide, be aware that a newer version of the guide may be available online at RSA Link in RSA NetWitness Suite under Hardware Setup Guides: <https://community.rsa.com/community/products/netwitness/hardware-setup-guides>

## S4 R620 Appliances Hardware Description

---

The RSA Series 4 (S4) NetWitness Suite appliances (hosts) are based on the Dell PowerEdge R620 chassis. The Series 4 appliances are shipped with NetWitness Suite software installed.

This topic describes the Series 4 appliances that are based on the Dell PowerEdge R620 chassis:

- Decoder and Log Decoder
- Concentrator
- Broker
- Archiver
- NetWitness Server
- Malware Analysis (MA)
- Event Stream Analysis (ESA)
- Hybrid
- All-in-One (AIO)
- RSA Analytics Warehouse (MapR-Based)

Except for the ESA, MA, Hybrid, Warehouse, and All-in-One Appliances, all Dell PowerEdge R620-based appliances have the same components and physical specifications. The ESA, MA, Hybrid, Warehouse, and All-in-One Appliances have additional hard drives. The S4 ESA, MA, Hybrid, Warehouse, and All-in-One Specifications provide details.

The initial setup of a Series 4 appliance in your network involves these steps:

1. Review site requirements and safety information in the *Deployment Guide* for your NetWitness Suite software version.
2. Mount or place the appliance hardware securely in accordance with your site requirements.
3. Connect the appliance (host) to your network: [Connect the Appliance to the Network](#)
4. Finish the appliance (host) setup in one of the following sections, depending on your NetWitness Suite version:
  - [Additional 10.6 and Earlier Installation Tasks](#)
  - [Additional 11.0 and Later Installation Tasks](#)

**Caution:** To avoid damaging NetWitness servers and appliances, remove them from the rack and dismantle the rack before transporting them to another location. Follow the recommendations of the server manufacturer and rack manufacturer for packaging, transport, and installation.

RSA does not support re-shipping of racked servers. The customer assumes all risk and liability for transporting NetWitness servers and appliances mounted in a rack.

## Package Contents

Verify the contents of the packing box to ensure that you have received all items necessary to install and configure the appliance.

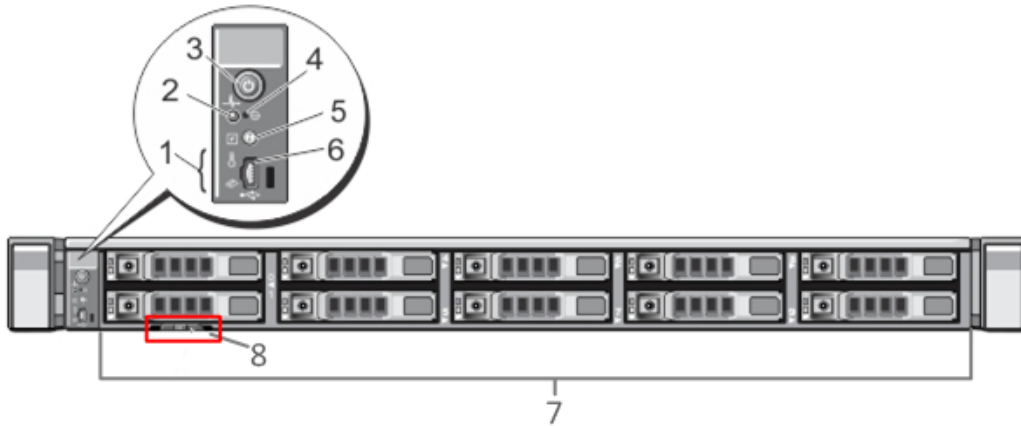
- Series 4 NetWitness Suite appliance (Decoder, Concentrator, Broker, Archiver, NetWitness Server, Malware Analysis, ESA, RSA Analytics Warehouse (MapR-Based), Hybrid, or All-in-One)
- Rail Slide Assemblies (2)
- Power Cord (2)

## Customer Supplied Materials

To complete the setup procedure, you will need:

- One Ethernet network cable
- Cables to connect a monitor or KVM adapter to the VGA port and a keyboard or KVM adapter to the USB port
- Standard tools

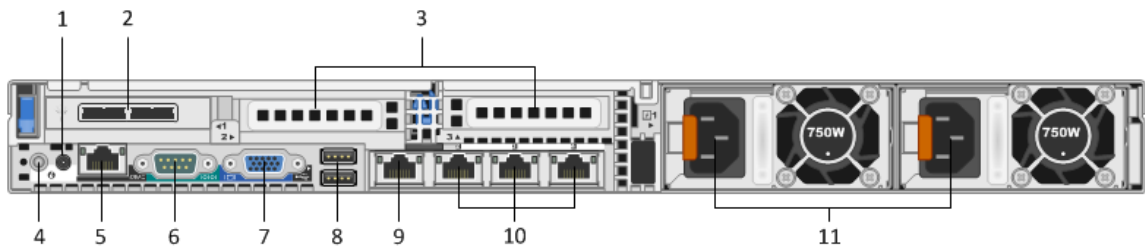
## Front View of the Series 4 Appliances



Key	Description
1	Diagnostic LEDs
2	System Identification Light
3	Power On/Off
4	Recessed non-maskable interrupt (NMI) button
5	System Identification Button
6	Micro USB port
7	<b>Series 4 Appliances <u>except</u> ESA, MA, Hybrid, Warehouse, and All-in-One:</b> Ten 2.5-inch hard drive bays. The Concentrator has two 146 GB drives and two 1 TB drives installed. There is also an internal secure digital (SD) card module where two 32 GB cards are installed, and this is where the operating system is installed by default.  <b>ESA, MA, Hybrid, Warehouse, and All-in-One Appliances:</b> Ten 2.5-inch hard drive bays. The Event Stream Analysis, Hybrid, and All-in-One appliances have ten 1 TB drives installed. There is also an internal secure digital (SD) card module where two 32 GB cards are installed, and this is where the operating system is installed by default.
8	Service Tag Details



## Rear View of the Series 4 Appliances



Key	Description
1	System Identification Light
2	Network Interface cards slot: SAS Controller installed with two DAC interface ports for connecting to the disk storage arrays.
3	Network Interface card expansion slots for optional cards. Possible options are: <ul style="list-style-type: none"> <li>• Fiber/Copper 10Gbps network capture card (RJ45)</li> <li>• Fiber-channel host bus adaptor (HBA) used to connect to a SAN</li> </ul>
4	System Identification Button
5	iDRAC Port
6	RS232 Serial Port (serial connection to laptop via DB9 or serial server)
7	VGA Video Port (monitor)
8	USB Ports (Keyboard)
9	Gigabit Ethernet Port 1: em1 = management port.
10	Gigabit Ethernet Ports (2-4): em 2, em3, and em4
11	Hot Swappable Power Supply 1 and 2

## Series 4 Specifications (Except ESA, MA, Hybrid, Warehouse, and AIO)

Item	Description
Form Factor	1U, full depth
Weight	39 lbs.
Dimensions	18.99" (w) x 30.39" (d) x 1.68" (h)
Power	Hot Swappable, redundant 750W, 100V to 240V autosensing
Processors	Dual hex core 2.66 GHZ
RAM	96 GB

## S4 ESA, MA, Hybrid, Warehouse, and All-in-One Specifications

Item	Description
Form Factor	1U, full depth
Weight	43.56 lbs.
Dimensions (approximate)	With bezel: 434.0mm (w) x 787.1mm (d) x 42.8mm (h) Without bezel: 434.0mm (w) x 752.1mm (d) x 42.8mm (h)
Power supplies	Hot Swappable, redundant 750W, 100V to 240V autosensing
Processors	Dual hex core 2.66 GHZ
RAM	96 GB

**Caution:** Opening the appliance chassis will void the warranty unless you are specifically instructed to do so by RSA Customer Care. The hard drives and power supplies are replaceable in the field by a qualified technician.

## Install a Deep-Rack Adapter for an R620 Appliance

**Note:** This procedure is only applicable if you are installing the S4 R620 appliance in the EMC Titan D Ultra Rack.

When installing the S4 R620 appliance into the EMC Titan D Ultra Rack, a 1U deep-rack adapter is required. Follow this procedure to install a new bracket on the server rails.

1. Locate the alternate rail bracket in the accessory box in the R620 appliance carton.



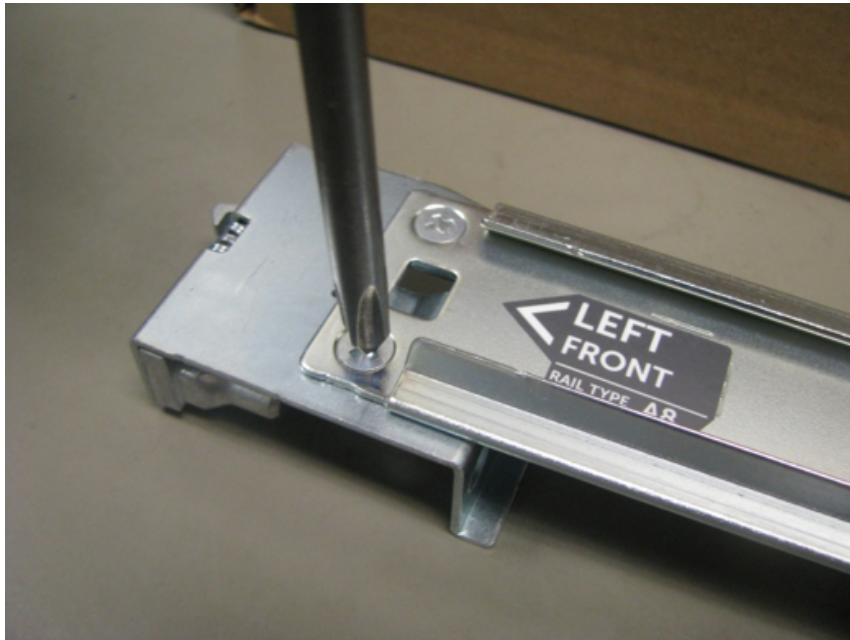
2. Remove the left side rail from the rail carton.



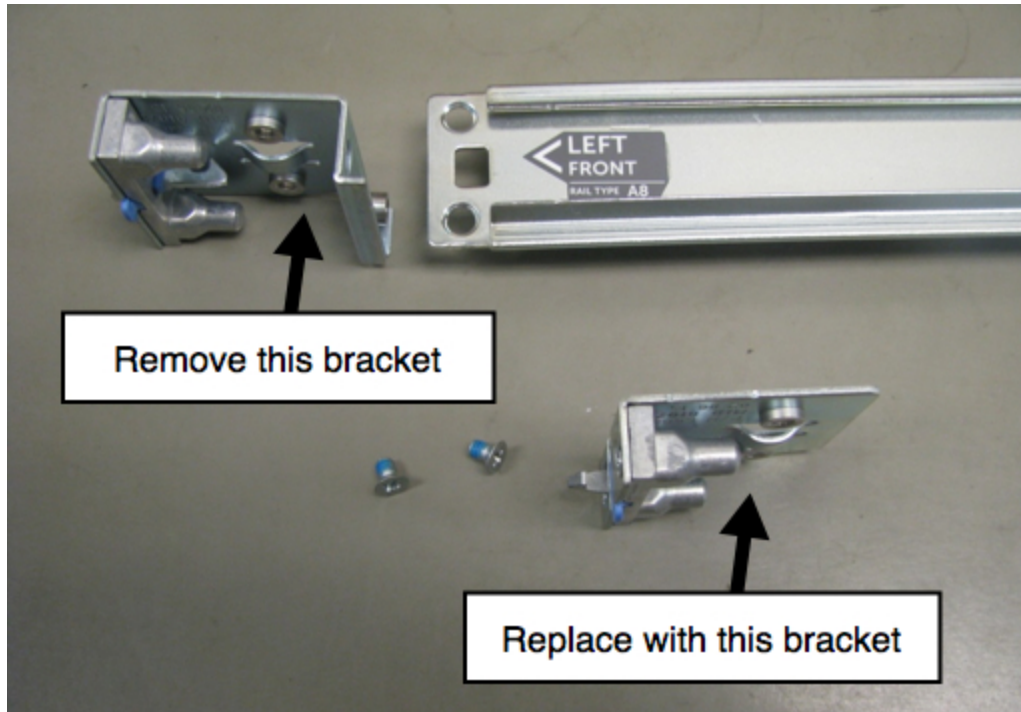
Each rail is marked.



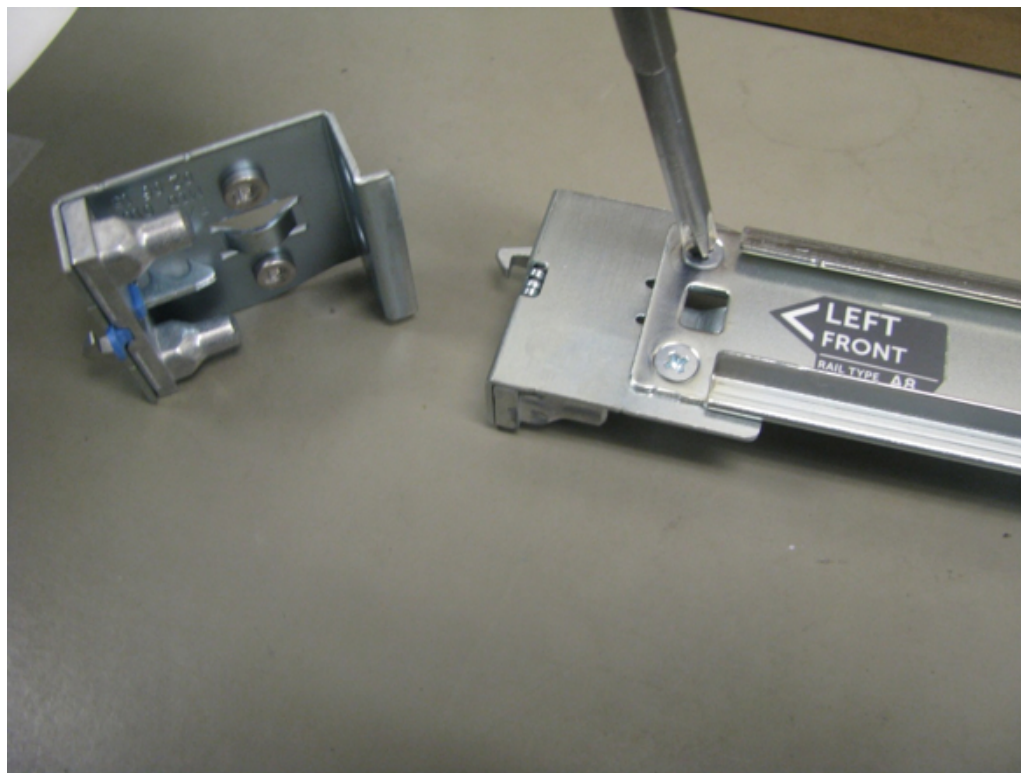
3. Use a Phillips screwdriver to remove the two mounting screws.



4. Remove the bracket and replace it with the new bracket.



5. Re-use the screws to fasten the new bracket in place.



The rail is now ready for the R620 appliance installation.

## Connect the Appliance to the Network

This topic provides instructions for connecting a NetWitness Suite S4 appliance (host) to your network.

### Prerequisites

For each NetWitness Suite Series 4 appliance, obtain and write the information in the following table.

Configuration	Default	Your Appliance
Login	root	
Password	netwitness	
System IP Address	192.168.1.1*	
System Netmask	255.255.255.0*	
Default Gateway		
Primary DNS Server IP Address		
Secondary DNS Server IP		
Local Domain Name (or None)		
Unqualified Hostname	NWAPPLIANCE<xxxxxx>, where <xxxxxx> is a generated random number.*	
IP Address of NetWitness Server		

\* This default applies to 10.6 and earlier.

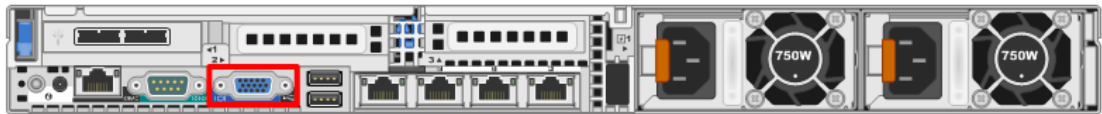
**Note:** Before you begin network configuration, mount or place the appliance securely in accordance with site requirements.

Configuring network parameters for an RSA NetWitness Suite S4 appliance consists of setting the default IP address, your DNS servers, the hostname, and the network clock source. To set these parameters, you connect to the appliance console using a keyboard and mouse.

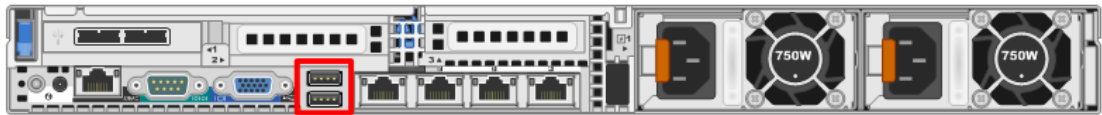
The preferred practice is to provision the NetWitness Server before configuring the other RSA NetWitness Suite appliances (hosts).

## Connect to the Appliance Console

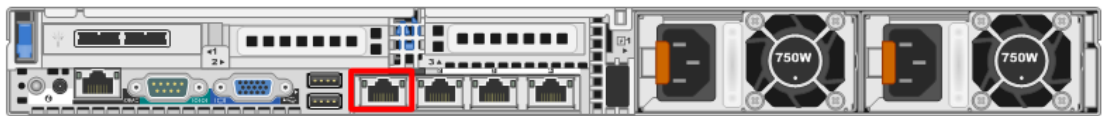
1. Connect a monitor or KVM adapter to the VGA Port on the back of the appliance.



2. Connect a keyboard or KVM adapter to one of the USB ports on the back of the appliance.



3. Connect an Ethernet cable from the network to the em1 port on the back of the appliance.



4. Connect a power cord to each of the two power supplies on the rear of the appliance. Connect the power cords to a power source. To provide a more robust setup, connect each power supply to a different circuit.

**Caution:** 5V standby power is active whenever the system is plugged in. To remove power from the system, you must unplug both AC power cords from the power source.

5. Power on the appliance and continue to one of the following sections, depending on your NetWitness Suite version:
  - [Additional 10.6 and Earlier Installation Tasks](#)
  - [Additional 11.0 and Later Installation Tasks](#)

## Additional 10.6 and Earlier Installation Tasks

---

If you are on NetWitness Suite 10.6 or earlier, follow the steps below to configure the network parameters on the appliance (host) and finish the setup in NetWitness Suite.

### Configure Network Parameters

1. At the login prompt, enter the default credentials to gain access to the operating system:

```
NWAPPLIANCE<xxxxxxx> login: root  
Password: netwitness
```

**Note:** If you do not receive the prompts for configuring network parameters, you can run `#netconfig.sh` from the command line to prompt you to enter the configuration options.

2. Enter the following information when prompted:
  - a. System IP Address (or **d** for DHCP)
  - b. System Netmask
  - c. Default Gateway
  - d. Primary DNS Server IP Address
  - e. Secondary DNS Server IP (or press **Enter** for none)
  - f. Local Domain Name (or press **Enter** for none)
  - g. Unqualified Hostname

Upon completion of the initial configuration, you should see a prompt that allows you to save the configuration as shown in the following figure.



```

you entered the following network parameters
IP Address: 192.168.1.20
Netmask: 255.255.255.0
Default Gateway: 192.168.1.1
Primary DNS: 192.168.1.2
Secondary DNS: 192.168.1.3
Local Domain: SampleDomain.com
Host Name: SA-Server
-----
enter y to confirm and save
enter q to quit without saving
enter d for don't save or ask me this
enter 1 to re-enter IP address
enter 2 to re-enter netmask
enter 3 to re-enter default gateway
enter 4 to re-enter primary DNS
enter 5 to re-enter secondary DNS
enter 6 to re-enter local domain
enter 7 to re-enter host name
enter a to re-enter all network data
-----
? 

```

3. Verify the entered information and enter `y` to save the configuration.  
This sets the network information and restarts the network services.
4. If your appliance is not a NetWitness Server, **wait approximately 15 seconds for a prompt** and then enter the NetWitness Server IP Address at the prompt.
5. Verify network connectivity by pinging your DNS Server.
6. Continue to the *Specify the Network Clock Source* section.

## Specify the Network Clock Source

Configuring time synchronization between services and appliances is required. It is highly recommended to use an NTP time source for synchronization. Not only is time crucial for underlying communications between services, but not having appliances in synch can result in mismatched times shown during analysis of data. If the NTP server is not configured or reachable at this time, the network clock source configuration will fail, but can be done from the RSA NetWitness Suite interface later.

### Best Practices

RSA recommends the following best practices:

For better data integrity, configure the NetWitness Server as the clock source for all other appliances. All appliances, including Event Stream Analysis (ESA), get their time from the NetWitness Server. Only the NetWitness Server is configured to an external NTP time source.

For the NetWitness Server appliance, use the NwConsole utility to connect to the NTP time source.

If the other appliances have NetWitness Suite 10.5.1 or later, the time is automatically set on all appliances attached to the NetWitness Server appliance. If the other appliances do not have NetWitness Suite 10.5.1 or later, set the time to point to the NetWitness Server manually.

## Set Time on the NetWitness Server using the NwConsole Utility

To set the network clock source on the NetWitness Suite using the NwConsole utility:

1. At the root prompt [root@NwAppliance~] # enter the following command:  
**NwConsole**  
NwConsole starts up and the startup message with a version and date displayed:  
RSA NetWitness Suite Console
2. In NwConsole, enter the following command:  
**login localhost:50006 <username> <password>**  
The system administrator account username for NetWitness Suite is **admin** and the default password is **netwitness**.  
You are logged onto the appliance and the following message is displayed:  
Successfully logged in as session <session #>
3. At the localhost prompt [localhost:50006] /> do one of the following:
  - a. If you want to use your network clock source, enter the following command:  
**appliance setNTP source=<NTP\_server\_hostname or IP\_address>**  
For example: **appliance setNTP source=0.pool.ntp.org**
  - b. If you want to use the appliance clock as a clock source, type: **appliance setNTP source=local**
4. When you see an output of **Success** from the command, type **exit** to log out and exit the NwConsole program.

**Note:** If you specified an NTP clock source of local, the appliance clock serves as the clock source and the time is configured using Set Appliance Built-In Clock as described in NetWitness Suite online documentation.

## Finish Appliance Setup in NetWitness Suite

To finish configuration of a Series 4 appliance, you need to log on to NetWitness Suite and use the configuration options available in the NetWitness Suite Administration module. Each type of appliance has a slight variation in configuration steps. This section provides basic information and links to online help documents to guide you through the process.

### Log On to NetWitness Suite

RSA NetWitness Suite is a web-based application that you launch in a browser window. Compatible browsers include any browser that supports WebSockets, LocalStorage, and the HTML5 History API: Google Chrome, Apple Safari, Mozilla Firefox, and Internet Explorer 10 and above.

1. Type the following in your web browser:

```
https://<hostname or IP address>/login
```

Where <hostname or IP address> is the hostname or IP address of your NetWitness Server.

The NetWitness Suite login screen is displayed.

2. Type your username and password, and then click **Login**.

The system administrator account username for NetWitness Suite is **admin** and the default password is **netwitness**.

### Open the Online Help

Instructions for configuring individual appliances are provided based on the software version installed on the appliance.

For NetWitness Suite 10.5 or later, read these documents: *Hosts and Services Configuration Guides* and *Licensing Guide*. A good starting point to understand the general configuration process and begin configuration is the *Hosts and Services Getting Started Guide*.

## **Additional 11.0 and Later Installation Tasks**

---

If you are on NetWitness Suite 11.0 or later, go to the *Physical Host Installation Guide* and follow the steps for installing and configuring your appliance (host).