IBM Security QRadar Log Manager
Version 7.2

Installation Guide

Note: Before using this information and the product that it supports, read the information in "Notices and Trademarks"on page 41.

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ABOUT THIS GUIDE

The *IBM Security QRadar Log Manager Installation Guide* provides you with QRadar Log Manager 7.1.0 (MR1) installation procedures. QRadar Log Manager appliances are pre-installed with software and a Red Hat Enterprise Linux version 6.3 operating system. You can also install QRadar Log Manager software on your own hardware.

This guide does not cover installation and recovery of High Availability (HA) systems. If you want to install or recover an HA system, see the *IBM Security QRadar High Availability Guide*.

Intended audience

This guide is intended for network administrators responsible to installing and configuring QRadar Log Manager systems in your network.

Documentation conventions

The following conventions are used throughout this guide:

Note: Indicates that the information provided is supplemental to the associated feature or instruction.

CAUTION: *Indicates that the information is critical. A caution alerts you to potential loss of data or potential damage to an application, system, device, or network.*

WARNING: *Indicates that the information is critical. A warning alerts you to potential dangers, threats, or potential personal injury. Read any and all warnings carefully before proceeding.*

Technical documentation

For information on how to access more technical documentation, technical notes, and release notes, see the ***Accessing IBM Security QRadar Documentation Technical Note***. (http://www.ibm.com/support/docview.wss?rs=0&uid=swg21614644)

Contacting customer support

For information on contacting customer support, see the ***Support and Download Technical Note***. (http://www.ibm.com/support/docview.wss?rs=0&uid=swg21612861)

Statement of good security practices

IT system security involves protecting systems and information through prevention, detection and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, misappropriated or misused or can result in damage to or misuse of your systems, including for use in attacks on others. No IT system or product should be considered completely secure and no single product, service or security measure can be completely effective in preventing improper use or access. IBM systems, products and services are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products or services to be most effective. IBM DOES NOT WARRANT THAT ANY SYSTEMS, PRODUCTS OR SERVICES ARE IMMUNE FROM, OR WILL MAKE YOUR ENTERPRISE IMMUNE FROM, THE MALICIOUS OR ILLEGAL CONDUCT OF ANY PARTY.

1 PREPARATION FOR YOUR INSTALLATION

To ensure a successful IBM Security QRadar Log Manager deployment, adhere to the preparation requirements and recommendations included in this topic.

QRadar Log Manager deployment overview

QRadar Log Manager deployment architecture allows you to install components on a single server for small enterprises or distributed across multiple servers for maximum performance and scalability in large enterprise environments.

QRadar Log Manager also provides High Availability (HA) functionality, which requires you to install redundant appliances for each system that requires HA protection. If you want to install or recover an HA system, see the *IBM Security QRadar High Availability Guide*.

Activation keys and license keys

When you install QRadar Log Manager, you must type an activation key. After you install QRadar Log Manager, you must apply your license keys. To avoid typing the wrong key in the installation process, it is important to understand the difference between the keys:

- The **activation key** is a 24-digit, four-part, alphanumeric string that you receive from IBM. All installations of QRadar products use the same software; however, the activation key specifies which software modules to apply for each appliance type. For example, the QRadar Log Manager activation key tells the installer to install only QRadar Log Manager modules. You can obtain the activation key from the following locations:
    - If you purchased an appliance preloaded with QRadar Log Manager software, the activation key is included in your shipping box on the CD.
    - If you purchased a QRadar Log Manager software or virtual appliance download, a list of activation keys are included in the Getting Started document that is attached in a confirmation email.
- Your system includes a **default license key** that provides you with access to QRadar Log Manager for five weeks. After you install the software and before the default license key expires, you must access the Console user interface to add your purchased Console license and any licenses for managed hosts or additional products. The default license key provides the following limits:

- Active Log Source Limit: 750
- Events per second threshold: 5000
- User Limit: 10
- Network Object Limit: 300

- After you purchase a IBM Security QRadar product, you receive a email from IBM that contains your **permanent license keys**. These license keys extend the capabilities of your appliance type and defines your system operating parameters. You must apply your license keys before your default license expires.

Integrated Management Module

On the back panel of each appliance type, the serial connector and ethernet connectors can be managed using the Integrated Management Module (IMM). You can configure the IMM to share an ethernet port with the QRadar Log Manager management interface; however, we recommend configuring the IMM in dedicated mode to reduce the risk of losing the IMM connection when the appliance is restarted. To configure the IMM, you must access the System BIOS settings by pressing the F1 key when the IBM splash screen is displayed. For further instructions on how configure the IMM, see the *Integrated Management Module User's Guide* located on the CD that was shipped with your appliance.

QRadar Log Manager components

QRadar Log Manager deployments can include the following components:

- **Console** - Provides the QRadar Log Manager user interface, which provides real time event and flow views, reports, offenses, asset information, and administrative functionality. Using the Console, you can also manage hosts that include other components in a distributed QRadar Log Manager deployment.
- **Event Collector** - Gathers events from local and remote log sources. The Event Collector normalizes raw log source events. During this process, the Magistrate component examines the event from the log source and maps the event to a QRadar Identifier (QID). Then the Event Collector bundles identical events to conserve system usage and sends the information to the Event Processor.
- **Event Processor** - Processes events collected from one or more Event Collector. The Event Processor correlates the information from QRadar Log Manager and distributes the information to the appropriate area, depending on the type of event. The Event Processor also includes information gathered by QRadar Log Manager to indicate behavioral changes or policy violations for the event. When complete, the Event Processor sends the events to the Magistrate component.
- **Magistrate** - Provides the core processing components. You can add one Magistrate component for each deployment. The Magistrate provides views, reports, alerts, and analysis of network traffic and security events. The Magistrate processes events against the custom rules. If an event matches a rule, the magistrate generates the response configured in the custom rule. For

example, the custom rule may indicate that when an event matches the rule, an alert is created. If there is no match to a custom rule, the Magistrate uses default rules to process the event. An alert is processed using multiple inputs, individual events, and events combined with analyzed behavior and vulnerabilities. The magistrate prioritizes the alerts and assigns a magnitude value based on several factors, including number of events, severity, relevance, and credibility.

For more information on each QRadar Log Manager component, see the *IBM Security QRadar Log Manager Administration Guide*.

Additional hardware requirements

Before you install QRadar Log Manager systems, make sure you have access to the following hardware components:

- Monitor and keyboard, or a serial console
- Uninterrupted Power Supply (UPS) for all systems that store data, such as Consoles and Event Processors
- Null modem cable if you want to connect the system to a serial console

Note: QRadar Log Manager supports hardware-based Redundant Array of Independent Disks (RAID) implementations, but does not support software-based RAID installations.

Additional software requirements

Before you install QRadar Log Manager, make sure you have the following applications installed on any desktop system that you use to access the QRadar Log Manager user interface:

- Java^{TM} Runtime Environment (JRE)
- Adobe Flash 10.x

You can download Java 1.6 or 1.7 at the following website: *http://java.com/*. Make sure that you install JRE on your desktop system, not on the QRadar Log Manager system.

Supported browsers

You can access the Console from a standard web browser. When you access the system, a prompt asks for a user name and a password, which must be configured in advance by the QRadar Log Manager administrator.

Table 2-1 Supported web browsers

Web browser	Supported versions
Mozilla Firefox	• 10.0 ESR • 17.0 ESR Due to Mozilla's short release cycle, we cannot commit to testing on the latest versions of the Mozilla Firefox web browser. However, we are fully committed to investigating any issues that are reported.
Microsoft® Windows Internet Explorer, with Compatibility View Enabled	• 8.0 • 9.0
Google Chrome	• Latest version We are fully committed to investigating any issue that are reported.

Required network settings

Before you install QRadar Log Manager, you must identify the following information for each system that you want to install:

- Hostname
- IP address
- Network mask address
- Subnet mask
- Default gateway address
- Primary Domain Name System (DNS) server address
- Secondary DNS server address (optional)
- Public IP address for networks using Network Address Translation (NAT)
- Email server name
- Network Time Protocol (NTP) server (Console only) or time server name

2 QRadar Log Manager Console and Managed Host Installation

Use the procedures in this topic to install IBM Security QRadar Log Manager Consoles and managed host appliances (non-Consoles). QRadar Log Manager appliances include QRadar Log Manager software and a Red Hat Enterprise Linux operating system. You can also install QRadar Log Manager software on your own hardware.

For more information about appliances, see the *Hardware Installation Guide*.

Preparing your QRadar Log Manager appliance for installation

Before you can use the installation wizard to install a QRadar Log Manager appliance, you must physically install and prepare the appliance.

About this task

If you use a laptop to connect to the system, you must use a terminal program, such as HyperTerminal, to connect to the system. Make sure you set **Connect Using** to the appropriate COM port of the serial connector and **Bits per second** to 9600. You must also set **Stop Bits** (1), **Data bits** (8), and **Parity** (None).

For more information on your QRadar Log Manager appliance, see the *Hardware Installation Guide*.

Procedure

Step 1 Install all necessary hardware.

Step 2 Choose one of the following options:

- Connect a laptop to the serial port on the rear of the appliance.
- Connect a keyboard and monitor to their respective ports.

Step 3 Power on the system and log in:

Username: **root**

Note: The username is case sensitive.

Step 4 Press Enter.

What to do next

Installing a QRadar Log Manager Console or managed host

Preparing your own appliance for installation

You can install QRadar Log Manager software on your own hardware using the Red Hat Enterprise Linux 6.3 operating system. Before you can install QRadar Log Manager software on your own appliance, you must prepare your appliance.

About this task

Red Hat Enterprise Linux 6.3 operating system is a vendor system. For more information on how to install the Red Hat Linux 6.3 operating system, see your vendor documentation. For QRadar Log Manager specific guidelines on how to install and configure the Red Hat Enterprise Linux 6.3 operating system, see **Installing the Red Hat Enterprise Linux operating system**.

Procedure

Step 1 Install the necessary hardware.

Step 2 Obtain the Red Hat Enterprise Linux 6.3 operating system and install it on your hardware.

Step 3 Log in as the root user.

Username: **root**

Note: The username is case sensitive.

Step 4 To create the /media/cdrom redhat directory, type the following command:

```
mkdir /media/cdrom
```

Step 5 Obtain the QRadar Log Manager software from the Qmmunity website or *http://www.ibm.com/support*.

Step 6 To mount the QRadar Log Manager 7.2 ISO, type the following command:

```
mount -o loop <path to the QRadar Log Manager ISO> /media/cdrom
```

Step 7 To begin the installation, type the following command:

```
/media/cdrom/setup
```

What to do next

Installing a QRadar Log Manager Console or managed host

Installing a QRadar Log Manager Console or managed host

Use this procedure to install a QRadar Log Manager Console or managed host. You can also use this procedure to install QRadar Log Manager software on your own appliance.

Before you begin

Before you begin, ensure that the following requirements are met:

- Your appliance is prepared for installation. If your appliance is not prepared for installation, choose one of the following:
  - **Preparing your QRadar Log Manager appliance for installation**
  - **Preparing your own appliance for installation**

- The End User License Agreement (EULA) window is displayed.
- Locate your activation key. The activation key is a 24-digit, four-part, alphanumeric string that you receive from IBM. The letter I and the number 1 (one) are treated the same, as are the letter O and the number 0 (zero).

About this task

When you read the End User License Agreement (EULA), press the Spacebar to advance each window until you reach the end of the document.

The Internet Protocol Version window displays up to a maximum of four interfaces. Each interface with a physical link is denoted with a plus (+) symbol.

When you configure the network settings, you can configure a public IP address for the server. This is a secondary IP address that is used to access the server, usually from a different network or the Internet, and is managed by your network administrator. The Public IP address is often configured using Network Address Translation (NAT) services on your network or firewall settings on your network. NAT translates an IP address in one network to a different IP address in another network.

When you create the root password, the password must meet the following criteria:

- Must contain at least five characters
- No spaces
- Can include the following special characters: @,#,^, and *.

Procedure

Step 1 Read the information in the End User License Agreement (EULA) window.

Step 2 Type **yes** to accept the agreement, and then press Enter.

Step 3 Type your activation key and press Enter.

Step 4 Select **normal** for the type of setup. Select **Next** and press Enter.

Step 5 If you are installing a non-Console appliance, go to **Step 8**.

Step 6 Select the **Enterprise** tuning template. Select **Next** and press Enter.

Step 7 Configure your time settings:

a Choose one of the following options:

- **Manual** - Select this option to manually input the time and date. Select **Next** and press Enter. The Current Date and Time window is displayed. Go to **b**.
- **Server** - Select this option to specify your time server. Select **Next** and press Enter. The Enter Time Server window is displayed. Go to **c**.

b To manually enter the time and date, type the current time and date. Select **Next** and press Enter. Go to **Step 8**.

c To specify a time server, in the **Time server** field, type the time server name or IP address. Select **Next** and press Enter. Go to **Step 10**.

Step 8 On the Time Zone Continent window, select your time zone continent or area. Select **Next** and press Enter.

Step 9 On the Time Zone Region window, select your time zone region. Select **Next** and press Enter.

Step 10 Select an internet protocol version. Select **Next** and press Enter.

Step 11 Select the interface that you want to use as the management interface. Select **Next** and press Enter.

Step 12 Choose one of the following options:

- If you use IPv4 as your Internet protocol, go to **Step 15**.
- If you use IPv6 as your Internet protocol, go to **Step 13**.

Step 13 hoose one of the following options:

a To automatically configure for IPv6, select **Yes** and press Enter. The automatic configuration can take an extended period of time. Go to **Step 15**.

b To manually configure for IPv6, select **No** and press Enter. Go to **Step 14**.

Step 14 Enter network information to use for IPv6:

a In the **Hostname** field, type a fully qualified domain name as the system hostname.

b In the **IP Address** field, type the IP address of the system.

c In the **Email server** field, type the email server. If you do not have an email server, type `localhost` in this field.

d Select **Next** and press Enter. Go to **Step 16**.

Step 15 Configure the QRadar Log Manager network settings:

a Enter values for the following parameters:

- **Hostname** - Type a fully qualified domain name as the system hostname.
- **IP Address** - Type the IP address of the system.
- **Network Mask** - Type the network mask address for the system.
- **Gateway** - Type the default gateway of the system.
- **Primary DNS** - Type the primary DNS server address.
- **Secondary DNS** - Optional. Type the secondary DNS server address.
- **Public IP** - Optional. Type the Public IP address of the server.
- **Email Server** - Type the email server. If you do not have an email server, type `localhost` in this field.

b Select **Next** and press Enter.

Step 16 Configure the QRadar Log Manager root password:

a Type your password. Select **Next** and press Enter.

b Retype your new password to confirm. Select **Finish** and press Enter.

Step 17 Press Enter to select **OK**.

Result

After you configure the installation parameters, a series of messages are displayed as QRadar Log Manager continues with the installation. This process typically takes several minutes.

What to do next

See **Applying your license key**.

Applying your license key

After the installation is complete and before the default license expires, you must access the QRadar Log Manager user interface to apply your license key.

Before you begin

Review the following information: **Activation keys and license keys**.

About this task

When you access the QRadar Log Manager for the first time, note the following requirements:

- If you use Mozilla Firefox, you must add an exception to Mozilla Firefox. For more information, see your Mozilla documentation.
- If you use Internet Explorer, a website security certificate message is displayed. You must select the Continue to this website option to log in to QRadar Log Manager.

Procedure

Step 1 Open your web browser.

Step 2 Log in to QRadar Log Manager:

```
https://<IP Address>
```

Where <`IP Address`> is the IP address of the QRadar Log Manager system. The default values are:

Username: `admin`

Password: `<root password>`

Step 3 Click **Login To QRadar Log Manager**.

Step 4 Click the **Admin** tab.

Step 5 On the navigation menu, click **System Configuration**.

Step 6 Click the **System and License Management** icon.

Step 7 From the **Display** list box, select **Licenses**.

Step 8 Upload your license key.

a On the toolbar, click **Upload License**.

b In the dialog box, click **Select File**.

c On the File Upload window, locate and select the license key.

d Click **Open**.

e Click **Upload**.

Step 9 Allocate the license to your system:

a Select the unallocated license.

b Click **Allocate System to License**.

c From the list of licenses, select a license.

d Click **Allocate License to System**.

3 INSTALLING THE RED HAT ENTERPRISE LINUX OPERATING SYSTEM

Use this task to install the Red Hat Enterprise Linux 6.3 operating system on your own appliance for use with IBM Security QRadar Log Manager.

Before you begin

Before you install the Red Hat Enterprise Linux 6.3 operating system, note the following:

- QRadar Log Manager supports the 64-bit versions of the Red Hat Enterprise Linux 6.3 operating system.
- QRadar Log Manager does not support KickStart disks. These disks may cause the application to install incorrectly.
- If you want to use NTP as your time server, make sure you install the NTP package. For more information, see your Red Hat documentation.
- For Console systems, must have at least 8 GB of RAM and at least 256 GB of free disk space.
- If you plan to enable payload indexing we strongly recommend that your Console has at least 24 GB of RAM. We require that you upgrade your system memory before you install QRadar Log Manager on your system.
- For QRadar QFlow Collectors, make sure the primary drive is at least 70 GB of free space.
- The firewall configuration must allow WWW (http, https) and SSH traffic. Before you configure the firewall, disable the SELinux option. The QRadar Log Manager installation includes a default firewall template, which you can update in the System Setup window.

About this task

If you want to delete and recreate partitions rather than edit the default partitions, use the following table as a guide:

Table 1-1 Partition guide

Partition	Description	Mount point	File system type	Size	Forced to be primary	SDA or SDB
/boot	System boot files	/boot	EXT4	101 MB	Yes	SDA
swap	Area to be used as memory when RAM is full.	empty	swap	For systems with 4 to 8 GB of RAM, the size of the swap partition must match the amount of RAM, For systems with 8 to 24 GB of RAM, configure the swap partition size to be 75% of RAM, with a minimum value of 8 GB and a maximum value of 24 GB.	No	SDA
/	Install area for QRadar Log Manager, the operating system, and associated files.	/	EXT4	20000 MB	No	SDA
/store/tmp	Storage area for QRadar Log Manager temporary files	/store/tmp	EXT4	20000 MB	No	SDA
/var/log	Storage area for QRadar Log Manager and system log files	/var/log	EXT4	20000 MB	No	SDA
/store	Storage area for all QRadar Log Manager data and configuration files	/store	EXT4	Select the **Fill to maximum allowable size** check box	No	SDA

Note: If an error is displayed when the software RAID partitions are created, contact Customer Support.

CAUTION: *Future software upgrades will fail if you reformat any of the following partitions or their sub-partitions: /store, /store/tmp, /store/ariel, /store/persistent data.*

For multi-disk deployments only, configure the following partitions for the Console:

- **/store** as **RAID5** - Stores QRadar Log Manager data. Choose **EXT4** as the file system type.
- **FLOWLOGS** and **DB** are located in the **Store** partition. In a system with five drives, a suggested configuration includes:
  - **disk 1** - boot, swap, OS, QRadar Log Manager temporary files, and log files
  - **remaining disks** - RAID 5, mounted as **/store**

Note: Other QRadar Log Manager components do not require the storage partitions mentioned above.

After installation, if you notice that your onboard network interfaces are named anything other than eth0, eth1, eth2, and eth3, you must rename the network interfaces.

Procedure

Step 1 Install the Red Hat Enterprise Linux 6.3 operating system:

a Obtain the Red Hat Enterprise Linux 6.3 operating system DVD ISO and copy the ISO to one of the following portable storage devices:

- Digital Versatile Disk (DVD)
- Bootable USB flash-drive

  For instructions on how to create a bootable USB flash-drive, see the *Installing QRadar Using a Bootable USB Flash-Drive Technical Note*.

b Insert the portable storage device into your appliance.

c Restart your appliance.

d Load the boot menu.

e Choose one of the following options:

- Select the USB drive or DVD drive as the boot option.
- To install the Red Hat Enterprise Linux operating system on a system that supports Extensible Firmware Interface (EFI), you must start the system in legacy mode. Select **boot from legacy dvd** or **boot from legacy usb**.

f When the login prompt is displayed, log in to the system as the root user.

Step 2 To prevent an issue with ethernet interface address naming, perform the following steps on the Welcome page:

a Press the Tab key.

b Locate the following line:

```
Vmlinuz initrd=initrd.image
```

c At the end of the `Vmlinuz initrd=initrd.image` line, add the following text:

```
biosdevname=0
```

d To return to the installation wizard, press Enter.

Step 3 Click **Next** to advance to the next page.

Step 4 Select the language that you want to use for the installation process and as the system default. Click **Next**.

Step 5 Select the type of keyboard layout that you want to use. Click **Next**.

Step 6 Select the **Basic Storage Devices** option. Click **Next**

Step 7 In the **Hostname** field, type a unique name of your server.

The host name can include letters, numbers, and hyphens.

Step 8 Click **Configure Network**.

The Network Connections window is displayed.

Step 9 Select **System eth0**. Click **Edit**.

Step 10 Configure the parameters:

a Select the **Connect automatically** check box.

b Click the **IPv4 Settings** tab.

c From the **Method** list box, select **Manual**.

d In the Addresses pane, click **Add**, and then add the IP, Netmask, and Gateway addresses for your server.

e In the **DNS servers** field, type a comma-separated list of DSN servers.

f Click **Apply**.

g Click **Close**.

Step 11 Click **Next** to advance to the next page.

Step 12 From the list box, select a time zone. Click **Next**.

Step 13 Configure your root password for your system:

a In the **Root Password** field, type a root password.

b In the **Confirm** field, type the root password again.

c Click **Next** to advance to the next page.

Step 14 Select the **Create Custom Layout** option. Click **Next**.

Step 15 Configure disk partitioning:

a Configure the mount points for each disk partition.

b For all other partitions, such as /, /boot, and /var/log, configure the file system type to be EXT4.

c Reformat the swap partition with a file system type of swap. For important information on partition requirements, see **About this task**.

Step 16 Click **Next**. No changes are required on this page.

Step 17 Click **Next**.

Step 18 Select the **Basic Server** option. Click **Next**.

Step 19 When the installation is complete, click **Reboot**.

What to do next

Installing a QRadar Log Manager Console or managed host

4 VIRTUAL APPLIANCE INSTALLATION

A virtual appliance is a IBM Security QRadar Log Manager system that consists of QRadar Log Manager software installed on a VMWare ESX 5.0 virtual machine. Use the procedures in this topic to install your virtual appliance.

Virtual appliance overview

A virtual appliance enables the same visibility and functionality in your virtual network infrastructure that QRadar Log Manager appliances offer in your physical environment.

After you install your virtual appliances, you can access the deployment editor and add your virtual appliances to your deployment. For more information on how to connect appliances, see the *IBM Security QRadar Log Manager Administration Guide*.

The following virtual appliances are available:

- The **QRadar Log Manager 8090** virtual appliance is a QRadar Log Manager system manages and stores events from various network devices. The QRadar Log Manager 8090 virtual appliance includes an on-board Event Collector, Event Processor, and internal storage for events.The QRadar Log Manager 8090 virtual appliance supports:
  - 1,000 Events Per Second (EPS), depending on your license
  - 2 TB or larger dedicated event storage

  A virtual appliance is a QRadar Log Manager system that consists of QRadar Log Manager software installed on a VMWare ESX 5.0 virtual machine. Use the procedures in this topic to install your virtual appliance.

Virtual appliance requirements

Before you install your virtual appliance, ensure the following requirements are met:

- Virtual appliances require VMware ESXi 5.0. You must have a VMware client installed on your desktop. VMware server applications are bundled with client software. For example, ESXi 5.0 is bundled with VMware vSphere client 5.0. If your server/client configuration differs, we recommend you upgrade your VMware server and client. For more information, see *http://www.vmware.com*.

- 8 GB of free memory is required by the VMware host. 12 GB is optimal.
- 256 GB of free disk space is required on all virtual appliance types.

Virtual appliance installation procedures

The process to install a virtual appliance includes the following tasks, which must be performed in sequence.

1. **Creating your virtual machine**
2. **Installing the QRadar Log Manager ISO on the virtual machine**
3. **Installing QRadar Log Manager software on your virtual machine**
4. **Adding your virtual appliance to your deployment**

Creating your virtual machine

To install a virtual appliance, you must first create a virtual machine using VMware vSphere client 5.0.

About this task

When you configure the parameters on the CPU page, you must configure a minimum of two processors. The combination of number of virtual sockets and number of cores per virtual socket determines how many processors are configured on your system. The following table provides examples of CPU page settings you can use:

Table 2-2 Sample CPU page settings

Number of processors	Sample CPU page settings
2	Number of virtual sockets = 1 Number of cores per virtual socket = 2
2	Number of virtual sockets = 2 Number of cores per virtual socket = 1
4	Number of virtual sockets = 4 Number of cores per virtual socket = 1
4	Number of virtual sockets = 2 Number of cores per virtual socket = 2

Procedure

Step 1 Access your vSphere Client.

Step 2 Select **File > New > Virtual Machine**.

Step 3 In the Configuration pane of the Create New Virtual Machine window, select the **Custom** option and click **Next**.

Step 4 In the **Name** field, type a unique name for the virtual machine and click **Next**.

Step 5 In the right pane, select the datastore where you want to store the virtual machine and click **Next**.

Step 6 In the Virtual Machine Version pane, select the **Virtual Machine Version: 7** option and click **Next**.

Step 7 Select the Operating System (OS) for the QRadar Log Manager virtual appliance:

a In the Guest Operating System pane, select the **Linux** option.

b From the **Version** list box, select **Red Hat Enterprise Linux 6 (64-bit)** and click **Next**.

Step 8 On the CPUs page, configure the number of virtual processors that you want for the virtual machine:

a From the **Number of virtual sockets** list box, select the number of sockets that you want for the virtual machine and click **Next**.

b From the **Number of cores per virtual socket** list box, select the number of sockets that you want for the virtual machine and click **Next**.

Step 9 In the Memory Configuration pane, provide a minimum of 8 GB for memory:

a In the **Memory Size** field, type or select **8** or higher.

b In the list box, select **GB**.

Step 10 Configure your network connections:

a From the **How many NICs do you want to connect** list box, select the number of Network Interface Controllers (NICs) that you want to add. You must add at least one NIC.

b For all NICs, select **VMXNET3** from the **Adapter** list box.

c Click **Next**.

Step 11 In the SCSI controller pane, select **VMware Paravirtual** and click **Next**.

Step 12 In the Disk pane, select **Create a new virtual disk**.

Step 13 Configure the virtual disk size and specify a provisioning policy:

a In the Capacity pane, type or select 256 or higher and select **GB** from the list box.

b In the Disk Provisioning pane, select the **Thin provision** check box.

c Click **Next**.

The Advanced Options page is displayed. Do not configure the options on this page.

Step 14 Click **Next**.

Step 15 On the Ready to Complete page, review the settings and click **Finish**.

What to do next

Installing the QRadar Log Manager ISO on the virtual machine

Installing the QRadar Log Manager ISO on the virtual machine

After you create your virtual machine, you must install the QRadar Log Manager ISO on the virtual machine.

Before you begin

Before you begin, ensure that you created a virtual machine. See **Creating your virtual machine**.

Procedure

Step 1 Obtain the QRadar Log Manager software from the Qmmunity website or *http://www.ibm.com/support*.

Step 2 In the left pane of your VMware vSphere Client, select your virtual machine from the menu tree.

Step 3 In the right pane, click the **Summary** tab.

Step 4 In the Commands pane, click **Edit Settings**.

Step 5 In the left pane of the Virtual Machine Properties window, click **CD/DVD Drive 1**.

Step 6 In the Device Status pane, select the **Connect at power on** check box.

Step 7 In the Device Type pane, select **Datastore ISO File** and click **Browse**.

is displayed.

Step 8 On the Browse Datastores window, locate and select the ISO file and click **Open**.

Step 9 Click **OK**.

What to do next

Installing QRadar Log Manager software on your virtual machine.

Installing QRadar Log Manager software on your virtual machine

After your virtual machine is configured and QRadar Log Manager ISO is installed, power on and continue the QRadar Log Manager software installation.

Before you begin

Before you begin, you must have created a virtual machine and installed the QRadar Log Manager ISO on the machine. See the following topics:

- **Creating your virtual machine**
- **Installing the QRadar Log Manager ISO on the virtual machine**

You must also locate your activation key. The activation key is a 24-digit, four-part, alphanumeric string that you receive from IBM. The letter I and the number 1 (one) are treated the same, as are the letter O and the number 0 (zero).

About this task

When you read the End User License Agreement (EULA), press the Spacebar to advance each window until you reach the end of the document.

The Internet Protocol Version window displays up to a maximum of four interfaces. Each interface with a physical link is denoted with a plus (+) symbol.

When you configure the network settings, you can configure a public IP address for the server. This is a secondary IP address that is used to access the server, usually from a different network or the Internet, and is managed by your network administrator. The Public IP address is often configured using Network Address Translation (NAT) services on your network or firewall settings on your network. NAT translates an IP address in one network to a different IP address in another network.

When you create the root password, the password must meet the following criteria:

- Must contain at least five characters
- No spaces
- Can include the following special characters: @,#,^, and *.

Procedure

Step 1 Access your vSphere Client.

Step 2 In the menu tree, right-click your virtual machine and select **Power > Power On**.

Step 3 Log in to the virtual machine:

Username: **root**

Note: The username is case sensitive.

Step 4 Press Enter.

Step 1 Read the information in the End User License Agreement (EULA) window.

Step 2 Type **yes** to accept the agreement, and then press Enter.

Step 3 Type your activation key and press Enter.

Step 4 Select **normal** for your type of setup. Select **Next** and press Enter.

Step 5 Specify if you want to install a Console or non-Console system.

- **Yes** - Select this option if this system is a Console.
- **No** - Select this option if this system is not a Console.

Step 6 Select **Next** and press Enter.

Step 7 If you are installing a non-Console appliance, go to **Step 10**.

Step 8 Select the **Enterprise** tuning template. Select **Next** and press Enter.

Step 9 Configure your time settings:

a Choose one of the following options:

- **Manual** - Select this option to manually input the time and date. Select **Next** and press Enter. The Current Date and Time window is displayed. Go to **b**.
- **Server** - Select this option to specify your time server. Select **Next** and press Enter. The Enter Time Server window is displayed. Go to **c**.

b To manually enter the time and date, type the current time and date. Select **Next** and press Enter. Go to **Step 10**.

c To specify a time server, in the **Time server** field, type the time server name or IP address. Select **Next** and press Enter. Go to **Step 10**.

Step 10 On the Time Zone Continent window, select your time zone continent or area. Select **Next** and press Enter.

Step 11 On the Time Zone Region window, select your time zone region. Select **Next** and press Enter.

Step 12 Select an internet protocol version. Select **Next** and press Enter.

Step 13 Select the interface that you want to use as the management interface. Select **Next** and press Enter.

Step 14 Choose one of the following options:

- If you use IPv4 as your Internet protocol, go to **Step 17**.
- If you use IPv6 as your Internet protocol, go to **Step 15**.

Step 15 Choose one of the following options:

a To automatically configure for IPv6, select **Yes** and press Enter. The automatic configuration can take an extended period of time. Go to **Step 17**.

b To manually configure for IPv6, select **No** and press Enter. Go to **Step 16**.

Step 16 Enter network information to use for IPv6, type the values for the **Hostname** and **Email server**. Select **Next** and press Enter.

Step 17 Configure the QRadar Log Manager network settings:

a Enter values for the following parameters:

- **Hostname** - Type a fully qualified domain name as the system hostname.
- **IP Address** - Type the IP address of the system.
- **Network Mask** - Type the network mask address for the system.
- **Gateway** - Type the default gateway of the system.
- **Primary DNS** - Type the primary DNS server address.
- **Secondary DNS** - Optional. Type the secondary DNS server address.
- **Public IP** - Optional. Type the Public IP address of the server.
- **Email Server** - Type the email server. If you do not have an email server, type `localhost` in this field.

b Select **Next** and press Enter.

Step 18 Configure the QRadar Log Manager root password:

a Type your password. Select **Next** and press Enter**.**

b Retype your new password to confirm. Select **Finish** and press Enter.

c Press Enter to select **OK**.

Result

After you configure the installation parameters, a series of messages are displayed as QRadar Log Manager continues with the installation. This process typically takes several minutes.

What to do next

Adding your virtual appliance to your deployment

Adding your virtual appliance to your deployment

After your virtual appliance is installed, you must add the virtual appliance to your deployment using the deployment editor.

Before you begin

Before you begin, you must have created a virtual machine, installed the QRadar Log Manager ISO on the machine, and installed QRadar Log Manager.

See the following topics:

- **Creating your virtual machine**
- **Installing the QRadar Log Manager ISO on the virtual machine**
- **Installing QRadar Log Manager software on your virtual machine**

About this task

The name you assign to the virtual appliance can be up to 20 characters in length and can include underscores or hyphens.

Procedure

Step 1 Log in to the QRadar Log Manager Console.

Step 2 On the **Admin** tab, click **Deployment Editor**.

Step 3 In the Event Components pane on the Event View page, select the virtual appliance component that you want to add.

Step 4 On the first page of the Adding a New Component wizard, type a unique name for the virtual appliance. Click **Next**.

Step 5 From the **Select a host to assign to** list box, select the managed host that you want to assign the virtual appliance to. Click **Next**.

Step 6 Click **Finish**.

Step 7 From the deployment editor menu, select **File > Save to staging**.

Step 8 On the **Admin** tab menu, click **Deploy Changes**.

What to do next

See **Applying your license key**.

5 NETWORK SETTING MANAGEMENT

Use the **`qchange_netsetup script`** to change the network settings of your IBM Security QRadar Log Manager system. Configurable network settings include hostname, IP address, network mask, gateway, DNS addresses, public IP address, and email server.

Changing the network settings in an all-in-one Console

You can change the network settings in your all-in-one system. An all-in-one system has all QRadar Log Manager components, including the **Admin** tab, installed on one system.

Before you begin

You must have a local connection to your Console before you start this procedure.

About this task

The Internet Protocol Version window displays up to a maximum of four interfaces. Each interface with a physical link is denoted with a plus (+) symbol.

When you configure the network settings, you can configure a public IP address for the server. This is a secondary IP address that is used to access the server, usually from a different network or the Internet, and is managed by your network administrator. The Public IP address is often configured using Network Address Translation (NAT) services on your network or firewall settings on your network. NAT translates an IP address in one network to a different IP address in another network.

Procedure

Step 1 Log in to QRadar Log Manager as the root user:

Username: root

Password: <password>

Step 2 Type the following command:

```
qchange_netsetup
```

Step 3 Select an internet protocol version. Select **Next** and press Enter.

Step 4 Select the interface that you want to use as the management interface. Select **Next** and press Enter.

Step 5 Choose one of the following options:

- If you use IPv4 as your Internet protocol, go to **Step 8**.
- If you use IPv6 as your Internet protocol, go to **Step 6**.

Step 6 To configure IPv6, choose one of the following options:

a To automatically configure for IPv6, select **Yes** and press Enter. The automatic configuration can take an extended period of time. Go to **Step 8**.

b To manually configure for IPv6, select **No** and press Enter. Go to **Step 7**.

Step 7 Enter network information to use for IPv6:

a Type the values for the **Hostname**, **IP Address**, and **Email server**.

b Select **Next** and press Enter.

Step 8 Configure the QRadar Log Manager network settings:

a Enter values for the following parameters:

- **Hostname** - Type a fully qualified domain name as the system hostname.
- **IP Address** - Type the IP address of the system.
- **Network Mask** - Type the network mask address for the system.
- **Gateway** - Type the default gateway of the system.
- **Primary DNS** - Type the primary DNS server address.
- **Secondary DNS** - Optional. Type the secondary DNS server address.
- **Public IP** - Optional. Type the Public IP address of the server.
- **Email Server** - Type the name of the email server. If you do not have an email server, type `localhost` in this field.

b Select **Next** and press Enter.

Step 9 Select **Finish** and press Enter.

Result

A series of messages are displayed as QRadar Log Manager processes the requested changes. After the requested changes are processed, the QRadar Log Manager system is automatically shutdown and rebooted.

Changing the network settings of a Console in a multi-system deployment

To change the network settings in a multi-system deployment, you must remove all managed hosts from the deployment, change the network settings, re-add the managed hosts, and then re-assign the component or components.

About this task

This procedure requires you to use the deployment editor. For more information on how to use the deployment editor, see the *IBM Security QRadar Log Manager Administration Guide*.

You must perform this procedure in the following order:

1 **Removing managed hosts**

2 **Changing the network settings**

3 **Re-adding and re-assigning managed hosts**

Removing managed hosts

Before you can change network settings on a Console in a multi-system deployment, you must remove all managed hosts from your deployment.

Procedure

Step 1 Log in to QRadar Log Manager:

`https://<IP Address>`

Where `<IP Address>` is the IP address of the QRadar Log Manager system.

Username: **admin**

Password: **<admin password>**

Step 2 Click the **Admin** tab.

Step 3 Click the **Deployment Editor** icon.

Step 4 On the deployment editor window, click the **System View** tab.

Step 5 For each managed host in your deployment, right-click the managed host and select **Remove host**.

Step 6 Click **Save**.

Step 7 Close the deployment editor.

Step 8 On the **Admin** tab, click **Deploy Changes**.

What to do next

Changing the network settings

Changing the network settings

After you remove all managed hosts from your Console, you can change the network settings on the Console.

Before you begin

Before you can change network settings on Console in a multi-system deployment, you must remove all managed hosts from your Console. See **Removing managed hosts**.

About this task

The Internet Protocol Version window displays up to a maximum of four interfaces. Each interface with a physical link is denoted with a plus (+) symbol.

When you configure the network settings, you can configure a public IP address for the server. This is a secondary IP address that is used to access the server, usually from a different network or the Internet, and is managed by your network administrator. The Public IP address is often configured using Network Address Translation (NAT) services on your network or firewall settings on your network. NAT translates an IP address in one network to a different IP address in another network.

Procedure

Step 1 Using SSH, log in to QRadar Log Manager as the root user.

Username: **root**

Password: **<password>**

Step 2 Type the following command:

```
qchange_netsetup
```

Step 3 Select an internet protocol version. Select **Next** and press Enter.

Step 4 Select the interface that you want to use as the management interface. Select **Next** and press Enter.

Step 5 Choose one of the following options:

- If you use IPv4 as your Internet protocol, go to **Step 8**.
- If you use IPv6 as your Internet protocol, go to **Step 6**.

Step 6 To configure IPv6, choose one of the following options:

a To automatically configure for IPv6, select **Yes** and press Enter. The automatic configuration can take an extended period of time. Go to **Step 8**.

b To manually configure for IPv6, select **No** and press Enter. Go to **Step 7**.

Step 7 Enter network information to use for IPv6:

a Type the values for the **Hostname**, **IP Address**, and **Email server**.

b Select **Next** and press Enter.

Step 8 Configure the QRadar Log Manager network settings:

a Enter values for the following parameters:

- **Hostname** - Type a fully qualified domain name as the system hostname.
- **IP Address** - Type the IP address of the system.
- **Network Mask** - Type the network mask address for the system.
- **Gateway** - Type the default gateway of the system.
- **Primary DNS** - Type the primary DNS server address.
- **Secondary DNS** - Optional. Type the secondary DNS server address.
- **Public IP** - Optional. Type the Public IP address of the server.
- **Email Server** - Type the name of the email server. If you do not have an email server, type `localhost` in this field.

b Select **Next** and press Enter.

Step 9 Select **Finish** and press Enter.

Result

A series of messages are displayed as QRadar Log Manager processes the requested changes. After the requested changes are processed, the QRadar Log Manager system is automatically shutdown and rebooted.

What to do next

Re-adding and re-assigning managed hosts

Re-adding and re-assigning managed hosts

After you remove all managed hosts from your Console and change the Console network settings, you must re-add and re-assign the managed hosts.

About this task

When you create the password for each managed host, the password must meet the following criteria:

- Must contain at least five characters
- No spaces
- Can include the following special characters: @,#,^, and *.

Procedure

Step 1 Log in to QRadar Log Manager:

```
https://<IP Address>
```

Where <`IP Address`> is the IP address of the QRadar Log Manager system.

Username: **admin**

Password: **<admin password>**

Step 2 Click the **Admin** tab.

Step 3 Click the **Deployment Edit** icon.

The deployment editor is displayed.

Step 4 Click the **System View** tab.

Step 5 From the menu, select **Actions > Add a managed host**.

Step 6 On the Add a new host wizard, click **Next**.

Step 7 On the Enter the host's IP window, enter values for the parameters:

- **Enter the IP of the server or appliance to add** - Type the IP address of the host that you want to add to your System View.
- **Enter the root password of the host** - Type the root password for the host.
- **Confirm the root password of the host** - Type the password again, for confirmation.
- **Host is NATed** - Optional. Select this option to enable encryption.

Step 8 Click **Next**.

Step 9 Click **Finish**.

Step 10 Re-assign all components to your non-Console managed host.

- **a** In the QRadar Log Manager deployment editor, click the **Event View** tab.
- **b** Select the component that you want to re-assign to the managed host.
- **c** From the menu, select **Actions > Assign**
- **d** From the **Select a host** list box, select the host that you want to re-assign to this component. Click **Next**.
- **e** Click **Finish**.

Step 11 Repeat for each non-Console managed host until all hosts are re-added and re-assigned.

Step 12 Close the deployment editor.

Step 13 Click **Deploy Changes**.

Changing the network settings of a managed host in a multi-system deployment

To change the network settings of a managed host in a multi-system deployment, you must remove the managed host that you want to change from the deployment, change the network settings, re-add the managed host, and then re-assign the original components.

About this task

This procedure requires you to use the deployment editor. For more information on how to use the deployment editor, see the *IBM Security QRadar Log Manager Administration Guide*.

You must perform this procedure in the following order:

1. **Removing the managed host from your deployment**
2. **Changing the network settings of a managed host**
3. **Re-adding and re-assigning the managed host**

Removing the managed host from your deployment

Before you can change network settings on a managed host in a multi-system deployment, you must remove the managed host from your deployment.

Procedure

Step 1 Log in to QRadar Log Manager:

```
https://<IP Address>
```

Where <`IP Address`> is the IP address of the QRadar Log Manager system.

Username: **admin**

Password: **<admin password>**

Step 2 Click the **Admin** tab.

Step 3 Click the **Deployment Editor** icon.

Step 4 Click the **System View** tab.

Step 5 Right-click the managed host that you want to delete to access the menu, select **Remove host**.

Step 6 Close the deployment editor.

Step 7 Click **Deploy Changes**.

What to do next

Changing the network settings of a managed host

Changing the network settings of a managed host

After you remove the managed host from your Console, you can change the network settings on the managed host.

Before you begin

Before you can change network settings on managed host in a multi-system deployment, you must remove the managed host from your Console. See **Removing the managed host from your deployment**.

About this task

The Internet Protocol Version window displays up to a maximum of four interfaces. Each interface with a physical link is denoted with a plus (+) symbol.

When you configure the network settings, you can configure a public IP address for the server. This is a secondary IP address that is used to access the server, usually from a different network or the Internet, and is managed by your network administrator. The Public IP address is often configured using Network Address Translation (NAT) services on your network or firewall settings on your network. NAT translates an IP address in one network to a different IP address in another network.

Procedure

Step 1 Using SSH, log in to Console as the root user:

Username: root

Password: <password>

Step 2 Type the following command:

```
qchange_netsetup
```

Step 3 Select an internet protocol version. Select **Next** and press Enter.

The window displays up to a maximum of four interfaces. Each interface with a physical link is denoted with a plus (+) symbol.

Step 4 Select the interface that you want to use as the management interface. Select **Next** and press Enter.

Step 5 Choose one of the following options:

- If you use IPv4 as your Internet protocol, go to **Step 8**.
- If you use IPv6 as your Internet protocol, go to **Step 6**.

Step 6 To configure IPv6, choose one of the following options:

a To automatically configure for IPv6, select **Yes** and press Enter. The automatic configuration can take an extended period of time. Go to **Step 8**.

b To manually configure for IPv6, select **No** and press Enter. Go to **Step 7**.

Step 7 Enter network information to use for IPv6:

a Type the values for the **Hostname**, **IP Address**, and **Email server**.

b Select **Next** and press Enter.

Step 8 Configure the QRadar Log Manager network settings:

a Enter values for the following parameters:

- **Hostname** - Type a fully qualified domain name as the system hostname.
- **IP Address** - Type the IP address of the system.
- **Network Mask** - Type the network mask address for the system.
- **Gateway** - Type the default gateway of the system.
- **Primary DNS** - Type the primary DNS server address.
- **Secondary DNS** - Optional. Type the secondary DNS server address.
- **Public IP** - Optional. Type the Public IP address of the server.
- **Email Server** - Type the name of the email server. If you do not have an email server, type `localhost` in this field.

b Select **Next** and press Enter.

Step 9 Select **Finish** and press Enter.

Result

A series of messages are displayed as QRadar Log Manager processes the requested changes. After the requested changes are processed, the QRadar Log Manager system is automatically shutdown and rebooted.

What to do next

Re-adding and re-assigning the managed host

Re-adding and re-assigning the managed host

After you remove the managed host from your Console and change the network settings, you must re-add and re-assign the managed host.

About this task

When you create the root password for each managed host, the password must meet the following criteria:

- Must contain at least five characters
- No spaces
- Can include the following special characters: @,#,^, and *.

Procedure

Step 1 Log in to QRadar Log Manager:

`https://<IP Address>`

Where <`IP Address`> is the IP address of the QRadar Log Manager system.

Username: **admin**

Password: **<admin password>**

Step 2 Click the **Admin** tab.

Step 3 Click the **Deployment Editor** icon.

Step 4 Click the **System View** tab.

Step 5 From the menu, select **Actions > Add a managed host**.

Step 6 Click **Next**.

Step 7 Enter values for the parameters:

- **Enter the IP of the server or appliance to add** - Type the IP address of the host that you want to add to your System View.
- **Enter the root password of the host** - Type the root password for the host.
- **Confirm the root password of the host** - Type the password again, for confirmation.
- **Host is NATed** - Select this option if you want to specify NAT values if necessary.
- **Enable Encryption** - Select this option if you want to enable encryption.

Step 8 Click **Next**.

Step 9 Click **Finish**.

Step 10 Re-assign all components to your non-Console managed host.

a In the QRadar Log Manager deployment editor, click the **Event View** tab.

b Select the component that you want to re-assign to the managed host.

c From the menu, select **Actions > Assign**.

d From the **Select a host** list box, select the host that you want to re-assign to this component. Click **Next**.

e Click **Finish**.

Step 11 Close the deployment editor.

Step 12 On the **Admin** tab, click **Deploy Changes**.

Updating network settings after a NIC Replacement

If you perform a replacement of your integrated motherboard or stand-alone NICs, you must update your QRadar Log Manager network settings to ensure your hardware remains operational.

About this task

This task involves the network settings file. The file displays one pair of lines for each NIC that has been installed and one pair of lines for each NIC that has been removed. You must remove the lines for the NIC that you removed and then rename the NIC that you installed.

Your network settings file may resemble the following example:

```
# PCI device 0x14e4:0x163b (bnx2)

SUBSYSTEM=="net", ACTION=="add", DRIVERS=="?*",
ATTR{address}=="78:2a:cb:23:1a:2f", ATTR{type}=="1",
KERNEL=="eth*", NAME="eth0"


# PCI device 0x14e4:0x163b (bnx2)

SUBSYSTEM=="net", ACTION=="add", DRIVERS=="?*",
ATTR{address}=="78:2a:cb:23:1a:2f", ATTR{type}=="1",
KERNEL=="eth*", NAME="eth0"


# PCI device 0x14e4:0x163b (bnx2)

SUBSYSTEM=="net", ACTION=="add", DRIVERS=="?*",
ATTR{address}=="78:2a:cb:23:1a:2f", ATTR{type}=="1",
KERNEL=="eth*", NAME="eth4"


# PCI device 0x14e4:0x163b (bnx2)

SUBSYSTEM=="net", ACTION=="add", DRIVERS=="?*",
ATTR{address}=="78:2a:cb:23:1a:2f", ATTR{type}=="1",
KERNEL=="eth*", NAME="eth4"
```

Where **NAME=″eth0″** is the NIC that was replaced and **NAME=″eth4″** is the NIC that was installed.

Procedure

Step 1 Using SSH, log in to QRadar Log Manager as the root user:

Username: **root**

Password: **<password>**

Step 2 Type the following command:

```
cd /etc/udev/rules.d/
```

Step 3 To edit the network settings file, type the following command:

```
vi 70-persistent-net.rules
```

Step 4 Remove the pair of lines for the NIC which has been replaced; **NAME=″eth0″**.

Step 5 Rename the **`Name=<eth>`** values for the newly installed NIC. For example, **`NAME="eth4"`** should be renamed to **`NAME="eth0".`**

Step 6 Save and close the file.

Step 7 Type the following command:

```
reboot
```

6 RE-INSTALLATION FROM THE RECOVERY PARTITION

If required, you can re-install IBM Security QRadar Log Manager software from the recovery partition. This section applies to new QRadar Log Manager 7.2 installations or upgrades from new QRadar Log Manager 7.2 installations on QRadar Log Manager appliances.

Recovery partition overview

When you install QRadar Log Manager, the installer (ISO) is copied into the recovery partition. From this partition, you can re-install QRadar Log Manager, which restores QRadar Log Manager to factory defaults. Your system is restored back to factory default configuration. Your current configuration and data files are overwritten.

When you reboot your QRadar Log Manager appliance, you are presented with the option to re-install the software. If you do not respond to the prompt after 5 seconds, the system reboots as normal, thus your configuration and data files are maintained. If you choose the re-install QRadar Log Manager option, a warning message is displayed and you must confirm that you want to re-install QRadar Log Manager. After confirmation, the installer runs and you can follow the prompts through the installation process.

Note: After a hard disk failure, you are unable to re-install from the recovery partition, because it is longer be available. If you experience a hard disk failure, contact Customer Support for assistance.

Any software upgrades you perform after you install QRadar Log Manager 7.2 replaces the ISO file with the newer version.

Re-installing QRadar Log Manager from the recovery partition

This topic provides the procedure for re-installing QRadar Log Manager from the recovery partition.

Before you begin

Before you begin, ensure that the following requirements are met:

- Locate your activation key. The activation key is a 24-digit, four-part, alphanumeric string that you receive from IBM. You can find the activation key:
  - Printed on a sticker and physically placed on your appliance.

- Included with the packing slip; all appliances are listed along with their associated keys.

The letter I and the number 1 (one) are treated the same, as are the letter O and the number 0 (zero).

If you do not have your activation key, contact the Welcome Center at *welcomecenter@q1labs.com* or or *http://www.ibm.com/support* with the serial number of the QRadar Log Manager appliance. Software activation keys do not require serial numbers

About this task

When you read the End User License Agreement (EULA), press the Spacebar to advance each window until you reach the end of the document.

The Internet Protocol Version window displays up to a maximum of four interfaces. Each interface with a physical link is denoted with a plus (+) symbol.

When you configure the network settings, you can configure a public IP address for the server. This is a secondary IP address that is used to access the server, usually from a different network or the Internet, and is managed by your network administrator. The Public IP address is often configured using Network Address Translation (NAT) services on your network or firewall settings on your network. NAT translates an IP address in one network to a different IP address in another network.

When you create the root password, the password must meet the following criteria:

- Must contain at least five characters
- No spaces
- Can include the following special characters: @,#,^, and *.

When you type `flatten` during the procedure, the installer partitions and reformats the hard disk, installs the OS, and then re-installs QRadar Log Manager. You must wait for the flatten process to complete. This process can take up to several minutes. When the process is complete, a confirmation is displayed.

Procedure

Step 1 Reboot your QRadar Log Manager appliance.

Step 2 Select **Factory re-install**.

Step 3 Type `flatten` to continue.

Step 4 Type `SETUP`.

Step 5 Log in to QRadar Log Manager as the root user.

Username: root

Password: <password>

Step 6 Read the information in the End User License Agreement (EULA) window.

Step 7 Type your activation key and press Enter.

Step 8 If you are re-installing a non-Console appliance, go to **Step 11**.

Step 9 Select the **Enterprise** tuning template. Select **Next** and press Enter.

Step 10 Configure your time settings:

a Choose one of the following options:

- **Manual** - Select this option to manually input the time and date. Select **Next** and press Enter. The Current Date and Time window is displayed. Go to **b**.
- **Server** - Select this option to specify your time server. Select **Next** and press Enter. The Enter Time Server window is displayed. Go to **c**.

b To manually enter the time and date, type the current time and date. Select **Next** and press Enter. Go to **Step 11**.

c To specify a time server, in the **Time server** field, type the time server name or IP address. Select **Next** and press Enter. Go to **Step 13**.

Step 11 On the Time Zone Continent window, select your time zone continent or area. Select **Next** and press Enter.

Step 12 On the Time Zone Region window, select your time zone region. Select **Next** and press Enter.

Step 13 Select an internet protocol version. Select **Next** and press Enter.

Step 14 Select the interface that you want to use as the management interface. Select **Next** and press Enter.

Step 15 Choose one of the following options:

- If you use IPv4 as your Internet protocol, go to **Step 18**.
- If you use IPv6 as your Internet protocol, go to **Step 16**.

Step 16 Choose one of the following options:

a To automatically configure for IPv6, select **Yes** and press Enter. The automatic configuration can take an extended period of time. Go to **Step 18**.

b To manually configure for IPv6, select **No** and press Enter. Go to **Step 17**.

Step 17 Enter network information to use for IPv6:

a In the **Hostname** field, type a fully qualified domain name as the system hostname.

b In the **IP Address** field, type the IP address of the system.

c In the **Email server** field, type the email server. If you do not have an email server, type `localhost` in this field.

d Select **Next** and press Enter. Go to **Step 19**.

Step 18 Configure the QRadar Log Manager network settings:

a Enter values for the following parameters:

- **Hostname** - Type a fully qualified domain name as the system hostname.
- **IP Address** - Type the IP address of the system.
- **Network Mask** - Type the network mask address for the system.

- **Gateway** - Type the default gateway of the system.
- **Primary DNS** - Type the primary DNS server address.
- **Secondary DNS** - Optional. Type the secondary DNS server address.
- **Public IP** - Optional. Type the Public IP address of the server.
- **Email Server** - Type the email server. If you do not have an email server, type `localhost` in this field.

b Select **Next** and press Enter.

Step 19 Configure the QRadar Log Manager root password:

a Type your password. Select **Next** and press Enter

The password must meet the following criteria:

- Must contain at least five characters
- No spaces
- Can include the following special characters: @,#,^, and *.

The Confirm New Root Password window is displayed.

b Retype your new password to confirm. Select **Finish** and press Enter.

Step 20 Press Enter to select **OK**.

Result

After you configure the installation parameters, a series of messages are displayed as QRadar Log Manager continues with the re-installation. This process typically takes several minutes.

What to do next

See **Applying your license key**

A NOTICES AND TRADEMARKS

What's in this appendix:

- **Notices**
- **Trademarks**

This section describes some important notices, trademarks, and compliance information.

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