Before using this information and the product that it supports, read the information in "Notices" on page 11.
## Contents

### Introduction to upgrading QRadar software

### Chapter 1. What’s new for installers in QRadar V7.2.2

### Chapter 2. Preparation for the upgrade

- Software version requirements for upgrades
- Upgrade paths
- Memory and disk space requirements
- Supported web browsers
- Upgrade priority order in distributed deployments
- Upgrades in HA deployments

### Chapter 3. Upgrading QRadar products

- Clearing the Java cache and web browser cache after upgrades

### Notices

- Trademarks
- Privacy policy considerations

### Index
Introduction to upgrading QRadar software


Intended audience

System administrators who are responsible for upgrading IBM Security QRadar systems must be familiar with network security concepts and device configurations.

Technical documentation

To find IBM Security QRadar product documentation on the web, including all translated documentation, access the IBM Knowledge Center (http://www.ibm.com/support/knowledgecenter/SS42VS/welcome).

For information about how to access more technical documentation in the QRadar products library, see Accessing IBM Security Documentation Technical Note (www.ibm.com/support/docview.wss?rs=0&uid=swg21614644).

Contacting customer support

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

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Chapter 1. What's new for installers in QRadar V7.2.2

IBM Security QRadar V7.2.2 introduces updates to supported software environments.

**Updated web browser support**

For the best possible web experience, IBM Security QRadar supports newer versions of web browsers.  

**RHEL 6.5 support**

To take advantage of the updates and fixes, IBM Security QRadar supports a newer version of RedHat Enterprise Linux.
Chapter 2. Preparation for the upgrade

To successfully upgrade IBM Security QRadar systems, ensure that you know your upgrade path, especially if you upgrade from older versions that require intermediate steps. You must also review the software, hardware, and high-availability requirements.

Software version requirements for upgrades

To ensure that IBM Security QRadar upgrades without errors, ensure that you use only the supported versions of QRadar software.

Ensure that the following software requirements are met:

- QRadar version 7.1 (MR2) or later must be installed.
  You can check the software version in the software by clicking Help > About.
- You must upgrade all of the systems in your deployment to V7.2.2.

Important: Software versions for all IBM Security QRadar appliances in a deployment must be same version and fix level. Deployments that use different QRadar versions of software are not supported.

Upgrade paths

There are a number of upgrade paths to get to the most current version of IBM Security QRadar. The upgrade path depends on the version of QRadar that is installed.

Applying fix packs before you upgrade

Before you upgrade, you can apply fixes (fix pack) to your existing software.

Download the fix pack from IBM Fix Central (www.ibm.com/support/fixcentral) and follow the instructions in the release notes document to install it.

QRadar is preconfigured for automatic, weekly updates. You can view the pending updates in the Updates window on the Admin tab.

Single step and multiple step upgrade paths

For some QRadar software versions, you can upgrade directly to the most current QRadar version. To upgrade to QRadar version 7.2.2 in one step, you must have QRadar version 7.1 (MR2) or later installed.

Examples: The one-step upgrade path includes upgrading from the following versions:

- 7.2.1 or later
- 7.2 (build 599863)
- 7.2 fix pack 1 (build 614901) or later

For older versions of QRadar, you might be required to upgrade to an interim version before you upgrade to the most current version of QRadar.
Use the following table to help you determine your upgrade path and note any special considerations.

### Table 1. Supported upgrade paths for QRadar products

<table>
<thead>
<tr>
<th>Current version</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 (MR2) (7.1.0.501605) or later</td>
<td>7.2.2 (SFS)</td>
<td>7.2.2 (SFS)</td>
<td>7.2.2 (SFS)</td>
</tr>
<tr>
<td>7.1 GA to 7.1 (MR1) Patch 3</td>
<td>7.1 MR2 Patch 2 (7.1.0.599086) (SFS)</td>
<td>7.2.2 (SFS)</td>
<td>7.2.2 (SFS)</td>
</tr>
<tr>
<td>7.0 (MR5) to 7.0 (MR5) Patch 7</td>
<td>7.1 MR2 Patch 2 (7.1.0.599086) (SFS)</td>
<td>7.2.2 (SFS)</td>
<td>7.2.2 (SFS)</td>
</tr>
<tr>
<td>7.0 GA to 7.0 MR4 Patch 2</td>
<td>7.0 MR5 (7.0.0.301503) (SFS)</td>
<td>7.1 MR2, (7.1.0.599086) (ISO)</td>
<td>7.2.2 (SFS)</td>
</tr>
</tbody>
</table>

Related concepts:  
[“Upgrade priority order in distributed deployments” on page 7](#)

When you upgrade IBM Security QRadar systems, you must complete the upgrade process on your Console first. You must be able to access the user interface on your desktop system before you upgrade your secondary Console and managed hosts.

### Memory and disk space requirements

Before you upgrade, ensure that IBM Security QRadar meets the minimum or suggested memory and disk space requirements.

#### QRadar memory requirements

The following table describes the minimum and suggested memory requirements for QRadar appliances. The minimum memory requirement defines the amount of memory that is required by the software features. The suggested memory requirements include the amount of memory that is required by the current software features and extra memory for possible future capabilities. Appliances that have less than the suggested appliance memory might experience performance issues during periods of excessive event and flow traffic.

### Table 2. Minimum and optional memory requirements for QRadar appliances

<table>
<thead>
<tr>
<th>Appliance</th>
<th>Minimum memory requirement</th>
<th>Suggested memory requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>QFlow Collector 1201</td>
<td>6 GB</td>
<td>6 GB</td>
</tr>
<tr>
<td>QFlow Collector 1202</td>
<td>6 GB</td>
<td>6 GB</td>
</tr>
<tr>
<td>QFlow Collector 1301</td>
<td>6 GB</td>
<td>6 GB</td>
</tr>
<tr>
<td>QFlow Collector 1310</td>
<td>6 GB</td>
<td>6 GB</td>
</tr>
<tr>
<td>QRadar Event Collector 1501</td>
<td>12 GB</td>
<td>16 GB</td>
</tr>
<tr>
<td>QRadar Event Collector Virtual 1599</td>
<td>12 GB</td>
<td>16 GB</td>
</tr>
<tr>
<td>QRadar Event Processor 1601</td>
<td>12 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Event Processor 1605</td>
<td>12 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Event Processor 1624</td>
<td>64 GB</td>
<td>64 GB</td>
</tr>
<tr>
<td>QRadar Event Processor 1628</td>
<td>128 GB</td>
<td>128 GB</td>
</tr>
<tr>
<td>Appliance</td>
<td>Minimum memory requirement</td>
<td>Suggested memory requirement</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>QRadar Event Processor Virtual 1699</td>
<td>12 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Flow Processor 1701</td>
<td>12 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Flow Processor 1705</td>
<td>12 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Flow Processor 1724</td>
<td>64 GB</td>
<td>64 GB</td>
</tr>
<tr>
<td>QRadar Flow Processor 1728</td>
<td>128 GB</td>
<td>128 GB</td>
</tr>
<tr>
<td>QRadar Flow Processor Virtual 1799</td>
<td>12 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Event and Flow Processor 1805</td>
<td>12 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Event and Flow Processor 1824</td>
<td>64 GB</td>
<td>64 GB</td>
</tr>
<tr>
<td>QRadar Event and Flow Processor 1828</td>
<td>128 GB</td>
<td>128 GB</td>
</tr>
<tr>
<td>QRadar SIEM 2100</td>
<td>24 GB</td>
<td>24 GB</td>
</tr>
<tr>
<td>QRadar SIEM 2100 Light</td>
<td>24 GB</td>
<td>24 GB</td>
</tr>
<tr>
<td>QRadar SIEM 3100</td>
<td>24 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar SIEM 3105</td>
<td>24 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar SIEM 3124</td>
<td>64 GB</td>
<td>64 GB</td>
</tr>
<tr>
<td>QRadar SIEM 3128</td>
<td>128 GB</td>
<td>128 GB</td>
</tr>
<tr>
<td>QRadar SIEM Virtual 3199</td>
<td>24 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 1605</td>
<td>12 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 1624</td>
<td>64 GB</td>
<td>64 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 1628</td>
<td>128 GB</td>
<td>128 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 2100</td>
<td>24 GB</td>
<td>24 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 3105</td>
<td>24 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 3124</td>
<td>64 GB</td>
<td>64 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 3128</td>
<td>128 GB</td>
<td>128 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 3199</td>
<td>24 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Log Manager 3199</td>
<td>24 GB</td>
<td>48 GB</td>
</tr>
<tr>
<td>QRadar Network Anomaly 3105</td>
<td>24 GB</td>
<td>48 GB</td>
</tr>
</tbody>
</table>

**Other memory requirements**

If the following conditions are met, extra memory requirements might be required:

- If you plan to enable payload indexing, your system requires a minimum of 24 GB of memory. However, 48 GB of memory is suggested.
- If you install QRadar software on your own hardware, your system requires a minimum of 24 GB of memory.
**Disk space requirements**

The following table describes the minimum requirements for free disk space:

<table>
<thead>
<tr>
<th>Partition</th>
<th>Free space requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>/</td>
<td>3 GB or 10 GB 1</td>
</tr>
<tr>
<td>/store</td>
<td>4 GB</td>
</tr>
<tr>
<td>/var/log</td>
<td>500 MB</td>
</tr>
<tr>
<td>/store/tmp</td>
<td>800 MB</td>
</tr>
</tbody>
</table>

1If your appliance has less than 8 GB of available swap space or 5 GB of memory, the root (/) partition requires 10 GB of drive space. Otherwise, appliances require a minimum of 3 GB of disk space on the root partition.

**Restriction:** If your IBM Security QRadar QFlow Collector appliances have less than an 80 GB of available disk space, you must install the most current software version. For more information, see the *Installation Guide* for your product.

The upgrade pretest determines whether a partition includes enough free space to complete an upgrade. Before you can upgrade, you must free up sufficient disk space on the partition that is defined in the pretest error message.

**Related concepts:**

“Supported web browsers”

For the features in IBM Security QRadar products to work properly, you must use a supported web browser.

---

**Supported web browsers**

For the features in IBM Security QRadar products to work properly, you must use a supported web browser.

When you access the QRadar system, you are prompted for a user name and a password. The user name and password must be configured in advance by the administrator.

The following table lists the supported versions of web browsers.

<table>
<thead>
<tr>
<th>Web browser</th>
<th>Supported version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mozilla Firefox</td>
<td>17.0 Extended Support Release</td>
</tr>
<tr>
<td></td>
<td>24.0 Extended Support Release</td>
</tr>
<tr>
<td>32-bit Microsoft Internet Explorer, with</td>
<td>8.0</td>
</tr>
<tr>
<td>document mode and browser mode enabled</td>
<td>9.0</td>
</tr>
<tr>
<td>Google Chrome</td>
<td>The current version as of the release date of IBM Security QRadar V7.2.2 products</td>
</tr>
</tbody>
</table>

**Related concepts:**

“Memory and disk space requirements” on page 4

Before you upgrade, ensure that IBM Security QRadar meets the minimum or suggested memory and disk space requirements.
Upgrade priority order in distributed deployments

When you upgrade IBM Security QRadar systems, you must complete the upgrade process on your Console first. You must be able to access the user interface on your desktop system before you upgrade your secondary Console and managed hosts.

Upgrade your QRadar systems in the following order:
1. Console
2. The following QRadar systems can be upgrade concurrently:
   - Event Processors
   - Event Collectors
   - Flow Processors
   - QFlow Collectors

Related concepts:
“Upgrade paths” on page 3
There are a number of upgrade paths to get to the most current version of IBM Security QRadar. The upgrade path depends on the version of QRadar that is installed.

“Upgrades in HA deployments”
If you upgrade IBM Security QRadar in high-availability (HA) deployments, the primary host must be the active system in your deployment. If the primary system is the active system and the secondary system is in standby mode, the upgrade is automatically applied to the associated secondary system.

Upgrades in HA deployments

If you upgrade IBM Security QRadar in high-availability (HA) deployments, the primary host must be the active system in your deployment. If the primary system is the active system and the secondary system is in standby mode, the upgrade is automatically applied to the associated secondary system.

If the HA cluster is disconnected, or you want to add a new secondary HA host, you must reinstall QRadar on the secondary HA. For more information about reinstalling software, see the Installation Guide for your system. After you reinstall the secondary HA host, log in to the user interface to reconnect or to create a new HA cluster.

Important: Disk replication and failover are disabled until the primary and secondary hosts synchronize and the needs upgrade or failed status is cleared from the secondary host.

After you upgrade the secondary host, you might be required to restore the configuration of the secondary host. For more information about restoring a failed host, see the Administration Guide for your product.

Related concepts:
“Upgrade priority order in distributed deployments”
When you upgrade IBM Security QRadar systems, you must complete the upgrade process on your Console first. You must be able to access the user interface on your desktop system before you upgrade your secondary Console and managed hosts.
Chapter 3. Upgrading QRadar products

You must upgrade all of your IBM Security QRadar products in your deployment to the same version. During the upgrade, the version of RedHat Enterprise Linux is upgraded to version 6.5.

Before you begin

Ensure that you take the following precautions:

- Back up your data.  
  For more information about backup and recovery, see the Administration Guide for your product.
- To avoid access errors in your log file, close all open QRadar product sessions.
- Ensure that you have sufficient RAM.
  During the upgrade from versions 7.1.x to 7.2.x, a system pretest checks that the minimum amount of RAM is available. If there is not enough RAM, the upgrade stops.
- If your deployment includes offboard storage solutions, you must disconnect your offboard storage.
  After you complete the upgrade, you can remount your external storage solutions. For more information, see the Offboard Storage Guide.

Procedure

1. Download the `<QRadar_patchupdate>.sfs` file from Fix Central (www.ibm.com/support/fixcentral).
2. Use SSH to log in to your system as the root user.
3. Copy the patch file to the `/tmp` directory or to another location that has sufficient disk space.
4. To create the `/media/updates` directory, type the following command:
   
   ```
   mkdir -p /media/updates
   ```
5. Change to the directory where you copied the patch file.
6. To mount the patch file to the `/media/updates` directory, type the following command:
   
   ```
   mount -o loop -t squashfs `<QRadar_patchupdate>.sfs` /media/updates/
   ```
7. To run the patch installer, type the following command:
   
   ```
   /media/updates/installer
   ```
   The first time that you run the patch installer script, there might be a delay before the first patch installer menu is displayed.
8. Using the patch installer, upgrade all systems in your deployment.
   If you do not select Patch All, you must upgrade systems in the following order:
   - Console
   - Event Processors
   - Event Collectors
   - Flow Processors
If your SSH session is disconnected while the upgrade is in progress, the upgrade continues. When you reopen your SSH session and rerun the installer, the installation resumes.

What to do next

Clear your Java™ cache and your web browser cache. After you upgrade QRadar, the Vulnerabilities tab might not be displayed. To use QRadar Vulnerability Manager after you upgrade, you must upload and allocate a valid license key. For more information, see the Administration Guide for your product.

Related concepts:
"Upgrade paths" on page 3
There are a number of upgrade paths to get to the most current version of IBM Security QRadar. The upgrade path depends on the version of QRadar that is installed.

Clearing the Java cache and web browser cache after upgrades

After you upgrade, clear the Java cache and web browser cache before you log in to IBM Security QRadar.

Before you begin

The Java Runtime Environment version 1.7 must be installed on the desktop system that you use to view the user interface.

Procedure

1. To clear the Java cache, open the Windows Control Panel search and enter Java Control Panel.
   a. View the Temporary Internet Files.
   b. Delete all of the QRadar Deployment Editor entries.
2. To clear your web browser cache, ensure that you have only one instance of your web browser open, and then clear the cache.
3. Log in to QRadar by typing the IP address of the QRadar system into a web browser:
   https://IP Address
   The default user name is admin.

Related concepts:
"Supported web browsers" on page 6
For the features in IBM Security QRadar products to work properly, you must use a supported web browser.
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