

IBM Security QRadar
Version 7.1.0 (MR1)

*Replacing the SSL Certificate Technical
Note*



Note: Before using this information and the product that it supports, read the information in [Notices and Trademarks on page 5](#)

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REPLACING THE SSL CERTIFICATE

By default, QRadar provides an untrusted SSL certificate. You can replace the untrusted SSL certificate with a self-signed or trusted certificate.

Unless otherwise noted, all references to QRadar refer to QRadar SIEM, IBM Security QRadar Log Manager, and IBM Security QRadar Network Anomaly Detection. References to flows do not apply to QRadar Log Manager.

Understanding SSL certificates

Secure Sockets Layer (SSL) is the transaction security protocol used by websites to provide an encrypted link between a web server and a browser.

SSL is an industry standard and is used by websites to protect online transactions. To be able to generate an SSL link, a web server requires an SSL certificate. SSL certificates are issued by software and trusted third-party certifying authorities.

Generally available software, such as Open SSL or Microsoft's Certificate Services manager, issues SSL certificates. These certificates are not inherently trusted by browsers, because they are not issued by a recognized authority. Although they can be used for encrypting data, there is no third-party assurance regarding the identity of the server sending the certificate. They cause browsers to display warning messages that inform the user that the certificate has not been issued by an entity that the user has chosen to trust.

Trusted third-party certification authorities, such as VeriSign or Thawte, use their trusted position to issue trusted SSL certificates. SSL certificates issued by trusted certification authorities do not display a warning and transparently establish a secure link between a website and a browser.

Browsers and operating systems include a pre-installed list of trusted certification authorities, known as the Trusted Root CA (Certificate Authority) store. As Microsoft and Mozilla provide the major operating systems and browsers, they elect whether or not to include the certification authority into the Trusted Root CA store, thereby giving the certification authority its trusted status. Java™ Runtime Environment provides a set of trusted certificated authorities, as selected by Sun Microsystems.

For the purpose of establishing SSL connections between the browser and Console, QRadar trusts any certificate that is issued, directly or indirectly, from a trusted root CA in the browser and Java™ keystore.

For the purpose of establishing all internal SSL connections between components, QRadar does not trust certificates issued by a recognized authority. Instead, you must use the web server certificate pre-installed on the Console.

Replacing the default SSL certificate

You can replace the untrusted SSL certificate with either a self-signed certificate or a certificate issued by a trusted third-party certifying authority.

Before you begin

CAUTION: Do not encrypt the private key when installing or replacing an SSL certificate. If you encrypt the private key, your Console system pauses until you manually enter a password each time the Console restarts. This delay can disrupt event collection.

About this task

Note: SSL certificates issued from some vendors, such as VeriSign, require an intermediate certificate. You must download the intermediate certificate from the vendor and use it during the configuration.

To replace the SSL certificate on your QRadar SIEM Console follow one of the two procedures below:

Procedure when an Intermediate certificate is required:

- Step 1** Obtain a certificate from a trusted certificate authority.
- Step 2** Using SSH, log in to your QRadar SIEM Console as the root user:
Username: **root**
Password: **<password>**
- Step 3** Type the following command:

```
/opt/qradar/bin/install_ssl_cert.sh -i
```
- Step 4** Type the directory path for your private key file. Press Enter on your keyboard.
- Step 5** Type the directory path for your public key file. Press Enter on your keyboard.
- Step 6** Type the directory path for your intermediate certificate. Press Enter on your keyboard.
- Step 7** Type **y** to continue. Press Enter on your keyboard.

Procedure when an Intermediate certificate is not required:

- Step 1** Obtain a certificate from a trusted certificate authority.
- Step 2** Using SSH, log in to your QRadar SIEM Console as the root user:
Username: **root**
Password: **<password>**
- Step 3** Type the following command:

```
    /opt/qradar/bin/install_ssl_cert.sh -b
```
- Step 4** At the **Path to private key file** prompt, type the directory path for your private key file. Press Enter on your keyboard.
- Step 5** Type the directory path for your public key file. Press Enter on your keyboard.
- Step 6** Type **x** to continue. Press Enter on your keyboard.

What to do next:

Type the following command to restart the host context process on all non-Console systems in your deployment:

```
service hostcontext restart
```


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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