Tenable and IBM QRadar SIEM v3.0 Integration Guide

Last Revised: December 15, 2023

Table of Contents

Welcome to Tenable for IBM QRadar SIEM **3**

Install Tenable App for QRadar **4**

Configuration **6**

Configure QRadar with Tenable Security Center 7

Configure QRadar with Tenable Vulnerability Management 10

Install the OT Security Log Extension for QRadar 13

Configure QRadar with OT Security 14

Send OT Security Alerts to QRadar 18

Install the Tenable Identity Exposure Log Extension for QRadar 23

Configure QRadar with Tenable Identity Exposure 24

Send Tenable Identity Exposure Alerts to QRadar 28

Configure Rule-Based Scanning **32**

Rule Wizard: Rule Response Configuration 34

Configure Right-Click Scanning **36**

View Offenses **39**

Uninstall **40**

Troubleshooting **41**

Welcome to Tenable for IBM QRadar SIEM

This document provides information and steps for integrating Tenable Vulnerability Management, Tenable Identity Exposure, Tenable OT Security, and Tenable Security Center applications with IBM QRadar Security Information and Event Management (SIEM).

IBM QRadar SIEM (QRadar) is a network security management platform that provides situational awareness and compliance support. It collects, processes, aggregates, and stores network data in real time. QRadar has a modular architecture that provides real-time visibility of your IT infrastructure that you can use for threat detection and prioritization.

You can use the customized Tenable applications in QRadar. to obtain vulnerability summaries for Tenable Vulnerability Management, Tenable Identity Exposure, Tenable OT Security, or Tenable Security Center that correspond to the source IP address for each offense.

For additional information about IBM QRadar SIEM, see the IBM QRadar SIEM website.

Install Tenable App for QRadar

Complete the following steps to install the **Tenable App For QRadar**.

Before you begin:

- Ensure you have a Tenable Vulnerability Management, Tenable Identity Exposure, Tenable OT Security, or Tenable Security Center account with administrative privileges.
- Ensure you have QRadar 7.4.1+
- Download the Tenable App For QRadar v4.2.1 from the IBM App Exchange website.

To upgrade the Tenable App For Qradar:

1. Log in to the IBM QRadar SIEM Console.
2. Click the ☰ button.

   The **Menu** options appear.
3. Click **Admin**.

   The **Admin** options appear.
4. In the **Systems Configuration** section, click **Extensions Management**.

   The **Extensions Management** window appears.
5. Click **Add**.

   The **Add a New Extension** window appears.
6. Click **Browse** and select the **Tenable App For QRadar** file.
7. Click **Add**.

   A **Confirm Installation** window appears.
8. Click **Install**.

   A validation window appears.
9. After the validation completes, the **Tenable App For QRadar** window appears.

10. Click **Install**.

    A validation window appears.

    A docker container is created.

    After the validation completes, the **Tenable App** appears in the list of **Applications Packages** on the **Tenable App For QRadar** window.

11. Click **OK**.

12. Clear the browser cache and refresh the page.

    The **Tenable App For QRadar** appears on the **Extensions Management** page.

Configuration

You can configure QRadar with Tenable Vulnerability Management or Tenable Security Center. Click the corresponding link for configuration steps.

- Configure QRadar with Tenable Security Center
- Configure QRadar with Tenable Vulnerability Management
- Configure QRadar with OT Security
- Tenable Identity Exposure Configuration

Configure QRadar with Tenable Security Center

Required User Role: Security Analyst

Note: In Tenable App for QRadar v2 and later, you must authenticate using an API Access Key and Secret Key. For more information, see the Generate API section in the *Tenable Security Center User Guide*.

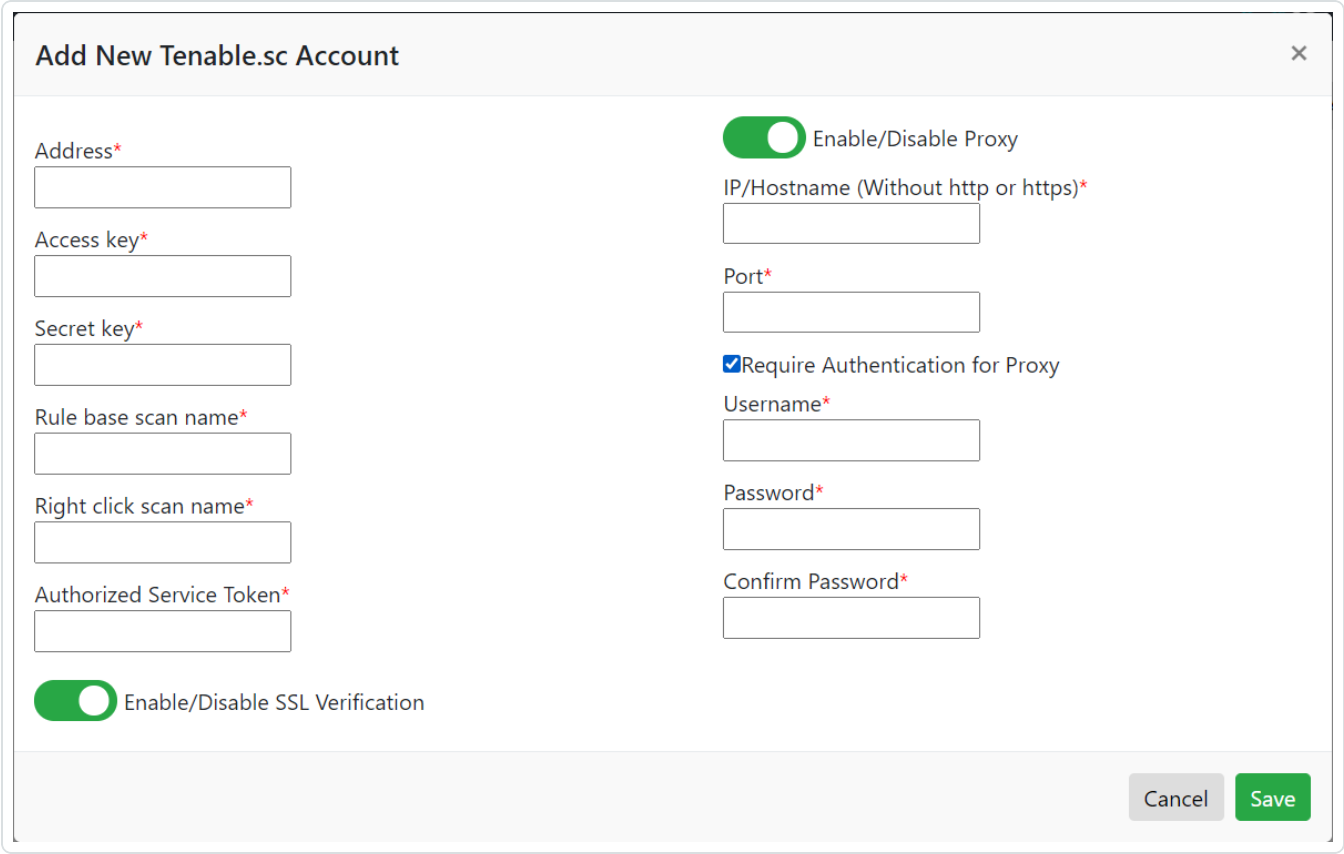
To configure **TenableApp For Qradar** v4.2.1:

1. Log in to the IBM QRadar SIEM console.
2. Click the ☰ button.

   The **Menu** options appear.
3. Click **Admin**.

   The **Admin** options appear.
4. Scroll to the **Tenable** section.
5. Click **Tenable App Settings**.

   The **Tenable Configuration** appears.
6. Click **Add Tenable Security Center Account**.
7. Configure the settings for Tenable Security Center.



a. In the **Address** box, enter the IP address used to access Tenable Security Center.

b. In the **Access Key** box, enter your generated Tenable Security Center access key. For more information, see Enable API Key Authentication and Generate API Keys.

c. In the **Secret Key** box, enter your generated Tenable Security Center secret key. For more information, see Enable API Key Authentication and Generate API Keys.

d. In the **Rule based Scan Name** box, enter a scan name that exists in Tenable Security Center.

> **Note:** If a scan does not exist, you must create one. The scan needs to be associated to the Tenable user that Qradar logs into the Tenable product with. This scan is used for the rule-based scan function.

e. In the **Right Click Scan Name** box, enter a scan name that exists in Tenable Security Center.

> **Note:** If a scan does not exist, you must create one. The scan needs to be associated to the Tenable user that Qradar logs into the Tenable product with. This scan is used for the right-click scan function.

> **Note:** This scan can be the same as the **Rule Based Scan Name**.

f. In the **Authorized Service Token** box, enter your Qradar authorized service token. Authorized tokens are found under **User Management** in the **Authorized Services** section.

   See the IBM QRadar SIEM website for steps on creating an authorized service token.

g. (Optional) Click the toggle to enable or disable SSL verification. It may be required to enter the hostname of the machine hosting Tenable Security Center in the **Address** box.

h. (Optional) Connect to Tenable Security Center using a proxy.

   - Click the **Enable/Disable Proxy** toggle.
   - Type an **IP/Hostname**.
   - Type a **Port**.
   - (Optional) Select the **Require Authentication for Proxy** check box.
   - If you required authentication for proxy, type the proxy **Username**, **Password**, and **Confirm Password**.

8. Click **Save**.

   The **Tenable Configuration** window appears and displays a success message.

9. Create an **Offense Rule** to generate offenses for the offense rule. For steps on creating offense rules, see the IBM QRadar SIEM documentation.

Configure QRadar with Tenable Vulnerability Management

> **Required Tenable Vulnerability Management User Role:** Basic, VM Scan Operator, VM Standard, VM Scan Manager, or Administrator

Complete the following steps to configure the **Tenable App For QRadar** to sync data from Tenable Vulnerability Management to QRadar.

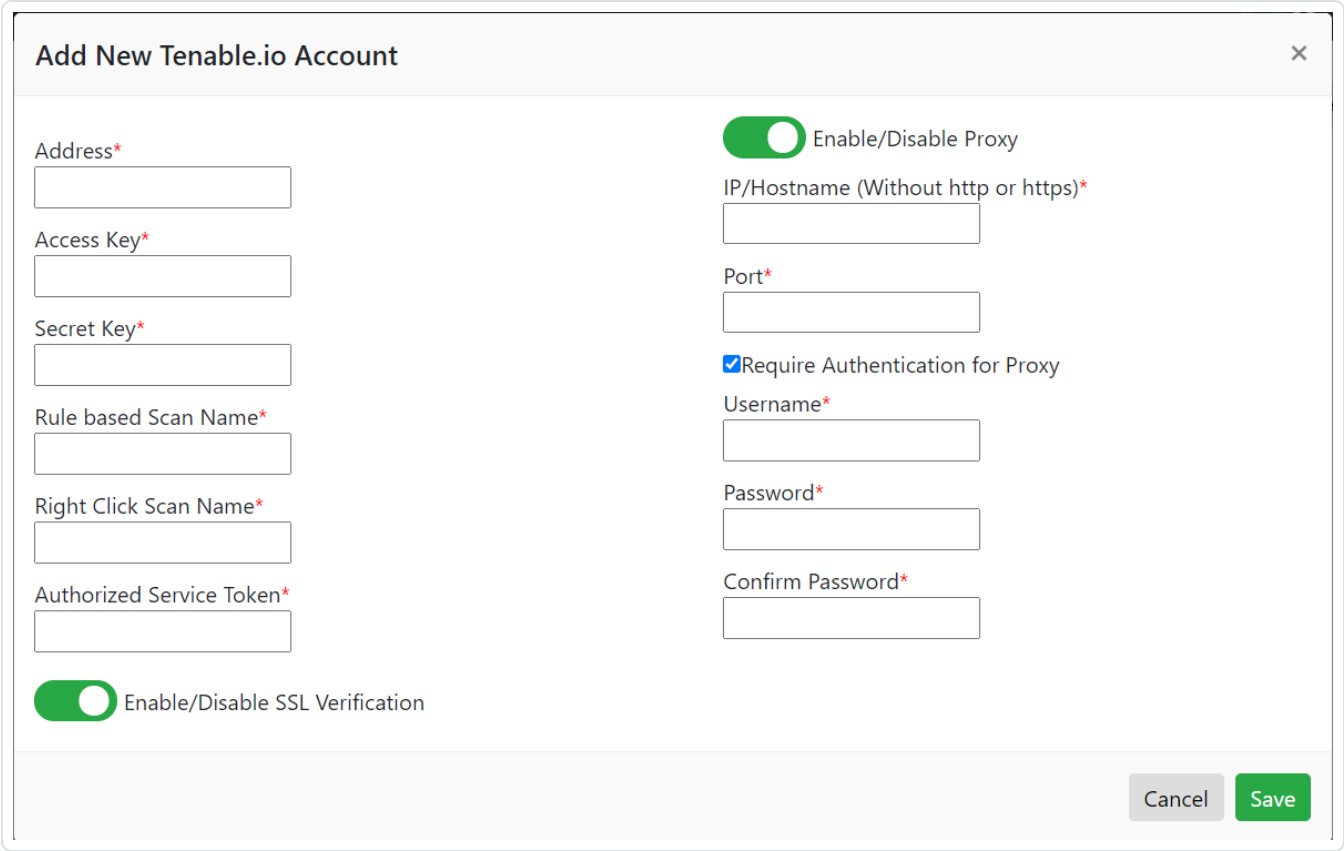
To configure the **Tenable App For Qradar**:

1. Log in to the IBM QRadar SIEM Console.
2. Click the ☰ button.

   The **Menu** options appear.
3. Click **Admin**.

   The **Admin** options appear.
4. Scroll to the **Tenable** section.
5. Click **Tenable App Settings**.

   The **Tenable Configuration** appears.
6. Click **Add Tenable Vulnerability Management Account**.
7. Configure the settings for Tenable Vulnerability Management.



a. In the **Address** box, enter the the domain name used to access Tenable Vulnerability Management.

b. In the **Access Key** box, enter the API access key for Tenable Vulnerability Management. For information on generating API keys see the Generate API Key section in the *Tenable Vulnerability Management User Guide*.

c. In the **Secret Key** box, enter the API secret key for Tenable Vulnerability Management. For information on generating API keys see the Generate API Key section in the *Tenable Vulnerability Management User Guide*.

d. In the **Rule based Scan Name** box, enter a scan name that exists in Tenable Vulnerability Management.

> **Note:** If a scan does not exist, you must create one. The scan needs to be associated to the Tenable user that Qradar logs into the Tenable product with. This scan is used for the rule-based scan function.

e. In the **Right Click Scan Name** box, enter a scan name that exists in Tenable Vulnerability Management.

> **Note:** If a scan does not exist, you must create one. The scan needs to be associated to the Tenable user that Qradar logs into the Tenable product with. This scan is used for the right-click scan function.

> **Note:** This scan can be the same as the **Rule Based Scan Name**.

f. In the **Authorized Service Token** box, enter your QRadar authorized service token. Authorized tokens are found under **User Management** in the **Authorized Services** section.

   See the IBM QRadar SIEM website for steps on creating an authorized service token.

g. (Optional) Click the toggle to enable or disable SSL verification.

h. (Optional) Connect to Tenable Vulnerability Management using a proxy.

   - Click the toggle to **Enable/Disable Proxy**.
   - Type an **IP/Hostname**.
   - Type a **Port**.
   - (Optional) Select the **Require Authentication for Proxy** check box.
   - If you required authentication for proxy, type the proxy **Username**, **Password**, and **Confirm Password**.

8. Click **Save**.

   The **Tenable Configuration** window appears and displays a success message.

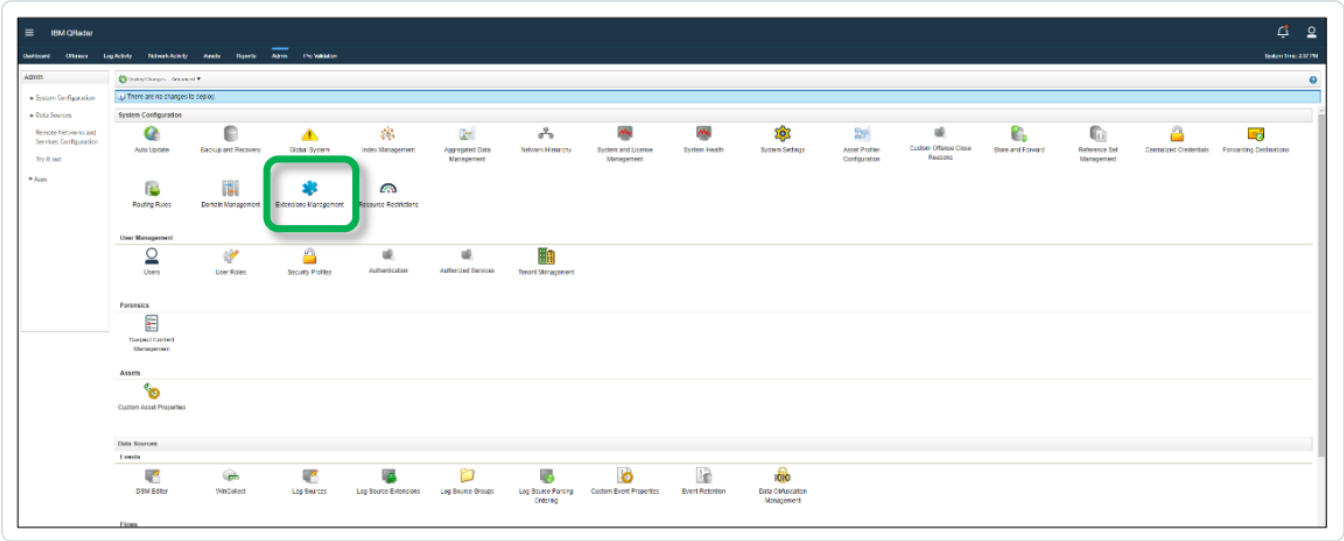
9. Create an **Offense Rule** to generate offenses for the offense rule. For steps on creating offense rules, see the IBM QRadar SIEM documentation.

Install the OT Security Log Extension for QRadar

In order to integrate OT Security with your QRadar system, you need to download the OT Security extension from the IBM X-Force Exchange and install it.

To download and install the extension:

1. In the IBM QRadar console, open the **Admin** tab.
2. In the **System Configuration** section, click on **Extension Management**.



3. In the **Extension Management** window, click **Add** and select the *TenableotCustom_ext* archive file.
4. Select the **Install Immediately** checkbox to install the extension immediately. Before the extension is installed, a preview list of the content items is displayed.

What to do next:

- Configure QRadar with Tenable.ot Security
- Send Alerts to QRadar

Configure QRadar with OT Security

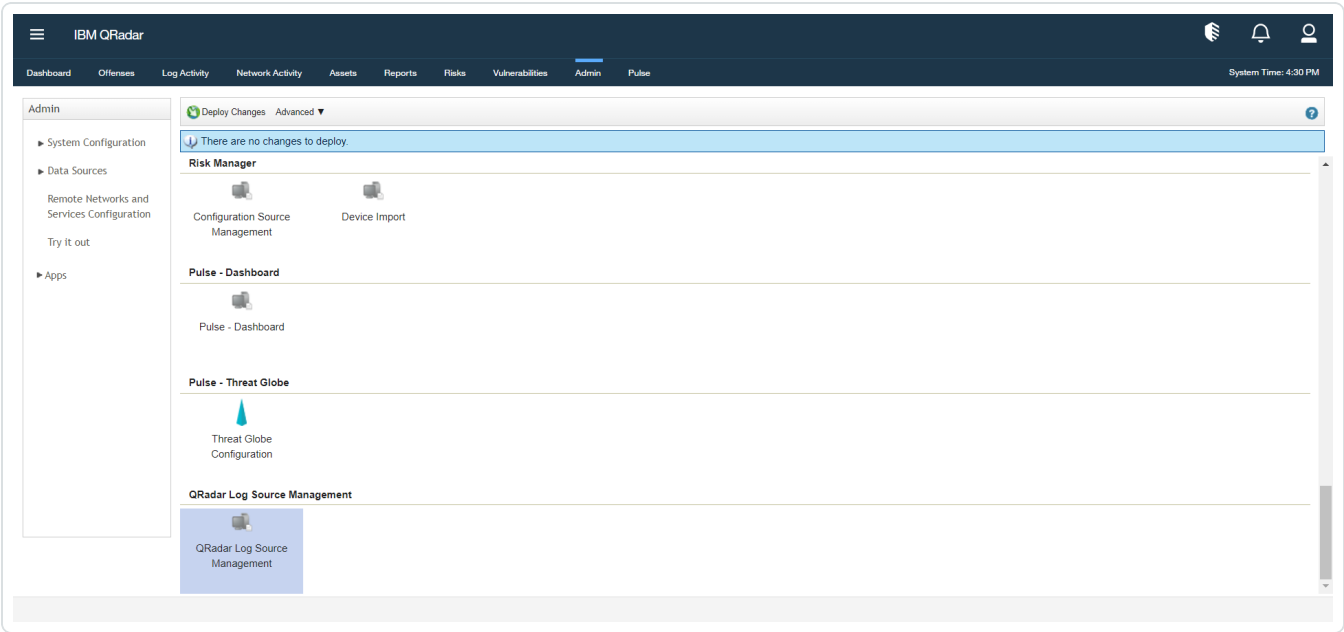
Overview

OT Security enables operational engineers and cybersecurity personnel to gain visibility into, and control over, Industrial Control System (ICS) networks. Through its policies and alerts mechanism, OT Security generates real-time alerts that are accurate, actionable, and customized for each network and its unique needs. OT Security detects unauthorized changes made to industrial processes in ICS networks. It can produce various alerts on changes in the configuration of controllers (PLC, DCS, IED), details, communications, and alert on a range of network attack vectors that may threaten industrial processes. OT Security also actively verifies the controllers' configuration and alerts on changes made to them. OT Security reports these alerts to QRadar via Syslog. For each individual policy, users can decide whether an alert should be sent to QRadar via Syslog; this offers them maximum control over which information is being sent.

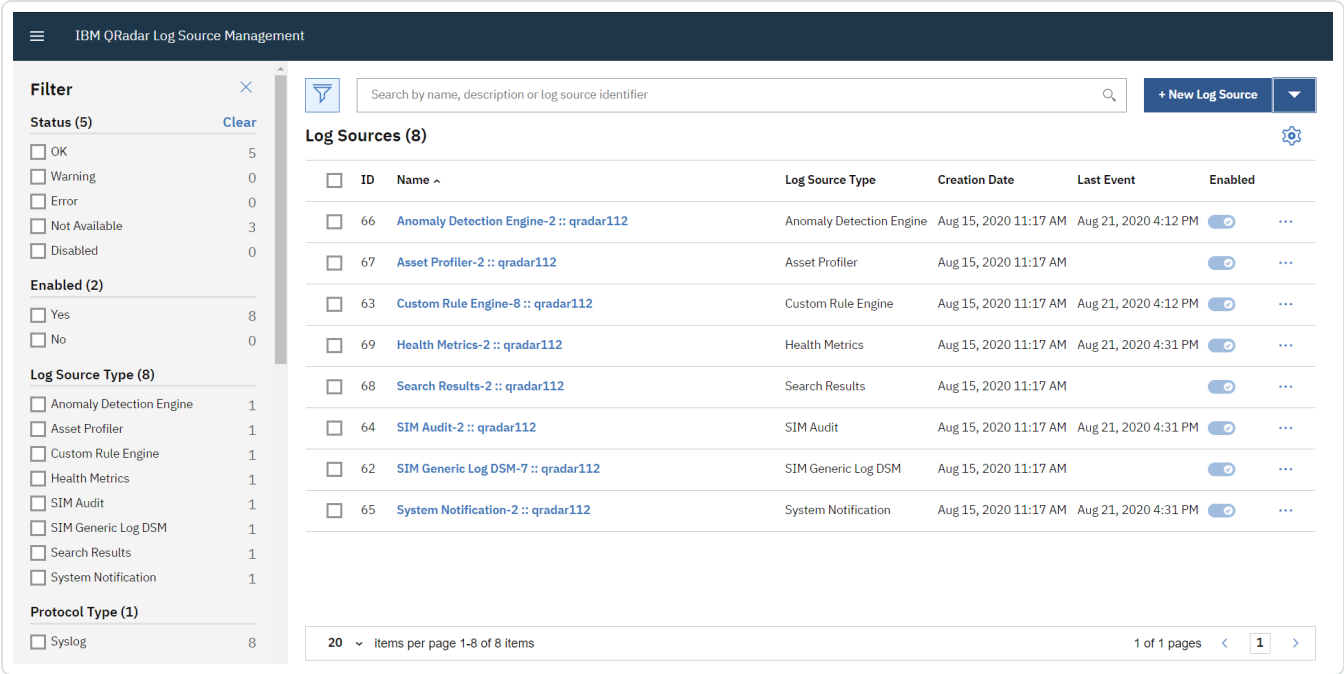
To configure QRadar with OT Security you must create a log source through the Log Source Management application for ingesting data from the Tenable platform.

Complete the following steps to configure the OT Security App For QRadar v2.0:

1. Go to the **QRadar Log Source Management** application in the **Admin** panel.



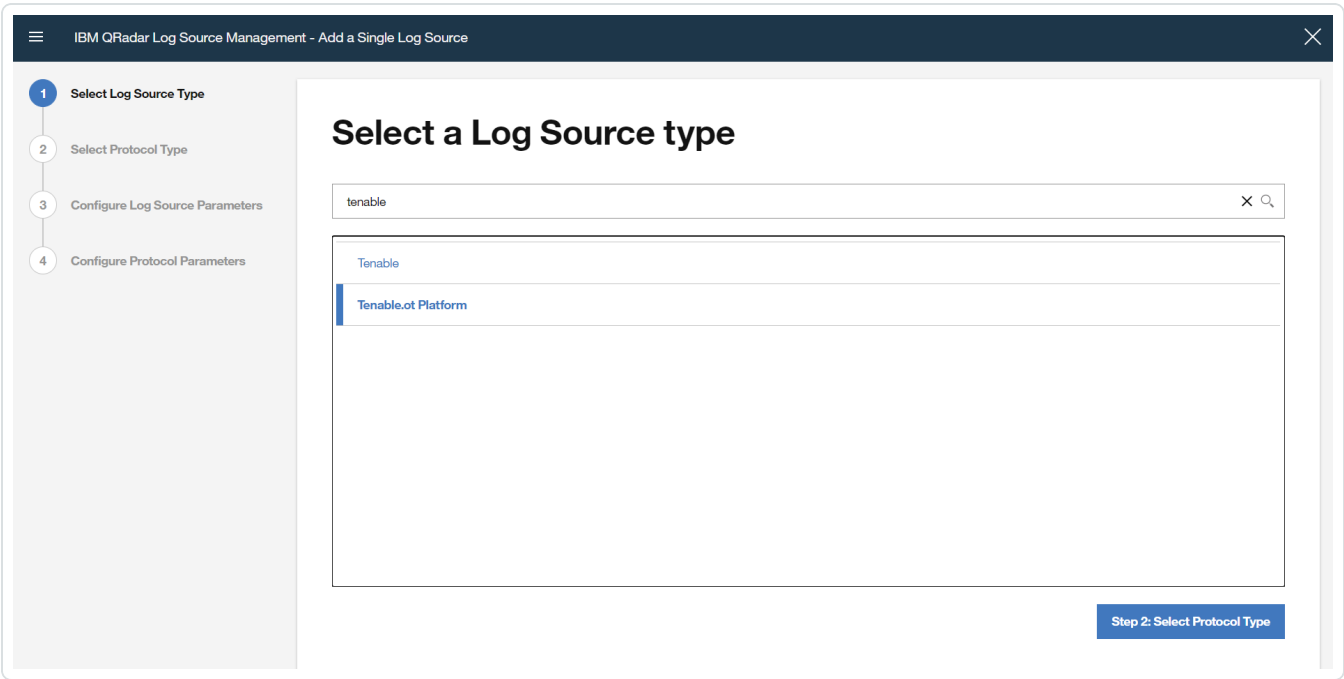
The **Log Source Management** page appears.



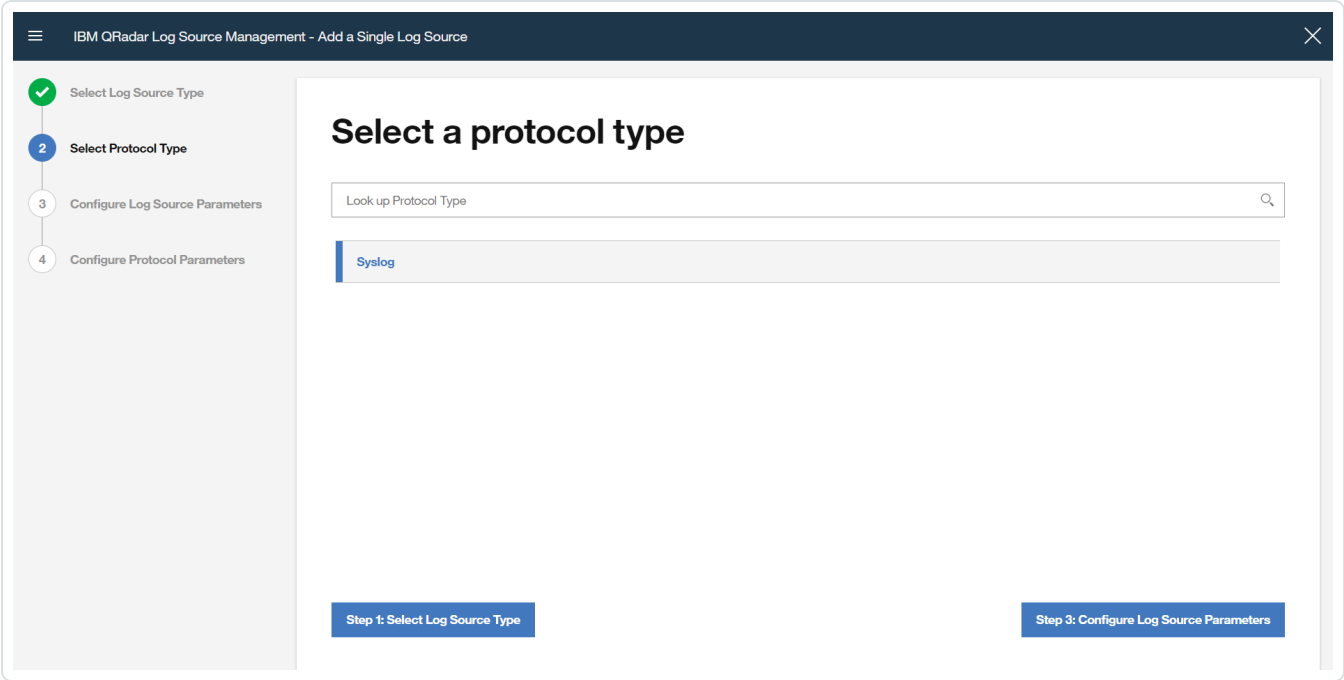
2. Click **+ New Log Source** in the upper-right.

   The **Log Source Management** page appears.

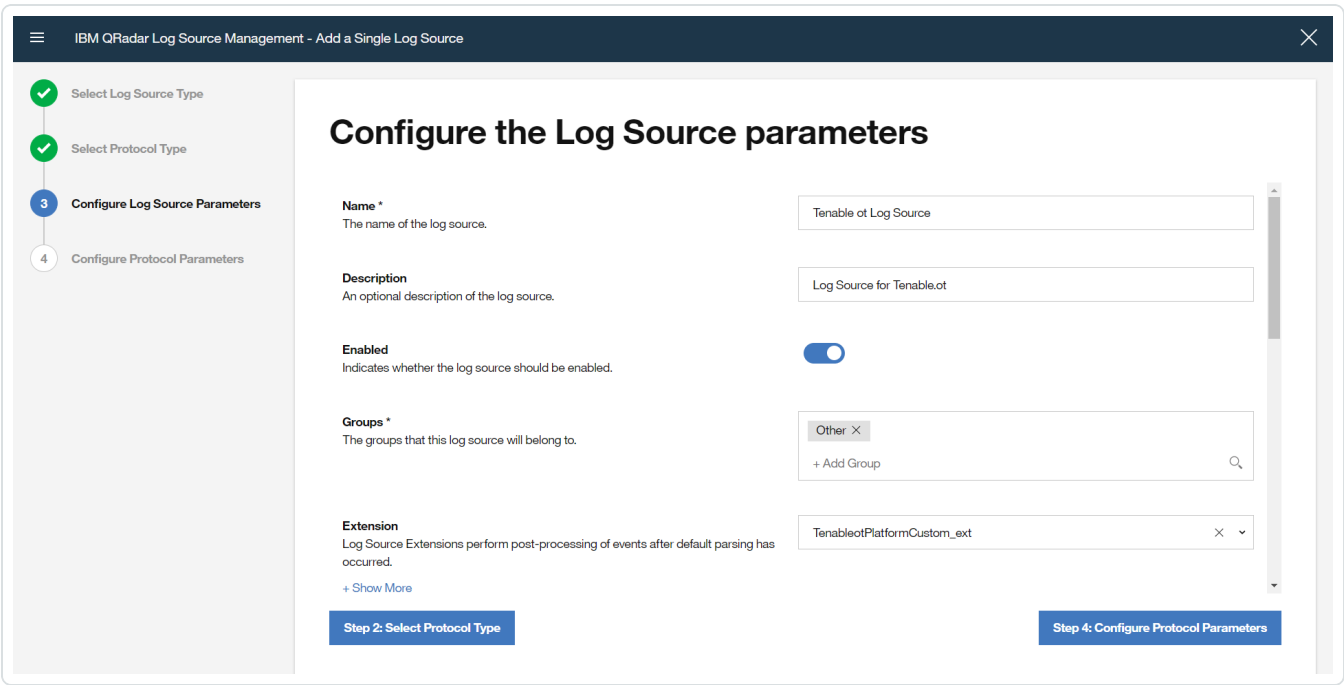
3. Select **Tenable.ot Platform** as the **Log Source type**.



4. Select **Syslog** as the **protocol type**.



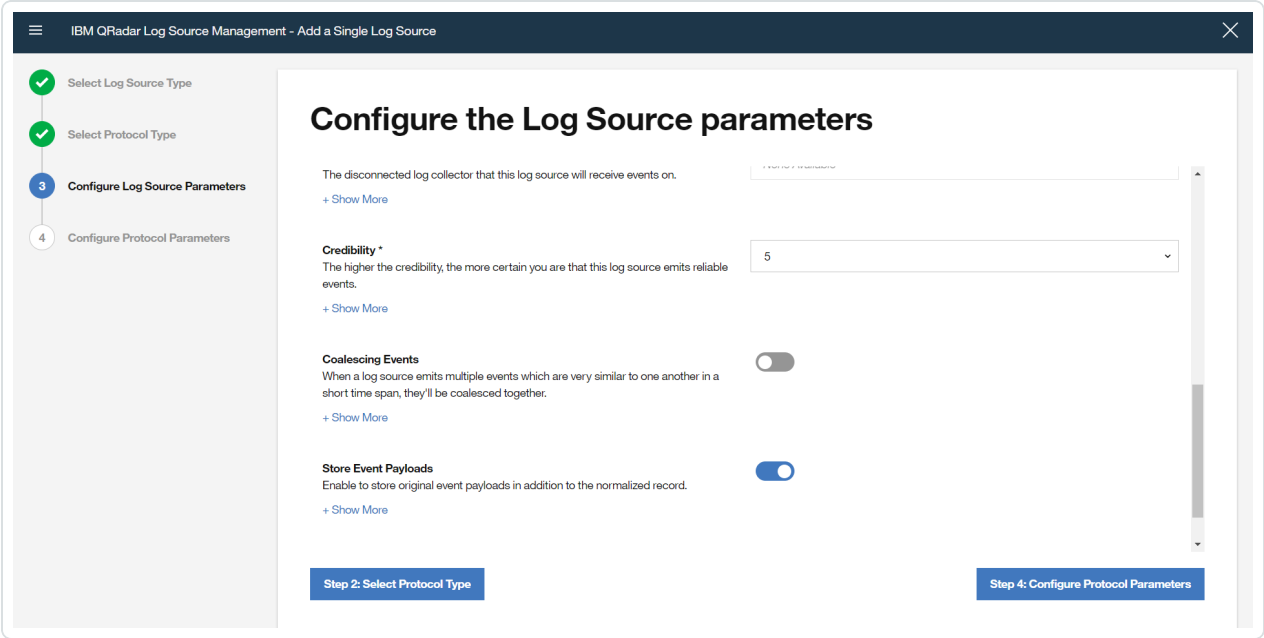
5. In the **Configure Log Source Parameters** section, enter the name of the log source in the **Name** box.



   a. Enable the log source by clicking the **Enabled/Disabled** switch to **Enabled**.

   b. Select **TenableotPlatformCustom_ext** as the log source extension.

c. Disable **Coalescing Events** by clicking the **Enabled/Disabled** switch to **Disabled**



6. In the **Configure Protocol Parameters** section, enter the **Log Source Identifier**. This Identifier is the hostname/IP address from the data to be forwarded.
7. Click **Finish**.

What to do next:

- Send Alerts to QRadar

Send OT Security Alerts to QRadar

In order to send OT Security alerts to QRadar, you first need to configure OT Security for your QRadar system. Then, for each relevant policy, you can specify QRadar as a target for receiving alerts.

To connect your QRadar Syslog server to OT Security:

1. In the OT Security console, under **Local Settings**, go to the **Servers > Syslog Servers** screen.
2. Click **+ Add Syslog Server**. The **Syslog Server** configuration window is displayed.

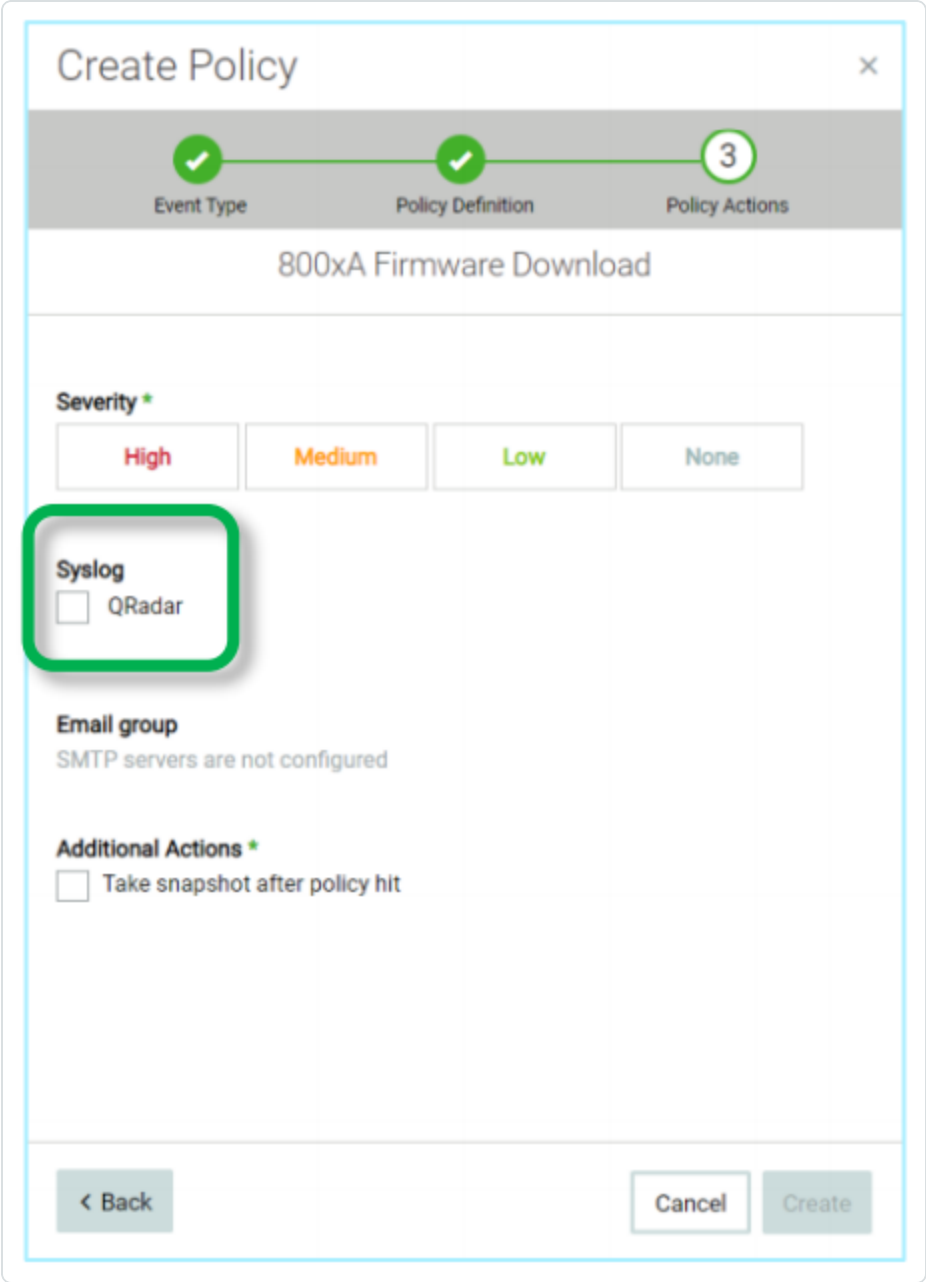
3. In the **Server Name** field, enter a name for your QRadar system.
4. In the **Hostname\IP** field, enter the IP address of your QRadar system.

5. In the **Port** field, enter the port number on the QRadar system to which the events will be sent. (Default value is 514)
6. In the **Transport** field, select from the drop-down list the transport protocol to be used. (Options are **TCP** or **UDP**)
7. Click **Send Test Message** to send a test message to verify that the configuration was successful, and check if the message has arrived. If the message did not arrive, then troubleshoot to discover the cause of the problem and correct it.
8. Click **Save**.

Specifying QRadar as a Target for Policy Alerts

To configure a policy to send alerts to QRadar:

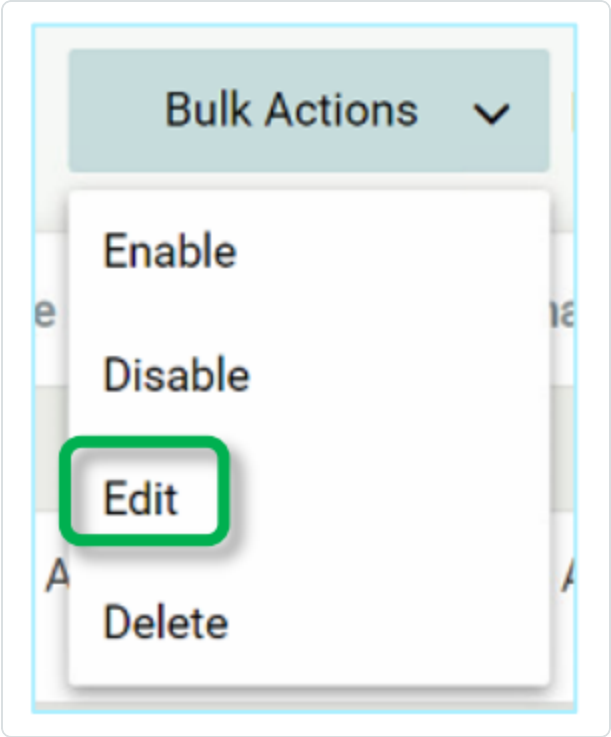
1. Create a new Policy or edit an existing Policy.
2. Fill in all fields as needed.
3. On the **Policy Actions** page, under **Syslog**, select your QRadar system.



4. Click **Create** (or **Save** if you are editing a Policy).

To configure multiple Policies (bulk process) to send alerts to QRadar:

1. On the **Policies** screen, select the check box next each of the desired Policies.
2. Click on the **Bulk Actions** menu and select **Edit** from the drop-down list.



3. The **Bulk Edit** screen is shown with the Policy Actions available for bulk editing.

4. Under **Syslog**, select the check box next to your QRadar system.
5. Click **Save**.

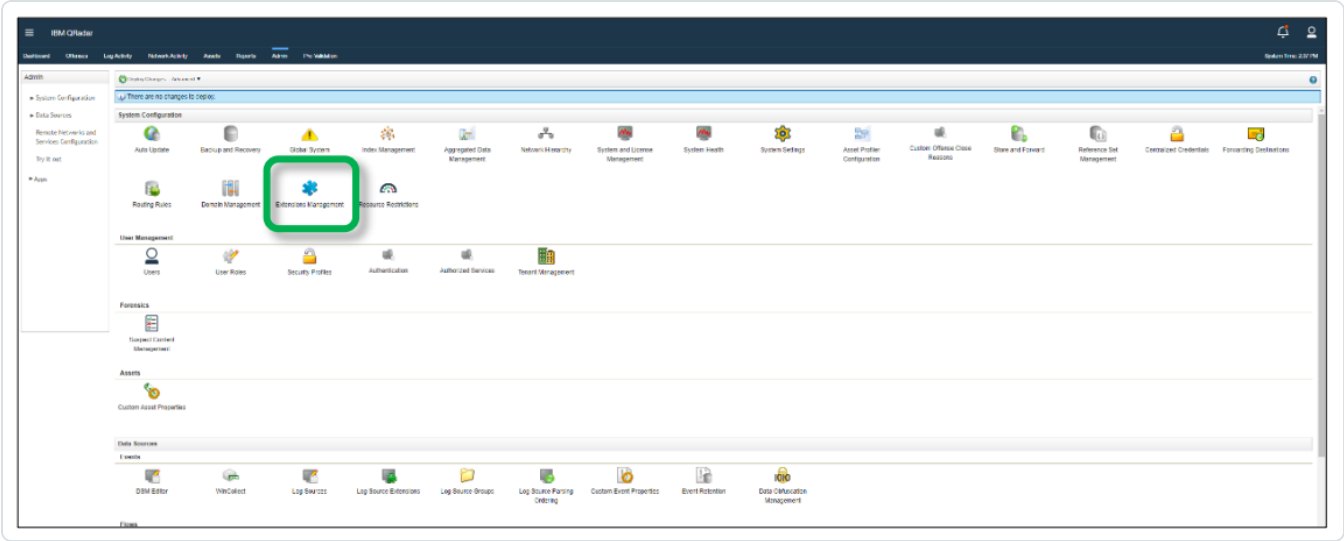
   The Policies are saved with the new configuration.

Install the Tenable Identity Exposure Log Extension for QRadar

In order to integrate Tenable Identity Exposure with your QRadar system, you need to download the Tenable Identity Exposure extension from the IBM X-Force Exchange and install it.

To download and install the extension:

1. In the IBM QRadar console, open the **Admin** tab.
2. In the **System Configuration** section, click on **Extension Management**.



3. In the **Extension Management** window, click **Add** and select the **TenableadCustom_ext** archive file.
4. Select the **Install Immediately** checkbox to install the extension immediately.

   Before the extension is installed, a preview list of the content items appears.

What to do next:

- Configure QRadar with Tenable Identity Exposure Security
- Send Alerts to QRadar

Configure QRadar with Tenable Identity Exposure

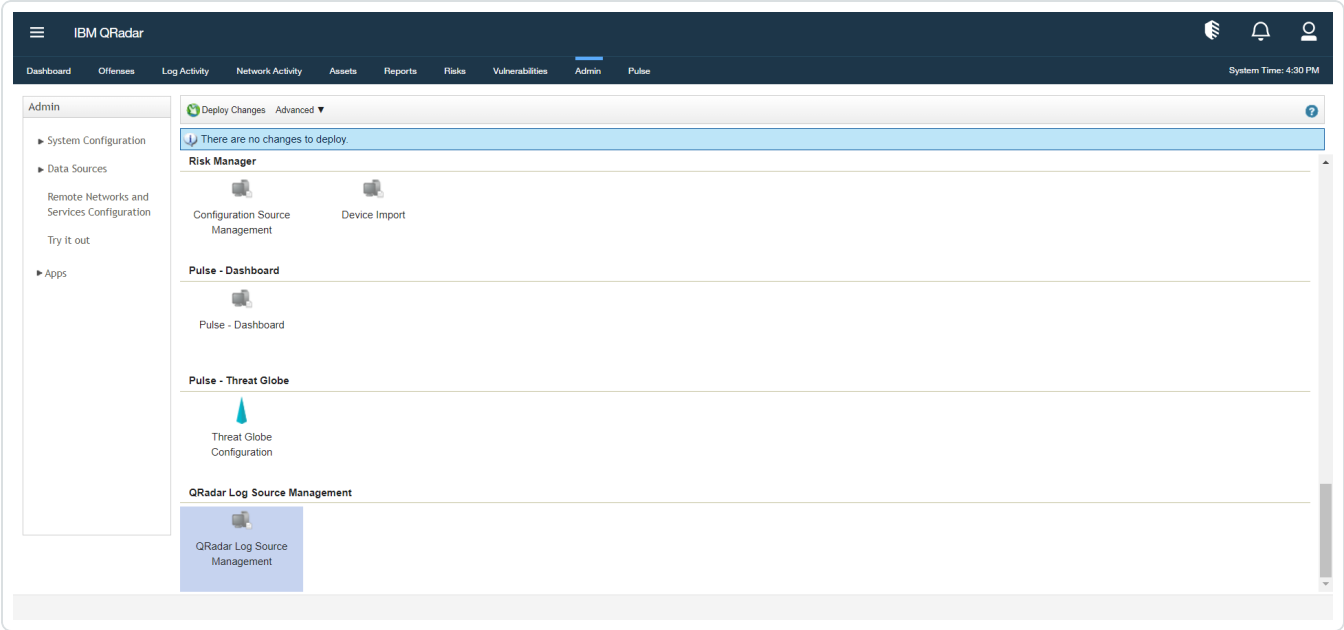
Overview

Tenable Identity Exposure features allow users to anticipate threats, detect breaches, and respond to incidents and attacks. Through its policies and alerts mechanism, Tenable Identity Exposure generates real-time alerts that are accurate, actionable, and customized for each network and its unique needs. Tenable Identity Exposure reports these alerts to QRadar via Syslog. For each individual policy, users can decide whether an alert should be sent to QRadar via Syslog; this offers them maximum control over which information is being sent.

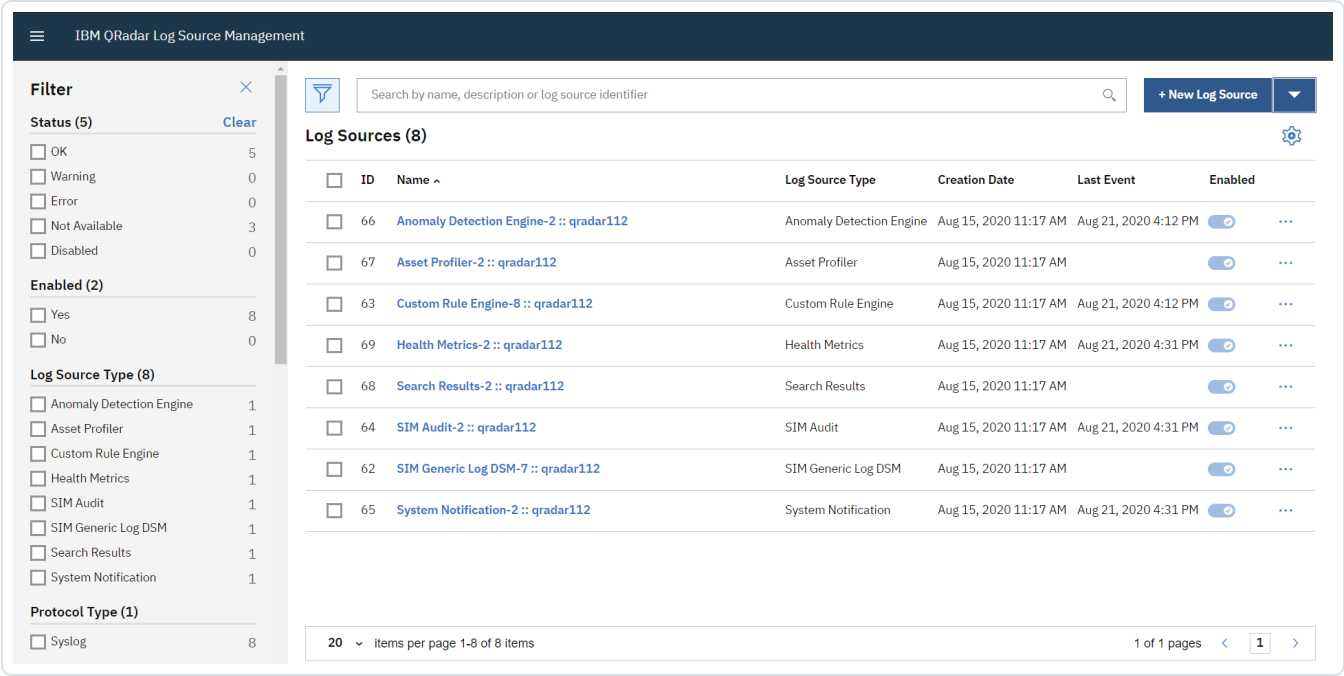
To configure QRadar with Tenable Identity Exposure you must create a log source through the Log Source Management application for ingesting data from the Tenable platform.

Complete the following steps to configure the Tenable Identity Exposure App For QRadar:

1. Go to the **QRadar Log Source Management** application in the **Admin** panel.



The **Log Source Management** page appears.

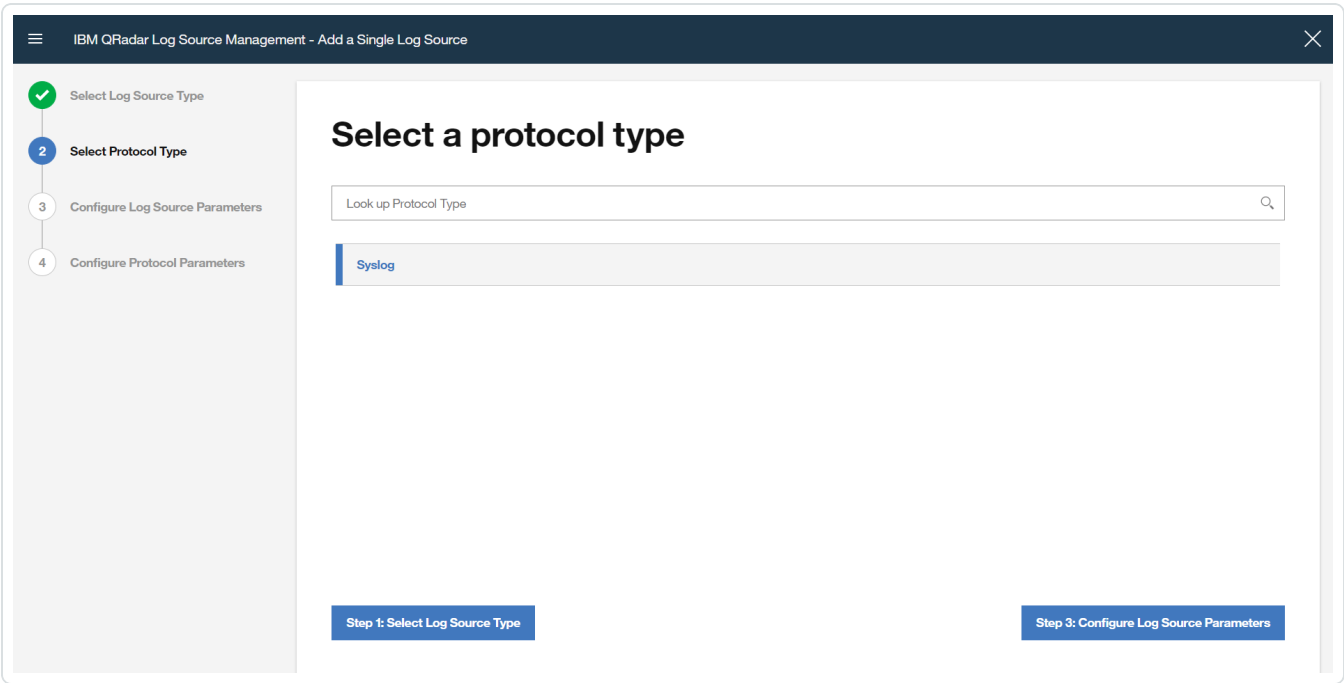


2. Click **+ New Log Source** in the upper-right.

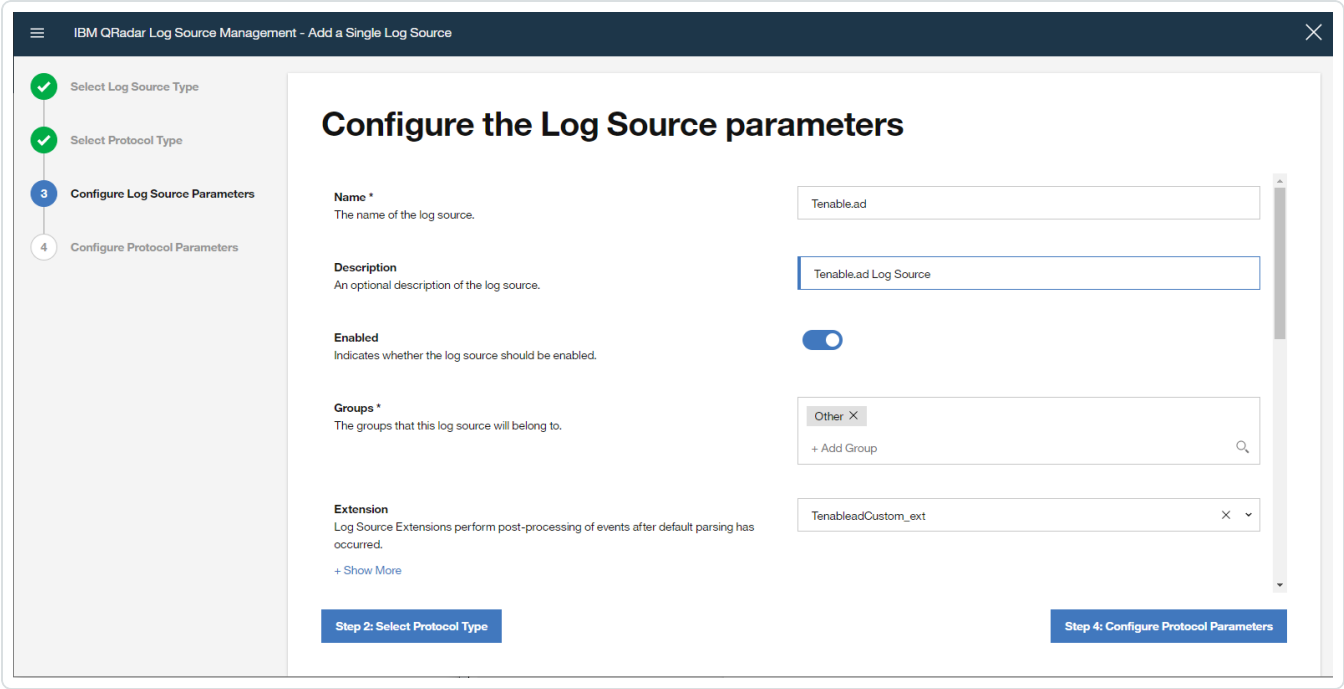
   The **Add a Single Log Source** page appears.

3. Select **Tenable.ad** as the **Log Source type**.

4. Select **Syslog** as the **protocol type**.



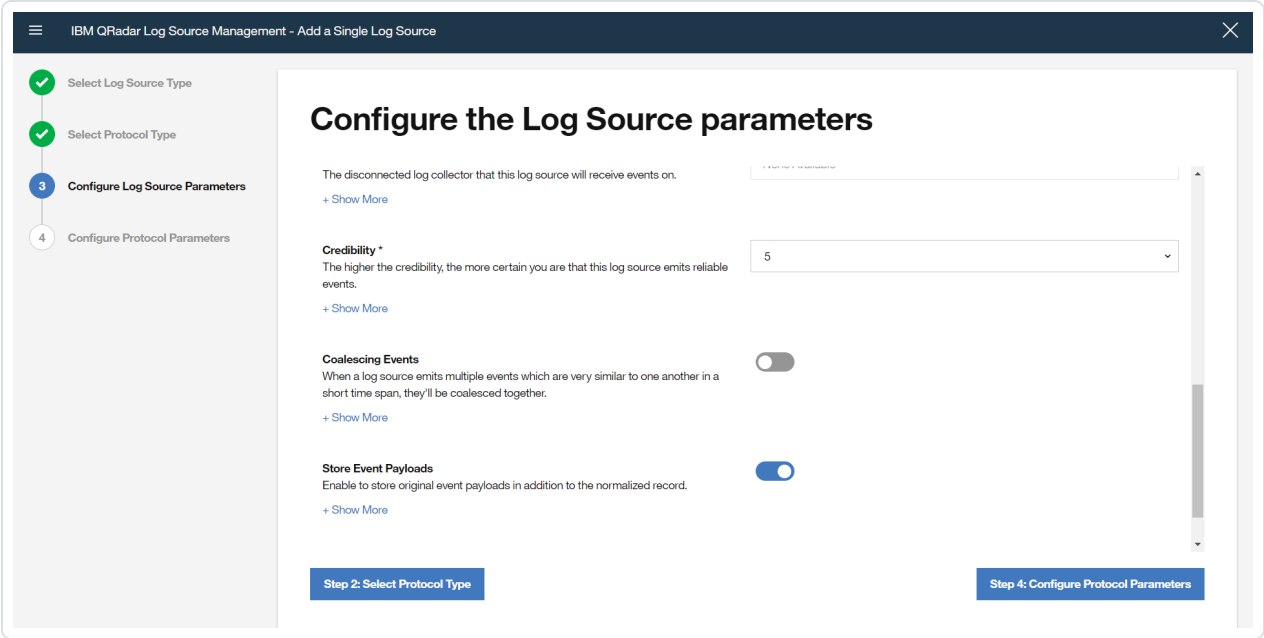
5. In the **Configure Log Source Parameters** section, enter the name of the log source in the **Name** box.



   a. Enable the log source by clicking the **Enabled/Disabled** switch to **Enabled**.

   b. Select **TenableadCustom_ext** as the log source extension.

c. Disable **Coalescing Events** by clicking the **Enabled/Disabled** switch to **Disabled**.



6. In the **Configure Protocol Parameters** section, enter the **Log Source Identifier**. This Identifier is the hostname/IP address from the data to be forwarded.
7. Click **Finish**.

What to do next:

- Send Alerts to QRadar

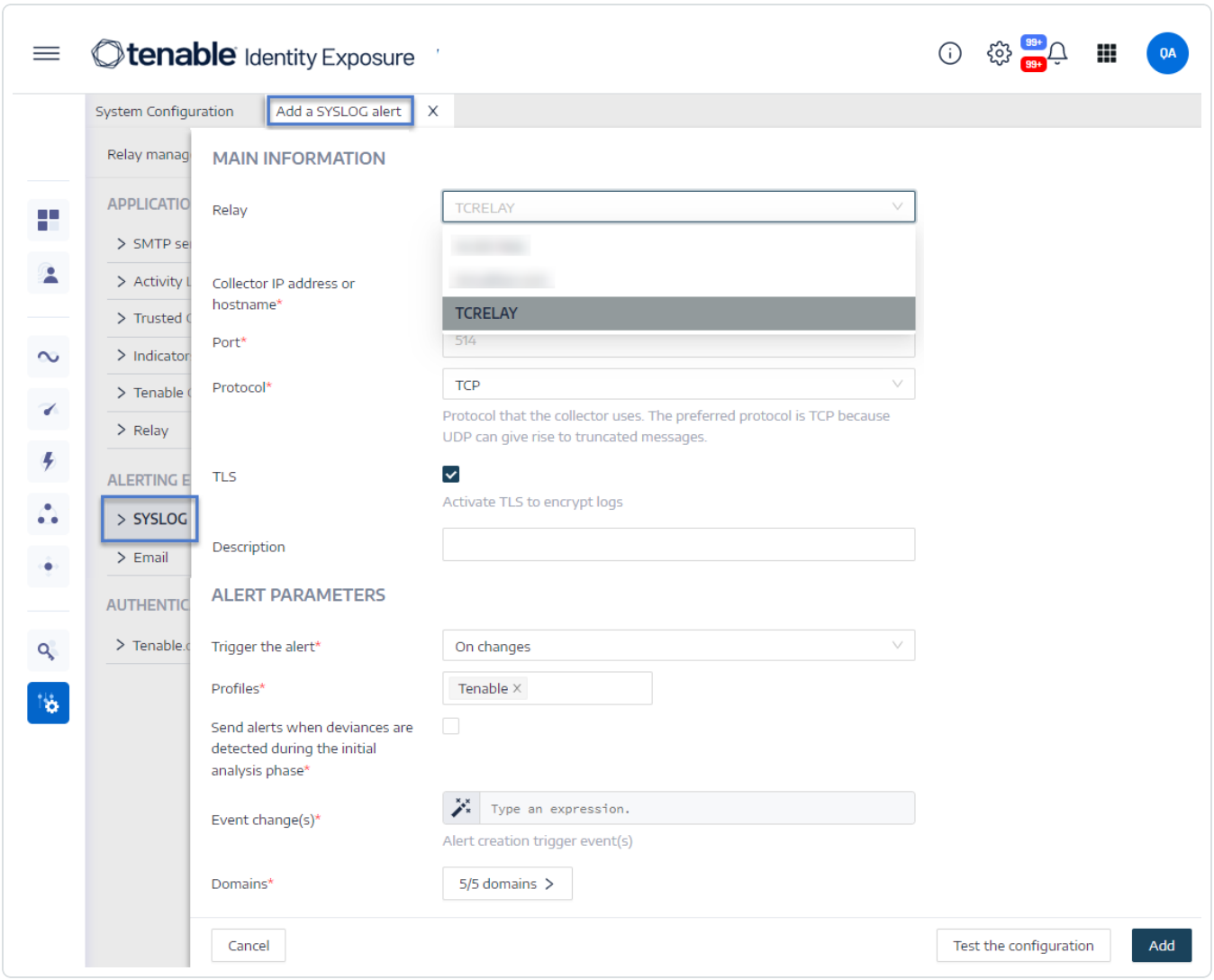
Send Tenable Identity Exposure Alerts to QRadar

In order to send Tenable Identity Exposure alerts to QRadar, you first need to configure Tenable Identity Exposure for your QRadar system. Then, for each relevant policy, you can specify QRadar as a target for receiving alerts.

To configure the Syslog server to Tenable Identity Exposure:

1. In Tenable Identity Exposure, click **System** > **Configuration** > **Syslog**.
2. Click the **Add a Syslog alert** button on the right.

   The **Add a Syslog alert** pane appears.



3. Under the **Main Information** section, provide the following:

- **If your network uses Secure Relay:** In the **Relay** box, click the arrow to select a Relay to communicate with your SIEM from the drop-down list.
- In the **Collector IP address or hostname** box, type the server IP or hostname that receives notifications.
- In the **Port** box, type the port number for the collector.
- In the **Protocol** box, click the arrow to select either UDP or TCP.
  - If you choose TCP, select the **TLS** option checkbox if you want to enable the TLS security protocol to encrypt the logs.

4. In the **Trigger the alert** drop-down list, select one:
   - **On changes**: Tenable Identity Exposure sends out a notification whenever an event that you specified occurs.
   - **On each deviance**: Tenable Identity Exposure sends out a notification on each deviant IoE detection.
   - **On each attack**: Tenable Identity Exposure sends out a notification on each deviant IoA detection.
   - **On each health check status changes**: Tenable Identity Exposure sends out a notification whenever a health check status changes.
   - In the **Description** box, type a brief description for the collector.
5. In the **Profiles** box, click to select the profile to use for this Syslog alert (if applicable).
6. **Send alerts when deviances are detected during the initial analysis phase**: do one of the following (if applicable):
   - Select the checkbox: Tenable Identity Exposure sends out a large volume of email notifications when a system reboot triggers alerts.
   - Unselect the checkbox: Tenable Identity Exposure does not send out email notifications when a system reboot triggers alerts.
7. **Severity threshold**: click the arrow of the drop-down box to select the threshold at which Tenable Identity Exposure sends alerts (if applicable).
8. Depending on the alert trigger you selected previously:

- **Event changes**: If you set alerts to trigger **on changes**, type an expression to trigger the event notification.

  You can either click on the icon to use the search wizard or type a query expression in the search box and click **Validate**. For more information, see Customize Trail Flow Queries.

- **Indicators of Exposure**: If you set alerts to trigger **on each deviance**, click the arrow next to each severity level to expand the list of Indicators of Exposure and select the ones for which to send alerts.

- **Indicators of Attack**: If you set alerts to trigger **on each attack**, click the arrow next to each severity level to expand the list of Indicators of Attack and select the ones for which to send alerts.

- **Health check status changes**: Click **Health Checks** to select the health check type to trigger an alert, and click **Filter on selection**.

9. Click the **Domains** box to select the domains for which Tenable Identity Exposure sends out alerts.

   The **Forests and Domains** pane appears.

   a. Select the forest or domain.

   b. Click **Filter on selection**.

10. Click **Test the configuration**.

    A message confirms that Tenable Identity Exposure sent a Syslog alert to the server.

11. Click **Add**.

    A message confirms that Tenable Identity Exposure created the Syslog alert.

To edit a Syslog alert:

1. In Tenable Identity Exposure, click **System** > **Configuration** > **Syslog**.

2. In the list of Syslog alerts, hover over the one you want to modify and click the icon at the end of the line.

   The **Edit a Syslog alert** pane appears.

3. Make the necessary modifications as described in the procedure Send Tenable Identity Exposure Alerts to QRadar
4. Click **Edit**.

   A message confirms that Tenable Identity Exposure updated the alert.

To delete a Syslog alert:

1. In Tenable Identity Exposure, click **System** > **Configuration** > **Syslog**.
2. In the list of Syslog alerts, hover over the one you want to delete and click the 🗑 icon at the end of the line.

   A message asks you to confirm the deletion.
3. Click **Delete**.

   A message confirms that Tenable Identity Exposure deleted the alert.

For more information, see the Tenable Identity Exposure documentation.

Configure Rule-Based Scanning

In QRadar, you can create a rule based on SIEM data. If the rule conditions are present, a scan launches on the requested IP address. You can also right-click an IP address in QRadar to initiate a scan. When scans launch, rules with the associated IP address scan Tenable Vulnerability Management and Tenable Security Center.

A background script runs periodically to launch scans on the IP address. The default time for run is 1200 seconds.

Complete the following steps to create a rule in your Tenable application for IBM QRadar SIEM .

To create a rule:

1. On the IBM QRadar SIEM console, click the ☰ button.

   The **Menu** options appear.

2. Click **Offenses**.

   The **Offenses** menu appears.

3. In the **Offenses** menu, click **Rules**.

   The **Rules** page appears.

4. In the **Rules** menu, click **Actions**.

   A drop-down box appears.

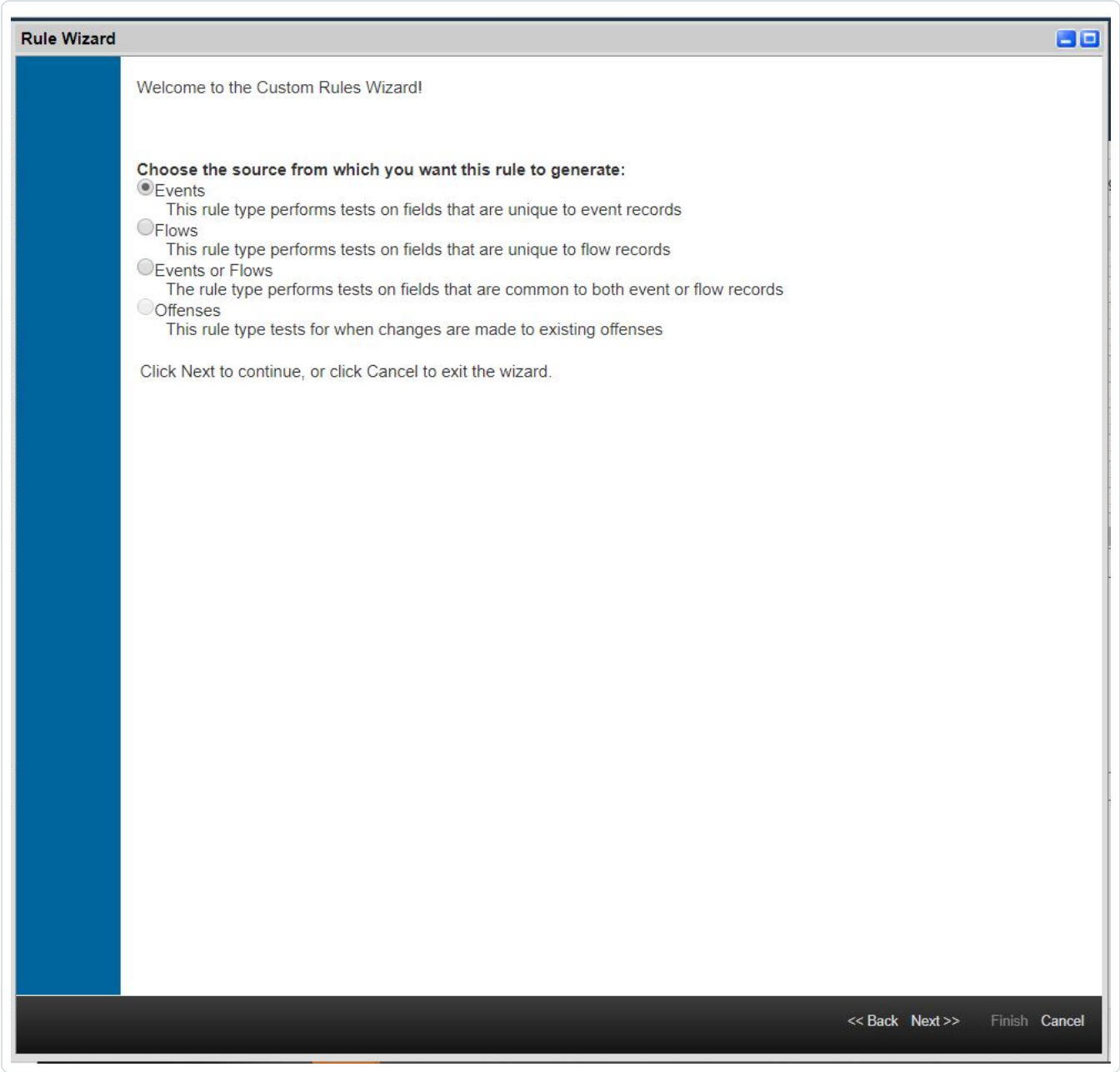
5. Select one of the **New Rule** options.

   The **Rule Wizard** window appears.

6. Click **Next**.

   > **Note:** If you experience difficulties with user interface elements, problems may exist with your browser. Try again from a different browser.

7. Select the source where the rules are generated.



8. Click **Next**.

   The Rule Wizard: Rule Response window appears.

Rule Wizard: Rule Response Configuration

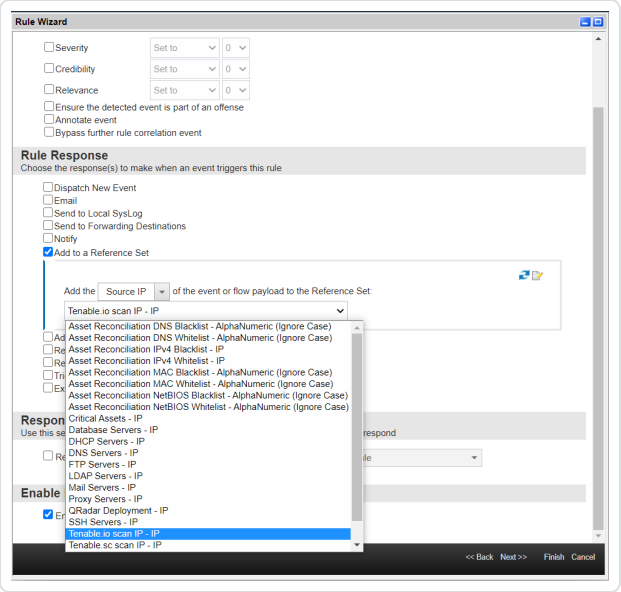
1. In the **Rule Response** section, click the check box for **Ensure the detected event is part of an offense**.
2. Click the check box for **Add to a Reference Set**.

   A drop-down appears.

   > **Caution:** Without the **Ensure the detected event is part of an offense** and **Add to a Reference Set** settings enabled, QRadar cannot create an event in the **All Offenses** category of the **Offenses** tab of the dashboard. The **All Offenses** category is where you can review the vulnerabilities you set the rules for.

3. Add the Tenable source IP.

   a. In the drop-down, select **Tenable Vulnerability Management scan IP** or **Tenable Security Center scan IP**.



> **Note:**
>
> If you want to launch a scan for source IP and destination for both Tenable Vulnerability Management and Tenable Security Center, you must create four rules:
>
> - Scan source IP with Tenable Vulnerability Management
> - Scan source IP with Tenable Security Center

- Scan destination IP with Tenable Vulnerability Management
- Scan destination IP with Tenable Security Center.

4. After you make your rules selections, click **Finish**.

Tip: You can check your active scans launched from the IBM QRadar SIEM integration in the **Tenable App Dashboard** tab in the QRadar user interface.

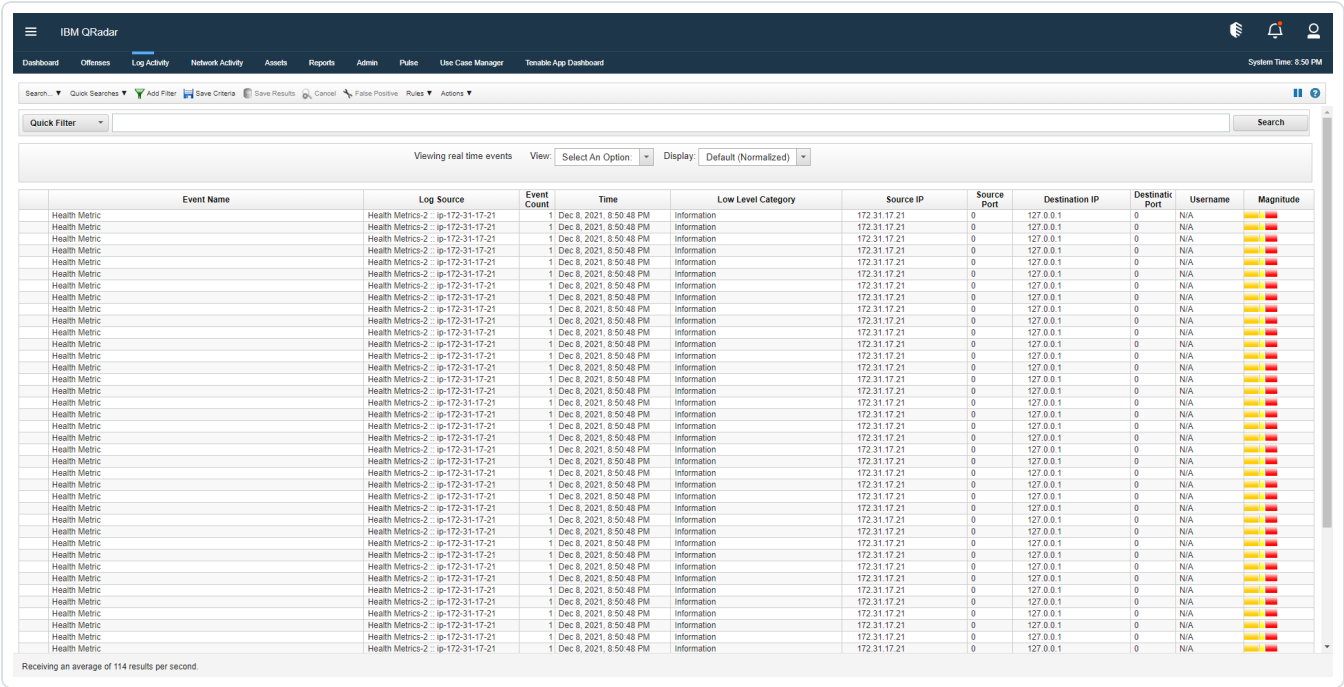
Configure Right-Click Scanning

QRadar users and administrators can initiate a scan against an IP address by right-clicking on it. In the right-click menu, two buttons, “Tenable.sc scan” and “Tenable.io scan”, initiate a scan against that IP on Tenable Security Center or Tenable Vulnerability Management. The user can see the latest scan status of the initiated scan in the dashboard.

To use the right-click scanning for IBM QRadar SIEM:

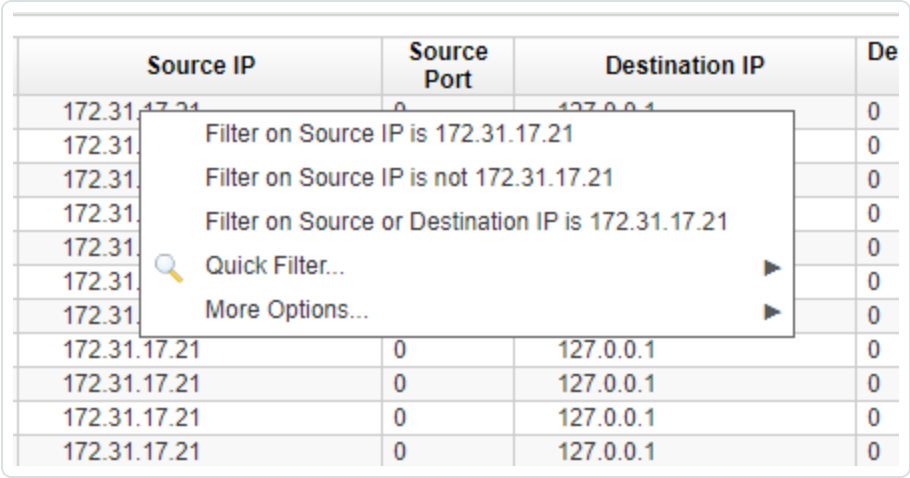
1. In the QRadar dashboard, click the **Log Activity** tab in the upper-left.

   The events and log items page appears.



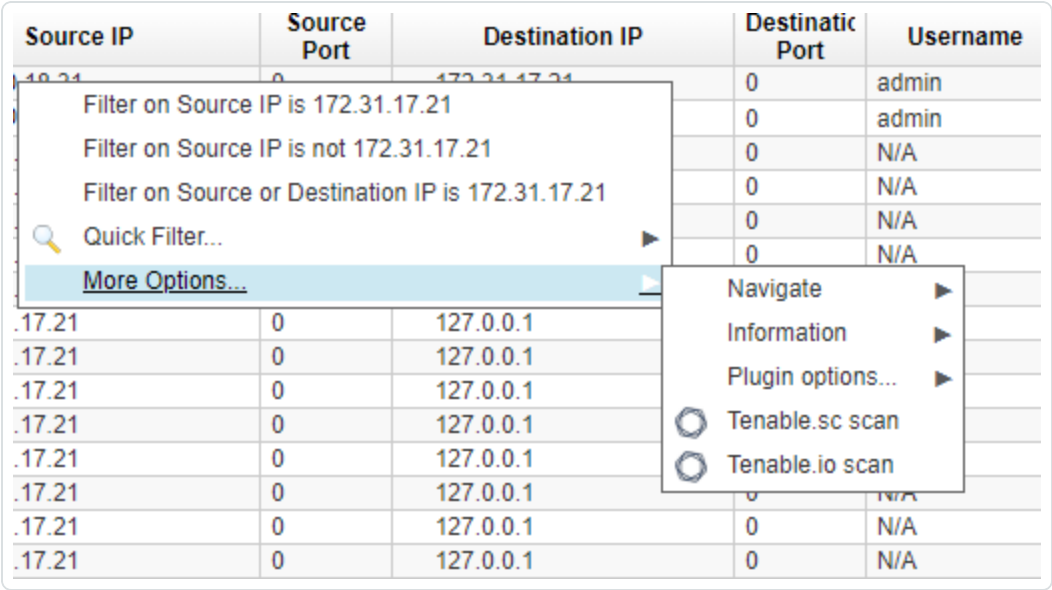
2. Under the **Source IP** column, right-click on any IP address.

   The pop-up menu options appear.



3. Click **More Options** (if available).

   The **Admin** options appear.



4. Click **Tenable.sc scan** or **Tenable.io scan**.

   A **Tenable Scan Details** pop-up window opens and the scan initiates.

   After successfully initiating, the pop-up window shows information such as:

   Scan Name, Scan ID, Scan Description, Scan Result ID or History ID, Platform, IP Address, and Scan Status.

5. The scan details will be reflected in the dashboard.

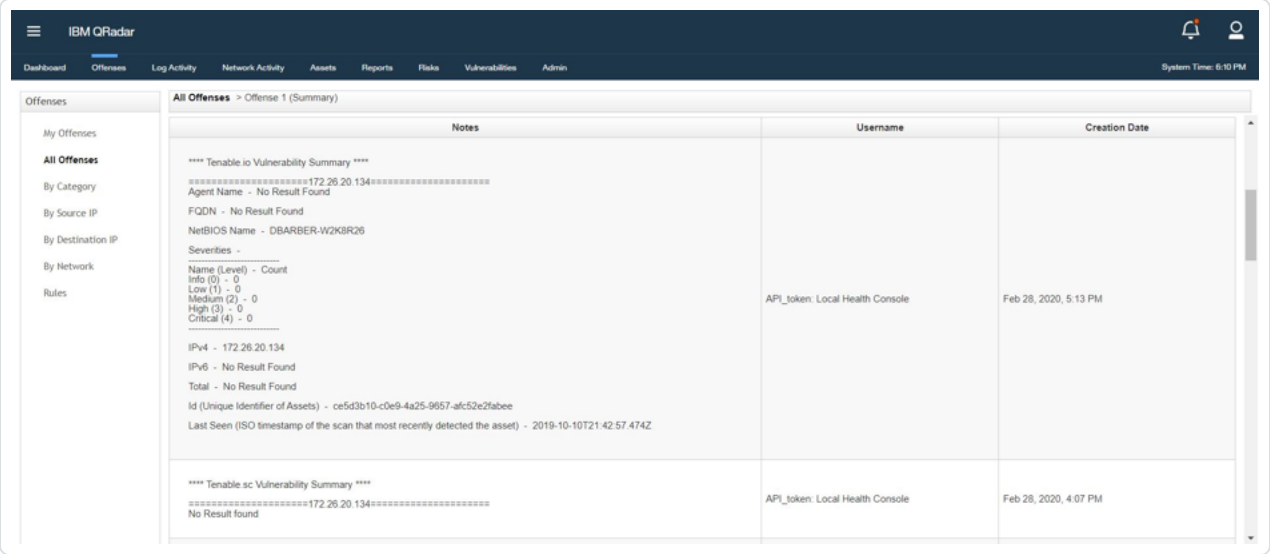
Note: You will not be able to launch a scan multiple times on the same, or different, IP addresses until the previous scan is completed for Tenable Vulnerability Management.

Tip: You can check your active scans launched from the IBM QRadar SIEM integration in the **Tenable App Dashboard** tab in the QRadar user interface.

View Offenses

After you create an offense rule, the offenses are added to the **All Offenses** table. Use the **Tenable IO: Vulnerability Summary** and **Tenable SC: Vulnerability Summary** buttons to view enriched offense data. Complete the following steps to view the offenses.

For additional information on viewing offenses, see the [IBM QRadar SIEM documentation](#).



Uninstall

To uninstall the Tenable App for IBM QRadar SIEM:

1. On the IBM QRadar SIEM console, click the ☰ button.

   The **Menu** options appear.

2. Click **Admin**.

   The **Admin** options appear.

3. In the **System Configuration** section, click **Extensions Management**.

   The **Extensions Management** page appears.

4. Click **Tenable App for QRadar**.

5. Click **Uninstall**.

Troubleshooting

- **After clicking the action buttons for Tenable Vulnerability Management or Tenable Security Center, you get an alert with the message: "Check if the configuration page details are filled."**

  This occurs if you did not configure an account on the **Configuration** page. See the Configure QRadar with Tenable Vulnerability Management page for steps on how to configure an account.

- **Offense note shows the configuration error message: "Error while reading configurations."**

  Your configuration file may have been corrupted.

  This can also occur if you upgraded the application to v2.0. from a previous version and you did not reconfigure your files. If you did this, delete the configurations from the configurations page and reconfigure the credentials.

- **How do I view my log files?**

  a. Log in to your QRadar instance.

  b. In the **Admin** section, click **System and License Management**.

  c. Select the host on which the Tenable App is installed.

  d. In the top section, click **Actions** and select **Collect Log Files**.

     The **Log File Collection** window appears.

  e. Click **Advanced Options**.

  f. Click the check box to select **Debug Logs**, **Application Extension Logs**, and **Setup Logs**.

  g. For data input, select **5 days**.

  h. Click the **Collect Log Files** button.

  i. Click **Click here to download files**.

     The log files download in a zip file on your local machine.

- **The configuration page shows the error message: "Failed due to proxy error or invalid credentials. Check logs for more detail."**

  Verify that you entered valid credentials for the configuration or proxy.

- **New configuration shows the error message: "Failed due to network connection timeout or Failed Proxy Authentication or invalid server address. Check logs for more details."**

  This occurs when either the internet for the virtual machine (VM) is down, proxy authentication needs more credentials to proceed, or the provided server address is Invalid. Verify that the internet for your VM is operational, the entered proxy credentials are valid, and the server address is correct.

- **New configuration shows the error message: "401 - Authorization service token is not valid."**

  You entered an incorrect authorization service token. Enter the correct service token.

- **An alert pop-up shows the error message: "Check if the configuration page details are filled."**

  Check that you correctly configured your Tenable Vulnerability Management or Tenable Security Center account.

- **An alert pop-up shows the error message "Failed due to network connection timeout or Failed Proxy Authentication. Check logs for more details."**

  This occurs when you have an internet connectivity problem on the VM or proxy authentication failed. Verify the Internet is on and valid proxy credentials are entered.

- **An alert pop-up shows the error message "Please enter a valid Address or configure valid proxy settings or verify SSL certificate."**

  If you have verified that the **Address** is set to the IP/FQDN of your Tenable Security Center configuration, try disabling the **Enable/Disable SSL Verification** option and resubmitting. If the error persists, open a case with Tenable Tech Support.

- **An alert pop-up shows the error message "Failed due to invalid credentials or connection error."**

This occurs when Tenable Vulnerability Management or Tenable Security Center credentials are updated in the Tenable system, but the updates are not made in the QRadar configuration page. Add the updated credentials to the configuration page.

- **Container proxy settings were overridden, causing the application to stop working as expected.**

  The configuration must be updated to allow the local proxy on the application to make tunneled connections. For steps on updating the proxy connections, see the IBM QRadar Support Documentation.

- **An alert pop up shows the error message: "Failed to connect flask server."**

  When there are multiple IP addresses or multiple vulnerabilities for all of the IP addresses present in the offense, it may take more than one minute to fetch vulnerability data from Tenable and populate notes. The dashboard displays "Failed to connect flask server." If the total time of initiating a scan exceeds one minute for Tenable Vulnerability Management and Tenable Security Center both, the "Failed to connect flask server" message shows in the backend.

  The scan initiates and ingests the event with the scan status "In progress" in QRadar. You can see this scan event in the dashboard.

  Reload the web page.

- **After upgrading from OT Security v1.0.0, or AlsidForActiveDirectoy, to Tenable v4.0.0, Tenable Vulnerability Management or Tenable Security Center events are parsed as "Unknown" or "Tenable Message."**

  Installing Tenable v4.0.0 on OT Security v1.0.0 DSM, or AlsidForActiveDirectory, Tenable Vulnerability Management or Tenable Security Center events are parsed as "Unknown" or "Tenable Message." In the **Log Source Extensions** tab, extensions may appear disarranged.

  1. Go to the **Log Source Extensions** tab under the **Admin** section.
  2. Confirm that the **Log Source Extensions** appear jumbled up.
  3. Click **TenableCustom_ext**. An XML file downloads to your local machine.
  4. Open the instance SSH and run the following command:
     `/opt/qradar/bin/contentManagement.pl -a search -c 24 -r .*Tenable`

5. Copy the ID corresponding to Tenable. For example, if the ID copied is 4002, then in the XML file, change `device-type-id-override="4001"` to `device-type-id-override="4002"`.
6. Click **Upload** and select the modified XML file. Select **Default Log Source Type** as **Tenable**.
7. Click **Save**.
8. Confirm that the value of `device-type-id-override` is correct for all of the extensions.

> **Note:** If events of Tenable Vulnerability Management or OT Security are parsed as "Unknown" or "Custom Message," then follow the same steps for those respective log source extensions.

- **After upgrading from v2.0.0 (QRadar app framework v1 app) to v3.0.0 (QRadar app framework v2), unable to launch scan, unable to populate offense notes in the back end.**

  There are multiple errors which contain the "EncryptionError" exception in the log files. To check the logs:

  1. Go to the **Admin** tab of the QRadar console. Open the configuration page and click the **Edit** icon.
  2. Save the configurations again.
  3. If that does not work, delete the configurations and save again.

- **Configuration page, dashboard, or offense note shows error or unintended behavior.**

  Clear the browser cache and reload the webpage.

- **Can the Tenable app for QRadar scan multiple IPs?**

  Yes, rule base scan can initialize scan for multiple IPs.

- **"Error while initiating socket connection with IBM QRadar" observed in log files.**

  This issue might be observed in QRadar v2 app framework (< v7.4.2 P2).

  For more information, see the IBM QRadar documentation.

- **Error message: "Unable to Launch scan. Error while creating socket connection with Qradar. Check logs for more details."**

This issue was observed when port 514 was not enabled in QRadar.

- **Unable to save configuration using self-signed certificates for Tenable.sc.**

  If the user is using self-signed certificates and keeping the SSL toggle button on and is receiving "Please enter valid Address or configure valid proxy settings or verify SSL certificate." error messages in the user interface, the probable cause is that the SSL certificate is not present on QRadar.

  If you want to use self-signed SSL certificates for Tenable Security Center, before installing the app (or upgrade from v2.0.0 app), perform the following steps:

  1. Copy the CA's root certificate to `/etc/pki/ca-trust/source/anchors/` on the QRadar console.
  2. Run the following commands at the SSH command line on the console.
     - `/opt/qradar/support/all_servers.sh -p /etc/pki/ca-trust/source/anchors/<root_certificate> -r /etc/pki/ca-trust/source/anchors`
     - `/opt/qradar/support/all_servers.sh -C update-ca-trust`

     Continue with the standard installation steps. For more information, see the IBM documentation.

  If the app is already installed, restart the Docker container of the app:

  1. Login into your QRadar instance.
  2. Go to the **Admin** panel.
  3. Open configuration page of **Tenable App for QRadar**.
  4. From the configuration window, copy the app ID found within the URL. The app ID is the number after `/console/plugins/` within the URL. For example, if the URL is: `https://198.51.100.0/console/plugins/1062/app_proxy/index`, copy the number "1062."

  To get into the Docker container, run the following commands on your QRadar instance via SSH:

1. Run the command `docker ps`on your Qradar instance via SSH.
2. Find the container ID of Tenable App. This is under the **Image** column containing the previous copied number. For example, "qapp-1062."
3. To open the docker, run the command `docker exec -it <container-id> /bin/bash`.

- **Dashboard is showing the error message: "No data available."**

  1. Make sure the user has initiated scans.
  2. Run the following query in **Log Activity** to see if there are any scans initiated:

     ```
     Select "Product" as 'Product', "Scan ID" as 'Scan ID', "Scan Result ID" as 'Scan Result ID', "Scan History ID" as 'History ID', "Scan Name" as 'Scan Name', "Scan Type" as 'Scan Type', "Scan description" as 'Scan description', "Scan Status" as 'Scan Status', "Scan Targets" as 'Scan Targets', "Note" as 'Note', "Redirect URL" as 'Redirect URL' from events where LOGSOURCETYPENAME(devicetype) = 'Tenable' AND QIDNAME(qid) NOT IN ('Tenable Message', 'Unknown') AND "Scan ID" is not null ORDER BY devicetime DESC LIMIT 1000 LAST 7 DAYS.
     ```

  3. If this query result returns the events, open any event and check if all of the CEPs are getting extracted. If the query returns nothing, or CEPs are not getting parsed, check the *After upgrading from v2.0.0 (QRadar app framework v1 app) to v3.0.0 (QRadar app framework v2), unable to launch scan, unable to populate offense notes in the back end.* troubleshooting topic in this document.

- **You have scanned an IP address once and are trying to scan the same IP again, but Scan Result ID is not updated for the second scan.**

  1. Launch the scan on the IP address.
  2. Open the developer tool of the browser.
  3. Hard reload the browser or clear the cache.
  4. Launch the scan on the same IP address.

     Now the scan can be initiated on the same IP address.

- **I am getting an "Unable to launch scan. An error occurred while fetching the scan id of the scan. Check logs for more details." error upon launching a Tenable Vulnerability Management scan.**

    1. Log in to Tenable Vulnerability Management.
    2. Click on **Create Scan** > **Basic Network Scan**.
    3. Add necessary details and click on **Launch and Save**.
    4. Open QRadar.
    5. Save the configuration with the newly created and launched scan on Tenable Vulnerability Management.
    6. You can now launch the right-click scan for Tenable Vulnerability Management.