

IBM Security QRadar Network Anomaly Detection
Version 7.1.0 MR1

Users Guide



Note: Before using this information and the product that it supports, read the information in [“Notices and Trademarks”](#) on [page 355](#).

CONTENTS

ABOUT THIS GUIDE

Intended Audience	1
Conventions	1
Technical Documentation	2
Contacting Customer Support	2

1 ABOUT IBM SECURITY QRADAR NETWORK ANOMALY DETECTION

Supported Web Browsers	3
Enabling Compatibility View for Internet Explorer	4
Logging In to QRadar Network Anomaly Detection	4
Dashboard Tab	5
Offenses Tab	5
Log Activity Tab	5
Network Activity Tab	5
Assets Tab	6
Reports Tab	6
Using QRadar Network Anomaly Detection	6
Sorting Results	7
Refreshing the User Interface	7
Pausing the User Interface	7
Investigating IP Addresses	7
Investigating User Names	10
Viewing System Time	10
Updating User Details	10
Accessing Online Help	11
Resizing Columns	11
Configuring Page Size	11
Admin Tab	11

2 USING THE DASHBOARD TAB

About Dashboards	13
Managing Dashboards	15
Viewing a Dashboard	15
Creating a Custom Dashboard	16
Adding Items	16
Investigating Data from a Dashboard Item	16

Configuring Charts	17
Removing Items	19
Detaching an Item	19
Editing a Dashboard	19
Deleting a Dashboard	20
Dashboard Items	20
Flow Search Items	20
Offenses Items	20
Log Activity Items	21
Reports Items	22
System Summary Item	23
System Notifications Item	23
Internet Threat Information Center	25
Adding Search-Based Dashboard Items to the Add Items List	25

3 INVESTIGATING OFFENSES

Offense Tab Overview	27
Using the Offenses Tab	28
Viewing My Offenses	29
Managing Offenses	29
Viewing Offenses	29
Offense Source Summary Options	49
Adding Notes	57
Removing Offenses From the Offenses Tab	58
Protecting Offenses	60
Exporting Offenses	62
Assigning Offenses to Users	63
Sending Email Notification	64
Marking an Item For Follow-Up	65
Viewing Offenses By Category	65
Viewing Offenses By Source IP	68
Viewing Offenses By Destination IP	76
Viewing Offenses By Network	85

4 INVESTIGATING EVENTS

Log Activity Tab Overview	95
Using the Log Activity Tab	96
Using the Toolbar	96
Using Quick Filter Syntax	99
Using the Right-Click Menu Options	100
Using the Status Bar	100
Viewing Events	100
Viewing Streaming Events	101
Viewing Normalized Events	101
Viewing Raw Events	107
Viewing Grouped Events	109
Viewing Associated Offenses	112

Modifying Event Mapping	112
Using Custom Event Properties	114
Creating Custom Event Properties	114
Copying a Custom Event Property	121
Deleting a Custom Event Property	122
Tuning False Positives	122
Managing PCAP Data	123
Displaying the PCAP Data Column	123
Viewing PCAP Information	124
Downloading the PCAP File to Your Desktop System	125
Exporting Events	126

5 INVESTIGATING FLOWS

Network Activity Tab Overview	127
Using the Network Activity Tab	128
Using the Toolbar	128
Using Quick Filter Syntax	130
Using the Right-Click Menu Options	131
Using the Status Bar	131
Viewing Flows	132
Viewing Streaming Flows	132
Viewing Normalized Flows	133
Viewing Grouped Flows	139
Viewing Associated Offenses	142
Using Custom Flow Properties	142
Creating a Custom Flow Property	143
Modify a Custom Flow Property	148
Copying a Custom Flow Property	149
Deleting a Custom Flow Property	150
Tuning False Positives	150
Exporting Flows	151

6 USING THE CHART FEATURE

Chart Feature Overview	153
Chart Legends	154
Configuring Charts	154
Managing Time Series Charts	156
Creating Time Series Searches	156
Navigating Time Series Charts	158

7 SEARCHING DATA

Searching Events or Flows	159
Searching Offenses	163
Searching My Offenses and All Offenses	163
Searching Source IPs	168
Searching Destination IPs	169

Searching Networks	170
Saving Search Criteria	171
Saving Search Criteria	172
Deleting Search Criteria	174
Performing a Sub-Search	174
Managing Search Results	176
Viewing Managed Search Results	176
Saving Search Results	178
Managing Search Groups	179
Viewing Search Groups	179
Creating a New Group	179
Editing a Group	180
Copying a Saved Search to Another Group	180
Removing a Saved Search from a Group	180
Removing a Group	180

8 CONFIGURING RULES

Rules Overview	181
Rule Types	182
Rule Conditions	183
Rule Responses	183
Viewing Rules	184
Creating a Custom Rule	187
Creating an Anomaly Detection Rule	195
Managing Rules	201
Enabling/Disabling Rules	201
Editing a Rule	201
Copying a Rule	202
Deleting a Rule	202
Grouping Rules	202
Viewing Groups	203
Creating a Group	203
Editing a Group	204
Copying an Item to Another Group	204
Deleting an Item from a Group	204
Deleting a Group	205
Assigning an Item to a Group	205
Editing Building Blocks	205

9 MANAGING ASSETS

Asset Tab Overview	207
Viewing Asset Profiles	208
Viewing Vulnerability Details	213
Managing Asset Profiles	215
Adding an Asset Profile	216
Editing an Asset	216
Deleting Assets	217

Importing Asset Profiles	218
Exporting Assets	218
Using the Search Feature	219
Searching Asset Profiles	219
Searching Assets By Vulnerability Attribute	222

10 MANAGING REPORTS

Reports Tab Overview	227
Using the Reports Tab	228
Viewing Reports	228
Using the Toolbar	230
Viewing Generated Reports	231
Deleting Generated Content	232
Using the Status Bar	232
Creating Custom Reports	232
Creating a Report	232
Configuring Charts	237
Selecting a Graph Type	253
Customizing Default Reports	254
Grouping Reports	254
Creating a Group	255
Editing a Group	255
Assigning a Report to a Group	256
Copying a Report to Another Group	256
Removing a Report From a Group	256
Manually Generating a Report	257
Duplicating a Report	257
Sharing a Report	257
Branding Reports	258

A RULE TESTS

Event Rule Tests	259
Host Profile Tests	260
IP/Port Tests	262
Event Property Tests	263
Common Property Tests	267
Log Source Tests	268
Function - Sequence Tests	269
Function - Counter Tests	278
Function - Simple Tests	283
Date/Time Tests	283
Network Property Tests	284
Function - Negative Tests	285
Flow Rule Tests	285
Host Profile Tests	286
IP/Port Tests	288

Flow Property Tests	289
Common Property Tests	295
Function - Sequence Tests	297
Function - Counters Tests	305
Function - Simple Tests	309
Date/Time Tests	310
Network Property Tests	310
Function - Negative Tests	311
Common Rule Tests	312
Host Profile Tests	313
IP/Port Tests	315
Common Property Tests	316
Functions - Sequence Tests	319
Function - Counter Tests	327
Function - Simple Tests	331
Date/Time Tests	332
Network Property Tests	332
Functions Negative Tests	333
Offense Rule Tests	334
IP/Port Tests	334
Function Tests	335
Date/Time Tests	335
Log Source Tests	336
Offense Property Tests	336
Anomaly Detection Rule Tests	339
Anomaly Rule Tests	339
Behavioral Rule Tests	341
Threshold Rule Tests	343

B GLOSSARY

C NOTICES AND TRADEMARKS

Notices	355
Trademarks	357

INDEX

ABOUT THIS GUIDE

The *IBM Security QRadar Network Anomaly Detection Users Guide* provides information on managing QRadar Network Anomaly Detection including the **Dashboard, Offenses, Log Activity, Network Activity, Assets, and Reports** tabs.

Intended Audience This guide is intended for all QRadar Network Anomaly Detection users responsible for investigating and managing network security. This guide assumes that you have QRadar Network Anomaly Detection access and a knowledge of your corporate network and networking technologies.

Conventions The following conventions are used throughout this guide:

- ▶ Indicates that the procedure contains a single instruction.

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).
(<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).
(<http://www.ibm.com/support/docview.wss?rs=0&uid=swg21612861>)

1

ABOUT IBM SECURITY QRADAR NETWORK ANOMALY DETECTION

IBM Security QRadar QFlow Collector is a network security management platform that provides situational awareness and compliance support through the combination of flow-based network knowledge, security event correlation, and asset-based vulnerability assessment.

This section includes the following topics:

- [Supported Web Browsers](#)
- [Logging In to QRadar Network Anomaly Detection](#)
- [Dashboard Tab](#)
- [Offenses Tab](#)
- [Log Activity Tab](#)
- [Network Activity Tab](#)
- [Assets Tab](#)
- [Reports Tab](#)
- [Using QRadar Network Anomaly Detection](#)
- [Admin Tab](#)

NOTE

When navigating QRadar Network Anomaly Detection, do not use the browser **Back** button. Use the navigation options available with QRadar Network Anomaly Detection to navigate the user interface.

Supported Web Browsers

You can access the Console from a standard web browser. When you access the system, a prompt is displayed asking for a user name and a password, which must be configured in advance by the QRadar Network Anomaly Detection administrator.

Table 1-1 Supported Web Browsers

Web Browser	Supported Versions
Mozilla Firefox	<ul style="list-style-type: none"> 10.0 <p>Due to Mozilla's short release cycle, we cannot commit to testing on the latest versions of the Mozilla Firefox browser. However, we are fully committed to investigating any issues that are reported.</p>
Microsoft® Windows Internet Explorer, with Compatibility View Enabled	<ul style="list-style-type: none"> 8.0 9.0 <p>For instructions on how to enable Compatibility View, see Enabling Compatibility View for Internet Explorer.</p>

Enabling Compatibility View for Internet Explorer

To enable Compatibility View for Internet Explorer 8.0 and 9.0:

Step 1 Press F12 to open the Developer Tools window.

Step 2 Configure the following compatibility settings:

Table 1-2 Internet Explorer Compatibility Settings

Browser Version	Option	Description
Internet Explorer 8.0	Browser Mode	From the Browser Mode list box, select Internet Explorer 8.0 .
	Document Mode	From the Document Mode list box, select Internet Explorer 7.0 Standards .
Internet Explorer 9.0	Browser Mode	From the Browser Mode list box, select Internet Explorer 9.0 .
	Document Mode	From the Document Mode list box, select Internet Explorer 7.0 Standards .

Logging In to QRadar Network Anomaly Detection

To log in to QRadar Network Anomaly Detection:

Step 1 Open your web browser.

Step 2 Type the following address in the address bar:

https://<IP Address>

Where **<IP Address>** is the IP address of the QRadar Network Anomaly Detection system.

Step 3 Type your user name and password.

Step 4 Click **Login To QRadar**.

If you are using Mozilla Firefox, you must add an exception to Mozilla Firefox to log in to QRadar Network Anomaly Detection. For more information, see your Mozilla documentation.

If you are using Internet Explorer, a website security certificate message is displayed. You must select the **Continue to this website** option to log in to QRadar Network Anomaly Detection.

NOTE

To log out of QRadar Network Anomaly Detection, click **Log out** in the top right corner of the user interface.

A default license key provides you access to the user interface for five weeks. A window provides the date that the temporary license key expires. For more information on installing a license key, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Dashboard Tab

The **Dashboard** tab is the default tab that is displayed when you log in to QRadar Network Anomaly Detection. It provides a workspace environment that supports multiple dashboards on which you can display your views of network security, activity, or data that QRadar Network Anomaly Detection collects. Default dashboards are available. Each dashboard contains items that provide summary and detailed information about offenses occurring on your network. You can also create a custom dashboard to enable you to focus on your security or network operations responsibilities.

For more information on using the **Dashboard** tab, see [Using the Dashboard Tab](#).

Offenses Tab

The **Offenses** tab allows you to view offenses occurring on your network, which you can locate using various navigation options or through powerful searches. From the **Offenses** tab, you can investigate an offense to determine the root cause of an issue. You can also resolve the issue.

For more information on **Offenses** tab, see [Investigating Offenses](#).

Log Activity Tab

The **Log Activity** tab allows you to investigate event logs being sent to QRadar Network Anomaly Detection in real-time, perform powerful searches, and view log activity using configurable time-series charts. The **Log Activity** tab allows you to perform in-depth investigations on event data.

For more information, see [Investigating Events](#).

Network Activity Tab

The **Network Activity** tab allows you to investigate flows being sent to QRadar Network Anomaly Detection in real-time, perform powerful searches, and view network activity using configurable time-series charts. A flow is a communication session between two hosts. Viewing flow information allows you to determine how the traffic is communicated, what is communicated (if the content capture option is enabled), and who is communicating. Flow data also includes details such as protocols, ASN values, IFLIndex values, and priorities.

For more information, see [Investigating Flows](#).

Assets Tab

QRadar Network Anomaly Detection automatically discovers assets (servers and hosts) operating on your network, based on passive flow data and vulnerability data, allowing QRadar Network Anomaly Detection to build an asset profile. Asset profiles provide information about each known asset in your network, including identity information (if available) and what services are running on each asset. This profile data is used for correlation purposes to help reduce false positives. For example, if an attack tries to exploit a specific service running on a specific asset, QRadar Network Anomaly Detection can determine if the asset is vulnerable to this attack by correlating the attack to the asset profile. Using the **Assets** tab, you can view the learned assets or search for specific assets to view their profiles.

For more information, see [Managing Assets](#).

Reports Tab

The **Reports** tab allows you to create, distribute, and manage reports for any data within QRadar Network Anomaly Detection. The Reports feature allows you to create customized reports for operational and executive use. To create a report, you can combine information (such as, security or network) into a single report. You can also use pre-installed report templates that are included with QRadar Network Anomaly Detection.

The **Reports** tab also allows you to brand your reports with customized logos. This is beneficial for distributing reports to different audiences.

For more information on reports, see [Managing Reports](#).

Using QRadar Network Anomaly Detection

This section includes the following topics:

- [Sorting Results](#)
- [Refreshing the User Interface](#)
- [Pausing the User Interface](#)
- [Investigating IP Addresses](#)
- [Viewing System Time](#)
- [Updating User Details](#)
- [Accessing Online Help](#)
- [Resizing Columns](#)
- [Configuring Page Size](#)

Sorting Results

On the **Log Activity**, **Offenses**, **Network Activity**, and **Reports** tabs, you can sort tables by clicking on a column heading. A single click of a column sorts the results in descending order and a second click on the heading sorts the results in

ascending order. An arrow at the top of the column indicates the direction of the sort.

For example, if you want to sort events by Event Name, click the **Event Name** heading. An arrow is displayed in the column heading to indicate the results are sorted in descending order.

Click the **Event Name** column heading again if you want to sort the information in ascending order.

Refreshing the User Interface

Several QRadar Network Anomaly Detection tabs, including the **Dashboard**, **Log Activity**, **Offenses**, and **Network Activity** tabs allow you to manually refresh the tab. This refresh option is located in the right corner of the tab. The **Dashboard** and **Offenses** tabs automatically refresh every 60 seconds. The **Log Activity** and **Network Activity** tabs automatically refresh every 60 seconds if you are viewing the tab in Last Interval (auto refresh) mode. The timer indicates the amount of time since the tab was automatically refreshed. To refresh the tab, click the **Refresh** icon.

Pausing the User Interface

When you are viewing the **Log Activity** or **Network Activity** tab in Real Time (streaming) or Last Minute (auto refresh) mode, you can use the refresh timer, located on the right, to pause the current display. You can also pause the current display in the **Dashboard** tab.

► To pause the display on the tab, click the **Pause** icon.

Clicking anywhere inside a dashboard item automatically pauses the tab. The timer flashes red to indicate the current display is paused.

► Click the **Play** icon to restart the timer.

Investigating IP Addresses

If geographic information is available for an IP address, the country is visually indicated by a flag.

► Move your mouse pointer over an IP address to view the location of the IP address.

You can right-click any IP address or asset name to access additional menus, which allow you to further investigate that IP address or asset. For more information on assets, see [Managing Assets](#). For more information on customizing the right-click menu, see the Customizing the *Right-Click Menu Technical Note*.

The More Options menu includes:

Table 1-3 More Options Menu

Menu	Description
Navigate	<p>The Navigate menu provides the following options:</p> <ul style="list-style-type: none"> • View By Network - Displays the List of Networks window, which displays all networks associated with the selected IP address. • View Source Summary - Displays the List of offenses window, which displays all offenses associated with the selected source IP address. • View Destination Summary - Displays the List of Offenses window, which displays all offenses associated to the selected destination IP address.

Table 1-3 More Options Menu (continued)

Menu	Description
Information	<p>The Information menu provides the following options:</p> <ul style="list-style-type: none"> • DNS Lookup - Searches for DNS entries based on the IP address. • WHOIS Lookup - Searches for the registered owner of a remote IP address. The default WHOIS server is whois.arin.net. • Port Scan - Performs a Network Mapper (NMAP) scan of the selected IP address. This option is only available if NMAP is installed on your system. For more information on installing NMAP, see your vendor documentation. • Asset Profile - Displays asset profile information. This menu option is only available when QRadar Network Anomaly Detection has acquired profile data either actively through a scan or passively through flow sources. For information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>. • Search Events - Select the Search Events option to search events associated with this IP address. For information, see Searching Events or Flows. • Search Flows - Select the Search Flows option to search for flows associated with this IP address. For information, see Searching Events or Flows. • Search Connections - Select the Search Connections option to search for connections associated with this IP address. This option only is displayed when the IBM Security QRadar Risk Manager has been purchased and licensed, and you have established the connection between the Console and the IBM Security QRadar Risk Manager appliance. For more information, see the <i>IBM Security QRadar Risk Manager Users Guide</i>. • Switch Port Lookup - Select the Switch Port Lookup to determine the switch port on a Cisco IOS device for this IP address. This option only applies to switches discovered using the Discover Devices option on the Risk Manager tab. For more information, see the <i>IBM Security QRadar Risk Manager Users Guide</i>. • View Topology - Select the View Topology option to view the Topology tab, which depicts the layer 3 topology of your network. This option is only displayed when the IBM Security QRadar Risk Manager has been purchased and licensed, and you have established the connection between the Console and the IBM Security QRadar Risk Manager appliance. For more information, see the <i>IBM Security QRadar Risk Manager Users Guide</i>.

Investigating User Names Right-click a user name to access additional menu options, which allow you to further investigate that user name or IP address. The menu options include:

Table 1-4 User Name More Options

Menu	Description
View Assets	Displays the Assets Lists window, which displays current assets associated to the selected user name. For more information on viewing assets, see Managing Assets .
View User History	Displays the Assets Lists window, which displays all assets associated to the selected user name over the previous 24 hours. For more information on viewing assets, see Managing Assets .
View Events	Displays the List of Events window, which displays the events associated to the selected user name. For more information on the List of Events window, see Viewing Events .

NOTE

For more information on customizing the right-click menu, see the *Customizing the Right-Click Menu* Technical Note.

Viewing System Time The right corner of the QRadar Network Anomaly Detection user interface displays system time, which is the time on the Console. The Console time synchronizes all QRadar Network Anomaly Detection systems within the QRadar Network Anomaly Detection deployment, and is used to determine what time events were received from other devices for proper time synchronization correlation.

In a distributed deployment, the Console may be located in a different time zone from your desktop computer. When applying time-based filters and searches on the **Log Activity** and **Network Activity** tabs, you must use the Console System Time when specifying a time range.

Updating User Details You can access your user details through the QRadar Network Anomaly Detection user interface. To access your user information, click **Preferences**. The User Preferences window provides the following information:

Table 1-5 User Preferences Window Details

Parameter	Description
Username	Displays your user name.
Password	Optional. Type a new password. The password must meet the following criteria: <ul style="list-style-type: none"> • Minimum of six characters • Maximum of 255 characters • Must contain at least one special character • Must contain one uppercase character

Table 1-5 User Preferences Window Details (continued)

Parameter	Description
Password (Confirm)	Type the password again for confirmation.
Email Address	Optional. Type your email address. The email address must meet the following requirements: <ul style="list-style-type: none"> • Must be a valid email address • Minimum of 10 characters • Maximum of 255 characters
Enable Popup Notifications	Select this check box if you want to enable popup system notifications to be displayed on your user interface.

Accessing Online Help You can access the QRadar Network Anomaly Detection Online Help through the QRadar Network Anomaly Detection user interface. To access the Online Help, click **Help > Help Contents**.

Resizing Columns Several QRadar Network Anomaly Detection tabs, including the **Offenses**, **Log Activity**, **Network Activity**, **Assets**, and **Reports** tabs allow you to resize the columns of the display. Place the pointer of your mouse over the line that separates the columns and drag the edge of the column to the new location. You can also resize columns by double-clicking the line that separates the columns to automatically resize the column to the width of the largest field.

NOTE Column resizing does not function in Internet Explorer 7.0 while the **Log Activity** or **Network Activity** tabs are displaying records in streaming mode.

Configuring Page Size In the **Offenses**, **Assets**, **Log Activity**, **Network Activity**, and **Reports** tab tables, QRadar Network Anomaly Detection displays a maximum of 40 results by default. If you have administrative privileges, you can configure the maximum number of results using the **Admin** tab. For more information, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Admin Tab If you have administrative privileges, you can access the **Admin** tab. The **Admin** tab provides administrative users access to administrative functionality, including:

- **System Configuration** - Allows you to configure system and user management options.
- **Data Sources** - Allows you to configure log sources, flow sources, and vulnerability options.
- **Remote Networks and Services Configuration** - Allows you to configure remote networks and services groups.

- **Plug-ins** - Provides access to plug-in components, such as the IBM Security QRadar Risk Manager plug-in. This option is only displayed if there are plug-ins installed on your Console.
- **Deployment Editor** - Allows you to connect manage the individual components of your QRadar Network Anomaly Detection deployment.

All configuration updates you make in the **Admin** tab are saved to a staging area. When all changes are complete, you can deploy the configuration updates to the managed host in your deployment.

For more information regarding the **Admin** tab, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

2

USING THE DASHBOARD TAB

The **Dashboard** tab is the default view when you log into IBM Security QRadar QFlow Collector. It provides a workspace environment that supports multiple dashboards on which you can display your views of network security, activity, or data that QRadar Network Anomaly Detection collects.

This section includes the following topics:

- [About Dashboards](#)
- [Managing Dashboards](#)
- [Dashboard Items](#)

About Dashboards

Dashboards allow you to organize your dashboard items into functional views, enabling you to focus on specific areas of your network.

The **Dashboard** tab provides default dashboards focused on security, network intelligence, application activity, and system monitoring. Each dashboard displays a default set of dashboard items. The dashboard items act as launch points to navigate to more detailed data.

The following table defines the default dashboards.

Table 2-1 Default Dashboards

Default Dashboard	Items
Application Overview	Inbound Traffic by Country (time series)
	Outbound Traffic by Country (time series)
	Top Applications (time series)
	Top Applications Inbound from Internet (time series)
	Top Applications Outbound from Internet (time series)
	Top Applications Outbound from Internet (time series)
	DSCP - Precedence (time series)

Table 2-1 Default Dashboards (continued)

Default Dashboard	Items
Network Intelligence	Top Talkers (real time)
	ICMP Type/Code (time series)
	Top Networks by Traffic Volume (time series)
	Firewall Deny by DST Port (time series)
	Firewall Deny by DST IP (time series)
	Firewall Deny by SRC IP (time series)
	Top Applications (time series)
	Link Utilization (real-time)
	DSCP - Precedence (time series)
	Top Talkers (real time)
System Monitoring	Top Log Sources (Event Count)
	Link Utilization (real-time)
	System Notifications
	Event Processor Distribution (time series)
	Event Rate (Events per Second Coalesced - Average 1 Min)
	Flow Rate (Flows per Second - Peak 1 Min)
Threat and Security Monitoring	Default-IDS / IPS-All: Top Alarm Signatures (time series)
	Top Systems Attacked (IPD/IDP/IPS) (time series)
	Top Systems Sourcing Attacks (IPD/IDP/IPS) (time series)
	My Offenses
	Most Severe Offenses
	Most Recent Offenses
	Outbound Events by Country (real-time)
	Internet Threat Information Center
	Flow Bias
	Top Category Types
	Top Sources
Top Local Destinations	

The content displayed on the **Dashboard** tab is user-specific. You can customize your dashboards. Changes made within a QRadar Network Anomaly Detection session affect only your system.

To customize your **Dashboard** tab, you can perform the following tasks:

- Create custom dashboards that are relevant to your responsibilities.
QRadar Network Anomaly Detection supports up to 255 dashboards per user; however, we recommend that you create no more than 10 dashboards.
- Add and remove dashboard items from default or custom dashboards.
- Move and position items to meet your requirements.

When positioning items, each item automatically resizes in proportion to the dashboard.

- Add custom items based on any data to your dashboards.

For example, you can display a dashboard item that provides a time series graph or a bar chart representing top N network activity.

To create custom items, you can create saved searches on the **Network Activity** or **Log Activity** tabs and choose how you want the results represented in your dashboard. Each dashboard chart displays real-time up-to-the-minute data. Time series graphs on the dashboard refresh every 5 minutes.

Managing Dashboards

This section includes the following topics:

- [Viewing a Dashboard](#)
- [Creating a Custom Dashboard](#)
- [Adding Items](#)
- [Configuring Charts](#)
- [Removing Items](#)
- [Detaching an Item](#)
- [Editing a Dashboard](#)
- [Deleting a Dashboard](#)

Viewing a Dashboard

QRadar Network Anomaly Detection provides default dashboards, which you can access from the **Show Dashboard** list box. After you create custom dashboards, they are also listed in the **Show Dashboard** list box.

NOTE

If you have previously viewed a dashboard and are returning to the **Dashboard** tab, the last dashboard you viewed is displayed.

To view a dashboard:

Step 1 Click the **Dashboard** tab.

Step 2 From the **Show Dashboard** list box, select the dashboard you want to view.

Creating a Custom Dashboard

To create a custom dashboard:

- Step 1** Click the **Dashboard** tab.
- Step 2** Click the **New Dashboard** icon.
- Step 3** In the **Name** field, type a name for the dashboard. The maximum length is 65 characters.
- Step 4** In the **Description** field, type a description of the dashboard. The maximum length is 255 characters. This description is displayed in the tooltip for the dashboard name in the **Show Dashboard** list box.
- Step 5** Click **OK**.

The new dashboard is displayed in the **Dashboard** tab and is listed in the **Show Dashboard** list box. By default, the dashboard is empty. For more information on adding items, see [Adding Items](#).

Adding Items

To add an item to a dashboard:

- Step 1** Click the **Dashboard** tab.
- Step 2** From the **Show Dashboard** list box, select the dashboard to which you want to add an item.
- Step 3** From **Add Item** list box, select an item. For more information on available dashboard items, see [Dashboard Items](#).

Investigating Data from a Dashboard Item

Search-based dashboard items provide a link to the **Log Activity** or **Network Activity** tabs, allowing you to further investigate log or network activity.

Search-based dashboard items are available on the **Add Items > Network Activity > Flow Searches** and **Add Items > Log Activity > Event Searches** menus. For more information on dashboard items, see [Dashboard Items](#).

NOTE

This procedure also applies to Risk Manager dashboard items. Risk Manager dashboard items are only displayed when IBM Security QRadar Risk Manager has been purchased and licensed, and you have established the connection between the Console and the IBM Security QRadar Network Anomaly Detection appliance. For more information, see the *IBM Security QRadar Risk Manager Users Guide*.

To investigate flows from a **Log Activity** dashboard item:

- ▶ Click the **View in Log Activity** link. The **Log Activity** tab is displayed, displaying results and two charts that match the parameters of your dashboard item.

To investigate flows from a **Network Activity** dashboard item:

- ▶ Click the **View in Network Activity** link. The **Network Activity** tab is displayed, displaying results and two charts that match the parameters of your dashboard item.

The chart types displayed on the **Log activity** or **Network Activity** tab depend on which chart is configured in the dashboard item:

- **Bar, Pie, and Table** - The **Log Activity** or **Network Activity** tab displays a bar chart, pie chart, and table of flow details.
- **Time Series** - The **Log Activity** or **Network Activity** tab displays charts according to the following criteria:
 - If your time range is less than or equal to 1 hour, a time series chart, a bar chart, and a table of event or flow details are displayed.
 - If your time range is more than 1 hour, a time series chart is displayed and you are prompted to click **Update Details**. This action starts the search that populates the event or flow details and generates the bar chart. When the search completes, the bar chart and table of event or flow details are displayed.

Configuring Charts You can configure **Log Activity**, **Network Activity**, and **Connections** (if applicable) dashboard items to specify the chart type and how many data objects you want to view. Your custom chart configurations are retained, so that they are displayed as configured each time you access the **Dashboard** tab.

To configure charts in a dashboard item:

- Step 1** Click the **Dashboard** tab.
- Step 2** From the **Show Dashboard** list box, select the dashboard that contains the item you want to customize.
- Step 3** On the dashboard item header, click the **Settings** icon.
Configuration options are displayed.
- Step 4** Configure the parameters:

Table 2-2 Chart Menu Options

Parameters	Description
Value to Graph	<p>From the list box, select the object type that you want to graph on the chart. Options include all normalized and custom event or flow parameters included in your search parameters.</p> <p>Note: QRadar Network Anomaly Detection accumulates data so that when you perform a time series saved search, there is a cache of event or flow data available to display the data for the previous time period. Accumulated parameters are indicated by an asterisk (*) in the Value to Graph list box. If you select a value to graph that is not accumulated (no asterisk), time series data is not available.</p>
Chart Type	<p>From the list box, select the chart type you want to view. Options include:</p> <ul style="list-style-type: none"> • Bar Chart - Displays data in a bar chart. This option is only available for grouped events or flows. • Pie Chart - Displays data in a pie chart. This option is only available for grouped events or flows. • Table - Displays data in a table. This option is only available for grouped events or flows. • Time Series - Displays an interactive line chart representing the records matched by a specified time interval. <p>For information on configuring time series search criteria for log activity, see Investigating Events.</p> <p>For information on configuring time series search criteria for network activity, see Investigating Flows.</p>
Display Top	<p>From the list box, select the number of objects you want you view in the chart. Options include 5 and 10. The default is 10.</p>
Capture Time Series Data	<p>Select this check box to enable time series capture. When you select this check box, the chart feature begins accumulating data for time series charts. By default, this option is disabled.</p> <p>Note: This option is only available on time series charts. You must have the appropriate role permissions to manage and view time series charts. For more information on role permissions, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Time Range	<p>From the list box, select the time range you want to view.</p> <p>Note: This option is only available on time series charts.</p>

Removing Items Removing an item does not remove the item from QRadar Network Anomaly Detection. Removing an item removes the item from your dashboard. You can add the item again at any time.

To remove an item from your dashboard:

- Step 1** Click the **Dashboard** tab.
- Step 2** From the **Show Dashboard** list box, select the dashboard from which you want to remove an item.
- Step 3** On the dashboard item header, click the red [x] icon to remove the item from the dashboard.
- Step 4** Click **Yes**.

Detaching an Item Detaching an item allows you to temporarily monitor one or more particular items on your desktop. You can detach the item, and then remove the item from your dashboard. The detached window remains open and refreshes during scheduled intervals. If you close the QRadar Network Anomaly Detection application, the detached window remains open for monitoring and continues to refresh until you manually close the window or shut down your computer system.

NOTE QRadar Network Anomaly Detection does not save the status of a detached dashboard item when you end your QRadar Network Anomaly Detection session.

To detach an item from your dashboard:

- Step 1** Click the **Dashboard** tab.
- Step 2** From the **Show Dashboard** list box, select the dashboard from which you want to detach an item.
- Step 3** On the dashboard item header, click the green icon to detach the dashboard item and open it in separate window.

NOTE Detaching an item does not remove the item from QRadar Network Anomaly Detection; detaching an item duplicates the data in a new window.

Editing a Dashboard You can edit the name and description for any dashboard. To edit a dashboard:

- Step 1** Click the **Dashboard** tab.
- Step 2** From the **Show Dashboard** list box, select the dashboard you want to edit.
- Step 3** On the toolbar, click the **Rename Dashboard** icon.
- Step 4** In the **Name** field, type a new name for the dashboard. The maximum length is 65 characters.
- Step 5** In the **Description** field, type a new description of the dashboard. The maximum length is 255 characters.
- Step 6** Click **OK**.

Deleting a Dashboard To delete a dashboard:

- Step 1** Click the **Dashboard** tab.
- Step 2** From the **Show Dashboard** list box, select the dashboard you want to delete.
- Step 3** On the toolbar, click **Delete Dashboard**.
- Step 4** Click **Yes**.

The **Dashboard** tab refreshes and the first dashboard listed in the **Show Dashboard** list box is displayed. The dashboard you deleted is no longer displayed in the **Show Dashboard** list box.

Dashboard Items This section includes the following topics:

- [Flow Search Items](#)
- [Offenses Items](#)
- [Log Activity Items](#)
- [Reports Items](#)
- [System Summary Item](#)
- [System Notifications Item](#)
- [Internet Threat Information Center](#)
- [Adding Search-Based Dashboard Items to the Add Items List](#)

Flow Search Items You can display a custom dashboard item based on saved search criteria from the **Network Activity** tab. Flow search items are listed in the **Add Item > Network Activity > Flow Searches** menu. The name of the flow search item matches the name of the saved search criteria the item is based on.

QRadar Network Anomaly Detection includes default saved search criteria that is preconfigured to display flow search items on your **Dashboard** tab menu. You can add more flow search dashboard items to your **Dashboard** tab menu. For more information, see [Adding Search-Based Dashboard Items to the Add Items List](#).

On a flow search dashboard item, search results display real-time last minute data on a chart. The supported chart types are time series, table, pie, and bar. The default chart type is bar. These charts are configurable. For more information on configuring charts, see [Configuring Charts](#).

Time series charts are interactive. Using the time series charts, you can magnify and scan through a timeline to investigate network activity.

Offenses Items You can add several Offenses items to your dashboard. The **Offenses** tab displays data for offenses, sources, and local destinations detected on your network. Offenses items include:

- [Offenses](#)

- [Sources and Destinations](#)
- [Categories](#)

NOTE

Hidden or closed offenses are not included in the values that are displayed in the **Dashboard** tab. For more information on hidden or closed events, see [Investigating Offenses](#).

Offenses

The **Add Item > Offenses > Offenses** menu item on the **Dashboard** tab menu displays the following dashboard items:

- **Most Recent Offenses** - The five most recent offenses are identified with a magnitude bar to inform you of the importance of the offense. Point your mouse over the offense name to view detailed information for the IP address.
- **Most Severe Offenses** - The five most severe offenses are identified with a magnitude bar to inform you of the importance of the offense. Point your mouse over the offense name to view detailed information for the IP address.
- **My Offenses** - The **My Offenses** item displays five of the most recent offenses assigned to you. The offenses are identified with a magnitude bar to inform you of the importance of the offense. Point your mouse over the IP address to view detailed information for the IP address.

Sources and Destinations

The **Add Item > Offenses > Sources and Destinations** menu item on the **Dashboard** tab menu displays the following dashboard items:

- **Top Sources** - The **Top Sources** item displays the top offense sources. Each source is identified with a magnitude bar to inform you of the importance of the source. Point your mouse over the IP address to view detailed information for the IP address.
- **Top Local Destinations** - The **Top Local Destinations** item displays the top local destinations. Each destination is identified with a magnitude bar to inform you of the importance of the destination. Point your mouse over the IP address to view detailed information for the IP address.

Categories

The **Top Categories Types** item displays the top five categories associated with the highest number of offenses.

Log Activity Items

The Log Activity dashboard items allow you to monitor and investigate events in real-time. Log Activity items include:

- [Event Searches](#)
- [Events By Severity](#)
- [Top Log Sources](#)

NOTE

Hidden or closed events are not included in the values that are displayed in the **Dashboard** tab.

Event Searches

You can display a custom dashboard item based on saved search criteria from the **Log Activity** tab. Event search items are listed in the **Add Item > Network Activity > Event Searches** menu. The name of the event search item matches the name of the saved search criteria the item is based on.

QRadar Network Anomaly Detection includes default saved search criteria that is preconfigured to display event search items on your **Dashboard** tab menu. You can add more event search dashboard items to your **Dashboard** tab menu. For more information, see [Adding Search-Based Dashboard Items to the Add Items List](#).

On a **Log Activity** dashboard item, search results display real-time last minute data on a chart. The supported chart types are time series, table, pie, and bar. The default chart type is bar. These charts are configurable. For more information on configuring charts, see [Configuring Charts](#).

Time series charts are interactive. Using the time series charts, you can magnify and scan through a timeline to investigate log activity.

Events By Severity

The **Events By Severity** dashboard item displays the number of active events grouped by severity. This item allows you to see the number of events that are being received by the level of severity that has been assigned. Severity indicates the amount of threat an offense source poses in relation to how prepared the destination is for the attack. The range of severity is 0 (low) to 10 (high). The supported chart types are Table, Pie, and Bar.

Top Log Sources

The **Top Log Sources** dashboard item displays the top five log sources that sent events to QRadar Network Anomaly Detection within the last 5 minutes. The number of events sent from the specified log source is indicated in the pie chart. This item allows you to view potential changes in behavior, for example, if a firewall log source that is typically not in the top 10 list is now contributing to a large percentage of the overall message count, you should investigate this occurrence. The supported chart types are Table, Pie, and Bar.

Reports Items

The **Most Recent Reports** dashboard item displays the top recently generated reports. The display provides the report title, the time and date the report was generated, and the format of the report.

- System Summary Item** The **System Summary** dashboard item provides a high-level summary of activity within the past 24 hours. Within the summary item, you can view the following information:
- **Current Flows Per Second** - Specifies the flow rate per second.
 - **Flows (Past 24 Hours)** - Specifies the total number of active flows seen within the last 24 hours.
 - **Current Events Per Second** - Specifies the event rate per second.
 - **New Events (Past 24 Hours)** - Specifies the total number of new events received within the last 24 hours.
 - **Updated Offenses (Past 24 Hours)** - Specifies the total number of offenses that have been either created or modified with new evidence within the last 24 hours.
 - **Data Reduction Ratio** - Specifies the ratio of data reduced based on the total events detected within the last 24 hours and the number of modified offenses within the last 24 hours.

- System Notifications Item** The **Systems Notification** dashboard item displays event notifications your system receives. For notifications to show in the **System Notification** dashboard item, the Administrator must create a rule based on each notification message type and select the **Notify** check box in the Custom Rules Wizard. For more information on configuring event notifications and creating event rules, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

This section includes the following topics:

- [Viewing System Notifications](#)
- [Managing System Notifications](#)
- [Viewing Pop-Up Notifications](#)

Viewing System Notifications

On the **System Notifications** dashboard item, you can view the following information:

- **Flag** - Specifies symbols to indicate severity level of the notification. Point your mouse over the symbol to view more detail about the severity level.
 - **Information** icon (?)
 - **Error** icon (X)
 - **Warning** icon (!)
- **Created** - Specifies the amount of time that has elapsed since the notification was created.
- **Description** - Specifies information about the notification.
- **Dismiss icon (x)**- Allows you to dismiss a system notification.

You can point your mouse over a notification to view more details:

- **Host IP** - Specifies the host IP address of the host that originated the notification.
- **Severity** - Specifies the severity level of the incident that created this notification.
- **Low Level Category** - Specifies the low-level category associated with the incident that generated this notification. For example: Service Disruption. For more information on categories, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.
- **Payload** - Specifies the payload content associated with the incident that generated this notification.
- **Created** - Specifies the amount of time that has elapsed since the notification was created.

Managing System Notifications

Using the **System Notification** dashboard item on your dashboard, you can specify the number of notifications that you want to display in your dashboard and dismiss any system notifications.

To manage your System Notification display:

Step 1 Ensure the **System Notification** dashboard item is added to your dashboard.

For more information, see [Adding Items](#).

Step 2 On the System Notification dashboard item header, click the **Settings** icon.

Step 3 From the **Display** list box, select the number of system notifications you want to view.

The options are **5**, **10** (default), **20**, **50**, and **All**.

To view all system notifications logged in the past 24 hours, click **All**. A window is displayed detailing the system notifications. For more information regarding events, see [Investigating Events](#).

Step 4 To dismiss a system notification, click the **Delete** icon.

Viewing Pop-Up Notifications

When you add the **System Notifications** dashboard item, system notifications can also display as pop-up notifications in the QRadar Network Anomaly Detection user interface. These pop-up notifications are displayed in the lower right corner of the user interface, regardless of the selected tab.

NOTE

Pop-up notifications are only available for users with administrative permissions. Pop-up notifications are enabled by default. To disable pop-up notifications, select **User Preferences** and clear the **Enable Pop-up Notifications** check box. For more information, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

In the System Notifications pop-up window, the number of notifications in the queue is highlighted. For example, if (1 to 12) is displayed in the header, the current notification is 1 of 12 notifications to be displayed.

The system notification pop-up window provides the following options:

- **Next icon (>)** - Displays the next notification message. For example, if the current notification message is 3 of 6, click the icon to view 4 of 6.
- **Close icon (X)** - Closes this notification pop-up window.
- **(details)** - Displays additional information regarding this system notification.

Internet Threat Information Center

The Internet Threat Information Center dashboard item is an embedded RSS feed that provides you with up-to-date advisories on security issues, daily threat assessments, security news, and threat repositories.

The Current Threat Level diagram indicates the current threat level and provides a link to the Current Internet Threat Level page of the IBM Internet Security Systems website.

Current advisories are listed in the dashboard item. To view a summary of the advisory:

- ▶ Click the Arrow icon next to the advisory. The advisory expands to display a summary. Click the Arrow icon again to hide the summary.

To investigate the full advisory:

- ▶ Click the associated link. The IBM Internet Security Systems website opens in another browser window, displaying the full advisory details.

Adding Search-Based Dashboard Items to the Add Items List

To add an event and flow search dashboard item to the **Add Item** menu on the **Dashboard** tab, you must access the **Log Activity** or **Network Activity** tab to create search criteria that specifies that the search results can be displayed on the **Dashboard** tab. The search criteria must also specify that the results are grouped on a parameter.

NOTE

This procedure also applies to Risk Manager dashboard items. Risk Manager dashboard items are only displayed when IBM Security QRadar Risk Manager has been purchased and licensed, and you have established the connection between the Console and the IBM Security QRadar Risk Manager appliance. For more information, see the *IBM Security QRadar Risk Manager Users Guide*.

For more information on event and flow dashboard items, see [Dashboard Items](#).

To add an event or flow search dashboard item to the **Add Items** list:

Step 1 Choose one of the following options:

- To add a flow search dashboard item, click the **Network Activity** tab.
- To add an event search dashboard item, click the **Log Activity** tab.

Step 2 From the **Search** list box, choose one of the following options:

- To create a new search, select **New Search**.
- To edit a saved search, select **Edit Search**.

Step 3 Configure or edit your search parameters, as required. For more information on flow searches, see [Investigating Flows](#).

Step 4 Ensure you configure the following parameters:

- On the Edit Search pane, select the **Include in my Dashboard** option.
- On the Column Definition pane, select a column and click the **Add Column** icon to move the column to the **Group By** list.

Step 5 Click **Filter**.

The search results are displayed.

Step 6 Click **Save Criteria**

Step 7 Configure the parameters, as required. For more information, see [Searching Data](#).

Step 8 Click **OK**.

Step 9 Verify that your saved search criteria successfully added the event or flow search dashboard item to the **Add Items** list

- a Click the **Dashboard** tab.
- b Choose one of the following options:
 - To verify an event search item, select **Add Item > Log Activity > Event Searches**.
 - To verify a flow search item, select **Add Item > Network Activity > Flow Searches**.

The dashboard item should be displayed on the list using the same name as your saved search criteria.

3

INVESTIGATING OFFENSES

Using the **Offenses** tab, you can investigate offenses, source and destination IP addresses, network behaviors, and anomalies on your network.

This section includes the following topics:

- [Offense Tab Overview](#)
- [Using the Offenses Tab](#)
- [Viewing My Offenses](#)
- [Managing Offenses](#)
- [Viewing Offenses By Category](#)
- [Viewing Offenses By Source IP](#)
- [Viewing Offenses By Destination IP](#)
- [Viewing Offenses By Network](#)

Offense Tab Overview

IBM Security QRadar Network Anomaly Detection can correlate events and flows with destination IP addresses located across multiple networks in the same offense, and ultimately the same network incident. This allows you to effectively investigate each offense in your network. You can navigate the various pages of the **Offenses** tab to investigate event and flow details to determine the unique events that caused the offense.

Using the **Offenses** tab, you can search for offenses based on various criteria. For more information on searching offenses, see [Searching Data](#).

NOTE

The **Offenses** tab does not use device level user permissions to determine which offenses each user should be able to view; this is determined by network permissions. Therefore, all users can view all offenses regardless of which log source or flow source is associated with the offense. For more information on device level permissions, see the *QRadar Network Anomaly Detection Administration Guide*.

Using the **Offenses** tab, you can access and analyze the following:

- **Offenses** - An offense includes multiple events or flows originating from one source, such as a host or log source. The **Offenses** tab displays offenses, which include traffic and vulnerabilities that collaborate and validate the magnitude of an offense. The magnitude of an offense is determined by several tests performed on the offense each time it is re-evaluated. Re-evaluation occurs when events are added to the offense and at scheduled intervals.
- **Source IP Addresses** - A source IP address specifies the device that attempts to breach the security of a component on your network. A source IP address can use various methods of attack, such as reconnaissance or Denial of Service (DoS) attacks, to attempt unauthorized access.
- **Destination IP Addresses** - A destination IP address specifies the network device that a source IP address attempts to access.

Using the **Offenses** tab, you can add notes, mark an offense for follow-up, assign offenses to users, hide offenses, email offenses, close resolved offenses or protect offenses from deletion. The **Offenses** tab allows you to investigate events and flows associated with specific offenses for forensic analysis.

Using the Offenses Tab

Using the **Offenses** tab, you can access the following options on the navigation menu:

Table 3-1 Navigation Menu Options

Menu	Description
My Offenses	Displays all offenses that are assigned to you.
All Offenses	Displays all global offenses on the network.
By Category	Displays all offenses grouped by the high- and low-level category. For more information on high- and low-level categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
By Source IP	Displays all source IP addresses that are involved in an offense. For more information, see Viewing Offenses By Source IP .
By Destination IP	Displays all destination IP addresses that are involved in an offense. For more information, see Viewing Offenses By Destination IP .
By Network	Displays all networks that are involved in an offense. For more information, see Viewing Offenses By Network .
Rules	Provides access to the Rules tab, from which you can create custom rules. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .

Each page on the **Offenses** tab provides a toolbar, allowing you to perform actions on the offenses displayed on the page.

Viewing My Offenses

By default, the All Offenses page is displayed when you click the **Offenses** tab. You can view offenses that are assigned to you on the My Offenses page.

To view offenses assigned to you:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **My Offenses**.

The My Offenses page provides a list of all offenses the administrator assigned to you. For more information on managing your offenses, see [Managing Offenses](#).

Managing Offenses

The All Offenses page on the **Offenses** tab displays list of offenses that QRadar Network Anomaly Detection has identified on your network. Offenses are listed with the highest magnitude first.

NOTE

On the **Admin** tab, you can configure system settings to remove offenses from the database after a configured period of time. You must have administrative permission to access the **Admin** tab and configure system settings. When configuring the thresholds, QRadar Network Anomaly Detection adds 5 days to any defined threshold. For more information, see the *IBM Security QRadar Network Anomaly Detection Administration Guide - Configuring System Settings*.

This section includes the following topics:

- [Viewing Offenses](#)
- [Offense Source Summary Options](#)
- [Adding Notes](#)
- [Removing Offenses From the Offenses Tab](#)
- [Protecting Offenses](#)
- [Exporting Offenses](#)
- [Assigning Offenses to Users](#)
- [Sending Email Notification](#)
- [Marking an Item For Follow-Up](#)

Viewing Offenses To view offenses:

- Step 1** Click the **Offenses** tab.

NOTE

To access the All Offenses page from other **Offenses** tab pages, click **All Offenses** on the navigation menu.

The All Offenses toolbar provides the following functions:

Table 3-2 All Offenses Toolbar

Function	Description
Search	<p>Click Search to perform advanced searches on offenses, including:</p> <ul style="list-style-type: none"> • New Search - Select this option to create a new offense search. • Edit Search - Select this option to select and edit an offense search. <p>For more information on the search feature, see Searching Data.</p>
Save Criteria	<p>Click Save Criteria to save the current search criteria. See Saving Search Criteria.</p>
Actions	<p>From the Actions list box, you can choose one of the following actions:</p> <ul style="list-style-type: none"> • Hide - Select this option to hide selected offenses. For more information on hiding offenses, see Hiding Offenses. • Show - Select this option to show hidden offenses. For more information on showing hidden offenses, see Showing Hidden Offenses. • Close - Select this option to close selected offenses. For more information on closing offenses, see Closing an Offense. • Close Listed - Select this option to close all offenses listed on the Offenses tab. For more information on closing listed offenses, see Closing Listed Offenses. • Protect - Select this option to protect selected offenses. For more information on protecting offenses, see Protecting Offenses. • Protect Listed - Select this option to protect all offenses listed on the Offenses tab. For more information on protecting listed offenses, see Protecting Listed Offenses. • Unprotect - Select this option to unprotect selected protected offenses. For more information on unprotecting offenses, see Unprotecting Offenses. • Unprotect Listed - Select this option to unprotect all selected protected offenses listed on the Offenses tab. For more information on unprotecting listed offenses, see Unprotecting Listed Offenses. • Export to XML - Select this option to export offenses in XML format. See Exporting Offenses.

Table 3-2 All Offenses Toolbar (continued)

Function	Description
	<ul style="list-style-type: none"> • Export to CSV - Select this option to export offenses in CSV format. See Exporting Offenses. • Assign - Select this option to assign a selected offense to a user. See Assigning Offenses to Users.
Print	Click Print to print the offenses displayed on the page.

The All Offenses page provides the following information:

Table 3-3 All Offenses Page Parameters

Parameter	Description
View Offenses	Using this list box, you can filter on the offenses you want to view in this page. You can view all offenses or filter by the offenses based on a time range. From the list box, select the time range you want to filter by.
Current Search Parameters	<p>The top of the table displays the details of the search parameters applied to the search results. To clear these search parameters, click Clear Filter.</p> <p>For information about searching offenses, see Searching Data.</p>
Flag	<p>Indicates the action taken on the offense. The actions are represented by the following icons:</p> <ul style="list-style-type: none"> • Flag - Indicates that the offense is marked for follow-up. This allows you to track a particular item for further investigation. For more information on how to mark an offense for follow-up, see Marking an Item For Follow-Up. • User - Indicates that the offense has been assigned to a user. When an offense is assigned to a user, the offense is displayed on the My Offenses page of that user. For more information on assigning offenses to users, see Assigning Offenses to Users. • Notes - Indicates that a user has added notes to the offense. Notes can include any information you want to capture for the offense. For example, you could add a note that specifies information that is not automatically included in an offense, such as a Customer Support ticket number or offense management information. For more information on adding notes, see Adding Notes. • Protected - Indicates that this offense is protected. The Protect feature prevents specified offenses from being removed from the database after the retention period has elapsed. For more information on protected offenses, see Protecting Offenses.

Table 3-3 All Offenses Page Parameters (continued)

Parameter	Description
	<ul style="list-style-type: none"> • Inactive Offense - Indicates that this is an inactive offense. An offense becomes inactive after five days have elapsed since the offense received the last event. Also, all offenses become inactive after upgrading your QRadar Network Anomaly Detection software. <p>An inactive offense cannot become active again. If new events are detected for the offense, a new offense is created and the inactive offense is retained until the offense retention period has elapsed. You can perform the following actions on inactive offenses: protect, flag for follow up, add notes, and assign to users.</p> <p>Point your mouse over the icon to display additional information.</p>
Id	Specifies the unique identification number QRadar Network Anomaly Detection assigns to this offense.
Description	Specifies the details for this offense.
Offense Type	Specifies the type of offense. The Offense Type is determined by the rule that created the offense. For example, if the offense type is log source event, the rule that generated this offense correlates events based on the device that detected the event.
Offense Source	Specifies information about the source of the offense. The information displayed in the Offense Source field depends on the type of offense. For example, if the offense type is Source Port, the Offense Source field displays the source port of the event that created this offense.
Magnitude	<p>Specifies the relative importance of the offense. The magnitude bar provides a visual representation of all correlated variables of the events and flows for this offense. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude.</p> <p>Note: For more information on relevance, severity, and credibility, see the Glossary.</p>
Source IPs	Specifies the IP addresses or host name of the device that attempted to breach the security of a component on your network. If more than one source IP address is associated with this offense, this field specifies Multiple and the number of source IP addresses.
Destination IPs	Specifies the IP addresses and asset name (if available) of the local or remote destinations. If more than one destination IP address is associated with this offense, this field specifies Multiple and the number of destination IP addresses.
Users	Specifies the user names associated with this offense. If more than one user name is associated with the offense, this field specifies Multiple and the number of user names.
Log Sources	Specifies the log sources associated with this offense. If more than one log source is associated with the offense, this field specifies Multiple and the number of log sources.

Table 3-3 All Offenses Page Parameters (continued)

Parameter	Description
Events	Specifies the number of events for this offense.
Flows	Specifies the number of flows for this offense. <i>Note: If the Flows column displays N/A, the offense may have a start date that precedes the date you upgraded to IBM Security QRadar Network Anomaly Detection 7.1.0 (MR1).</i>
Start Date	Specifies the date and time of the first event or flow associated with this offense.
Last Event/Flow	Specifies the elapsed time since the last event or flow.

Step 2 Double-click the offense you want to view.

NOTE

If you want to view an offense on a new page, hold the Control key while you double-click on an offense.

The Offense Summary page provides the following functions:

Table 3-4 Offense Summary Toolbar

Function	Description
Display	From the Display list box, select the option for the information you want to display.
Summary	If you clicked to view another option from the Display list box, you can click Summary to return to the detailed summary view.
Notes	Click Notes to view all notes for this offense, including: <ul style="list-style-type: none"> • Notes - Specifies the user notes for this offense. • Username - Specifies the user who created this note. • Creation Date - Specifies the date and time that this note was created. For more information on notes, see Adding Notes .

Table 3-4 Offense Summary Toolbar (continued)

Function	Description
Sources	<p>Click Sources to view all source IP addresses for this offense, including:</p> <ul style="list-style-type: none"> • Flag - Specifies the action taken on the source IP address. For example, if a flag is displayed, the source IP address is marked for follow-up. Point your mouse over the icon to display additional information. • Source IP - Specifies the IP address of the device that attempted to breach the security of a component on your network. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>. • Magnitude - Specifies the relative importance of the source IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the source IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see the Glossary. • Location - Specifies the network location of the source IP address. • Vulnerability - Specifies whether the source IP address has vulnerabilities. • User - Specifies the user name for the source IP address. If no user is identified, this field specifies Unknown. • MAC - Specifies the MAC address for the source IP address. If no MAC address is identified, this field specifies Unknown. • Weight - Specifies the weight of the source IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets. • Offenses - Specifies the number of offenses associated with this source IP address. • Destination(s) - Specifies the number of destination IP addresses associated with this source IP address. • Last Event/Flow - Specifies the time elapsed since the last event or flow. • Events/Flows - Specifies the number of events or flows associated with this source IP address.

Table 3-4 Offense Summary Toolbar (continued)

Function	Description
Destinations	<p>Click Destinations to view all local destination IP addresses for this offense, including:</p> <p>Note: <i>If the destination IP addresses associated with this offense are remote, a separate page opens providing information for the remote destination IP addresses. For more information on destination IP addresses, see Viewing Offenses By Destination IP.</i></p> <ul style="list-style-type: none"> • Flag - Specifies the action taken on the destination IP address. For example, if a flag is displayed, the destination IP address is marked for follow-up. Point your mouse over the icon to display additional information. • Destination IP - Specifies the IP address of the local destination. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>. • Magnitude - Specifies the relative importance of the destination IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the destination IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see the Glossary. • Location - Specifies the network location of the destination IP address. • Vulnerability - Specifies whether the destination IP address has vulnerabilities. • User - Specifies the user name for the destination IP address. If no user is identified, this field specifies Unknown. • MAC - Specifies the MAC address for the destination IP address. If no MAC address is identified, this field specifies Unknown. • Weight - Specifies the weight of this destination IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets. • Offenses - Specifies the number of offenses associated with this destination IP address. • Source(s) - Specifies the number of source IP addresses associated with this destination IP address. • Last Event/Flow - Specifies the time elapsed since the last event or flow. • Events/Flows - Specifies the number of events or flows associated with this destination IP address.

Table 3-4 Offense Summary Toolbar (continued)

Function	Description
Log Sources	<p>Click Log Sources to view all log sources for this offense, including:</p> <ul style="list-style-type: none"> • Name - Specifies the log source name. • Description - Specifies the log source description. • Group - Specifies to which log source group the log source belongs. • Events/Flows - Specifies the number of events associated with this log source. • Offenses - Specifies the number of offenses associated with this log source for this offense. • Total Events/Flows - Specifies the total number of events associated with this log source.
Users	<p>Click Users to view all users associated with this offense, including:</p> <ul style="list-style-type: none"> • Name - Specifies the name of the user. • Events/Flows - Specifies the number of events or flows associated with the user for this offense. • Offenses - Specifies the number of offenses associated with the user. • Total Events/Flows - Specifies the total number of events or flows associated with the user.

Table 3-4 Offense Summary Toolbar (continued)

Function	Description
Categories	<p>Click Categories to view category information for this offense, including:</p> <p>Note: You can also further investigate the events related to a specific category by right-clicking a category and selecting Events. Alternatively, you can highlight the category and click the Events icon on the List of Event Categories toolbar.</p> <ul style="list-style-type: none"> • Name - Specifies the name of the category associated with this offense. • Magnitude - Specifies the relative importance of the category. The magnitude bar provides a visual representation of all correlated variables of the category. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values for the category and the calculated magnitude. • Local Destination Count - Specifies the number of local destination IP addresses associated with this category. • Events/Flows - Specifies the number of events or flows associated with this category. • First Event/Flow - Specifies the date and time of the first event or flow. • Last Event/Flow - Specifies the date and time of the last event or flow. <p>For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Annotations	<p>Click Annotations to view all annotations for this offense, including:</p> <ul style="list-style-type: none"> • Annotation - Specifies the details for this annotation. Annotations are text descriptions that rules can automatically add to offenses as part of the rule response. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>. • Time - Specifies the date and time when this annotation was created. • Weight - Specifies the weight of this annotation.

Table 3-4 Offense Summary Toolbar (continued)

Function	Description
Networks	<p>Click Networks to view all destination networks for this offense, including:</p> <ul style="list-style-type: none"> • Flag - Specifies the action taken on the network. For example, if a flag is displayed, the network is marked for follow-up. Point your mouse over the icon to display additional information. • Network - Specifies the name of the destination network. • Magnitude - Specifies the relative importance of the destination network. The magnitude bar provides a visual representation of the CVSS risk value of the assets associated with the destination network. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see the Glossary. • Source IPs - Specifies the number of source IP addresses associated with this network. • Destination IPs - Specifies the number of destination IP addresses associated with this network. • Offenses Targeted - Specifies the number of offenses targeted at this network. • Offenses Launched - Specifies the number of offenses launched by this network. • Events/Flows - Specifies the number of events or flows associated with this network.
Rules	<p>Click Rules to view all rules that have generated this offense, including:</p> <ul style="list-style-type: none"> • Flag - Specifies that the rule has been deleted since it generated for this offense. • Rule Name - Specifies the name of the rule that generated this offense. • Events/Flows - Specifies the combined count of events or flows generated for this offense. • First Event/Flow - Specifies the time elapsed since the first event or flow generated this rule. • Last Event/Flow - Specifies the time elapsed since the last event or flow generated this rule. <p>Note: <i>The rule that created the offense is listed first.</i></p> <p>To have appropriate permissions to edit a rule, double-click the rule to launch the Edit Rules page. For more information on user roles, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p> <p>If the rule has been deleted, a red icon (x) is displayed beside the rule. If you double-click a deleted rule, a message is displayed to indicate the rule no longer exists.</p>

Table 3-4 Offense Summary Toolbar (continued)

Function	Description
Events	Click Events to view all events for this offense. When you click Events , the event search results are displayed. For information on searching events, see Investigating Events
Anomaly	Click Anomaly to display the saved search results that caused the anomaly detection rule to generate this offense. <i>Note: This button is only displayed if this offense was generated by an anomaly detection rule.</i>
Flows	Click Flows to further investigate the flows associated with this offense. When you click Flows , the flow search results are displayed. See Investigating Flows .
Connections	Click Connections to further investigate connections. <i>Note: This option is only available if you have purchased and licensed IBM Security QRadar Risk Manager. For more information, see the IBM Security QRadar Risk Manager Users Guide.</i>

When you click the **Connections** icon, the connection search criteria page is displayed on a new page, pre-populated with the following event search criteria:

- **Time Range** - Recent (Last Hour)
- **Column Definition** - Specifies the following columns to be displayed in the search results:
 - Last Packet Time
 - Source Type
 - Source
 - Destination Type
 - Destination
 - Protocol
 - Destination Port
 - Flow Application
 - Flow Source
 - Flow Count
 - Flow Source Bytes
 - Flow Destination Bytes
 - Log Source
 - Event Count
 - Connection Type

You can customize the search parameters, if required. Click **Search** to view the connection information.

Table 3-4 Offense Summary Toolbar (continued)

Function	Description
Actions	<p>From the Actions list box, you can choose one of the following actions:</p> <ul style="list-style-type: none"> • Follow up - Select this option to mark this offense for further follow-up. See Marking an Item For Follow-Up. • Hide - Select this option to hide this offense. For more information on hiding offenses, see Hiding Offenses. • Protect Offense - Select this option to protect this offense. For more information on protecting offenses, see Protecting Offenses. • Close - Select this option to close this offense. For more information on closing offenses, see Closing an Offense. • Email - Select this option to email the offense summary to one or more recipients. See Sending Email Notification. • Add Note - Select this option to add notes to the offense. See Adding Notes. • Assign - Select this option to assign this offense to a user. See Assigning Offenses to Users.
View Attack Path	<p>Click View Attack Path to further investigate the attack path of the offense. When you click the View Attack Path icon, the Current Topology page is displayed on a new page.</p> <p><i>Note: This option is only available if you have purchased and licensed IBM Security QRadar Risk Manager. For more information, see the IBM Security QRadar Risk Manager Users Guide.</i></p>
Print	Click Print to print the offense.

The Offense Summary page provides the following tables of information on the selected offense:

- [Offense Table](#)
- [Offense Source Summary Table](#)
- [Last 5 Notes Table](#)
- [Top 5 Source IPs Table](#)
- [Top 5 Destination IPs Table](#)
- [Top 5 Log Sources Table](#)
- [Top 5 Users Table](#)
- [Top 5 Categories Table](#)
- [Last 10 Events Table](#)
- [Last 10 Events \(Anomaly Events\) Table](#)
- [Last 10 Flows Table](#)
- [Top 5 Annotations Table](#)

NOTE The top of the page displays the navigation trail to the current view. To return to a previously viewed page, click the page name on the navigation trail. This option is not available when viewing the offense summary on a new page.

NOTE To view a pane on the summary page in greater detail, click the associated toolbar option. For example, if you want to view the details of the source IP addresses, click **Sources**.

Offense Table

The Offense table provides overview details for the offense. For more information on the toolbar, see [Table 3-4](#).

Table 3-5 Offense Table Parameters

Parameter	Description
Magnitude	Specifies the relative importance of the offense. The magnitude bar provides a visual representation of all correlated variables of the events and flows for this offense. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display the values and the calculated magnitude. Note: For more information on relevance, severity, and credibility, see the Glossary .

Table 3-5 Offense Table Parameters (continued)

Parameter	Description
Status	<p>Displays icons to indicate the status of an offense. Status icons include:</p> <ul style="list-style-type: none"> • Inactive Offense - Indicates that this is an inactive offense. An offense becomes inactive after five days have elapsed since the offense received the last event. Also, all offenses become inactive after upgrading your QRadar Network Anomaly Detection software. An inactive offense cannot become active again. If new events are detected for the offense, a new offense is created and the inactive offense is retained until the offense retention period has elapsed. You can perform the following actions on inactive offenses: protect, flag for follow up, add notes, and assign to users • Hidden Offense - Indicates that this offense is hidden from view on the All Offenses page. Hidden offenses are only visible on the All Offenses page if you perform a search for hidden offenses. For more information on hidden offenses, see Hiding Offenses. • User - Indicates that the offense has been assigned to a user. When an offense is assigned to a user, the offense is displayed on the My Offenses page of that user. For more information on assigning offenses to users, see Assigning Offenses to Users. • Protected - Indicates that this offense is protected. The Protect feature prevents specified offenses from being removed from the database after the retention period has elapsed. For more information on protected offenses, see Protecting Offenses. • Closed Offense - Indicates that this offense has been closed. For more information on closing offenses, see Closing an Offense. <p>Point your mouse over the icon to display additional information.</p>
Relevance	Specifies the relative importance of this offense.
Severity	Specifies the severity of this offense. Severity specifies the amount of threat that an offense poses in relation to how prepared the destination IP address is for the attack. This value is directly mapped to the event category that correlates to the offense. For example, a Denial of Service (DoS) attack has a severity of 10, which specifies a severe occurrence.
Credibility	Specifies the credibility of this offense, as determined by the credibility rating from source devices. For example, credibility is increased when multiple offenses report the same event or flow.
Description	Specifies a description of the offense.

Table 3-5 Offense Table Parameters (continued)

Parameter	Description
Source IP(s)	<p>Specifies the IP address or host name of the device that attempted to breach the security of a component on your network. Click the link to view additional details.</p> <p>For more information on source IP addresses, see Viewing Offenses By Source IP.</p>
Destination IP(s)	<p>Specifies the IP addresses and asset name (if available) of the local or remote destinations. Click the link to view additional details.</p> <p>For more information on destination IP addresses, see Viewing Offenses By Destination IP.</p>
Network(s)	<p>Specifies the destination network for this offense. If the offense has one destination network, this field displays the network leaf. Click the link to view the network information. If the offense has more than one destination network, the term Multiple is displayed. Click the link to view additional details.</p>
Offense Type	<p>Specifies the type of offense. The Offense Type is determined by the rule that created the offense. For example, if the offense type is log source event, the rule that generated this offense correlates events based on the device that detected the event.</p> <p>Offense types include:</p> <ul style="list-style-type: none"> • Source IP • Destination IP • Event Name • User Name • Source MAC Address • Destination MAC Address • Log Source • Host Name • Source Port • Destination Port • Source IPv6 • Destination IPv6 • Source ASN • Destination ASN • Rule • App ID <p>Note: The offense type determines what type of information is displayed on the Offense Source Summary pane.</p>

Table 3-5 Offense Table Parameters (continued)

Parameter	Description
Event/Flows Count	<p>Specifies the number of events and flows that have occurred for this offense and the number of categories.</p> <p>Click the events link to further investigate the events associated with this offense. When you click the events link, the event search results are displayed.</p> <p>Click the flows link to further investigate the flows associated with this offense. When you click the flows link, the flow search results are displayed.</p> <p>Note: <i>If the flow count displays N/A, the offense may have a start date that precedes the date that you upgraded to IBM Security QRadar Network Anomaly Detection 7.1.0 (MR1), therefore, flows cannot be counted. You can, however, click the N/A link to investigate the associated flows in the flow search results.</i></p>
Start	Specifies the date and time the first event or flow occurred for this offense.
Duration	Specifies the amount of time elapsed since this offense was first detected.
Assigned to	<p>Specifies the user assigned to this offense.</p> <p>If no user is assigned, this field specifies Not assigned. Click Not assigned to assign this offense to a user. For more information, see Assigning Offenses to Users.</p>

Offense Source Summary Table

The Offense Source Summary Table specifies information about the source of the offense. The information displayed in the **Offense Source** field depends on the type of offense. For example, if the offense type is Source Port, the **Offense Source** field displays information about the source port of the event that created this offense.

NOTE

For more information on offense types, see [Offense Type](#). For more information on the offense source summary parameters for each offense type, see [Offense Source Summary Options](#).

Last 5 Notes Table

The Last 5 Notes table specifies information about the last five user notes for the offense. Click **Notes** to view additional information. Click **Add Notes** to add a note. For more information on adding a note, see [Adding Notes](#).

Table 3-6 Last 5 Notes Table Parameters

Parameter	Description
Notes	Specifies the user notes for this offense.
Username	Specifies the user who created this note.

Table 3-6 Last 5 Notes Table Parameters (continued)

Parameter	Description
Create Date	Specifies the date and time that this note was created.

Top 5 Source IPs Table

The Top 5 Source IPs table specifies the top five source IP addresses of this offense, organized by magnitude. Click **Sources** to view additional information.

Table 3-7 Top 5 Source IPs Table Parameters

Parameter	Description
Source IP	Specifies the IP address or host name of the device that attempted to breach the security of a component on your network.
Magnitude	Specifies the relative importance of the source IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the source IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see the Glossary .
Location	Specifies the network location of the source IP address.
Vulnerability	Specifies whether this source IP address has vulnerabilities.
User	Specifies the user name for the source IP address. If no user is identified, this field specifies Unknown.
MAC	Specifies the MAC address for the source IP address. If no MAC address is identified, this field specifies Unknown.
Weight	Specifies the weight of the source IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets .
Offenses	Specifies the number of offenses for this source IP address.
Destination(s)	Specifies the number of destination IP addresses for this source IP address.
Last Event/Flow	Specifies the elapsed time since the last event or flow was observed for this source IP address.
Events/Flows	Specifies the number of events or flows for this source IP address.

Top 5 Destination IPs Table

The Top 5 Destination IPs table specifies the top five destination IP addresses of this offense, organized by magnitude. Click **Destinations** to view additional information.

Table 3-8 Top 5 Destination IPs Table Parameters

Parameter	Description
Destination IP	Specifies the IP address or host name of the destination.

Table 3-8 Top 5 Destination IPs Table Parameters (continued)

Parameter	Description
Magnitude	Specifies the relative importance of the destination IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the destination IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see the Glossary .
Location	Specifies the network location of the destination IP address.
Vulnerability	Specifies whether the destination IP address has vulnerabilities.
Chained	Specifies whether the destination IP address is chained. A chained destination IP address is associated with other offenses. For example, a destination IP address may become the source IP address for another offense. If the destination IP address is chained, click Yes to view the chained offenses.
User	Specifies the user name for the destination IP address. If no user is identified, this field specifies Unknown.
MAC	Specifies the MAC address for the destination IP address. If no MAC address is identified, this field specifies Unknown.
Weight	Specifies the weight of the destination IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets .
Offenses	Specifies the number of offenses for this destination IP address.
Source(s)	Specifies the number of source IP addresses for this destination IP address.
Last Event/Flow	Specifies the elapsed time since the last event or flow was observed for this destination IP address.
Events/Flows	Specifies the number of events or flows for this destination IP address.

Top 5 Log Sources Table

The Top 5 Log Sources table specifies the top five log sources of this offense, organized by the number of events each log source contributed to the offense. Click **Log Sources** to view additional information.

Table 3-9 Top 5 Log Sources Table Parameters

Parameter	Description
Name	Specifies the name of the log source.
Description	Specifies the description of the log source.
Group	Specifies to which log source group the log source belongs.
Events/Flows	Specifies the number of events or flows associated with the log source for this offense.
Offenses	Specifies how many offenses are associated with the log source.
Total Events/Flows	Specifies the total number of events for the log source.

Top 5 Users Table

The Top 5 Users table specifies the top 5 users for this offense, organized by the number of offenses per user. Click **Users** to view all users for this offense.

Table 3-10 Top 5 Users Table Parameters

Parameter	Description
Name	Specifies the name of the user.
Events/Flows	Specifies the number of events or flows associated with the user for this offense.
Offenses	Specifies the number of offenses associated with the user.
Total Events/Flows	Specifies the total number of events or flows associated with the user.

Top 5 Categories Table

The Top 5 Categories table specifies the top five global categories of this offense, organized by magnitude. Click **Categories** to view additional information.

Table 3-11 Top 5 Categories Table Parameters

Parameter	Description
Name	Specifies the name of the category.
Magnitude	Specifies the relative importance of the category. The magnitude bar provides a visual representation of all correlated variables of the category. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values for the category and the calculated magnitude. <i>Note: For more information on relevance, severity, and credibility, see the Glossary.</i>
Local Destination Count	Specifies the number of local destination IP addresses associated with this category.
Events/Flows	Specifies the number of events or flows associated with this category.
First Event/Flow	Specifies the date and time the first event was detected for this category in this offense.
Last Event/Flow	Specifies the date and time the last event was detected for this category in this offense.

Last 10 Events Table

The Last 10 Events table specifies the Last 10 events of this offense within the last hour, organized by magnitude. Click **Events** to view additional information.

NOTE

If the selected offense was generated by an anomaly detection rule, a different set of parameters are displayed. See [Last 10 Events \(Anomaly Events\) Table](#).

Table 3-12 Last 10 Events Table Parameters

Parameter	Description
Event Name	Specifies a name for this event.
Magnitude	Specifies the relative importance of this event. The magnitude bar provides a visual representation of all correlated variables of the event. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values for the event and the calculated magnitude. <i>Note: For more information on relevance, severity, and credibility, see the Glossary.</i>
Log Source	Specifies the log source that detected this event.
Category	Specifies the category of this event.
Destination	Specifies the destination IP address of this event.
Dst Port	Specifies the destination port of this event.
Time	Specifies the date and time when the first event was detected in this normalized event. This date and time is specified by the device that detected the event.

Last 10 Events (Anomaly Events) Table

The Last 10 Events (Anomaly Events) table specifies the last 10 events of this offense within the last hour. Click **Events** to view additional information.

NOTE

This pane is only displayed if this offense was generated by an anomaly detection rule.

Table 3-13 Last 10 Events (Anomaly Events) Table Parameters

Parameter	Description
Event Name	Specifies a name for this event.
Time	Specifies the date and time when the first event was detected in this normalized event. This date and time is specified by the device that detected the event.
Anomaly Text	Specifies a description of the anomalous behavior that was detected by the anomaly detection rule.
Anomaly Value	Specifies the value that caused the anomaly detection rule to generate this offense.
Anomaly	Select this option to display the saved search results that caused the anomaly detection rule to generate this event.

Last 10 Flows Table

The Last 10 Flows table specifies the last 10 flows of this offense within the last hour, organized by magnitude. Click **Flows** to view additional information.

Table 3-14 Last 10 Flows Table Parameters

Parameter	Description
Application	Specifies the application associated with this flow.
Source IP	Specifies the source IP address of this flow.
Source Port	Specifies the source port of this flow.
Destination IP	Specifies the destination IP address of this flow
Destination Port	Specifies the destination port of this flow.
Total Bytes	Specifies the total number of bytes for this flow.
Last Packet Time	Specifies the date and time the last packet for this flow was sent.

Top 5 Annotations Table

The Top 5 Annotation table specifies the top five annotations for this offense. Click **Annotations** to view additional information.

Table 3-15 Top 5 Annotations Table Parameters

Parameter	Description
Annotation	Specifies the details for this annotation. Annotations are text descriptions that rules can automatically add to offenses as part of the rule response. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Time	Specifies the date and time that this annotation was created.
Weight	Specifies the weight of this annotation.

Offense Source Summary Options

The information in the Offense Source Summary table, displayed on the Offense Summary page, depends on the offense type for the offense you are viewing.

The offense types include:

- **Source IP**
- **Destination IP**
- **Event Name**
- **Username**
- **Source or Destination MAC Address**
- **Log Source**
- **Hostname**
- **Source or Destination Port**
- **Source or Destination IPv6**

- [Source or Destination ASN](#)
- [Rule](#)
- [App ID](#)

Source IP

If the Offense Type is Source IP, the following information is displayed in the Offense Source table:

Table 3-16 Source IP Offense Summary Parameters

Parameter	Description
Source IP	Specifies the source IP address associated with the event or flow that created this offense.
Magnitude	Specifies the relative importance of the source IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the source IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see the Glossary .
User	Specifies the user associated with this source IP address. If no user is identified, this field specifies Unknown.
Host Name	Specifies the host name associated with the source IP address. If no host name is identified, this field specifies Unknown.
Asset Name	Specifies the asset name, which you can assign using the Asset Profile function. For more information, see Managing Assets .
Offenses	Specifies the number of offenses associated with this source IP address. Click the link to view more details.
Location	Specifies the network location of the source IP address. If the location is local, you can click the link to view the networks.
Vulnerabilities	Specifies the number of identified vulnerabilities associated with this source IP address. This value also includes the number of active and passive vulnerabilities.
MAC	Specifies the MAC address of the source IP address when the offense began. If the MAC address is unknown, this field specifies Unknown.
Asset Weight	Specifies the asset weight, which you can assign using the Asset Profile function. For more information, see Managing Assets .
Events/Flows	Specifies the number of events or flows associated with the source IP address. Click the link to view more details.

Destination IP

If the Offense Type is Destination IP, the following information is displayed in the Offense Source table:

Table 3-17 Destination IP Offense Summary Parameters

Parameter	Description
IP	Specifies the destination IP address associated with the event or flow that created this offense.

Table 3-17 Destination IP Offense Summary Parameters (continued)

Parameter	Description
Magnitude	Specifies the relative importance of the destination IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the destination IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see the Glossary .
User	Specifies the user associated with this destination IP address. If no user is identified, this field specifies Unknown.
Host Name	Specifies the host name associated with the destination IP address. If no host name is identified, this field specifies Unknown.
Asset Name	Specifies the asset name, which you can assign using the Asset Profile function. For more information, see Managing Assets .
Chained	Specifies whether the destination IP address is chained. A chained destination IP address is associated with other offenses. For example, a destination IP address may become the source IP address for another offense. If the destination IP address is chained, click Yes to view the chained offenses.
Offenses	Specifies the number of offenses associated with this destination IP address. Click the link to view more details.
Location	Specifies the network location of the destination IP address. If the location is local, you can click the link to view the networks.
Vulnerabilities	Specifies the number of identified vulnerabilities associated with this destination IP address. This value also includes the number of active and passive vulnerabilities.
MAC	Specifies the MAC address of the destination IP address when the offense began. If the MAC address is unknown, this field specifies Unknown.
Asset Weight	Specifies the asset weight, which you can assign using the Asset Profile function. For more information, see Managing Assets .
Events/Flows	Specifies the number of events or flows association with the destination IP address. Click the link to view more details.

Event Name

If the Offense Type is Event Name, the following information is displayed in the Offense Source table:

NOTE

The information displayed for Event Name offenses is derived from the QRadar Identifier (QID) map, which maps events to unique identifiers.

Table 3-18 Event Name Offense Summary Parameters

Parameter	Description
Event Name	Specifies the event name, as identified in the QID map, associated with the event or flow that created this offense. Point your mouse over the event name to view the QID.
High Level Category	Specifies the high-level category of the event. For more information on high-level categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Severity	Specifies the severity of the event.
Offenses	Specifies the number of offenses associated with this event name. Click the link to view more details.
Low Level Category	Specifies the low-level category of the event. For more information on low-level categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Events/Flows	Specifies the number of events or flows associated with this event name. Click the link to view more details.

Username

If the Offense Type is Username, the following information is displayed in the Offense Source table:

Table 3-19 Username Offense Summary Parameters

Parameter	Description
Username	Specifies the user name associated with the event or flow that created this offense. Note: If you move your mouse pointer over the Username parameter, the tooltip that is displayed provides the user name associated with the most recent user name information from the Asset tab instead of the username associated with the event or flow that created this offense.
Last Known Host	Specifies the current host the user is associated with. If no host is identified, this field specifies Unknown. Note: This field does not display historical information.
Last Known MAC	Specifies the last known MAC address of the user. If no MAC is identified, this field specifies Unknown. Note: This field does not display historical information.
Last Observed	Specifies the date and time the user was last observed on the system.

Table 3-19 Username Offense Summary Parameters (continued)

Parameter	Description
Offenses	Specifies the number of offenses associated with this user. Click the link to view more details.
Last Known Group	Specifies the current group the user belongs to. If no group is currently associated with the user name, the value for this field is Unknown. Note: This field does not display historical information.
Last Known Machine	Specifies the current machine name associated with the user. If no machine name is identified, this field specifies Unknown. Note: This field does not display historical information.
Last Known IP	Specifies the current IP address of the user. If no IP address is identified, this field specifies Unknown. Note: This field does not display historical information.
Events/Flows	Specifies the number of events or flows association with the user name. Click the link to view more details.

Source or Destination MAC Address

If the Offense Type is Source MAC Address or Destination MAC Address, the following information is displayed in the Offense Source table:

Table 3-20 Source or Destination MAC Address Offense Summary Parameters

Parameter	Description
MAC Address	Specifies the MAC address associated with the event that created this offense. If no MAC address is identified, this field specifies Unknown.
Last Known Host	Specifies the current host of the MAC address. If no host is identified, this field specifies Unknown. Note: This field does not display historical information.
Last Known Username	Specifies the current user of the MAC address. If no MAC address is identified, this field specifies Unknown. Note: This field does not display historical information.
Last Observed	Specifies the date and time the last MAC address was observed on the system.
Offenses	Specifies the number of offenses associated with this MAC address. Click the link to view more details.
Last Known IP	Specifies the current IP address associated with the MAC address. If no IP address is currently associated with the MAC address, the value for this field is Unknown. Note: This field does not display historical information.
Last Known Machine	Specifies the current machine name associated with the MAC address. If no machine name is identified, this field specifies Unknown. Note: This field does not display historical information.

Table 3-20 Source or Destination MAC Address Offense Summary Parameters

Parameter	Description
Last Known Group	Specifies the current group associated with the MAC address. If no group is identified, this field specifies Unknown. Note: <i>This field does not display historical information.</i>
Events/Flows	Specifies the number of events associated with this MAC address. Click the link to view more details.

Log Source

If the Offense Type is Log Source, the following information is displayed in the Offense Source table:

NOTE

The information displayed for log source offenses is derived from the Log Sources page on the **Admin** tab. You must have administrative access to access the **Admin** tab and manage log sources. For more information on log source management, see the *IBM Security QRadar Log Sources User Guide*.

Table 3-21 Log Source Offense Summary Parameters

Parameter	Description
Log Source Name	Specifies the log source name, as identified in the Log Sources table, associated with the event that created this offense.
Description	Specifies the description of the log source.
Last Event/Flow Time	Specifies the date and time this log source was last observed on the system.
Offenses	Specifies the number of offenses associated with this log source. Click the link to view more details.
Log Source Identifier	Specifies the host name of the log source.
Group	Specifies to which group the log source belongs.
Status	Specifies the status of this log source.
Events/Flows	Specifies the number of events associated with this log source. Click the link to view more details.

Hostname

If the Offense Type is Hostname, the following information is displayed in the Offense Source table:

Table 3-22 Hostname Offense Summary Parameters

Parameter	Description
Hostname	Specifies the host name associated with the flow that created this offense.
Last Known MAC	Specifies the current MAC address associated with the host name. If no MAC address is identified, this field specifies Unknown. <i>Note: This field does not display historical information.</i>
Last Known Username	Specifies the current user name associated with the host name. If no user is identified, this field specifies Unknown. <i>Note: This field does not display historical information.</i>
Last Observed	Specifies the date and time the host name was last observed on the system.
Offenses	Specifies the number of offenses associated with this host name. Click the link to view more details.
Last Known Machine	Specifies the current machine name associated with this host name. If no machine name is identified, this field specifies Unknown. <i>Note: This field does not display historical information.</i>
Last Known IP	Specifies the current IP address associated with the host name. If no IP address is currently associated with the host name, the value for this field is Unknown. <i>Note: This field does not display historical information.</i>
Last Known Group	Specifies the current group to which this host name is assigned. If no group is identified, this field specifies Unknown. <i>Note: This field does not display historical information.</i>
Events/Flows	Specifies the number of flows associated with this host name. Click the link to view more details.

Source or Destination Port

If the Offense Type is Source Port or Destination Port, the following information is displayed in the Offense Source table:

Table 3-23 Source or Destination Port Offense Summary Parameters

Parameter	Description
Port	Specifies the port associated with the event or flow that created this offense.
Offenses	Specifies the number of offenses associated with this port. Click the link to view more details.
Events/Flows	Specifies the number of events or flows associated with this port. Click the link to view more details.

Source or Destination IPv6

If the Offense Type is Source IPv6 or Destination IPv6, the following information is displayed in the Offense Source table:

Table 3-24 Source or Destination IPv6 Offense Summary Parameters

Parameter	Description
IPv6	Specifies the IPv6 address associated with the event or flow that created this offense.
Offenses	Specifies the number of offenses associated with this IPv6 address. Click the link to view more details.
Events/Flows	Specifies the number of events or flows associated with this IPv6 address. Click the link to view more details.

Source or Destination ASN

If the Offense Type is Source ASN or Destination ASN, the following information is displayed in the Offense Source table:

Table 3-25 Source or Destination ASN Offense Summary Parameters

Parameter	Description
ASN Index	Specifies the ASN value associated with the flow that created this offense.
Offenses	Specifies the number of offenses associated with this ASN. Click the link to view more details.
Events/Flows	Specifies the number of flows associated with this ASN. Click the link to view more details.

Rule

If the Offense Type is Rule, the following information is displayed in the Offense Source table:

NOTE

The information displayed for rule offenses is derived from the Rules tab. For more information on rules, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Table 3-26 Rule Offense Summary Parameters

Parameter	Description
Rule Name	Specifies the name of the rule associated with the event or flow that created this offense.
Group(s)	Specifies which rule group this rule belongs to.
Events/Flows	Specifies the number of events or flows associated with this rule. Click the link to view more details.
Notes	Specifies the notes for this rule.
Rule Description	Specifies the summary of the rule parameters.
Response	Specifies the response type for the rule.

Table 3-26 Rule Offense Summary Parameters (continued)

Parameter	Description
Rule Type	Specifies the rule type for the offense.
Offenses	Specifies the number of offenses associated with this rule. Click the link to view more details.

App ID

If the Offense Type is App ID, the following information is displayed in the Offense Source table:

Table 3-27 App ID Summary Parameters

Parameter	Description
Application Name	Specifies the application associated with the flow that created this offense.
Offenses	Specifies the number of offenses associated with this application. Click the link to view more details.
Events/Flows	Specifies the number of flows associated with this application. Click the link to view more details.

Adding Notes You can add notes to any offense on the **Offenses** tab. Notes can include any information you want to capture for the offense. For example, you could add a note that specifies information that is not automatically included in an offense, such as a Customer Support ticket number or offense management information.

To add notes to an offense:

- Step 1** Click the **Offenses** tab.
- Step 2** Navigate to the offense to which you want to add notes.
- Step 3** Double-click the offense.
- Step 4** Select the **Add Note** option.

The Add Note option is available on the following locations in an offense summary:

- **Actions** list box on the offense summary toolbar.
- **Add Note** icon on the Last 5 Notes pane.

- Step 5** Type the note you want to include for this offense. You can type up to 1996 characters.

NOTE

The note text does not automatically wrap text and is not editable. The text is displayed on the tab exactly as entered. For example, if you type the text without inserting hard carriage returns, the note text is displayed on one line in the Notes summary and the Note column includes a scroll bar.

Step 6 Click **Add Note**.

The note is displayed in the Last 5 Notes pane on the offense summary. A **Notes** icon is displayed in the flag column of the offenses list. If you hover your mouse over the notes indicator, the note for that offense is displayed.

Removing Offenses From the Offenses Tab

You can remove an offense from the **Offenses** tab using the following options:

- **Hiding Offenses**
- **Showing Hidden Offenses**
- **Closing an Offense**
- **Closing Listed Offenses**

You can hide or close an offense from any offense list (for example, All Offenses) or the Offense Summary pages. The procedures below provide instruction on how to hide and close offenses from the All Offenses page.

Hiding Offenses

After you hide an offense, the offense is no longer displayed in any list (for example, All Offenses) on the **Offenses** tab; however, if you perform a search that includes the hidden offenses, the item is displayed in the search results. To hide an offense:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **All Offenses**.
- Step 3** Select the offense you want to hide.

NOTE

To hide multiple offenses, hold the Control key while you select each offense you want to hide.

- Step 4** From the **Actions** list box, select **Hide**.
- Step 5** Click **OK**.

The All Offenses page displays all offenses except the hidden offenses.

NOTE

If you are viewing results of a search that is configured to exclude hidden offenses, the offense counts that are displayed in the By Category pane of the **Offenses** tab may not be correct. If you want to view the total count in the By Category pane, clear the **Hidden Offenses** check box in the Excludes pane on your offense search page.

Showing Hidden Offenses

Hidden offenses are not visible on the **Offenses** tab, however, you can show hidden offenses if you want to view them again. To view hidden offenses:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **All Offenses**.

Step 3 Use the Search feature to show the hidden offenses:

- a From the **Search** list box, select **New Search**.
- b In the **Exclude option** list on the Search Parameters pane, clear the **Hidden Offenses** check box.
- c Click **Search**.

The All Offenses page is displayed, including all offenses. The offense is specified as hidden by the **Hidden** icon in the Flag column. The hidden offenses are still configured as hidden; therefore, the next time you display All Offenses without the search parameters applied, you will not see the hidden offenses.

Step 4 Locate and select the hidden offense you want to show.

Step 5 From the **Actions** list box, select **Show**.

Now the hidden offense is no longer configured as hidden.

Closing an Offense

After you close (delete) an offense, the offense is no longer displayed in any list (for example, All Offenses) on the **Offenses** tab. The closed offense is removed from the database after the offense retention period has elapsed. The default offense retention period is 3 days. If additional events occur for that offense, a new offense is created. If you perform a search that includes closed offenses, the item is displayed in the search results as long as it has not been removed from the database.

To close an offense:

Step 1 Click the **Offenses** tab.

Step 2 Click **All Offenses**.

Step 3 Select the offense you want to close.

NOTE

To close multiple offenses, hold the Control key while you select each offense you want to close.

Step 4 From the **Actions** list box, select **Close**.

Step 5 From the **Reason for Closing** list box, select a reason. The default reason is **non-issue**.

Step 6 From the **Reason for Closing** list box, select a reason.

If you have administrative privileges, you can add a reason to the **Reason for Closing** list box:

- a Click the **Edit Custom** Reasons icon.
- b In the **Reason** field, type a reason. Reasons must be between 5 and 60 characters.
- c Click **OK**.

Step 7 Optional. In the **Notes** field, type a note. This note is displayed on the offense details page.

Step 8 Click **OK**.

NOTE

After you close an offense, the counts that are displayed on the By Category pane of the **Offenses** tab can take several minutes to reflect the closed offense.

Closing Listed Offenses

The offenses that are displayed on the summary page include either all the offenses or, if a search is applied, a subset of offenses. You can close (delete) all listed offenses from the **Offenses** tab. After the offense retention period has elapsed, closed offenses are removed from the database. If additional events occur for that offense, a new offense is created. If you perform a search that includes closed offenses, the item is displayed in the search results as long as it has not been removed from the database.

To close listed offenses:

Step 1 Click the **Offenses** tab.

Step 2 Click **All Offenses**.

Step 3 From the **Actions** list box, select **Close Listed**.

Step 4 From the **Reason for Closing** list box, select a reason. The default reason is **non-issue**.

If you have administrative privileges, you can add a reason to the **Reason for Closing** list box:

- a Click the **Edit Custom Reasons** icon.
- b In the **Reason** field, type a reason. Reasons must be between 5 and 60 characters.
- c Click **OK**.

Step 5 Optional. In the **Notes** field, type a note. This note is displayed on the offense details page.

Step 6 Click **OK**.

The closed offenses are no longer listed.

NOTE

After you close offenses, the counts that are displayed on the By Category pane of the **Offenses** tab can take several minutes to reflect the closed offenses.

Protecting Offenses

Offenses are retained for a configurable retention period. The default retention period is 3 days; however, Admin users can customize the retention period. You might have offenses that you want to retain regardless of the retention period. You can use the Protect feature to prevent these offenses from being removed from the database after the retention period has elapsed. For more information on the Offense Retention Period, see the *IBM Security QRadar Network Anomaly*

Detection Administration Guide.



CAUTION

*When the SIM data model is reset using the **Hard Clean** option, all offenses, including protected offenses, are removed from the database and the disk. You must have administrative privileges to reset the SIM data model. For more information, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.*

This section includes the following topics:

- [Protecting Offenses](#)
- [Protecting Listed Offenses](#)
- [Unprotecting Offenses](#)
- [Unprotecting Listed Offenses](#)

Protecting Offenses

To protect offenses:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **All Offenses**.
- Step 3** Select the offense you want to protect.

NOTE

To protect multiple offenses, hold the Control key while you select each offense you want to protect.

- Step 4** From the **Actions** list box, select **Protect**.
- Step 5** Click **OK**.

The protected offense is indicated by a **Protected** icon in the Flag column.

Protecting Listed Offenses

To protect listed offenses:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **All Offenses**.
- Step 3** From the **Actions** list box, select **Protect Listed**.
- Step 4** Click **OK**.

The protected offenses are indicated by a **Protected** icon in the Flag column.

Unprotecting Offenses

To unprotect offenses:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **All Offenses**.
- Step 3** Select the offense you want to unprotect.

NOTE To unprotect multiple offenses, hold the Control key while you select each protected offense you want to unprotect.

NOTE You can use the Search feature to display only protected offenses. If you clear the **Protected** check box and ensure all other options are selected under the **Excludes option** list on the Search Parameters pane, only protected offenses are displayed.

- Step 4** From the **Actions** list box, select **Unprotect**.
 - Step 5** Click **OK**.
- The unprotected offense no longer displays the **Protected** icon in the Flag column.

Unprotecting Listed Offenses

To unprotect listed offenses:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **All Offenses**.

NOTE You can use the Search feature to display only protected offenses. If you clear the Protected check box and ensure all other options are selected under the **Excludes option** list on the Search Parameters pane, only protected offenses are displayed.

- Step 3** From the **Actions** list box, select **Unprotect Listed**.
 - Step 4** Click **OK**.
- The unprotected offenses no longer display the **Protected** icon in the Flag column.

Exporting Offenses You can export offenses in Extensible Markup Language (XML) or Comma Separated Values (CSV). Exporting offenses allows you to re-use or store your offense data. For example, you could export offenses to create non-QRadar Network Anomaly Detection-based reports. You could also export offenses as a secondary long-term retention strategy. Customer Support might require you to export offenses for troubleshooting purposes.

The resulting XML or CSV file includes the parameters specified in the Column Definition pane of your search parameters. The length of time required to export your data depends on the number of parameters specified.

To export offenses:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **All Offenses**.
- Step 3** Select the offense you want to export.
- Step 4** Choose one of the following:
 - If you want to export the offenses in XML format, select **Actions > Export to XML** from the **Actions** list box.
 - If you want to export the offenses in CSV format, select **Actions > Export to CSV** from the **Actions** list box.
- Step 5** Choose one of the following:
 - If you want to open the list for immediate viewing, select the **Open with** option and select an application from the list box.
 - If you want to save the list, select the **Save to Disk** option.
- Step 6** Click **OK**.

Assigning Offenses to Users

Using the **Offenses** tab, you can assign offenses to QRadar Network Anomaly Detection users for investigation. When an offense is assigned to a user, the offense is displayed on the My Offenses page of that user. You must have appropriate privileges to assign offenses to users. For more information on user roles, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

You can assign offenses to users from either the **Offenses** tab or Offense Summary pages. The procedure below provides instruction on how to assign offenses from the **Offenses** tab.

To assign an offense to a user:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **All Offenses**.
- Step 3** Select the offense you want to assign.

NOTE _____
To assign multiple offenses, hold the Control key while you select each offense you want to assign.

- Step 4** From the **Actions** list box, select **Assign**.
- Step 5** From the **Username** list box, select the user you want to assign this offense to.

NOTE _____
The **Username** list box only displays users who have **Offenses** tab privileges.

- Step 6** Click **Save**.

The offense is assigned to the selected user. The **User** icon is displayed in the Flag column of the **Offenses** tab to indicate that the offense is assigned. The designated user can also see this offense in their My Offenses page.

Sending Email Notification

You can send an email containing an offense summary to any valid email address. The body of the email message includes the following information (if available):

- Source IP address
- Source user name, host name, or asset name
- Total number of sources
- Top five sources by magnitude
- Source networks
- Destination IP address
- Destination user name, host name, or asset name
- Total number of destinations
- Top five destinations by magnitude
- Destination networks
- Total number of events
- Rules that caused the offense or event rule to fire
- Full description of offense or event rule
- Offense ID
- Top five categories
- Start time of offense or time the event generated
- Top five Annotations
- Link to the offense in the QRadar Network Anomaly Detection user interface
- Contributing CRE rules

To send an email notification:

- Step 1** Click the **Offenses** tab.
- Step 2** Navigate to the offense for which you want to send email notification.
- Step 3** Double-click the offense.
- Step 4** From the **Actions** list box, select **Email**.

Step 5 Enter values for the following parameters:

Table 3-28 Notification Preferences Parameters

Item	Description
To	Type the email address of the user you want to notify if a change occurs to the selected offense. Separate multiple email addresses with a comma.
From	Type the default originating email address. The default is root@localhost.com.
Email Subject	Type the default subject for the email. The default is Offense ID.
Email Message	Type the standard message you want to accompany the notification email.

Step 6 Click **Send**.

An email is immediately sent to the email recipients.

Marking an Item For Follow-Up Using the **Offenses** tab, you can mark an offense, source IP address, destination IP address, and network for follow-up. This allows you to track a particular item for further investigation.

To mark an item for follow-up:

Step 1 Click the **Offenses** tab.

Step 2 Navigate to the offense you want to mark for follow-up.

Step 3 Double-click the offense you want to mark for follow-up.

Step 4 From the **Actions** list box, select **Follow up**.

The offense now displays a flag in the **Flags** column, indicating the offense is flagged for follow-up.

NOTE

If you do not see your flagged offense on the offenses list, you can sort the list to display all flagged offenses first. To sort an offense list by flagged offense, double-click the **Flags** column header.

**Viewing Offenses
By Category**

The By Category details page provides you with a view of all offenses based on the high-level category.

NOTE

By default, the By Category details page is organized by offense count. If you change the display, click **Save Layout** to save the current display as your default view. The next time you log in to the **Offenses** tab, the saved layout is displayed.

To view offenses by category:

Step 1 Click the **Offenses** tab.

Step 2 On the navigation menu, click **By Category**.

The By Category details page displays high-level categories. The counts for each category are accumulated from the values in the low-level categories.

NOTE

Low-level categories with associated offenses are displayed with an arrow. You can click the arrow to view the associated low-level categories. If you want to view all categories, click **Show Inactive Categories**.

Table 3-29 By Category Details Page Parameters

Parameter	Description
Category Name	<p>Specifies on the following high-level categories:</p> <ul style="list-style-type: none"> • Access - Events resulting from an attempt to access network resources. For example, firewall accept or deny. • Application - Events relating to application activity. • Audit - Events relating to audit activity. • Authentication - Events relating to authentication controls, group, or privilege change. For example, log in or log out. • CRE - Events generated from an offense, event, or flow rule. For more information on creating custom rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>. • DOS - Events relating to Denial of Service (DoS) or Distributed Denial of Service (DDoS) attacks against services or hosts, for example, brute force network DoS attacks. • Exploit - Events relating to application exploits and buffer overflow attempts, for example, buffer overflow or web application exploits. • Malware - Events relating to viruses, trojans, back door attacks, or other forms of hostile software. This may include a virus, trojan, malicious software, or spyware. • Policy - Events regarding corporate policy violations or misuse. • Potential Exploit - Events relating to potential application exploits and buffer overflow attempts. • Recon - Events relating to scanning and other techniques used to identify network resources, for example, network or host port scans. • SIM Audit - Events relating to suspicious or unapproved SIM audit events. • Suspicious Activity - Events where the nature of the threat is unknown but behavior is suspicious including protocol anomalies that potentially indicate evasive techniques. For example, packet fragmentation or known Intrusion Detection System (IDS) evasion techniques. • System - Events related to system changes, software installation, or status messages. • User Defined - Events or flows related to custom rules. • VIS Host Discovery - Events related to Vulnerability Assessment Integration Server (VIS) host discovery. <p>For more information on high-level categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>

Table 3-29 By Category Details Page Parameters (continued)

Parameter	Description
Offense Count	Specifies the number of active offenses in each category. Active offenses are offenses that have not been hidden or closed.
Local Destination Count	Specifies the number of local destination IP addresses associated with this category.
Source Count	Specifies the number of source IP addresses associated with offenses in this category. If a source IP address is associated with offenses in five different low-level categories, the source IP address is only counted once.
Event/Flow Count	Specifies the number of active events or flow (events or flows that are not closed or hidden) associated with this offense in this category. Offenses only stay active for a period of time if no new events or flows are received. The offenses are still displayed on the Offenses tab, but are not counted in this field.
First Offense	Specifies the date and time of the occurrence of the first offense in this category.
Last Updated	Specifies the date and time of the occurrence of the last offense in the specified category.

NOTE

Count fields, such as **Event/Flow Count** and **Source Count**, do not consider network permissions of the user.

- Step 3** To view additional low-level category information for a particular category, click the arrow icon next to the category name.
- Step 4** To view detailed offense information, double-click any low-level category to view the list of associated offenses.

For more information on managing offenses, see [Managing Offenses](#).

Viewing Offenses By Source IP

You can view offenses organized by source IP address. A source IP address specifies the host that has generated offenses as a result of attempting to attack your system. All source IP addresses are listed with the highest magnitude first. The list of offenses only displays source IP addresses with active offenses.

To view offenses by source IP address:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **By Source IP**.

The By Source IP details page provides the following information:

Table 3-30 By Source IP Details Page Parameters

Parameter	Description
View Offenses	Select an option from this list box to filter on the offenses you want to view on this page. You can view all offenses or filter by the offenses based on a time range. From the list box, select the time range you want to filter by.
Current Search Parameters	The top of the table displays the details of the search parameters applied to the search results. To clear these search parameters, click Clear Filter . <i>Note: This parameter is only displayed after you apply a filter.</i>
Flag	Specifies the action taken on the source IP address. For example, if a flag is displayed, the offense is source IP address for follow-up. Point your mouse over the icon to display additional information.
Source IP	Specifies the IP address or host name of the device that attempted to breach the security of a component on your network.
Magnitude	Specifies the relative importance of the source IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the source IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see the Glossary .
Location	Specifies the network, continent, or country where the source IP address is located. Countries are represented with a flag.
Vulnerability	Specifies whether this source IP address has vulnerabilities.
User	Specifies the user associated with this source IP address. If no user is identified, this field specifies Unknown.
MAC	Specifies the MAC address associated with this source IP address. If no MAC address is identified, this field specifies Unknown.
Weight	Specifies the weight of this source IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets .
Offenses	Specifies the number of offenses associated with this source IP address.
Destination(s)	Specifies the number of destination IP addresses associated with this source IP address.
Last Event/Flow	Specifies the elapsed time since the last event or flow was observed on the system for this source IP address.
Events/Flows	Specifies the number of events or flows associated with this source IP address.

Step 3 Double-click the source IP address you want to view.

NOTE If you want to view the source IP address on a new page, hold the Control key while you double-click the source IP address.

NOTE The top of the page displays the navigation trail to the current view. If you want to return to a previously viewed page, click the page name on the navigation trail.

The Source Details page provides the following information:

Table 3-31 Source Details Page Parameters

Parameter	Description
Magnitude	Specifies the relative importance of the source IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the source IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see Glossary .
IP	Specifies the IP address or host name of the device that attempted to breach the security of a component on your network.
Location	Specifies the location of the source IP address. Countries are represented with their flag.
Offense(s)	Specifies the names of the offenses associated with this source IP address. To view additional information about the offense, click the name or term that is displayed. If there are multiple offenses, the term Multiple is displayed.
Local Destination(s)	Specifies the local destination IP addresses associated with the source IP address. To view additional information about the destination IP addresses, click the IP address or term that is displayed. If there are multiple destination IP addresses, the term Multiple is displayed.
Events/Flows	Specifies the total number of events or flows associated with this source IP address.
First event/flow seen on	Specifies the date and time in which this source IP address generated the first event or flow.
Last event/flow seen on	Specifies the date and time of the last generated event or flow associated with this source IP address.

The Source toolbar provides the following functions:

Table 3-32 Source Toolbar

Function	Description
Destinations	Click Destinations to view the list of local destination IP addresses for this source IP address.
Offenses	Click Offenses to view a list of offenses associated with this source IP address.

Table 3-32 Source Toolbar (continued)

Function	Description
Notes	Click Notes to view all notes for this source IP address. For more information on notes, see Adding Notes .
Actions	From the Actions list box, you can choose one of the following actions: <ul style="list-style-type: none"> • Follow up - Select this option to mark this offense for further follow-up. See Marking an Item For Follow-Up. • Add Notes - Select this option to add notes for this destination IP address. See Adding Notes. • Print - Select this option to print this offense.

Step 4 To view a list of local destination IP addresses for the source IP address, click **Destinations** on the Source page toolbar.

The List of Local Destinations provides the following information:

Table 3-33 By Source IP - List of Local Destinations

Parameter	Description
Flag	Specifies the action taken on the destination IP address. For example, if a flag is displayed, the destination IP address is marked for follow-up. Point your mouse over the icon to display additional information.
Destination IP	Specifies the IP address of the destination. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Magnitude	Specifies the relative importance of this destination IP address. The magnitude bar provides a visual representation of all correlated variables of the destination IP address. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. Note: For more information on relevance, severity, and credibility, see the Glossary .
Location	Specifies the location of the destination IP address.
Vulnerability	Specifies whether this destination IP address has vulnerabilities.
User	Specifies the user name for the destination IP address. If no user is identified, this field specifies Unknown.
MAC	Specifies the MAC address for the destination IP address. If no MAC address is identified, this field specifies Unknown.
Weight	Specifies the weight of this destination IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets .
Offenses	Specifies the number of offenses associated with this destination IP address.

Table 3-33 By Source IP - List of Local Destinations (continued)

Parameter	Description
Source(s)	Specifies the number of source IP addresses associated with this destination IP address.
Last Event/Flow	Specifies the time elapsed since the last event or flow.
Events/Flows	Specifies the number of events or flows associated with this destination IP address.

The List of Local Destinations toolbar provides the following functions:

Table 3-34 By Source IP - List of Local Destinations Toolbar

Function	Description
Offenses	Click Offenses to view a list of offenses for this destination IP address.
Sources	Click Sources to view a list of source IP addresses for this destination IP address. For more information, see Table 3-30 .
Search	Click Search to filter destination IPs for this source IP address. To filter destinations: <ol style="list-style-type: none"> 1 Click Search. 2 Enter values for the following parameters: <ul style="list-style-type: none"> Destination Network - From the list box, select the network you want to filter. Magnitude - From the list box, select whether you want to filter for magnitude Equal to, Less than, or Greater than the configured value. Sort by - From the list box, select how you want to sort the filter results. 3 Click Search. For more information on results, see table Table 3-33 .

- Step 5** To view a list of offenses associated with this source IP address, click **Offenses** on the Source page toolbar.

Table 3-35 By Source IP - List of Offenses

Parameter	Description
Flag	<p>Indicates the action taken on the offense. The actions are represented by the following icons:</p> <ul style="list-style-type: none"> • Flag - Indicates that the offense is marked for follow-up. This allows you to track a particular item for further investigation. For more information on how to mark an offense for follow-up, see Marking an Item For Follow-Up. • User - Indicates that the offense has been assigned to a user. When an offense is assigned to a user, the offense is displayed on the My Offenses page of that user. For more information on assigning offenses to users, see Assigning Offenses to Users. • Notes - Indicates that a user has added notes to the offense. Notes can include any information you want to capture for the offense. For example, you could add a note that specifies information that is not automatically included in an offense, such as a Customer Support ticket number or offense management information. For more information on adding notes, see Adding Notes. • Protected - Indicates that this offense is protected. The Protect feature prevents specified offenses from being removed from the database after the retention period has elapsed. For more information on protected offenses, see Protecting Offenses. • Inactive Offense - Indicates that this is an inactive offense. An offense becomes inactive after five days have elapsed since the offense received the last event. Also, all offenses become inactive after upgrading your QRadar Network Anomaly Detection software. <p>An inactive offense cannot become active again. If new events are detected for the offense, a new offense is created and the inactive offense is retained until the offense retention period has elapsed. You can perform the following actions on inactive offenses: protect, flag for follow up, add notes, and assign to users.</p> <p>Point your mouse over the icon to display additional information.</p>
ID	Specifies the QRadar Network Anomaly Detection identifier for this offense.
Description	Specifies the description for this offense.
Offense Type	Specifies the type of offense. The Offense Type is determined by the rule that created the offense. For example, if the offense type is a log source event, the rule that generated this offense correlates events based on the device that detected the event.

Table 3-35 By Source IP - List of Offenses (continued)

Parameter	Description
Offense Source	Specifies information about the source of the offense. The information displayed in the Offense Source field depends on the type of offense. For example, if the offense type is Source Port, the Offense Source field displays the source port of the event that created this offense.
Magnitude	Specifies the relative importance of the offense. The magnitude bar provides a visual representation of all correlated variables of the events and flows. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. Note: For more information on relevance, severity, and credibility, see Glossary .
Source IPs	Specifies the IP address or host name of the device that attempted to breach the security of a component on your network. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Destination IPs	Specifies the IP addresses and asset names (if available) of the destination associated with this offense. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Users	Specifies the users associated with this offense. If no user is identified, this field specifies Unknown.
Log Sources	Specifies the log sources associated with this offense.
Events	Specifies the number of events associated with this offense.
Flows	Specifies the number of flows associated with this offense.
Start Date	Specifies the date and time of the first occurrence of this offense.
Last Event/Flow	Specifies the time elapsed since the last event or flow.

The List of Offenses toolbar provides the following functions:

Table 3-36 By Source IP - List of Offenses Toolbar

Function	Description
Sources	Click Sources to view a list of source IP addresses for the selected offense. For more information, see Viewing Offenses By Source IP .
Destinations	Click Destinations to view all destination IP addresses for the selected offense. For more information, see Viewing Offenses By Destination IP .

Table 3-36 By Source IP - List of Offenses Toolbar (continued)

Function	Description
Categories	<p>Click Categories to view category information for the selected offense.</p> <ul style="list-style-type: none"> • Name - Specifies the name of the category associated with the offense. • Magnitude - Specifies the relative importance of the category. The magnitude bar provides a visual representation of all correlated variables of the category. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values for the category and the calculated magnitude. For more information on relevance, severity, and credibility, see the Glossary. • Local Destination Count - Specifies the number of destination IP addresses associated with this category. • Events/Flows - Specifies the number of events or flows associated with this category. • First Event/Flow - Specifies the date of the first event or flow. • Last Event/Flow - Specifies the date of the last event or flow. <p>Note: You can also further investigate the events related to a specific category by right-clicking the category and selecting Events.</p> <p>For more information on categories, see Viewing Offenses By Category.</p>
Annotations	<p>Click Annotations to view all annotations for the selected offense, including:</p> <ul style="list-style-type: none"> • Annotation - Specifies the details for this annotation. Annotations are text descriptions that rules can automatically add to offenses as part of the rule response. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>. • Time - Specifies the date and time of this annotation. • Weight - Specifies the weight of this annotation.

Table 3-36 By Source IP - List of Offenses Toolbar (continued)

Function	Description
Networks	<p>Click Networks to view all destination networks for the selected offense, including:</p> <ul style="list-style-type: none"> • Flag - Specifies the action taken on the network. For example, if a flag is displayed, the network is marked for follow-up. Point your mouse over the icon to display additional information. • Network - Specifies the name of the destination network. • Magnitude - Specifies the relative importance of the destination network. The magnitude bar provides a visual representation of the CVSS risk value of the assets associated with the destination network. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see Glossary. • Source IPs - Specifies the number of source IP addresses associated with this network. • Destination IPs - Specifies the number of destination IP addresses associated with this network. • Offenses Targeted - Specifies the number of offenses targeted at this network. • Offenses Launched - Specifies the number of offenses launched by this network. • Events/Flows - Specifies the number of events or flows associated with this network.
Actions	<p>From the Actions list box, you can select one of the following actions:</p> <ul style="list-style-type: none"> • Hide - Select this option to hide this offense. For more information on hiding offenses, see Hiding Offenses. • Show - Select this option to show all hidden offenses. For more information on showing offenses, see Showing Hidden Offenses. • Close - Select this option to close an offense. For more information on closing offenses, see Closing an Offense. • Close Listed - Select this option to close listed offense. For more information on closing listed offenses, see Closing Listed Offenses.

Viewing Offenses By Destination IP

You can view a list of local destination IP addresses for offenses generated in your deployment. All destination IP addresses are listed with the highest magnitude first.

To view offenses by destination IP address:

- Step 1** Click the **Offenses** tab.
- Step 2** Click **By Destination IP**.

The By Destination IP details page provides the following information:

Table 3-37 By Destination IP Details Page Parameters

Parameter	Description
View Offenses	Select an option from this list box to filter on the offenses you want to view in this page. You can view all offenses or filter by the offenses based on a time range. From the list box, select the time range you want to filter by.
Current Search Parameters	The top of the table displays the details of the search parameters applied to the search results. To clear these search parameters, click Clear Filter . Note: This parameter is only displayed after you apply a filter.
Flag	Indicates the action taken on the destination IP address. For example, if a flag is displayed, the destination IP address is marked for follow-up. Point your mouse over the icon to display additional information.
Destination IP	Specifies the IP address for the destination. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Magnitude	Specifies the relative importance of the destination IP address. The magnitude bar provides a visual representation of the CVSS risk value of the asset associated with the destination IP address. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see Glossary .
Location	Specifies the location of the destination IP address.
Vulnerability	Specifies whether this destination IP address has vulnerabilities.
User	Specifies the user name for this destination IP address. If no user is identified, this field specifies Unknown.
MAC	Specifies the MAC address for this destination IP address. If no MAC address is identified, this field specifies Unknown.
Weight	Specifies the weight of the destination IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets .
Offenses	Specifies the number of offenses associated with this destination IP address.
Source(s)	Specifies the number of source IP addresses associated with this destination IP address.
Last Event/Flow	Specifies elapsed time since the last event or flow.
Events/Flows	Specifies the number of events or flows associated with this destination IP address.

Step 3 Double-click the destination IP address you want to view.

NOTE

If you want to view the details on a new page, hold the Control key while you double-click the destination IP address you want to view.

NOTE

The top of the page displays the navigation trail to the current view. If you want to return to a previously viewed page, click the page name on the navigation trail.

The Destination page provides the following information:

Table 3-38 Destination Page

Parameter	Description
Magnitude	<p>Specifies the relative importance of attacks on the destination IP address. The magnitude bar provides a visual representation of all correlated variables of the destination IP address. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude.</p> <p>Note: For more information on relevance, severity, and credibility, see the Glossary.</p>
IP/DNS Name	<p>Specifies the IP address of the destination. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Offense(s)	<p>Specifies the name of the offense. You can click the name to view the offense details.</p> <p>If multiple offenses are associated with this destination IP address, this field specifies Multiple and the number of offense.</p>
Source(s)	<p>Specifies the source IP addresses of the offense associated with this destination IP address. To view additional information about the source IP addresses, click the IP address, asset name, or term that is displayed.</p> <p>If a single source IP address is specified, an IP address and asset name is displayed (if available). You can click the IP address or asset name to view the source IP address details. If there are multiple source IP addresses, this field specifies Multiple and the number of source IP addresses.</p>
Event/Flow Count	<p>Specifies the total number of generated events or flows associated with this destination IP address.</p>

The Destination toolbar provides the following functions:

Table 3-39 Destination Toolbar

Function	Description
Offenses	Click Offenses to view the list of offenses associated with this destination IP address. See Step 4 .
Sources	Click Sources to view a list of source IP addresses associated with this destination IP address. See Step 5 .
Notes	Click Notes to view all notes for this destination IP address. For more information on notes, see Adding Notes .
Actions	From the Actions list box, you can choose one of the following actions: <ul style="list-style-type: none"> • Follow up - Select this option to mark this destination IP address for further follow-up. See Marking an Item For Follow-Up. • Notes - Select this option to add notes for this destination IP address. See Adding Notes. • Print - Select this option to print this destination IP address.

Step 4 To view a list of offenses associated with this destination IP address, click **Offenses** on the Destination page toolbar.

The List of Offenses provides the following information:

Table 3-40 By Destination IP - List of Offenses

Parameter	Description
Flag	<p>Indicates the action taken on the offense. The actions are represented by the following icons:</p> <ul style="list-style-type: none"> • Flag - Indicates that the offense is marked for follow-up. This allows you to track a particular item for further investigation. For more information on how to mark an offense for follow-up, see Marking an Item For Follow-Up. • User - Indicates that the offense has been assigned to a user. When an offense is assigned to a user, the offense is displayed on the My Offenses page of that user. For more information on assigning offenses to users, see Assigning Offenses to Users. • Notes - Indicates that a user has added notes to the offense. Notes can include any information you want to capture for the offense. For example, you could add a note that specifies information that is not automatically included in an offense, such as a Customer Support ticket number or offense management information. For more information on adding notes, see Adding Notes. • Protected - Indicates that this offense is protected. The Protect feature prevents specified offenses from being removed from the database after the retention period has elapsed. For more information on protected offenses, see Protecting Offenses. • Inactive Offense - Indicates that this is an inactive offense. An offense becomes inactive after five days have elapsed since the offense received the last event. Also, all offenses become inactive after upgrading your QRadar Network Anomaly Detection software. <p>An inactive offense cannot become active again. If new events are detected for the offense, a new offense is created and the inactive offense is retained until the offense retention period has elapsed. You can perform the following actions on inactive offenses: protect, flag for follow up, add notes, and assign to users.</p> <p>Point your mouse over the icon to display additional information.</p>
ID	Specifies the QRadar identifier for this offense.
Description	Specifies the description for this offense.
Offense Type	Specifies the type of offense. The Offense Type is determined by the rule that created the offense. For example, if the offense type is log source event, the rule that generated this offense correlates events based on the device that detected the event.

Table 3-40 By Destination IP - List of Offenses (continued)

Parameter	Description
Offense Source	Specifies information about the source of the offense. The information displayed in the Offense Source field depends on the type of offense. For example, if the offense type is Source Port, the Offense Source field displays the source port of the event that created this offense.
Magnitude	Specifies the relative importance of the offense. The magnitude bar provides a visual representation of all correlated variables of the events and flows for this offense. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. Note: For more information on relevance, severity, and credibility, see the Glossary .
Source IPs	Specifies the IP address or host name of the device that attempted to breach the security of a component on your network. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Destination IPs	Specifies the IP addresses and asset names (if available) of the destination associated with this offense. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Users	Specifies the users associated with this offense. If no user is identified, this field specifies Unknown.
Log Sources	Specifies the log sources associated with this offense.
Events	Specifies the number of events associated with this offense.
Flows	Specifies the number of flows associated with this offense.
Start Date	Specifies the date and time of the first occurrence of this offense.
Last Event/Flow	Specifies the date and time this event was detected for this offense.

The List of Offenses toolbar provides the following functions:

Table 3-41 By Destination IP - List of Offenses Toolbar

Function	Description
Sources	Click Sources to view a list of source IP addresses for the selected offense. For more information, see Viewing Offenses By Source IP .
Destinations	Click Destinations to view local or remote destination IP addresses for this offense. For more information on destination IP addresses, see Viewing Offenses By Destination IP .

Table 3-41 By Destination IP - List of Offenses Toolbar (continued)

Function	Description
Categories	<p>Click Categories to view category information for this offense, including:</p> <p>Note: <i>You can also further investigate the events relating to a specific category by right-clicking a category and selecting Events.</i></p> <ul style="list-style-type: none"> • Name - Specifies the name of the category associated with this offense. • Magnitude - Specifies the relative importance of the category. The magnitude bar provides a visual representation of all correlated variables of the category. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values for the category and the calculated magnitude. For more information on relevance, severity, and credibility, see the Glossary. • Local Destination Count - Specifies the number of destination IP addresses associated with this category. • Events/Flows - Specifies the number of events or flows associated with this category. • First Event/Flow - Specifies the date of the first event or flow. • Last Event/Flow - Specifies the date of the last event or flow. <p>For more information on categories, see Viewing Offenses By Category.</p>
Annotations	<p>Click Annotations to view all explanatory notes for this offense, including:</p> <ul style="list-style-type: none"> • Annotation - Specifies the details for this annotation. Annotations are text descriptions that rules can automatically add to offenses as part of the rule response. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>. • Time - Specifies the date and time of this annotation. • Weight - Specifies the weight of this annotation.

Table 3-41 By Destination IP - List of Offenses Toolbar (continued)

Function	Description
Networks	<p>Click Networks to view all destination networks for this offense, including:</p> <ul style="list-style-type: none"> • Flag - Indicates the action taken on the network. For example, if a flag is displayed, the network is marked for follow-up. Point your mouse over the icon to display additional information. • Network - Specifies the name of the destination network. • Magnitude - Specifies the relative importance of the destination network. The magnitude bar provides a visual representation of the CVSS risk value of the assets associated with the destination network. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see Glossary. • Source IPs - Specifies the number of source IP addresses associated with this network. • Destination IPs - Specifies the number of destination IP addresses associated with this network. • Offenses Targeted - Specifies the number of offenses targeted at this network. • Offenses Launched - Specifies the number of offenses launched by this network. • Events/Flows - Specifies the number of events or flows associated with this network.
Actions	<p>From the Actions list box, you can choose one of the following actions:</p> <ul style="list-style-type: none"> • Hide - Select this option to hide this offense. For more information on hiding offenses, see Hiding Offenses. • Show - Select this option to show all hidden offenses. For more information on showing offenses, see Showing Hidden Offenses. • Close - Select this option to close an offense. For more information on closing offenses, see Closing an Offense. • Close Listed - Select this option to close listed offense. For more information on closing listed offenses, see Closing Listed Offenses.

Step 5 To view a list of source IP addresses associated with this destination IP address, click **Sources** on the Destination page toolbar.

The List of Sources provides the following information:

Table 3-42 By Destination IP - List of Sources

Parameter	Description
Flag	Indicates the action taken on the source IP address. For example, if a flag is displayed, the source IP address is marked for follow-up. Point your mouse over the icon to display additional information.
Source IP	Specifies the IP address or host name of the device that attempted to breach the security of a component on your network. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Magnitude	Specifies the relative importance of this source IP address. The magnitude bar provides a visual representation of all correlated variables of the source IP address. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. Note: For more information on relevance, severity, and credibility, see the Glossary .
Location	Specifies the location of the source IP address.
Vulnerability	Specifies whether this source IP address has vulnerabilities.
User	Specifies the user name for the source IP address. If no user is identified, this field specifies Unknown.
MAC	Specifies the MAC address for the source IP address. If no MAC address is identified, this field specifies Unknown.
Weight	Specifies the weight of this source IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets .
Offenses	Specifies the number of offenses associated with this source IP address.
Destination(s)	Specifies the number of destination IP addresses associated with this source IP address.
Last Event/Flow	Specifies the time elapsed since the last event or flow.
Events/Flows	Specifies the number of events or flows associated with this source IP address.

The List of Sources toolbar provides the following functions:

Table 3-43 By Destination IP - List of Sources Toolbar

Function	Description
Destinations	Click Destinations to view local or remote destination IP addresses for this source IP address. For more information on destination IP addresses, see Viewing Offenses By Destination IP .
Offenses	Click Offenses to view a list of offenses for this source IP address. For more information, see Managing Offenses .

Viewing Offenses By Network

You can view the list of offenses grouped by network. All networks are listed with the highest magnitude first.

To view offenses by network:

Step 1 Click the **Offenses** tab.

Step 2 On the navigation menu, click **By Network**.

The By Network details page provides the following information:

Table 3-44 By Network Details Page Parameters

Parameter	Description
Flag	Indicates the action taken on the network. For example, if a flag is displayed, the network is marked for follow-up. Point your mouse over the icon to display additional information.
Name	Specifies the name of the network.
Magnitude	Specifies the relative importance of the network. The magnitude bar provides a visual representation of all correlated variables of the network. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. <i>Note: For more information on relevance, severity, and credibility, see the Glossary.</i>
Source IPs	Specifies the number of source IP addresses associated with this network.
Destination IPs	Specifies the number of destination IP addresses associated with this network.
Offenses Targeted	Specifies the number of offenses targeted for this network.
Offenses Launched	Specifies the number of offenses originated from this network.
Events/Flows	Specifies the number of events or flows associated with this network.

Step 3 Double-click the network you want view.

NOTE

If you want to view the details on a new page, hold the Control key while you double-click the network you want to view.

NOTE

The top of the page displays the navigation trail to the current view. If you want to return to a previously viewed page, click the page name on the navigation trail.

The Network page provides the following information:

Table 3-45 Network Page Parameters

Parameter	Description
Magnitude	Specifies the relative importance of the network. The magnitude bar provides a visual representation of all correlated variables of the network. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. <i>Note: For more information on relevance, severity, and credibility, see the Glossary.</i>
Network	Specifies the IP address or name of the network.
Offense(s) Launched	Specifies the offenses launched from the network. If multiple offenses are responsible, this field specifies Multiple and the number of offenses.
Offense(s) Targeted	Specifies the offenses targeted for the network. If multiple offenses are responsible, this field specifies Multiple and the number of offenses
Source(s)	Specifies the source IP addresses associated with this network. To view additional information about the source IP address, click the IP address, asset name, or term that is displayed. If there are multiple source IP addresses, this field specifies Multiple and the number of source IP addresses. Click Multiple (n) to display a table of source IP addresses at the bottom of the page.
Event/Flow Count	Specifies the total number of generated events or flows for this network.

The Network page toolbar provides the following functions:

Table 3-46 Network Page Toolbar

Function	Description
Sources	Click Sources to view a list of source IP addresses associated with this network. See Step 4 .
Destinations	Click Destinations to view a list of destination IP addresses associated with this network. See Step 5 .
Offenses	Click Offenses to view the list of offenses associated with this network. See Step 6 .
Notes	Click Notes to view all notes for this network. For more information on notes, see Adding Notes .
Actions	From the Actions list box, you can choose one of the following actions: <ul style="list-style-type: none"> • Follow up - Select this option to mark this network for further follow-up. See Marking an Item For Follow-Up. • Add Note - Select this option to add notes to the network. See Adding Notes. • Print - Select this option to print this list of network offenses.

Step 4 To view a list of source IP addresses associated with this network, click **Sources** on the Network page toolbar.

The List of Sources provides the following information:

Table 3-47 By Network - List of Sources

Parameter	Description
Flag	Indicates the action taken on the source IP address. For example, if a flag is displayed, the source IP address is marked for follow-up. Point your mouse over the icon to display additional information.
Source IP	Specifies the IP address or host name of the device that attempted to breach the security of a component on your network. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Magnitude	Specifies the relative importance of this source IP address. The magnitude bar provides a visual representation of all correlated variables of the source IP address. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. Note: For more information on relevance, severity, and credibility, see the Glossary .
Location	Specifies the location of the source IP address.
Vulnerability	Specifies whether this source IP address has vulnerabilities.
User	Specifies the user name for the source IP address. If no user is identified, this field specifies Unknown.
MAC	Specifies the MAC address for the source IP address. If no MAC Address is identified, this field specifies Unknown.
Weight	Specifies the weight of this source IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets .
Offenses	Specifies the number of offenses associated with this source IP address.
Destination(s)	Specifies the number of destination IP addresses associated with this source IP address.
Last Event/Flow	Specifies the time elapsed since the last event or flow.
Events/Flows	Specifies the number of events or flows associated with this source IP address.

The List of Sources toolbar provides the following functions:

Table 3-48 By Network - List of Sources Toolbar

Function	Description
Destinations	Click Destinations to view remote or local destination IP addresses. For more information on destination IP addresses, see Viewing Offenses By Destination IP .
Offenses	Click Offenses to view offenses associated with this source IP address. For more information on offenses, see Managing Offenses .

- Step 5** To view a list of destination IP addresses associated with this network, click **Destinations** on the Network page toolbar.

The List of Local Destinations provides the following information:

Table 3-49 By Network - List of Local Destinations Parameters

Parameter	Description
Flag	Indicates the action taken on the destination IP address. For example, if a flag is displayed, the destination IP address is marked for follow-up. Point your mouse over the icon to display additional information.
Destination IP	Specifies the IP address of the destination. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Magnitude	Specifies the relative importance of this destination IP address. The magnitude bar provides a visual representation of all correlated variables of the destination IP address. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. Note: For more information on relevance, severity, and credibility, see the Glossary .
Location	Specifies the location of the destination IP address.
Vulnerability	Specifies whether this destination IP address has vulnerabilities.
User	Specifies the user name for the destination IP address. If no user is identified, this field specifies Unknown.
MAC	Specifies the MAC address for the destination IP address. If no MAC address is identified, this field specifies Unknown.
Weight	Specifies the weight of this destination IP address. The weight of an IP address is assigned on the Assets tab. For more information, see Managing Assets .
Offenses	Specifies the number of offenses associated with this destination IP address.
Source(s)	Specifies the number of source IP addresses associated with this destination IP address.
Last Event/Flow	Specifies the time elapsed since the last event or flow.

Table 3-49 By Network - List of Local Destinations Parameters (continued)

Parameter	Description
Events/Flows	Specifies the number of events or flows associated with this destination IP address.

The List of Local Destinations toolbar provides the following functions:

Table 3-50 List of Local Destinations Toolbar

Function	Description
Offenses	Click Offenses to view a list of offenses for this destination IP address. See Step 6 .
Sources	Click Sources to view a list of source IP addresses. For more information, see Viewing Offenses By Source IP .
Search	Click Search to search for destination IP addresses of this network. To search destination IP addresses: <ol style="list-style-type: none"> 1 Click Search. 2 Enter values for the parameters: <ul style="list-style-type: none"> Destination Network - From the list box, select the network you want to search. Magnitude - From the list box, select whether you want to search for magnitude Equal to, Less than, or Greater than the configured value. Sort by - From the list box and the options, select how you want to sort the search results. 3 Click Search.

Step 6 To view a list of offenses associated with this network, click **Offenses** on the Network page toolbar.

The List of Offenses provides the following information:

Table 3-51 By Network - List of Offenses Parameters

Parameter	Description
Flag	<p>Indicates the action taken on the offense. The actions are represented by the following icons:</p> <ul style="list-style-type: none"> • Flag - Indicates that the offense is marked for follow-up. This allows you to track a particular item for further investigation. For more information on how to mark an offense for follow-up, see Marking an Item For Follow-Up. • User - Indicates that the offense has been assigned to a user. When an offense is assigned to a user, the offense is displayed on the My Offenses page of that user. For more information on assigning offenses to users, see Assigning Offenses to Users. • Notes - Indicates that a user has added notes to the offense. Notes can include any information you want to capture for the offense. For example, you could add a note that specifies information that is not automatically included in an offense, such as a Customer Support ticket number or offense management information. For more information on adding notes, see Adding Notes. • Protected - Indicates that this offense is protected. The Protect feature prevents specified offenses from being removed from the database after the retention period has elapsed. For more information on protected offenses, see Protecting Offenses. • Inactive Offense - Indicates that this is an inactive offense. An offense becomes inactive after five days have elapsed since the offense received the last event. Also, all offenses become inactive after upgrading your QRadar Network Anomaly Detection software. <p>An inactive offense cannot become active again. If new events are detected for the offense, a new offense is created and the inactive offense is retained until the offense retention period has elapsed. You can perform the following actions on inactive offenses: protect, flag for follow up, add notes, and assign to users.</p> <p>Point your mouse over the icon to display additional information.</p>
ID	Specifies the QRadar identifier for this offense.
Description	Specifies the description for this offense.
Offense Type	Specifies the type of offense. The Offense Type is determined by the rule that created the offense. For example, if the offense type is log source event, the rule that generated this offense correlates events based on the device that detected the event.

Table 3-51 By Network - List of Offenses Parameters (continued)

Parameter	Description
Offense Source	Specifies information about the source of the offense. The information displayed in the Offense Source field depends on the type of offense. For example, if the offense type is Source Port, the Offense Source field displays information about the source port of the event that created this offense.
Magnitude	Specifies the relative importance of the offense. The magnitude bar provides a visual representation of all correlated variables of the offense, source, destination, or network. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to display values and the calculated magnitude. Note: For more information on relevance, severity, and credibility, see the Glossary .
Source IPs	Specifies the IP address or host name of the device that attempted to breach the security of a component on your network. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Destination IPs	Specifies the IP addresses and asset names (if available) of the destination IP address associated with this offense. If DNS lookups is enabled on the Admin tab, you can view the DNS name by pointing your mouse over the IP address or asset name. For more information, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Users	Specifies the users associated with this offense. If no user is identified, this field specifies Unknown.
Log Sources	Specifies the log sources associated with this offense.
Events	Specifies the number of events associated with this offense.
Flows	Specifies the number of flows associated with this offense.
Start Date	Specifies the date and time of the first occurrence of this offense.
Last Event/Flow	Specifies the date and time this event or flow was detected for this offense.

The List of Offenses toolbar provides the following functions:

Table 3-52 By Network - List of Offenses Toolbar

Function	Description
Sources	Click Sources to view a list of source IPs for the selected offense. For more information, see Viewing Offenses By Source IP .
Destinations	Click Destinations to view remote or local destination IP addresses for the selected offense. For more information on destination IP addresses, see Viewing Offenses By Destination IP .

Table 3-52 By Network - List of Offenses Toolbar (continued)

Function	Description
Categories	<p>Click Categories to view category information for the selected offense, including:</p> <p>Note: You can also further investigate the events relating to a specific category by right-clicking a category and selecting Events.</p> <ul style="list-style-type: none"> • Name - Specifies the name of the category associated with this offense. • Magnitude - Specifies the relative importance of the category. The magnitude bar provides a visual representation of all correlated variables of the category. Variables include Relevance, Severity, and Credibility. Point your mouse over the magnitude bar to view the values for the category and the calculated magnitude. For more information on relevance, severity, and credibility, see the Glossary. • Local Destination Count - Specifies the number of destination IP addresses associated with this category. • Events/Flows - Specifies the number of events or flows associated with this category. • First Event/Flow - Specifies the time elapsed since of the first event or flow. • Last Event/Flow - Specifies the time elapsed since of the last event or flow. <p>For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Annotations	<p>Click Annotations to view all explanatory notes for the selected offense, including:</p> <ul style="list-style-type: none"> • Annotation - Specifies the details for this annotation. Annotations are text descriptions that rules can automatically add to offenses as part of the rule response. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>. • Time - Specifies the date and time of this annotation. • Weight - Specifies the weight of this annotation.

Table 3-52 By Network - List of Offenses Toolbar (continued)

Function	Description
Networks	<p>Click Networks to view all destination networks for this offense, including:</p> <ul style="list-style-type: none"> • Flag - Indicates the action taken on the network. For example, if a flag is displayed, the network is marked for follow-up. Point your mouse over the icon to display additional information. • Network - Specifies the name of the destination network. • Magnitude - Specifies the relative importance of the destination network. The magnitude bar provides a visual representation of the CVSS risk value of the assets associated with the destination network. Point your mouse over the magnitude bar to display the calculated magnitude. For more information on CVSS, see Glossary. • Source IPs - Specifies the number of source IP addresses associated with this network. • Destination IPs - Specifies the number of source IP addresses associated with this network. • Offenses Targeted - Specifies the number of offenses targeted at this network. • Offenses Launched - Specifies the number of offenses launched by this network. • Events/Flows - Specifies the number of events or flows associated with this network.
Actions	<p>From the Actions list box, you can choose one of the following actions:</p> <ul style="list-style-type: none"> • Hide - Select this option to hide this offense. For more information on hiding offenses, see Hiding Offenses. • Show - Select this option to show all hidden offenses. For more information on showing hidden offenses, see Showing Hidden Offenses. • Close - Select this option to close an offense. For more information on closing offenses, see Closing an Offense. • Close Listed - Select this option to close the listed offense. For more information on closing listed offenses, see Closing Listed Offenses.

4

INVESTIGATING EVENTS

Using the **Log Activity** tab, you can monitor and investigate log activity (events) in real-time or perform advanced searches.

This section includes the following topics:

- [Log Activity Tab Overview](#)
- [Using the Log Activity Tab](#)
- [Viewing Events](#)
- [Viewing Associated Offenses](#)
- [Modifying Event Mapping](#)
- [Using Custom Event Properties](#)
- [Tuning False Positives](#)
- [Managing PCAP Data](#)
- [Exporting Events](#)

Log Activity Tab Overview

You must have permission to view the **Log Activity** tab. For more information on permissions and assigning roles, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

An event is a record from a log source, such as a firewall or router device, that describes an action on a network or host. The **Log Activity** tab specifies which events are associated with offenses. You can use the **Log Activity** tab to:

- Search events (see [Searching Data](#))
- Save and manage search criteria and results
- View events in real-time (streaming)
- View event information grouped by various options
- Create, view and investigate time series charts
- View and manage Packet Capture (PCAP) data
- Associate or map an unknown event to a high-level and low-level category (or QRadar Identifier (QID))
- Tune false positive events from generating offenses

- Export events in Extensible Markup Language (XML) or Comma-Separated Value (CSV) format

QRadar Network Anomaly Detection normalizes events for display on the **Log Activity** tab. Normalization involves parsing raw event data and preparing the data to display readable information on the tab. When QRadar Network Anomaly Detection normalizes events, the system normalizes names as well. Therefore, the name that is displayed on the **Log Activity** tab may not match the name that is displayed in the event.

Using the Log Activity Tab

If you previously configured saved search criteria as the default, the results of that search are automatically displayed when you access the **Log Activity** tab. For more information on saving search criteria, see [Saving Search Criteria](#).

This section includes the following topics:

- [Using the Toolbar](#)
- [Using the Right-Click Menu Options](#)
- [Using the Status Bar](#)

Using the Toolbar

Using the toolbar, you can access the following options:

Table 4-1 Log Activity Tab Toolbar Options

Option	Description
Search	Click Search to perform advanced searches on events. Options include: <ul style="list-style-type: none"> • New Search - Select this option to create a new event search. • Edit Search - Select this option to select and edit an event search. • Manage Search Results - Select this option to view and manage search results. See Managing Search Results. For more information on the search feature, see Searching Data .
Quick Searches	From this list box, you can run previously saved searches. Options are displayed in the Quick Searches list box only when you have saved search criteria that specifies the Include in my Quick Searches option.
Add Filter	Click Add Filter to add a filter to the current search results.
Save Criteria	Click Save Criteria to save the current search criteria.
Save Results	Click Save Results to save the current search results. This option is only displayed after a search is complete. This option is disabled in streaming mode.
Cancel	Click Cancel to cancel a search in progress. This option is disabled in streaming mode.

Table 4-1 Log Activity Tab Toolbar Options (continued)

Option	Description
False Positive	<p>Click False Positive to open the False Positive Tuning window, which allows you to tune out events that are known to be false positives from creating offenses. For more information on false positives, see the Glossary.</p> <p>This option is disabled in streaming mode. For more information on tuning false positives, see Tuning False Positives.</p>
Rules	<p>Click Rules to configure custom event rules. Options include:</p> <ul style="list-style-type: none"> • Rules - Select this option to create a rule. When you select the Rule option, the Rules Wizard is displayed, prepopulated with the appropriate options for creating an event rule. <p>Note: <i>To enable the anomaly detection rule options (Add Threshold Rule, Add Behavioral Rule, and Add Anomaly Rule), you must save aggregated search criteria because the saved search criteria specifies the required parameters.</i></p> <ul style="list-style-type: none"> • Add Threshold Rule - Select this option to create a threshold rule. A threshold rule tests event traffic for activity that exceeds a configured threshold. Thresholds can be based on any data collected by QRadar Network Anomaly Detection. For example, if you create a threshold rule indicating that no more than 220 clients can log into the server between 8 am and 5 pm, the rules generate an alert when the 221st client attempts to login. <p>When you select the Add Threshold Rule option, the Rules Wizard is displayed, prepopulated with the appropriate options for creating a threshold rule.</p> <ul style="list-style-type: none"> • Add Behavioral Rule - Select this option to create a behavioral rule. A behavioral rule tests event traffic for abnormal activity, such as the existence of new or unknown traffic, which is traffic that suddenly ceases or a percentage change in the amount of time an object is active. For example, you can create a behavioral rule to compare the average volume of traffic for the last 5 minutes with the average volume of traffic over the last hour. If there is more than a 40% change, the rule generates a response. <p>When you select the Add Behavioral Rule option, the Rules Wizard is displayed, prepopulated with the appropriate options for creating a behavioral rule.</p>

Table 4-1 Log Activity Tab Toolbar Options (continued)

Option	Description
	<ul style="list-style-type: none"> • Add Anomaly Rule - Select this option to create an anomaly rule. An anomaly rule tests event traffic for abnormal activity, such as the existence of new or unknown traffic, which is traffic that suddenly ceases or a percentage change in the amount of time an object is active. For example, if an area of your network that never communicates with Asia starts communicating with hosts in that country, an anomaly rule generates an alert. <p>When you select the Add Anomaly Rule option, the Rules Wizard is displayed, prepopulated with the appropriate options for creating an anomaly rule.</p> <p>For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Actions	<p>Click Actions to perform the following actions:</p> <ul style="list-style-type: none"> • Show All - Select this option to remove all filters on search criteria and display all unfiltered events. • Print - Select this option to print the events displayed on the page. • Export to XML > Visible Columns - Select this option to export only the columns that are visible on the Log Activity tab. This is the recommended option. See Exporting Events. • Export to XML > Full Export (All Columns) - Select this option to export all event parameters. A full export can take an extended period of time to complete. See Exporting Events. • Export to CSV > Visible Columns - Select this option to export only the columns that are visible on the Log Activity tab. This is the recommended option. See Exporting Events. • Export to CSV > Full Export (All Columns) - Select this option to export all event parameters. A full export can take an extended period of time to complete. See Exporting Events. • Delete - Select this option to delete a search result. See Deleting a Search. • Notify - Select this option to specify that you want a notification emailed to you on completion of the selected searches. This option is only enabled for searches in progress. <p>Note: The Print, Export to XML, and Export to CSV options are disabled in streaming mode and when viewing partial search results.</p>

Table 4-1 Log Activity Tab Toolbar Options (continued)

Option	Description
Quick Filter	<p>Type your search criteria in the Quick Filter field and click the Quick Filter icon or press Enter on the keyboard. All events that match your search criteria are displayed in the events list. A text search is run on the event payload to determine which match your specified criteria.</p> <p>Note: When you click the Quick Filter field, a tooltip is displayed, providing information on the appropriate syntax to use for search criteria. For more syntax information, see Using Quick Filter Syntax.</p>

Using Quick Filter Syntax

The Quick Filter feature enables you to search event payloads using a text search string. The Quick Filter functionality is available in the following locations on the user interface:

- **Log Activity toolbar** - On the toolbar, a **Quick Filter** field enables you to type a text search string and click the **Quick Filter** icon to apply your quick filter to the currently displayed list of events.
- **Add Filter dialog box** - From the **Add Filter** dialog box, accessed by clicking the **Add Filter** icon on the **Log Activity** tab, you can select **Quick Filter** as your filter parameter and type a text search string. This enables you to apply your quick filter to the currently displayed list of events or flows. For more information on the Add Filter dialog box, see [Performing a Sub-Search](#).
- **Event and Flow search pages** - From the event and flow search pages, you can add a Quick Filter to your list of filters to be included in your search criteria. For more information on configuring search criteria, see [Searching Events or Flows](#).

When viewing events in real time (streaming) or last interval mode, you can only type simple words or phrases in the **Quick Filter** field. When viewing events using a time-range, use the following syntax guidelines for typing your text search criteria:

- Search terms can include any plain text that you expect to find in the payload. For example, **Firewall**
- Include multiple terms in double quotes to indicate that you want to search for the exact phrase. For example, **"Firewall deny"**
- Search terms can include single and multiple character wild cards. The search term cannot start with a wild card. For example, **F?rwall** or **F??ew***
- Group terms using logical expressions, such as AND, OR, and NOT. The syntax is case sensitive and the operators must be upper case to be recognized as logical expressions and not as search terms. For example: **(%PIX* AND ("Accessed URL" OR "Deny udp src")) AND 10.100.100.*)**

When creating search criteria that includes the NOT logical expression, you must include at least one other logical expression type, otherwise, your filter will

not return any results. For example: (%PIX* AND ("Accessed URL" OR "Deny udp src") NOT 10.100.100.*)

- The following characters must be preceded by a backslash to indicate that the character is part of your search term: + - && || ! () { } [] ^ " ~ * ? : \. For example: "%PIX\ -5\ -304001"

Using the Right-Click Menu Options

On the **Log Activity** tab, you can right-click an event to access additional event filter information.

The right-click menu options are:

Table 4-2 Right-Click Menu Options

Option	Description
Filter on	Select this option to filter on the selected event, depending on the selected parameter in the event.
False Positive	Select this option to open the False Positive Tuning window, which allows you to tune out events that are known to be false positives from creating offenses. This option is disabled in streaming mode. See Tuning False Positives .
More options:	Select this option to investigate an IP address or a user name. For more information on investigating an IP address, see Investigating IP Addresses . For more information on investigating a user name, see Investigating User Names . Note: This option is not displayed in streaming mode.

Using the Status Bar

When streaming events, the status bar displays the average number of results received per second. This is the number of results the Console successfully received from the Event Processors. If this number is greater than 40 results per second, only 40 results are displayed. The remainder is accumulated in the result buffer. To view additional status information, move your mouse pointer over the status bar.

When QRadar Network Anomaly Detection is not streaming events, the status bar displays the number of search results currently displayed on the tab and the amount of time required to process the search results.

Viewing Events

By default, the **Log Activity** tab displays events in streaming mode, allowing you to view events in real-time. For more information on streaming mode, see [Viewing Streaming Events](#). You can specify a different time range to filter events using the **View** list box.

You can view events using the following options:

- [Viewing Streaming Events](#)
- [Viewing Normalized Events](#)

- [Viewing Raw Events](#)
- [Viewing Grouped Events](#)

Viewing Streaming Events

Streaming mode enables you to view event data entering your system. This mode provides you with a real-time view of your current event activity by displaying the last 50 events.

If you apply any filters on the **Log Activity** tab or in your search criteria before enabling streaming mode, the filters are maintained in streaming mode. However, streaming mode does not support searches that include grouped events. If you enable streaming mode on grouped events or grouped search criteria, the **Log Activity** tab displays the normalized events. See [Viewing Normalized Events](#).

To view streaming events:

Step 1 Click the **Log Activity** tab.

If you previously saved search criteria to be the default, the results for that saved search criteria is displayed.

Step 2 From the **View** list box, select **Real Time (streaming)**.

The streaming events are displayed. For information on the toolbar options, see [Table 4-1](#). For more information on the parameters displayed in streaming mode, see [Table 4-4](#).

► To select an event record, click the **Pause** icon to pause streaming.

When streaming is paused, the last 1,000 events are displayed.

► To restart streaming mode, click the **Play** icon.

Viewing Normalized Events

To view normalized events:

Step 1 Click the **Log Activity** tab.

If you previously saved a search to be the default, the results for that saved search are displayed.

Step 2 From the **Display** list box, select **Default (Normalized)**.

Step 3 From the **View** list box, select the time frame you want to display.

NOTE

If you have selected a time frame to display, a time series chart is displayed. For more information on using time series charts, see [Managing Time Series Charts](#).

The **Log Activity** tab displays the following parameters:

Table 4-3 Log Activity Tab - Default (Normalized)

Parameter	Description
Current Filters	<p>The top of the table displays the details of the filters applied to the search results. To clear these filter values, click Clear Filter.</p> <p><i>Note: This parameter is only displayed after you apply a filter.</i></p>
View	<p>From this list box, you can select the time range you want to filter for.</p>
Current Statistics	<p>When not in Real Time (streaming) or Last Minute (auto refresh) mode, current statistics are displayed, including:</p> <p><i>Note: Click the arrow next to Current Statistics to display or hide the statistics</i></p> <ul style="list-style-type: none"> • Total Results - Specifies the total number of results that matched your search criteria. • Data Files Searched - Specifies the total number of data files searched during the specified time span. • Compressed Data Files Searched - Specifies the total number of compressed data files searched within the specified time span. • Index File Count - Specifies the total number of index files searched during the specified time span. • Duration - Specifies the duration of the search. <p><i>Note: Current statistics are useful for troubleshooting. When you contact Customer Support to troubleshoot events, you may be asked to supply current statistical information.</i></p>
Charts	<p>Displays configurable charts representing the records matched by the time interval and grouping option. Click Hide Charts if you want to remove the charts from your display.</p> <p>The charts are only displayed after you select a time frame of Last Interval (auto refresh) or above, and a grouping option to display. For more information on configuring charts, see Configuring Charts.</p> <p><i>Note: If you use Mozilla Firefox as your browser and an ad blocker browser extension is installed, charts do not display. To display charts, you must remove the ad blocker browser extension. For more information, see your browser documentation.</i></p>
Offenses icon	<p>Click the Offenses icon to view details of the offense associated with this event. For more information, see Viewing Associated Offenses.</p>
Event Name	<p>Specifies the normalized name of the event.</p>
Log Source	<p>Specifies the log source that sent the event to QRadar Network Anomaly Detection. If there are multiple log sources associated with this event, this field specifies the term Multiple and the number of log sources.</p>

Table 4-3 Log Activity Tab - Default (Normalized) (continued)

Parameter	Description
Event Count	Specifies the total number of events bundled in this normalized event. Events are bundled when many of the same type of event for the same source and destination IP address are detected within a short period of time.
Time	Specifies the date and time when QRadar Network Anomaly Detection received the event.
Low Level Category	Specifies the low-level category associated with this event. For more information on event categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Source IP	Specifies the source IP address of the event.
Source Port	Specifies the source port of the event.
Destination IP	Specifies the destination IP address of the event.
Destination Port	Specifies the destination port of the event.
Username	Specifies the user name associated with this event. User Names are often available in authentication related events. For all other types of events where the user name is not available, this field specifies N/A.
Magnitude	Specifies the magnitude of this event. Variables include credibility, relevance, and severity. Point your mouse over the magnitude bar to display values and the calculated magnitude. For more information on credibility, relevance, and severity, see the Glossary .

Step 4 Double-click the event you want to view in greater detail.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you double-click an event.

The event details results provides the following information:

Table 4-4 Event Details

Parameter	Description
Event Information	
Event Name	Specifies the normalized name of the event.
Low Level Category	Specifies the low-level category of this event. For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Event Description	Specifies a description of the event, if available.
Magnitude	Specifies the magnitude of this event. For more information on magnitude, see the Glossary .
Relevance	Specifies the relevance of this event. For more information on relevance, see the Glossary .
Severity	Specifies the severity of this event. For more information on severity, see the Glossary .

Table 4-4 Event Details (continued)

Parameter	Description
Credibility	Specifies the credibility of this event. For more information on credibility, see the Glossary .
Username	Specifies the user name associated with this event, if available.
Start Time	Specifies the time of the event was received from the log source.
Storage Time	Specifies the time that the event was stored in the QRadar Network Anomaly Detection database.
Log Source Time	Specifies the system time as reported by the log source in the event payload.
Anomaly Detection Information - This pane is only displayed if this event was generated by an anomaly detection rule. For more information on anomaly detection rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> . Click the Anomaly icon to view the saved search results that caused the anomaly detection rule to generate this event.	
Rule Description	Specifies the anomaly detection rule that generated this event.
Anomaly Description	Specifies a description of the anomalous behavior that was detected by the anomaly detection rule.
Anomaly Alert Value	Specifies the anomaly alert value.
Source and Destination Information	
Source IP	Specifies the source IP address of the event.
Destination IP	Specifies the destination IP address of the event.
Source Asset Name	Specifies the user-defined asset name of the event source. For more information on assets, see Managing Assets .
Destination Asset Name	Specifies the user-defined asset name of the event destination. For more information on assets, see Managing Assets
Source Port	Specifies the source port of this event.
Destination Port	Specifies the destination port of this event.
Pre NAT Source IP	For a firewall or another device capable of Network Address Translation (NAT), this parameter specifies the source IP address before the NAT values were applied. NAT translates an IP address in one network to a different IP address in another network.
Pre NAT Destination IP	For a firewall or another device capable of NAT, this parameter specifies the destination IP address before the NAT values were applied.
Pre NAT Source Port	For a firewall or another device capable of NAT, this parameter specifies the source port before the NAT values were applied.
Pre NAT Destination Port	For a firewall or another device capable of NAT, this parameter specifies the destination port before the NAT values were applied.

Table 4-4 Event Details (continued)

Parameter	Description
Post NAT Source IP	For a firewall or another device capable of NAT, this parameter specifies the source IP address after the NAT values were applied.
Post NAT Destination IP	For a firewall or another device capable of NAT, this parameter specifies the destination IP address after the NAT values were applied.
Post NAT Source Port	For a firewall or another device capable of NAT, this parameter specifies the source port after the NAT values were applied.
Post NAT Destination Port	For a firewall or another device capable of NAT, this parameter specifies the destination port after the NAT values were applied.
IPv6 Source	Specifies the source IPv6 address of the event.
IPv6 Destination	Specifies the destination IPv6 address of the event.
Source MAC	Specifies the source MAC address of the event.
Destination MAC	Specifies the destination MAC address of the event.
Payload Information	
Payload	Specifies the payload content from the event. This field offers three tabs to view the payload: <ul style="list-style-type: none"> • Universal Transformation Format (UTF) - Click UTF. • Hexidecimal - Click HEX. • Base64 - Click Base64.
Additional Information	
Protocol	Specifies the protocol associated with this event.
QID	Specifies the QID for this event. Each event has a unique QID. For more information on mapping a QID, see Modifying Event Mapping .
Log Source	Specifies the log source that sent the event to QRadar Network Anomaly Detection. If there are multiple log sources associated with this event, this field specifies the term Multiple and the number of log sources.
Event Count	Specifies the total number of events bundled in this normalized event. Events are bundled when many of the same type of event for the same source and destination IP address are seen within a short period of time.
Custom Rules	Specifies custom rules that match this event. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Custom Rules Partially Matched	Specifies custom rules that partially match this event. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .

Table 4-4 Event Details (continued)

Parameter	Description
Annotations	Specifies the annotation for this event. Annotations are text descriptions that rules can automatically add to events as part of the rule response. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Identity Information - QRadar Network Anomaly Detection collects identity information, if available, from log source messages. Identity information provides additional details about assets on your network. Log sources only generate identity information if the log message sent to QRadar Network Anomaly Detection contains an IP address and least one of the following: user name or MAC address. Not all log sources generate identity information. For more information on identity and assets, see Managing Assets .	
Identity Username	Specifies the user name of the asset associated with this event.
Identity IP	Specifies the IP address of the asset associated with this event.
Identity Net Bios Name	Specifies the Network Base Input/Output System (Net Bios) name of the asset associated with this event.
Identity Extended Field	Specifies additional information about the asset associated with this event. The content of this field is user-defined text and depends on the devices on your network that are available to provide identity information. Examples include: physical location of devices, relevant policies, network switch, and port names.
Has Identity (Flag)	Specifies True if QRadar Network Anomaly Detection has collected identity information for the asset associated with this event. For more information on which devices send identity information, see the <i>IBM Security QRadar DSM Configuration Guide</i> .
Identity Host Name	Specifies the host name of the asset associated with this event.
Identity MAC	Specifies the MAC address of the asset associated with this event.
Identity Group Name	Specifies the group name of the asset associated with this event.

The event details toolbar provides the following functions:

Table 4-5 Event Details Toolbar

Function	Description
Return to Events List	Click Return to Event List to return to the list of events.
Offense	Click Offense to display the offenses associated with the event.
Anomaly	Click Anomaly to display the saved search results that caused the anomaly detection rule to generate this event. Note: This icon is only displayed if this event was generated by an anomaly detection rule.

Table 4-5 Event Details Toolbar (continued)

Function	Description
Map Event	Click Map Event to edit the event mapping. For more information, see Modifying Event Mapping .
False Positive	Click False Positive to tune QRadar Network Anomaly Detection to prevent false positive events from generating into offenses.
Extract Property	Click Extract Property to create a custom event property from the selected event. For more information, see Using Custom Event Properties .
Previous	Click Previous to view the previous event in the event list.
Next	Click Next to view the next event in the event list.
PCAP Data	<p>Note: This option is only displayed if your QRadar Network Anomaly Detection Console is configured to integrate with the Juniper JunOS Platform DSM. For more information on managing PCAP data, see Managing PCAP Data.</p> <p>From the PCAP Data list box, select one of the following options:</p> <ul style="list-style-type: none"> • View PCAP Information - Select this option to view the PCAP information. For more information, see Viewing PCAP Information. • Download PCAP File - Select this option to download the PCAP file to your desktop system. For more information, see Downloading the PCAP File to Your Desktop System.
Print	Click Print to print the event details.

Viewing Raw Events To view raw event data:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 From the **Display** list box, select **Raw Events**.

Step 3 From the **View** list box, select the time frame you want to display.

The **Log Activity** tab results provides the following raw event data:

Table 4-6 Raw Events Parameters

Parameter	Description
Current Filters	<p>The top of the table displays the details of the filters applied to the search results. To clear these filter values, click Clear Filter.</p> <p>Note: This parameter is only displayed after you apply a filter.</p>
View	From the list box, select the time range you want to filter for.

Table 4-6 Raw Events Parameters (continued)

Parameter	Description
Current Statistics	<p>When not in Real Time (streaming) or Last Minute (auto refresh) mode, current statistics are displayed, including:</p> <p>Note: Click the arrow next to Current Statistics to display or hide the statistics.</p> <ul style="list-style-type: none"> • Total Results - Specifies the total number of results that matched your search criteria. • Data Files Searched - Specifies the total number of data files searched during the specified time span. • Compressed Data Files Searched - Specifies the total number of compressed data files searched within the specified time span. • Index File Count - Specifies the total number of index files searched during the specified time span. • Duration - Specifies the duration of the search. <p>Note: Current statistics are useful for troubleshooting. When you contact Customer Support to troubleshoot events, you may be asked to supply current statistic information.</p>
Charts	<p>Displays configurable charts representing the records matched by the time interval and grouping option. Click Hide Charts if you want to remove the charts from your display.</p> <p>The charts are only displayed after you select a time frame of Last Interval (auto refresh) or above, and a grouping option to display. For more information on configuring charts, see Configuring Charts.</p> <p>Note: If you use Mozilla Firefox as your browser and an ad blocker browser extension is installed, charts do not display. To displayed charts, you must remove the ad blocker browser extension. For more information, see your browser documentation.</p>
Offenses icon	Click this icon to view details of the offense associated with this event. For more information, see Viewing Associated Offenses .
Start Time	Specifies the time of the first event, as reported to QRadar Network Anomaly Detection by the log source.
Log Source	Specifies the log source that originated the event. If there are multiple log sources associated with this event, this field specifies the term Multiple and the number of log sources.
Payload	Specifies the original event payload information in UTF-8 format.

Step 4 Double-click the event you want to view in greater detail.

For more information on the event details page, see [Table 4-4](#). For more information on the event details toolbar, see [Table 4-5](#).

Viewing Grouped Events Using the **Log Activity** tab, you can view events grouped by various options. From the **Display** list box, you can select the parameter by which you want to group events.

NOTE The **Display** list box is not displayed in streaming mode because streaming mode does not support grouped events. If you entered streaming mode using non-grouped search criteria, this option is displayed.

To view grouped events:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 From the **View** list box, select the time frame you want to display.

Step 3 From the **Display** list box, choose one of the following options:

Table 4-7 Grouped Events Options

Group Option	Description
Low Level Category	Displays a summarized list of events grouped by the low-level category of the event. For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Event Name	Displays a summarized list of events grouped by the normalized name of the event.
Destination IP	Displays a summarized list of events grouped by the destination IP address of the event.
Destination Port	Displays a summarized list of events grouped by the destination port address of the event.
Source IP	Displays a summarized list of events grouped by the source IP address of the event.
Custom Rule	Displays a summarized list of events grouped by the associated custom rule.
Username	Displays a summarized list of events grouped by the user name associated with the events.
Log Source	Displays a summarized list of events grouped by the log sources that sent the event to QRadar Network Anomaly Detection.
High Level Category	Displays a summarized list of events grouped by the high-level category of the event. For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Network	Displays a summarized list of events grouped by the network associated with the event.
Source Port	Displays a summarized list of events grouped by the source port address of the event.

The column layout of the data depends on the chosen group option. Each row in the events table represents an event group. The **Log Activity** tab provides the following information when displaying grouped events:

Table 4-8 Grouped Event Parameters

Parameter	Description
Grouping By	Specifies the parameter that the search is grouped on.
Current Filters	The top of the table displays the details of the filter applied to the search results. To clear these filter values, click Clear Filter .
View	From the list box, select the time range you want to filter for.
Current Statistics	<p>When not in Real Time (streaming) or Last Minute (auto refresh) mode, current statistics are displayed, including:</p> <p>Note: Click the arrow next to Current Statistics to display or hide the statistics.</p> <ul style="list-style-type: none"> • Total Results - Specifies the total number of results that matched your search criteria. • Data Files Searched - Specifies the total number of data files searched during the specified time span. • Compressed Data Files Searched - Specifies the total number of compressed data files searched within the specified time span. • Index File Count - Specifies the total number of index files searched during the specified time span. • Duration - Specifies the duration of the search. <p>Note: Current statistics are useful for troubleshooting. When you contact Customer Support to troubleshoot events, you may be asked to supply current statistic information.</p>
Charts	<p>Displays configurable charts representing the records matched by the time interval and grouping option. Click Hide Charts if you want to remove the chart from your display.</p> <p>The charts are only displayed after you select a time frame of Last Interval (auto refresh) or above, and a grouping option to display. For more information on configuring charts, see Configuring Charts.</p> <p>Note: If you use Mozilla Firefox as your browser and an ad blocker browser extension is installed, charts do not display. To display charts, you must remove the ad blocker browser extension. For more information, see your browser documentation.</p>
Source IP (Unique Count)	Specifies the source IP address associated with this event. If there are multiple IP addresses associated with this event, this field specifies the term Multiple and the number of IP addresses.
Destination IP (Unique Count)	Specifies the destination IP address associated with this event. If there are multiple IP addresses associated with this event, this field specifies the term Multiple and the number of IP addresses.

Table 4-8 Grouped Event Parameters (continued)

Parameter	Description
Destination Port (Unique Count)	Specifies the destination ports associated with this event. If there are multiple ports associated with this event, this field specifies the term Multiple and the number of ports.
Event Name	Specifies the normalized name of the event.
Log Source (Unique Count)	Specifies the log sources that sent the event to QRadar Network Anomaly Detection. If there are multiple log sources associated with this event, this field specifies the term Multiple and the number of log sources.
High Level Category (Unique Count)	Specifies the high-level category of this event. If there are multiple categories associated with this event, this field specifies the term Multiple and the number of categories. For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Low Level Category (Unique Count)	Specifies the low-level category of this event. If there are multiple categories associated with this event, this field specifies the term Multiple and the number of categories. For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Protocol (Unique Count)	Specifies the protocol ID associated with this event. If there are multiple protocols associated with this event, this field specifies the term Multiple and the number of protocol IDs.
Username (Unique Count)	Specifies the user name associated with this event, if available. If there are multiple user names associated with this event, this field specifies the term Multiple and the number of user names.
Magnitude (Maximum)	Specifies the maximum calculated magnitude for grouped events. Variables used to calculate magnitude include credibility, relevance, and severity. For more information on credibility, relevance, and severity, see the Glossary .
Event Count (Sum)	Specifies the total number of events bundled in this normalized event. Events are bundled when many of the same type of event for the same source and destination IP address are seen within a short period of time.
Count	Specifies the total number of normalized events in this event group.

Step 4 Double-click the event group you want to investigate.

The List of Events page displays the events belonging to the selected group.

NOTE

The List of Events page does not retain chart configurations you may have defined on the **Log Activity** tab.

For more information on the List of Events parameters, see [Table 4-3](#).

Step 5 Double-click the event you want to investigate

For more information on the event details page, see [Table 4-4](#). For more information on the event details toolbar, see [Table 4-5](#).

Viewing Associated Offenses

If an event matches a rule, an offense can be generated on the **Offenses** tab. From the **Log Activity** tab, you can view the offense associated with the event by clicking the **Offense** icon for the event you want to investigate. For more information on rules, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*. For more information on managing offenses, see [Investigating Offenses](#).

To view an associated offense:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you investigate an event.

Step 2 Click the **Offense** icon beside the event you want to investigate.

NOTE

If the Magistrate has not yet saved the offense associated with the selected event to disk or the offense has been purged from the database, an information message is displayed.

For more information on managing offenses, see [Investigating Offenses](#).

Modifying Event Mapping

For normalization purposes, QRadar Network Anomaly Detection automatically maps events from log sources to high- and low-level categories. For more information on event categories, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Using the Map Event feature, you can manually map a normalized or raw event to a high-level and low-level category (or QID). This manual action allows QRadar Network Anomaly Detection to map unknown log source events to known QRadar Network Anomaly Detection events so that they can be categorized and processed appropriately.

When QRadar Network Anomaly Detection receives events from log sources that the system is unable to categorize, QRadar Network Anomaly Detection categorizes these events as unknown. These events occur for several reasons, including:

- **User-defined Events** - Some log sources, such as Snort, allow you to create user-defined events.

- **New Events or Older Events** - Vendor log sources may update their software with maintenance releases to support new events that QRadar Network Anomaly Detection may not support.

NOTE

The Map Event feature is disabled for events when the high-level category is SIM Audit or the log source type is Simple Object Access Protocol (SOAP).

To modify event mapping:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you map an event.

Step 2 For any normalized or raw event, double-click the event you want to map.

For more information on viewing normalized events, see [Viewing Normalized Events](#). For more information on viewing raw events, see [Viewing Raw Events](#).

Step 3 Click **Map Event**.

Step 4 If you know the QID that you want to map to this event, type the QID in the **Enter QID** field. Go to [Step 6](#).

Step 5 If you do not know the QID you want to map to this event, search for a particular QID:

- a Choose one of the following options:
 - To search for a QID by category, select the high-level category from the **High-Level Category** list box.
 - To search for a QID by category, select the low-level category from the **Low-Level Category** list box.
 - To search for a QID by log source type, select a log source type from the **Log Source Type** list box.
 - To search for a QID by name, type a name in the **QID/Name** field.

b Click **Search**.

A list of QIDs are displayed.

c Select the QID you want to associate this event with.

Step 6 Click **OK**.

Using Custom Event Properties

The Custom Event Properties functionality allows you to search, view, and report on information within logs that QRadar Network Anomaly Detection does not typically normalize and display.

NOTE

To create custom event properties, you must have the User Defined Event Properties permission. Check with your administrator to ensure you have the correct permissions. For more information regarding permissions, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

You can create custom event properties from two locations on the **Log Activity** tab:

- **Event details** - Select an event from the **Log Activity** tab to create a custom event property derived from its payload.
- **Search page** - You can create and edit a custom event property from the Search page. When you create a new custom event property from the Search page, the event property is not derived from any particular event; therefore, the Event Property Definition window does not prepopulate. You can copy and paste payload information from another source. For more information, see [Searching Events or Flows](#).

NOTE

If you have Administrative permissions, you can also create and modify custom event properties from the **Admin** tab.

This section includes the following topics:

- [Creating Custom Event Properties](#)
- [Modify a Custom Event Property](#)
- [Copying a Custom Event Property](#)
- [Deleting a Custom Event Property](#)

Creating Custom Event Properties

Using the Custom Event Properties feature, you can create two types of custom event properties:

- **Regex** - Using regular expression (Regex) statements, you can extract unnormalized data from event payloads.

For example, QRadar Network Anomaly Detection reports on all users who make user permission changes on an Oracle server. QRadar Network Anomaly Detection provides a list of users and the number of times they made a change to the permission of another account. However, QRadar Network Anomaly Detection typically cannot display the actual user account or permission that was changed. You can create a custom event property to extract this information from the logs, and then use the event property in event searches and reports.

Use of this feature requires advanced knowledge of regular expressions (regex). Regex defines the field that you want to become the custom event property. After you enter a regex statement, you can validate it against the payload. When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.

A custom event property can be associated with multiple regular expressions. When an event is parsed, each regex pattern is tested on the event until a regex pattern matches the payload. The first regex pattern to match the event payload determines the data to be extracted.

- **Calculated** - Using calculation-based custom event properties, you can perform calculations on existing numeric event properties to produce a calculated property. For example, you can create a property that displays a percentage by dividing one numeric property by another numeric property.

This section includes the following topics:

- [Creating a Regex-Based Custom Event Property](#)
- [Creating a Calculation-Based Custom Event Property](#)

Creating a Regex-Based Custom Event Property

A regex-based customer event property matches event payloads to a regular expression.

To create a regex-based custom event property:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 Double-click the event you want to base the custom event property on.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you double-click an event.

Step 3 Click **Extract Property**.

NOTE

If you have Administrative permissions, you can access the Custom Event Properties window on the **Admin** tab. Click **Admin > Data Sources > Custom Event Properties**. For more information, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Step 4 In the Property Type pane, select the **Regex Based** option.

Step 5 Configure the custom event property parameters:

Table 4-9 Custom Event Properties Window Parameters

Parameter	Description
Test Field	Specifies the payload that was extracted from the unnormalized event.
Property Definition	
Existing Property	To select an existing property, select this option, and then select a previously saved property name from the list box.
New Property	To create a new property, select this option, and then type a unique name for this custom event property. The new property name cannot be the name of a normalized event property, such as Username, Source IP, or Destination IP.
Optimize parsing for rules, reports, and searches	<p>To parse and store the property the first time QRadar Network Anomaly Detection receives the event, select the check box. When you select the check box, the property does not require additional parsing for reporting, searching, or rule testing.</p> <p>If you clear this check box, the property is parsed each time a report, search, or rule test is performed.</p> <p>By default, this option is disabled.</p>
Field Type	<p>From the list box, select the field type. The field type determines how the custom event property is displayed in QRadar Network Anomaly Detection and which options are available for aggregation. The field type options are:</p> <ul style="list-style-type: none"> • Alpha-Numeric • Numeric • IP • Port <p>The default is Alpha-Numeric.</p>
Description	Type a description of this custom event property.
Property Expression Definition	
Log Source Type	From the list box, select the type of log source to which this custom event property applies.
Log Source	From the list box, select the log source to which this custom event property applies. If there are multiple log sources associated with this event, this field specifies the term Multiple and the number of log sources.
Event Name	<p>To specify an event name to which this custom event property applies, select this option.</p> <p>Click Browse to access the Event Browser and select the QRadar Identifier (QID) for the event name you want applied to this custom event property.</p> <p>By default, this option is enabled.</p>

Table 4-9 Custom Event Properties Window Parameters (continued)

Parameter	Description
Category	<p>To specify a low-level category to which this custom event property applies, select this option.</p> <p>To select a low-level category:</p> <ol style="list-style-type: none"> 1 From the High Level Category list box, select the high-level category. The Low Level Category list updates to include only the low-level categories associated with the selected high-level category. 2 From the Low Level Category list box, select the low-level category to which this custom event property applies.
RegEx	<p>Type the regular expression you want to use for extracting the data from the payload. Regular expressions are case-sensitive.</p> <p>Sample regular expressions:</p> <ul style="list-style-type: none"> • email: <code>(.+@[^\.] * \. [a-z]{2,})\$</code> • URL: <code>(http:\/\/[a-zA-Z0-9\-\.] + \. [a-zA-Z]{2,3} (\/s*) ?\$)</code> • Domain Name: <code>(http[s]? :\/ (.\+?) [\"/? :])</code> • Floating Point Number: <code>([-+] ? \d* \. ? \d* \$)</code> • Integer: <code>([-+] ? \d* \$)</code> • IP Address: <code>(\b\d{1,3} \. \d{1,3} \. \d{1,3} \. \d{1,3} \b)</code> <p>For example: To match a log that resembles the following: SEVERITY=43 Construct the Regular Expression as follows: SEVERITY= ([-+] ? \d* \$)</p> <p>Note: Capture groups must be enclosed in parenthesis.</p>
Capture Group	<p>Type the capture group you want to use if the regex contains more than one capture group.</p> <p>Capture groups treat multiple characters as a single unit. In a capture group, characters are grouped inside a set of parentheses.</p>
Test	Click Test to test the regular expression against the payload.
Enabled	<p>Select this check box to enable this custom event property. If you clear the check box, this custom event property does not display in event search filters or column lists and the event property is not parsed from payloads.</p> <p>The default is Enabled.</p>

Step 6 Click **Test** to test the regular expression against the payload.

Step 7 Click **Save**.

The custom event property is now displayed as an option in the list of available columns on the search page.

NOTE

Custom event properties are not automatically included in event listings. To include a custom event property in an events list, you must select the custom event property from the list of available columns when creating a search.

Creating a Calculation-Based Custom Event Property

To create a calculation-based custom event property:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 Double-click the event you want to base the custom event property on.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you double-click an event.

Step 3 Click **Extract Property**.

NOTE

If you have Administrative permissions, you can access the Custom Event Properties window on the **Admin** tab. Click **Admin > Data Sources > Custom Event Properties**. For more information, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Step 4 In the Property Type pane, select the **Calculation Based** option.

Step 5 Configure the custom event property parameters:

Table 4-10 Custom Event Properties Window Parameters

Parameter	Description
Property Definition	
Property Name	Type a unique name for this custom event property. The new property name cannot be the name of a normalized event property, such as Username, Source IP, or Destination IP.
Description	Type a description of this custom event property.
Property Calculation Definition	
Property 1	From the list box, select the first property you want to use in your calculation. Options include all numeric normalized and numeric custom event properties. You can also specify a specific numeric value. From the Property 1 list box, select the User Defined option. The Numeric Property parameter is displayed. Type a specific numeric value.

Table 4-10 Custom Event Properties Window Parameters (continued)

Parameter	Description
Operator	From the list box, select the operator you want to apply to the selected properties in the calculation. Options include: <ul style="list-style-type: none"> • Add • Subtract • Multiply • Divide
Property 2	From the list box, select the second property you want to use in your calculation. Options include all numeric normalized and numeric custom event properties. You can also specify a specific numeric value. From the Property 1 list box, select the User Defined option. The Numeric Property parameter is displayed. Type a specific numeric value.
Enabled	Select this check box to enable this custom event property. If you clear the check box, this custom event property does not display in event search filters or column lists and the event property is not parsed from payloads. The default is Enabled.

Step 6 Click **Save**.

The custom event property is now displayed as an option in the list of available columns on the search page.

NOTE

Custom event properties are not automatically included in event listings. To include a custom event property in an events list, you must select the custom event property from the list of available columns when creating a search.

Modify a Custom Event Property

To modify a custom event property:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 From the **Search** list box, select **Edit Search**.**Step 3** Click **Manage Custom Properties**.

The Custom Event Properties window provides the following information:

Table 4-11 Manage Custom Event Property Window Columns

Column	Description
Property Name	Specifies a unique name for this custom event property.

Table 4-11 Manage Custom Event Property Window Columns (continued)

Column	Description
Type	Specifies the type for this custom event property. Options include: <ul style="list-style-type: none"> • Regex - A regex-based custom event property matches event payloads to a regular expression. See Creating Custom Event Properties • Calculated - A calculation-based custom event property performs a calculation on event properties. See Creating a Calculation-Based Custom Event Property.
Property Description	Specifies a description for this custom event property.
Log Source Type	Specifies the name of the log source type to which this custom event property applies.
Log Source	Specifies the log source to which this custom event property applies. If there are multiple log sources associated with this event, this field specifies the term Multiple and the number of log sources.
Expression	Specifies the expression for this custom event property. The expression depends on the custom event property type: <ul style="list-style-type: none"> • For a regex-based custom event property, this parameter specifies the regular expression you want to use for extracting the data from the payload. • For a calculation-based custom event property, this parameter specifies the calculation you want to use to create the custom event property value.
Username	Specifies the name of the user who created this custom event property.
Enabled	Specifies whether this custom event property is enabled. This field specifies either True or False.
Creation Date	Specifies the date this custom event property was created.
Modification Date	Specifies the last time this custom event property was modified.

The Custom Event Property toolbar provides the following functions:

Table 4-12 Custom Event Property Toolbar Options

Option	Description
Add	Click Add to add a new custom event property. See Creating Custom Event Properties .
Edit	Click Edit to edit the selected custom event property.
Copy	Click Copy to copy selected custom event properties.

Table 4-12 Custom Event Property Toolbar Options (continued)

Delete	Click Delete to delete selected custom event properties.
Enable/Disable	Click Enable/Disable to enable or disable the selected custom event properties for parsing and viewing in the event search filters or column lists.

Step 4 Select the custom event property you want to edit and click **Edit**.

NOTE You can also double-click the custom event property you want to edit.

Step 5 Edit the necessary parameters. See [Table 4-9](#).

Step 6 If you edited the regular expression, click **Test** to test the regular expression against the payload.

Step 7 Click **Save**.

The edited custom event property is now updated in the list of available columns on the search page.

NOTE Custom event properties are not automatically included in event listings. To include a custom event property in an events list, you must select the custom event property from the list of available columns when creating a search.

Copying a Custom Event Property To copy a custom event property:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 From the **Search** list box, select **Edit Search**.

Step 3 Click **Manage Custom Properties**.

Step 4 Select the custom event property you want to copy and click **Copy**.

Step 5 Select the **New Property** option and type a new property name.

Step 6 Edit the necessary parameters. See [Custom Event Properties Window Parameters](#).

Step 7 If you edited the regular expression, click **Test** to test the regular expression against the payload.

Step 8 Click **Save**.

The copied custom event property is now available in the list of available columns on the search page.

NOTE Custom event properties are not automatically included in event listings. To include a custom event property in an events list, you must select the custom event property from the list of available columns when creating a search.

Deleting a Custom Event Property

You can delete any custom property, provided the custom property is not associated with another custom property. If you attempt to delete a custom property associated with another custom property, an error message is displayed, providing the name of the associated custom property.

To delete a custom event property:

Step 1 Click the **Log Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 From the **Search** list box, select **Edit Search**.

Step 3 Click **Manage Custom Properties**.

Step 4 Select the custom event property you want to delete and click **Delete**.

Step 5 Click **Yes**.

The deleted custom event property is no longer displayed in the event details.

Tuning False Positives

You can use the False Positive Tuning function to tune out false positive events from created offenses. You must have appropriate permissions for creating customized rules to tune false positives. For more information on roles, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*. For more information on false positives, see the [Glossary](#).

To tune a false positive event:

Step 1 Click the **Log Activity** tab.

Step 2 Select the event you want to tune.

Step 3 Click **False Positive**.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you click **False Positive**.

The False Positive window is displayed with information derived from the selected event.

Step 4 Select one of the following **Event/Flow Property** options:

- Event/Flow(s) with a specific QID of <Event>
- Any Event/Flow(s) with a low-level category of <Event>
- Any Event/Flow(s) with a high-level category of <Event>

Step 5 Select one of the **Traffic Direction** options:

- <Source IP Address> to <Destination IP Address>
- <Source IP Address> to Any Destination
- Any Source to <Destination IP Address>
- Any Source to any Destination

Step 6 Click **Tune**.

NOTE You can tune false positive events from the summary or details page.

Managing PCAP Data

If your QRadar Network Anomaly Detection Console is configured to integrate with the Juniper JunOS Platform DSM, QRadar Network Anomaly Detection can receive, process, and store Packet Capture (PCAP) data from a Juniper SRX-Series Services Gateway log source. For more information on the Juniper JunOS Platform DSM, see the *IBM Security QRadar DSM Configuration* guide.

Before you can display PCAP data on the **Log Activity** tab, the Juniper SRX-Series Services Gateway log source must be configured with the PCAP Syslog Combination protocol. For more information on configuring log source protocols, see the *IBM Security QRadar Log Sources Users Guide*.

This section includes the following topics:

- [Displaying the PCAP Data Column](#)
- [Viewing PCAP Information](#)
- [Downloading the PCAP File to Your Desktop System](#)

Displaying the PCAP Data Column

The PCAP Data column is not displayed on the **Log Activity** tab by default. When you create search criteria, you must select the **PCAP Data** column in the Column Definition pane. You can also group your event search results by the **PCAP Data** column. For more information on searching and viewing events, see [Investigating Events](#).

To display the **PCAP Data** column in event search results:

Step 1 Click the **Log Activity** tab.

Step 2 From the **Search** list box, select **New Search**.

Step 3 Optional. Configure your specific search criteria:

NOTE If you perform this step, the search results display only events that have PCAP data available.

- a From the first list box, select **PCAP data**.
- b From the second list box, select **Equals**.
- c From the third list box, select **True**.
- d Click **Add Filter**.

Step 4 Configure your column definitions:

- a From the **Available Columns** list in the Column Definition pane, click **PCAP Data**.

- b Click the **Add Column** icon on the bottom set of icons to move the **PCAP Data** column to the **Columns** list.
- c Optional. Click the **Add Column** icon in the top set of icons to move the **PCAP Data** column to the **Group By** list.

Step 5 Click **Filter**.

NOTE

You can configure your event search using additional parameters, however, this procedure only demonstrates the required search criteria to display the PCAP data column. For more information on searching events, see [Searching Events or Flows](#).

The event search results are displayed, including the **PCAP Data** column. If PCAP data is available for an event, an icon is displayed in the **PCAP Data** column. Using the **PCAP** icon, you can view the PCAP data or download the PCAP file to your desktop system.

Step 6 Double-click the event you want to investigate.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you double-click an event.

From the **PCAP Data** toolbar option, you can view the PCAP information or download the PCAP file to your desktop system.

For more information on viewing and downloading PCAP data, see the following sections:

- [Viewing PCAP Information](#)
- [Downloading the PCAP File to Your Desktop System](#)

Viewing PCAP Information

You can view a readable version of the data in the PCAP file. To view PCAP information:

Step 1 Click the **Log Activity** tab.

Step 2 Perform or select a search that displays the **PCAP Data** column. See [Displaying the PCAP Data Column](#).

The event search results are displayed.

Step 3 Choose one of the following:

- Right-click the **PCAP** icon for the event you want to investigate, and then select **More Options > View PCAP Information**.
- Double-click the event you want to investigate, and then select **PCAP Data > View PCAP Information** from the event details toolbar.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you double-click an event.

NOTE

Before PCAP data can be displayed, QRadar Network Anomaly Detection must retrieve the PCAP file for display on the user interface. If the download process takes an extended period of time, the Downloading PCAP Packet Information window is displayed. In most cases, the download process is quick and this window is not displayed.

After the file is retrieved, a pop-up window is displayed, providing a readable version of the PCAP file. You can read the information displayed on the window, or download the information to your desktop system

Step 4 If you want to download the information to your desktop system, choose one of the following options:

- Click **Download PCAP File** to download the original PCAP file to be used in an external application.
- Click **Download PCAP Text** to download the PCAP information in .TXT format.

Step 5 Choose one of the following options:

- If you want to open the file for immediate viewing, select the **Open with** option and select an application from the list box.
- If you want to save the list, select the **Save File** option.

Step 6 Click **OK**.

Downloading the PCAP File to Your Desktop System

You can download the PCAP file to your desktop system for storage or for use in other applications. To download the PCAP file to your desktop system:

Step 1 Click the **Log Activity** tab.

Step 2 Perform or select a search that displays the **PCAP Data** column. See [Displaying the PCAP Data Column](#).

The event search results are displayed.

Step 3 For the event you want to investigate, choose one of the following:

- Click the **PCAP** icon.
- Right-click the **PCAP** icon and select **More Options > Download PCAP File**.
- Double-click the event you want to investigate, and then select **PCAP Data > Download PCAP File** from the event details toolbar.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you double-click an event.

Step 4 Choose one of the following options:

- If you want to open the file for immediate viewing, select the **Open with** option and select an application from the list box.
- If you want to save the list, select the **Save File** option.

Step 5 Click **OK**.

Exporting Events

You can export events in Extensible Markup Language (XML) or Comma Separated Values (CSV) format. The length of time required to export your data depends on the number of parameters specified.

To export events:

Step 1 Click the **Log Activity** tab.

NOTE

If you are viewing events in streaming mode, you must pause streaming before you export event information.

Step 2 From the **Actions** list box, select one of the following options:

- **Export to XML > Visible Columns** - Select this option to export only the columns that are visible on the **Log Activity** tab. This is the recommended option.
- **Export to XML > Full Export (All Columns)** - Select this option to export all event parameters. A full export can take an extended period of time to complete.
- **Export to CSV > Visible Columns** - Select this option to export only the columns that are visible on the **Log Activity** tab. This is the recommended option.
- **Export to CSV > Full Export (All Columns)** - Select this option to export all event parameters. A full export can take an extended period of time to complete.

Step 3 If you want to resume your activities, click **Notify When Done**.

When the export is complete, you receive notification that the export is complete. If you did not select the **Notify When Done** icon, the status window is displayed.

5

INVESTIGATING FLOWS

Using the **Network Activity** tab, you can monitor and investigate network activity (flows) in real-time or perform advanced searches.

This section includes the following topics:

- [Using the Network Activity Tab](#)
- [Viewing Flows](#)
- [Viewing Associated Offenses](#)
- [Using Custom Flow Properties](#)
- [Tuning False Positives](#)
- [Exporting Flows](#)

Network Activity Tab Overview

You must have permission to view the **Network Activity** tab. For more information on permissions and assigning roles, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

The **Network Activity** tab allows you to visually monitor and investigate flow data in real-time, or perform advanced searches to filter the displayed flows. A flow is a communication session between two hosts. You can view flow information to determine how the traffic is communicated, and what was communicated (if the content capture option is enabled). Flow information can also include such details as protocols, Autonomous System Number (ASN) values, or Interface Index (IFIndex) values. You can use the **Network Activity** tab to:

- Search flows. See [Searching Data](#).
- Save and manage search criteria and results
- View flows in real-time (streaming)
- View flow information grouped by various options
- Create, view, and investigate time series charts
- Tune false positive flows from generating offenses
- Export flows in XML or CSV format

Using the Network Activity Tab

If you previously configured a saved search as the default, the results of that search are automatically displayed when you access the **Network Activity** tab. For more information on saving search criteria, see [Saving Search Criteria](#).

This section includes the following topics:

- [Using the Toolbar](#)
- [Using the Right-Click Menu Options](#)
- [Using the Status Bar](#)

Using the Toolbar

The toolbar provides the following options:

Table 5-1 Network Activity Tab Toolbar Options

Option	Description
Search	Click Search to perform advanced searches on flows. Options include: <ul style="list-style-type: none"> • New Search - Select this option to create a new flow search. • Edit Search - Select this option to select and edit a flow search. • Manage Search Results - Select this option to view and manage search results. See Managing Search Results. For more information on the search feature, see Searching Data .
Quick Searches	From this list box, you can run previously saved searches. Options are displayed in the Quick Searches list box only when you have saved search criteria that specifies the Include in my Quick Searches option.
Add Filter	Click Add Filter to add a filter to the current search results.
Save Criteria	Click Save Criteria to save the current search criteria.
Save Results	Click Save Results to save the current search results. This option is only displayed after a search is complete. This option is disabled in streaming mode.
Cancel	Click Cancel to cancel a search in progress. This option is disabled in streaming mode.
False Positive	Click False Positive to open the False Positive Tuning window, which allows you to tune out flows that are known to be false positives from creating offenses. For more information on false positives, see the Glossary . This option is disabled in streaming mode. See Exporting Flows .

Table 5-1 Network Activity Tab Toolbar Options (continued)

Option	Description
Rules	<p>Click Rules to configure custom flow rules. Options include:</p> <ul style="list-style-type: none"> <p>Rules - Select this option to create a rule. When you select the Rules option, the Rules Wizard is displayed, prepopulated with the appropriate options for creating a flow rule.</p> <p>Note: <i>To enable the anomaly detection rule options (Add Threshold Rule, Add Behavioral Rule, and Add Anomaly Rule), you must save aggregated search criteria because the saved search criteria specifies the required parameters.</i></p> <p>Add Threshold Rule - Select this option to create a threshold rule. A threshold rule tests flow traffic for activity that exceeds a configured threshold. Thresholds can be based on any data collected by QRadar Network Anomaly Detection. For example, if you create a threshold rule indicating that no more than 220 clients can log into the server between 8 am and 5 pm, the rules generate an alert when the 221st client attempts to login.</p> <p>When you select the Add Threshold Rule option, the Rules Wizard is displayed, prepopulated with the appropriate options for creating a threshold rule.</p> <p>Add Behavioral Rule - Select this option to create a behavioral rule. A behavior rule tests flow traffic for volume changes in behavior that occurs in regular seasonal patterns. For example, if a mail server typically communicates with 100 hosts per second in the middle of the night and then suddenly starts communicating with 1,000 hosts a second, a behavioral rule generates an alert.</p> <p>When you select the Add Behavioral Rule option, the Rules Wizard is displayed, prepopulated with the appropriate options for creating a behavioral rule.</p> <p>Add Anomaly Rule - Select this option to create an anomaly rule. An anomaly rule tests flow traffic for abnormal activity, such as the existence of new or unknown traffic, which is traffic that suddenly ceases or a percentage change in the amount of time an object is active. For example, you can create an anomaly rule to compare the average volume of traffic for the last 5 minutes with the average volume of traffic over the last hour. If there is more than a 40% change, the rule generates a response.</p> <p>When you select the Add Anomaly Rule option, the Rules Wizard is displayed, prepopulated with the appropriate options for creating an anomaly rule.</p> <p>For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>

Table 5-1 Network Activity Tab Toolbar Options (continued)

Option	Description
Actions	<p>Click Actions to perform the following actions:</p> <ul style="list-style-type: none"> • Show All - Select this option to remove all filters on search criteria and display all unfiltered flows. • Print - Select this option to print the flows displayed on the page. • Export to XML - Select this option to export flows in XML format. See Exporting Flows. • Export to CSV - Select this option to export flows in CSV format. See Exporting Flows. • Delete - Select this option to delete a search result. See Deleting a Search. • Notify - Select this option to specify that you want a notification emailed to you on completion of the selected searches. This option is only enabled for searches in progress. <p>Note: The Print, Export to XML, and Export to CSV options are disabled in streaming mode and when viewing partial search results.</p>
Quick Filter	<p>Type your search criteria in the Quick Filter field and click the Quick Filter icon or press Enter on the keyboard. All flows that match your search criteria are displayed in the flows list. A text search is run on the event payload to determine which match your specified criteria.</p> <p>Note: When you click the Quick Filter field, a tooltip is displayed, providing information on the appropriate syntax to use for search criteria. For more syntax information, see Using Quick Filter Syntax.</p>

Using Quick Filter Syntax

The Quick Filter feature enables you to search flow payloads using a text search string. The Quick Filter functionality is available in the following locations on the user interface:

- **Network Activity toolbar** - On the toolbar, a **Quick Filter** field enables you to type a text search string and click the **Quick Filter** icon to apply your quick filter to the currently displayed list of flows.
- **Add Filter dialog box** - From the **Add Filter** dialog box, accessed by clicking the **Add Filter** icon on the **Network Activity** tab, you can select **Quick Filter** as your filter parameter and type a text search string. This enables you to apply your quick filter to the currently displayed list of flows. For more information on the Add Filter dialog box, see [Performing a Sub-Search](#).
- **Flow search pages** - From the flow search pages, you can add a Quick Filter to your list of filters to be included in your search criteria. For more information on configuring search criteria, see [Searching Events or Flows](#).

When viewing flows in real time (streaming) or last interval mode, you can only type simple words or phrases in the **Quick Filter** field. When viewing flow using a time-range, use the following syntax guidelines for typing your text search criteria:

- Search terms can include any plain text that you expect to find in the payload. For example, `Firewall`
- Include multiple terms in double quotes to indicate that you want to search for the exact phrase. For example, `"Firewall deny"`
- Search terms can include single and multiple character wild cards. The search term cannot start with a wild card. For example, `F?rwall` or `F??ew*`
- Group terms using logical expressions, such as AND, OR, and NOT. The syntax is case sensitive and the operators must be upper case to be recognized as logical expressions and not as search terms. For example: `(%PIX* AND ("Accessed URL" OR "Deny udp src")) AND 10.100.100.*)`

When creating search criteria that includes the NOT logical expression, you must include at least one other logical expression type, otherwise, your filter will not return any results. For example: `(%PIX* AND ("Accessed URL" OR "Deny udp src")) NOT 10.100.100.*)`

- The following characters must be preceded by a backslash to indicate that the character is part of your search term: `+ - & || ! () { } [] ^ " ~ * ? : \`. For example: `"%PIX\ -5\ -304001"`

Using the Right-Click Menu Options

On the **Network Activity** tab, you can right-click a flow to access additional flow filter criteria.

The right-click menu options are:

Table 5-2 Right-Click Menu Options

Option	Description
Filter on	Select this option to filter on the selected flow, depending on the selected parameter in the flow.
False Positive	Select this option to open the False Positive Tuning window, which allows you to tune out flows that are known to be false positives from creating offenses. This option is disabled in streaming mode. See Exporting Flows .
More options:	Select this option to investigate an IP address. See Investigating IP Addresses .

Note: This option is not displayed in streaming mode.

Using the Status Bar

When streaming flows, the status bar displays the average number of results received per second. This is the number of results the Console successfully received from the Event Processors. If this number is greater than 40 results per second, only 40 results are displayed. The remainder is accumulated in the result buffer. To view additional status information, move your mouse pointer over the status bar.

When QRadar Network Anomaly Detection is not streaming flows, the status bar displays the number of search results currently displayed and the amount of time required to process the search results.

Viewing Flows

By default, the **Network Activity** tab displays flows in streaming mode, allowing you to view flows in real-time. For more information on streaming mode, see [Viewing Streaming Flows](#). You can specify a different time range to filter flows using the **View** list box.

NOTE

If you have administrative permissions, you can specify the maximum number of flows you want to send from the QRadar QFlow Collector to the Event Processors. All data collected after the configured flow limit has been reached is grouped into one flow record. This flow record is then displayed on the **Network Activity** tab with a source IP address of 127.0.0.4 and a destination IP address of 127.0.0.5. This flow record specifies Overflow on the **Network Activity** tab.

You can view flows by using one of the following:

- [Viewing Streaming Flows](#)
- [Viewing Normalized Flows](#)
- [Viewing Grouped Flows](#)

Viewing Streaming Flows

Streaming mode enables you to view flow data entering your system. This mode provides you with a real-time view of your current flow activity by displaying the last 50 flows.

If you apply any filters on the **Network Activity** tab or in your search criteria before enabling streaming mode, the filters are maintained in streaming mode. However, streaming mode does not support searches that include grouped flows. If you enable streaming mode on grouped flows or grouped search criteria, the **Network Activity** tab displays the normalized flows. See [Viewing Normalized Flows](#).

To view streaming flows:

Step 1 Click the **Network Activity** tab.

If you previously saved search criteria to be the default, the results for that saved search criteria is displayed.

Step 2 From the **View** list box, select **Real Time (streaming)**.

The streaming flows are displayed. For information on the toolbar options, see [Table 5-1](#). For more information on the parameters displayed in streaming mode, see [Table 5-3](#).

► To select a flow record, click the **Pause** icon to pause streaming.

When streaming is paused, the last 1,000 flows are displayed.

► To restart streaming mode, click the **Play** icon.

Viewing Normalized Flows

To view normalized flows:

Step 1 Click the **Network Activity** tab.

If you previously saved a search to be the default, the results for that saved search is displayed.

Step 2 From the **Display** list box, select **Default (Normalized)**.

Step 3 From the **View** list box, select the time frame you want to display.

NOTE

If you have selected a time frame to display, a time series chart is displayed. For more information on using the time series charts, see [Viewing Associated Offenses](#).

The **Network Activity** tab displays the following parameters:

Table 5-3 Network Activity Tab Parameters

Parameter	Description
Current Filters	The top of the table displays the details of the filters applied to the search results. To clear these filter values, click Clear Filter . <i>Note: This parameter is only displayed after you apply a filter.</i>
View	From the list box, you can select the time range you want to filter for.
Current Statistics	When not in Real Time (streaming) or Last Minute (auto refresh) mode, current statistics are displayed, including: <i>Note: Click the arrow next to Current Statistics to display or hide the statistics.</i> <ul style="list-style-type: none"> • Total Results - Specifies the total number of results that matched your search criteria. • Data Files Searched - Specifies the total number of data files searched during the specified time span. • Compressed Data Files Searched - Specifies the total number of compressed data files searched within the specified time span. • Index File Count - Specifies the total number of index files searched during the specified time span. • Duration - Specifies the duration of the search. <i>Note: Current statistics are useful for troubleshooting. When you contact Customer Support to troubleshoot flows, you may be asked to supply current statistical information.</i>

Table 5-3 Network Activity Tab Parameters (continued)

Parameter	Description
Charts	<p>Displays configurable charts representing the records matched by the time interval and grouping option. Click Hide Charts if you want to remove the charts from your display.</p> <p>The charts are only displayed after you select a time frame of Last Interval (auto refresh) or above, and a grouping option to display. For more information on configuring charts, see Viewing Associated Offenses.</p> <p>Note: <i>If you use Mozilla Firefox as your browser and an ad blocker browser extension is installed, charts do not display. To display charts, you must remove the ad blocker browser extension. For more information, see your browser documentation.</i></p>
Offense icon	Click the Offenses icon to view details of the offense associated with this flow. For more information, see Viewing Associated Offenses .
Flow Type	<p>Specifies the flow type. Flow types are measured by the ratio of incoming activity to outgoing activity. Flow types include:</p> <ul style="list-style-type: none"> • Standard Flow - Bidirectional traffic • Type A - Single-to-Many (unidirectional), for example, a single host performing a network scan. • Type B - Many-to-Single (unidirectional), for example, a Distributed DoS (DDoS) attack. • Type C - Single-to-Single (unidirectional), for example, a host to host port scan.
First Packet Time	Specifies the date and time that QRadar Network Anomaly Detection received the flow.
Storage time	Specifies the time the flow was stored in the QRadar Network Anomaly Detection database.
Source IP	Specifies the source IP address of the flow.
Source Port	Specifies the source port of the flow.
Destination IP	Specifies the destination IP address of the flow.
Destination Port	Specifies the destination port of the flow.
Source Bytes	Specifies the number of bytes sent from the source host.
Destination Bytes	Specifies the number of bytes sent from the destination host.
Total Bytes	Specifies the total number of bytes associated with the flow.
Source Packets	Specifies the total number of packets sent from the source host.
Destination Packets	Specifies the total number of packets sent from the destination host.
Total Packets	Specifies the total number of packets associated with the flow.
Protocol	Specifies the protocol associated with the flow.

Table 5-3 Network Activity Tab Parameters (continued)

Parameter	Description
Application	Specifies the detected application of the flow. For more information on application detection, see the <i>IBM Security QRadar Application Configuration Guide</i> .
ICMP Type/Code	Specifies the Internet Control Message Protocol (ICMP) type and code, if applicable. If the flow has ICMP type and code information in a known format, this field displays as <code>Type <A></code> , <code>Code </code> , where <A> and are the numeric values of the type and code.
Source Flags	Specifies the Transmission Control Protocol (TCP) flags detected in the source packet, if applicable.
Destination Flags	Specifies the TCP flags detected in the destination packet, if applicable.
Source QoS	Specifies the Quality of Service (QoS) service level for the flow. QoS enables a network to provide various levels of service for flows. QoS provides the following basic service levels: <ul style="list-style-type: none"> • Best Effort - This service level does not guarantee delivery. The delivery of the flow is considered best effort. • Differentiated Service - Certain flows are granted priority over other flows. This priority is granted by classification of traffic. • Guaranteed Service - This service level guarantees the reservation of network resources for certain flows.
Destination QoS	Specifies the QoS level of service for the destination flow.
Flow Source	Specifies the system that detected the flow. For more information on flow sources, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Flow Interface	Specifies the interface that received the flow.
Source If Index	Specifies the source Interface Index (IFIndex) number.
Destination If Index	Specifies the destination IFIndex number.
Source ASN	Specifies the source Autonomous System Number (ASN) value.
Destination ASN	Specifies the destination ASN value.

Step 4 Double-click the flow you want to view in greater detail.

NOTE

If you are viewing flows in streaming mode, you must pause streaming before you double-click a flow.

The flow details page provides the following information:

Table 5-4 Flow Details

Parameter	Description
Flow Information	
Protocol	Specifies the protocol associated with this flow. For more information on protocols, see the <i>IBM Security QRadar Application Configuration Guide</i> .
Application	Specifies the detected application of the flow. For more information on application detection, see the <i>IBM Security QRadar Application Configuration Guide</i> .
Magnitude	Specifies the magnitude of this flow. For more information on magnitude, see the Glossary .
Relevance	Specifies the relevance of this flow. For more information on relevance, see the Glossary .
Severity	Specifies the severity of this flow. For more information on severity, see the Glossary .
Credibility	Specifies the credibility of this flow. For more information on credibility, see the Glossary .
First Packet Time	Specifies the start time of the flow, as reported to QRadar Network Anomaly Detection by the flow source. For more information on flow sources, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Last Packet Time	Specifies the end time of the flow, as reported to QRadar Network Anomaly Detection by the flow source. For more information on flow sources, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Storage Time	Specifies the time the flow was stored in the QRadar Network Anomaly Detection database.
Event Name	Specifies the normalized name of the flow.
Low Level Category	Specifies the low-level category of this flow. For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Event Description	Specifies a description of the flow, if available.
Source and Destination Information	
Source IP	Specifies the source IP address of the flow.
Destination IP	Specifies the destination IP address of the flow.
Source Asset Name	Specifies the source asset name of the flow. For more information on assets, see Managing Assets .
Destination Asset Name	Specifies the destination asset name of the flow. For more information on assets, see Managing Assets .
IPv6 Source	Specifies the source IPv6 address of the flow.
IPv6 Destination	Specifies the destination IPv6 address of the flow.

Table 5-4 Flow Details (continued)

Parameter	Description
Source Port	Specifies the source port of the flow.
Destination Port	Specifies the destination port of the flow.
Source QoS	Specifies the QoS level of service for the source flow.
Destination QoS	Specifies the QoS level of service for the destination flow.
Source ASN	Specifies the source ASN number. <i>Note: If this flow has duplicate records from multiple flow sources, the corresponding source ASN numbers are listed.</i>
Destination ASN	Specifies the destination ASN number. <i>Note: If this flow has duplicate records from multiple flow sources, the corresponding destination ASN numbers are listed.</i>
Source If Index	Specifies the source IFIndex number. <i>Note: If this flow has duplicate records from multiple flow sources, the corresponding source IFIndex numbers are listed.</i>
Destination If Index	Specifies the destination IFIndex number. <i>Note: If this flow has duplicate records from multiple flow sources, the corresponding source IFIndex numbers are listed.</i>
Source Payload	Specifies the packet and byte count for the source payload.
Destination Payload	Specifies the packet and byte count for the destination payload.
Payload Information	
Source Payload	Specifies source payload content from the flow. This field offers three formats to view the payload: <ul style="list-style-type: none"> • Universal Transformation Format (UTF) - Click UTF. • Hexidecimal - Click HEX. • Base64 - Click Base64. <i>Note: If your flow source is Netflow v9 or IPFIX, unparsed fields from these sources may be displayed in the Source Payload field. The format of the unparsed field is <name>=<value>. For example, MIN_TTL=x.</i>
Destination Payload	Specifies destination payload content from the flow. This field offers three formats to view the payload: <ul style="list-style-type: none"> • Universal Transformation Format (UTF) - Click UTF. • Hexidecimal - Click HEX. • Base64 - Click Base64.

Additional Information

Table 5-4 Flow Details (continued)

Parameter	Description
Flow Type	Specifies the flow type. Flow types are measured by the ratio of incoming activity to outgoing activity. Flow types include: <ul style="list-style-type: none"> • Standard - Bidirectional traffic • Type A - Single-to-Many (unidirectional) • Type B - Many-to-Single (unidirectional) • Type C - Single-to-Single (unidirectional)
Flow Direction	Specifies the direction of the flow. Flow directions include: <ul style="list-style-type: none"> • L2L - Internal traffic from a local network to another local network. • L2R - Internal traffic from a local network to a remote network. • R2L - Internal traffic from a remote network to a local network. • R2R - Internal traffic from a remote network to another remote network.
Custom Rules	Specifies custom rules that match this flow. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Custom Rules Partially Matched	Specifies custom rules that partially match to this flow. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Flow Source/Interface	Specifies the flow source name of the system that detected the flow. Note: <i>If this flow has duplicate records from multiple flow sources, the corresponding flow sources are listed.</i>
Annotations	Specifies the annotation or notes for this flow. Annotations are text descriptions that rules can automatically add to flows as part of the rule response. For more information on rules, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .

The flow details toolbar provides the following functions:

Table 5-5 Flow Details Toolbar

Function	Description
Return to Results	Click Return to Results to return to the list of flows.
Offense	Click Offense to display the offenses that the flow was correlated to.
Extract Property	Click Extract Property to create a custom flow property from the selected flow. For more information, see Using Custom Flow Properties .
False Positive	Click False Positive to open the False Positive Tuning window, which allows you to tune out flows that are known to be false positives from creating offenses. This option is disabled in streaming mode. See Exporting Flows .

Table 5-5 Flow Details Toolbar (continued)

Function	Description
Previous	Click Previous to view the previous flow in the event list.
Next	Click Next to view the next flow in the event list.
Print	Click Print to print the flow details.

Viewing Grouped Flows Using the **Network Activity** tab, you can view flows grouped by various options. From the **Display** list box, you can select the parameter by which you want to group flows.

NOTE The **Display** list box is not displayed in streaming mode because streaming mode does not support grouped flows. If you entered streaming mode using non-grouped search criteria, this option is displayed.

To view grouped flows:

Step 1 Click the **Network Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 From the **View** list box, select the time frame you want to display.

NOTE Viewing grouped flows is not an option in streaming mode.

Step 3 From the **Display** list box, choose one of the following options:

Table 5-6 Grouped Flows

Group Option	Description
Unioned Flows	Displays several flows in one uninterrupted pattern across several intervals, in a single record. For example, if a flow is five minutes long, the unioned flow displays as a single flow five minutes long. Without the unioned flow, the flow displays as five flows: one flow for each minute. Unioned flows display a summarized list of flows grouped by unioned flow information.
Source or Destination IP	Displays a summarized list of flows grouped by the IP address associated with the flow.
Source IP	Displays a summarized list of flows grouped by the source IP address of the flow.
Destination IP	Displays a summarized list of flows grouped by the destination IP address of the flow.
Source Port	Displays a summarized list of flows grouped by the source port of the flow.
Destination Port	Displays a summarized list of flows grouped by the destination port of the flow.

Table 5-6 Grouped Flows (continued)

Group Option	Description
Source Network	Displays a summarized list of flows grouped by the source network of the flow.
Destination Network	Displays a summarized list of flows grouped by the destination network of the flow.
Application	Displays a summarized list of flows grouped by the application that originated the flow.
Geographic	Displays a summarized list of flows grouped by geographic location.
Protocol	Displays a summarized list of flows grouped by the protocol associated with the flow.
Flow Bias	Displays a summarized list of flows grouped by the flow direction.
ICMP Type	Displays a summarized list of flows grouped by the ICMP type of the flow.

The column layout of the data depends on the chosen group option. Each row in the flows table represents a flow group. The **Network Activity** tab provides the following information when displaying grouped flows:

Table 5-7 Grouped Flow Parameters

Parameter	Description
Grouping By	Specifies the parameter that the search is grouped on.
Current Filters	The top of the table displays the details of the filter applied to the search results. To clear these filter values, click Clear Filter .
View	From the list box, select the time range you want to filter for.
Current Statistics	When not in Real Time (streaming) or Last Minute (auto refresh) mode, current statistics are displayed, including: <ul style="list-style-type: none"> • Total Results - Specifies the total number of results that matched your search criteria. • Data Files Searched - Specifies the total number of data files searched during the specified time span. • Compressed Data Files Searched - Specifies the total number of compressed data files searched within the specified time span. • Index File Count - Specifies the total number of index files searched during the specified time span. • Duration - Specifies the duration of the search. <p>Note: <i>Click the arrow next to Current Statistics to display or hide the statistics.</i></p> <p>Note: <i>Current Statistics are useful for troubleshooting. When you contact Customer Support to troubleshoot flows, you may be asked to supply current statistical information.</i></p>

Table 5-7 Grouped Flow Parameters (continued)

Parameter	Description
Charts	<p>Displays configurable charts representing the records matched by the time interval and grouping option. Click Hide Charts if you want to remove the graph from your display.</p> <p>The charts are only displayed after you select a time frame of Last Interval (auto refresh) or above, and a grouping option to display. For more information on configuring charts, see Viewing Associated Offenses.</p> <p>Note: <i>If you use Mozilla Firefox as your browser and an ad blocker browser extension is installed, charts do not display. To display charts, you must remove the ad blocker browser extension. For more information, see your browser documentation.</i></p>
Source IP (Unique Count)	Specifies the source IP address of the flow.
Destination IP (Unique Count)	Specifies the destination IP address of the flow. If there are multiple destination IP addresses associated with this flow, this field specifies the term Multiple and the number of IP addresses.
Source Port (Unique Count)	Displays the source port of the flow.
Destination Port (Unique Count)	Specifies the destination port of the flow. If there are multiple destination ports associated with this flow, this field specifies the term Multiple and the number of ports.
Source Network (Unique Count)	Specifies the source network of the flow. If there are multiple source networks associated with this flow, this field specifies the term Multiple and the number of networks.
Destination Network (Unique Count)	Specifies the destination network of the flow. If there are multiple destination networks associated with this flow, this field specifies the term Multiple and the number of networks.
Application (Unique Count)	Specifies the detected application of the flows. If there are multiple applications associated with this flow, this field specifies the term Multiple and the number of applications.
Total Bytes (Sum)	Specifies the total number of bytes associated with the flow.
Source Bytes (Sum)	Specifies the number of bytes from the source.
Destination Bytes (Sum)	Specifies the number of bytes from the destination.
Source Packets (Sum)	Specifies the number of packets from the source.
Destination Packets (Sum)	Specifies the number of packets from the destination.
Total Packets	Specifies the total number of packets associated with the flow.
Count	Specifies the number of flows sent or received.

Step 4 Double-click the flow group you want to investigate.

The Flows List page displays the flows belonging to the selected group.

For more information on the Flows List parameters, see [Table 5-3](#).

Step 5 Double-click the flow you want to investigate.

For more information on the flow details page, see [Table 5-4](#). For more information on the flow details toolbar, see [Table 5-5](#).

Viewing Associated Offenses

If a flow matches a rule, an offense can be generated on the **Offenses** tab. From the **Network Activity** tab, you can view the offense associated with the flow by clicking the **Offense** icon for the flow you want to investigate. For more information on rules, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*. For more information on managing offenses, see [Investigating Offenses](#).

To view an associated offense:

Step 1 Click the **Network Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

NOTE

If you are viewing flows in streaming mode, you must pause streaming before you investigate a flow.

Step 2 Click the **Offense** icon beside the flow you want to investigate.

If the Magistrate has not yet saved the offense associated with the selected flow to disk or the offense has been purged from the database, an information message is displayed.

For more information on managing offenses, see [Investigating Offenses](#)

Using Custom Flow Properties

The Custom Flow Properties functionality allows you to search, view, and report on information within flows that QRadar Network Anomaly Detection does not typically normalize and display.

NOTE

To create custom flow properties, you must have Custom Flow Property permissions. Check with your administrator to ensure you have the correct permissions. For more information regarding permissions, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

You can create custom flow properties from two locations on the **Network Activity** tab:

- **Flow details** - Select a flow from the **Network Activity** tab to create a custom flow property derived from the payload.
- **Search page** - You can create and edit a custom flow property from the search page. When you create a new custom flow property from the search page, the flow property is not derived from any particular flow; therefore, the Flow

Properties Definition window does not prepopulate. You can copy and paste payload information from another source.

NOTE

If you have Administrative permissions, you can also create and modify custom flow properties from the **Admin** tab.

This section includes the following topics:

- [Creating a Custom Flow Property](#)
- [Modify a Custom Flow Property](#)
- [Copying a Custom Flow Property](#)
- [Deleting a Custom Flow Property](#)

Creating a Custom Flow Property

Using the Custom Flow Properties feature, you can create two types of custom flow properties:

- **Regex** - Using regular expression (Regex) statements, you can extract unnormalized data from flow payloads.

Use of this feature requires advanced knowledge of regex statements. Regex defines the field that you want to become the custom flow property. After you enter a regex statement, you can validate it against the payload. When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.

A custom flow property can be associated with multiple regular expressions. When a flow is parsed, each regex pattern is tested on the flow until a regex pattern matches the payload. The first regex pattern to match the flow payload determines the data to be extracted.

- **Calculated** - Using calculation-based custom flow properties, you can perform calculations on existing numeric flow properties to produce a calculated property. For example, you can create a property that displays a percentage by dividing one numeric property by another numeric property.

This section includes the following topics:

- [Creating a Regex-Based Custom Flow Property](#)
- [Creating a Calculation-Based Custom Flow Property](#)

Creating a Regex-Based Custom Flow Property

A regex-based customer flow property matches flow payloads to a regular expression.

To create a regex-based custom flow property:

Step 1 Click the **Network Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 Double-click the flow you want to base the custom flow property on.

NOTE

If you are viewing flows in streaming mode, you must pause streaming before you double-click a flow.

Step 3 Click **Extract Property**.

NOTE

If you have Administrative permissions, you can access the Custom Flow Properties window on the **Admin** tab. Click **Admin > Data Sources > Custom Flow Properties**. For more information, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Step 4 In the Property Type pane, select the **Regex Based** option.

Step 5 Configure the custom flow property parameters:

Table 5-8 Custom Flow Properties Window Parameters

Parameter	Description
Test Field	Specifies the payload that was extracted from the unnormalized flow.
Property Definition	
Existing Property	To select an existing property, select this option, and then select a previously saved property name from the list box.
New Property	To create a new property, select this option, and then type a unique name for this custom flow property. The new property name cannot be the name of a normalized flow property.
Optimize parsing for rules, reports, and searches	To parse and store the property the first time QRadar Network Anomaly Detection receives the flow, select the check box. When you select the check box, the property does not require additional parsing for reporting, searching, or rule testing. If you clear this check box, the property is parsed each time a report, search, or rule test is performed. By default, this option is disabled.

Table 5-8 Custom Flow Properties Window Parameters (continued)

Parameter	Description
Field Type	<p>From the list box, select the field type. The field type determines how the custom flow property is displayed in QRadar Network Anomaly Detection and which options are available for aggregation. The field type options are:</p> <ul style="list-style-type: none"> • Alpha-Numeric • Numeric • IP • Port <p>The default is Alpha-Numeric.</p>
Description	Type a description of this custom flow property.
Property Expression Definition	
Event Name	<p>To specify an event name to which this custom flow property applies, select this option.</p> <p>Click Browse to access the Event Browser and select the QRadar Identifier (QID) for the event name you want applied to this custom flow property.</p> <p>By default, this option is enabled.</p>
Category	<p>To specify a low-level category to which this custom flow property applies, select this option.</p> <p>To select a low-level category:</p> <ol style="list-style-type: none"> 1 From the High Level Category list box, select the high-level category. The Low Level Category list updates to include only the low-level categories associated with the selected high-level category. 2 From the Low Level Category list box, select the low-level category to which this custom flow property applies.

Table 5-8 Custom Flow Properties Window Parameters (continued)

Parameter	Description
RegEx	<p>Type the regular expression you want to use for extracting the data from the payload. Regular expressions are case-sensitive.</p> <p>Sample regular expressions:</p> <ul style="list-style-type: none"> • email: <code>(.+@[^\.] *\. [a-z]{2,})\$</code> • URL: <code>(http\:\/\/[a-zA-Z0-9\-\.] +\. [a-zA-Z]{2,3} (\S*) ?\$)</code> • Domain Name: <code>(http[s]?:\/\/(.+?) ["/?:])</code> • Floating Point Number: <code>([-+] ?\d*\.\.? \d*\$)</code> • Integer: <code>([-+] ?\d*\$)</code> • IP Address: <code>(\b\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}\b)</code> <p>For example: To match a flow that resembles the following: SEVERITY=43 Construct the Regular Expression as follows: SEVERITY=([-+] ?\d*\$)</p> <p>Note: Capture groups must be enclosed in parenthesis.</p>
Capture Group	<p>Type the capture group you want to use if the regex contains more than one capture group.</p> <p>Capture groups treat multiple characters as a single unit. In a capture group, characters are grouped inside a set of parentheses.</p>
Test	Click Test to test the regular expression against the payload.
Enabled	<p>Select this check box to enable this custom flow property. If you clear the check box, this custom flow property does not display in flow search filters or column lists and the flow property is not parsed from payloads.</p> <p>The default is Enabled.</p>

Step 6 Click **Test** to test the regular expression against the payload.

Step 7 Click **Save**.

The custom flow property is now displayed as an option in the list of available columns on the search page.

NOTE

Custom flow properties are not automatically included in flow listings. To include a custom flow property in an flows list, you must select the custom flow property from the list of available columns when creating a search.

Creating a Calculation-Based Custom Flow Property

To create a calculation-based custom flow property:

Step 1 Click the **Network Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 Double-click the flow you want to base the custom flow property on.

NOTE

If you are viewing flows in streaming mode, you must pause streaming before you double-click a flow.

Step 3 Click **Extract Property**.

NOTE

If you have Administrative permissions, you can access the Custom Flow Properties window on the **Admin** tab. Click **Admin > Data Sources > Custom Flow Properties**. For more information, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Step 4 In the Property Type pane, select the **Calculation Based** option.

Step 5 Configure the custom flow property parameters:

Table 5-9 Custom Flow Properties Window Parameters

Parameter	Description
Property Definition	
Property Name	Type a unique name for this custom flow property. The new property name cannot be the name of a normalized flow property.
Description	Type a description of this custom flow property.
Property Calculation Definition	
Property 1	From the list box, select the first property you want to use in your calculation. Options include all numeric normalized and numeric custom flow properties. You can also specify a specific numeric value. From the Property 1 list box, select the User Defined option. The Numeric Property parameter is displayed. Type a specific numeric value.
Operator	From the list box, select the operator you want to apply to the selected properties in the calculation. Options include: <ul style="list-style-type: none"> • Add • Subtract • Multiply • Divide

Table 5-9 Custom Flow Properties Window Parameters (continued)

Parameter	Description
Property 2	<p>From the list box, select the second property you want to use in your calculation. Options include all numeric normalized and numeric custom flow properties.</p> <p>You can also specify a specific numeric value. From the Property 1 list box, select the User Defined option. The Numeric Property parameter is displayed. Type a specific numeric value.</p>
Enabled	<p>Select this check box to enable this custom flow property. If you clear the check box, this custom flow property does not display in flow search filters or column lists and the flow property is not parsed from payloads.</p> <p>The default is Enabled.</p>

Step 6 Click **Save**.

The custom flow property is now displayed as an option in the list of available columns on the search page.

NOTE

Custom flow properties are not automatically included in flow listings. To include a custom flow property in a flows list, you must select the custom flow property from the list of available columns when creating a search.

Modify a Custom Flow Property

To modify a custom flow property:

Step 1 Click the **Network Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 From the **Search** list box, select **Edit Search**.**Step 3** Click **Manage Custom Properties**.

The Custom Flow Properties window provides the following information:

Table 5-10 Custom Flow Property Columns

Column	Description
Property Name	Specifies a unique name for this custom flow property.
Property Description	Specifies a description for this custom flow property.
Test Field	Specifies whether the test field is the source or destination payload.
Regular Expression	Specifies the regular expression you want to use for extracting the data from the payload.
Username	Specifies the name of the user who created this custom flow property.

Table 5-10 Custom Flow Property Columns (continued)

Column	Description
Enabled	Specifies whether this custom flow property is enabled. This field specifies either True or False.
Creation Date	Specifies the date this custom flow property was created.
Modification Date	Specifies the last time this custom flow property was modified.

The Custom Flow Property toolbar provides the following functions:

Table 5-11 Custom Flow Property Toolbar Options

Option	Description
Add	Click Add to add a new custom flow property. See Creating a Custom Flow Property .
Edit	Click Edit to edit the selected custom flow property. See Step 4 .
Copy	Click Copy to copy selected custom flow properties.
Delete	Click Delete to delete selected custom flow properties.
Enable /Disable	Click Enable/Disable to enable or disable the selected custom flow properties for parsing and viewing in the flow search filters or column lists.

Step 4 Select the custom flow property you want to edit and click **Edit**.

NOTE

You can also double-click the custom flow property you want to edit.

Step 5 Edit the necessary parameters. See [Table 5-8](#).

Step 6 If you edited the regular expression, click **Test** to test the regular expression against the payload.

Step 7 Click **Save**.

The edited custom flow property is now updated in the list of available columns on the search page.

NOTE

Custom flow properties are not automatically included in flow listings. To include a custom flow property in a flows list, you must select the custom flow property from the list of available columns when creating a search.

Copying a Custom Flow Property

To copy a custom flow property:

Step 1 Click the **Network Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

Step 2 From the **Search** list box, select **Edit Search**.

Step 3 Click **Manage Custom Properties**.

- Step 4** Select the custom flow property you want to copy and click **Copy**.
- Step 5** Select the **New Property** option and type a new property name.
- Step 6** Edit the necessary parameters. See [Table 5-8](#).
- Step 7** If you edited the regular expression, click **Test** to test the regular expression against the payload.
- Step 8** Click **Save**.

The copied custom flow property is now available in the list of available columns on the search page.

NOTE

Custom flow properties are not automatically included in flow listings. To include a custom flow property in a flows list, you must select the custom flow property from the list of available columns when creating a search.

Deleting a Custom Flow Property

You can delete any custom property, provided the custom property is not associated with another custom property. If you attempt to delete a custom property associated with another custom property, an error message is displayed, providing the name of the associated custom property.

To delete a custom flow property:

- Step 1** Click the **Network Activity** tab.
- If you previously saved a search as the default, the results for that saved search is displayed.
- Step 2** From the **Search** list box, select **Edit Search**.
- Step 3** Click **Manage Custom Properties**.
- Step 4** Select the custom flow property you want to delete and click **Delete**.
- Step 5** Click **Yes**.

The deleted custom flow property is no longer displayed the flow details.

Tuning False Positives

You can use the False Positive Tuning function to tune out false positive flows from created offenses. You must have appropriate permissions for creating customized rules to tune false positives. For more information on roles, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*. For more information on false positives, see the [Glossary](#).

To tune a false positive flow:

- Step 1** Click the **Network Activity** tab.
- Step 2** Select the flow you want to tune.
- Step 3** Click **False Positive**.

NOTE

If you are viewing flows in streaming mode, you must pause streaming before you click **False Positive**.

The False Positive window is displayed with information derived from the selected flow.

Step 4 Select one of the following options:

- Event/Flow(s) with a specific QID of <Event>
- Any Event/Flow(s) with a low-level category of <Event>
- Any Event/Flow(s) with a high-level category of <Event>

Step 5 Select one of the Traffic Direction options:

- <Source IP Address> to <Destination IP Address>
- <Source IP Address> to Any Destination
- Any Source to <Destination IP Address>
- Any Source to any Destination

Step 6 Click **Tune**.

NOTE

You can tune false positive flows from the summary or details page.

Exporting Flows

You can export flows in Extensible Markup Language (XML) or Comma Separated Values (CSV). The resulting XML or CSV file includes the parameters specified in the Column Definition pane of your search parameters. The length of time required to export your data depends on the number of parameters specified.

To export flows:

Step 1 Click the **Network Activity** tab.

NOTE

If you are viewing flows in streaming mode, you must pause streaming before you export flow information.

Step 2 Choose one of the following options:

- If you want to export the flows in XML format, select **Export to XML** from the **Actions** list box.
- If you want to export the flows in CSV format, select **Export to CSV** from the **Actions** list box.

When the export is complete, you receive notification that the export is complete. If you did not select the **Notify When Done** icon, the status window is displayed.

6

USING THE CHART FEATURE

Using the chart feature on the **Log Activity** and **Network Activity** tabs, you can view your data using various chart configuration options.

This section includes the following topics:

- [Chart Feature Overview](#)
- [Chart Legends](#)
- [Configuring Charts](#)
- [Managing Time Series Charts](#)

Chart Feature Overview

If you select a time frame or a grouping option to view your data, charts are displayed on the **Log Activity** and **Network Activity** tabs. Available chart types include: bar, pie, table, and time series. Charts are configurable, allowing you to select what data you want to plot in the chart. You can configure charts independently of each other to display your search results from different perspectives.

NOTE

You must have the appropriate role permissions to manage and view time series charts. For more information on role permissions, see the *IBM Security IBM Security QRadar Network Anomaly Detection Administration Guide*.

After you configure a chart, your chart configurations are retained when you:

- Change your view using the **Display** list box.
- Apply a filter.
- Save your search criteria.

Your chart configurations are not retained when you:

- Start a new search.
- Access a quick search.
- View grouped results in a branch window.
- Save your search results.

NOTE

If you use Mozilla Firefox as your browser and an ad blocker browser extension is installed, charts do not display. To display charts, you must remove the ad blocker browser extension. For more information, see your browser documentation.

Chart Legends

Each chart provides a legend, which is a visual reference to help you associate the chart objects to the parameters they represent. Using the legend feature, you can perform the following actions:

- Move your mouse pointer over a legend item or the legend color block to view more information about the parameters it represents.
- Right-click the legend item to further investigate the item. For more information on right-click menu options, see [About IBM Security QRadar Network Anomaly Detection](#).
- Click a pie or bar chart legend item to hide the item in the chart. Click the legend item again to show the hidden item. You can also click the corresponding graph item to hide and show the item.
- Click **Legend**, or the arrow beside it, if you want to remove the legend from your chart display.

Configuring Charts

To configure a chart:

- Step 1** Click the **Log Activity** or **Network Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

- Step 2** Perform a grouped search. See [Searching Events or Flows](#).

The charts and the list of events or flows are displayed.

- Step 3** Click **Save Criteria** on the toolbar.

- Step 4** In the Charts pane, click the **Configure** icon.

Configuration options are displayed.

- Step 5** Configure the parameters:

Table 6-1 Chart Menu Parameters

Parameters	Description
Value to Graph	<p>From the list box, select the object type that you want to graph on the Y axis of the chart. Options include all normalized and custom event or flow parameters included in your search parameters.</p> <p>Note: QRadar Network Anomaly Detection can accumulate data so that when you perform a time series search, a cache of data is available to display data for the previous time period. After you enable time series data capture for a selected parameter, an asterisk (*) is displayed next to the parameter in the Value to Graph list box.</p>
Display Top	<p>From the list box, select the number of objects you want you view in the chart. Options include 5, 10, and 20. The default is 10.</p> <p>Note: Charting any more than 10 items may cause your chart data to be unreadable.</p>
Chart Type	<p>From the list box, select the chart type you want to view. Options include:</p> <ul style="list-style-type: none"> • Bar Chart - Displays data in a bar chart. This option is only available for grouped events. • Pie Chart - Displays data in a pie chart. This option is only available for grouped events. • Table - Displays data in a table. This option is only available for grouped events. <p>Note: If your bar, pie, or table chart is based on saved search criteria with a time range of more than 1 hour, you must click Update Details to update the chart and populate the event details.</p> <ul style="list-style-type: none"> • Time Series - Displays an interactive line chart representing the records matched by a specified time interval. For information on configuring time series search criteria, see Managing Time Series Charts. <p>Note: You must have the appropriate role permissions to manage and view time series charts. For more information on role permissions, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Capture Time Series Data	<p>Select this check box if you want to enable time series data capture. When you select this check box, the chart feature begins accumulating data for time series charts. By default, this option is disabled.</p> <p>Note: This option is only available on time series charts.</p>
Time Range	<p>From the list box, select the time range you want to view.</p> <p>Note: This option is only available on time series charts.</p>

NOTE

To start data accumulation for your time series chart, you must save your search criteria. This action starts data accumulation and your time series chart is displayed. Configuring a bar chart, pie chart, or table does not require you to save your configuration options. The chart automatically refreshes.

Step 6 To view the list of events or flows if your time range is greater than 1 hour, click **Update Details**.

Time series charts have additional configuration and navigation options. For more information on using time series charts, see [Managing Time Series Charts](#).

Managing Time Series Charts

Time series charts are graphical representations of your log or network activity over time. Peaks and valleys displayed in the charts depict high and low volume activity. Time series charts are useful for short-term and long-term trending of data. Using time series charts, you can access, navigate, and investigate log or network activity from various views and perspectives.

NOTE

You must have the appropriate role permissions to manage and view time series charts. For more information on role permissions, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

To display time series charts, you must create and save a search that includes time series and grouping options. QRadar Network Anomaly Detection includes default time series saved searches, which you can access from the list of available searches on the event or flow search page. You can easily identify saved time series searches on the **Quick Searches** menu, because the search name is appended with the time range specified in the search criteria.

If your search parameters match a previously saved search for column definition and grouping options, a time series chart may automatically display for your search results. If a time series chart does not automatically display for your unsaved search criteria, no previously saved search criteria exists to match your search parameters. If this occurs, you must enable time series data capture and save your search criteria.

This section includes the following topics:

- [Creating Time Series Searches](#)
- [Managing Time Series Charts](#)
- [Navigating Time Series Charts](#)

Creating Time Series Searches

We recommend that you plan your time series search according to what data you want to investigate and how you want to display the data on the time series chart. For example, consider how you want to group the search, what columns you want to display, and what filters you want to apply.

NOTE QRadar Network Anomaly Detection supports up to 100 saved time series searches.

To create a time series search:

Step 1 Click the **Log Activity** or **Network Activity** tab.

If you previously saved a search as the default, the results for that saved search is displayed.

NOTE Charts are not displayed while in streaming mode.

Step 2 Configure your time series search parameters. Choose one of the following:

- Click **Search > New Search** to create a search, ensuring that the search is grouped and specifies a time range. See [Searching Events or Flows](#).
- From the **Display** and **View** list boxes, select a time frame and a parameter on which to group your results.

Your search results are displayed, providing two charts: a bar and pie chart.

Step 3 Save your search criteria. Choose one of the following:

- On the Log Activity or Network Activity toolbar, click **Save Criteria**. See [Saving Search Criteria](#).
- In the Chart Configuration pane, click the **Save** icon.

NOTE Saving your search criteria enables QRadar Network Anomaly Detection to start accumulating the data required for your time series chart.

Step 4 Configure one or both of the charts to be a time series chart:

- a Click the **Configure** icon.
- b From the **Chart Type** list box, select **Time Series**.
- c From the **Value to Graph** list box, select the parameter you want to graph.
- d Select the **Capture Time Series Data** check box.
- e Click **Save**.

Step 5 To view the list of events or flows if your time range is greater than 1 hour, click **Update Details**.

The list of events or flows updates to display log or network activity according to your time series chart configuration.

Navigating Time Series Charts

Using the time series charts, you can magnify and scan a time line to investigate log or network activity. The following table provides functions you can use to view time series charts including:

Table 6-2 Time Series Charts Functions

If you want to...	Then...
View data in greater detail	<p>Using the zoom feature, you can investigate smaller time segments of event traffic.</p> <ul style="list-style-type: none"> • Move your mouse pointer over the chart, and then use your mouse wheel to magnify the chart (roll the mouse wheel up). • Highlight the area of the chart you want to magnify. When you release your mouse button, the chart displays a smaller time segment. Now you can click and drag the chart to scan the chart. <p>When you magnify a time series chart, the chart refreshes to display a smaller time segment.</p>
View a larger time span of data	<p>Using the zoom feature, you can investigate larger time segments or return to the maximum time range. You can expand a time range using one of the following options:</p> <ul style="list-style-type: none"> • Click Zoom Reset at the top left corner of the chart. • Move your mouse pointer over the chart, and then use your mouse wheel to expand the view (roll the mouse wheel down).
Scan the chart	<p>When you have magnified a time series chart, you can scan the chart.</p> <ul style="list-style-type: none"> ▶ Click and drag the chart left or right to scan the time line.

7

SEARCHING DATA

The Search feature allows you to search data using specific criteria and display data that match the search criteria in a results list. You can create a new search or load a previously saved set of search criteria. You can select, organize, and group the columns of data to be displayed in search results.

This section includes the following topics:

- [Searching Events or Flows](#)
- [Searching Offenses](#)
- [Saving Search Criteria](#)
- [Deleting Search Criteria](#)
- [Performing a Sub-Search](#)
- [Managing Search Results](#)
- [Managing Search Groups](#)

NOTE

When you create or customize a report template that includes an events chart, you can base the chart data on saved search criteria. This allows you to easily customize the chart. For more information, see [Managing Reports](#).

Searching Events or Flows

To search events:

- Step 1** Choose one of the following options:
- To search events, click the **Log Activity** tab.
 - To search flows, click the **Network Activity** tab.
- Step 2** From the **Search** list box, select **New Search**.
- Step 3** Choose one of the following options:
- To load a previously saved search, go to [Step 4](#).
 - To create a new search, go to [Step 5](#).
- Step 4** Select a previously saved search:
- a Choose one of the following options:

- From the **Available Saved Searches** list, select the saved search you want to load.
 - In the **Type Saved Search or Select from List** field, type the name of the search you want to load.
- b Click **Load**.
- After you load the saved search, the Edit Search pane is displayed.
- c In the Edit Search pane, select the options you want for this search:

Table 7-1 Edit Search Options

Parameter	Description
Include in my Quick Searches	Select this check box if you want to include this search in your Quick Search menu, which is located on the Log Activity and Network Activity toolbars. For more information on the Quick Search menu, see Table 7-2 .
Include in my Dashboard	Select this check box if you want to include the data from your saved search in your Dashboard. For more information on the Dashboard, see Using the Dashboard Tab . <i>Note: This parameter is only displayed if the search is grouped.</i>
Set as Default	Select this check box if you want to set this search as your default search when you access the Log Activity or Network Activity tab.
Share with Everyone	Select this check box if you want to share these search requirements with all other users.

- Step 5** In the Time Range pane, select an option for the time range you want to capture for this search.
- a Enter values for the following parameters:

Table 7-2 Time Range Options

Parameter	Description
Real Time (streaming)	Select this option if you want to filter on events or flows while in streaming mode. Real Time (streaming) is enabled by default. For more information on streaming mode, see Viewing Streaming Events or Viewing Streaming Flows . <i>Note: When Real Time (streaming) is enabled, you are unable to group your search results. If you select any grouping option in the Column Definition pane, an error message is displayed.</i>
Last Interval (auto refresh)	Select this option if you want to filter on events while in auto-refresh mode. The Log Activity and Network Activity tabs refresh at one minute intervals to display the most recent information.
Recent	Select this option and, from the list box, select the time range you want to filter for.
Specific Interval	Select this option and, using the calendar, select the date and time range you want to filter for.

- b Optional. Click **Filter** if you are finished configuring the search and want to view the results.

Step 6 In the Search Parameters pane, define your search criteria:

- a From the first list box, select a parameter you want to search for. For example, Device, Source Port, or Event Name.

NOTE

The **Quick Filter** parameter allows you to search for events or flows that match your text string in the event or flow payload. For more information on how to use the **Quick Filter** parameter, see [Using Quick Filter Syntax](#).

- b From the second list box, select the modifier you want to use for the search. The modifiers that are available depend on the parameter selected in the first list.
 - c In the text field, type specific information related to your search parameter.
 - d Click **Add Filter**.
 - e Repeat steps **a** through **d** for each filter you want to add to the search criteria. The filter is displayed in the **Current Filters** text box.
- Step 7** If you want to automatically save the search results when the search is complete, select the **Save results when search is complete** check box, and then type a name for the saved search.
- Step 8** Using the Column Definition pane, define the columns and column layout you want to use to view the results:
- a From the **Display** list box, select the preconfigured view you want to associate with this search.
 - b Click the arrow next to **Advanced View Definition** to display advanced search parameters.
 - c Customize the columns to display in the search results:

Table 7-3 Advanced View Definition Options

Parameter	Description
Type Column or Select from List	Filters the columns in the Available Columns list. You can type the name of the column you want to locate or type a keyword to display a list of column names that include that keyword. For example, type Device to display a list of columns that include Device in the column name.
Available Columns	Lists available columns. Columns that are currently in use for this saved search are highlighted and displayed in the Columns list.
Add and remove column icons (top set)	The top set of icons allow you to customize the Group By list. <ul style="list-style-type: none"> • Add Column - Select one or more columns from the Available Columns list and click the Add Column icon. • Remove Column - Select one or more columns from the Group By list and click the Remove Column icon.

Table 7-3 Advanced View Definition Options (continued)

Parameter	Description
Add and remove column icons (bottom set)	<p>The bottom set of icon allows you to customize the Columns list.</p> <ul style="list-style-type: none"> • Add Column - Select one or more columns from the Available Columns list and click the Add Column icon. • Remove Column - Select one or more columns from the Columns list and click the Remove Column icon.
Group By	<p>Specifies the columns from which the saved search groups the results. You can further customize the Group By list using the following options:</p> <ul style="list-style-type: none"> • Move Up - Select a column and move it up through the priority list using the Move Up icon. • Move Down - Select a column and move it down through the priority list using the Move Down icon. <p>The priority list specifies in which order the results are grouped. The search results will group by the first column in the Group By list and then group by the next column on the list.</p>
Columns	<p>Specifies columns chosen for the search. The columns are loaded from a saved search. You can customize the Columns list by selecting columns from the Available Columns list. You can further customize the Columns list by using the following options:</p> <ul style="list-style-type: none"> • Move Up - Select a column and move it up through the priority list using the Move Up icon. • Move Down - Select a column and move it down through the priority list using the Move Down icon. <p>If the column type is numeric or time-based and there is an entry in the Group By list, the column includes a list box to allow you to choose how you want to group the column.</p> <p>If the column type is group, the column includes a list box to allow you to choose how many levels you want to include for the group.</p>
Order By	<p>From the first list box, select the column by which you want to sort the search results. Then, from the second list box, select the order you want to display for the search results: Descending or Ascending.</p>

Step 9 Click **Filter**.

The search results are displayed.

When you generate a search that displays on the **Log Activity** or **Network Activity** tab before the search has collected all results, the partial results page is displayed. If the search is not complete, the **In Progress (<percent>% Complete)** status is displayed in the top right corner.

While viewing partial search results, the search engine works in the background to complete the search and refreshes the partial results to update your view.

When the search is complete, the **Completed** status is displayed in the top right corner. For more information on viewing your search results, see [Using the Log Activity Tab](#) or [Viewing Flows](#).

Searching Offenses Using the Search feature, you can search offenses using specific criteria and display offenses that match the search criteria in a results list. You can create a new search or load a previously saved set of search criteria.

This section includes the following topics:

- [Searching My Offenses and All Offenses](#)
- [Searching Source IPs](#)
- [Searching Destination IPs](#)
- [Searching Networks](#)
- [Saving Search Criteria](#)

Searching My Offenses and All Offenses

To search offenses:

- Step 1** Click the **Offenses** tab.
- Step 2** From the **Search** list box, select **New Search**.
- Step 3** Choose one of the following options:
 - To load a previously saved search, go to [Step 4](#).
 - To create a new search, go to [Step 7](#).
- Step 4** Select a previously saved search using one of the following options:
 - From the **Available Saved Searches** list, select the saved search you want to load.
 - In the **Type Saved Search or Select from List** field, type the name of the search you want to load.
- Step 5** Click **Load**.

After you load the saved search, the Edit Search pane is displayed.
- Step 6** Select the **Set as Default** check box if you want to set this search as your default search.

If you set this search as your default search, the search will automatically perform and display results each time you access the **Offenses** tab.
- Step 7** On the Time Range pane, select an option for the time range you want to capture for this search.

Table 7-4 Time Range Options

Parameter	Description
All Offenses	Select this option if you want to search all offenses regardless of time range.
Recent	Select the option and, from the list box, select the time range you want to search.
Specific Interval	If you want to specify a specific interval to search, select the Specific Interval option, and then select one of the following options: <ul style="list-style-type: none"> • Start Date between - Select this check box if you want to search offenses that started during a certain time period. After you select this check box, use the list boxes to select the dates you want to search. • Last Event/Flow between - Select this check box if you want to search offenses that the last detected event occurred within a certain time period. After you select this check box, use the list boxes to select the dates you want to search.
Search	Click Search if you are finished configuring the search and want to view the results.

Step 8 On the Search Parameters pane, define your specific search criteria:

Table 7-5 Search Parameters

Item	Description
Offense Id	Type the Offense ID you want to search for.
Description	Type the description you want to search for.
Assigned to user	From the list box, select the user name you want to search for.
Direction	From the list box, select the offense direction you want to search for. Options include: <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote • Local to Remote or Local • Remote to Remote or Local
Source IP	Type the source IP address or CIDR range you want to search for.
Destination IP	Type the destination IP address or CIDR range you want to search for.
Magnitude	From the list box, select if you want to search magnitude equal to, less than, or greater than the configured value. The range is 0 to 10.
Severity	From the list box, select if you want to search severity equal to, less than, or greater than the configured value. The range is 0 to 10.

Table 7-5 Search Parameters (continued)

Item	Description
Credibility	From the list box, select if you want to search credibility equal to, less than, or greater than the configured value. The range is 0 to 10.
Relevance	From the list box, select if you want to search relevance equal to, less than, or greater than the configured value. The range is 0 to 10.
Contains Username	Type a regex statement to search for offenses containing the specified user name. When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.
Source Network	From the list box, select the source network you want to search for.
Destination Network	From the list box, select the destination network you want to search for.
High Level Category	From the list box, select the high-level category you want to search for. For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Low Level Category	From the list box, select the low-level category you want to search for. For more information on categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Exclude	Select the check boxes for the offenses you want to exclude from the search results. The options include: <ul style="list-style-type: none"> • Active Offenses • Hidden Offenses (selected by default) • Closed Offenses (selected by default) • Inactive offenses • Protected Offense
Close by User	This parameter is only displayed when the Closed Offenses check box is cleared in the Exclude pane. The default is Any . From the list box, select the user name you want to search closed offenses for or select Any to displayed all closed offenses. The user name is the user name of the user that closed the offense. The default is Any .
Reason For Closing	This parameter is only displayed when the Closed Offenses check box is cleared in the Exclude pane. From the list box, select a reason you want to search closed offenses for or select Any to displayed all closed offenses. The reason is the reason the user specified when closing the offense.
Events	From the list box, select if you want to search the event count equal to, less than, or greater than the configured value.
Flows	From the list box, select if you want to search the flow count equal to, less than, or greater than the configured value.
Total Events/Flows	From the list box, select if you want to search the total event and flow count equal to, less than, or greater than the configured value.

Table 7-5 Search Parameters (continued)

Item	Description
Destinations	From the list box, select if you want to search the destination IP address count equal to, less than, or greater than the configured value.
Contains Log Source	
Log Source Group	From the list box, select a log source group that contains the log source you want to search for. The Log Source list box displays all log sources assigned to the selected log source group.
Log Source	From the list box, select the log source you want to search for.
Contributing Rule	
Rule Group	From the list box, select a rule group that contains the contributing rule you want to search for. The Rule list box displays all rules assigned to the selected rule group.
Rule	From the list box, select the contributing rule you want to search for.

Step 9 On the Offense Source pane, specify the offense type and offense source you want to search:

- a From the list box, select the offense type you want to search for.
When you select an offense type, corresponding search parameters are displayed.
- b Type your search parameters:

Table 7-6 Offense Type Source Parameters

Offense Types	Description
Any	Select this option to search all offense sources. This is the default.
Source IP	Select this option and type the source IP address you want to search for.
Destination IP	Select this option and type the destination IP address you want to search for.

Table 7-6 Offense Type Source Parameters (continued)

Offense Types	Description
Event Name	<p>Click the Browse icon to open the Event Browser and locate the event name (QID) you want to search for.</p> <p>Search for a particular QID using one of the following options:</p> <ul style="list-style-type: none"> • To search for a QID by category, select the Browse by Category check box and select the high- or low-level category from the list boxes. • To search for a QID by log source type, select the Browse by Log Source Type check box and select a log source type from the Log Source Type list box. • To search for a QID by name, select the QID Search check box and type a name in the QID/Name field. <p>A list of QIDs are displayed.</p> <p>Select the QID you want to search for.</p>
Username	Select this option and type the user name you want to search for.
Source MAC Address	Select this option and type the source MAC address you want to search for.
Destination MAC Address	Select this option and type the destination MAC address you want to search for.
Log Source	<p>From the Log Source Group list box, select the log source group that contains the log source you want to search for. The Log Source list box displays all log sources assigned to the selected log source group.</p> <p>From the Log Source list box, select the log source you want to search for.</p>
Host Name	Select this option and type the host name you want to search for.
Source Port	Select this option and type the source port you want to search for.
Destination Port	Select this option and type the destination port you want to search for.
Source IPv6	Select this option and type the source IPv6 address you want to search for.
Destination IPv6	Select this option and type the destination IPv6 address you want to search for.
Source ASN	From the Source ASN list box, select the source ASN you want to search for.
Destination ASN	From the Destination ASN list box, select the destination ASN you want to search for.
Rule	<p>From the Rule Group list box, select the rule group that contains the rule you want to search for. The Rule Group list box displays all rules assigned to the selected rule group.</p> <p>From the Rule list box, select the rule you want to search for.</p>

Table 7-6 Offense Type Source Parameters (continued)

Offense Types	Description
App ID	From the App ID list box, select the application ID you want to search for.

- Step 10** Using the Column Definition pane, define the order in which you want to sort the results:
- From the first list box, select the column by which you want to sort the search results.
 - From the second list box, select the order you want to display for the search results: Descending or Ascending.
- Step 11** Click **Search**.
The search results are displayed.

Searching Source IPs To search source IP addresses:

- Click the **Offenses** tab.
- Click **By Source IP**.
- From the **Search** list box, select **New Search**.
- On the Time Range pane, select an option for the time range you want to capture for this search.

Table 7-7 Time Range Options

Parameter	Description
All Offenses	Select this option if you want to search all source IP addresses regardless of time range.
Recent	Select the option and, from the list box, select the time range you want to search for.
Specific Interval	If you want to specify a particular interval to search for, select the Specific Interval option and then select one of the following options: <ul style="list-style-type: none"> Start Date between - Select this check box if you want to search source IP addresses associated with offenses that started during a certain time period. After you select this check box, use the list boxes to select the dates you want to search for. Last Event/Flow between - Select this check box if you want to search source IP addresses associated with offenses that the last detected event occurred within a certain time period. After you select this check box, use the list boxes to select the dates you want to search for.
Search	Click Search if you are finished configuring the search and want to view the results.

- Step 5** On the Search Parameters pane, define your specific search criteria:

Table 7-8 Source IP Search Parameters

Item	Description
Source IP	Type the source IP address or CIDR range you want to search for.
Magnitude	From the list box, select if you want to search magnitude equal to, less than, or greater than the configured value. The range is 0 to 10.
VA Risk	From the list box, select if you want to search VA Risk equal to, less than, or greater than the configured value. The range is 0 to 10.
Events/Flows	From the list box, select if you want to search the event or flow count equal to, less than, or greater than the configured value.
Exclude	Select the check boxes for the offenses you want to exclude from the search results. The options include: <ul style="list-style-type: none"> • Active Offenses • Hidden Offenses (selected by default) • Closed Offenses (selected by default) • Inactive offenses • Protected Offense

Step 6 Using the Column Definition pane, define the order in which you want to sort the results:

- a From the first list box, select the column by which you want to sort the search results.
- b From the second list box, select the order you want to display for the search results: Descending or Ascending.

Step 7 Click **Search**.

The search results are displayed. The search results consider all source IP addresses associated with active offenses.

Searching Destination IPs To search destination IP addresses:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **By Destination IP**.
- Step 3** From the **Search** list box, select **New Search**.
- Step 4** On the Time Range pane, select an option for the time range you want to capture for this search.

Table 7-9 Time Range Options

Parameter	Description
All Offenses	Select this option if you want to search all destination IP addresses regardless of time range.
Recent	Select the option and, from the list box, select the time range you want to search for.

Table 7-9 Time Range Options (continued)

Parameter	Description
Specific Interval	<p>If you want to specify a particular interval to search for, select the Specific Interval option and then select one of the following options:</p> <ul style="list-style-type: none"> • Start Date between - Select this check box if you want to search destination IP addresses associated with offenses that started during a certain time period. After you select this check box, use the list boxes to select the dates you want to search. • Last Event/Flow between - Select this check box if you want to search destination IP addresses associated with offenses that the last detected event occurred within a certain time period. After you select this check box, use the list boxes to select the dates you want to search.
Search	Click Search if you are finished configuring the search and want to view the results.

Step 5 On the Search Parameters pane, define your specific search criteria:

Table 7-10 Destination IP Search Parameters

Item	Description
Destination IP	Type the destination IP address or CIDR range you want to search for.
Magnitude	From the list box, select if you want to search magnitude equal to, less than, or greater than the configured value. The range is 0 to 10.
VA Risk	From the list box, select if you want to search VA Risk equal to, less than, or greater than the configured value. The range is 0 to 10.
Events/Flows	From the list box, select if you want to search the event or flow count equal to, less than, or greater than the configured value.

Step 6 Using the Column Definition pane, define the order in which you want to sort the results:

- a From the first list box, select the column by which you want to sort the search results.
- b From the second list box, select the order in which you want to display the search results: Descending or Ascending.

Step 7 Click **Search**.

The search results are displayed. The search results consider all destination IP addresses associated with active offenses.

Searching Networks To search networks:

Step 1 Click the **Offenses** tab.

Step 2 Click **By Networks**.

Step 3 From the **Search** list box, select **New Search**.

Step 4 On the Search Parameters pane, define your specific search criteria:

Table 7-11 Networks Search Parameters

Item	Description
Network	From the list box, select the network you want to search for.
Magnitude	From the list box, select if you want to search magnitude equal to, less than, or greater than the configured value. The range is 0 to 10.
VA Risk	From the list box, select if you want to search VA Risk equal to, less than, or greater than the configured value. The range is 0 to 10.
Event/Flows	From the list box, select if you want to search the event or flow count equal to, less than, or greater than the configured value.

- Step 5** Using the Column Definition pane, define the order in which you want to sort the results:
- a From the first list box, select the column by which you want to sort the search results.
 - b From the second list box, select the order in which you want to display the search results: Descending or Ascending.

Step 6 Click **Search**.
The search results are displayed.

Saving Search Criteria To save the specified search criteria for future use:

- Step 1** Click the **Offenses** tab.
- Step 2** Perform a search. See [Searching Offenses](#).
The search results are displayed.
- Step 3** Click **Save Criteria**.
- Step 4** Enter values for the parameters:

Table 7-12 Save Search Parameters

Parameter	Description
Search Name	Type a name you want to assign to this search criteria.
Assign Search to Group(s)	Select the check box for the groups to which you want to assign this saved search. If you do not select a group, this saved search is assigned to the Other group by default.
Manage Groups	Click Manage Groups to manage search groups. See Managing Search Groups .

Table 7-12 Save Search Parameters (continued)

Parameter	Description
Timespan options:	<p>Choose one of the following options:</p> <ul style="list-style-type: none"> • All Offenses - Select this option if you want to search all offenses regardless of time range. • Recent - Select the option and, from the list box, select the time range you want to search for. • Specific Interval - If you want to specify a particular interval to search for, select the Specific Interval option and then select one of the following options: <ul style="list-style-type: none"> Start Date between - Select this check box if you want to search offenses that started during a certain time period. After you select this check box, use the list boxes to select the dates you want to search for. Last Event/Flow between - Select this check box if you want to search offenses that the last detected event occurred within a certain time period. After you select this check box, use the list boxes to select the dates you want to search.
Set as Default	Select this check box if you want to set this search as your default search.

Step 5 Click **OK**.

Saving Search Criteria

To save the specified search criteria for future use:

NOTE

Saving your search criteria also saves your chart configurations. For more information on chart configuration, see [Configuring Charts](#).

Step 1 Choose one of the following options:

- Click the **Log Activity** tab.
- Click the **Network Activity** tab.

Step 2 Perform a search. See [Searching Events or Flows](#).

The search results are displayed.

Step 3 Click **Save Criteria**.

Step 4 Enter values for the parameters:

Table 7-13 Save Criteria Parameters

Parameter	Description
Search Name	Type the unique name you want to assign to this search criteria. Note: If you specify a time range for your search, QRadar Network Anomaly Detection appends your search name with the specified time range. For example, a saved search named <i>Exploits by Source</i> with a time range of <i>Last 5 minutes</i> becomes <i>Exploits by Source - Last 5 minutes</i> . Note: If you change a column set in a previously saved search, and then save the search criteria using the same name, previous accumulations for time series charts are lost.
Assign Search to Group(s)	Select the check box for the group you want to assign this saved search to. If you do not select a group, this saved search is assigned to the Other group by default. For more information, see Managing Search Groups .
Manage Groups	Click Manage Groups to manage search groups. For more information, see Managing Search Groups .
Timespan options:	Choose one of the following options: <ul style="list-style-type: none"> • Real Time (streaming) - Select this option if you want to filter your search results while in streaming mode. For more information on streaming mode, see Viewing Streaming Events or Viewing Streaming Flows. • Last Interval (auto refresh) - Select this option if you want to filter your search results while in auto-refresh mode. The Log Activity and Network Activity tabs refreshes at one minute intervals to display the most recent information. • Recent - Select this option and, from the list box, select the time range you want to filter for. • Specific Interval - Select this option and, from the calendar, select the date and time range you want to filter for.
Include in my Quick Searches	Select this check box if you want to include this search in your Quick Search list box, which is located on the Log Activity and Network Activity toolbars. For more information on the Quick Search toolbar option, see Table 4-1 or Table 5-1 .
Include in my Dashboard	Select this check box if you want to include the data from your saved search in your Dashboard. For more information on the Dashboard tab, see Using the Dashboard Tab . Note: This parameter is only displayed if the search is grouped.
Set as Default	Select this check box if you want to set this search as your default search when you access the Log Activity or Network Activity tab.
Share with Everyone	Select this check box if you want to share these search requirements with all other QRadar Network Anomaly Detection users.

Step 5 Click **OK**.

Deleting Search Criteria

You can delete search criteria. When you delete a saved search, QRadar Network Anomaly Detection objects that are associated with the saved search may no longer function. Reports and anomaly detection rules are QRadar Network Anomaly Detection objects that use saved search criteria. After you delete a saved search, we recommend that you edit the associated objects to ensure they continue to function.

To delete saved search criteria:

Step 1 Choose one of the following options:

- Click the **Log Activity** tab.
- Click the **Network Activity** tab.

Step 2 From the **Search** list box, select **New Search** or **Edit Search**.

Step 3 In the Saved Searches pane, select a saved search from the **Available Saved Searches** list box.

Step 4 Click **Delete**.

If the saved search criteria is not associated with other QRadar Network Anomaly Detection objects, a confirmation window is displayed. See [Step 5](#).

If the saved search criteria is associated with other QRadar Network Anomaly Detection objects, the Delete Saved Search window is displayed. The window lists all QRadar Network Anomaly Detection objects that are associated with the saved search you want to delete. We recommend that you note the associated objects. See [Step 6](#).

Step 5 Click **OK**.

The saved search is now deleted from your system.

Step 6 Choose one of the following options:

- Click **OK** to proceed. The saved search is now deleted.
- Click **Cancel** to close the Delete Saved Search window.

If you chose to delete the saved search, the saved search is now deleted from your system. We recommend that you access the associated objects you noted and edit the objects to remove the association with the deleted saved search.

Performing a Sub-Search

Each time you perform a search, QRadar Network Anomaly Detection searches the entire database for events or flows that match your criteria. This process may take an extended period of time depending on the size of your database.

The sub-search feature allows you to perform searches within a set of previously completed search results. The sub-search function allows you to refine your search results without requiring you to search the database again.

This feature is not available for grouped searches, searches in progress, or in streaming mode. When defining a search that you want to use as a base for

sub-searching, make sure that Real Time (streaming) option is disabled and the search is not grouped.

To perform a sub-search:

Step 1 Choose one of the following options:

- Click the **Log Activity** tab.
- Click the **Network Activity** tab.

Step 2 Perform a search. See [Searching Events or Flows](#).

The search results are displayed.

This search becomes the base search from which any sub-searches can be performed. Before you continue, make sure your search is complete.

The Current Filter pane specifies the filters on which this search is based.

Step 3 To add a filter:

- a Click **Add Filter**.
- b From the first list box, select a parameter you want to search for.

NOTE

The **Quick Filter** parameter allows you to search for events or flows that match your text string in the event payload. For more information on how to use the **Quick Filter** parameter, see [Using Quick Filter Syntax](#) (events) or [Using Quick Filter Syntax](#) (flows).

- c From the second list box, select the modifier you want to use for the search. The list of modifiers that are available depends on the attribute selected in the first list.
- d In the text field, type specific information related to your search.
- e Click **Add Filter**.

NOTE

You can right-click an event and select the **Filter on** option.

The sub-search results are displayed. If the search remains in progress, partial results are displayed.

The Original Filter pane specifies the filters applied to the base search. The Current Filter pane specifies the filters applied to the sub-search.

NOTE

You can clear sub-search filters without restarting the base search. Click the Clear Filter link next to the filter you want to clear. If you clear a filter from the Original Filter pane, the base search is relaunched.

Step 4 Click **Save Criteria** to save the sub-search criteria. See [Saving Search Criteria](#).

NOTE

If you delete the base search criteria, you still have access to the saved sub-search criteria. If you add a filter, the sub-search searches the entire database since the search function no longer bases the search on a previously searched data set.

Managing Search Results

You can perform multiple searches while navigating to other tabs. You can configure the search feature to send you an email notification when a search is complete. At any time while a search is in progress, you can view partial results.

NOTE

The Manage Search Results feature retains chart configurations from the associated saved search criteria, however, if the saved search result is based on saved search criteria that has been deleted, default charts (bar and pie) are displayed.

This section includes the following topics:

- [Viewing Managed Search Results](#)
- [Saving Search Results](#)
- [Canceling a Search](#)
- [Deleting a Search](#)

Viewing Managed Search Results

To view search results:

Step 1 Choose one of the following options:

- Click the **Log Activity** tab.
- Click the **Network Activity** tab.

Step 2 From the Search menu, select **Manage Search Results**.

The manage search results page provides the following parameters:

Table 7-14 Manage Search Results Page

Parameter	Description
Flags	Indicates that an email notification is pending for when the search is complete.
User	Specifies the name of the user who started the search.
Name	Specifies the name of the search, if the search has been saved. For more information on saving a search, see Saving Search Results .
Started On	Specifies the date and time the search was started.
Ended On	Specifies the date and time the search ended.

Table 7-14 Manage Search Results Page (continued)

Parameter	Description
Duration	Specifies the amount of time the search took to complete. If the search is currently in progress, the Duration parameter specifies how long the search has been processing to date. If the search was canceled, the Duration parameter specifies the period of time the search was processing before it was canceled.
Expires On	Specifies the date and time an unsaved search result will expire. The saved search retention figure is configured in the system settings. For more information on configuring systems settings, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> . Saved search criteria does not expire.
Status	Specifies the status of the search. The options are: <ul style="list-style-type: none"> • Queued - Specifies that the search is queued to start. • <percent>% Complete - Specifies the progress of the search in terms of percentage complete. You can click the link to view partial results. • Sorting - Specifies that the search has finished collecting results and is currently preparing the results for viewing. • Canceled - Specifies that the search has been canceled. You can click the link to view the results that were collected before the cancellation. • Completed - Specifies that the search is complete. You can click the link to view the results. See Viewing Events or Viewing Flows.
Size	Specifies the file size of the search result set.

The search results toolbar provides the following options:

Table 7-15 Manage Search Results Toolbar

Parameter	Description
New Search	Click New Search to create a new search. When you click this icon, the search page is displayed. See Searching Events or Flows .
Save Results	Click Save Results to save search results. See Saving Search Results . Note: This option is only enabled when you have selected a row in the Manage Search Results list.
Cancel	Click Cancel to cancel searches that are in progress or are queued to start. See Canceling a Search .
Delete	Click Delete to delete a search result. See Deleting a Search .
Notify	Select the searches for which you want to receive notification, and then click Notify to enable email notification when the search is complete.

Table 7-15 Manage Search Results Toolbar (continued)

Parameter	Description
View	From the list box, select which search results you want to list on the Search Results page. The options are: <ul style="list-style-type: none"> • Saved Search Results • All Search Results • Canceled/Erroneous Searches • Searches in Progress

Saving Search Results

To save search results:

Step 1 Choose one of the following options:

- Click the **Log Activity** tab.
- Click the **Network Activity** tab.

Step 2 Perform a search or sub-search. For more information on how to perform a search, see [Searching Events or Flows](#). For more information on how to perform a sub-search, see [Performing a Sub-Search](#).

Step 3 Click **Save Results**.

NOTE

The **Save Results** icon is enabled only when the search is complete or if the search was canceled while in progress.

NOTE

You can also save results from the Search Results page. Click **Search > Manage Search Results** and select a search result. Click **Save Results**.

Step 4 Type a unique name for the search results.

Step 5 Click **OK**.

The saved search results displays the name in the **Name** column of the Manage Search Results page.

Canceling a Search

To cancel a search:

Step 1 From the Manage Search Results page, select the queued or in progress search result you want to cancel.

Step 2 Click **Cancel**.

NOTE

You can select multiple searches to cancel.

Step 3 Click **Yes**.

If the search was in progress when canceled, the results that were accumulated until the cancellation are maintained.

Deleting a Search

To delete a search:

- Step 1** From the Manage Search Results page, select the search result you want to delete.
- Step 2** Click **Delete**.
- Step 3** Click **Yes**.

The search is removed from the Manage Search Results page.

Managing Search Groups

Using the Search Groups window, you can create and manage search groups. These groups allow you to easily locate saved search criteria (see [Searching Events or Flows](#) or [Searching Offenses](#)) or base a report on a saved search (see [Managing Reports](#)).

This section includes the following topics:

- [Viewing Search Groups](#)
- [Creating a New Group](#)
- [Editing a Group](#)
- [Copying a Saved Search to Another Group](#)
- [Removing a Saved Search from a Group](#)
- [Removing a Group](#)

Viewing Search Groups

QRadar Network Anomaly Detection provides a default set of groups and subgroups. To view search groups:

- Step 1** Choose one of the following options:
 - Click the **Log Activity** tab.
 - Click the **Network Activity** tab.
 - Click the **Offenses** tab.

Step 2 Select **Search > Edit Search**.

Step 3 Click **Manage Groups**.

You can add new groups or modify existing groups. All saved searches that are not assigned to a group are located in the **Other** group.

Creating a New Group

To create a new group:

- Step 1** Select the group under which you want to create the new group.
- Step 2** Click **New Group**.
- Step 3** In the **Name** field, type a unique name for the new group.
- Step 4** Optional. In the **Description** field, type a description.

Step 5 Click **OK**.

Editing a Group To edit a group:

Step 1 Select the group you want edit.

Step 2 Click **Edit**.

Step 3 To edit the name, type a new name in the **Name** field.

Step 4 To edit the description, type a new description in the **Description** field.

Step 5 Click **OK**.

Copying a Saved Search to Another Group To copy a saved search to another group:

Step 1 Locate and select the saved search you want to copy to another group.

Step 2 Click **Copy**.

Step 3 Select the check box for the group you want to copy the saved search to.

Step 4 Click **Assign Groups**.

Removing a Saved Search from a Group To remove a saved search from a group:

Step 1 Select the saved search you want to remove from the group.

NOTE

When you remove a saved search from a group, the saved search is not deleted from your system. The saved search is removed from the group and automatically moved to the **Other** group.

Step 2 Click **Remove**.

Step 3 Click **OK**.

Removing a Group To remove a group:

Step 1 Select the group you want to remove.

NOTE

You cannot remove the **Event Search Groups**, **Flow Search Groups**, **Offense Search Groups**, and **Other** groups.

Step 2 Click **Remove**.

Step 3 Click **OK**.

8

CONFIGURING RULES

From the **Log Activity**, **Network Activity**, and **Offenses** tabs, you can configure rules or building blocks.

This section includes the following topics:

- [Rules Overview](#)
- [Rule Types](#)
- [Rule Conditions](#)
- [Rule Responses](#)
- [Viewing Rules](#)
- [Creating a Custom Rule](#)
- [Creating an Anomaly Detection Rule](#)
- [Copying a Rule](#)
- [Managing Rules](#)
- [Grouping Rules](#)
- [Editing Building Blocks](#)

Rules Overview

Rules perform tests on events, flows, or offenses, and if all the conditions of a test are met, the rule generates a response. For a complete list of default rules, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

The two rule categories are:

- **Custom Rules** - Custom rules perform tests on events, flows, and offenses to detect unusual activity in your network.
- **Anomaly Detection Rules** - Anomaly detection rules perform tests on the results of saved flow or event searches as a means to detect when unusual traffic patterns occur in your network.

A user with non-administrative access can create rules for areas of the network that they can access. You must have the appropriate role permissions to manage rules. For more information on user role permissions, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Rule Types

Custom rules include the following rule types:

- **Event Rule** - An event rule performs tests on events as they are processed in real-time by the Event Processor. You can create an event rule to detect a single event (within certain properties) or event sequences. For example, if you want to monitor your network for unsuccessful login attempts, access multiple hosts, or a reconnaissance event followed by an exploit, you can create an event rule. It is common for event rules to create offenses as a response.
- **Flow Rule** - A flow rule performs tests on flows as they are processed in real-time by the QRadar QFlow Collector. You can create a flow rule to detect a single flow (within certain properties) or flow sequences. It is common for flow rules to create offenses as a response.
- **Common Rule** - A common rule performs tests on fields that are common to both event and flow records. For example, you can create a common rule to detect events and flows that have a specific source IP address. It is common for common rules to create offenses as a response.
- **Offense Rule** - An offense rule processes offenses only when changes are made to the offense, such as, when new events are added or the system scheduled the offense for reassessment. It is common for offense rules to email a notification as a response.

Anomaly detection rules perform tests on the results of saved flow or event searches as a means to detect when unusual traffic patterns occur in your network. This rule category includes the following rule types:

- **Anomaly** - An anomaly rule tests event and flow traffic for abnormal activity such as the existence of new or unknown traffic, which is traffic that suddenly ceases or a percentage change in the amount of time an object is active. For example, you can create an anomaly rule to compare the average volume of traffic for the last 5 minutes with the average volume of traffic over the last hour. If there is more than a 40% change, the rule generates a response.
- **Threshold** - A threshold rule tests event and flow traffic for activity that is less than, equal to, or greater than a configured threshold, or within a specified range. Thresholds can be based on any data collected by QRadar Network Anomaly Detection. For example, you can create a threshold rule specifying that no more than 220 clients can log into the server between 8 am and 5 pm. The threshold rule generates an alert when the 221st client attempts to login.
- **Behavioral** - A behavioral rule tests event and flow traffic for volume changes in behavior that occurs in regular seasonal patterns. For example, if a mail server typically communicates with 100 hosts per second in the middle of the night and then suddenly starts communicating with 1,000 hosts a second, a behavioral rule generates an alert.

Rule Conditions

The tests in each rule can also reference other building blocks and rules. You are not required to create rules in any specific order because the system checks for dependencies each time a new rule is added, edited, or deleted. If a rule that is referenced by another rule is deleted or disabled, a warning is displayed and no action is taken.

Each rule may contain the following components:

- **Functions** - With functions, you can use building blocks and other rules to create a multi-event, multi-flow, or multi-offense function. You can connect rules using functions that support Boolean operators, such as OR and AND. For example, if you want to connect event rules, you can use the **when an event matches any/all of the following rules** function. For a complete list of functions, see [Rule Tests](#).
- **Building blocks** - A building block is a rule without a response and is used as a common variable in multiple rules or to build complex rules or logic that you want to use in other rules. You can save a group of tests as building blocks for use with other functions. Building blocks allow you to re-use specific rule tests in other rules. For example, you can save a building block that includes the IP addresses of all mail servers in your network and then use that building block to exclude those hosts from another rule. The default building blocks are provided as guidelines, which should be reviewed and edited based on the needs of your network. For a complete list of building blocks, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.
- **Tests** - You can run tests on the property of an event, flow, or offense, such as source IP address, severity of event, or rate analysis. For a complete list of tests, see [Rule Tests](#).

Rule Responses

QRadar Network Anomaly Detection responses, when rule conditions are met, can include one or more of the following responses:

- Creating an offense.
- Sending an email.
- Generating system notifications using the Dashboard feature.
- Creating or adding data to reference sets.

The **Rules** tab allows you to create a rule to import event and flow data into a reference set. A reference set is a set of data, such as a list of IP addresses or user names. After you create a reference set, you can create rules to detect when log or network activity associated with the reference set occurs on your network.

You can create a reference set to contain data derived from an external file. For example, you can create a reference set to retain data about terminated employees. First, you add a log source to import a text file containing terminated employee data, such as IP addresses and user names. Then, using the Custom Rule Wizard, create a reference set specifying which data you want

to retain from the external file. For more information on adding a log source, see the *IBM Security QRadar Log Sources User Guide*.

When a reference set is created, you create a rule that generates a response when a reference set element, such as the IP address of a terminated employee, is detected on your network.

- Generating a response to an external system, including the following server types:
 - **Local Syslog** - Syslog is a standard that allows you to store event, flow, and offense information in a software-independent log file. Using the Rules wizard, you can configure rules to generate a syslog file.
 - **Forwarding Destinations** - QRadar Network Anomaly Detection allows you to forward raw log data received from log sources and QRadar Network Anomaly Detection-normalized event data to one or more vendor systems, such as ticketing or alerting systems. On the QRadar Network Anomaly Detection user interface, these vendor systems are called forwarding destinations.
 - **Simple Network Management Protocol (SNMP)** - The SNMP protocol enables QRadar Network Anomaly Detection to send event, flow, and offense notifications to another host to be stored. Using the Rules wizard, you can configure rules to generate a response that includes sending SNMP traps to the configured host.
 - **Interface For Metadata Access Points (IF-MAP)** - The Interface For Metadata Access Points (IF-MAP) rule response enables QRadar Network Anomaly Detection to publish alert and offense data derived from events, flows, and offense data on an IF-MAP server.

Viewing Rules

To view deployed rules:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **Rules**.
- Step 3** From the **Display** list box, select **Rules**.

The list of deployed rules provides the following information for each rule:

Table 8-1 Rules Page Parameters

Parameter	Description
Rule Name	Specifies the name of the rule.
Group	Specifies the group to which this rule is assigned. For more information on groups, see Grouping Rules .
Rule Category	Specifies the rule category for the rule. Options include: <ul style="list-style-type: none"> • Custom Rule • Anomaly Detection Rule

Table 8-1 Rules Page Parameters (continued)

Parameter	Description
Rule Type	Specifies the rule type. Rule types include: <ul style="list-style-type: none"> • Event • Flow • Common • Offense • Anomaly • Threshold • Behavioral For more information on the rule types, see Rule Types .
Enabled	Specifies whether the rule is enabled or disabled. For more information on enabling and disabling rules, see Enabling/Disabling Rules .
Response	Specifies the rule response, if any. Rule responses include: <ul style="list-style-type: none"> • Dispatch New Event • Email • Log • Notification • SNMP • Reference Set • IF-MAP Response For more information on rule responses, see Rule Responses .
Event/Flow Count	Specifies the number of events or flows associated with this rule when the rule contributes to an offense.
Offense Count	Specifies the number of offenses generated by this rule.
Origin	Specifies whether this rule is a default rule (System) or a custom rule (User).
Creation Date	Specifies the date and time this rule was created.
Modification Date	Specifies the date and time this rule was modified.

The Rules tab toolbar provides the following functions:

Table 8-2 Rules Tab Toolbar

Function	Description
Display	From the list box, select whether you want to display rules or building blocks in the rules list.
Group	From the list box, select which rule group you want to be displayed in the rules list.
Groups	Click Groups to manage rule groups. For more information on grouping rules, see Grouping Rules .

Table 8-2 Rules Tab Toolbar (continued)

Function	Description
Actions	<p>Click Actions and select one of the following options:</p> <ul style="list-style-type: none"> • New Event Rule - Select this option to create a new event rule. See Creating a Custom Rule. • New Flow Rule - Select this option to create a new flow rule. See Creating a Custom Rule. • New Common Rule - Select this option to create a new common rule. See Creating a Custom Rule. • New Offense Rule - Select this option to create a new offense rule. See Creating a Custom Rule. • Enable/Disable - Select this option to enable or disable selected rules. See Enabling/Disabling Rules. • Duplicate - Select this option to copy a selected rule. See Copying a Rule. • Edit - Select this option to edit a selected rule. See Editing a Rule. • Delete - Select this option to delete a selected rule. See Deleting a Rule. • Assign Groups - Select this option to assign selected rules to rule groups. See Assigning an Item to a Group.
Revert Rule	<p>Click Revert Rule to revert a modified system rule to the default value. When you click Revert Rule, a confirmation window is displayed. When you revert a rule, any previous modifications are permanently removed.</p> <p><i>Note: To both revert the rule and maintain a modified version, duplicate the rule and use the Revert Rule option on the modified rule.</i></p>
Search Rules	<p>Type your search criteria in the Search Rules field and click the Search Rules icon or press Enter on the keyboard. All rules that match your search criteria are displayed in the rules list.</p> <p>The following parameters are searched for a match with your search criteria:</p> <ul style="list-style-type: none"> • Rule Name • Rule (description) • Notes • Response <p>The Search Rule feature attempts to locate a direct text string match. If no match is found, the Search Rule feature then attempts a regular expression (regex) match.</p>

Step 4 Select the rule you want to view.

If you selected a rule that specifies Custom Rule as the rule category, the Custom Rules Wizard is displayed. If you selected a rule that specifies Anomaly Detection Rule as the rule category, the Anomaly Detection Wizard is displayed. In the **Rule** and **Notes** fields, descriptive information is displayed.

Creating a Custom Rule

Custom rules include the following rule types:

- **Event Rule** - An event rule performs tests on events as they are processed in real-time by the Event Processor. You can create an event rule to detect a single event (within certain properties) or event sequences. For example, if you want to monitor your network for unsuccessful login attempts, access multiple hosts, or a reconnaissance event followed by an exploit, you can create an event rule. It is common for event rules to create offenses as a response.
- **Flow Rule** - A flow rule performs tests on flows as they are processed in real-time by the QRadar QFlow Collector. You can create a flow rule to detect a single flow (within certain properties) or flow sequences. It is common for flow rules to create offenses as a response.
- **Common Rule** - A common rule performs tests on fields that are common to both event and flow records. For example, you can create a common rule to detect events and flows that have a specific source IP address. It is common for common rules to create offenses as a response.
- **Offense Rule** - An offense rule processes offenses only when changes are made to the offense, such as, when new events are added or the system scheduled the offense for reassessment. It is common for offense rules to email a notification as a response.

To create a new rule:

Step 1 Click the **Offenses** tab.

Step 2 On the navigation menu, click **Rules**.

Step 3 From the **Actions** list box, select one of the following options:

- a **New Event Rule** - Select this option to configure a rule for events.
- b **New Flow Rule** - Select this option to configure a rule for flows.
- c **New Common Rule** - Select this option to configure a rule for events and flows.
- d **New Offense Rule** - Select this option to configure a rule for offenses.

NOTE

If you do not want to view the Welcome message on the Rules Wizard page again, select the **Skip this page when running the rules wizard** check box.

Step 4 Read the introductory text. Click **Next**.

You are prompted to choose the source from which you want this rule to apply. The default is the rule type you selected on the **Offenses** tab.

Step 5 If required, select the rule type you want to apply to the rule. Click **Next**.

Step 6 To add a test to a rule:

- a From the **Test Group** list box, select the type of test you want to apply to this rule.

NOTE

To filter the options in the **Test Group** list box, type the text you want to filter for in the **Type to filter** field.

For information on tests, see [Rule Tests](#).

- b For each test you want to add to the rule, select the **+** sign beside the test. The selected tests are displayed in the **Rule** field.
- c For each test added to the **Rule** field that you want to identify as an excluded test, click **and** at the beginning of the test. The **and** is displayed as **and not**.
- d For each test added to the **Rule** field, you must customize the variables of the test. Click the underlined configurable parameter to configure. See [Rule Tests](#).

Step 7 In the **enter rule name here** field, type a unique name you want to assign to this rule.

Step 8 From the list box, select whether you want to test the rule locally or globally:

- **Local** - The rule is tested on the local Event Processor and not shared with the system. The default is Local.
- **Global** - The rule is shared and tested by any Event Processor on the system. Global rules send events and flows to the central Event Processor, which may decrease performance on the central Event Processor.

Step 9 To export the configured rule as a building block to use with other rules:

- a Click **Export as Building Block**.
- b Type a unique name for this building block.
- c Click **Save**.

Step 10 On the Groups pane, select the check boxes of the groups to which you want to assign this rule. For more information on grouping rules, see [Grouping Rules](#).

Step 11 In the **Notes** field, type any notes you want to include for this rule. Click **Next**.

In the Rules Wizard, the Rule Responses page is displayed, which allows you to configure the action QRadar Network Anomaly Detection takes when the event or flow sequence is detected.

Step 12 Choose one of the following:

- a If you are configuring an Event Rule, Flow Rule, or Common Rule:

Table 8-3 Event/Flow/Common Rule Response Page Parameters

Parameter	Description
Severity	Select this check box if you want this rule to set or adjust severity. When selected, you can use the list boxes to configure the appropriate severity level. For more information on severity, see the Glossary .

Table 8-3 Event/Flow/Common Rule Response Page Parameters (continued)

Parameter	Description
Credibility	Select this check box if you want this rule to set or adjust credibility. When selected, you can use the list boxes to configure the appropriate credibility level. For more information on credibility, see the Glossary .
Relevance	Select this check box if you want this rule to set or adjust relevance. When selected, you can use the list boxes to configure the appropriate relevance level. For more information on relevance, see the Glossary .
Ensure the detected event is part of an offense	<p>Select this check box if you want the event to be forwarded to the Magistrate component. If no offense exists on the Offenses tab, a new offense is created. If an offense exists, this event is added to the offense.</p> <p>When you select this check box, the following options are displayed:</p> <ul style="list-style-type: none"> Index offense based on - From the list box, select the parameter on which you want to index the offense. The default is Source IPv6. <p>For event rules, options include destination IP, destination IPv6, destination MAC address, destination port, event name, host name, log source, rule, source IP, source IPv6, source MAC address, source port, or user name.</p> <p>For flow rules, options include App ID, destination ASN, destination IP, destination IP Identity, destination port, event name, rule, source ASN, source IP, source IP identity, or source Port.</p> <p>For common rules, options include destination IP, destination IP identity, destination port, rule, source IP, source IP identity and source port.</p> Annotate this offense - Select this check box to add an annotation to this offense and type the annotation. Include detected events by <index> from this point forward, for second(s), in the offense - Select this check box and type the number of seconds you want to include detected events by <index> on the Offenses tab. This field specifies the parameter on which the offense is indexed. The default is Source IP.
Annotate event	Select this check box if you want to add an annotation to this event and type the annotation you want to add to the event.
Drop the detected event	Select this check box to force an event, which is normally be sent to the Magistrate component, to be sent to the Ariel database for reporting or searching. This event does not display on the Offenses tab.
Rule Response	

Table 8-3 Event/Flow/Common Rule Response Page Parameters (continued)

Parameter	Description
Dispatch New Event	Select this check box to dispatch a new event in addition to the original event or flow, which will be processed like all other events in the system. The Dispatch New Event parameters are displayed when you select this check box. By default, the check box is clear.
Event Name	Type a unique name for the event you want to be displayed on the Offenses tab.
Event Description	Type a description for the event. The description is displayed in the Annotations pane of the event details.
Severity	From the list box, select the severity for the event. The range is 0 (lowest) to 10 (highest) and the default is 0. The Severity is displayed in the Annotation pane of the event details. For more information on severity, see the Glossary .
Credibility	From the list box, select the credibility of the event. The range is 0 (lowest) to 10 (highest) and the default is 10. Credibility is displayed in the Annotation pane of the event details. For more information on credibility, see the Glossary .
Relevance	From the list box, select the relevance of the event. The range is 0 (lowest) to 10 (highest) and the default is 10. Relevance is displayed in the Annotations pane of the event details. For more information on relevance, see the Glossary .
High-Level Category	From the list box, select the high-level event category you want this rule to use when processing events. For more information on event categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Low-Level Category	From the list box, select the low-level event category you want this rule to use when processing events. For more information on event categories, see <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Annotate this offense	Select this check box to add an annotation to this offense and type the annotation.

Table 8-3 Event/Flow/Common Rule Response Page Parameters (continued)

Parameter	Description
Ensure the dispatched event is part of an offense	<p>Select this check box if you want, as a result of this rule, the event forwarded to the Magistrate component. If no offense has been created on the Offenses tab, a new offense is created. If an offense exists, this event is added.</p> <p>When you select this check box, the following options are displayed:</p> <ul style="list-style-type: none"> • Index offense based on - From the list box, select the parameter on which you want to index the offense. The default is Source IP. <p>For event rules, options include destination IP, destination IPv6, destination MAC address, destination port, event name, host name, log source, rule, source IP, source IPv6, source MAC address, source port, or user name.</p> <p>For flow rules, options include App ID, destination ASN, destination IP, destination IP Identity, destination port, event name, rule, source ASN, source IP, source IP identity, or source Port.</p> <p>For common rules, options include destination IP, destination IP identity, destination port, rule, source IP, source IP identity and source port.</p> • Include detected events by <index> from this point forward, for second(s), in the offense - Select this check box and type the number of seconds you want to include detected events by <index> on the Offenses tab. This field specifies the parameter on which the offense is indexed. The default is Source IP. • Offense Naming - Select one of the following options: <ul style="list-style-type: none"> This information should contribute to the name of the associated offense(s) - Select this option if you want the Event Name information to contribute to the name of the offense. This information should set or replace the name of the associated offense(s) - Select this option if you want the configured Event Name to be the name of the offense. This information should not contribute to the naming of the associated offense(s) - Select this option if you do not want the Event Name information to contribute to the name of the offense. This is the default.
Email	Select this check box to display the email options. By default, the check box is clear.
Enter email addresses to notify	Type the email address to send notification if this rule generates. Separate multiple email addresses using a comma.

Table 8-3 Event/Flow/Common Rule Response Page Parameters (continued)

Parameter	Description
SNMP Trap	<p>This parameter is only displayed when the SNMP Settings parameters are configured in the system settings. For more information on configuring system settings, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p> <p>► Select this check box to enable this rule to send an SNMP notification (trap).</p> <p>The SNMP trap output includes system time, the trap OID, and the notification data, as defined by the Q1 Labs MIB.</p> <p>For example, the SNMP notification may resemble:</p> <pre>"Wed Sep 28 12:20:57 GMT 2005, QRADAR Custom Rule Engine Notification - Rule 'SNMPTRAPTest' Fired. 172.16.20.98:0 -> 172.16.60.75:0 1, Event Name: ICMP Destination Unreachable Communication with Destination Host is Administratively Prohibited, QID: 1000156, Category: 1014, Notes: Offense description"</pre>
Send to Local SysLog	<p>Select this check box if you want to log the event or flow locally. By default, this check box is clear.</p> <p>For example, the syslog output may resemble:</p> <pre>Sep 28 12:39:01 localhost.localdomain ECS: Rule 'Name of Rule' Fired: 172.16.60.219:12642 -> 172.16.210.126:6666 6, Event Name: SCAN SYN FIN, QID: 1000398, Category: 1011, Notes: Event description</pre>
Send to Forwarding Destinations	<p>This check box is only displayed for Event rules.</p> <p>Select this check box if you want to log the event or flow on a forwarding destination. A forwarding destination is a vendor system, such as SIEM, ticketing, or alerting systems. When you select this check box, a list of forwarding destinations is displayed. Select the check box for the forwarding destination you want to send this event or flow to.</p> <p>To add, edit, or delete a forwarding destination, click the Manage Destinations link. For more information on configuring forwarding destinations, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Notify	<p>Select this check box if you want events that generate as a result of this rule to be displayed in the System Notifications item on the Dashboard tab.</p> <p>For more information on the Dashboard tab, see Using the Dashboard Tab.</p> <p>Note: If you enable notifications, we recommend that you configure the Response Limiter parameter.</p>

Table 8-3 Event/Flow/Common Rule Response Page Parameters (continued)

Parameter	Description
Add to Reference Set	<p>Select this check box if you want events generated as a result of this rule to add data to a reference set.</p> <p>To add data to a reference set:</p> <ol style="list-style-type: none"> Using the first list box, select the data you want to add. Options include all normalized or custom data. Using the second list box, select the reference set to which you want to add the specified data. <p>The Add to Reference Set rule response provides the following functions:</p> <ul style="list-style-type: none"> New - Click New to add a new reference set and configure the following parameters: <ul style="list-style-type: none"> Name - Type a unique name for the reference set. Type - From the list box, select the data type. Options include String, Numeric, IP, and Port. Maximum number of elements - Type the maximum number of data elements you want to store in this reference set. The default is 10,000 and the maximum is 100,000. Edit - Click Edit to edit the reference set name and maximum number of data elements for the selected reference set. Delete - Click Delete to delete the reference set. Purge - Click Purge to delete the contents of the reference set while maintaining the reference set.
Publish on the IF-MAP Server	<p>If the IF-MAP parameters are configured and deployed in the system settings, select this option to publish the event information on the IF-MAP server. For more information on configuring the IF-MAP parameters, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Response Limiter	<p>Select this check box and use the list boxes to configure the frequency in which you want this rule to respond.</p>
Enable Rule	<p>Select this check box to enable this rule. By default, the check box is selected.</p>

b If you are configuring an Offense Rule:

Table 8-4 Offense Rule Response Page Parameters

Parameter	Description
Rule Action	
Name/Annotate the detected offense	<p>Select this check box to display Name options.</p>
New Offense Name	<p>Type the name you want to assign to the offense.</p>

Table 8-4 Offense Rule Response Page Parameters (continued)

Parameter	Description
Offense Annotation	Type the offense annotation you want to be displayed on the Offenses tab.
Offense Name	Select one of the following options: <ul style="list-style-type: none"> • This information should contribute to the name of the offense - Select this option if you want the Event Name information to contribute to the name of the offense. • This information should set or replace the name of the offense - Select this option if you want the configured Event Name to be the name of the offense.
Rule Response	
Email	Select this check box to display the email options. By default, the check box is clear.
Enter email address to notify	Type the email address to send the notification if the event generates. Separate multiple email addresses using a comma.
SNMP Trap	<p>This parameter is only displayed when the SNMP Settings parameters are configured in the system settings. For more information on configuring system settings, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p> <p>► Select this check box to enable this rule to send an SNMP notification (trap).</p> <p>For an offense rule, the SNMP trap output includes system time, the trap OID, and the notification data, as defined by the Q1 Labs MIB.</p> <p>For example, the SNMP notification may resemble:</p> <pre>"Wed Sep 28 12:20:57 GMT 2005, QRADAR Custom Rule Engine Notification - Rule 'SNMPTRAPTest' Fired. 172.16.20.98:0 -> 172.16.60.75:0 1, Event Name: ICMP Destination Unreachable Communication with Destination Host is Administratively Prohibited, QID: 1000156, Category: 1014, Notes: Offense description"</pre>
Send to Local SysLog	<p>Select this check box if you want to log the event or flow locally. By default, this check box is clear.</p> <p>For example, the syslog output may resemble:</p> <pre>Sep 28 12:39:01 localhost.localdomain ECS: Rule 'Name of Rule' Fired: 172.16.60.219:12642 -> 172.16.210.126:6666 6, Event Name: SCAN SYN FIN, QID: 1000398, Category: 1011, Notes: Event description</pre>

Table 8-4 Offense Rule Response Page Parameters (continued)

Parameter	Description
Send to Forwarding Destinations	Select this check box if you want to log the event or flow on a forwarding destination. A forwarding destination is a vendor system, such as SIEM, ticketing, or alerting systems. When you select this check box, a list of forwarding destinations is displayed. Select the check box for the forwarding destination you want to send this event or flow to. To add, edit, or delete a forwarding destination, click the Manage Destinations link. For more information on configuring forwarding destinations, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Publish on the IF-MAP Server	If the IF-MAP parameters are configured and deployed in the system settings, select this option to publish the offense information on the IF-MAP server. For more information on configuring the IF-MAP parameters, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Response Limiter	Select this check box and use the list boxes to configure the frequency with which you want this rule to respond.
Enable Rule	Select this check box to enable this rule. By default, the check box is selected.

Step 13 Click **Next**.

Step 14 Review the configured rule to ensure the settings are correct. Make any changes if necessary and then click **Finish**.

Creating an Anomaly Detection Rule

Anomaly detection rules perform tests on the results of saved flow or event searches as a means to detect when unusual traffic patterns occur in your network. This rule category includes the following rule types:

- **Anomaly** - An anomaly rule tests event and flow traffic for abnormal activity such as the existence of new or unknown traffic, which is traffic that suddenly ceases or a percentage change in the amount of time an object is active. For example, you can create an anomaly rule to compare the average volume of traffic for the last 5 minutes with the average volume of traffic over the last hour. If there is more than a 40% change, the rule generates a response.
- **Threshold** - A threshold rule tests event and flow traffic for activity that is less than, equal to, or greater than a configured threshold, or within a specified range. Thresholds can be based on any data collected by QRadar Network Anomaly Detection. For example, you can create a threshold rule specifying that no more than 220 clients can log into the server between 8 am and 5 pm. The threshold rule generates an alert when the 221st client attempts to login.

- **Behavioral** - A behavioral rule tests event and flow traffic for volume changes in behavior that occurs in regular seasonal patterns. For example, if a mail server typically communicates with 100 hosts per second in the middle of the night and then suddenly starts communicating with 1,000 hosts a second, a behavioral rule generates an alert.

To create a new anomaly detection rule:

Step 1 Click the **Log Activity** or **Network Activity** tab.

Step 2 Perform a search.

Your search criteria must be aggregated. Anomaly detection rules uses all grouping and filter criteria from the saved search criteria, but does not use any time ranges from the search criteria. The Anomaly Detection Rule wizard allows you to apply time range criteria using Data and Time tests.

The search results are displayed.

Step 3 From the **Rules** menu, select the rule type you want to create. Options include:

- Add Anomaly Rule
- Add Threshold Rule
- Add Behavioral Rule

NOTE

If you do not want to view the Welcome message on the Rules Wizard page again, select the **Skip this page when running the rules wizard** check box.

Step 4 Read the introductory text. Click **Next**.

You are prompted to choose the source from which you want this rule to apply. The default is the rule type you selected on the **Network Activity** or **Log Activity** tab.

Step 5 If required, select the rule type you want to apply to the rule. Click **Next**.

The rule is populated with default tests. You can edit the default tests or add tests to the test stack. At least one Accumulated Property test must be included in the test stack.

Step 6 To add a test to a rule:

- From the **Test Group** list box, select the type of test you want to apply to this rule.

NOTE

To filter the options in the **Test Group** list box, type the text you want to filter for in the **Type to filter** field.

The list of tests are displayed. For information on tests, see [Rule Tests](#).

- For each test you want to add to the rule, select the **+** sign beside the test.

The selected tests are displayed in the **Rule** field.

- For each test added to the **Rule** field that you want to identify as an excluded test, click **and** at the beginning of the test.

The **and** is displayed as **and not**.

- d For each test added to the **Rule** field, you must customize the variables of the test. Click the underlined configurable parameter to configure the variable. See [Rule Tests](#).

By default, the rule tests the selected accumulated property for each event or flow group separately. For example, if the selected accumulated value is UniqueCount(sourceIP), the rule tests each unique source IP address for each event/flow group

- Step 7** To test the total selected accumulated properties for each event/flow group, clear the **Test the [Selected Accumulated Property] value of each [group] separately** check box.

This is a dynamic field. The **[Selected Accumulated Property]** value depends on what option you select for the **this accumulated property** test field. For information on tests, see [Rule Tests](#). The **[group]** value depends on the grouping options specified in the saved search criteria. If multiple grouping options are included, the text may be truncated. Move your mouse pointer over the text to view all groups.

- Step 8** In the **enter rule name here** field, type a unique name you want to assign to this rule.

- Step 9** In the groups pane, select the check boxes of the groups you want to assign this rule to. For more information on grouping rules, see [Grouping Rules](#).

- Step 10** In the **Notes** field, type any notes you want to include for this rule. Click **Next**.

The Rule Responses page allows you to configure the action QRadar Network Anomaly Detection takes when the event or flow sequence is detected.

- Step 11** Configure the parameters:

Table 8-5 Anomaly Detection Rule Response Page Parameters

Parameter	Description
Rule Response	
Dispatch New Event	Specifies that this rule dispatches a new event in addition to the original event or flow, which is processed like all other events in the system. By default, this check box is selected and cannot be cleared.
Event Name	Type the unique name of the event you want to be displayed on the Offenses tab.
Event Description	Type a description for the event. The description is displayed in the Annotations pane of the event details.

Table 8-5 Anomaly Detection Rule Response Page Parameters (continued)

Parameter	Description
Offense Naming	<p>Select one of the following options:</p> <ul style="list-style-type: none"> • This information should contribute to the name of the associated offense(s) - Select this option if you want the Event Name information to contribute to the name of the offense. • This information should set or replace the name of the associated offense(s) - Select this option if you want the configured Event Name to be the name of the offense. • This information should not contribute to the naming of the associated offense(s) - Select this option if you do not want the Event Name information to contribute to the name of the offense. This is the default.
Severity	Using the list boxes, select the severity for the event. The range is 0 (lowest) to 10 (highest) and the default is 5. The Severity is displayed in the Annotations pane of the event details. For more information on severity, see the Glossary .
Credibility	Using the list boxes, select the credibility of the event. The range is 0 (lowest) to 10 (highest) and the default is 5. Credibility is displayed in the Annotations pane of the event details. For more information on credibility, see the Glossary .
Relevance	Using the list boxes, select the relevance of the event. The range is 0 (lowest) to 10 (highest) and the default is 5. Relevance is displayed in the Annotations pane of the event details. For more information on relevance, see the Glossary .
High Level Category	<p>From the list box, select the high-level event category you want this rule to use when processing events.</p> <p>For more information on event categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Low Level Category	<p>From the list box, select the low-level event category you want this rule to use when processing events.</p> <p>For more information on event categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Annotate this offense	Select this check box to add an annotation to this offense and type the annotation.
Ensure the dispatched event is part of an offense	<p>As a result of this rule, the event is forwarded to the Magistrate component. If an offense exists, this event will be added. If no offense has been created on the Offenses tab, a new offense is created. This parameter is enabled by default.</p> <p>The following options are displayed:</p> <ul style="list-style-type: none"> • Index offense based on - Specifies that the new offense is based on event name. This parameter is enabled by default. • Include detected events by Event Name from this point forward, for second(s), in the offense - Select this check box and type the number of seconds you want to include detected events or flows from the source on the Offenses tab.

Table 8-5 Anomaly Detection Rule Response Page Parameters (continued)

Parameter	Description
Email	Select this check box to display the email options. By default, the check box is clear.
Enter email address to notify	Type the email address to send notification if this rule generates. Separate multiple email addresses using a comma.
SNMP Trap	<p>This parameter is only displayed when the SNMP Settings parameters are configured in the system settings. For more information on configuring system settings, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p> <p>▶ Select this check box to enable this rule to send an SNMP notification (trap).</p> <p>The SNMP trap output includes system time, the trap OID, and the notification data, as defined by the Q1 Labs MIB.</p> <p>For example, the SNMP notification may resemble:</p> <pre>"Wed Sep 28 12:20:57 GMT 2005, QRADAR Custom Rule Engine Notification - Rule 'SNMPTRAPTest' Fired. 172.16.20.98:0 -> 172.16.60.75:0 1, Event Name: ICMP Destination Unreachable Communication with Destination Host is Administratively Prohibited, QID: 1000156, Category: 1014, Notes: Offense description"</pre>
Notify	<p>Select this check box if you want events that generate as a result of this rule to be displayed in the System Notifications item in the Dashboard tab.</p> <p>For more information on the Dashboard tab, see Using the Dashboard Tab.</p> <p>Note: If you enable notifications, we recommend that you configure the Response Limiter parameter.</p>
Send to Local SysLog	<p>Select this check box if you want to log the event or flow locally. By default, the check box is clear.</p> <p>For example, the syslog output may resemble:</p> <pre>Sep 28 12:39:01 localhost.localdomain ECS: Rule 'Name of Rule' Fired: 172.16.60.219:12642 -> 172.16.210.126:6666 6, Event Name: SCAN SYN FIN, QID: 1000398, Category: 1011, Notes: Event description</pre>

Table 8-5 Anomaly Detection Rule Response Page Parameters (continued)

Parameter	Description
Add to Reference Set	<p>Select this check box if you want events that generate as a result of this rule to add data to a reference set.</p> <p>To add data to a reference set:</p> <ol style="list-style-type: none"> Using the first list box, select the data you want to add. Options include all normalized or custom data. Using the second list box, select the reference set to which you want to add the specified data. <p>The Add to Reference Set rule response provides the following functions:</p> <ul style="list-style-type: none"> New - Click this icon to add a new reference set. After you click New, you must configure the following: <ul style="list-style-type: none"> Name - Type a unique name for the reference set. Type - From the list box, select the data type. Options include String, Numeric, IP, and Port. Maximum number of elements - Type the maximum number of data elements you want to store in this reference set. The default is 10,000 and the maximum is 100,000. Edit - Click Edit to edit the reference set name and maximum number of data elements for the selected reference set. Delete - Click Delete to delete the reference set. Purge - Click Purge to delete the contents of the reference set while maintaining the reference set.
Publish on the IF-MAP Server	If the IF-MAP parameters are configured and deployed in the system settings, select this option to publish the offense information on the IF-MAP server. For more information on configuring the IF-MAP parameters, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i> .
Response Limiter	Select this check box and use the list boxes to configure the frequency in which you want this rule to respond.
Enable Rule	Select this check box to enable this rule. By default, the check box is selected.

Step 12 Click **Next**.

Step 13 Review the configured rule. Click **Finish**.

Managing Rules Using the Rules feature on the **Offenses** tab, you can manage custom and anomaly rules. You can enable and disable rules, as required. Also, you can edit, copy, or delete a rule.

This section includes the following topics:

- [Enabling/Disabling Rules](#)
- [Editing a Rule](#)
- [Copying a Rule](#)
- [Deleting a Rule](#)

NOTE

The anomaly detection functionality on the **Log Activity** and **Network Activity** tabs only allows you to create anomaly detection rules. To manage default and previously created anomaly detection rules, you must use the **Offenses** tab.

Enabling/Disabling Rules When tuning your system, you can enable or disable the appropriate rules to ensure that your system is generating meaningful offenses for your environment.

To enable or disable a rule:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **Rules**.
- Step 3** From the **Display** list box, select **Rules**.
- Step 4** Select the rule you want to enable or disable.
- Step 5** From the **Actions** list box, select **Enable/Disable**.

The **Enabled** column indicates the status.

Editing a Rule You can edit a rule to change the rule name, rule type, tests, or responses.

To edit a rule:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **Rules**.
- Step 3** From the **Display** list box, select **Rules**.
- Step 4** Select the rule you want to edit.
- Step 5** From the **Actions** list box, select **Edit**.
- Step 6** Edit the parameters. See [Table 8-1](#).
- Step 7** Optional. If you want to change the rule type, click **Back** and select a new rule type.
- Step 8** Click **Next**.
- Step 9** Edit the parameters:
 - See [Table 8-3](#) for event, flow, or common rule parameters.

- See [Table 8-4](#) for offense rule parameters.
- See [Table 8-5](#) for anomaly detection rule parameters.

Step 10 Click **Next**.

Step 11 Review the edited rule. Click **Finish**.

Copying a Rule To create a new rule, you can copy an existing rule, enter a new name for the rule, and then customize the parameters in the new rule as required.

To copy a rule:

Step 1 Click the **Offenses** tab.

Step 2 On the navigation menu, click **Rules**.

Step 3 From the **Display** list box, select **Rules**.

Step 4 Select the rule you want to duplicate.

Step 5 From the **Actions** list box, select **Duplicate**.

Step 6 In the **Enter name for the copied rule** field, type a name for the new rule. Click **OK**.

For more information on editing the rule, see [Editing a Rule](#).

Deleting a Rule QRadar Network Anomaly Detection allows you to delete rules. Deleting a rule removes the rule completely from your system.

To delete a rule:

Step 1 Click the **Offenses** tab.

Step 2 On the navigation menu, click **Rules**.

Step 3 From the **Display** list box, select **Rules**.

Step 4 Select the rule you want to delete.

Step 5 From the **Actions** list box, select **Delete**.

Grouping Rules

If you are an administrator, you are able to create, edit, and delete groups of rules. You can group and view your rules and building blocks based on your chosen criteria. Categorizing your rules or building blocks into groups allows you to efficiently view and track your rules. For example, you can view all rules related to compliance. By default, the Rules tab displays all rules and building blocks.

As you create new rules, you can assign the rule to an existing group. For information on assigning a group using the rule wizard, see [Creating a Custom Rule](#) or [Creating an Anomaly Detection Rule](#).

This section includes the following topics:

- [Viewing Groups](#)
- [Creating a Group](#)
- [Editing a Group](#)
- [Copying an Item to Another Group](#)
- [Deleting an Item from a Group](#)
- [Assigning an Item to a Group](#)

Viewing Groups On the Rules tab, you can filter the rules or building blocks to view only the rules or building blocks belonging to a specific group.

To view rule or building block groups:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **Rules**.
- Step 3** From the **Display** list box, select whether you want to view rules or building blocks.
- Step 4** From the **Filter** list box, select the group category you want to view.

The list of items assigned to that group is displayed.

Creating a Group The Rules tab provides default rule group, however, you can create a new group.

To create a group:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **Rules**.
- Step 3** Click **Groups**.
- Step 4** From the navigation tree, select the group under which you want to create a new group.

NOTE

After you create the group, you can drag navigation tree items to change the organization of the tree items.

- Step 5** Click **New Group**.
- Step 6** Enter values for the following parameters:
 - **Name** - Type a unique name to assign to the new group. The name can be up to 255 characters in length.
 - **Description** - Type a description you want to assign to this group. The description can be up to 255 characters in length.
- Step 7** Click **OK**.
- Step 8** To change the location of the new group, click the new group and drag the folder to the new location in your navigation tree.

Step 9 Close the Group window.

Editing a Group You can edit a group name or description.

To edit a group:

Step 1 Click the **Offenses** tab.

Step 2 On the navigation menu, click **Rules**.

Step 3 Click **Groups**.

Step 4 From the navigation tree, select the group you want to edit.

Step 5 Click **Edit**.

Step 6 Update values for the following parameters:

- **Name** - Type a unique name to assign to the new group. The name can be up to 255 characters in length.
- **Description** - Type a description you want to assign to this group. The description can be up to 255 characters in length.

Step 7 Click **OK**.

Step 8 To change the location of the group, click the new group and drag the folder to the new location in your navigation tree.

Step 9 Close the Group window.

Copying an Item to Another Group Using the groups functionality, you can copy a rule or building block to one or many groups. To move a rule or building block:

Step 1 Click the **Offenses** tab.

Step 2 On the navigation menu, click **Rules**.

Step 3 Click **Groups**.

Step 4 From the navigation tree, select the rule or building block you want to copy to another group.

Step 5 Click **Copy**.

Step 6 Select the check box for the group you want to copy the rule or building block to.

Step 7 Click **Copy**.

Step 8 Close the Group window.

Deleting an Item from a Group Deleting an item from a group does not delete the rule or building block from the Rules tab.

To delete a rule or building block from a group:

Step 1 Click the **Offense** tab.

Step 2 On the navigation menu, click **Rules**.

Step 3 Click **Groups**.

- Step 4** Using the navigation tree, navigate to and select the item you want to delete.
- Step 5** Click **Remove**.
- Step 6** Click **OK**.
- Step 7** Close the Group window.

Deleting a Group Deleting an item from a group does not delete the rules or building blocks of that group from the Rules tab.

To delete a group:

- Step 1** Click the **Offense** tab.
- Step 2** On the navigation menu, click **Rules**.
- Step 3** Click **Groups**.
- Step 4** Using the navigation tree, navigate to and select the group you want to delete.
- Step 5** Click **Remove**.
- Step 6** Click **OK**.
- Step 7** Close the Group window.

Assigning an Item to a Group To assign a rule or building block to a group:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **Rules**.
- Step 3** Select the rule or building block you want to assign to a group.
- Step 4** From the **Actions** list box, select **Assign Groups**.
- Step 5** Select the group you want to assign the rule or building block to.
- Step 6** Click **Assign Groups**.
- Step 7** Close the Choose Groups window.

Editing Building Blocks

Building blocks allow you to re-use specific rule tests in other rules. For example, you can save a building block that excludes the IP addresses of all mail servers in your deployment from the rule.

For more information on the default building blocks, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

To edit a building block:

- Step 1** Click the **Offenses** tab.
- Step 2** On the navigation menu, click **Rules**.
- Step 3** From the **Display** list box, select **Building Blocks**.

Step 4 Double-click the building block you want to edit.

Step 5 Update the building block, as necessary. Click **Next**.

Step 6 Continue through the wizard. For more information, see [Creating a Custom Rule](#).

Step 7 Click **Finish**.

9

MANAGING ASSETS

Using the Assets tab, you can manage assets operating on your network.

This section includes the following topics:

- [Asset Tab Overview](#)
- [Viewing Asset Profiles](#)
- [Viewing Vulnerability Details](#)
- [Managing Asset Profiles](#)
- [Using the Search Feature](#)

Asset Tab Overview

IBM Security QRadar Network Anomaly Detection automatically discovers assets (servers and hosts) operating on your network, based on passive flow data and vulnerability data, to create asset profiles. Asset profiles provide information about each known asset in your network, including what services are running on each asset. Asset profile information is used for correlation purposes to help reduce false positives. For example, if a source attempts to exploit a specific service running on a specific asset, QRadar Network Anomaly Detection can determine if the asset is vulnerable to this attack by correlating the attack to the asset profile.

Using the **Assets** tab, you can:

- Search for specific assets.
- View all the learned assets.
- View identity information for learned assets.
- Manually add asset profiles.
- Edit asset profiles for manually added or discovered assets.
- Tune false positive vulnerabilities.
- Print or export asset profiles.

NOTE

Asset profiles are only populated if you have flow data or vulnerability assessment (VA) scans configured. For flow data to populate asset profiles, bidirectional flows are required. For more information on VA, see the *IBM Security QRadar Vulnerability Assessment Configuration Guide*. For more information on flow sources, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

Viewing Asset Profiles

To view asset profiles:

- Step 1** Click the **Assets** tab.
- Step 2** Perform a search. See [Using the Search Feature](#).

The search results are displayed, providing the following information:

Table 9-1 Asset Search Results Page

Parameter	Description
IP Address	Specifies the IP address of the asset.
MAC	Specifies the last known MAC address of the asset.
Name	Specifies the name, host name, or machine name of the asset. If unknown, this field is blank.
User	Specifies the last known user of the asset. If unknown, this field is blank.
Group	Specifies the last known user group of the asset. If unknown, this field is blank.
Network	Specifies the network in which the asset belongs.
Weight	Specifies the asset weight of the asset.
Risk Level	Specifies the risk level of the asset.
Vulnerabilities	Specifies the number of identified vulnerabilities associated with this asset. This value also includes the number of active and passive vulnerabilities.
Last Seen	Specifies the last date and time the asset was seen. If the asset was manually entered but never actively or passively seen, the column indicates Never.

The asset search results page toolbar provides the following functions:

Table 9-2 Asset Search Results Page Toolbar

Function	Description
Modify Search	Click Modify Search to return to the Assets Search page to modify your search criteria. See Viewing Asset Profiles .
Add Asset	Click Add Asset to add an asset profile. See Adding an Asset Profile .

Table 9-2 Asset Search Results Page Toolbar (continued)

Function	Description
Edit Asset	Click Edit Asset to edit an existing asset profile. This option is enabled only if you have selected an asset profile from the results list. See Editing an Asset .
Actions	Click Actions to perform the following actions: <ul style="list-style-type: none"> • Delete Asset - Select this option to delete the selected asset profiles. See Deleting an Asset. • Delete Listed - Select this option to delete all asset profiles listed in the results list. See Deleting All Assets. • Import Assets - Select this option to import assets. See Importing Asset Profiles. • Export to XML - Select this option to export asset profiles in XML format. See Exporting Assets. • Export to CSV - Select this option to export asset profiles in CSV format. See Exporting Assets. <p><i>Note: The Actions menu is available only if you have administrative privileges. For more information, see the IBM Security QRadar Network Anomaly Detection Administration Guide.</i></p>
Print	Click Print to print the asset profiles displayed on the page.

NOTE

To view additional information about this asset, move your mouse over the IP address.

Step 3 To view the asset detail, double-click the asset.

The Asset Profile page provides the following functions:

Table 9-3 Asset Page Toolbar

Function	Description
Return to Asset List	Click Return to Asset List to return to the assets search results page.
Modify Search	Click Modify Search to return to the Assets Search page to modify your search criteria. See Viewing Asset Profiles .
Print	Click Print to print the asset profiles displayed on the page.

The Asset Profile page provides the following information:

NOTE

You can edit certain parameters directly on the Asset Profile page. To edit parameter directly from the Asset Profile page, make the necessary changes and click **Save Changes**.

Table 9-4 Asset Profile Page

Parameter	Description
Name	Specifies the name of the asset.
Description	Specifies a description for this asset.
IP Address	Specifies the IP address of the asset.
Network	Specifies the network in which the asset belongs.
Host Name (DNS Name)	Specifies the IP address or DNS name of the asset, if known.
Risk Level	Specifies the risk level (0 to 10) for the asset where 0 is the lowest and 10 is the highest. This is a weighted value against all other hosts in your deployment.
Operating System	Specifies the operating system running on the asset. Note: You can edit this parameter directly if the Override parameter is specified as Override Until the Next Scan or Override Forever . From the list box, select the operating system name.
Vendor	Specifies the operating system vendor name of the asset, as detected by the VA scanner or manually entered. Note: You can edit this parameter directly if the Override parameter is specified as Override Until the Next Scan or Override Forever . From the list box, select the operating system vendor name.
Version	Specifies the version of the operating system. Note: You can edit this parameter if the Override parameter is specified as Override Until the Next Scan or Override Forever . From the list box, select the operating system version.
Override	The Override parameter specifies the method by which operating system information (Operating System, Vendor, and Version parameters) is derived. From the list box, select one of the following options: <ul style="list-style-type: none"> • Detected By a Scanner - Select this option to specify that the scanner provides operating system information. • Override Until the Next Scan - Select this option to specify that the scanner provides operating system information and the information can be temporarily edited. If you edit the operating system parameters, the scanner restores the information at its next scan. This is the default. • Override Forever - Select this option to specify that you want to manually enter operating system information and disable the scanner from updating the information.
Asset Weight	Specifies the level of importance associated with this asset. The range is 0 (Not Important) to 10 (Very Important).
MAC	Specifies the last known MAC address of the asset.

Table 9-4 Asset Profile Page (continued)

Parameter	Description
Machine Name	Specifies the last known machine name of the asset.
Username	Specifies the last known user of the asset.
Extra Data	Specifies any extended information based on an event.
Host Name	Specifies the last known host name of the asset.
User Group	Specifies the last known user group of the asset.
Business Owner	Specifies the name of business owner of the asset. An example of a technical owner is a department manager.
Business Owner Contact Info	Specifies the contact information for the business owner.
Technical Owner	Specifies the technical owner of the asset. An example of a technical owner is an IT manager or director.
Technical Owner Contact Info	Specifies the contact information of the technical owner.
Location	Specifies the physical location of the asset.

The Asset Profile toolbar provides the following options:

Table 9-5 Asset Profile Toolbar

Options	Description
View by Network	If this asset is associated with an offense, this option allows you to view the list of networks associated with this asset. When you click View By Network , the List of Networks window is displayed. See Viewing Offenses By Network .
View Source Summary	If this asset is the source of an offense, this option allows you to view source summary information. When you click View Source Summary , the List of Offenses window is displayed. See Viewing Offenses By Source IP .
View Destination Summary	If this asset is the destination of an offense, this option allows you to view destination summary information. When you click View Destination Summary , the List of Destinations window is displayed. See Viewing Offenses By Destination IP .

Table 9-5 Asset Profile Toolbar (continued)

Options	Description
History	<p>Click History to view event history information for this asset. When you click the History icon, the Event Search window is displayed, pre-populated with the following event search criteria:</p> <ul style="list-style-type: none"> • Time Range - Recent (Last 24 Hours) • Search Parameters - Specifies the following filters to be applied to the search results: <ul style="list-style-type: none"> - Identity is true - Identity IP is the IP address of the asset • Column Definition - Specifies the following columns to be displayed in the search results: <ul style="list-style-type: none"> - Event name - Log Source - Start Time - Identity User Name - Identity MAC - Identity Host Name - Identity Net Bios Name - Identity Group Name <p>You can customize the search parameters, if required. Click Search to view the event history information. For more information on searching events, see Searching Events or Flows.</p>
Applications	<p>Click Applications to view application information for this asset. When you click the Applications icon, the Flow Search window is displayed, pre-populated with the following event search criteria:</p> <ul style="list-style-type: none"> • Time Range - Recent (Last 24 Hours) • Search Parameters - Specifies the following filter to be applied to the search results: Source or Destination IP is the IP address of the asset. • Column Definition - Specifies the Application Group column to be displayed in the search results. <p>You can customize the search parameters, if required. Click Search to view the application information. For more information on searching flows, see Searching Events or Flows.</p>

The Ports and Vulnerabilities pane of the Asset Profile page displays the following information:

Table 9-6 Ports Information

Parameter	Description
Port	Specifies the port number for the services discovered running on the asset.
Service	Specifies the services discovered running on the asset.
OSVDB ID	Specifies the vulnerability identifier for the asset. Click the ID to obtain more information.
Name	Specifies the name of the detected vulnerability. This value is only available when integrating with VA tools.
Description	Specifies a description of the detected vulnerability. This value is only available when integrating with VA tools.
Risk/Severity	Specifies the risk level (0 to 10) for the vulnerability.
Last Seen	Specifies the date and time that the service was last detected running on the asset either passively or actively.
First Seen	Specifies the date and time when the service was first detected running on the asset either passively or actively.
False Positive Tuning	Click False Positive Tuning to remove selected vulnerabilities from the list. <i>Note: This option is only available if you have one of the following user permissions: Admin or Remove Vulnerabilities. For more information, see the IBM Security QRadar Network Anomaly Detection Administration Guide.</i>

Viewing Vulnerability Details

Third-party scanners identify and report discovered vulnerabilities to QRadar Network Anomaly Detection using external references, such as the Open Source Vulnerability Database (OSVDB) and National Vulnerability Database (NVDB). Examples of third-party scanners include QualysGuard and nCircle ip360. The OSVDB assigns a unique reference identifier (OSVDB ID) to each vulnerability. Additionally, external data references can identify vulnerabilities with an ID. Examples of external data reference IDs include Common Vulnerability and Exposures (CVE) ID or Bugtraq ID.

For more information on scanners and vulnerability assessment, see the *IBM Security QRadar Vulnerability Assessment Configuration Guide*.

This procedure assumes you are viewing the Asset Profile page on the **Assets** tab and want to investigate the details of a vulnerability listed in the Ports and Vulnerabilities pane. If you are not viewing an Asset Profile page, see [Viewing Asset Profiles](#).

- To view vulnerability details, choose one of the following options:

- In the Ports and Vulnerabilities pane, double-click the row for the vulnerability you want to view.
- In the Ports and Vulnerabilities pane, click the link in the **Name** parameter for the vulnerability you want to view.

The Research Vulnerability Details window provides the following details:

Table 9-7 Research Vulnerabilities Details Window Details

Parameter	Description
Vuln ID	Specifies the ID of the vulnerability. The Vuln ID is a unique identifier that is generated by Vulnerability Information System (VIS).
Published Date	Specifies the date on which the vulnerability details were published on the OSVDB.
Name	Specifies the name of the vulnerability.
CVE	Specifies the CVE identifier for the vulnerability. CVE identifiers are provided by the NVDB. <p>► Click the link to obtain more information. When you click the link, the NVDB website is displayed in a new browser window.</p>
OSVDB	Specifies the OSVDB identifier for the vulnerability. <p>► Click the link to obtain more information. When you click the link, the OSVDB website is displayed in a new browser window.</p>
CVSS Score	Specifies the Common Vulnerability Scoring System (CVSS) score of the vulnerability. <p>A CVSS score is an metric for assessing the severity of a vulnerability. You can use CVSS scores to measure how much concern a vulnerability warrants in comparison to other vulnerabilities. For more information on CVSS, see http://www.first.org/cvss/.</p>
Description	Specifies a description of the detected vulnerability. This value is only available when integrating with VA tools.
Concern	Specifies the effects the vulnerability can have on your network.
Solution	Follow the instructions provided to resolve the vulnerability.

Table 9-7 Research Vulnerabilities Details Window Details (continued)

Parameter	Description
IPS/IDS Mitigation	<p>Displays information on the Intrusion Prevention System/Intrusion Detection System (IPS/IDS) device associated with this vulnerability.</p> <p>The IPS/IDS Mitigation table displays the following information:</p> <ul style="list-style-type: none"> • QID - Specifies the QID associated with this vulnerability. A QID assigns a unique identifier, high-level, and lower-level category to a single event from an external device. • Device Type - Specifies the device type associated with the QID. • Signature - Specifies the signature issued from the IPS/IDS device.
Reference	<p>Displays a list of external references, including:</p> <ul style="list-style-type: none"> • Reference Type - Specifies the type of reference listed, such as an advisory URL or mail post list. • URL - Specifies the URL that you can click to view the reference. <p>▶ Click the link to obtain more information. When you click the link, the external resource is displayed in a new browser window.</p>
Products	<p>Displays a list of products that are associated with this vulnerability.</p> <ul style="list-style-type: none"> • Vendor - Specifies the vendor of the product. • Product - Specifies the product name. • Version - Specifies the version number of the product.

Managing Asset Profiles

This section includes the following topics:

- [Adding an Asset Profile](#)
- [Editing an Asset](#)
- [Deleting Assets](#)
- [Importing Asset Profiles](#)
- [Exporting Assets](#)

Adding an Asset Profile

To add an asset profile:

NOTE

QRadar Network Anomaly Detection automatically discovers and adds asset profiles; therefore, adding an asset profile is typically not necessary.

- Step 1** Click the **Assets** tab.
- Step 2** On the navigation menu, click **Asset Profiles**.
- Step 3** Click **Add Asset**.
- Step 4** Enter values for the parameters:

Table 9-8 Add Asset Profile Parameters

Parameter	Description
IP	Type the IP address or CIDR range of the asset.
Asset Name	Type the name of the asset. This parameter is case sensitive. The maximum length is 255 characters.
Description	Type a description of the asset. The maximum length is 255 characters.
Asset Weight	From the list box, type the asset weight you want to assign to this asset. The range is 0 to 10. The default is 0.
Business Owner	Type the name of business owner of the asset. An example of a business owner is a department manager. The maximum length is 255 characters.
Business Owner Contact Info	Type the contact information for the business owner. The maximum length is 255 characters.
Technical Owner	Type the technical owner of the asset. An example of a business owner is the IT manager or director. The maximum length is 255 characters.
Technical Owner Contact Info	Type the contact information for the technical owner. The maximum length is 255 characters.
Location	Type the physical location of the asset. The maximum length is 255 characters.

- Step 5** Click **Save**.

After you add an asset profile, you can edit the profile to configure additional asset profile parameters, such as operating system and business owner information. See [Editing an Asset](#).

Editing an Asset

To edit an asset:

- Step 1** Click the **Assets** tab.
- Step 2** On the navigation menu, click **Asset Profiles**.
- Step 3** Search for asset profiles.

For more information on searching asset profiles, see [Viewing Asset Profiles](#)

Step 4 From the list of assets, select the asset you want to edit.

Step 5 Click **Edit Asset**.

Step 6 Edit the parameters. For more information on the parameters, see [Table 9-4](#).

Step 7 Click **Save Changes**.

Deleting Assets You can delete specific assets or all assets discovered by a search. This section includes the following topics:

- [Deleting an Asset](#)
- [Deleting All Assets](#)

Deleting an Asset

To delete an asset:

Step 1 Click the **Assets** tab.

Step 2 On the navigation menu, click **Asset Profiles**.

Step 3 Search for asset profiles.

For more information on searching asset profiles, see [Viewing Asset Profiles](#).

Step 4 From the list of assets, select the asset you want to delete.

NOTE

To delete multiple assets, use your Control key to select multiple assets.

Step 5 From the **Actions** list box, select **Delete Asset**.

Step 6 Click **OK**.

Deleting All Assets

To delete all assets:

Step 1 Click the **Assets** tab.

Step 2 On the navigation menu, click **Asset Profiles**.

Step 3 Search for asset profiles.

For more information on searching asset profiles, see [Viewing Asset Profiles](#).

Step 4 From the **Actions** list box, select **Delete Listed**.

Step 5 Click **OK**.

Importing Asset Profiles You can import asset profile information into QRadar Network Anomaly Detection. The imported file must be a CSV file in the following format:

```
ip,name,weight,description
```

Where:

- **IP** - Specifies any valid IP address in the dotted decimal format. For example: 192.168.5.34.
- **Name** - Specifies the name of this asset up to 255 characters in length. Commas are not valid in this field and invalidates the import process. For example: WebServer01 is correct.
- **Weight** - Specifies a number from 0 to 10, which indicates the importance of this asset on your network. A value of 0 denotes low importance and 10 is very high.
- **Description** - Specifies a textual description for this asset up to 255 characters in length. This value is optional.

For example, the following entries may be included in a CSV file:

```
192.168.5.34,WebServer01,5,Main Production Web Server
192.168.5.35,MailServ01,0,
```

The import process merges the imported asset profiles with the asset profile information you have currently stored in the system.

NOTE

If an error occurs during the import process, no assets are imported.

To import asset profiles:

- Step 1** Click the **Assets** tab.
- Step 2** On the navigation menu, click **Asset Profiles**.
- Step 3** Click **Browse** to locate and select the CSV file you want to import.
- Step 4** Click **Import Assets** to begin the import process.

Exporting Assets To export assets in XML or CSV format:

- Step 1** Click the **Assets** tab.
- Step 2** On the navigation menu, click **Asset Profiles**.
- Step 3** Search for asset profiles.
For more information on searching asset profiles, see [Viewing Asset Profiles](#).
- Step 4** From the **Actions** list box, select one of the following options:
 - Export to XML
 - Export to CSV

NOTE

If you want to continue navigating QRadar Network Anomaly Detection, you can click the **Notify When Done** link.

Step 5 Choose one of the following options:

- **Open** - Select this option to open the export results in your choice of browser.
- **Save** - Select this option to save the results to your desktop.

Step 6 Click **OK**.

Using the Search Feature

The Search feature allows you to search host profiles, assets, and identity information. Identity information provides additional details about log sources on your network, including DNS information, user logins, and MAC addresses.

This section includes the following topics:

- [Searching Asset Profiles](#)
- [Searching Assets By Vulnerability Attribute](#)

Searching Asset Profiles

To search asset profiles:

Step 1 Click the **Assets** tab.

Step 2 On the navigation menu, click **Asset Profiles**.

NOTE

If you want to search for all asset profiles in your deployment, click **Show All**.

The **Assets** tab toolbar provides the following options:

Table 9-9 Assets Tab Toolbar

Options	Description
Add Asset	Click Add Asset to add an asset profile. See Adding an Asset Profile .
Actions	Click Actions to import assets. See Importing Asset Profiles . <i>Note: The Actions menu is available only if you have administrative privileges. For more information, see the IBM Security QRadar Network Anomaly Detection Administration Guide.</i>

Step 3 In the Assets Properties pane, define your search criteria:

Table 9-10 Asset Properties

Parameter	Description
IP	Type the IP address or CIDR range of the assets you want to search for.
MAC	Type the MAC address of the asset you want to search for.

Table 9-10 Asset Properties (continued)

Parameter	Description
Host Name	Type the host name of the asset you want to search for. This search field is case insensitive and accepts any symbol characters.
Machine Name	Type the machine name of the asset you want to search for. This search field is case insensitive and accepts any symbol characters.
Username	Type the user of the assets you want to search for. This search field is case insensitive and accepts any symbol characters.
User Group	Type the user group of the assets you want to search for. This search field is case insensitive and accepts any symbol characters.
Extra Data	Type the text you want to search for. The content of this field is user-defined text and depends on the devices on your network that are available to provide identity data. Examples include: physical location of devices, relevant policies, or network switch and port names.
Asset Name	Type the name of the assets you want to search for. This search field is case insensitive and accepts any symbol characters.
Description	Type the description of the assets you want to search for.
Port	Type the ports (TCP or UDP) or port ranges of the assets you want to search for. You can enter multiple ports, separated by commas. For example, 80, 8080, or 6000 to 7000.
Risk Level	From the list box, select less than, equal to, or greater than the specified risk level. Then type the risk level of the assets you want to search for. The range is 0 to 10.
Network	From the list box, select the network of the assets you want to search.
Asset Weight	Type the asset weight of the assets you want to search for. From the list box, select whether you want to search for less than, equal to, or greater than the specified asset weight. Then type the asset weight you want to search for. The range is 0 to 10. The asset weight allows QRadar Network Anomaly Detection to appropriately prioritize offenses against high valued assets.
Show only hosts with vulnerabilities	Select this check box if you want only to display only assets with vulnerabilities in the search results.
Operating System	Type the operating system of the assets you want to search for. For example, Red Hat Linux®.

Table 9-10 Asset Properties (continued)

Parameter	Description
Host Name	Type the host name of the asset you want to search for. This search field is case insensitive and accepts any symbol characters.
Machine Name	Type the machine name of the asset you want to search for. This search field is case insensitive and accepts any symbol characters.
Username	Type the user of the assets you want to search for. This search field is case insensitive and accepts any symbol characters.
User Group	Type the user group of the assets you want to search for. This search field is case insensitive and accepts any symbol characters.
Extra Data	Type the text you want to search for. The content of this field is user-defined text and depends on the devices on your network that are available to provide identity data. Examples include: physical location of devices, relevant policies, or network switch and port names.
Asset Name	Type the name of the assets you want to search for. This search field is case insensitive and accepts any symbol characters.
Description	Type the description of the assets you want to search for.
Port	Type the ports (TCP or UDP) or port ranges of the assets you want to search for. You can enter multiple ports, separated by commas. For example, 80, 8080, or 6000 to 7000.
Risk Level	From the list box, select less than, equal to, or greater than the specified risk level. Then type the risk level of the assets you want to search for. The range is 0 to 10.
Network	From the list box, select the network of the assets you want to search.
Asset Weight	Type the asset weight of the assets you want to search for. From the list box, select whether you want to search for less than, equal to, or greater than the specified asset weight. Then type the asset weight you want to search for. The range is 0 to 10. The asset weight allows QRadar Network Anomaly Detection to appropriately prioritize offenses against high valued assets.
Show only hosts with vulnerabilities	Select this check box if you want only to display only assets with vulnerabilities in the search results.
Operating System	Type the operating system of the assets you want to search for. For example, Red Hat Linux®.

Table 9-10 Asset Properties (continued)

Parameter	Description
Service Vendor	Type the service vendor of the assets you want to search for. For example, RedHat inc.
Service Version	Type the service version of the assets you want to search for. For example, 7.1.

NOTE

The **Search** icon is available below each pane on the Asset Profile Search page. After you have specified your search criteria and do not require additional search criteria from the remaining panes, you can click the **Search** icon.

Step 4 In the Extended Assets Properties pane, define your search criteria:

Table 9-11 Extended Asset Properties

Parameter	Description
Business Owner	Type the business owner of the assets you want to search for. An example of a business owner is a department manager.
Business Owner Contact Info	Type the business owner contact information of the assets you want to search for.
Technical Owner	Type the technical owner of the assets you want to search for. An example of a technical owner is an IT manager or director.
Technical Owner Contact Info	Type the technical owner contact information of the assets you want to search for.
Location	Type the physical location of the assets you want to search for.

NOTE

The **Search** icon is available below each pane on the Asset Profile Search page. After you have specified your search criteria and do not require additional search criteria from the remaining panes, you can click the **Search** icon in that pane.

The search results are displayed. Now you can locate and select the asset you want to view. See [Viewing Asset Profiles](#).

Searching Assets By Vulnerability Attribute

Third party scanners, such as QualysGuard and nCircle ip360, report vulnerabilities to QRadar Network Anomaly Detection using external references from the Open Source Vulnerability Database (OSVDB) and National Vulnerability Database (NVD) to identify found vulnerabilities. Each vulnerability is assigned a unique reference identifier (OSVDB ID). Additionally, each vulnerability can be identified by external data references, such as a Common Vulnerability and Exposures (CVE) ID or Bugtraq ID.

Using the asset search feature, you can search for assets by external data references to determine if known vulnerabilities exist in your deployment.

For example:

You receive a notification that CVE ID: CVE-2010-000 is being actively exploited in the field. To verify if any hosts in your deployment are vulnerable to this exploit, you can type the `cve-2010-000` in the **CVE ID** search parameter to view a list of all hosts that are vulnerable to that specific CVE ID.

NOTE

For more information on OSVDB, see www.osvdb.org. For more information on NVDB, see <http://nvd.nist.gov/>.

To search assets by vulnerability attribute:

Step 1 Click the **Assets** tab.

Step 2 On the navigation menu, click **Asset Profiles**.

Step 3 In the Vulnerability Attributes pane, define your search criteria:

NOTE

Each search parameter field is case-insensitive and supports special characters to aid your search. The maximum length of each search string is 255 characters.

Table 9-12 Vulnerability Attributes

Parameter	Description
OSVDB ID	Type the vulnerability identifier, as defined on the OSVDB, of the assets you want to search for. You can type multiple OSVDB IDs, separated by commas.
Bugtraq ID	Type the Bugtraq ID you want to search for. For example, 1234.
CERT	Type Computer Emergency Response Team (CERT) advisory number you want to search for. For example, CA-2001-01.
CERT VU	Type the CERT vulnerability note (VU) number you want to search for. For example, 619982.
CIAC Advisory	Type the Computer Incident Advisory Capability (CIAC) advisory number you want to search for. For example, O-084.
CVE ID	Type the CVE ID you want to search for. For example, 2004-0001.
Exploit Database	Type the Exploit Database ID you want to search for.
FrSIRT Advisory	Type the French Security Incident Response Team (FrSIRT) Advisory ID you want to search for.
Generic Exploit URL	Type the Generic Exploit URL you want to search for. Note: Typically the Generic Exploit URL links to exploit script/code or a detailed text file explaining how to exploit a specific vulnerability.
Generic Informational URL	Type the Generic Informational URL you want to search for. Note: The Generic Information URL links to information about a type or class of vulnerability. For example, this attribute can contain a link to a white paper on DDoS attacks.
IBM APPSCAN	Type the IBM AppScan identifier you want to search for. For example, security-check-applicationtestscriptdetected.

Table 9-12 Vulnerability Attributes (continued)

Parameter	Description
ISS X-Force ID	Type the Internet Security System (ISS) X-Force ID you want to search for. For example, 1234.
Keyword	Type the keyword you want use to search all fields in the OSVDB.
Mail List Post	Type the URL for the Mail List Post ID you want to search for.
Metasploit ID	Type the Metasploit ID you want to search for.
Microsoft Knowledge Base Article	Type the Microsoft® Knowledge Base Article ID you want to search for. For example, KB958644.
Microsoft Security Bulletin	Type the Microsoft Security ID you want to search for. For example, MS04-004.
Milw0rm	Type the Milw0rm ID you want to search for. For example, 6824.
Nessus Script ID	Type the URL for the Nessus Script ID you want to search for. For example, 10123.
News Article	Type the URL for the News Article ID you want to search for. Note: <i>The News Article ID references mainstream news articles about specific vulnerabilities.</i>
Niko Item ID	Type the Niko Item ID you want to search for.
OVAL ID	Type the Open Vulnerability and Assessment Language (OVAL) ID you want to search for. For example, 5863.
Other Advisory URL	Type the Other Advisory URL you want to search for.
Other Solution URL	Type the Other Solution URL you want to search for.
Packet Storm	Type the Packet Storm reference you want to search for.
RedHat RHSA	Type the RedHat Security Alert (RHSA) ID you want to search for. For example, RHSA-2004:065-05.
Related OSVDB ID	Type the related OSVDB ID you want to search for. IDs are cross-referenced in the OSVDB. Typically OSVDB IDs are cross-referenced if the source of the information is the same.
SCIP VulDB ID	Type the Secure Communications Interoperability Protocol (SCIP) Vulnerability Database (VulDB) ID you want to search for.
Secunia Advisory ID	Type the Secunia Advisory ID you want to search for. For example: 10123.
Security Tracker	Type the Security Tracker ID you want to search for. For example, 1009695.
Snort Signature ID	Type the Snort Signature ID you want to search for. For example, 1324.
Tenable PVS	Type the Tenable Passive Vulnerability Scanner (PVS) ID you want to search for.
US-CERT Cyber Security Alert	Type the US-CERT Cyber Security Alert ID you want to search for. For example, TA06-333A.

Table 9-12 Vulnerability Attributes (continued)

Parameter	Description
VUPEN Advisory	Type the VUPEN Security ID you want to search for.
Vender Specific Advisory URL	Type the Vender Specific Advisory URL you want to search for.
Vendor Specific News/Changelog Entry	Type the URL of the Vendor Specific New/Changelog Entry you want to search for.
Vendor Specific Solution URL	Type the Vendor Specific Solution URL you want to search for.
Vendor URL	Type the Vendor URL you want to search for.

Step 4 Click **Search**.

The search results are displayed. Now you can locate and select the asset you want to view. See [Viewing Asset Profiles](#).

10

MANAGING REPORTS

You can use the **Reports** tab to create, edit, distribute, and manage reports.

This section includes the following topics:

- [Reports Tab Overview](#)
- [Using the Reports Tab](#)
- [Creating Custom Reports](#)
- [Customizing Default Reports](#)
- [Grouping Reports](#)
- [Manually Generating a Report](#)
- [Viewing Generated Reports](#)
- [Duplicating a Report](#)
- [Sharing a Report](#)
- [Branding Reports](#)

Reports Tab Overview

The **Reports** tab provides you with:

- Detailed reporting options required to satisfy various regulatory standards, such as PCI compliance.
- Flexibility in layout and content.

You can create your own custom reports in IBM Security QRadar QFlow Collector or use one of the default reports. You can customize and rebrand any of the default reports and distribute these to other QRadar Network Anomaly Detection users. Administrative users can view all reports created by other QRadar Network Anomaly Detection users. Non-administrative users can only view reports they created or reports which are shared by other users.

**CAUTION**

If you are running Microsoft® Exchange Server 5.5, unavailable font characters might be displayed in the subject line of emailed reports. To resolve this, download and install Service Pack 4 of Microsoft Exchange Server 5.5. For more information, contact Microsoft support.

To ensure that the Reports feature uses the correct date and time for reporting data, your QRadar Network Anomaly Detection session must be synchronized with your timezone. During the installation and setup of QRadar Network Anomaly Detection, the time zone is configured. Check with your administrator to ensure your QRadar Network Anomaly Detection session is synchronized with your timezone.

Using the Reports Tab

The **Reports** tab displays a list of default and custom reports. From the **Reports** tab, you can view statistical information about the reports template, perform actions on the report templates, view the generated reports, delete generated content.

This section includes the following topics:

- [Viewing Reports](#)
- [Using the Toolbar](#)
- [Viewing Generated Reports](#)
- [Deleting Generated Content](#)
- [Using the Status Bar](#)

Viewing Reports

On the **Reports** tab, you can view the list of reports and the statistical data for each report, such as the frequency with which the report is generated and the next time the report is scheduled to generate.

To view the list of reports:

- Step 1** Click the **Reports** tab.

The **Reports** tab provides the following information:

Table 10-1 Reports Tab Parameters

Parameters	Description
Flag Column	If an error occurred, causing the report generation to fail, the Error icon is displayed in this column.
Report Name	Specifies the report name.
Group	Specifies the group to which this report belongs.

Table 10-1 Reports Tab Parameters (continued)

Parameters	Description
Schedule	Specifies the frequency with which the report is generated. Reports that specify an interval schedule, when enabled, are automatically generated according to the specified interval. If a report does not specify an interval schedule, you must manually generate the report. See Manually Generating a Report .
Next Run Time	Specifies the duration of time, in hours and minutes, until the next report is generated.
Last Modification	Specifies the last date this report was modified.
Owner	Specifies the QRadar Network Anomaly Detection user that owns the report.
Author	Specifies the QRadar Network Anomaly Detection user that created the report.
Generated Reports	From this list box, select the date stamp of the generated report you want to view. When you select the date stamp, the Format parameter displays the available formats for the generated reports. See Viewing Generated Reports . If no reports have been generated, None is displayed.
Formats	Specifies the report formats of the currently selected report in the Generated Reports column. Click the icon for the format you want to view. Report formats include: <ul style="list-style-type: none"> • PDF - Portable Document Format • HTML - Hyper Text Markup Language format • RTF - Rich Text Format • XML - Extensible Markup Language (only available for tables) • XLS - Microsoft Excel format (only available for tables)

Step 2 Point your mouse over any report to preview a report summary in a tooltip.

The summary specifies the report configuration and the type of content the report generates.

NOTE

By default, reports are sorted by the **Last Modification** column. On the Reports navigation menu, reports are sorted by interval schedule. To filter the report to only display reports of a specific frequency, click the arrow beside the **Report** menu item on the navigation menu and select the group (frequency) folder.

Using the Toolbar

You can use the toolbar to perform a number of actions on reports. The following table identifies and describes the Reports toolbar options.

Table 10-2 Reports Tab Toolbar Options

Option	Description
Group	From the list box, select the group you want to view. The group is displayed with the assigned reports. For more information, see Grouping Reports .
Manage Groups	Click Manage Groups to manage report groups. Using the Manage Groups feature, you can organize your reports into functional groups. For more information, see Grouping Reports .
Actions	Click ACTIONS to perform the following actions: <ul style="list-style-type: none"> • Create - Select this option to create a new report. For more information, see Customizing Default Reports. • Edit - Select this option to edit the selected report. You can also double-click a report to edit the content. • Duplicate - Select this option to duplicate or rename the selected report. For more information, see Duplicating a Report. • Assign Groups - Select this option to assign the selected report to a report group. For more information, see Grouping Reports. • Share - Select this option to share the selected report with other users. You must have administrative privileges to share reports. For more information, see Sharing a Report. • Toggle Scheduling - Select this option to toggle the selected report to the Active or Inactive state. • Run Report - Select this option to generate the selected report. For more information, see Manually Generating a Report. To generate multiple reports, hold the Control key and click on the reports you want to generate. • Delete Report - Select this option to delete the selected report. To delete multiple reports, hold the Control key and click on the reports you want to delete. • Delete Generated Content - Select this option to delete all generated content for the selected rows. To delete multiple generated reports, hold the Control key and click on the generate reports you want to delete.
Hide Inactive Reports	Select this check box to hide inactive report templates. The Reports tab automatically refreshes and displays only active reports. Clear the check box to show the hidden inactive reports.

Table 10-2 Reports Tab Toolbar Options (continued)

Option	Description
Search Reports	Type your search criteria in the Search Reports field and click the Search Reports icon. A search is run on the following parameters to determine which match your specified criteria: <ul style="list-style-type: none"> • Report Title • Report Description • Report Groups • Report Author User Name

Viewing Generated Reports

You can view generated reports listed on the **Reports** tab. These reports have been previously generated, and may already be distributed to other QRadar Network Anomaly Detection users. You can view only the reports to which you have been given access from the QRadar Network Anomaly Detection administrator. Administrative users can access all reports. Reports can be presented in one of the following formats:

- **PDF** - Portable Document Format
- **HTML** - Hyper Text Markup Language format
- **RTF** - Rich Text Format
- **XML** - Extensible Markup Language (only available for tables)
- **XLS** - Microsoft Excel format

The XML and XLS formats are available only for reports that use a single chart table format (portrait or landscape).

NOTE

If you use Mozilla Firefox as your browser and you select the RTF report format, FireFox launches a new browser window. This new window launch is the result of the FireFox browser configuration and does not affect QRadar Network Anomaly Detection. You can close the window and continue with your QRadar Network Anomaly Detection session.

To view a generated report:

Step 1 Click the **Reports** tab.

NOTE

The **Reports** tab may require an extended period of time to refresh if your system includes a large number of reports.

Step 2 From the list box in the **Generated Reports** column, select the time-stamp of report you want to view.

When a report has generated content, the **Generated Reports** column displays a list box. The list box displays all generated content, organized by the time-stamp of the report. The most recent reports are displayed at the top of the list. If a report

has no generated content, the **None** value is displayed in the **Generated Reports** column.

Icons representing the report format of the generated report are displayed in the **Formats** column.

Step 3 Click the icon for the format you want to view.

The report opens in the selected format.

Deleting Generated Content When you delete generated content, all reports that have generated from the report template are deleted, but the report template is retained.

To delete generated content from a report:

Step 1 Click the **Reports** tab.

Step 2 Select the reports for which you want to delete the generated content.

Step 3 From the **Actions** list box, click **Delete Generated Content**.

All generated content for the selected report is deleted.

Using the Status Bar The status bar displays the number of search results (**Displaying 1 of 10 items**) currently displayed and the amount of time (**Elapsed time:**) required to process the search results.

Creating Custom Reports

On the **Reports** tab, you can access the Report Wizard to create a new report. The Report Wizard provides a step-by-step guide on how to design, schedule, and generate reports. The wizard uses the following key elements to help you create a report:

- **Layout** - Position and size of each container
- **Container** - Placeholder for the featured content
- **Content** - Definition of the chart that is placed in the container

This section includes the following topics:

- [Creating a Report](#)
- [Configuring Charts](#)
- [Selecting a Graph Type](#)

Creating a Report To create a report:

Step 1 Click the **Reports** tab.

Step 2 From the **Actions** list box, select **Create**.

Step 3 Click **Next** to move to the next page of the Report Wizard.

Step 4 Select one of the following scheduling options.

- **Manually** - Generates a report once. This is the default setting; however, you can generate this report as often as required.
- **Hourly** - Schedules the report to generate at the end of each hour using the data from the previous hour.

If you choose the **Hourly** option, further configuration is required. From the list boxes, select a time frame to begin and end the reporting cycle. A report is generated for each hour within this time frame. Time is available in half-hour increments. The default is 1:00 a.m. for both the **From** and **To** fields.

- **Daily** - Schedules the report to generate daily using the data from the previous day. For each chart on a report, you can select the previous 24 hours of the day, or select a specific time frame from the previous day.

If you choose the **Daily** option, further configuration is required. Select the check box beside each day you want to generate a report. Also, you can use the list box to select a time to begin the reporting cycle. Time is available in half-hour increments. The default is 1:00 a.m.

- **Weekly** - Schedules the report to generate weekly using the data from the previous week.

If you choose the **Weekly** option, further configuration is required. Select the day you want to generate the report. The default is Monday. From the list box, select a time to begin the reporting cycle. Time is available in half-hour increments. The default is 1:00 a.m.

- **Monthly** - Schedules the report to generate monthly using the data from the previous month.

If you choose the **Monthly** option, further configuration is required. From the list box, select the date you want to generate the report. The default is the first day of the month. Also, use the list box to select a time to begin the reporting cycle. Time is available in half-hour increments. The default is 1:00 a.m.

NOTE

After creating a report that generates weekly or monthly, the scheduled time must have elapsed before the generated report returns results. For a scheduled report, you must wait the scheduled time period for the results to build. For example, a weekly search requires 7 days to build the data. This search does not return results before 7 days has elapsed.

Step 5 In the Allow this report to generate manually pane, select one of the following options:

- **Yes** - Enables manual generation of this report.
- **No** - Disables manual generation of this report.

Step 6 Click **Next** to move to the next page of the Report Wizard.

A report can consist of several data elements and can represent network and security data in a variety of styles, such as tables, line charts, pie charts, and bar charts.

When you select the layout of a report, consider the type of report you want to create. For example, do not choose a small chart container for graph content that displays a large number of objects. Each graph includes a legend and a list of networks from which the content is derived; choose a large enough container to hold the data. To preview how each chart displays a data, see [Selecting a Graph Type](#).

Step 7 Configure the layout of your report:

- a From the **Orientation** list box, select the page orientation: Portrait or Landscape. The default is Landscape.
- b Select one of the six layout options displayed on the Report Wizard.
- c Click **Next** to move to the next page of the Report Wizard.

Step 8 Specify values for the following parameters:

- **Report Title** - Type a report title. The title can be up to 100 characters in length. Do not use special characters.
- **Logo** - From the list box, select a logo. The QRadar Network Anomaly Detection logo is the default logo. For more information on branding your report, see [Branding Reports](#).

Step 9 To configure each container in the report:

- a From the **Chart Type** list box, select a chart type. Options include:

- **None**

When you select the **None** option, the container is displayed empty in the report. This option may be useful for creating white space in your report. If you select the None option for any container, no further configuration is required for that container.

- **Asset Vulnerabilities**
- **Event/Logs**
- **Flows**
- **Top Destination IPs**
- **Top Offenses**
- **Top Source IPs**

After you select a chart type, the next page of the Wizard opens enabling you to configure the contents for that particular container.

- b Configure the chart.

For detailed information about configuring your chart, see [Configuring Charts](#).

- c Click **Save Container Details**.

The Wizard returns to the previous page, enabling you to specify more contents for your report.

- d If required, repeat steps **a** to **c** for all containers.
- e Click **Next** to move to the next page of the Report Wizard.

Charts displayed on the preview page do not display actual data. This is only a graphical representation of the layout you have configured.

- Step 10** Click **Next** to move to the next step of the Report Wizard.
- Step 11** Select the check boxes for the report formats. You can select more than one option. The options are:
 - Portable Document Format (PDF) - This is the default report format.
 - Hypertext Markup Language (HTML)
 - Rich Text Format (RTF)
 - Extended Markup Language (XML)
 - Excel Spreadsheet (XLS)

NOTE

The file size of generated reports can be one to two megabytes, depending on the selected output format. We recommend that you use PDF format; PDF format is smaller in size and does not consume a large quantity of disk storage space.

- Step 12** Click **Next** to move to the next page of the Report Wizard.
- Step 13** Select the distribution channels you want for your report.

Table 10-3 Generated Report Distribution Options

Options	Description
Report Console	Select this check box to send the generated report to the Reports tab. This is the default distribution channel.
Select the users that should be able to view the generated report.	<p>This option is only displayed after you select the Report Console check box.</p> <p>From the list of users, select the QRadar Network Anomaly Detection users you want to grant permission to view the generated reports.</p> <p>Note: You must have appropriate network permissions to share the generated report with other users. For more information on permissions, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Select all users	<p>This option is only displayed after you select the Report Console check box.</p> <p>Select this check box if you want to grant permission to all QRadar Network Anomaly Detection users to view the generated reports.</p> <p>Note: You must have appropriate network permissions to share the generated report with other users. For more information on permissions, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Email	Select this check box if you want to distribute the generated report using email.

Table 10-3 Generated Report Distribution Options (continued)

Options	Description
Enter the report distribution email address(es)	<p>This option is only displayed after you select the Email check box.</p> <p>Type the email address for each generated report recipient; separate a list of email addresses with commas. The maximum characters for this parameter is 255.</p> <p>Note: <i>Email recipients receive this email from <code>no_reply_reports@qradar</code>.</i></p>
Include Report as attachment (non-HTML only)	<p>This option is only displayed after you select the Email check box.</p> <p>Select this check box to send the generated report as an attachment.</p>
Include link to Report Console	<p>This option is only displayed after you select the Email check box.</p> <p>Select this check box to include a link the Report Console in the email.</p>

Step 14 Click **Next** to go to the final step of the Report Wizard.

Step 15 Enter values for the following parameters:

Table 10-4 Finishing Up Parameters

Parameter	Description
Report Description	Type a description for this report. The description is displayed on the Report Summary page and in the generated report distribution email.
Groups	Select the groups to which you want to assign this report. For more information on groups, see Grouping Reports .
Would you like to run the report now?	Select this check box if you want to generate the report when the wizard is complete. By default, the check box is selected.

Step 16 Click **Next** to view the report summary.

The Report Summary page provides the details for the report. You can select the tabs available on the summary report to preview the report selections.

Step 17 Click **Finish**.

The report immediately generates. If you cleared the **Would you like to run the report now?** check box on the final page of the wizard, the report is saved and generates as scheduled.

The report title is the default title for the generated report. If you re-configure a report to enter a new report title, the report is saved as a new report with the new name; however, the original report remains the same.

Configuring Charts The chart type determines how the generated report presents data and network objects. You can chart data with several characteristics and create the charts in a single generated report.

The following chart types are available for each report:

- **Asset Vulnerabilities**
- **Event/Logs**
- **Event/Logs**
- **Flows**
- **Top Destination IPs**
- **Top Offenses**
- **Top Source IPs**

Asset Vulnerabilities

You can use the Asset Vulnerabilities chart to view vulnerability data for each defined asset in your deployment. You can generate Asset Vulnerability charts when vulnerabilities have been detected by a VA scan. For more information, see the *IBM Security QRadar Vulnerability Assessment Configuration Guide*.

- ▶ To configure the Assets Vulnerabilities Chart container details, enter values for the following parameters:

Table 10-5 Asset Vulnerabilities Chart Container Details

Parameter	Description
Container Details - Assets	
Chart Title	Type a chart title to a maximum of 100 characters.
Chart Sub-Title	Clear the check box to change the automatically created sub-title. Type a title to a maximum of 100 characters.
Limit Assets to Top	From the list box, select how many assets you want to include in this report.

Table 10-5 Asset Vulnerabilities Chart Container Details (continued)

Parameter	Description
Graph Type	<p>From the list box, select the type of graph to display on the generated report. Options include:</p> <ul style="list-style-type: none"> • Aggregate Table - Displays the data in an aggregated table, which is a table that contains sub-tables (sub-reports). When you select this option, you must configure the sub-report details. The Table option is only available for the full page width container. • Bar - Displays the data in a bar chart. When you select this option, the report does not include sub-report data. This is the default. This graph type requires the saved search to be a grouped search. • Pie - Displays the data in a pie chart. When you select this option, the report does not include sub-report data. This graph type requires the saved search to be a grouped search. <p>To view examples of each graph charts data type, see Selecting a Graph Type.</p>
Order Assets By	<p>Select the type of data on which you want the chart to be ordered. Options include:</p> <ul style="list-style-type: none"> • Asset Weight - Orders the data by the asset weight defined in the asset profile. • CVSS Risk - Orders the data by the Common Vulnerability Scoring System (CVSS) risk level. For more information on CVSS, see http://www.first.org/cvss/. • Vulnerability Count - Orders the data by the vulnerability count of the assets.
Sub-Report Details	
Sub-report	Specifies the type of information that displays in the sub-report.
Order Sub-report By	<p>Select the parameter by which you want to organize the sub-report data. The options include:</p> <ul style="list-style-type: none"> • Risk (Base Score) • OSVDB ID • OSVDB Title • Last Modified Date • Disclosure Date • Discovery Date <p>For more information on the Open Source Vulnerability Database (OSVDB), see www.osvdb.org.</p>
Limit Sub-report to Top	From the list box, select how many vulnerabilities you want to include in this sub-report.
Graph Content	

Table 10-5 Asset Vulnerabilities Chart Container Details (continued)

Parameter	Description
Vulnerabilities	To specify the vulnerabilities you want to report: <ol style="list-style-type: none"> 1 Click Browse. 2 From the Search by list box, select the vulnerability attribute you want to search by. Options include CVE ID, Bugtraq ID, OSVDB ID, and OSVDB Title. For more information on vulnerability attributes, see Managing Assets - Searching Assets By Vulnerability Attribute. 3 From the Search Results list, select the vulnerabilities you want to report. Click Add. 4 Click Submit.
IP Address	Type the IP address, CIDR, or a comma-delimited list of IP addresses you want to report. Partial CIDRs are permitted.
Networks	From the navigation tree, select one or more networks from which to gather chart data.

Event/Logs

You can use the Event/Logs chart to view event information. You can base your charts on data from saved searches from the **Log Activity** tab. This allows you to customize the data that you want to display in the generated report. You can configure the chart to plot data over a configurable period of time. This functionality helps you to detect event trends.

For more information on saved searches, see [Searching Data](#).

- To configure the Event/Logs Chart container details, enter values for the following parameters:

Table 10-6 Event/Logs Chart Container Details

Parameter	Description
Container Details - Events/Logs	
Chart Title	Type a chart title to a maximum of 100 characters.
Chart Sub-Title	Clear the check box to change the automatically created sub-title. Type a title to a maximum of 100 characters.
Limit Events/Logs to Top	From the list box, select the number of events/logs to be displayed in the generated report.

Table 10-6 Event/Logs Chart Container Details (continued)

Parameter	Description
Graph Type	<p data-bbox="748 338 1458 401">From the list box, select the type of graph to display on the generated report. Options include:</p> <ul data-bbox="748 411 1458 768" style="list-style-type: none"><li data-bbox="748 411 1458 495">• Bar - Displays the data in a bar chart. This is the default graph type. This graph type requires the saved search to be a grouped search.<li data-bbox="748 506 1235 533">• Line - Displays the data in a line chart.<li data-bbox="748 548 1458 611">• Pie - Displays the data in a pie chart. This graph type requires the saved search to be a grouped search.<li data-bbox="748 621 1430 648">• Stacked Bar - Displays the data in a stacked bar chart.<li data-bbox="748 659 1446 686">• Stacked Line - Displays the data in a stacked line chart.<li data-bbox="748 697 1458 760">• Table - Displays the data in table format. The Table option is only available for the full page width container only. <p data-bbox="748 779 1458 842">To view examples of each graph charts data type, see Selecting a Graph Type.</p>

Table 10-6 Event/Logs Chart Container Details (continued)

Parameter	Description
Manual Scheduling	<p>The Manual Scheduling pane is displayed only if you selected the Manually scheduling option in the Report Wizard.</p> <p>Using the Manual Scheduling options, you can create a manual schedule that can run a report over a custom defined period of time, with the option to only include data from the hours and days that you select. For example, you can schedule a report to run from October 1 to October 31, only including data generated during your business hours, such as Monday to Friday, 8 AM to 9 PM.</p> <p>To create a manual schedule:</p> <ol style="list-style-type: none"> 1 From the From list box, type the start date you want for the report, or select the date using the Calendar icon. The default is the current date. 2 From the list boxes, select the start time you want for the report. Time is available in half-hour increments. The default is 1:00 a.m. 3 From the To list box, type the end date you want for the report, or select the date using the Calendar icon. The default is the current date. 4 From the list boxes, select the end time you want for the report. Time is available in half-hour increments. The default is 1:00 a.m. 5 From the Timezone list box, select the time zone you want to use for your report. <p><i>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the event search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</i></p> <p>To further refine your schedule:</p> <ol style="list-style-type: none"> 1 Select the Targeted Data Selection check box. More options are displayed. 2 Select the Only hours from check box, and then using the list boxes, select the time range you want for your report. For example, you can select only hours from 8:00 AM to 5:00 PM. 3 Select the check box for each day of the week you want to schedule your report for.

Table 10-6 Event/Logs Chart Container Details (continued)

Parameter	Description
Hourly Scheduling	<p>The Hourly Scheduling pane is displayed only if you selected the Hourly scheduling option in the Report Wizard.</p> <ul style="list-style-type: none"> ▶ From the Timezone list box, select the time zone you want to use for your report. <p>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the event search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</p> <p>Hourly Scheduling automatically graphs all data from the previous hour.</p>
Daily Scheduling	<p>The Daily Scheduling pane is displayed only if you selected the Daily scheduling option in the Report Wizard.</p> <ol style="list-style-type: none"> 1 Choose one of the following options: <ul style="list-style-type: none"> • All data from previous day (24 hours) • Data of previous day from - From the list boxes, select the period of time you want for the generated report. Time is available in half-hour increments. The default is 1:00 a.m. 2 From the Timezone list box, select the time zone you want to use for your report. <p>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the event search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</p>

Table 10-6 Event/Logs Chart Container Details (continued)

Parameter	Description
Weekly Scheduling	<p>The Weekly Scheduling pane is displayed only if you selected the Weekly scheduling option in the Report Wizard.</p> <ol style="list-style-type: none"> Choose one of the following options: <ul style="list-style-type: none"> All data from previous week All Data from previous week from - From the list boxes, select the period of time you want for the generated report. The default is Sunday. From the Timezone list box, select the time zone you want to use for your report. <p><i>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the event search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</i></p> <p>To further refine your schedule:</p> <ol style="list-style-type: none"> Select the Targeted Data Selection check box. More options are displayed. Select the Only hours from check box, and then using the list boxes, select the time range you want for your report. For example, you can select only hours from 8:00 AM to 5:00 PM. Select the check box for each day of the week you want to schedule your report for.

Table 10-6 Event/Logs Chart Container Details (continued)

Parameter	Description
Monthly Scheduling	<p>The Monthly Scheduling pane is displayed only if you selected the Monthly scheduling option in the Report Wizard.</p> <ol style="list-style-type: none"> 1 Choose one of the following options: <ul style="list-style-type: none"> • All data from previous month • Data from previous month from the - From the list boxes, select the period of time you want for the generated report. The default is 1st to 31st. 2 From the Timezone list box, select the time zone you want to use for your report. <p><i>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the event search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</i></p> <p>To further refine your schedule:</p> <ol style="list-style-type: none"> 1 Select the Targeted Data Selection check box. More options are displayed. 2 Select the Only hours from check box, and then using the list boxes, select the time range you want for your report. For example, you can select only hours from 8:00 AM to 5:00 PM. 3 Select the check box for each day of the week you want to schedule your report for.
Graph Content	
Group	From the list box, select a saved search group to display the saved searches belonging to that group in the Available Saved Searches list box.
Type Saved Search or Select from List	To refine the Available Saved Searches list, type the name of the search you want to locate in the Type Saved Search or Select from List field. You can also type a keyword to display a list of searches that include that keyword. For example, type Firewall to display a list of all searches that include Firewall in the search name.

Table 10-6 Event/Logs Chart Container Details (continued)

Parameter	Description
Available Saved Searches	Provides a list of available saved searches. By default, all available saved searches are displayed, however, you can filter the list by selecting a group from the Group list box or typing the name of a known saved search in the Type Saved Search or Select from List field.
Create New Event Search	Click Create New Event Search to create a new search. For more information on how to create an event search, see Investigating Events .

Flows

You can use the Flows chart to view flow information. You can base your charts on data from saved searches from the **Network Activity** tab. This allows you to customize the data that you want to display in the generated report. You can use saved searches to configure the chart to plot flow data over a configurable period of time. This functionality helps you to detect flow trends.

For more information on saved searches, see [Searching Data](#).

- ▶ To configure the Flows container details, enter values for the following parameters:

Table 10-7 Flows Container Details

Parameter	Description
Container Details - Flows	
Chart Title	Type a chart title to a maximum of 100 characters.
Chart Sub-Title	Clear the check box to change the automatically created sub-title. Type a title to a maximum of 100 characters.
Limit Flows to Top	From the list box, select the number of flows to be displayed in the generated report.
Graph Type	From the list box, select the type of graph to display on the generated report. Options include: <ul style="list-style-type: none"> • Bar - Displays the data in a bar chart. This is the default graph type. This graph type requires the saved search to be a grouped search. • Line - Displays the data in a line chart. • Pie - Displays the data in a pie chart. This graph type requires the saved search to be a grouped search. • Stacked Bar - Displays the data in a stacked bar chart. • Stacked Line - Displays the data in a stacked line chart. • Table - Displays the data in table format. To view examples of each graph charts data type, see Selecting a Graph Type .

Table 10-7 Flows Container Details (continued)

Parameter	Description
Manual Scheduling	<p>The Manual Scheduling pane is displayed only if you selected the Manually scheduling option in the Report Wizard.</p> <p>Using the Manual Scheduling options, you can create a manual schedule that can run a report over a custom defined period of time, with the option to only include data from the hours and days that you select. For example, you can schedule a report to run from October 1 to October 31, only including data generated during your business hours, such as Monday to Friday, 8 AM to 9 PM.</p> <p>To create a manual schedule:</p> <ol style="list-style-type: none"> 1 From the From list box, type the start date you want for the report, or select the date using the Calender icon. The default is the current date. 2 From the list boxes, select the start time you want for the report. Time is available in half-hour increments. The default is 1:00 a.m. 3 From the To list box, type the end date you want for the report, or select the date using the Calender icon. The default is the current date. 4 From the list boxes, select the end time you want for the report. Time is available in half-hour increments. The default is 1:00 a.m. 5 From the Timezone list box, select the time zone you want to use for your report. <p><i>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the flow search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</i></p> <p>To further refine your schedule:</p> <ol style="list-style-type: none"> 1 Select the Targeted Data Selection check box. More options are displayed. 2 Select the Only hours from check box, and then using the list boxes, select the time range you want for your report. For example, you can select only hours from 8:00 AM to 5:00 PM. 3 Select the check box for each day of the week you want to schedule your report for.

Table 10-7 Flows Container Details (continued)

Parameter	Description
Hourly Scheduling	<p>The Hourly Scheduling pane is displayed only if you selected the Hourly scheduling option in the Report Wizard.</p> <p>► From the Timezone list box, select the time zone you want to use for your report.</p> <p>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the flow search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</p> <p>Hourly Scheduling automatically graphs all data from the previous hour.</p>
Daily Scheduling	<p>The Daily Scheduling pane is displayed only if you selected the Daily scheduling option in the Report Wizard.</p> <p>1 Choose one of the following options:</p> <ul style="list-style-type: none"> • All data from previous day (24 hours) • Data of previous day from - From the list boxes, select the period of time you want for the generated report. Time is available in half-hour increments. The default is 1:00 a.m. <p>2 From the Timezone list box, select the time zone you want to use for your report.</p> <p>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the flow search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</p>

Table 10-7 Flows Container Details (continued)

Parameter	Description
Weekly Scheduling	<p>The Weekly Scheduling pane is displayed only if you selected the Weekly scheduling option in the Report Wizard.</p> <ol style="list-style-type: none"> 1 Choose one of the following options: <ul style="list-style-type: none"> • All data from previous week • All Data from previous week from - From the list boxes, select the period of time you want for the generated report. The default is Sunday. 2 From the Timezone list box, select the time zone you want to use for your report. <p><i>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the flow search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</i></p> <p>To further refine your schedule:</p> <ol style="list-style-type: none"> 1 Select the Targeted Data Selection check box. More options are displayed. 2 Select the Only hours from check box, and then using the list boxes, select the time range you want for your report. For example, you can select only hours from 8:00 AM to 5:00 PM. 3 Select the check box for each day of the week you want to schedule your report for.

Table 10-7 Flows Container Details (continued)

Parameter	Description
Monthly Scheduling	<p>The Monthly Scheduling pane is displayed only if you selected the Monthly scheduling option in the Report Wizard.</p> <ol style="list-style-type: none"> Choose one of the following options: <ul style="list-style-type: none"> All data from previous month Data from previous month from the - From the list boxes, select the period of time you want for the generated report. The default is 1st to 31st. From the Timezone list box, select the time zone you want to use for your report. <p><i>Note: When configuring the Timezone parameter, consider the location of the Event Processors associated with the flow search used to gather data for some of the reported data. If the report uses data from multiple Event Processors spanning multiple time zones, the configured time zone may be incorrect. For example, if your report is associated to data collected from Event Processors in North America and Europe, and you configure the time zone as GMT -5.00 America/New_York, the data from Europe reports the time zone incorrectly.</i></p> <p>To further refine your schedule:</p> <ol style="list-style-type: none"> Select the Targeted Data Selection check box. More options are displayed. Select the Only hours from check box, and then using the list boxes, select the time range you want for your report. For example, you can select only hours from 8:00 AM to 5:00 PM. Select the check box for each day of the week you want to schedule your report for.
Graph Content	
Group	<p>From the list box, select a saved search group to display the saved searches belonging to that group in the Available Saved Searches list box.</p>
Type Saved Search or Select from List	<p>To refine the Available Saved Searches list, type the name of the search you want to locate in the Type Saved Search or Select from List field. You can also type a keyword to display a list of searches that include that keyword. For example, type Firewall to display a list of all searches that include Firewall in the search name.</p>

Table 10-7 Flows Container Details (continued)

Parameter	Description
Available Saved Searches	Provides a list of available saved searches. By default, all available saved searches are displayed, however, you can filter the list by selecting a group from the Group list box or typing the name of a known saved search in the Type Saved Search or Select from List field.
Create New Flow Search	Click Create New Flow Search to create a new search. For more information on creating a flow search, see Investigating Flows .

Top Source IPs

The Top Source IPs chart displays and sorts the top offense sources (IP addresses) that attack your network or business assets.

- To configure the Top Source IPs container details, enter values for the following parameters:

Table 10-8 Top Source IPs Container Details

Parameter	Description
Container Details - Top Source IPs	
Chart Title	Type a chart title to a maximum of 100 characters.
Chart Sub-Title	Clear the check box to change the automatically created sub-title. Type a title to a maximum of 100 characters.
Top	From the list box, select the number of sources to include on the graphs.
Graph Type	From the list box, select the type of graph to display on the generated report. Options include: <ul style="list-style-type: none"> • Table - Displays the data in table format (with full-width container only). • Horizontal Bar - Displays the data in a bar chart.
Order Results By	From the list box, select how the data is sorted on the graph. Options include: <ul style="list-style-type: none"> • Asset Weight • Risk • Magnitude
Graph Content	
Networks	From the navigation tree, select one or more networks from which to gather chart data.

Top Offenses

The Top Offenses chart displays the TopN offenses that occur at present time for the network locations you select.

- ▶ To configure the Top Offenses container details, enter values for the following parameters:

Table 10-9 Top Offenses Container Details

Parameter	Description
Container Details - Top Offenses	
Chart Title	Type a chart title to a maximum of 100 characters.
Chart Sub-Title	Clear the check box to change the automatically created sub-title. Type a title to a maximum of 100 characters.
Top	From the list box, select the number of offenses to include on the graphs. The default is 10.
Include	<p>Select the check box beside the option you want to include in the generated report. The options are:</p> <ul style="list-style-type: none"> • Active Offenses • Inactive Offenses • Hidden Offenses • Closed Offenses <p>The Active Offenses and Inactive Offenses options are selected by default.</p> <p>If you clear all check boxes, no restrictions are applied to the generated report; therefore, the generated report includes all offenses.</p>
Offenses Category	<p>From the High Level Category list box, select the high-level category you want to include in the generated report.</p> <p>From the Low Level Category list box, select a low-level category you want to include in the generated report.</p> <p>For more information on high- and low-level categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Graph Type	<p>From the list box, select the type of graph to display on the generated report. Options include:</p> <ul style="list-style-type: none"> • Table - Displays the data in table format (full-width container only). • Horizontal Bar -Displays the data in a bar chart.

Table 10-9 Top Offenses Container Details (continued)

Parameter	Description
Order Results By:	From the list box, select how the data is sorted on the graph. Options include: <ul style="list-style-type: none"> • Severity • Magnitude • Relevance • Credibility
Graph Content	
Networks	From the navigation tree, select one or more networks from which to gather chart data.

Top Destination IPs

The Top Destination IPs chart displays the top destination IPs in the network locations you select.

- ▶ To configure the Top Destination IPs container details, enter values for the following parameters:

Table 10-10 Top Destination IPs Container Details

Parameter	Description
Container Details - Top Destination IPs	
Chart Title	Type a chart title to a maximum of 100 characters.
Chart Sub-Title	Clear the check box to change the automatically created sub-title. Type a title to a maximum of 100 characters.
Top	From the list box, select the number of items to include on the graphs. The default is 10.
Graph Type	From the list box, select the type of graph to display on the generated report. Options include: <ul style="list-style-type: none"> • Table - Displays the data in table format (full-width container only). • Horizontal Bar - Displays the data in a bar chart.
Order Results By	From the list box, select how the data is displayed on the graph. Options include: <ul style="list-style-type: none"> • Asset Weight • Risk Level • Magnitude
Graph Content	
Networks	From the navigation tree, select one or more networks from which to gather chart data.

Selecting a Graph Type

Each chart type supports a variety of graph types you can use to display data. The network configuration files determine the colors the charts use to depict network traffic. Each IP address is depicted using a unique color.

The following table provides examples of how QRadar Network Anomaly Detection charts network and security data:

Table 10-11 Graph Types

Graph Type	Availability
Line Graph	Available with the following chart types: <ul style="list-style-type: none"> • Events/Logs • Flows
Stacked Line Graph	Available with the following chart types: <ul style="list-style-type: none"> • Events/Logs • Flows
Bar Graph	Available with the following chart types: <ul style="list-style-type: none"> • Events/Logs • Flows • Asset Vulnerabilities
Horizontal Bar Graph	Available with the following chart types: <ul style="list-style-type: none"> • Top Source IPs • Top Offenses • Top Destination IPs
Stacked Bar Graph	Available with the following chart types: <ul style="list-style-type: none"> • Events/Logs • Flows
Pie Graph	Available with the following chart type: <ul style="list-style-type: none"> • Events/Logs • Flows • Asset Vulnerabilities
Table Graph	Available with the following charts: <ul style="list-style-type: none"> • Event/Logs • Flows • Top Source IPs • Top Offenses • Top Destination IPs <p>To display content in a table, you must design the report with a full page width container.</p>

Table 10-11 Graph Types (continued)

Graph Type	Availability
Aggregate Table	Available with the Asset Vulnerabilities chart. To display content in a table, you must design the report with a full page width container.

Customizing Default Reports

QRadar Network Anomaly Detection provides a significant number of default reports that you can use or customize. The default **Reports** tab displays the list of reports. Each report captures and displays the existing data.

To customize default reports:

Step 1 Click the **Reports** tab.

Step 2 Double-click the report you want to customize.

The Report Wizard displays the parameters as preconfigured for the default report.

Step 3 Customize the report.

You can change any parameters to customize the report to generate the content you require. See [Creating Custom Reports](#).

Grouping Reports

On the **Reports** tab, you can sort the list of reports into functional groups. If you categorize reports into groups, you can efficiently organize and find reports. For example, you can view all reports related to Payment Card Industry Data Security Standard (PCIDSS) compliance. By default, the **Reports** tab displays the list of all reports, however, you can categorize reports into groups such as:

- Compliance
- Executive
- Log Sources
- Network Management
- Security
- VoIP
- Other

When you create a new report, you can assign the report to an existing group or create a new group. For more information on how to assign a report to a group by using the report wizard, see [Customizing Default Reports](#).

NOTE

You must have administrative access to create, edit, or delete groups. For more information on user roles, see the *IBM Security QRadar Network Anomaly Detection Administration Guide*.

This section includes the following topics:

- [Creating a Group](#)
- [Editing a Group](#)
- [Assigning a Report to a Group](#)
- [Copying a Report to Another Group](#)
- [Removing a Report From a Group](#)

Creating a Group To create a group:

Step 1 Click the **Reports** tab.

Step 2 Click **Manage Groups**.

Step 3 Using the navigation tree, select the group under which you want to create a new group.

After you create the group, you can drag and drop navigation tree items to change the organization of the tree items.

Step 4 Click **New Group**.

Step 5 Enter values for the following parameters:

- **Name** - Type the name for the new group. The name can be up to 255 characters in length.
- **Description** - Type a description for this group. The description can be up to 255 characters in length. This field is optional.

Step 6 Click **OK**.

Step 7 To change the location of the new group, click the new group and drag the folder to the new location on the navigation tree.

Step 8 Close the Report Groups window.

Editing a Group Using the **Edit** icon, you can edit the name or description of a report group.

To edit a group:

Step 1 Click the **Reports** tab.

Step 2 Click **Manage Groups**.

Step 3 From the navigation tree, select the group you want to edit.

Step 4 Click **Edit**.

Step 5 Update values for the parameters, as necessary:

- **Name** - Type the name for the new group. The name can be up to 255 characters in length.
- **Description** - Type a description for this group. The description can be up to 255 characters in length. This field is optional.

Step 6 Click **OK**.

Step 7 Close the Report Groups window.

Assigning a Report to a Group Using the **Assign Groups** option, you can assign a report to a another group.

To assign a report to a group:

Step 1 Click the **Reports** tab.

Step 2 Select the report you want to assign to a group.

Step 3 From the **Actions** list box, select **Assign Groups**.

Step 4 From the **Item Groups** list, select the check box of the group you want to assign to this report.

Step 5 Click **Assign Groups**.

Copying a Report to Another Group Using the **Copy** icon, you can copy a report to one or more report groups.

To copy a report from one group to another:

Step 1 Click the **Reports** tab.

Step 2 Click **Manage Groups**.

Step 3 From the navigation tree, select the report you want to copy.

Step 4 Click **Copy**.

Step 5 Select the group or groups to which you want to copy the report.

Step 6 Click **Assign Groups**.

Step 7 Close the Report Groups window.

Removing a Report From a Group If you remove a report from a group, the action does not delete the report. The report still exists on the **Reports** tab.

To remove a report from a group:

Step 1 Click the **Reports** tab.

Step 2 Click **Manage Groups**.

Step 3 From the navigation tree, navigate to the folder that contains the report you want to remove.

Step 4 From the list of groups, select the report you want to remove.

Step 5 Click **Remove**.

Step 6 Click **OK**.

Step 7 Close the Report Groups window.

Manually Generating a Report

To manually generate a report:

- Step 1** Click the **Reports** tab.
- Step 2** Select the report you want to generate.
- Step 3** Click **Run Report**.

The report generates. While the report generates, the **Next Run Time** column displays one of the three following messages:

- **Generating** - The report is generating.
- **Queued (*position in the queue*)** - The report is queued for generation. The message indicates the position the report is in the queue. For example, 1 of 3.
- **(*x hour(s) x min(s) y sec(s)*)** - The report is scheduled to run. The message is a count-down timer that specifies when the report will run next.

NOTE

You can select the **Refresh** icon to refresh the view, including the information in the **Next Run Time** column.

After the report generates, you can view the generated report from the **Generated Reports** column. See [Viewing Generated Reports](#).

Duplicating a Report

To duplicate a report:

- Step 1** Click the **Reports** tab.
- Step 2** Select the report you want to duplicate.
- Step 3** From the **Actions** list box, click **Duplicate**.
- Step 4** Type a new name, without spaces, for the report.

Sharing a Report

You can share reports with other users. When you share a report, you provide a copy of the selected report to another user to edit or schedule. Any updates that the user makes to a shared report does not affect the original version of the report.

NOTE

You must have administrative privileges to share reports. Also, for a new user to view and access reports, an administrative user must share all the necessary reports with the new user.

To share a report:

- Step 1** Click the **Reports** tab.
- Step 2** Select the reports you want to share.
- Step 3** From the **Actions** list box, click **Share**.

- Step 4** From the list of users, select the users with whom you want to share this report. If no users with appropriate access are available, a message is displayed.
- Step 5** Click **Share**.

Branding Reports

To brand reports, you can import logos and specific images. Report branding is beneficial for your enterprise if you support more than one logo. When you upload an image to QRadar Network Anomaly Detection, the image is automatically saved as a Portable Network Graphic (PNG). We recommend that you use graphics 144 x 50 pixels with a white background.

To brand reports with custom logos, you must upload and configure the logos before you begin using the Report Wizard.

To brand a report:

- Step 1** Click the **Reports** tab.
- Step 2** On the navigation menu, click **Branding**.
- Step 3** Click **Browse** to browse the files located on your system.
- Step 4** Select the file that contains the logo you want to upload.
- Step 5** Click **Open**.
- The file name is displayed in the **New Image** field.
- Step 6** Click **Upload Image** to upload the image to QRadar Network Anomaly Detection.

NOTE

To make sure your browser displays the new logo, clear your browser cache.

- Step 7** Select the logo you want to use as the default and click **Set Default Image**. This logo is displayed as the first option in the menu in the Specify Content page of the Report Wizard.

NOTE

When you upload a new image and set the image as your default, the new default image is not applied to reports that have been previously generated. Updating the logo on previously generated reports requires you to manually generate new content from the report.

NOTE

If you upload an image that is larger in length than the report header can support, the image automatically resizes to fit the header; this is approximately 50 pixels in height.

A

RULE TESTS

This section provides information on the tests you can apply to the rules, including:

- [Event Rule Tests](#)
- [Flow Rule Tests](#)
- [Common Rule Tests](#)
- [Offense Rule Tests](#)
- [Anomaly Detection Rule Tests](#)

Event Rule Tests

This section provides information on the event rule tests you can apply to the rules, including:

- [Host Profile Tests](#)
- [IP/Port Tests](#)
- [Event Property Tests](#)
- [Common Property Tests](#)
- [Log Source Tests](#)
- [Function - Sequence Tests](#)
- [Function - Counter Tests](#)
- [Function - Simple Tests](#)
- [Date/Time Tests](#)
- [Network Property Tests](#)
- [Function - Negative Tests](#)

Host Profile Tests

The host profile tests include:

Table A-1 Event Rule: Host Profile Tests

Test	Description	Default Test Name	Parameters
Host Profile Port	<p>Valid when the port is open on the configured local source or destination. You can also specify if the status of the port is detected using one of the following methods:</p> <ul style="list-style-type: none"> • Active - QRadar Network Anomaly Detection actively searches for the configured port through scanning or vulnerability assessment. • Passive - QRadar Network Anomaly Detection passively monitors the network recording hosts previously detected. 	when the local source host destination port is open either actively or passively seen	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • actively seen passively seen either actively or passively seen - Specify if you want this test to consider active scanning, passive scanning, or both. The default is either actively or passively seen.
Host Existence	<p>Valid when the local source or destination host is known to exist through active or passive scanning.</p> <p>You can also specify if the status of the host is detected using one of the following methods:</p> <ul style="list-style-type: none"> • Active - QRadar Network Anomaly Detection actively searches for the configured host through scanning or vulnerability assessment. • Passive - QRadar Network Anomaly Detection passively monitors the network recording hosts previously detected. 	when the local source host exists either actively or passively seen	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination host. The default is source. • actively seen passively seen either actively or passively seen - Specify if you want this test to consider active scanning, passive scanning, or both. The default is either actively or passively seen.

Table A-1 Event Rule: Host Profile Tests (continued)

Test	Description	Default Test Name	Parameters
Host Profile Age	Valid when the local source or destination host profile age is greater than the configured value within the configured time intervals.	when the local source host profile age is greater than this number of time intervals	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination host. The default is source. • greater than less than - Specify if you want this test to consider values greater than or less than the profile host age. • this number of - Specify the number of time intervals you want this test to consider. • time intervals - Specify whether you want this test to consider minutes or hours.
Host Port Age	Valid when the local source or destination port profile age is greater than or less than a configured amount of time.	when the local source host profile port age is greater than this number of time intervals	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • greater than less than - Specify if you want this test to consider values greater than or less than the profile port age. The default is greater than. • this number of - Specify the number of time intervals you want this test to consider. • time intervals - Specify whether you want this test to consider minutes or hours.
Asset Weight	Valid when the specified asset has an assigned weight greater than or less than the configured value.	when the destination asset has a weight greater than this weight	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to consider the source or destination asset. The default is destination. • greater than less than equal to - Specify if you want the value to be greater than, less than, or equal to the configured value. • this weight - Specify the weight you want this test to consider.

Table A-1 Event Rule: Host Profile Tests (continued)

Test	Description	Default Test Name	Parameters
Host Vulnerable to Event	Valid when the specified host port is vulnerable to the current event.	when the destination is vulnerable to current exploit on any port	Configure the following parameters: <ul style="list-style-type: none"> • destination source local host remote host - Specify if want this test to consider a destination, source, local host, or remote host. The default is destination. • current any - Specify if you want this test to consider the current or any exploit. The default is current. • any current - Specify if you want this test to consider any or the current port. The default is any.
OSVDB IDs	Valid when an IP address (source, destination, or any) is vulnerable to the configured Open Source Vulnerability Database (OSVDB) IDs.	when the source IP is vulnerable to one of the following OSVDB IDs	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. The default is source IP. • OSVDB IDs - Specify any OSVDB IDs that you want this test to consider. For more information regarding OSVDB IDs, see http://osvdb.org/.

IP/Port Tests

The IP/Port tests include:

Table A-2 Event Rule: IP / Port Test Group

Test	Description	Default Test Name	Parameters
Source Port	Valid when the source port of the event is one of the configured source ports.	when the source port is one of the following ports	ports - Specify the ports you want this test to consider.
Destination Port	Valid when the destination port of the event is one of the configured destination ports.	when the destination port is one of the following ports	ports - Specify the ports you want this test to consider.
Local Port	Valid when the local port of the event is one of the configured local ports.	when the local port is one of the following ports	ports - Specify the ports you want this test to consider.
Remote Port	Valid when the remote port of the event is one of the configured remote ports.	when the remote port is one of the following ports	ports - Specify the ports you want this test to consider.

Table A-2 Event Rule: IP / Port Test Group (continued)

Test	Description	Default Test Name	Parameters
Source IP Address	Valid when the source IP address of the event is one of the configured IP addresses.	when the source IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Destination IP Address	Valid when the destination IP address of the event is one of the configured IP addresses.	when the destination IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Local IP Address	Valid when the local IP address of the event is one of the configured IP addresses.	when the local IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Remote IP Address	Valid when the remote IP address of the event is one of the configured IP addresses.	when the remote IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
IP Address	Valid when the source or destination IP address of the event is one of the configured IP addresses.	when either the source or destination IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Source or Destination Port	Valid when either the source or destination port is one of the configured ports.	when the source or destination port is any of these ports	these ports - Specify the ports you want this test to consider.

Event Property Tests The event property test group includes:

Table A-3 Event Rule: Event Property Tests

Test	Description	Default Test Name	Parameters
Local Network Object	Valid when the event occurs in the specified network.	when the destination network is one of the following networks	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to consider the source or destination IP address of the event. • one of the following networks - Specify the areas of the network you want this test to apply to.
IP Protocol	Valid when the IP protocol of the event is one of the configured protocols.	when the IP protocol is one of the following protocols	protocols - Specify the protocols you want to add to this test.
Event Payload Search	Each event contains a copy of the original unnormalized event. This test is valid when the entered search string is included anywhere in the event payload.	when the Event Payload contains this string	this string - Specify the text string you want to include for this test.

Table A-3 Event Rule: Event Property Tests (continued)

Test	Description	Default Test Name	Parameters
QID of Event	A QID is a unique identifier for events. This test is valid when the event identifier is a configured QID.	when the event QID is one of the following QIDs	<p>QIDs - Use one of the following options to locate QIDs:</p> <ul style="list-style-type: none"> • Select the Browse By Category option and from the list boxes, select the high and low-level category QIDs you want to locate. • Select the QID Search option and enter the QID or name you want to locate. Click Search.
Event Context	<p>Event Context is the relationship between the source IP address and destination IP address of the event. For example, a local source IP address to a remote destination IP address.</p> <p>Valid if the event context is one of the following:</p> <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote 	when the event context is this context	<p>this context - Specify the context you want this test to consider. The options are:</p> <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote
Event Category	Valid when the event category is the same as the configured category, for example, Denial of Service (DoS) attack.	when the event category for the event is one of the following categories	<p>categories - Specify the event category you want this test to consider.</p> <p>For more information on event categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Severity	Valid when the event severity is greater than, less than, or equal to the configured value.	when the event severity is greater than 5 {default}	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • greater than less than equal to - Specify whether the severity is greater than, less than, or equal to the configured value. • 5 - Specify the index, which is a value from 0 to 10. The default is 5.
Credibility	Valid when the event credibility is greater than, less than, or equal to the configured value.	when the event credibility is greater than 5 {default}	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • greater than less than equal to - Specify whether the credibility is greater than, less than, or equal to the configured value. • 5 - Specify the index, which is a value from 0 to 10. The default is 5.

Table A-3 Event Rule: Event Property Tests (continued)

Test	Description	Default Test Name	Parameters
Relevance	Valid when the event relevance is greater than, less than, or equal to the configured value.	when the event relevance is greater than 5 {default}	Configure the following parameters: <ul style="list-style-type: none"> greater than less than equal to - Specify whether the relevance is greater than, less than, or equal to the configured value. 5 - Specify the index, which is a value from 0 to 10. The default is 5.
Source Location	Valid when the source IP address of the event is either local or remote.	when the source is local or remote {default: remote}	local remote - Specify either local or remote traffic.
Destination Location	Valid when the destination IP address of the event is either local or remote.	when the destination is local or remote {default: remote}	local remote - Specify either local or remote traffic.
Rate Analysis	QRadar Network Anomaly Detection monitors event rates of all source IP addresses/QIDs and destination IP addresses/QIDs and marks events that exhibit abnormal rate behavior. Valid when the event has been marked for rate analysis.	when the event has been marked with rate analysis	
False Positive Tuning	When you tune false positive events on the Log Activity tab, the resulting tuning values are displayed in this test. If you want to remove a false positive tuning, you can edit this test to remove the necessary tuning values.	when the false positive signature matches one of the following signatures	signatures - Specify the false positive signature you want this test to consider. Enter the signature in the following format: <CAT QID ANY>:<value>:<source IP>:<dest IP> Where: <CAT QID ANY> - Specify whether you want this false positive signature to consider a category (CAT), QRadar Identifier (QID), or any value. <value> - Specify the value for the <CAT QID ANY> parameter. For example, if you specified QID, you must specify the QID value. <source IP> - Specify the source IP address you want this false positive signature to consider. <dest IP> - Specify the destination IP address you want this false positive signature to consider.

Table A-3 Event Rule: Event Property Tests (continued)

Test	Description	Default Test Name	Parameters
Regex	<p>Valid when the configured MAC address, user name, host name, or operating system is associated with a particular regular expressions (regex) string.</p> <p>Note: <i>This test assumes knowledge of regular expressions (regex). When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.</i></p>	when the username matches the following regex	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • MAC source MAC destination MAC username source username destination username event username hostname source hostname dest hostname OS source OS dest OS event payload - Specify the value you want to associate with this test. The default is username. • regex - Specify the regex string you want this test to consider.
IPv6	Valid when the source or destination IPv6 address is the configured IP address.	when the source IP(v6) is one of the following IPv6 addresses	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source IP(v6) destination IP(v6) - Specify whether you want this test to consider the source or destination IPv6 address. • IP(v6) addresses - Specify the IPv6 addresses you want this test to consider.
Reference Set	Valid when any or all configured event properties are contained in any or all configured reference sets.	when any of these event properties are contained in any of these reference set(s)	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • any all - Specify if you want this test to consider any or all of the configured event properties. • these event properties - Specify the event properties you want this test to consider. • any all - Specify if you want this test to consider any or all of the configured reference sets. • these reference set(s) - Specify the reference sets you want this test to consider.
Search Filter	Valid when the event matches the specified search filter.	when the event matches this search filter	this search filter - Specify the search filter you want this test to consider.

Common Property Tests

The common property test group includes:

Table A-4 Event Rule: Common Property Tests

Test	Description	Default Test Name	Parameters
CVSS Risk (Host)	Valid when the specified host has a CVSS risk value that matches the configured value.	when the destination host has a CVSS risk value of greater than this amount	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination either - Specify whether the test considers the source or destination host of the event. • greater than less than equal to - Specify if you want the CVSS risk value to be greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.
CVSS Risk (Port)	Valid when the specified port has a CVSS risk value that matches the configured value.	when the destination port has a CVSS risk value of greater than this amount	<ul style="list-style-type: none"> • source destination either - Specify whether the test considers the source or destination port of the event. • greater than less than equal to - Specify if you want the threat level to be greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.
Custom Rule Engines	Valid when the event is processed by the specified Custom Rule Engines.	when the event is processed by one of these Custom Rule Engines	these - Specify the Custom Rule Engine you want this test to consider.
Regex	<p>Valid when the configured property is associated with a particular regular expressions (regex) string.</p> <p>Note: <i>This test assumes knowledge of regular expressions (regex). When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.</i></p>	when any of these properties match the following regex	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these properties - Specify the value you want to associate with this test. Options include all normalized, and custom flow and event properties. • regex - Specify the regex string you want this test to consider.

Table A-4 Event Rule: Common Property Tests (continued)

Test	Description	Default Test Name	Parameters
Hexadecimal	Valid when the configured property is associated with particular hexadecimal values.	when any of these properties contain any of these hexadecimal values	Configure the following parameters: <ul style="list-style-type: none"> • these properties - Specify the value you want to associate with this test. Options include all normalized, and custom flow and event properties. • these hexadecimal values - Specify the hexadecimal values you want this test to consider.

Log Source Tests

The log source tests include:

Table A-5 Event Rule: Log Source Tests

Test	Description	Default Test Name	Parameters
Source Log Sources	Valid when one of the configured log sources is the source of the event.	when the event(s) were detected by one or more of these log sources	these log sources - Specify the log sources that you want this test to detect.
Log Source Type	Valid when one of the configured log source types is the source of the event.	when the event(s) were detected by one or more of these log source types	these log source types - Specify the log sources that you want this test to detect.
Inactive Log Sources	Valid when one of the configured log sources has not generated an event in the configured time.	when the event(s) have not been detected by one or more of these log sources for this many seconds	Configure the following parameters: these log sources - Specify the log sources that you want this test to detect. this many - Specify the number of time intervals you want this test to consider.
Log Source Groups	Valid when an event is detected by the configured log source groups.	when the event(s) were detected by one or more of these log source groups	these log source groups - Specify the groups you want this rule to consider.

Function - Sequence Tests

The function - sequence tests include:

Table A-6 Event Rule: Functions - Sequence Group

Test	Description	Default Test Name	Parameters
Multi-Rule Event Function	You can use saved building blocks or other rules to populate this test. This function allows you to detect a specific sequence of selected rules involving a source and destination within a configured time period.	when all of these rules, in in any order, from the same any source IP to the same any destination IP , over this many seconds	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider. • in in any - Specify whether you want this test to consider in or in any order. • the same any - Specify if you want this test to consider the same or any of the configured sources. • username source IP source port destination IP destination port QID event ID log source category - Specify the source you want this test to consider. The default is source IP. • the same any - Specify if you want this test to consider the same or any of the configured destinations. • destination IP username destination port - Specify whether you want this test to consider a destination IP address, user name, or destination port. The default is destination IP. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is seconds.

Table A-6 Event Rule: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Multi-Rule Event Function	Allows you to use saved building blocks or other rules to populate this test. You can use this function to detect a number of specified rules, in sequence, involving a source and destination within a configured time interval.	when at least this number of these rules , in any order, from the same any source IP to the same any destination IP , over this many seconds	Configure the following parameters: <ul style="list-style-type: none"> • this number - Specify the number of rules you want this function to consider. • rules - Specify the rules you want this test to consider. • in in any - Specify whether you want this test to consider in or in any order. • the same any - Specify if you want this test to consider the same or any of the configured sources. • username source IP source port destination IP destination port QID event ID log sources category - Specify the source you want this test to consider. The default is source IP. • the same any - Specify if you want this test to consider the same or any of the configured destinations. • destination IP username destination port - Specify whether you want this test to consider a destination IP address, user name, or destination port. The default is destination IP. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider.
Multi-Event Sequence Function Between Hosts	Allows you to detect a sequence of selected rules involving the same source and destination hosts within the configured time interval. You can also use saved building blocks and other rules to populate this test.	when this sequence of rules , involving the same source and destination hosts in this many seconds	Configure the following parameters: <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is seconds.

Table A-6 Event Rule: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Multi-Rule Function	Allows you to detect a number of specific rules for a specific IP address or port followed by a number of specific rules for a specific port or IP address. You can also use building blocks or existing rules to populate this test.	when at least this many of these rules , in in any order, with the same username followed by at least this many of these rules in in any order to/from the same destination IP from the previous sequence, within this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of rules you want this test to consider. • rules - Specify the rules you want this test to consider. • in in any - Specify if you want this test to consider rules in a specific order. • username source IP source port destination IP destination port - Specify whether you want this test to consider the user name, source IP, source port, destination IP, or destination port. The default is username. • this many - Specify the number of rules you want this test to consider. • rules - Specify the rules you want this test to consider. • in in any - Specify if you want this test to consider rules in a specific order. • to from - Specify the direction you want this test to consider. • username source IP source port destination IP destination port - Specify whether you want this test to consider the user name, source IP, source port, destination IP, or destination port. The default is destination IP. • this many - Specify the number of time intervals you want this rule to consider. • seconds minutes hours days - Specify the time interval you want this rule to consider. The default is minutes.

Table A-6 Event Rule: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Rule Function	Allows you to detect a number of specific rules with the same event properties and different event properties within the configured time interval.	when these rules match at least this many times in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Event Property Function	Allows you to detect a configured number of specific rules with the same event properties within the configured time interval.	when these rules match at least this many times with the same event properties in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.

Table A-6 Event Rule: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when specific rules occur a configured number of times with the same event properties, and different event properties within the configured time interval after a series of specific rules.	when these rules match at least this many times with the same event properties and different event properties in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Rule Function	Allows you to detect when specific rules occur a configured number of times in a configured time interval and after a series of specific rules occur with the same event properties.	when these rules match at least this many times in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Table A-6 Event Rule: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when specific rules occur a configured number of times with the same event properties in a configured time interval and after a series of specific rules occur with the same event properties.	when these rules match at least this many times with the same event properties in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Table A-6 Event Rule: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when specific rules occur a configured number of times with the same event properties and different event properties in a configured time interval after a series of specific rules occur with the same event properties.	when these rules match at least this many times with the same event properties and different event properties in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Table A-6 Event Rule: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when a specific number of events occur with the same event properties and different event properties in a configured time interval after a series of specific rules occur.	when at least this many events are seen with the same event properties and different event properties in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Event Property Function	Allows you to detect when a specific number of events occur with the same event properties in a configured time interval after a series of specific rules occur with the same event properties.	when at least this many events are seen with the same event properties in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Table A-6 Event Rule: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when a specific number of events occur with the same event properties and different event properties in a configured time interval after a series of specific rules occur with the same event properties.	when at least this many events are seen with the same event properties and different event properties in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Function - Counter Tests

The function - counter tests include:

Table A-7 Event Rule: Functions - Counters Group

Test	Description	Default Test Name	Parameters
Multi-Event Counter Function	Allows you to test the number of events from configured conditions, such as, source IP address. You can also use building blocks and other rules to populate this test.	when a(n) source IP matches more than exactly this many of these rules across more than exactly this many destination IP , over this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • username source IP source port destination IP destination port QID event ID log sources category - Specify the source you want this test to consider. The default is source IP. • more than exactly - Specify if you want this test to consider more than or exactly the number of rules. • this many - Specify the number of rules you want this test to consider. • rules - Specify the rules you want this test to consider. • more than exactly - Specify if you want this test to consider more than or exactly the number of destination IP addresses, destination ports, QIDs, log source event IDs, or log sources that you selected in the source above. • this many - Specify the number of IP addresses, ports, QIDs, events, log sources, or categories you want this test to consider. • username destination IP source IP source port destination port QID event ID log sources category - Specify the destination you want this test to consider. The default is destination IP. • this many - Specify the time value you want to assign to this test. • seconds minutes hours days - Specify the time interval you want this rule to consider. The default is minutes.

Table A-7 Event Rule: Functions - Counters Group (continued)

Test	Description	Default Test Name	Parameters
Multi-Rule Function	Allows you to detect a series of rules for a specific IP address or port followed by a series of specific rules for a specific port or IP address. You can also use building blocks or existing rules to populate this test.	when any of these rules with the same source IP more than this many times, across more than exactly this many destination IP within this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider. • username source IP source port destination IP destination port QID event ID log sources category - Specify the source you want this test to consider. The default is source IP. • this many - Specify the number of times the configured rules must match the test. • more than exactly - Specify if you want this test to consider more than or exactly the number of destination IP addresses, destination ports, QIDs, log source event IDs, or log sources that you selected in the source option. • this many - Specify the number you want this test to consider, depending on the option you configured in the source IP parameter. • username destination IP source IP source port destination port QID event ID log sources category - Specify the destination you want this test to consider. The default is destination IP. • this many - Specify the time interval you want to assign to this test. • seconds minutes hours days - Specify the time interval you want this rule to consider. The default is minutes.

Table A-7 Event Rule: Functions - Counters Group (continued)

Test	Description	Default Test Name	Parameters
Username Function	Allows you to detect multiple updates to user names on a single host.	when the username changes more than this many times within this many hours on a single host.	Configure the following parameters: <ul style="list-style-type: none"> • MAC username hostname - Specify if you want this test to consider user name, MAC address, or host name. The default is username. • this many - Specify the number of changes you want this test to consider. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is hours.
Event Property Function	Allows you to detect a series of events with the same event properties within the configured time interval. For example, you can use this test to detect when 100 events with the same source IP address occurs within 5 minutes.	when at least this many events are seen with the same event properties in this many minutes	Configure the following parameters: <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Table A-7 Event Rule: Functions - Counters Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	<p>Allows you to detect a series of events with the same event properties and different event properties within the configured time interval.</p> <p>For example, you can use this test to detect when 100 events with the same source IP address and different destination IP address occurs within 5 minutes.</p>	when at least this many events are seen with the same event properties and different event properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.
Rule Function	Allows you to detect a number of specific rules with the same event properties within the configured time interval.	when these rules match at least this many times in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Table A-7 Event Rule: Functions - Counters Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect a number of specific rules with the same event properties within the configured time interval.	when these rules match at least this many times with the same event properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.
Event Property Function	Allows you to detect a number of specific rules with the same event properties and different event properties within the configured time interval.	when these rules match at least this many times with the same event properties and different event properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Function - Simple Tests

The function - simple tests include:

Table A-8 Event Rule: Functions - Simple Group

Test	Description	Default Test Name	Parameters
Multi-Rule Event Function	Allows you to use saved building blocks and other rules to populate this test. The event has to match either all or any of the selected rules. If you want to create an OR statement for this rule test, specify the any parameter.	when an event matches any all of the following rules	Configure the following parameters: <ul style="list-style-type: none"> • any all - Specify either any or all of the configured rules that should apply to this test. • rules - Specify the rules you want this test to consider.

Date/Time Tests

The date and time tests include:

Table A-9 Event Rule: Date/Time Tests

Test	Description	Default Test Name	Parameters
Event Day	Valid when the event occurs on the configured day of the month.	when the event(s) occur on the selected day of the month	Configure the following parameters: <ul style="list-style-type: none"> • on after before - Specify if you want this test to consider on, after, or before the configured day. The default is on. • selected - Specify the day of the month you want this test to consider.
Event Week	Valid when the event occurs on the configured days of the week.	when the event(s) occur on any of these days of the week	these days of the week - Specify the days of the week you want this test to consider.
Event Time	Valid when the event occurs at, before, or after the configured time.	when the event(s) occur after this time	Configure the following parameters: <ul style="list-style-type: none"> • after before at - Specify if you want this test to consider after, before, or at the configured time. The default is after. • this time - Specify the time you want this test to consider.

Network Property Tests

The network property test group includes:

Table A-10 Event Rule: Network Property Tests

Test	Description	Default Test Name	Parameters
Local Networks	Valid when the event occurs in the specified network.	when the local network is one of the following networks	one of the following networks - Specify the areas of the network you want this test to apply to.
Remote Networks	Valid when an IP address is part of any or all of the configured remote network locations.	when the source IP is a part of any of the following remote network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. • remote network locations - Specify the network locations you want this test to consider.
Remote Services Networks	Valid when an IP address is part of any or all of the configured remote services network locations.	when the source IP is a part of any of the following remote services network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. • remote services network locations - Specify the services network locations you want this test to consider.
Geographic Networks	Valid when an IP address is part of any or all of the configured geographic network locations.	when the Source IP is a part of any of the following geographic network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. • geographic network locations - Specify the network locations you want this test to consider.

Function - Negative Tests

The function - negative tests include:

Table A-11 Event Rule: Functions - Negative Group

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when none of the specified rules in a configured time interval after a series of specific rules occur with the same event properties.	when none of these rules match in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.
Rule Function	Allows you to detect when none of the specified rules in a configured time interval after a series of specific rules occur.	when none of these rules match in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.

Flow Rule Tests

This section provides information on the flow rule tests you can apply to the rules, including:

- [Host Profile Tests](#)
- [IP/Port Tests](#)
- [Flow Property Tests](#)
- [Common Property Tests](#)
- [Function - Sequence Tests](#)
- [Function - Counters Tests](#)

- **Function - Simple Tests**
- **Date/Time Tests**
- **Network Property Tests**
- **Function - Negative Tests**

Host Profile Tests The host profile tests include:

Table A-12 Flow Rules: Host Profile Tests

Test	Description	Default Test Name	Parameters
Host Profile Port	<p>Valid when the port is open on the configured local source or destination. You can also specify if the status of the port is detected using one of the following methods:</p> <ul style="list-style-type: none"> • Active - QRadar Network Anomaly Detection actively searches for the configured port through scanning or vulnerability assessment. • Passive - QRadar Network Anomaly Detection passively monitors the network recording hosts previously detected. 	when the local source host destination port is open either actively or passively seen	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • actively seen passively seen either actively or passively seen - Specify if you want this test to consider active scanning, passive scanning, or both. The default is either actively or passively seen.
Host Existence	<p>Valid when the local source or destination host is known to exist through active or passive scanning.</p> <p>You can also specify if the status of the host is detected using one of the following methods:</p> <ul style="list-style-type: none"> • Active - QRadar Network Anomaly Detection actively searches for the configured port through scanning or vulnerability assessment. • Passive - QRadar Network Anomaly Detection passively monitors the network recording hosts previously detected. 	when the local source host exists either actively or passively seen	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • actively seen passively seen either actively or passively seen - Specify if you want this test to consider active scanning, passive scanning, or both. The default is either actively or passively seen.

Table A-12 Flow Rules: Host Profile Tests (continued)

Test	Description	Default Test Name	Parameters
Host Profile Age	Valid when the local source or destination host profile age is greater than the configured value within the configured time intervals.	when the local source host profile age is greater than this number of time intervals	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination host. The default is source. • greater than less than - Specify if you want this test to consider values greater than or less than the profile host age. • this number of - Specify the number of time intervals you want this test to consider. • time intervals - Specify whether you want this test to consider minutes or hours.
Host Port Age	Valid when the local source or destination port profile age is greater than or less than a configured amount of time.	when the local source host profile port age is greater than this number of time intervals	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • greater than less than - Specify if you want this test to consider values greater than or less than the profile port age. The default is greater than. • this number of - Specify the number of time intervals you want this test to consider. • time intervals - Specify whether you want this test to consider minutes or hours.
Asset Weight	Valid when the device being attacked (destination) or the host that is the attacker (source) has an assigned weight greater than or less than the configured value.	when the destination asset has a weight greater than this weight	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to consider the source or destination asset. The default is destination. • greater than less than equal to - Specify if you want the value to be greater than, less than, or equal to the configured value. • this weight - Specify the weight you want this test to consider.

Table A-12 Flow Rules: Host Profile Tests (continued)

Test	Description	Default Test Name	Parameters
OSVDB IDs	Valid when an IP address (source, destination, or any) is vulnerable to the configured Open Source Vulnerability Database (OSVDB) IDs.	when the source IP is vulnerable to one of the following OSVDB IDs	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. The default is source IP. • OSVDB IDs - Specify any OSVDB IDs that you want this test to consider. For more information regarding OSVDB IDs, see http://osvdb.org/.

IP/Port Tests

The IP/Port tests include:

Table A-13 Flow Rules: IP / Port Test Group

Test	Description	Default Test Name	Parameters
Source Port	Valid when the source port of the flow is one of the configured source ports.	when the source port is one of the following ports	ports - Specify the ports you want this test to consider.
Destination Port	Valid when the destination port of the flow is one of the configured destination ports.	when the destination port is one of the following ports	ports - Specify the ports you want this test to consider.
Local Port	Valid when the local port of the flow is one of the configured local ports.	when the local port is one of the following ports	ports - Specify the ports you want this test to consider.
Remote Port	Valid when the remote port of the flow is one of the configured remote ports.	when the remote port is one of the following ports	ports - Specify the ports you want this test to consider.
Source IP Address	Valid when the source IP address of the flow is one of the configured IP addresses.	when the source IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Destination IP Address	Valid when the destination IP address of the flow is one of the configured IP addresses.	when the destination IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Local IP Address	Valid when the local IP address of the flow is one of the configured IP addresses.	when the local IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Remote IP Address	Valid when the remote IP address of the flow is one of the configured IP addresses.	when the remote IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.

Table A-13 Flow Rules: IP / Port Test Group (continued)

Test	Description	Default Test Name	Parameters
IP Address	Valid when the source or destination IP address of the flow is one of the configured IP addresses.	when either the source or destination IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Source or Destination Port	Valid when either the source or destination port is one of the configured ports.	when the source or destination port is any of these ports	these ports - Specify the ports you want this test to consider.

Flow Property Tests The flow property test group includes:

Table A-14 Flow Rules: Flow Property Tests

Test	Description	Default Test Name	Parameters
IP Protocol	Valid when the IP protocol of the flow is one of the configured protocols.	when the IP protocol is one of the following protocols	protocols - Specify the protocols you want to add to this test.
Flow Context	Flow Context is the relationship between the source IP address and destination IP address of the flow. For example, a local source IP address to a remote destination IP address. Valid if the flow context is one of the following: <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote 	when the flow context is this context	this context - Specify the context you want this test to consider. The options are: <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote
Source Location	Valid when the source IP address of the flow is either local or remote.	when the source is local or remote {default: remote}	local remote - Specify either local or remote traffic. The default is remote .
Destination Location	Valid when the destination IP address of the flow is either local or remote.	when the destination is local or remote {default: remote}	local remote - Specify either local or remote traffic. The default is remote .

Table A-14 Flow Rules: Flow Property Tests (continued)

Test	Description	Default Test Name	Parameters
Regex	<p>Valid when the configured MAC address, user name, host name, or operating system is associated with a particular regular expressions (regex) string.</p> <p>Note: <i>This test assumes knowledge of regular expressions (regex). When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.</i></p>	when the username matches the following regex	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • hostname source hostname destination hostname source payload destination payload - Specify the value you want to associate with this test. The default is username. • regex - Specify the regex string you want this test to consider.
IPv6	Valid when the source or destination IPv6 address is the configured IP address.	when the source IP(v6) is one of the following IP(v6) addresses	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source IP(v6) destination IP(v6) - Specify whether you want this test to consider the source or destination IPv6 address. • IP(v6) addresses - Specify the IPv6 addresses you want this test to consider.
Reference Set	Valid when any or all configured flow properties are contained in any or all configured reference sets.	when any of these flow properties are contained in any of these reference set(s)	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • any all - Specify if you want this test to consider any or all of the configured event properties. • these flow properties - Specify the flow properties you want this test to consider. • any all - Specify if you want this test to consider any or all of the configured reference sets. • these reference set(s) - Specify the reference sets you want this test to consider.
Flow Bias	Valid when flow direction matches the configured flow bias.	when the flow bias is any of the following bias	<p>inbound outbound mostly inbound mostly outbound balanced - Specify the flow bias you want this test to consider. The default is inbound.</p>

Table A-14 Flow Rules: Flow Property Tests (continued)

Test	Description	Default Test Name	Parameters
Byte / Packet Count	Valid when the number of bytes or packets matches the configured amount.	when the source bytes is greater than this amount	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination local remote - Specify whether you want this test to consider the source, destination, local or remote bytes or packets. The default is source. • bytes packets - Specify whether you want this test to consider bytes or packets. The default is bytes. • greater than less than equal to - Specify whether the number of bytes or packets is greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.
Host Count	Valid when the number of hosts matches the configured amount.	When the number of source hosts is greater than this amount .	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination local remote - Specify whether you want this test to consider the source, destination, local or remote hosts. The default is source. • greater than less than equal to - Specify whether the number of hosts is greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.
Packet Rate	Valid when the packet rate matches the configured amount.	when the source packet rate is greater than value packets/second	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination local remote - Specify whether you want this test to consider the source, destination, local or remote packet rate. The default is source. • greater than less than equal to - Specify whether the packet rate is greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.

Table A-14 Flow Rules: Flow Property Tests (continued)

Test	Description	Default Test Name	Parameters
Flow Duration	Valid when the flow duration matches the configured time interval.	when flow duration is greater than value seconds	Configure the following parameters: <ul style="list-style-type: none"> • greater than less than equal to - Specify whether the flow duration is greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.
Flow Payload Search	Each flow contains a copy of the original unnormalized event. This test is valid when the entered search string is included anywhere in the flow payload.	when the source payload matches the regex string	Configure the following parameters: <ul style="list-style-type: none"> • source destination local remote - Specify whether you want this test to consider the source, destination, local or remote payload. The default is source. • matches the regex matches the hexadecimal - Specify whether you want to match a regex or hexadecimal string. The default is regex. • string - Specify the text string you want to include for this test.
Flow Source Name	Valid when the flow source name matches the configured values.	when the name of the flow source is one of these sources	these sources - Specify the flow source names you want this test to consider.
Flow Interface	Valid when the flow interface matches the configured values.	when the flow interface is one of these interfaces	these interfaces - Specify the flow interface you want this test to consider.
Flow Type	Valid when the flow type matches the configured value.	when the flow type is one of these flow types	these flow types - Specify the flow type you want this test to consider.
Byte/Packet Ratio	Valid when the byte/packet ratio matches the configured value.	when the source byte/packet ratio is greater than value bytes/packet	Configure the following parameters: <ul style="list-style-type: none"> • source destination local remote - Specify whether you want this test to consider the source, destination, local or remote byte/packet ratio. The default is source. • greater than less than equal to - Specify whether the flow duration is greater than, less than, or equal to the configured value. • value - Specify the ratio you want this test to consider.

Table A-14 Flow Rules: Flow Property Tests (continued)

Test	Description	Default Test Name	Parameters
ICMP Type	Valid when the Internet Control Message Protocol (ICMP) type matches the configured values.	when the ICMP type is any of these types	these types - Specify the ICMP types you want this test to consider.
ICMP Code	Valid when the ICMP code matches the configured values.	when the ICMP code is any of these codes	these codes - Specify the ICMP codes you want this test to consider.
DSCP	Valid when the differentiated services code point (DSCP) matches the configured values.	when the destination DSCP is any of these values	Configure the following parameters: <ul style="list-style-type: none"> source destination local remote either - Specify whether you want this test to consider the source, destination, local, remote, or either DSCP. The default is destination. these values - Specify the DSCP values you want this test to consider.
IP Precedence	Valid when the IP precedence matches the configured values	when the destination IP precedence is any of these values	Configure the following parameters: <ul style="list-style-type: none"> source destination local remote either - Specify whether you want this test to consider the source, destination, local, remote, or either DSCP. The default is destination. these values - Specify the IP precedence values you want this test to consider.
Packet Ratio	Valid when the configured packet ratio matches the configured value. This test allows you to specify the values in the packet ratio.	when the source/destination packet ratio is greater than this value	Configure the following parameters: <ul style="list-style-type: none"> source destination local remote - Specify which direction you want this test to consider as the preceding value in the ratio. The default is source. greater than less than equal to - Specify whether the packet ratio is greater than, less than, or equal to the configured value. value - Specify the ratio you want this test to consider.

Table A-14 Flow Rules: Flow Property Tests (continued)

Test	Description	Default Test Name	Parameters
TCP Flags	Valid when the TCP flags match the configured values.	when the destination TCP flags are exactly these flags	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination local remote - Specify whether you want this test to consider the source, destination, local, or remote, TCP flags. The default is destination. • are exactly includes all of includes any of - Specify whether you want this test to consider exactly, all of, or any of the configured TCP flags. The default is are exactly. • these flags - Specify the TCP flags you want this test to consider.
IF Index	Valid when the IF Index matches the configured values	when the list of input IF (interface) indexes includes all of these values	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • input output either - Specify which direction you want this test to consider. The default is input. • all any - Specify whether you want this test to consider all or any configured IF Index values. • these values - Specify the IF Indexes you want this test to consider.
TCP Flag Combination	Valid when the TCP flags match the configured flag combinations.	When the destination TCP flags are any of these flag combinations	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination local remote - Specify whether you want this test to consider the source, destination, local, or remote, TCP flags. The default is destination. • these flag combinations - Specify the flag combinations you want this test to consider. Separate flags with commas.
Search Filter	Valid when the flow matches the specified search filter.	when the flow matches this search filter	this search filter - Specify the search filter you want this test to consider.

Table A-14 Flow Rules: Flow Property Tests (continued)

Test	Description	Default Test Name	Parameters
Flow Payload	Valid when the specified side of the flow has or does not have a payload.	when the destination side of the flow has payload data	Configure the following parameters: <ul style="list-style-type: none"> • the source the destination the local the remote either - Specify whether you want this test to consider the source, destination, local, remote, or either side of the flow. The default is destination. • has has not - Specify whether you want this test to consider flows that have a payload or does not have a payload.

Common Property Tests The date and time tests include:

Table A-15 Flow Rules: Common Property Tests

Test	Description	Default Test Name	Parameters
CVSS Risk (Host)	Valid when the specified host has a CVSS risk value that matches the configured value.	when the destination host has a CVSS risk value of greater than this amount	Configure the following parameters: <ul style="list-style-type: none"> • source destination either - Specify whether the test considers the source or destination host of the flow. • greater than less than equal to - Specify if you want the CVSS risk value to be greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.
CVSS Risk (Port)	Valid when the specified port has a CVSS risk value that matches the configured value.	when the destination port has a CVSS risk value of greater than this amount	<ul style="list-style-type: none"> • source destination either - Specify whether the test considers the source or destination port of the flow. • greater than less than equal to - Specify if you want the threat level to be greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.
Custom Rule Engine	Valid when the flow is processed by the specified custom rule engine.	when the flow is processed by one of these Custom Rule Engines	these - Specify the Custom Rule Engine ID numbers you want this test to consider.

Table A-15 Flow Rules: Common Property Tests (continued)

Test	Description	Default Test Name	Parameters
Regex	<p>Valid when the configured property is associated with a particular regular expressions (regex) string.</p> <p>Note: <i>This test assumes knowledge of regular expressions (regex). When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.</i></p>	when these properties match the following regex	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these properties - Specify the value you want to associate with this test. Options include all normalized, and custom flow and event properties. • regex - Specify the regex string you want this test to consider.
Hexadecimal	Valid when the configured property is associated with particular hexadecimal values.	when any of these properties contain any of these hexadecimal values	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these properties - Specify the value you want to associate with this test. Options include all normalized, and custom flow and event properties. • these hexadecimal values - Specify the hexadecimal values you want this test to consider.

Function - Sequence Tests The function - sequence tests include:

Table A-16 Flow Rules: Functions Sequence Group

Test	Description	Default Test Name	Parameters
Multi-Rule Flow Function	Allows you to use saved building blocks or other rules to populate this test. This function allows you to detect a specific sequence of selected rules involving a source and destination within a configured time period.	when all of these rules, in in any order, from the same any source IP to the same any destination IP , over this many seconds	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider. • in in any - Specify whether you want this test to consider in or in any order. • the same any - Specify if you want this test to consider the same or any of the configured sources. • source IP source port destination IP destination port QID category - Specify the source you want this test to consider. The default is the source IP. • the same any - Specify if you want this test to consider the same or any of the configured destinations. • destination IP destination port - Specify whether you want this test to consider a destination IP address, user name, or destination port. The default is destination IP. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is seconds.

Table A-16 Flow Rules: Functions Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Multi-Rule Flow Function	Allows you to use saved building blocks or other rules to populate this test. You can use this function to detect a number of specified rules, in sequence, involving a source and destination within a configured time interval.	when at least this number of these rules, in in any order, from the same any source IP to the same any destination IP , over this many seconds	Configure the following parameters: <ul style="list-style-type: none"> • this number - Specify the number of rules you want this function to consider. • rules - Specify the rules you want this test to consider. • in in any - Specify whether you want this test to consider in or in any order. • the same any - Specify if you want this test to consider the same or any of the configured sources. • source IP source port destination IP destination port QID category - Specify the source you want this test to consider. The default is source IP. • the same any - Specify if you want this test to consider the same or any of the configured destinations. • destination IP destination port - Specify whether you want this test to consider a destination IP address, user name, or destination port. The default is destination IP. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider.
Multi-Flow Sequence Function Between Hosts	Allows you to detect a sequence of selected rules involving the same source and destination hosts within the configured time interval. You can also use saved building blocks and other rules to populate this test.	when this sequence of rules , involving the same source and destination hosts in this many seconds	Configure the following parameters: <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is seconds.

Table A-16 Flow Rules: Functions Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Rule Function	Allows you to detect a number of specific rules with the same flow properties and different flow properties within the configured time interval.	when these rules match at least this many times in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Flow Property Function	Allows you to detect a configured number of specific rules with the same flow properties within the configured time interval.	when these rules match at least this many times with the same flow properties in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.

Table A-16 Flow Rules: Functions Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Flow Property Function	Allows you to detect when specific rules occur a configured number of times with the same flow properties and different flow properties within the configured time interval after a series of specific rules.	when these rules match at least this many times with the same flow properties and different flow properties in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Rule Function	Allows you to detect when specific rules occur a configured number of times in a configured time interval after a series of specific rules occur with the same flow properties.	when these rules match at least this many times in this many minutes after these rules match with the same flow properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties.

Table A-16 Flow Rules: Functions Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Flow Property Function	Allows you to detect when specific rules occur a configured number of times with the same flow properties in a configured time interval after a series of specific rules occur with the same flow properties.	when these rules match at least this many times with the same flow properties in this many minutes after these rules match with the same flow properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these - Specify the rules you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties.

Table A-16 Flow Rules: Functions Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Flow Property Function	Allows you to detect when specific rules occur a configured number of times with the same flow properties and different flow properties in a configured time interval after a series of specific rules occur with the same flow properties.	when these rules match at least this many times with the same flow properties and different flow properties in this many minutes after these rules match with the same flow properties	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties.

Table A-16 Flow Rules: Functions Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Flow Property Function	Allows you to detect when a specific number of flows occur with the same flow properties and different flow properties in a configured time interval after a series of specific rules occur.	when at least this many flows are seen with the same flow properties and different flow properties in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of flows you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Flow Property Function	Allows you to detect when a specific number of flows occur with the same flow properties in a configured time interval after a series of specific rules occur with the same flow properties.	when at least this many flows are seen with the same flow properties in this many minutes after these rules match with the same flow properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of flows you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties.

Table A-16 Flow Rules: Functions Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Flow Property Function	Allows you to detect when a specific number of flows occur with the same flow properties and different flow properties in a configured time interval after a series of specific rules occur with the same flow properties.	when at least this many flows are seen with the same flow properties and different flow properties in this many minutes after these rules match with the same flow properties	Configure the following parameters: <ul style="list-style-type: none"> • this many - Specify the number of flows you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules- Specify the rules you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties.

Function - Counters Tests

The functions - counters tests include:

Table A-17 Flow Rules: Functions - Counters Group

Test	Description	Default Test Name	Parameters
Multi-Flow Counter Function	Allows you to test the number of flows from configured conditions, such as, source IP address. You can also use building blocks and other rules to populate this test.	when a(n) source IP matches more than exactly this many of these rules across more than exactly this many destination IP, over this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source IP source port destination IP destination port QID category - Specify the source you want this test to consider. The default is source IP. • more than exactly - Specify if you want this test to consider more than or exactly the number of rules. • this many - Specify the number of rules you want this test to consider. • rules - Specify the rules you want this test to consider. • more than exactly - Specify if you want this test to consider more than or exactly the number of destination IP addresses, destination ports, QIDs, log source event IDs, or log sources that you selected in the source above. • this many - Specify the number of IP addresses, ports, or user names you want this test to consider. • username destination IP source IP source port destination port QID event ID log sources category - Specify the destination you want this test to consider. The default is destination IP. • this many - Specify the time value you want to assign to this test. • seconds minutes hours days - Specify the time interval you want this rule to consider. The default is minutes.

Table A-17 Flow Rules: Functions - Counters Group (continued)

Test	Description	Default Test Name	Parameters
Multi-Rule Function	Allows you to detect a series of rules for a specific IP address or port followed by a series of specific rules for a specific port or IP address. You can also use building blocks or existing rules to populate this test.	when any of these rules with the same source IP more than this many times, across more than exactly this many destination IP within this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider. • source IP source port destination IP destination port QID category - Specify the source you want this test to consider. The default is source IP. • this many - Specify the number of times the configured rules must match the test. • more than exactly - Specify if you want this test to consider more than or exactly the number of destination IP addresses, destination ports, QIDs, log source event IDs, or log sources that you selected in the source option. • this many - Specify the number you want this test to consider, depending on the option you configured in the source IP parameter. • username destination IP source IP source port destination port QID event ID log sources category - Specify the destination you want this test to consider. The default is destination IP. • this many - Specify the time interval you want to assign to this test. • seconds minutes hours days - Specify the time interval you want this rule to consider. The default is minutes.

Table A-17 Flow Rules: Functions - Counters Group (continued)

Test	Description	Default Test Name	Parameters
Flow Property Function	<p>Allows you to detect a series of events with the same flow properties within the configured time interval.</p> <p>For example, you can use this test to detect when 100 flows with the same source IP address occurs within 5 minutes.</p>	when at least this many flows are seen with the same flow properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of flows you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.
Flow Property Function	<p>Allows you to detect a series of events with the same flow properties and different flow properties within the configured time interval.</p> <p>For example, you can use this test to detect when 100 flows with the same source IP address and different destination IP address occurs within 5 minutes.</p>	when at least this many flows are seen with the same flow properties and different flow properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of flows you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Table A-17 Flow Rules: Functions - Counters Group (continued)

Test	Description	Default Test Name	Parameters
Rule Function	Allows you to detect a number of specific rules with the same flow properties within the configured time interval.	when these rules match at least this many times in this many minutes	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.
Flow Property Function	Allows you to detect a number of specific rules with the same flow properties within the configured time interval.	when these rules match at least this many times with the same flow properties in this many minutes	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Table A-17 Flow Rules: Functions - Counters Group (continued)

Test	Description	Default Test Name	Parameters
Flow Property Function	Allows you to detect a number of specific rules with the same flow properties and different flow properties within the configured time interval.	when these rules match at least this many times with the same flow properties and different flow properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Function - Simple Tests The function - simple tests include:

Table A-18 Flow Rules: Functions - Simple Group

Test	Description	Default Test Name	Parameters
Multi-Rule Flow Function	Allows you to use saved building blocks and other rules to populate this test. The flow has to match either all or any of the selected rules. If you want to create an OR statement for this rule test, specify the any parameter.	when a flow matches any/all of the following rules	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • any all - Specify either any or all of the configured rules that should apply to this test. • rules - Specify the rules you want this test to consider.

Date/Time Tests

The date and time tests include:

Table A-19 Flow Rules: Date/Time Tests

Test	Description	Default Test Name	Parameters
Flow Day	Valid when the flow occurs on the configured day of the month.	when the flow(s) occur on the selected day of the month	Configure the following parameters: <ul style="list-style-type: none"> • on after before - Specify if you want this test to consider on, after, or before the configured day. The default is on. • selected - Specify the day of the month you want this test to consider.
Flow Week	Valid when the flow occurs on the configured days of the week.	when the flow(s) occur on any of these days of the week	these days of the week - Specify the days of the week you want this test to consider.
Flow Time	Valid when the flow occurs at, before, or after the configured time.	when the flow(s) occur after this time	Configure the following parameters: <ul style="list-style-type: none"> • after before at - Specify if you want this test to consider after, before, or at the configured time. The default is after. • this time - Specify the time you want this test to consider.

Network Property Tests

The network property test group includes:

Table A-20 Flow Rules: Network Property Tests

Test	Description	Default Test Name	Parameters
Local Network Object	Valid when the flow occurs in the specified network.	when the local network is one of the following networks	one of the following networks - Specify the areas of the network you want this test to apply to.
Remote Networks	Valid when an IP address is part of any or all of the configured remote network locations.	when the source IP is a part of any of the following remote network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. The default is source IP. • remote network locations - Specify the network locations you want this test to consider.

Table A-20 Flow Rules: Network Property Tests (continued)

Test	Description	Default Test Name	Parameters
Remote Services Networks	Valid when an IP address is part of any or all of the configured remote services network locations.	when the source IP is a part of any of the following remote services network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. The default is source IP. • remote services network locations - Specify the services network locations you want this test to consider.
Geographic Networks	Valid when an IP address is part of any or all of the configured geographic network locations.	when the source IP is a part of any of the following geographic network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. The default is source IP. • geographic network locations - Specify the network locations you want this test to consider.

Function - Negative Tests

The function - negative tests include:

Table A-21 Flow Rules: Functions - Negative Group

Test	Description	Default Test Name	Parameters
Flow Property Function	Allows you to detect when none of the specified rules occur in a configured time interval after a series of specific rules occur with the same flow properties.	when none of these rules match in this many minutes after these rules match with the same flow properties	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties.

Table A-21 Flow Rules: Functions - Negative Group (continued)

Test	Description	Default Test Name	Parameters
Rule Function	Allows you to detect when none of the specified rules occur in a configured time interval after a series of specific rules occur.	when none of these rules match in this many minutes after these rules match	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.

Common Rule Tests

This section provides information on the common rule tests you can apply to both event and flow records, including:

- [Host Profile Tests](#)
- [IP/Port Tests](#)
- [Common Property Tests](#)
- [Functions - Sequence Tests](#)
- [Function - Counter Tests](#)
- [Function - Simple Tests](#)
- [Date/Time Tests](#)
- [Network Property Tests](#)
- [Functions Negative Tests](#)

Host Profile Tests

The host profile tests include:

Table A-22 Common Rule: Host Profile Tests

Test	Description	Default Test Name	Parameters
Host Profile Port	<p>Valid when the port is open on the configured local source or destination. You can also specify if the status of the port is detected using one of the following methods:</p> <ul style="list-style-type: none"> • Active - QRadar Network Anomaly Detection actively searches for the configured port through scanning or vulnerability assessment. • Passive - QRadar Network Anomaly Detection passively monitors the network recording hosts previously detected. 	when the local source host destination port is open either actively or passively seen	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • actively seen passively seen either actively or passively seen - Specify if you want this test to consider active scanning, passive scanning, or both. The default is either actively or passively seen.
Host Existence	<p>Valid when the local source or destination host is known to exist through active or passive scanning.</p> <p>You can also specify if the status of the host is detected using one of the following methods:</p> <ul style="list-style-type: none"> • Active - QRadar Network Anomaly Detection actively searches for the configured port through scanning or vulnerability assessment. • Passive - QRadar Network Anomaly Detection passively monitors the network recording hosts previously detected. 	when the local source host exists either actively or passively seen	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • actively seen passively seen either actively or passively seen - Specify if you want this test to consider active scanning, passive scanning, or both. The default is either actively or passively seen.

Table A-22 Common Rule: Host Profile Tests (continued)

Test	Description	Default Test Name	Parameters
Host Profile Age	Valid when the local source or destination host profile age is greater than the configured value within the configured time intervals.	when the local source host profile age is greater than this number of time intervals	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • greater than less than - Specify if you want this test to consider values greater than or less than the profile port age. • this number of - Specify the number of time intervals you want this test to consider. • time intervals - Specify whether you want this test to consider minutes or hours.
Host Port Age	Valid when the local source or destination host port profile age is greater than or less than a configured amount of time.	when the local source host profile port age is greater than this number of time intervals	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to apply to the source or destination port. The default is source. • greater than less than - Specify if you want this test to consider values greater than or less than the profile port age. The default is greater than. • this number of - Specify the number of time intervals you want this test to consider. • time intervals - Specify whether you want this test to consider minutes or hours.
Asset Weight	Valid when the device being attacked (destination) or the host is that attacker (source) has an assigned weight greater than or less than the configured value.	when the destination asset has a weight greater than this weight	Configure the following parameters: <ul style="list-style-type: none"> • source destination - Specify if you want this test to consider the source or destination asset. The default is destination. • greater than less than equal to - Specify if you want the value to be greater than, less than, or equal to the configured value. • this weight - Specify the weight you want this test to consider.

Table A-22 Common Rule: Host Profile Tests (continued)

Test	Description	Default Test Name	Parameters
OSVDB IDs	Valid when an IP address (source, destination, or any) is vulnerable to the configured Open Source Vulnerability Database (OSVDB) IDs.	when the source IP is vulnerable to one of the following OSVDB IDs	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. The default is source IP. • OSVDB IDs - Specify any OSVDB IDs that you want this test to consider. For more information regarding OSVDB IDs, see http://osvdb.org/.

IP/Port Tests The IP/Port tests include:**Table A-23** Common Rule: IP / Port Test Group

Test	Description	Default Test Name	Parameters
Source Port	Valid when the source port of the event or flow is one of the configured source ports.	when the source port is one of the following ports	ports - Specify the ports you want this test to consider.
Destination Port	Valid when the destination port of the event or flow is one of the configured destination ports.	when the destination port is one of the following ports	ports - Specify the ports you want this test to consider.
Local Port	Valid when the local port of the event or flow is one of the configured local ports.	when the local port is one of the following ports	ports - Specify the ports you want this test to consider.
Remote Port	Valid when the remote port of the event or flow is one of the configured remote ports.	when the remote port is one of the following ports	ports - Specify the ports you want this test to consider.
Source IP Address	Valid when the source IP address of the event or flow is one of the configured IP addresses.	when the source IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Destination IP Address	Valid when the destination IP address of the event or flow is one of the configured IP addresses.	when the destination IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Local IP Address	Valid when the local IP address of the event or flow is one of the configured IP addresses.	when the local IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.

Table A-23 Common Rule: IP / Port Test Group (continued)

Test	Description	Default Test Name	Parameters
Remote IP Address	Valid when the remote IP address of the event or flow is one of the configured IP addresses.	when the remote IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
IP Address	Valid when the source or destination IP address of the event or flow is one of the configured IP addresses.	when either the source or destination IP is one of the following IP addresses	IP addresses - Specify the IP addresses you want this test to consider.
Source or Destination Port	Valid when either the source or destination port is one of the configured ports.	when the source or destination port is any of these ports	these ports - Specify the ports you want this test to consider.

Common Property Tests The common property tests include:

Table A-24 Common Rules: Common Property Tests

Test	Description	Default Test Name	Parameters
IP Protocol	Valid when the IP protocol of the event or flow is one of the configured protocols.	when the IP protocol is one of the following protocols	protocols - Specify the protocols you want to add to this test.
Payload Search	This test is valid when the entered search string is included anywhere in the event or flow source or destination payload.	when the Flow Source or Destination Payload contains this string	this string - Specify the text string you want to include for this test.
Context	Context is the relationship between the source and destination of the event or flow. For example, a local source to a remote destination. Valid if the context is one of the following: <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote 	when the context is this context	this context - Specify the context you want this test to consider. The options are: <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote
Source Location	Valid when the source is either local or remote.	when the source is local or remote {default: Remote}	local remote - Specify if you want the source to be local or remote. The default is remote
Destination Location	Valid when the destination IP address of the event or flow is either local or remote.	when the destination is local or remote {default: remote}	local remote - Specify either local or remote traffic.

Table A-24 Common Rules: Common Property Tests (continued)

Test	Description	Default Test Name	Parameters
Regex	<p>Valid when the configured MAC address, user name, host name, or operating system is associated with a particular regular expressions (regex) string.</p> <p>Note: <i>This test assumes knowledge of regular expressions (regex). When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.</i></p>	when the username matches the following regex	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • hostname source hostname destination hostname source payload destination payload - Specify the value you want to associate with this test. The default is username. • regex - Specify the regex string you want this test to consider.
IPv6	Valid when the source or destination IPv6 address is the configured IP address.	when the source IP(v6) is one of the following IPv6 addresses	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source IP(v6) destination IP(v6) - Specify whether you want this test to consider the source or destination IPv6 address. • IP(v6) addresses - Specify the IPv6 addresses you want this test to consider.
Reference Set	Valid when any or all configured event or flow properties are contained in any or all configured reference sets.	when any of these properties are contained in any of these reference set(s)	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • any all - Specify if you want this test to consider any or all of the configured event properties. • these properties - Specify the event or flow properties you want this test to consider. • any all - Specify if you want this test to consider any or all of the configured reference sets. • these reference set(s) - Specify the reference sets you want this test to consider.

Table A-24 Common Rules: Common Property Tests (continued)

Test	Description	Default Test Name	Parameters
CVSS Risk (Host)	Valid when the specified host has a CVSS risk value that matches the configured value.	when the destination host has a CVSS risk value of greater than this amount	Configure the following parameters: <ul style="list-style-type: none"> • source destination either - Specify whether the test considers the source or destination host of the flow. • greater than less than equal to - Specify if you want the CVSS risk value to be greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.
CVSS Risk (Port)	Valid when the specified port has a CVSS risk value that matches the configured value.	when the destination port has a CVSS risk value of greater than this amount	<ul style="list-style-type: none"> • source destination either - Specify whether the test considers the source or destination port of the flow. • greater than less than equal to - Specify if you want the threat level to be greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0.
Search Filter	Valid when the event or flow matches the specified search filter.	when the event or flow matches this search filter	this search filter - Specify the search filter you want this test to consider.
Regex	Valid when the configured property is associated with a particular regular expressions (regex) string. <i>Note: This test assumes knowledge of regular expressions (regex). When you define custom regex patterns, adhere to regex rules as defined by the Java™ programming language. For more information, you can refer to regex tutorials available on the web.</i>	when these properties match the following regex	Configure the following parameters: <ul style="list-style-type: none"> • these properties - Specify the value you want to associate with this test. Options include all normalized, and custom flow and event properties. • regex - Specify the regex string you want this test to consider.
Custom Rule Engines	Valid when the event or flow is processed by the specified Custom Rule Engines.	when the event or flow is processed by one of these Custom Rule Engines	these - Specify the Custom Rule Engine you want this test to consider.

Table A-24 Common Rules: Common Property Tests (continued)

Test	Description	Default Test Name	Parameters
Hexadecimal	Valid when the configured property is associated with particular hexadecimal values.	when any of these properties contain any of these hexadecimal values	Configure the following parameters: <ul style="list-style-type: none"> • these properties - Specify the value you want to associate with this test. Options include all normalized, and custom flow and event properties. • these hexadecimal values - Specify the hexadecimal values you want this test to consider.

Functions - Sequence Tests - The functions - sequence tests include:

Table A-25 Common: Functions - Sequence Group

Test	Description	Default Test Name	Parameters
Multi-Rule Event Function	Allows you to use saved building blocks or other rules to populate this test. This function allows you to detect a specific sequence of selected rules involving a source and destination within a configured time period.	when all of these rules, in in any order, from the same any source IP to the same any destination IP , over this many seconds	Configure the following parameters: <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider. • in in any - Specify whether you want this test to consider in or in any order. • the same any - Specify if you want this test to consider the same or any of the configured sources. • source IP source port destination IP destination port QID category - Specify the source you want this test to consider. The default is source IP. • the same any - Specify if you want this test to consider the same or any of the configured destinations. • destination IP destination port - Specify whether you want this test to consider a destination IP address, user name, or destination port. The default is destination IP. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is seconds.

Table A-25 Common: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Multi-Rule Event Function	Allows you to use saved building blocks or other rules to populate this test. You can use this function to detect a number of specified rules, in sequence, involving a source and destination within a configured time interval.	when at least this number of these rules, in in any order, from the same any source IP to the same any destination IP , over this many seconds	Configure the following parameters: <ul style="list-style-type: none"> • this number - Specify the number of rules you want this function to consider. • rules - Specify the rules you want this test to consider. • in in any - Specify whether you want this test to consider in or in any order. • the same any - Specify if you want this test to consider the same or any of the configured sources. • source IP source port destination IP destination port QID category - Specify the source you want this test to consider. The default is source IP. • the same any - Specify if you want this test to consider the same or any of the configured destinations. • destination IP destination port - Specify whether you want this test to consider a destination IP address, user name, or destination port. The default is destination IP. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is seconds.
Multi-Event Sequence Function Between Hosts	Allows you to detect a sequence of selected rules involving the same source and destination hosts within the configured time interval. You can also use saved building blocks and other rules to populate this test.	when this sequence of rules , involving the same source and destination hosts in this many seconds	Configure the following parameters: <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is seconds.

Table A-25 Common: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Rule Function	Allows you to detect a number of specific rules with the same event properties and different event properties within the configured time interval.	when these rules match at least this many times in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Event Property Function	Allows you to detect a configured number of specific rules with the same event properties occur within the configured time interval.	when these rules match at least this many times with the same event properties in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.

Table A-25 Common: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when specific rules occur a configured number of times with the same event properties and different event properties occur within the configured time interval after a series of specific rules.	when these rules match at least this many times with the same event properties and different event properties in this many minutes after these rules match	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Select the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Rule Function	Allows you to detect when specific rules occur a configured number of times in a configured time interval after a series of specific rules occur with the same event properties.	when these rules match at least this many times in this many minutes after these rules match with the same event properties	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Table A-25 Common: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when specific rules occur a configured number of times with the same event properties in a configured time interval after a series of specific rules occur with the same event properties.	when these rules match at least this many times with the same event properties in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Table A-25 Common: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when specific rules occur a configured number of times with the same event properties and different event properties in a configured time interval after a series of specific rules occur with the same event properties.	when these rules match at least this many times with the same event properties and different event properties in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Table A-25 Common: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when a specific number of events occur with the same event properties and different event properties in a configured time interval after a series of specific rules occur.	when at least this many events are seen with the same event properties and different event properties in this many minutes after these rules match	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.
Event Property Function	Allows you to detect when a specific number of events occur with the same event properties in a configured time interval after a series of specific rules occur with the same event properties.	when at least this many events are seen with the same event properties in this many minutes after these rules match with the same event properties	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Table A-25 Common: Functions - Sequence Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect when a specific number of events occur with the same event properties and different event properties in a configured time interval after a series of specific rules occur with the same event properties.	when at least this many events are seen with the same event properties and different event properties in this many minutes after these rules match with the same event properties	Configure the following parameters: <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties.

Function - Counter Tests

The function - counter tests include:

Table A-26 Common Rules: Functions - Counter Test Group

Test	Description	Default Test Name	Parameters
Multi-Event Counter Function	Allows you to test the number of events or flows from configured conditions, such as, source IP address. You can also use building blocks and other rules to populate this test.	when a(n) source IP matches more than exactly this many of these rules across more than exactly this many destination IP, over this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • source IP source port destination IP destination port QID category - Specify the source you want this test to consider. The default is source IP. • more than exactly - Specify if you want this test to consider more than or exactly the number of rules. • this many - Specify the number of rules you want this test to consider. • rules - Specify the rules you want this test to consider. • more than exactly - Specify if you want this test to consider more than or exactly the number of destination IP addresses, destination ports, QIDs, log source event IDs, or log sources that you selected in the source above. • this many - Specify the number of IP addresses, ports, QIDs, events, log sources, or categories you want this test to consider. • username destination IP source IP source port destination port QID event ID log sources category - Specify the destination you want this test to consider. The default is destination IP. • this many - Specify the time value you want to assign to this test. • seconds minutes hours days - Specify the time interval you want this rule to consider. The default is minutes.

Table A-26 Common Rules: Functions - Counter Test Group (continued)

Test	Description	Default Test Name	Parameters
Multi-Rule Function	Allows you to detect a series of rules for a specific IP address or port followed by a series of specific rules for a specific port or IP address. You can also use building blocks or existing rules to populate this test.	when any of these rules with the same source IP more than this many times, across more than exactly this many destination IP within this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • rules - Specify the rules you want this test to consider. • source IP source port destination IP destination port QID category - Specify the source you want this test to consider. The default is source IP. • this many - Specify the number of times the configured rules must match the test. • more than exactly - Specify if you want this test to consider more than or exactly the number of destination IP addresses, destination ports, QIDs, log source event IDs, or log sources that you selected in the source option. • this many - Specify the number you want this test to consider, depending on the option you configured in the source IP parameter. • username destination IP source IP source port destination port QID event ID log sources category - Specify the destination you want this test to consider. The default is destination IP. • this many - Specify the time interval you want to assign to this test. • seconds minutes hours days - Specify the time interval you want this rule to consider. The default is minutes.

Table A-26 Common Rules: Functions - Counter Test Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	<p>Allows you to detect a series of events with the same event properties within the configured time interval.</p> <p>For example, you can use this test to detect when 100 events with the same source IP address occurs within 5 minutes.</p>	when at least this many events are seen with the same event properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.
Event Property Function	<p>Allows you to detect a series of events with the same event properties and different event properties within the configured time interval.</p> <p>For example, you can use this test to detect when 100 events with the same source IP address and different destination IP address occurs within 5 minutes.</p>	when at least this many events are seen with the same event properties and different event properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this many - Specify the number of events you want this test to consider. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Table A-26 Common Rules: Functions - Counter Test Group (continued)

Test	Description	Default Test Name	Parameters
Rule Function	Allows you to detect when a number of specific rules with the same event properties occur within the configured time interval.	when these rules match at least this many times in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.
Event Property Function	Allows you to detect a number of specific rules with the same event properties within the configured time interval.	when these rules match at least this many times with the same event properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Table A-26 Common Rules: Functions - Counter Test Group (continued)

Test	Description	Default Test Name	Parameters
Event Property Function	Allows you to detect a number of specific rules with the same event properties and different event properties within the configured time interval.	when these rules match at least this many times with the same event properties and different event properties in this many minutes	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of times the configured rules must match the test. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • event properties - Specify the event properties you want this test to consider. Options include all normalized and custom event properties. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes.

Function - Simple Tests The function - simple tests include:

Table A-27 Common Rules: Functions - Simple Test Group

Test	Description	Default Test Name	Parameters
Multi-Rule Event Function	Allows you to use saved building blocks and other rules to populate this test. The event has to match either all or any of the selected rules. If you want to create an OR statement for this rule test, specify the any parameter.	when a flow or an event matches any all of the following rules	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • any all - Specify either any or all of the configured rules that should apply to this test. • rules - Specify the rules you want this test to consider.

Date/Time Tests

The date and time tests include:

Table A-28 Common Rule: Date/Time Tests

Test	Description	Default Test Name	Parameters
Event/Flow Day	Valid when the event or flow occurs on the configured day of the month.	when the flow(s) or event(s) occur on the selected day of the month	Configure the following parameters: <ul style="list-style-type: none"> • on after before - Specify if you want this test to consider on, after, or before the configured day. The default is on. • selected - Specify the day of the month you want this test to consider.
Event/Flow Week	Valid when the event or flow occurs on the configured days of the week.	when the flow(s) or event(s) occur on any of these days of the week	these days of the week - Specify the days of the week you want this test to consider.
Event/Flow Time	Valid when the event or flow occurs at, before, or after the configured time.	when the flow(s) or event(s) occur after this time	Configure the following parameters: <ul style="list-style-type: none"> • after before at - Specify if you want this test to consider after, before, or at the configured time. The default is after. • this time - Specify the time you want this test to consider.

Network Property Tests

The network property test group includes:

Table A-29 Common Rule: Network Property Tests

Test	Description	Default Test Name	Parameters
Local Network Object	Valid when the event occurs in the specified network.	when the local network is one of the following networks	one of the following networks - Specify the areas of the network you want this test to apply to.
Remote Networks	Valid when an IP address is part of any or all of the configured remote network locations.	when the source IP is part of any of the following remote network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. • remote network locations - Specify the network locations you want this test to consider.

Table A-29 Common Rule: Network Property Tests (continued)

Test	Description	Default Test Name	Parameters
Remote Services Networks	Valid when an IP address is part of any or all of the configured remote services network locations.	when the source IP is a part of any of the following remote services network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. • remote services network locations - Specify the remote services network locations you want this test to consider.
Geographic Networks	Valid when an IP address is part of any or all of the configured geographic network locations.	when the Source IP is a part of any of the following geographic network locations	Configure the following parameters: <ul style="list-style-type: none"> • source IP destination IP any IP - Specify if you want this test to consider the source IP address, destination IP address, or any IP address. • geographic network locations - Specify the geographic network locations you want this test to consider.

Functions Negative Tests

The functions negative tests include:

Table A-30 Common Rules: Functions - Negative Test Group

Test	Description	Default Test Name	Parameters
Flow Property Function	Allows you to detect when none of the specified rules occur in a configured time interval after a series of specific rules occur with the same flow properties.	when none of these rules match in this many minutes after these match with the same flow properties	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these - Specify the rules you want this test to consider. • flow properties - Specify the flow properties you want this test to consider. Options include all normalized and custom flow properties.

Table A-30 Common Rules: Functions - Negative Test Group (continued)

Test	Description	Default Test Name	Parameters
Rule Function	Allows you to detect when none of the specified rules occur in a configured time interval after a series of specific rules occur.	when none of these rules match in this many minutes after these rules match	Configure the following parameters: <ul style="list-style-type: none"> • these rules - Specify the rules you want this test to consider. • this many - Specify the number of time intervals you want this test to consider. • seconds minutes hours days - Specify the time interval you want this test to consider. The default is minutes. • these rules - Specify the rules you want this test to consider.

Offense Rule Tests This section provides information on the tests you can apply to the offense rules, including:

- [IP/Port Tests](#)
- [Function Tests](#)
- [Date/Time Tests](#)
- [Log Source Tests](#)
- [Offense Property Tests](#)

IP/Port Tests The IP/Port tests include:

Table A-31 Offense Rules: IP/Port Test Group

Test	Description	Default Test Name	Parameters
Offense Index	Valid when the source IP address is one of the configured IP addresses.	when the offense is indexed by one of the following IP addresses .	IP addresses - Specify the IP addresses you want this test to consider. You can enter multiple entries using a comma-separated list.
Destination IP Address	Valid when the destination list is any of the configured IP addresses.	when the destination list includes any of the following IP addresses	Configure the following parameters: <ul style="list-style-type: none"> • any all - Specify if you want this test to consider any or all of the listed destinations. The default is any. • IP addresses - Specify the IP addresses you want this test to consider. You can enter multiple entries using a comma-separated list.

Function Tests The function tests include:**Table A-32** Offense Rules: Offense Function Group

Test	Description	Default Test Name	Parameters
Multi-Rule Offense Function	Allows you to use saved building blocks and other rules to populate this test. The offense has to match either all or any of the selected rules. If you want to create an OR statement for this rule test, specify the any parameter.	when the offense matches any of the following offense rules .	Configure the following parameters: <ul style="list-style-type: none"> • any all - Specify either any or all of the configured rules that should apply to this test. The default is any. • offense rules - Specify the rules you want this test to consider.

Date/Time Tests The date and time tests include:**Table A-33** Offense Rules: Date/Time Tests

Test	Description	Default Test Name	Parameters
Offense Day	Valid when the offense occurs on the configured day of the month.	when the offense(s) occur on the selected day of the month	Configure the following parameters: <ul style="list-style-type: none"> • on after before - Specify if you want this rule to consider on, after, or before the selected date. The default is on. • selected - Specify the date you want this test to consider.
Offense Week	Valid when the offense occurs on the configured day of the week.	when the offense(s) occur on these days of the week	Configure the following parameters: <ul style="list-style-type: none"> • on after before - Specify if you want this rule to consider on, after, or before the selected day. The default is on. • these days of the week - Specify the days you want this test to consider.
Offense Time	Valid when the offense occurs after, before, or on the configured time.	when the offense(s) occur after this time	Configure the following parameters: <ul style="list-style-type: none"> • on after before - Specify if you want this test to consider after, before, or at a specified time. The default is after. • this time - Specify the time you want this test to consider.

Log Source Tests The log source tests include:

Table A-34 Offense Rules: Log Source Tests

Test	Description	Default Test Name	Parameters
Log Source Types	Valid when one of the configured log source types is the source of the offense.	when the log source type(s) that detected the offense is one of the following log source types	log source types - Specify the log source types that you want this test to detect.
Number of Log Source Type	Valid when the number of log source types is greater than the configured value.	when the number of log source types that detected the offense is greater than this number	Configure the following parameters: <ul style="list-style-type: none"> • greater than equal to - Specify if you want the threat level to be greater than or equal to the configured value. • this number - Specify the number of log source types that you want this test to consider.

Offense Property Tests The offense property tests include:

Table A-35 Offense Rules: Offense Property Tests

Test	Description	Default Test Name	Parameters
Network Object	Valid when the network is affected by any or all of the configured networks.	when the networks affected are any of the following networks	Configure the following parameters: <ul style="list-style-type: none"> • any all - Specify if you want this test to consider any or all networks. The default is any. • the following networks - Specify the networks you want this test to consider.
Offense Category	Valid when the event category is any or all of the configured event categories.	when the categories of the offense includes any of the following list of categories	Configure the following parameters: <ul style="list-style-type: none"> • any all - Specify if you want this test to consider any or all categories. The default is any. • list of categories - Specify the categories you want this test to consider. <p>For more information on event categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>

Table A-35 Offense Rules: Offense Property Tests (continued)

Test	Description	Default Test Name	Parameters
Severity	Valid when the severity is greater than, less than, or equal to the configured value.	when the offense severity is greater than 5 {default}	Configure the following parameters: <ul style="list-style-type: none"> • greater than less than equal to - Specify if you want the offense severity to be greater than, less than, or equal to the configured value. • 5 - Specify the value you want this test to consider. The default is 5.
Credibility	Valid when the credibility is greater than, less than, or equal to the configured value.	when the offense credibility is greater than 5 {default}	Configure the following parameters: <ul style="list-style-type: none"> • greater than less than equal to - Specify if you want the offense credibility to be greater than, less than, or equal to the configured value. • 5 - Specify the value you want this test to consider.
Relevance	Valid when the relevance is greater than, less than, or equal to the configured value.	when the offense relevance is greater than 5 {default}	Configure the following parameters: <ul style="list-style-type: none"> • greater than less than equal to - Specify if you want the offense relevance to be greater than, less than, or equal to the configured value. • 5 - Specify the value you want this test to consider.
Offense Context	Offense Context is the relationship between the source and destination of the offense. For example, a local attacker to a remote target. Valid if the offense context is one of the following: <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote 	when the offense context is this context	this context - Specify the context you want this test to consider. The options are: <ul style="list-style-type: none"> • Local to Local • Local to Remote • Remote to Local • Remote to Remote
Source Location	Valid when the source is either local or remote.	when the source is local or local or remote {default: Remote}	local remote - Specify if you want the source to be local or remote. The default is remote .
Destination Location	Valid when the destination is either local or remote.	when the destination list includes local or remote IP addresses {default: remote}	locate IPs remote IPs - Specify if you want the target to be local or remote. The default is remote IPs .

Table A-35 Offense Rules: Offense Property Tests (continued)

Test	Description	Default Test Name	Parameters
Destination Count in an Offense	Valid when the number of destinations for an offense is greater than, less than, or equal to the configured value.	when the number of destinations under attack is greater than this number	Configure the following parameters: <ul style="list-style-type: none"> • greater than equal to - Specify if you want the number of destinations to be greater than or equal to the configured value. • this number - Specify the value you want this test to consider.
Event Count in an Offense	Valid when the number of events for an offense is greater than, less than, or equal to the configured value.	when the number of events making up the offense is greater than this number	Configure the following parameters: <ul style="list-style-type: none"> • greater than less than equal to - Specify if you want the event count to be greater than, less than, or equal to the configured value. • this number - Specify the value you want this test to consider.
Flow Count in an Offense	Valid when the number of flows for an offense is greater than, less than, or equal to the configured value.	when the number of flows making up the offense is greater than this number	Configure the following parameters: <ul style="list-style-type: none"> • greater than less than equal to - Specify if you want the flow count to be greater than, less than, or equal to the configured value. • this number - Specify the value you want this test to consider.
Total Event/Flow Count in an Offense	Valid when the total number of events and flows for an offense is greater than, less than, or equal to the configured value.	when the number of events and flows making up the offense is greater than this number	Configure the following parameters: <ul style="list-style-type: none"> • greater than less than equal to - Specify if you want the event and flow count to be greater than, less than, or equal to the configured value. • this number - Specify the value you want this test to consider.
Category Count in an Offense	Valid when the number of event categories for an offense is greater than, less than, or equal to the configured value.	when the number of categories involved in the offense is greater than this number	Configure the following parameters: <ul style="list-style-type: none"> • greater than equal to - Specify if you want the number of categories to be greater than or equal to the configured value. • this number - Specify the value you want this test to consider. <p>For more information on event categories, see the <i>IBM Security QRadar Network Anomaly Detection Administration Guide</i>.</p>
Offense ID	Valid when the Offense ID is the configured value.	when the offense ID is this ID	this ID - Specify the offense ID you want this test to consider.

Table A-35 Offense Rules: Offense Property Tests (continued)

Test	Description	Default Test Name	Parameters
Offense Creation	Valid when a new offense is created.	when a new offense is created	
Offense Change	Valid when the configured offense property has increased above the configured value.	when the offense property has increased by at least this percent	Configure the following parameters: <ul style="list-style-type: none"> • Magnitude Severity Credibility Relevance Destination count Source count Category count Annotation count Event count - Specify the property you want this test to consider. The default is Magnitude. • this - Specify the percent or unit value you want this test to consider. • percent unit(s) - Specify if you want this test to consider percentage or units.

Anomaly Detection Rule Tests

This section provides information on the tests you can apply to the anomaly detection rules, including:

- [Anomaly Rule Tests](#)
- [Behavioral Rule Tests](#)
- [Threshold Rule Tests](#)

Anomaly Rule Tests

This section provides information on the anomaly rule tests you can apply to the rules, including:

- [Anomaly Tests](#)
- [Time Threshold Tests](#)

Anomaly Tests

The anomaly test group includes:

Table A-36 Anomaly Rules: Anomaly Tests

Test	Description	Default Test Name	Parameters
Anomaly	<p>Valid when the accumulated property has increased or decreased by the specified percentage over a short period of time when compared against the specified larger period time.</p> <p>For example, if your average destination bytes for the last 24 hours is 100,000,000 bytes out for each minute and then over a 5 minute period, the average bytes out increases by 40%, this test is valid.</p> <p>Note: <i>The Accumulator sends data to the Anomaly Detection Rule engine in one minute intervals. For more information on the accumulator, see the IBM Security QRadar Network Anomaly Detection Administration Guide.</i></p>	when the average value (per interval) of this accumulated property over the last 1 min is at least percentage% different from the average value (per interval of the same property over the last 1 min	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this accumulated property - Specify the accumulated property you want this test to consider. • 1 min - Specify the time interval you want this test to consider. The default is 1 min. • 40 - Specify the percentage you want this test to consider. The default is 40. • 1 min - Specify the time interval this tests used to compare the interval length. The default is 1 min.
Minimum Value	Valid when the tested value for the accumulated interval exceeds the configured value.	when accumulation intervals are only considered if the tested value for that interval exceeds some value	some value - Specify the value you want to consider for the configured accumulation interval.

Time Threshold Tests

The time threshold test group includes:

Table A-37 Anomaly Rules: Time Threshold Tests

Test	Description	Default Test Name	Parameters
Date Range	Valid when anomalous activity is detected within the specified date range.	when the date is between this date and this date	<p>Configure the following parameters:</p> <ul style="list-style-type: none"> • this date - Specify the start date for your date range. • this date - Specify the end date for your date range.

Table A-37 Anomaly Rules: Time Threshold Tests (continued)

Test	Description	Default Test Name	Parameters
Day of the Week	Valid when anomalous activity is detected on the specified day of the week.	when the day of the week is any of these selected days	these selected days - Specify the days you want this test to consider.
Time Range	Valid when anomalous activity is detected within the specified time range.	when the time of day is between this time and this time	Configure the following parameters: <ul style="list-style-type: none"> • this time - Specify the start time for your date range. • this time - Specify the end date for your date range.

Behavioral Rule Tests This section provides information on the behavioral rule tests you can apply to the rules, including:

- [Behavioral Tests](#)
- [Time Threshold Tests](#)

Behavioral Tests

The behavioral test group includes:

Table A-38 Behavioral Rules: Behavioral Tests

Test	Description	Default Test Name	Parameters
Accumulated Property	Specifies which accumulated property this rule considers.	when this accumulated property is the tested property	this accumulated property - Specify the accumulated property you want this test to consider.
Current Traffic Level	Valid when the current traffic level represents specified seasonal change in data over the time period specified in the Season Length test. For example, the current traffic level test can compare current data with data from the same time period yesterday.	when the importance of the current traffic level (on a scale of 0 to 100) is importance compared to learned traffic trends and behavior	70 - Specify the level of importance, on a scale of 0 to 100, you want this test to consider. The default is 70 .
Current Traffic Trend	Valid when the current traffic trend represents the specified seasonal effect in data for each time interval. For example, the current traffic trend test can test for when data increases the same amount from week 2 to week 3 as it did from week 1 to week 2.	when the importance of the current traffic trend (on a scale of 0 to 100) is importance compared to learned traffic trends and behavior	30 - Specify the level of importance, on a scale of 0 to 100, you want this test to consider. The default is 30 .

Table A-38 Behavioral Rules: Behavioral Tests (continued)

Test	Description	Default Test Name	Parameters
Current Traffic Behavior	Valid when the current traffic behavior changes in data for each time interval. For example, the current traffic behavior test can test for data changes when comparing this minute to the minute before.	when the importance of the current traffic behavior (on a scale of 0 to 100) is importance compared to learned traffic trends and behavior	30 - Specify the level of importance, on a scale of 0 to 100, you want this test to consider. The default is 30 .
Deviation	Valid when accumulated property deviates from the predicted traffic pattern.	when the actual field value deviates by a margin of at least deviation % of the extrapolated (predicted field value).	50 - Specify the percentage of deviation you want this test to consider. The default is 50 .
Season Length	Valid when the season length represents the time interval you want to test. Typically, for network traffic, you can set the season length as a week. When monitoring traffic from automated systems, we recommend setting the season length as day.	when the season length is season	a day a week a month - Specify the season length you want this test to consider.
Minimum Value	Valid when the tested value for the accumulated interval exceeds the configured value.	when accumulation intervals are only considered if the tested value for that interval exceeds 0	0 - Specify the value you want to consider for the configured accumulation interval.

Time Threshold Tests

The time threshold test group includes:

Table A-39 Behavioral Rules: Time Threshold Tests

Test	Description	Default Test Name	Parameters
Date Range	Valid when anomalous activity is detected within the specified date range.	when the date is between this date and this date	Configure the following parameters: <ul style="list-style-type: none"> this date - Specify the start date for your date range. this date - Specify the end date for your date range.
Day of the Week	Valid when anomalous activity is detected on the specified day of the week.	when the day of the week is any of these selected days	these selected days - Specify the days you want this test to consider.

Table A-39 Behavioral Rules: Time Threshold Tests (continued)

Test	Description	Default Test Name	Parameters
Time Range	Valid when anomalous activity is detected within the specified time range.	when the time of day is between this time and this time	Configure the following parameters: <ul style="list-style-type: none"> • this time - Specify the start time for your date range. • this time - Specify the end date for your date range.

Threshold Rule Tests This section provides information on the threshold rule tests you can apply to the rules, including:

- [Field Threshold Tests](#)
- [Time Threshold Tests](#)

Field Threshold Tests

The field threshold test group includes:

Table A-40 Threshold Rules: Field Threshold Tests

Test	Description	Default Test Name	Parameters
Threshold Value	Valid when the accumulated property is greater than, less than, or equal to specified value. You can specify the interval, in minutes, you want to accumulate the property.	when this accumulated property is greater than this value (accumulated in 1 min intervals)	<ul style="list-style-type: none"> • this accumulated property - Specify the accumulated property you want this test to consider. • greater than less than equal to - Specify whether the accumulate property value is greater than, less than, or equal to the configured value. • 0 - Specify the value you want this test to consider. The default is 0. • 1 min - Specify the interval, in minutes, you want to accumulate the property. The default is 1 min.
Threshold Range	Valid when the accumulated property is within a specified range. You can specify the interval, in minutes, you want to accumulate the property.	when this accumulated property is between this value and this value (accumulated in 1 min intervals)	<ul style="list-style-type: none"> • this accumulated property - Specify the accumulated property you want this test to consider. • 0 - Specify the value you want this test to consider as the start of the range. The default is 0. • 0 - Specify the value you want this test to consider as the end of the range. The default is 0. • 1 min - Specify the interval, in minutes, you want to accumulate the property. The default is 1 min.

Time Threshold Tests

The time threshold test group includes:

Table A-41 Threshold Rules: Time Threshold Tests

Test	Description	Default Test Name	Parameters
Date Range	Valid when anomalous activity is detected within the specified date range.	when the date is between this date and this date	Configure the following parameters: <ul style="list-style-type: none"> • this date - Specify the start date for your date range. • this date - Specify the end date for your date range.
Day of the Week	Valid when anomalous activity is detected on the specified day of the week.	when the day of the week is any of these selected days	these selected days - Specify the days you want this test to consider.
Time Range	Valid when anomalous activity is detected within the specified time range.	when the time of day is between this time and this time	Configure the following parameters: <ul style="list-style-type: none"> • this time - Specify the start time for your date range. • this time - Specify the end date for your date range.

B

GLOSSARY

accumulator	The accumulator resides on the host that contains an Event Processor to assist with analyzing flows, events, reporting, writing database data, and alerting a DSM.
Address Resolution Protocol (ARP)	A protocol for mapping an Internet Protocol (IP) address to a physical host address recognized in the local network. For example, in IP Version 4, an address is 32 bits long. In an Ethernet LAN, however, addresses for attached devices are 48 bits long.
anomaly	A deviation from expected behavior of the network.
application signature	A unique set of characteristics or properties, derived by the examination of packet payload, used to identify a specific application.
ARP	See Address Resolution Protocol.
ARP Redirect	ARP allows a host to determine the address of other devices on the LAN or VLAN. A host can use ARP to identify the default gateway (router) or path off to the VLAN. ARP Redirect allows IBM Security QRadar Network Anomaly Detection to notify a host if a problem exists with sending traffic to a system. This renders the host and network unusable until the user intervenes.
ASN	See Autonomous System Number.
Autonomous System Number	An autonomous system is a collection of IP networks that all adhere to the same specific and clearly defined routing policy. An Autonomous System Number (ASN) is a unique ID number assigned to each autonomous system.
behavior	Indicates the normal manner in which the system or network functions or operates.
branding	A reporting option that enables a QRadar Network Anomaly Detection user to upload custom logos for customized reports.
CIDR	See Classless Inter-Domain Routing.
Classless Inter-Domain Routing (CIDR)	Addressing scheme for the Internet, which allocates and species Internet addresses used in inter-domain routing. With CIDR, a single IP address can be used to designate many unique IP addresses.

client	The host that originates communication.
coalescing interval	The interval for coalescing (bundling) events is 10 seconds, beginning with the first event that does not match any currently coalescing events. Within the interval, the first three matching events are released immediately to the Event Processor and the fourth and subsequent events are coalesced such that the payload and other features are kept from the fourth event. Each arrival of a matching event during the interval increments the event count of the fourth event. At the end of the interval, the coalesced event is released to the Event Processor and the next interval begins for matching events. If no matching events arrive during this interval, the process restarts. Otherwise, the coalescing continues with all events counted and released in 10 second intervals.
Console	Web interface for QRadar Network Anomaly Detection. QRadar Network Anomaly Detection is accessed from a standard web browser (Internet Explorer 7.0/8.0 or Mozilla Firefox 3.6 and above). When you access the system, a prompt is displayed for a user name and password, which must be configured in advance by the QRadar Network Anomaly Detection administrator.
content capture	QRadar QFlow Collectors capture a configurable amount of payload and store the data in the flow logs. You can view this data using the Network Activity tab.
credibility	Indicates the integrity of an event or offense as determined by the credibility rating that is configured in the log source. Credibility increases as the multiple sources report the same event.
database leaf objects	The end point objects in a hierarchy. At each point in the hierarchy above this point there is a parent object that contains the aggregate values of all of the leaf objects below.
datapoint	Any point on the QRadar Network Anomaly Detection charts where data is extracted.
DHCP	See Dynamic Host Configuration Protocol.
Device Support Module (DSM)	Device Support Modules (DSMs) allows you to integrate QRadar Network Anomaly Detection with log sources.
DNS	See Domain Name System.
DSM	See Device Support Module (DSM).
Domain Name System (DNS)	An online, distributed database used to map human-readable machine names into an IP address for resolving machine names to IP addresses.
duplicate flow	When multiple QRadar QFlow Collectors detect the same flow, this is referred to as a duplicate flow. However, in this event, the QRadar QFlow Collector drops the flow as a duplicate so the Event Processor only receives one report on the flow.

Dynamic Host Configuration Protocol (DHCP)	A protocol that allows dynamic assignment of IP addresses to customer premise equipment.
encryption	Encryption provides greater security for all QRadar Network Anomaly Detection traffic between managed hosts. When encryption is enabled for a managed host, encryption tunnels are created for all client applications on a managed host to provide protected access to the servers.
event	Record from a device that describes an action on a network or host.
Event Collector	Collects security events and flows from various types of devices in your network. The Event Collector gathers events and flows from local, remote, and device sources. The Event Collector then normalizes the events and flows, and sends the information to the Event Processor.
Event Processor	Processes events collected from one or more Event Collectors. The events are bundled again to conserve network usage. When received, the Event Processor correlates the information from QRadar Network Anomaly Detection and distributed to the appropriate area, depending on the type of event.
false positive	When an event is tuned as false positive, the event no longer contributes to custom rules, therefore, offenses do not generate based on the false positive event. The event is still stored in the database and contributes to reports.
flow	Communication session between two hosts. Describes how traffic is communicated, what was communicated (if content capture option has been selected), and includes such details as when, who, how much, protocols, priorities, or options.
flow data	Specific properties of a flow including: IP addresses, ports, protocol, bytes, packets, flags, direction, application ID, and payload data (optional).
flow logs	Record of flows that enables the system to understand the context of a particular transmission over the network. Flows are stored in flow logs.
flow sources	Source of flows that the QRadar QFlow Collector receives. Using the deployment editor, you can add internal and external flow sources from either the System or Event Views in the deployment editor.
forwarding destination	QRadar Network Anomaly Detection allows you to forward raw log data received from log sources and QRadar Network Anomaly Detection-normalized event data to one or more vendor systems, such as ticketing or alerting systems. On the QRadar Network Anomaly Detection user interface, these vendor systems are called forwarding destinations.

Fully Qualified Domain Name (FQDN)	The portion of an Internet Uniform Resource Locator (URL) that fully identifies the server program that an Internet request is addressed to.
Fully Qualified Network Name (FQNN)	Full path name of a certain point in the network hierarchy. For example, Company A hierarchy has a department object that contains a marketing object. Therefore, the FQNN is CompanyA.Department.Marketing.
FQDN	See Fully Qualified Domain Name.
FQNN	See Fully Qualified Network Name.
gateway	A device that communicates with two protocols and translates services between them.
Host Context	Monitors all QRadar Network Anomaly Detection components to ensure that each component is operating as expected.
ICMP	See Internet Control Message Protocol.
identity	QRadar Network Anomaly Detection collects identity information, if available, from log source messages. Identity information provides additional details about assets on your network. Log sources only generate identity information if the log message sent to QRadar Network Anomaly Detection contains an IP address and at least one of the following: user name or MAC address. Not all log sources generate identity information.
IDS	See Intrusion Detection System.
Internet Control Message Protocol (ICMP)	An Internet network-layer protocol between a host and gateway.
Internet Protocol (IP)	The method or protocol by which data is sent from one computer to another on the Internet. Each computer (known as a host) on the Internet has at least one IP address that uniquely identifies it from all other systems on the Internet. An IP address includes a network address and a host address. An IP address can also be divided by using classless addressing or subnetting.
Internet Service Provider (ISP)	An Internet Service Provider (ISP) provides users access to the Internet and other related services.
interval	The default time period in the system. Affects the update intervals of the graphs and how much time each flow log file contains.
Intrusion Detection System (IDS)	An application or device that identifies suspicious activity on the network.

Intrusion Prevention System (IPS)	Application that reacts to network intrusions.
IP	See Internet Protocol.
IP Multicast	IP Multicast reduces traffic on a network by delivering a single stream of information to multiple users at one time.
IP network	A group of IP routers that route IP datagrams. These routers are sometimes referred to as Internet gateways. Users access the IP network from a host. Each network in the Internet includes some combination of hosts and IP routers.
IPS	See Intrusion Prevention System.
item	A Dashboard option that creates a customized portal that displays any permissible view for monitoring purposes.
L2L	See Local To Local.
L2R	See Local To Remote.
LAN	See Local Area Network.
LDAP	See Lightweight Directory Access Protocol.
leaves	Children or objects which are part of a parent group.
Lightweight Directory Access Protocol (LDAP)	A set of protocols for accessing information directories. LDAP is based on the standards contained within the X.500 standard, but is significantly simpler. And unlike X.500, LDAP supports TCP/IP, which is necessary for any type of Internet access to a directory server.
Local Area Network (LAN)	A non-public data network in which serial transmission is used for direct data communication among data stations located on the user's premises.
Local To Local (L2L)	Internal traffic from one local network to another local network.
Local To Remote (L2R)	Internal traffic from a local network to a remote network.
log source	Log sources are external event log sources such as security equipment (for example, firewalls and IDSs) and network equipment (for example, switches and routers).
Magistrate	Provides the core processing components of the SIEM option. The Magistrate provides reports, alerts, and analysis of network traffic and security events. The Magistrate processes the event against the defined custom rules to create an offense.

magnitude	Specifies the relative importance of the offense and is a weighted value calculated from the Relevance, Severity, and Credibility. The magnitude bar on the Offenses tab and Dashboard provides a visual representation of all correlated variables of the offense, source, destination, or network. The magnitude of an offense is determined by several tests that performed on an offense every time it has been scheduled for re-evaluation, typically because events have been added or the minimum time for scheduling has occurred.
NAT	See Network Address Translation (NAT).
NetFlow	A proprietary accounting technology developed by Cisco Systems® Inc. that monitors traffic flows through a switch or router, interprets the client, server, protocol, and port used, counts the number of bytes and packets, and sends that data to a NetFlow collector. You can configure QRadar Network Anomaly Detection to accept NDE's and thus become a NetFlow collector.
Network Address Translation (NAT)	NAT translates an IP address in one network to a different IP address in another network.
network hierarchy	Contains each component of your network, and identifies which objects belong within other objects. The accuracy and completeness of this hierarchy is essential to traffic analysis functions. The network hierarchy provides for storage of flow logs, databases, and TopN files.
network layer	Layer 3 in the Open System Interconnection (OSI) architecture; the layer that establishes a path between open systems.
network objects	Components of your network hierarchy. You can add layers to the hierarchy by adding additional network objects and associating them to already defined objects. (Objects that contain other objects are called groups.)
network weight	The numeric value applied to each network that signifies the importance of the network. The network weight is user defined.
offense	A message sent or event generated in response to a monitored condition. For example, an offense informs you if a policy has been breached or the network is under attack.
Off-site Source	An off-site device that forwards normalized data to an Event Collector. You can configure an off-site source to receive flows or events and allow the data to be encrypted before forwarding.
Off-site Target	An off-site device that receives event or flow data. An off-site target can only receive data from an Event Collector.
Open Systems Interconnection (OSI)	A framework of ISO standards for communication between different systems made by different vendors, in which the communications process is organized into seven different categories that are placed in a layered sequence based on their

relationship to the user. Each layer uses the layer immediately below it and provides a service to the layer above. Layers 7 through 4 deal with end-to-end communication between the message source and destination, and layers 3 through 1 deal with network functions.

OSI	See Open Systems Interconnection.
Packeteer	Packeteer devices collect, aggregate, and store network performance data. When you configure an external flow source for Packeteer, you can send flow information from a Packeteer device to QRadar Network Anomaly Detection.
payload data	The actual application data, excluding any header or administrative information, contained in an IP flow.
OSVDB	Open Source Vulnerability Database (OSVDB) is an open source database created for and by the network security community. The database provides technical information on network security vulnerabilities.
protocol	A set of rules and formats that determines the communication behavior of layer entities in the performance of the layer functions. It may still require an authorization exchange with a policy module or external policy server before admission.
QRadar QFlow Collector	Collects data from devices and various live or recorded data feeds, such as, network taps, span/mirror ports, NetFlow, and QRadar Network Anomaly Detection flow logs.
QID	QRadar Identifier. A mapping of a single event of an external device to a QRadar unique identifier.
R2L	See Remote To Local.
R2R	See Remote To Remote.
refresh timer	The Dashboard , Log Activity , and Network Activity tabs feature a dynamic status bar that displays the amount of time until QRadar Network Anomaly Detection automatically refreshes the current network activity data; built-in refresh can be manually refreshed at any time.
relevance	Relevance determines the impact on your network of an event, category, or offense. For example, if a certain port is open, the relevance is high.
Remote To Local (R2L)	External traffic from a remote network to a local network.
Remote To Remote (R2R)	External traffic from a remote network to another remote network.

reports	A function that creates executive or operational level charting representations of network activity based on time, sources, offenses, security, and events.
report interval	A configurable time interval at which the Event Processor must send all captured event and flow data to the Console.
routing rules	Collection of conditions and consequent routing that are performed when event data matches each rule.
rule	Collection of conditions and consequent actions. You can configure rules that allow QRadar Network Anomaly Detection to capture and respond to specific event sequences. The rules allow you to detect specific, specialized events and forward notifications to either the Offenses tab or log file, or email a user.
severity	Indicates the amount of threat a source poses in relation to how prepared the destination is for the attack. This value is mapped to an event category in the QID map that is correlated to the offense.
Simple Network Management Protocol (SNMP)	A network management protocol used to monitor IP routers, other network devices, and the networks to which they attach.
Simple Object Access Protocol (SOAP)	A protocol that allows a program running in one kind of operating system to communicate with a program in the same or another kind of an operating system.
SNMP	See Simple Network Management Protocol.
SOAP	See Simple Object Access Protocol.
subnet	A network subdivided into networks or subnets. When subnetting is used, the host portion of the IP address is divided into a subnet number and a host number. Hosts and routers identify the bits used for the network and subnet number through the use of a subnet mask.
subnet mask	A bit mask that is logically ANDed with the destination IP address of an IP packet to determine the network address. A router routes packets using the network address.
sub-search	Allows you to perform searches within a set of completed search results. The sub-search function allows you to refine your search results without requiring you to search the database again.
superflows	Multiple flows with the same properties are combined into one flow to increase processing by reducing storage.
System Time	The right corner of the user interface displays System time, which is the time on the QRadar Network Anomaly Detection Console. This is the time that determines the time of events and offenses.

System View	Allows you to assign software components, such as a QRadar QFlow Collector, to systems (managed hosts) in your deployment. The System View includes all managed hosts in your deployment. A managed host is a system in your deployment that has QRadar Network Anomaly Detection software installed.
TACACS	Terminal Access Controller Access Control System (TACACS) is an authentication protocol that allows remote server access to forward a user logon password to an authentication server to determine whether access can be allowed to a given system. TACACS+ uses TCP.
TCP	See Transmission Control Protocol.
TCP flags	A type of marker that can be added to a packet to alert the system of abnormal activity. Only a few specific combinations of flags are valid and typical, in normal traffic. Abnormal combinations of flags often indicate an attack or an abnormal network condition.
TCP resets	For TCP-based applications, QRadar Network Anomaly Detection can issue a TCP reset to either the client or server in a conversation. This stops the communications between the client and the server.
Time Series	A chart type that graphs data based on time. This chart focuses on the networks or IP address data information from the selected networks.
TopN	Displays the top <i>N</i> networks or IP address information for the data you are viewing. For example, using the chart feature, you can display the top five networks generating traffic in the U.S.
Transmission Control Protocol (TCP)	A reliable stream service that operates at the transport-layer Internet protocol, which ensures successful end-to-end delivery of data packets without error.
violation	Includes a violation of corporate policy.
Whois	Allows you to look up information about registered Internet names and numbers.

C

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What's in this appendix:

- [Notices](#)
- [Trademarks](#)

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INDEX

A

- accessing online help 11
- admin tab
 - overview 11
- all offenses 29
- anomaly detection rules
 - anomaly rules
 - about 182, 195
 - anomaly tests 340
 - time threshold tests 340
 - behavioral rules
 - about 182, 196
 - behavioral tests 341
 - time threshold tests 342
 - threshold rules
 - about 182, 195
 - field threshold tests 343
 - time threshold tests 344
- assets tab 207
 - adding asset profiles 216
 - deleting an asset profile 217
 - editing an asset profile 216
 - exporting asset profiles 218
 - importing asset profiles 218
 - managing asset profiles 215
 - overview 6
 - searching
 - asset profiles 219
 - assets by vulnerability attribute 222
 - using the search feature 219
 - viewing asset profiles 208

B

- branding reports 258
- building blocks
 - about 183
 - editing 205
- by category 65

C

- chart feature 153
- common rules
 - about 182, 187
 - common property tests 316
 - data/time tests 332
 - function counter tests 327
 - function negative tests 333
 - function sequence tests 319
 - function simple tests 331
 - host profile tests 313
 - IP/port tests 315

- network property tests 332
- configuring page size 11
- conventions 1
- custom dashboards
 - creating 16
- custom event properties 114
 - copying 121
 - creating 115, 118
 - deleting 122
 - modifying 119
- custom flow properties
 - copying 149
 - creating 143
 - deleting 150
 - modifying 148
- custom rules 181

D

- dashboard items
 - event searches 22
 - events by severity 22
 - log activity 21
 - most recent offenses 21
 - most severe offenses 21
 - my offenses 21
 - network activity 20
 - offenses 20
 - reports 22
 - sources and destinations 21
 - system notifications 23
 - system summary 23
 - top category types 21
 - top local destinations 21
 - top log sources 22
 - top sources 21
- dashboard tab
 - overview 5
- dashboards
 - about 13
 - adding items 16
 - available items 20
 - configuring charts 17
 - creating a dashboard 16
 - deleting a dashboard 20
 - detaching items 19
 - editing a dashboard 19
 - managing 15
 - removing items 19
 - viewing a dashboard 15
- deleting saved search criteria 174

E

editing default reports 254
 event rules
 about 182, 187
 common property tests 267
 data/time tests 283
 event property tests 263
 function counter tests 278
 function negative tests 285
 function sequence tests 269
 function simple tests 283
 host profile tests 260
 IP/port tests 262
 log source tests 268
 network property tests 284
 events
 custom event properties 114
 exporting 126
 false positive tuning 122
 grouped 109
 investigating 95, 159
 mapping 112
 normalized 101
 raw 107
 steaming 101
 viewing 100
 viewing associated offenses 112
 exporting
 events 126
 flows 151
 offenses 62

F

false positives (events)
 tuning 122
 false positives (flows)
 tuning 150
 flow rules
 about 182, 187
 common property tests 295
 data/time tests 310
 flow property tests 289
 function counter tests 305
 function negative tests 311
 function sequence tests 297
 function simple tests 309
 host profile tests 286
 IP/port tests 288
 network property tests 310
 flows
 exporting 151
 false positive tuning 150
 grouped 139
 normalized 133
 streaming 132
 viewing 132
 follow-up on offenses 65
 functions 183

G

generated reports 231
 generating a report 257
 geographic flags 7
 glossary 345
 grouped events 109
 grouped flows 139

H

high-level category 65

I

intended audience 1
 investigating IP addresses 7
 investigating usernames 10
 IP addresses
 investigating 7

L

log activity tab
 custom event properties 114
 mapping events 112
 navigating time series charts (events) 158
 overview 5
 right-click menu options 100
 status bar 100
 toolbar 96
 viewing
 associated offenses 112
 events 100
 grouped events 109
 normalized events 101
 raw events 107
 streaming events 101
 logging in 4

M

managing
 asset profiles 215
 assets 207
 offenses 29
 modifying event mapping 112
 my offenses 29

N

network activity tab
 custom flow properties 142
 overview 5
 right-click 131
 toolbar 128
 using 127
 using the chart feature 142
 viewing
 flows 132
 grouped flows 139
 normalized flows 133

- streaming flows 132
- normalized events 101
- normalized flows 133

O

- offense rules
 - about 182, 187
 - date/time tests 335
 - function tests 335
 - IP/port tests 334
 - log source tests 336
 - offense property tests 336
- offenses
 - about 27
 - adding notes 57
 - assigning to users 63
 - closing
 - listed offenses 60
 - selected offenses 59
 - exporting 62
 - follow-up 65
 - hiding 58
 - managing
 - offenses 29
 - my offenses 29
 - navigation menu 28
 - offense source summary
 - options 49
 - protecting
 - listed offenses 61
 - protecting offenses 60
 - selected offenses 61
 - unprotecting listed 62
 - unprotecting selected 62
 - removing 58
 - search feature
 - searching destination IPs 169
 - searching networks 170
 - searching source IPs 168
 - sending email notification 64
 - showing hidden offenses 58
 - summary page
 - about 33
 - offense type 43
 - using the offenses tab 28
 - viewing
 - all offenses 29
 - by category 65
 - by destination IP 76
 - by networks 85
 - by source IP 68
- offenses tab
 - overview 5

P

- pausing the user interface 7
- PCAP data
 - about 123
 - displaying the column 123

- downloading 125
- viewing 124
- preferences 10
- protecting offenses 60

Q

- QRadar Network Anomaly Detection
 - overview 3
- quick filter syntax 99

R

- raw events 107
- refreshing the user interface 7
- report chart types 237
 - asset vulnerabilities 237
 - connections 239
 - event/logs 239
 - flows 245
 - top destination IPs 252
 - top offenses 251
 - top source IPs 250
- reports tab
 - about 227
 - assigning a report to a group 256
 - branding 258
 - chart type 237
 - configuring charts 237
 - containers 232
 - content 232
 - creating a template 232
 - creating custom reports 232
 - default reports 254
 - deleting generated content 232
 - distribution channels 235
 - editing default reports 254
 - generating a report 257
 - graph types 253
 - grouping reports 254
 - assigning a report 256
 - copying a report 256
 - creating a group 255
 - editing a group 255
 - removing a report 256
 - layout preview 235
 - overview 6
 - report formats 235
 - report layout 232
 - report summary 236
 - scheduling options 232
 - selecting a container 234
 - selecting the layout 233
 - sharing a report 257
 - toolbar 230
 - using the reports tab 228
 - using the status bar 232
 - viewing
 - generated reports 231
 - reports 228
- resizing columns 11

- rules
 - about 181
 - copying 202
 - creating anomaly detection rules 195
 - creating custom rules 187
 - deleting 202
 - enabling/disabling 201
 - groups 202
 - assigning 205
 - copying 204
 - creating 203
 - deleting 204
 - editing 204
 - viewing 184
-

S

- saved search criteria
 - deleting 174
 - searching
 - asset profiles 219
 - assets by vulnerability attribute 222
 - sorting results 7
 - System 23
-

T

- tests
 - about 183
 - tuning false positives (events) 122
 - tuning false positives (flows) 150
-

U

- updating user details 10
 - using QRadar Network Anomaly Detection 6
-

V

- viewing
 - all offenses 29
 - asset profiles 208
 - associated offenses 112
 - dashboards 15
 - events 100
 - streaming events 101
 - system time 10
 - vulnerability details 213
- vulnerability details 213