

Investigate security detections

Published: 2021-09-03

When an interesting detection appears, you should investigate whether the detected behavior points to a low-priority issue or a potential security risk. You can start your investigation directly from the detection card, which provides links to data across the ExtraHop system.

There are a number of [tools that can help you filter](#) your view to see the detections that you want to prioritize for investigation. Look for the following trends to get started:

- Did any detections occur at unusual or unexpected times, such as user-activity on weekends or after hours?
- Are any detections appearing in large clusters on the timeline?
- Are there detections appearing for high-value endpoints?
- Are there detections that have high risk scores?
- Are devices in the detection also participants in other detections?
- Are indicators of compromise identified from a threat collection associated with the detection?

Start your investigation

Review the detection title and summary to learn what caused the detection.

The screenshot shows a detection card with the following details:

- Risk Level:** 65 EXPLOITATION
- Time:** Today 09:00 (lasting an hour)
- Action:** Acknowledge, Hide Detections Like This
- Title:** Spike in SSH Server Sessions
- Description:** webserv-031.sea.example.com received an unusually large number of short SSH sessions, which could be caused by planned maintenance, or could indicate a potential brute force attack. The risk score increased because of device importance.
- Offender:** workstation-05.sea.example.com (192.168.123.113)
- Victim:** webserv-031.sea.example.com (192.168.80.9)
- SSH Metric Table:**

SSH Metric	6h Snapshot	1hr Peak Value	Expected Range	Deviation
Short Sessions		248	0-1	24,700%

Refine your investigation

Detection detail cards present related data about the detection. The availability of the data depends on the devices and metrics associated with the detection. After you click a link, you can return to the detection card by clicking the detection name in the navigation path. Each investigation option is described in the sections below.

Review investigative data

Most of the data that you need to understand, validate, and investigate a detection is displayed on the detection detail page: tables of relevant metric data, record transactions, and links to raw packets.

Click a host name to navigate to the device overview, or right-click to create a chart with that device as the source and the relevant metrics.

Investigate Servers

View the targeted servers

	Server IP	Host	Requests ↓
	192.168.136...	Citrix	7,947
	192.168.133...	Example-05	7,817
	192.168.254...	exds1	7,231
	192.168.227...	Citrix-55	5,485

Device name

Click a device name to navigate to a protocol page, which contains all of the protocol metrics associated with the device. A protocol page gives you a complete picture of what the device was doing at the time of the detection. Click **Overview** in the left pane to see the role, users, and tags associated with the device.

For example, if you get a reconnaissance scan detection, you can learn if the device associated with the scan is assigned the Vulnerability Scanner role.

The screenshot shows a detection alert titled "Spike in SSH Server Sessions" with a risk score of 65. The alert is dated "Today 09:00" and is "lasting an hour". It includes an "Acknowledge" button and a link to "Hide Detections Like This". The description states: "webserv-031.sea.example.com received an unusually large number of short SSH sessions, which could be caused by planned maintenance, or could indicate a potential brute force attack. The risk score increased because of device importance." Below the description, there are two sections: "OFFENDER" and "VICTIM". The "OFFENDER" section shows "workstation-05.sea.example.com" with IP "192.168.123.113". The "VICTIM" section shows "webserv-031.sea.example.com" with IP "192.168.80.9". At the bottom, there is a table for "SSH Metric" with columns for "6h Snapshot", "1hr Peak Value", "Expected Range", and "Deviation". The "Short Sessions" metric shows a peak value of 248, an expected range of 0-1, and a deviation of 24,700%.

Availability

Device name links are only available for devices that have been automatically discovered by the ExtraHop system. Remote devices that are located outside of your network are represented by their IP addresses.

Activity map

Click the Activity Map icon next to a device name to see device connections by protocol during the time of the detection. For example, if you get a lateral movement detection, you can learn if the suspicious device established connections over a remote control protocol with other clients, IT servers, or domain controllers on your network.

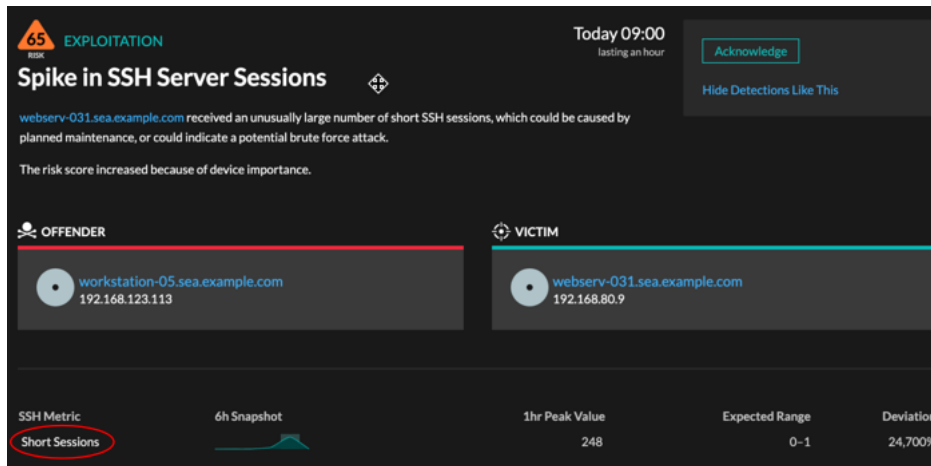
Availability

An activity map is available when a single client or server is associated with unusual L7 protocol activity, such as a high number of HTTP errors or DNS request timeouts.

Detail metric drill down

Click a detail metric link to drill down on a metric value. A detail metric page appears, which lists metric values by a key, such as client IP address, server IP address, method, or error. For example, if you get a

reconnaissance scan detection, drill down to learn which client IP addresses were associated with the unusually high number of 404 status codes during the detection.

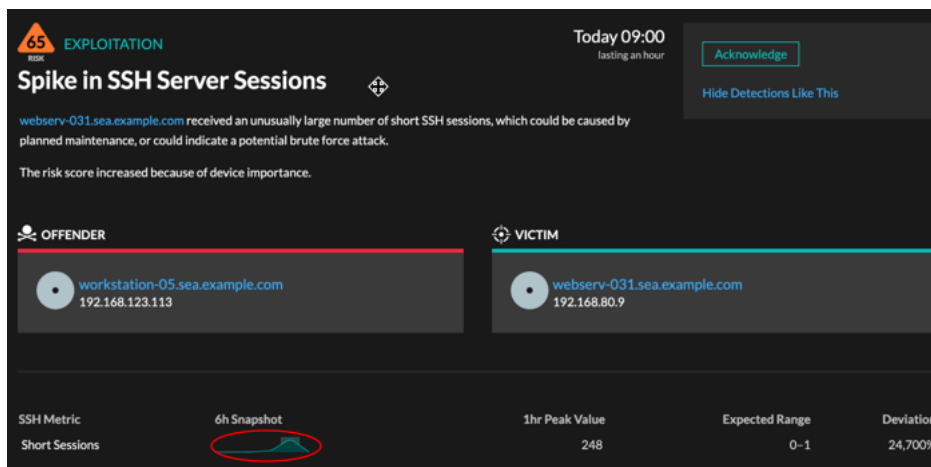


Availability

The drill-down option is available for detections associated with topset detail metrics.

Sparkline

Click the sparkline to create a chart that includes the source, time interval, and drill-down details from the detection, which you can then add to a dashboard for monitoring. For example, if you get a detection about an unusual number of remote sessions, create a chart with SSH sessions for that server and then add that chart to a dashboard about session management.



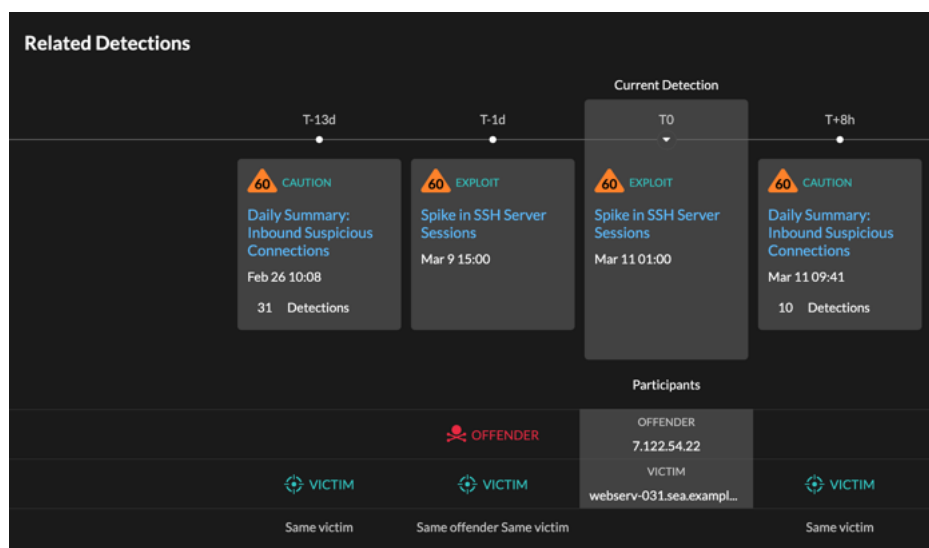
Availability

The sparkline option is available for detections that were associated with metrics and had a duration over one-hour. For 1-second metrics, a sparkline is available when the duration was over 30-seconds.

Related detections

Click a related detections to find insight about suspicious behavior and emerging attacks across multiple detections with shared participants. For example, a victim in the current detection that participates as an

offender in a later detection might indicate that the device is compromised. You can view related detection details to determine if the detection events are similar and to see which other devices are involved.



Availability

The related detections timeline is available if there are detections that share the same victim or offender participants with the current detection. Related detections might have occurred before or after the current detection.

Threat Intelligence

Click a red camera icon to access detailed threat intelligence about an indicator of compromise.

Threat intelligence provides known data about suspicious IP addresses, hostnames, and URIs that can help identify risks to your organization. These data sets, called threat collections, are available by default in your Reveal(x) system and from free and commercial sources in the security community.

Availability

Threat intelligence must be enabled on your Reveal(x) system before you can see these indicators.