

# Detections FAQ

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Here are some answers to frequently asked questions about detections.



**Note:** This topic applies to all ExtraHop systems, including ExtraHop Reveal(x).



**Note:** Detections require a [connection to the cloud-based ExtraHop Machine Learning Service](#).

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## How are detections identified?

After you [connect to the ExtraHop Machine Learning Service](#), the ExtraHop system begins to apply machine learning technology to your wire data automatically. Your appliance evaluates 4-weeks of data to calculate a range of expected network and user behavior that spans hundreds of metrics and several protocols. Normal values are determined through a proprietary algorithm that combines time series decomposition, unsupervised learning, heuristics, and domain expertise to evaluate data. Detections identify deviations from the expected data range of metric values and makes updates as your network traffic patterns change.

Certain detections can be generated by a trigger. Contact your ExtraHop representative for more information.

You can view and [interpret detections](#) on the Detections page in the ExtraHop Web UI.

For more information, see [How ExtraHop detections work](#).

## How quickly can a detection be identified?

The Machine Learning Service analyzes data for detections every 30 seconds or every hour, depending on the metric. Identified detections are sent from the cloud-based service to the ExtraHop system within minutes.

## What type of detections are identified?

Detections are unusual deviations from normal network behavior or notable activity in your environment. Depending on your ExtraHop subscription, detections surface either security risks or performance issues.

Security detections identify the following types of risks:

- Command and control activity
- Brute force attacks

- Reconnaissance activity
- Ransomware activity
- Botnet activity
- Cryptocurrency mining
- Suspicious remote login attempts
- Lateral movement activity
- Data exfiltration
- Rogue DHCP servers

Performance (IT operations) detections identify the following types of network infrastructure and performance issues:

- Failed login or authorization attempts
- Database errors and performance issues
- Poor user experience associated with Citrix sessions
- Infrastructure performance issues, such as DHCP configuration or network congestion
- Email service degradation
- File storage access issues
- Web application errors

### How are detections different from alerts?

[Alerts](#) and detections are similar in that they both provide information about conditions on your network. The following table describes how they differ.

	Alerts	Detections
How are they generated?	By conditions you define through Alert settings. You can configure trend, threshold, or detection alerts.	Automatically observed from your network data by the ExtraHop Machine Learning Service.
How do I view them?	Click <b>Alerts</b> from the top menu of the Web UI.	Click <b>Detections</b> from the top menu of the Web UI.
How do I set up email notifications?	After an email server is configured in the Admin UI, you can <a href="#">set up email notification settings</a> for any alert.	After an email server is configured in the Admin UI, you can <a href="#">configure a detection alert</a> and then set up email notifications.
What are the benefits?	You decide which business critical devices and services to monitor and determine the level of change that generates notification.	Notable changes to your network behavior are automatically surfaced. By providing feedback for detections, you help the Machine Learning Service algorithm better understand your network.
What are the challenges?	As your network changes, your configuration might become outdated or require continual maintenance of alert configurations.	Traffic must be stored on the Discover appliance for four weeks before the algorithm understands typical patterns of behavior for your network traffic.

### What is a risk score? (ExtraHop Reveal(x) only)

A risk score indicates the severity of a detection and is calculated based on the likelihood of an attack, the difficulty of exploiting the detection, and the level of impact to your operations.

Risk scores are grouped into one of the following color-coded severity levels:

- Red = 80-99
- Orange = 31-79
- Yellow = 1-30


Risk scores were added to detections in Reveal(x) Summer 2018. If a detection was identified in a previous version, the risk score is unavailable for that detection.

No risk score is displayed for an individual detection if a score has not been evaluated and defined for that detection.

### How do I see ongoing detections?

Change the time interval to the **Last 30 minutes** and then visit the Detections page in the ExtraHop Web UI. Ongoing detections are listed at the top of the page.

### Can I provide feedback about a detection?

Yes, click the feedback icon  in the top right corner of the detection to let us know if the detection was helpful. Your feedback is valuable and helps us improve our detection process. All feedback is anonymous and will not have an immediate effect on your detections. You can submit feedback for an detection more than once.

### Are detections available on the ExtraHop Command appliance?

If you are managing multiple ExtraHop Discover appliances through a Command appliance, you can access detections for any connected Discover appliances that are enabled for detections.

### After connecting to the Machine Learning Service, how far back are detections found?

After you first connect to the Machine Learning Service, you can look for detections starting one week back. The service then identifies all new detections moving forward.

Note that the Machine Learning Service requires four weeks (28 days) of data to calculate an expected range of metric values. The expected range represents normal network behavior. Data processing is typically completed within a few hours.

### Can I connect to the Machine Learning Service through a proxy?

In ExtraHop 7.0 and later, the Machine Learning Service supports implicit and explicit proxies. The proxy requires that DNS resolve all \*.extrahop.com domains, and the outbound 443 port is open to all IP addresses on the internet. These settings are implemented on the firewall for the proxy's source IP address.

For more information on configuring an explicit proxy, see [Troubleshoot your connection to ExtraHop Cloud Services](#).

### What data is sent from the ExtraHop system to the cloud-based Machine Learning Service?

The Machine Learning Service takes advantage of the unique processing capabilities of the ExtraHop system to “pre-process” wire data for hundreds of metrics on-premise. The ExtraHop system encrypts metric values and IP addresses that are sent to the Machine Learning Service. The ExtraHop system does not send custom metrics or sensitive data such as file names, strings, or payloads.

**How secure are detections?**

Detections are designed to be secure from end-to-end. Unlike a typical SaaS solution, detections do not ingest payloads, file names, strings, or other data categories that might contain sensitive information. Sensitive data remains on-premise and under your control. The ExtraHop Machine Learning Service has received the SOC 2, Type 1 compliance certification.

**How do I add a new or updated license for the Machine Learning Service to my ExtraHop system?**

If you purchased a new ExtraHop system that includes a license for the Machine Learning Service, you will receive an email with a new product key that must be added to your appliance. Follow the instructions to [register your appliance](#).

If you have added a license for the Machine Learning Service, your updated license is automatically added to your ExtraHop system, but must still be applied. Follow the instructions to [apply an updated license](#).

**After my Machine Learning Service license expires, can I still view my previous detections?**

Yes, previous detections remain available in your ExtraHop system.