

RevealX 360 Setup and Administration Guide

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After you receive your initial email from ExtraHop Networks, there are a few procedures you must complete before you can start analyzing your traffic. This guide provides procedures for basic setup and administration of the RevealX 360 system.



View the related training: [RevealX 360 Administration Overview](#)

Activate your administrator account

The System and Access Administration privilege is granted to the email address that you provided during sign up.

1. Open your Welcome to ExtraHop RevealX 360 email.
2. Click the URL link to your RevealX 360 environment.
3. At the login page, enter your email address and temporary password included in the email.
4. Click **Sign In**.
5. On the Change Password screen, enter a new password in both password fields and then click **Send**.
6. From the Multi-Factor Authentication Setup page, scan the QR code or manually enter the code that appears into your authenticator app.
7. Enter the code provided by your authentication app into the **Code** field and then click **Complete Setup**.
8. On the Success page, click **Continue**.

Configure your firewall rules

If your ExtraHop system is deployed in an environment with a firewall, you must open access to ExtraHop Cloud Services. For RevealX 360 systems that are connected to sensors, you must also open access to the cloud-based recordstore included with RevealX Standard Investigation

Open access to Cloud Services

For access to ExtraHop Cloud Services, your sensors must be able to resolve DNS queries for *.extrahop.com and have access to TCP 443 (HTTPS) from one of the following IP addresses that correspond to your sensor license. We recommend opening access to both IP addresses to avoid service interruption.

Region	IP Addresses
North, Central, South America (AMER)	35.161.154.247
	54.191.189.22
Asia, Pacific (APAC)	54.66.242.25
	13.239.224.80
Europe, Middle East, Africa (EMEA)	52.59.110.168
	18.198.13.99
United States Federal (US-FED)	3.135.6.11
	3.139.111.240

Open access to RevealX 360 Premium Investigation

For access to RevealX 360 Premium Investigation, your sensors must meet the following requirements:

- Sensors must be running ExtraHop firmware version 9.9 or later.
- Sensors must be able to access specific fully-qualified domain names over outbound TCP 443 (HTTPS).
- Sensors located in the United States must be able to access these domain names:
 - `eh.oem-2-1.logscale.us-2.crowdstrike.com`
 - `eh.oem-2-2.logscale.us-2.crowdstrike.com`
- Sensors located in the European Union must be able to access this domain name:
 - `eh.oem-2-3.logscale.eu-1.crowdstrike.com`

In addition to configuring access to these domains, you must also configure the [global proxy server settings](#) .

Open access to RevealX 360 Standard Investigation

For access to RevealX 360 Standard Investigation, your sensors must be able to access outbound TCP 443 (HTTPS) to these fully-qualified domain names:

- `bigquery.googleapis.com`
- `bigquerystorage.googleapis.com`
- `oauth2.googleapis.com`
- `www.googleapis.com`
- `www.mtls.googleapis.com`
- `iamcredentials.googleapis.com`

You can also review the public guidance from Google about [computing possible IP address ranges](#)  for `googleapis.com`.

In addition to configuring access to these domains, you can also configure the [global proxy server settings](#) .

Add and manage users

1. From the Overview page, click **System Settings**  and then click **User Access**.
2. In the Users section, click **View Users**.
3. Click **Create**.
4. Enter the email address, first name, and last name of the new user.
5. In the Sensor Access section, select sensor tags to grant packet access to sensors. Click **Manage Sensor Tags** to create, edit, or delete tags. Learn more about [Sensor Access Control](#).
6. In the System Access section, select one of the following privileges.

Privilege	Description
System and access administration	Create and modify all objects and settings, including Administration pages, in RevealX 360.
System administration	Create and modify objects and settings, excluding User Access and API Access on the Administration page.
Full write	Create and modify all objects and settings, excluding Administration pages.

- | Privilege | Description |
|----------------------|---|
| Limited write | Create, modify, and share dashboards. Create and modify tuning rules. Create and modify detection and threat briefing notification rules. |
| Personal write | Create personal dashboards and modify dashboards shared with the logged-in user. |
| Full read-only | View objects in the ExtraHop system. |
| Restricted read-only | View dashboards shared with this user. |
- In the NDR Module Access section, select one of the following privileges.

Privilege	Description
Full access	Access to network detections.
No access	No access to network detections.
 - In the NPM Module Access section, select one of the following privileges.

Privilege	Description
Full access	Access to performance detections.
No access	No access to performance detections.
 - In the **Packet and Session Key Access** section, select one of the following privileges:

Privilege	Description
Packets and session keys	Search and download packets and associated session keys.
Packets only	Search and download packets.
Packet headers only	Search and download packet headers.
Packet slices only	Search and download a set number of bytes at the beginning of a packet. By default, the number of downloadable bytes is 64. Adjust the number of downloadable bytes with the Packet Slice Download Control setting under Global Policies .
No access	No access to packets.
 - Click **Save**.
The user is sent an email that includes the URL of the RevealX 360 environment and their temporary password. The temporary password expires in 7 days.
 - Click **Done**.

Change user settings

You can change the assigned privilege levels, reset the multi-factor authentication configuration, or delete the user.

Change user privileges

- In the Users section, click the name of the user you want to modify.
- In the left pane, select the new privilege level for the user and then click **Save**.

Reset multi-factor authentication

- In the Users section, click the name of the user you want to modify.
- Clear the **Reset MFA configuration for this user**.
The user is required to configure multi-factor authentication the next time they log in to RevealX 360.

Delete a user

1. In the Users section, click the name of the user you want to modify.
2. Click **Delete**.
3. Select one of the following options:
 - **Transfer dashboards, collections, and activity maps owned by <username> to the following user:** and then select a new user from the drop-down menu list.
 - **Delete all dashboards, collections, and activity maps owned by <username>**
4. Click **Delete**.

Manage global policies

Administrators can configure global policies that apply to all users who access the system.

1. From the Overview page, click **System Settings**  and then click **User Access**.
2. From the Global Policies section, specify one or more of the following options.

Option	Description
Device Group Edit Control	Select to control whether all users with limited write privileges can create and edit device groups. When this policy is selected, all limited write users can create device groups and add other limited write users as editors to their device groups.
Packet Slice Download Control	Specify the number of bytes that users with the packet slices only privileges can download. Bytes are counted from the beginning of the packet. The default value of this setting is 64 bytes, which will typically include the packet header in downloads.
Default Dashboard	Specify the dashboard that users see when they log in to the system. Only dashboards shared with all users can be set as a global default. Users can override this default setting  from the command menu of any dashboard.
File Extraction Password	(NDR module only) Specify a required password that you can share with approved users to unzip files extracted and downloaded from a packet query  .

3. Click **Save Changes**.

Configure an allow list

Configure a list of IPv4 addresses and CIDR blocks that are allowed to access the RevealX 360 system and the RevealX 360 REST API.

1. From the Overview page, click **System Settings**  and then click **User Access**.
2. In the Allow List section click, **Enable Allow List**.
3. Type a comma-separated list of the IPv4 addresses or CIDR blocks that are allowed to access the system. IPv6 addresses are not supported.
4. Click **Save**. It can take several minutes for the allow list to become active.

Enable ExtraHop Remote Access

You can allow remote access to your ExtraHop system for one or more teams at ExtraHop to provide configuration help, troubleshooting, or detection improvements.

For more information about remote access, see the [Remote Access FAQ](#).

Before you begin

- The ExtraHop system must be connected to [ExtraHop Cloud Services](#).
 - Remote access is individually configured on consoles, sensors, recordstores, and packetstores.
1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
 2. Navigate to Remote Access settings.
 - For RevealX 360 systems, click **System Settings** , click **All Administration**, and then click **User Access**.
 - For a console and sensors, click **System Settings** , click **All Administration**, and then click **ExtraHop Cloud Services**.
 - For ExtraHop recordstores and packetstores, click **ExtraHop Cloud Services**.
 3. To grant remote access to a member of the ExtraHop Account Team, complete the following steps:
 - a) Select the **ExtraHop Account Team** checkbox.
 - b) Click **Add User**.
 - c) In the **ExtraHop Email Address** field, type the email address of the ExtraHop Account Team member.
 - d) Select the privilege level that you want the team member to have on your ExtraHop system. Your team member can provide guidance on what privileges they require. See [User privileges](#) for more information. For recordstores and packetstores, the team member is always granted **setup user account** privileges.
 4. To grant remote access to the ExtraHop Support team, complete the following steps:
 - a) Select the **ExtraHop Support** checkbox.
 - b) Select one of the following access levels:
 - **ExtraHop System and Administrator Access**
Grants unlimited (or **setup user account**) privileges to the console or sensor through a browser.
 - **Remote Shell Access**
Grants remote SSH access for a console or sensor to the ExtraHop Support team. See [Remote Access FAQ](#) for more information.

This option requires that you generate an encrypted SSH key from the ExtraHop console or sensor and email the key to your ExtraHop Support representative.

For RevealX Enterprise, go to **Support Access** from the Access Settings page to **generate a support SSH key**.

For RevealX 360, click **Manage Support SSH Key** to generate a support SSH key.
 - **Both**
Grants both access levels and requires that you generate an SSH key.
 5. (RevealX 360 only) To grant remote access to a member of the ExtraHop Detections Team, complete the following steps:
 - a) Select the **ExtraHop Detections Team** checkbox.
 - b) Select one of the following access levels:
 - **Read-only access including packets**

- Read-only access excluding packets
6. Click **Save Changes**.

Sensors

Packet sensors capture, store, and analyze metric data about your network.

You can add sensors in your RevealX 360 system, upgrade sensor firmware, and add sensor tags to individual or groups of sensors. You can also enable Sensor Access Control to restrict users from downloading packets on specific sensors.

Connect sensors

Add sensors to RevealX 360 to monitor your network traffic.

Sensors and packetstores can also be connected from within the RevealX 360 console. Note that if you have an existing console, you must disconnect the console before connecting your sensors to RevealX 360.

- [Connect to RevealX 360 from sensors](#) 

Upgrade connected sensors in RevealX 360

Administrators can upgrade sensors that are connected to RevealX 360.

Before you begin

- Your user account must have privileges on RevealX 360 for System and Access Administration or System Administration.

Here are some considerations about upgrading sensors:

- Sensors must be connected to ExtraHop Cloud Services
- Notifications appear when a new firmware version is available
- You can upgrade multiple sensors at the same time

1. From the Overview page, click **System Settings**  and then click **Sensors**.

Sensors that are eligible for upgrade display an up arrow in the Sensor Version field.

Sensors							
Name 				4 results		 New firmware is available.	
☐	Name ↑	Sensor Model	Status	License	Sensor Version	Sensor Tags	Date Added
☐	sensor-1	EDA6320V	 Online	 Valid	↑ 9.8.0.1760	—	2024-09
☐	sensor-2	EDA6320V	 Online	 Valid	↑ 9.8.0.1760	RegionA, exampleTag	2024-08
☐	sensor-3	EDA1100V	 Online	 Valid	↑ 9.8.0.1760	—	2024-08
☐	sensor-4	EDA1100V	 Online	 Valid	↑ 9.8.0.1760	RegionB	2024-08

2. Select the checkbox next to each sensor that you want to upgrade.
3. In the Sensor Details pane, select the firmware version from the **Available Firmware** drop-down menu. The drop-down menu only displays versions that are compatible with the selected sensors. Only the selected sensors that have a firmware upgrade available appear in the Sensor Details pane.
4. Click **Install Firmware**.
When the upgrade completes, the Sensor Version field is updated with the new firmware version.

Create a sensor tag

Sensor tags enable administrators to easily identify an individual sensor or a group of sensors. Administrators can label sensors with sensor tags, then reference the tags for other tasks such as granting a user group packet access to a specific set of sensors.

Before you begin

- Your user account must have [privileges](#) on RevealX 360 for System Administration.
- 1. From the Overview page, click **System Settings**  and then click **Sensors**.
- 2. Click a sensor in the sensor table.
- 3. Under Sensor Tags in the Sensor Details panel, click **Manage Sensor Tags**.
- 4. In the Manage Sensor Tags panel, click **Create**.
- 5. Type a tag name and click **Save**.
- 6. Select the tags that you would like to add to the sensor.

Sensors can have multiple tags and a tag can be applied to multiple sensors.

Next steps

After you tag sensors you can enable [sensor access control](#) to restrict access to packets to only those sensors.

Sensor Access Control

ExtraHop administrators can restrict user access to packets on specific sensors. After sensor access control is enabled, users can only view and download packets for sensors that have been assigned to them.

For example, if you want analysts in Region A and Region B to only have access to packets from sensors in their specific region, you can [create sensor tags](#) called `regionA` and `regionB` and add those tags to sensors in their respective region. After the sensor tags are added, you can assign access to all sensors tagged `regionA` to analysts in Region A, while restricting their access to sensors tagged `regionB`.

Sensor access is granted directly to users in the [ExtraHop IdP](#) or by mapping sensor tags to SAML user groups in [your own identity provider](#).



Note: The primary layer of access control for packets, session keys, and packet headers are [Packet and Session Key Access privileges](#). Even when they are granted sensor access, users can only download packets to the level of their assigned privileges.

Administrators can grant limited access to users that have packet download privileges but have not been granted sensor access.

Enable sensor access control from the ExtraHop IdP

Administrators can manage which user groups can access packets on sensors in the ExtraHop system after assigning sensors to users through the ExtraHop IdP.

Before you begin

- Your user account must have [privileges](#) on RevealX 360 for System and Access Administration.
- Sensors are assigned to user groups through sensor tags. You must [create a sensor tag](#) and add it to a sensor before you can assign that sensor to a user group.
- 1. From the Overview page, click **System Settings**  and then click **User Access**.
- 2. In the Users section, click **View Users**.
- 3. Click a user.
- 4. In the User Details panel under Sensor access, select sensor tags to grant the user packet download access to sensors, and then click **Save**.
You can click **Manage Sensor Tags** to create, edit, or delete tags. Learn more about [sensor tags](#).
- 5. On the User Details panel, click **Save**.
- 6. Click the **User Access** breadcrumb at the top of the page to return to the User Access page.

7. In the Sensor Access Control section, click **Enable Sensor Access Control**.
8. In the Edit Sensor Access Control panel, select the checkbox to enable packet download restrictions.
9. Select the level of access to provide to users that have been granted **Packet and Session Key Access privileges**, but are not assigned to the sensor.

Option	Description
Limited Access	On unassigned sensors, users with packet download privileges can only download packet headers.
No Access	On unassigned sensors, users have no packet access regardless of download privileges.

10. Click **Save**.

Enable sensor access control through your own identity provider

Administrators can manage which user groups can access packets on each sensor in the ExtraHop system by adding a SAML attribute value that maps sensor tags to user groups.

Before you begin

- Your user account must have **privileges** [↗](#) on RevealX 360 for System and Access Administration.
- You must have **configured a SAML 2.0 identity provider** [↗](#).
- Sensors are assigned to user groups through sensor tags. You must **create a sensor tag** and add it to a sensor before you can assign that sensor to a user group.

1. From the Overview page, click **System Settings**  and then click **User Access**.
2. In the Sensor Access Control section, click **Enable Sensor Access Control**.
3. In the Edit Sensor Access Control panel, select the checkbox to enable packet download restrictions.
4. Select the level of access to provide to users that have been granted **Packet and Session Key Access privileges**, but are not assigned to the sensor.

Option	Description
Limited Access	On unassigned sensors, users with packet download privileges can only download packet headers.
No Access	On unassigned sensors, users have no packet access regardless of download privileges.

5. Under SAML Configuration, type an attribute name for sensor access control.



Note: Attribute names and values must match the names and values your identity provider includes in SAML responses, which are configured when you add the ExtraHop application to a provider.

6. The attribute values are a list of the sensor tags that were created on the ExtraHop system. Type a user group next to a sensor tag to assign the sensor to that group.

You can only assign a sensor to one user group. The name of the user group must match the user group name defined in your IdP.

7. Click **Save**.



Important: All active users are logged out after saving the updated configuration.

Enable AI Search Assistant

The AI Search Assistant enables you to search for devices with questions, or prompts, written in natural, everyday language to quickly build complex queries.

The AI Search Assistant leverages a third-party LLM. User prompts are not provided for LLM training or stored by the LLM, but can be retained by the ExtraHop system for product improvement purposes. See the [AI Search Assistant FAQ](#) for more information.

Before you begin

- Your user account must have [privileges](#) on RevealX 360 for System and Access Administration.
 - Your RevealX 360 system must be [connected to ExtraHop Cloud Services](#).
1. From the Overview page, click the **System Settings** icon  and then click **All Administration**.
 2. From the Console Settings section, click **AI Search Assistant**.
 3. Enable the AI Search Assistant by selecting **I agree to enable AI search assistant and send natural language searches to ExtraHop Cloud Services**.
 4. Click **Save Changes**.

Next steps

[Find devices with AI Search Assistant](#)

Configure device name precedence

Discovered devices are automatically named based on multiple sources of network data such as protocols, MAC or IP addresses, or device roles. When multiple names are found for a device, the order of device name precedence specifies which name is displayed by default in the ExtraHop system.

The ExtraHop system defaults to the following order of precedence:

- Custom Name
- Cloud Instance Name
- CDP Name
- DHCP Name
- DNS Name
- NetBIOS Name
- Default Name

Before you begin

- Device name precedence settings only apply to the console or sensor on which the settings are configured.
1. From the Overview page, click **System Settings**  and then click **All Administration**.
 2. From the Console Settings section, click **Device Name Precedence**.
 3. Click and drag device names to create a new order of precedence.
 4. Click **Save**.
Click **Revert to Default** to undo your changes.

Enable detection tracking

Detection tracking enables you to assign a detection to a user, set the status, and add notes. You can track detections directly in the ExtraHop system, with a third-party external ticketing system, or with both methods.

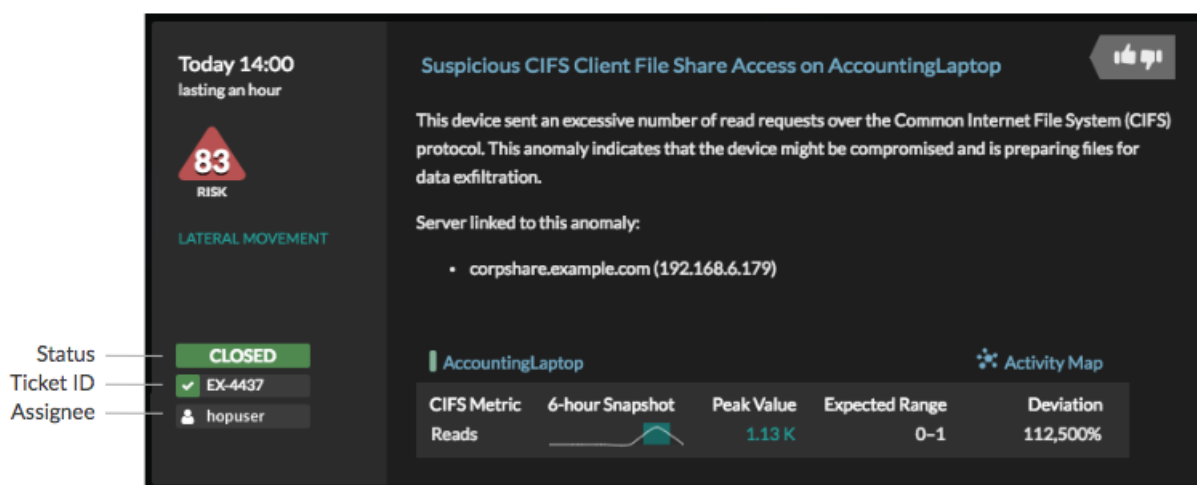


Note: You must enable ticket tracking on all connected sensors.

Before you begin

- You must have access to an ExtraHop system with a user account that has [Administration privileges](#).

- After you enable external ticket tracking, you must **configure third-party ticket tracking** by writing a trigger to create and update tickets on your ticketing system, then enable ticket updates on your ExtraHop system through the REST API.
 - If you disable external ticket tracking, previously stored status and assignee ticket information is converted to ExtraHop detection tracking. If detection tracking from within the ExtraHop system is enabled, you will be able to view tickets that already existed when you disabled external ticket tracking, but changes to that external ticket will not appear in the ExtraHop system.
1. From the Overview page, click **System Settings** ⚙️ and then click **All Administration**.
 2. From the Console Settings section, click **Detection Tracking**.
 3. Select one or both of the following methods for tracking detections:
 - Select **Enable ExtraHop users to track detections from within the ExtraHop system**.
 - Select **Enable external integrations, such as SOAR or ticket tracking systems, to track detections through the ExtraHop Rest API**.
 4. Optional: After you select the option to enable external integrations, specify the URL template for your ticketing system and add the `$ticket_id` variable at the appropriate location. For example, type a complete URL such as `https://jira.example.com/browse/$ticket_id`. The `$ticket_id` variable is replaced with the ticket ID associated with the detection.
- After the URL template is configured, you can click the ticket ID in a detection to open the ticket in a new browser tab.



Next steps

If you enabled external ticket tracking integrations, you must continue on to the following task:

- **Configure third-party ticket tracking for detections**

Configure third-party ticket tracking for detections

Ticket tracking enables you to connect tickets, alarms, or cases in your work-tracking system to ExtraHop detections. Any third-party ticketing system that can accept Open Data Stream (ODS) requests, such as Jira or Salesforce, can be linked to ExtraHop detections.

Before you begin

- You must have **selected the third-party detection tracking option in Administration settings**.
- You must have access to an ExtraHop system with a user account that has **System and Access Administration privileges**.
- You must be familiar with writing ExtraHop Triggers. See [Triggers](#) and the procedures in **Build a trigger**.
- You must create an ODS target for your ticket tracking server. See the following topics about configuring ODS targets: [HTTP](#), [Kafka](#), [MongoDB](#), [syslog](#), or [raw data](#).

- You must be familiar with writing REST API scripts and have a valid API key to complete the procedures below. See [Generate an API key](#).

Write a trigger to create and update tickets about detections on your ticketing system

This example shows you how to create a trigger that performs the following actions:

- Create a new ticket in the ticketing system every time a new detection appears on the ExtraHop system.
- Assign new tickets to a user named `escalations_team` in the ticketing system.
- Run every time a detection is updated on the ExtraHop system.
- Send detection updates over an HTTP Open Data Stream (ODS) to the ticketing system.

The complete example script is available at the end of this topic.

1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. Click the System Settings icon  and then click **Triggers**.
3. Click **New**.
4. Specify a name and optional description for the trigger.
5. From the Events list, select **DETECTION_UPDATE**.

The `DETECTION_UPDATE` event runs every time that a detection is created or updated in the ExtraHop system.

6. In the right pane, specify [Detection class](#) parameters in a JavaScript object. These parameters determine the information that is sent to your ticketing system.

The following example code adds the detection ID, description, title, categories, MITRE techniques and tactics, and risk score to a JavaScript object called `payload`:

```
const summary = "ExtraHop Detection: " + Detection.id + ": " +
  Detection.title;
const description = "ExtraHop has detected the following event on your
  network: " + Detection.description
const payload = {
  "fields": {
    "summary": summary,
    "assignee": {
      "name": "escalations_team"
    },
    "reporter": {
      "name": "ExtraHop"
    },
    "priority": {
      "id": Detection.riskScore
    },
    "labels": Detection.categories,
    "mitreCategories": Detection.mitreCategories,
    "description": description
  }
};
```

7. Next, define the HTTP request parameters in a JavaScript object below the previous JavaScript object. The following example code defines an HTTP request for the payload described in the previous example: defines a request with a JSON payload:

```
const req = {
  'path': '/rest/api/issue',
  'headers': {
    'Content-Type': 'application/json'
  },
  'payload': JSON.stringify(payload)
```

```
};
```

For more information about ODS request objects, see [Open data stream classes](#).

8. Finally, specify the HTTP POST request that sends the information to the ODS target. The following example code sends the HTTP request described in the previous example to an ODS target named ticket-server:

```
Remote.HTTP('ticket-server').post(req);
```

The complete trigger code should look similar to the following example:

```
const summary = "ExtraHop Detection: " + Detection.id + ": " +
  Detection.title;
const description = "ExtraHop has detected the following event on your
network: " + Detection.description
const payload = {
  "fields": {
    "summary": summary,
    "assignee": {
      "name": "escalations_team"
    },
    "reporter": {
      "name": "ExtraHop"
    },
    "priority": {
      "id": Detection.riskScore
    },
    "labels": Detection.categories,
    "mitreCategories": Detection.mitreCategories,
    "description": description
  }
};

const req = {
  'path': '/rest/api/issue',
  'headers': {
    'Content-Type': 'application/json'
  },
  'payload': JSON.stringify(payload)
};

Remote.HTTP('ticket-server').post(req);
```

Send ticket information to detections through the REST API

After you have configured a trigger to create tickets for detections in your ticket tracking system, you can update ticket information on your ExtraHop system through the REST API.

Ticket information appears in detections on the Detections page in the ExtraHop system. For more information, see the [Detections](#) topic.

The following example Python script takes ticket information from a Python array and updates the associated detections on the ExtraHop system.

```
#!/usr/bin/python3

import json
import requests
import csv

API_KEY = '123456789abcdefghijklmnopqrstuvwxyz'
HOST = 'https://extrahop.example.com/'
```

```
# Method that updates detections on an ExtraHop system
def updateDetection(detection):
    url = HOST + 'api/v1/detections/' + detection['detection_id']
    del detection['detection_id']
    data = json.dumps(detection)
    headers = {'Content-Type': 'application/json',
               'Accept': 'application/json',
               'Authorization': 'ExtraHop apikey=%s' % API_KEY}
    r = requests.patch(url, data=data, headers=headers)
    print(r.status_code)
    print(r.text)

# Array of detection information
detections = [
    {
        "detection_id": "1",
        "ticket_id": "TK-16982",
        "status": "new",
        "assignee": "sally",
        "resolution": None,
    },
    {
        "detection_id": "2",
        "ticket_id": "TK-2078",
        "status": None,
        "assignee": "jim",
        "resolution": None,
    },
    {
        "detection_id": "3",
        "ticket_id": "TK-3452",
        "status": None,
        "assignee": "alex",
        "resolution": None,
    }
]

for detection in detections:
    updateDetection(detection)
```



Note: If the script returns an error message that the TLS certificate verification failed, make sure that **a trusted certificate has been added to your sensor or console** [🔗](#). Alternatively, you can add the `verify=False` option to bypass certificate verification. However, this method is not secure and is not recommended. The following code sends an HTTP GET request without certificate verification:

```
requests.get(url, headers=headers, verify=False)
```

After ticket tracking is configured, ticket details are displayed in the left pane of the detection details, similar to the following figure:

The screenshot displays the 'Suspicious CIFS Client File Share Access on AccountingLaptop' detection. On the left, a sidebar shows the ticket status as 'CLOSED', the ticket ID as 'EX-4437', and the assignee as 'hopuser'. The main panel shows the detection title, a risk score of 83, and a description of the anomaly. It also lists the server linked to the anomaly: 'corpshare.example.com (192.168.6.179)'. At the bottom, a table shows the CIFS Metric 'Reads' with a 6-hour snapshot, peak value of 1.13 K, expected range of 0-1, and a deviation of 112,500%.

Today 14:00
lasting an hour

83
RISK

LATERAL MOVEMENT

Status — **CLOSED**

Ticket ID — ✓ EX-4437

Assignee — hopuser

Suspicious CIFS Client File Share Access on AccountingLaptop

This device sent an excessive number of read requests over the Common Internet File System (CIFS) protocol. This anomaly indicates that the device might be compromised and is preparing files for data exfiltration.

Server linked to this anomaly:

- corpshare.example.com (192.168.6.179)

AccountingLaptop Activity Map

CIFS Metric	6-hour Snapshot	Peak Value	Expected Range	Deviation
Reads		1.13 K	0-1	112,500%

Status

The status of the ticket associated with the detection. Ticket tracking supports the following statuses:

- New
- In Progress
- Closed
- Closed with Action Taken
- Closed with No Action Taken

Ticket ID

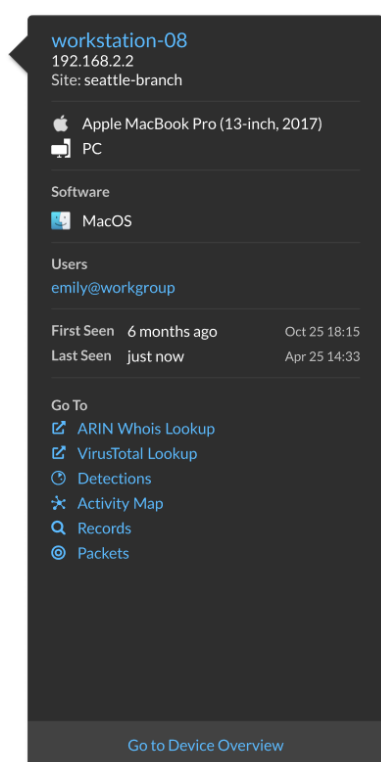
The ID of the ticket in your work-tracking system that is associated with the detection. If you have configured a template URL, you can click the ticket ID to open the ticket in your work-tracking system.

Assignee

The username assigned to the ticket associated with the detection. Usernames in gray indicate a non-ExtraHop account.

Configure lookup links

You can configure a list of external tools that are available for retrieving information about IP addresses and SHA-256 file hashes within the ExtraHop system. Lookup tool links are usually displayed when you click or hover over an IP address or file hash from Devices, Files, Records, or Detections pages. Click the link to launch the lookup tool, which will search for the associated IP address or file hash.



Here are some considerations about configuring lookup links:

- You must have System and Access Administration or System Administration (RevealX 360 only) **user privileges**.
 - You can configure up to 15 lookup links of each type.
 - The following lookup links are configured by default and can be modified or deleted:
 - ARIN Whois Lookup (IP addresses only)
 - VirusTotal Lookup
1. From the Overview page, click **System Settings** ⚙️ and then click **All Administration**.
 2. Configure an IP address lookup link by clicking the **IP Address** tab and completing the following steps:
 - a) Click **Add Lookup Link**.
 - b) In the **URL Template** field, type the URL of the lookup tool.
The URL must include the \$ip variable, which is replaced with the IP address of the endpoint upon lookup. For example, `https://search.arin.net/rdap/?query=$ip`
 - c) In the **Display Name** field, type the name of the link as you want it to appear.
 - d) Select one of the following Display Options:
 - Show this link on all endpoints
 - Show this link on external endpoints
 - Show this link on internal endpoints
 - Do not show this link
 3. Click **Save**.
 4. Configure a file hash lookup link, by clicking the **File Hash** tab and completing the following steps:
 - a) Click **Add Lookup Link**.
 - b) In the **URL Template** field, type the URL of the lookup tool.
The URL must include the \$filehash variable, which is replaced with the SHA-256 hash of the file upon lookup. For example: `https://www.virustotal.com/gui/search/$filehash`
 - c) In the **Display Name** field, type the name of the link as you want it to appear.

- d) Select one of the following Display Options:
 - Show this link on all files
 - Do not show this link
- 5. Click **Save**.

Configure the system time

The System Time page displays the default system time settings and the default display time configured for your ExtraHop system.

Here are some considerations about system time settings in RevealX 360:

- You must have System Administrator privileges or better to make changes.
 - The default system time is a global time zone applied to your ExtraHop system.
 - The default display time for users is the time zone that all users see in the ExtraHop system unless a user manually changes their [displayed time zone](#).
1. From the Overview page, click **System Settings**  and then click **All Administration**.
 2. From the Console Settings section, click **System Time**.
 3. From the Default System Time drop-down menu, select the time zone you want.
 4. From the Default Display Time for Users section, select one of the following options:
 - Browser time
 - System time
 - UTC
 5. Click **Save Changes**.

Integrations

The Integrations page displays a catalog of products and solutions from third-party vendors that work with the ExtraHop system. Integrations can provide insight into how your devices are communicating in your environment or improve your ability to investigate threats and issues. Click a tile to view more information about the integration.

Requirements and configurations vary by integration. Some integrations require that you install and configure an app or add-on, and most integrations require that you create credentials to access the [ExtraHop REST API](#).

For integrations that transfer data, you can add static source IP addresses to your security controls to allow requests from the RevealX 360 console. Add the IP addresses designated for your region:

United States (US)

- 44.239.88.18
- 54.191.141.54

Europe, Middle East, and Africa (EMEA)

- 18.153.205.130
- 18.199.126.90

Asia-Pacific (APAC)

- 52.64.254.4
- 54.66.82.248

Multi-factor authentication

Multi-factor Authentication (MFA) is a security enhancement that requires you to provide two forms of credentials when you log in to your account. In addition to your ExtraHop credentials, you must supply credentials from a 3rd-party authenticator app.

Select and download an authentication application to your device and generate secure, six-digit codes when you log in to your RevealX 360 system.

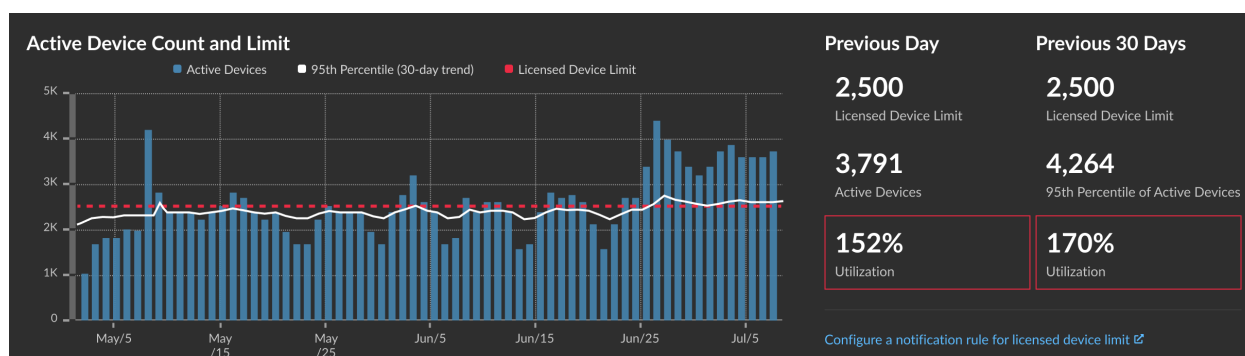
There are many authenticator apps to select from. The following steps are a general guideline, but you should also review the help documentation for the app you select.

1. Choose a device, such as a computer or mobile device (phone or tablet), on which you can install apps.
2. Download and install an authentication app on the device. Here are some popular options:
 - Android and iOS: Google Authenticator, Authy
 - Windows and macOS: 1Password, OTP Manager
 - Chrome extensions: Authenticator
3. Open a new browser and sign in to your ExtraHop RevealX 360 system.
4. Follow the instructions to scan or enter the code that appears on the ExtraHop Multi-Factor Authentication setup screen, and then enter the credentials provided by your authenticator app.

Active device count and limit

The Active Device Count and Limit chart enables you to monitor whether your active device count has exceeded the licensed limit. For example, an ExtraHop system with a 20,000-50,000 devices band is allowed up to 50,000 devices.

Click **System Settings**  and then click **All Administration** to view the chart.



The Active Device Count and Limit chart displays the following metrics:

- The dashed line represents the [licensed device limit](#).
- The solid line represents the 95th percentile of active devices observed each day for the last 30 days.
- The vertical bars represent the maximum number of active devices observed each day for the last 30 days.

This page also displays the following metrics:

- The licensed device limit for the previous day and for the last 30 days.
- The number of active devices observed the previous day.
- The 95th percentile of active devices observed over the last 30 days.
- The utilization percentage of the licensed device limit for the previous day and for the last 30 days. Utilization is the active device count divided by the licensed limit.

You can [create a system notification rule](#) to warn you if utilization exceeds a specified percentage or exceeds 100% of your licensed device limit. Limit percentages are customizable when you create a rule. If you find that you are consistently approaching or over your licensed limit, we recommend that you work with your sales team to move to the next available capacity band.

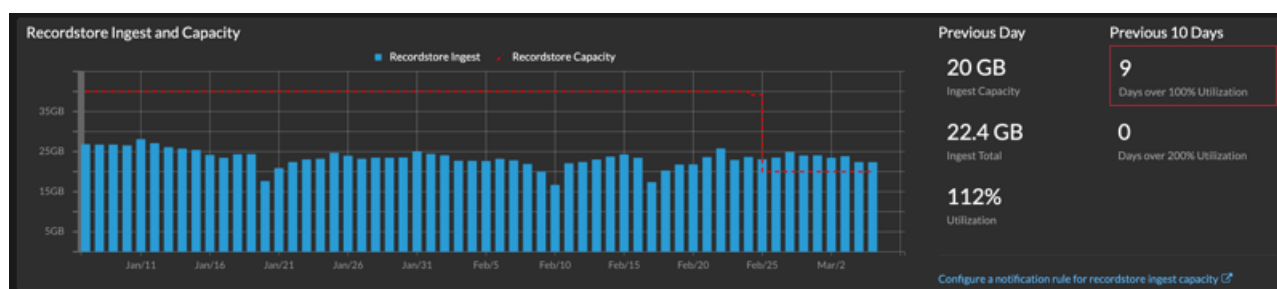
Record ingest and capacity

The Record Ingest and Capacity chart on the main Administration page enables you to monitor the record ingest and capacity levels and confirm that the capacity limit is optimal for your environment.

The dashed red line on the bar chart represents your record ingest capacity, and the blue bars represent the amount of ingest each day during the selected interval. You can select an interval of 30, 90, or 180 days depending on the amount of licensed record lookback, which is displayed to the right of the bar chart.

Ingest and utilization charts are displayed to help you track record ingest. You can [create a system notification rule](#) to warn you if record ingest exceeds a specified percentage or exceeds 100% of your daily record ingest capacity.

If you find that you are consistently over your allotted capacity, contact your ExtraHop sales representative.



Important: No records are written to the recordstore from a sensor with an expired license. If the license is renewed, records will start being sent again. However, there will be a gap in the records written between the expired and renewed period.

Sensor Access Control

ExtraHop administrators can restrict user access to packets on specific sensors. After sensor access control is enabled, users can only view and download packets for sensors that have been assigned to them.

For example, if you want analysts in Region A and Region B to only have access to packets from sensors in their specific region, you can [create sensor tags](#) called `regionA` and `regionB` and add those tags to sensors in their respective region. After the sensor tags are added, you can assign access to all sensors tagged `regionA` to analysts in Region A, while restricting their access to sensors tagged `regionB`.

Sensor access is granted directly to users in the [ExtraHop IdP](#) or by mapping sensor tags to SAML user groups in [your own identity provider](#).



Note: The primary layer of access control for packets, session keys, and packet headers are [Packet and Session Key Access privileges](#). Even when they are granted sensor access, users can only download packets to the level of their assigned privileges.

Administrators can grant limited access to users that have packet download privileges but have not been granted sensor access.

Audit Log

The audit log provides data about the operations of your ExtraHop system, broken down by component. The audit log lists all known events by timestamp, in reverse chronological order.

If you experience an issue with the ExtraHop system, consult the audit log to view detailed diagnostic data to determine what might have caused the issue.

Audit log events

The following events on an ExtraHop system generate an entry in the audit log.

Category	Event
Agreements	A EULA or POC agreement is agreed to
API	- An API key is created - An API key is deleted - A user is created. - A user is modified.
Sensor Migration	- A sensor migration is started - A sensor migration succeeded - A sensor migration failed
Browser sessions	- A specific browser session is deleted - All browser sessions are deleted
Cloud Services	- System connects to Cloud Services - System disconnects from Cloud Services - Status of a connected sensor is retrieved
Console	- A sensor connects to a console - A sensor disconnects from a console - An ExtraHop recordstore or packetstore establishes a tunneled connection to a console - Console information is set - A console nickname is set - Enable or disable a sensor - The sensor is remotely viewed - A license for a sensor is checked by a console - A license for a sensor is set by a console
Dashboards	- A dashboard is created - A dashboard is renamed - A dashboard is deleted - A dashboard permalink, also known as a short code, is modified - Dashboard sharing options are modified
Datastore	- The extended datastore configuration is modified - The datastore is reset

Category	Event
	• A datastore reset completed • Customizations are saved • Customizations are restored • Customizations are deleted
Detections	• A detection status is updated • A detection assignee is updated • Detection notes are updated • An external ticket is updated • A tuning rule is created • A tuning rule is deleted • A tuning rule is modified • A tuning rule description is updated • A tuning rule is enabled • A tuning rule is disabled • A tuning rule is extended
Exception files	• An exception file is deleted
ExtraHop recordstore records	• All ExtraHop recordstore records are deleted • A record type is enabled • A record type is disabled
ExtraHop recordstore cluster	• A new ExtraHop recordstore node is initialized • A node is added to an ExtraHop recordstore cluster • A node is removed from an ExtraHop recordstore cluster • A node joins an ExtraHop recordstore cluster • A node leaves an ExtraHop recordstore cluster • A sensor or console is connected to an ExtraHop recordstore • A sensor or console is disconnected from an ExtraHop recordstore • An ExtraHop recordstore node is removed or missing, but not through a supported interface
ExtraHop Update Service	• A detection category is updated • A detection definition is updated • A detection trigger is updated • A ransomware definition is updated • Detection metadata is updated • Expanded detection content is updated
Firmware	• Firmware is upgraded
Global Policies	• Global policy for device group edit control is updated
Integrations	• An integration is updated

Category	Event
License	• A new static license is applied • License server connectivity is tested • A product key is registered with the license server • A new license is applied
Login to the ExtraHop system	• A login succeeds • A login fails • An account is locked after too many failed login attempts • An administrator unlocks an account
Login from SSH or REST API	• A login succeeds • A login fails • An account is locked after too many failed login attempts • An administrator unlocks an account
Modules	• NDR module access control is enabled • NPM module access control is enabled
Network	• A network interface configuration is edited • The hostname or DNS setting is changed • A network interface route is changed
Notification rules	• A notification rule is created • A notification rule is deleted • A notification rule is modified
Offline capture	• An offline capture file is loaded
PCAP	• A packet capture (PCAP) file is downloaded
Remote Access	• Remote access for ExtraHop Support Team is enabled • Remote access for ExtraHop Support Team is disabled • Remote access for ExtraHop Support is enabled • Remote access for ExtraHop Support is disabled
RPCAP	• An RPCAP configuration is added • An RPCAP configuration is deleted
Running Config	• The running configuration file changes
SAML Identity Provider	• An identity provider is added • An identity provider is modified • An identity provider is deleted

Category	Event
SAML login	• A login succeeds • A login fails
SAML privileges	• A privilege level is granted • A privilege level is denied
Sensor tags	• A sensor tag is created • A sensor tag is modified • A sensor tag is deleted • Tags on a sensor are changed
SSL decryption	• An TLS decryption key is saved
SSL session keys	• A PCAP session key is downloaded
Support account	• The support account is disabled • The support account is enabled • The support SSH key is regenerated
Support Script	• A default support script is running • A past support script result is deleted • A support script is uploaded
Syslog	• Remote syslog settings are updated
System and service status	• The system starts up • The system shuts down • The system is restarted • The bridge, capture, or portal process is restarted • A system service is enabled (such as SNMP, web shell, management, SSH) • A system service is disabled (such as SNMP, web shell, /management, SSH)
System time	• The system time is set • The system time is changed • The system time is set backwards • NTP servers are set • The time zone is set • A manual NTP synchronization is requested
System user	• A user is added • User metadata is edited • A user is deleted • A user password is set • A user other than the set up user attempts to modify the password of another user • A user password is updated

Category	Event
TAXII feeds	• A TAXII feed is added • A TAXII feed is modified • A TAXII feed is deleted
Threat briefings	• A threat briefing is archived • A threat briefing is restored
ExtraHop packetstore	• A new ExtraHop packetstore is initialized • A sensor or console is connected to an ExtraHop packetstore • A sensor or console is disconnected from an ExtraHop packetstore • An ExtraHop packetstore is reset • A packetstore disk is encrypted • A packetstore disk is decrypted
Trends	• A trend is reset
Triggers	• A trigger is added • A trigger is edited • A trigger is deleted
User Groups	• A local user group is created • A local user group is deleted • A local user group is enabled • A local user group is disabled