

Find a device

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The ExtraHop system automatically discovers devices such as clients, servers, routers, load balancers, and gateways that are actively communicating with other devices over the wire. You can search for a specific device on the system and then view traffic and protocol metrics on a protocol page.

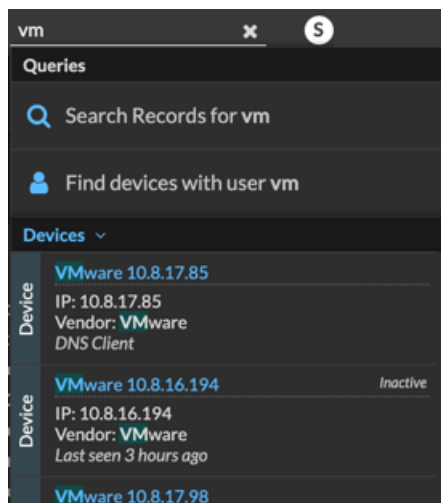
There are several ways to search for a device:

- [Find devices from a global search](#)
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- [Find devices by detection activity](#)
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Find devices from a global search

You can search for devices from the global search field at the top of the page. Global search compares a search term to multiple device properties such as the hostname, IP address, known alias, vendor, tag, description, and device group. For example, if you search for the term `vm`, the search results might display devices that include `vm` in the device name, device vendor, or device tag.

1. Type a search term in the global search field at the top of the page.
2. Click **Any Type** and then select **Devices**.
The search results are displayed in a list below the search field. Click **More Results** to scroll through the list.



Matching devices with no activity during the specified time interval have an Inactive label.



Tip: Devices inactive for more than 90 days are excluded from global search results. However, you can immediately [exclude all devices that have been inactive for fewer than 90 days](#) through the Administration settings.

3. Click a device name to open the [Device Overview page](#) and view device properties and metrics.

Find devices by details

You can search for devices by information observed over the wire, such as IP address, MAC address, hostname, or protocol activity. You can also search for devices by customized information such as device tags.

The trifold search filter enables you to search by multiple categories at once. For example, you can add filters for device name, IP address, and role to view results for devices that match all of the specified criteria.

1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. At the top of the page, click **Assets** and then click the **Active Devices** chart.
3. Optional: If displayed, click **Standard Search**.
4. In the trifold filter, click **Name** and select one of the following categories:

Option	Description
Name	Filters devices by the discovered device name. For example, a discovered device name can include the IP address or hostname.
MAC Address	Filters devices by the device MAC address.
IP Address	Filters devices by IP address in IPv4, IPv6, or CIDR block formats.
Site	Filters devices associated with a connected site. Console only.
Discovery Time	Filters devices automatically discovered by the ExtraHop system within the specified time interval. For more information, see Create a device group based on discovery time .
Analysis Level	Filters devices by analysis level, which determines what data and metrics are collected for a device. You cannot create a dynamic device group for devices filtered by analysis level.
Model	Filters devices by make and model name. The following tips can help you find the device model you want: <ul style="list-style-type: none"> • Select the exact match operator (=) to view a drop-down list of existing models and model sets. • Select the exact match operator (=) and then select Custom Models to filter all devices assigned to a custom model set.
Activity	Filters devices by protocol activity associated with the device. For example, selecting HTTP Server returns devices with HTTP server metrics, and any other device with a device role set to HTTP Server. Also filters devices that accepted or initiated an external connection, which can help you

Option	Description
	determine whether devices are engaged in suspicious activity.
Cloud Account	Filters devices by the cloud service account associated with the device.
Cloud Instance ID	Filters devices by the cloud instance ID associated with the device.
Cloud Instance Type	Filters devices by the cloud instance type associated with the device.
High Value	Filters devices that are considered high value because they provide authentication services, support essential services on your network, or are user-specified as high value.
Currently Active	Filters devices by activity observed on a device in the last 30 minutes.
Network Locality Type	Filters devices by all internal or external network localities.
Network Locality Name	Filters devices by network locality name.
Role	Filters devices by the assigned device role, such as gateway, firewall, load balancer, and DNS Server.
Software	Filters devices by operating system software detected on the device.
Software Type	Filters devices by the type of software observed on the device such as attack simulator, remote access, or database server.
Subnet	Filters devices by the subnet associated with the device.
Tag	Filters devices by user-defined device tags.
Vendor	Filters devices by the device vendor name, as determined by the Organizationally Unique Identifier (OUI) lookup.
Virtual Private Cloud	Filters devices by the VPC associated with the device.
VLAN	Filters devices by the device VLAN tag. VLAN information is extracted from VLAN tags, if the traffic mirroring process preserves them on the mirror port. Only available if the <code>devices_accross_vlans</code> setting is set to <code>False</code> in the running configuration file.
CDP Name	Filters devices by the CDP name assigned to the device.
Cloud Instance Name	Filters devices by the cloud instance name assigned to the device.

Option	Description
Custom Name	Filters devices by the custom name assigned to the device.
DHCP Name	Filters devices by the DHCP name assigned to the device.
DNS Name	Filters devices by any DNS name assigned to the device.
NetBIOS Name	Filters devices by the NetBIOS name assigned to the device.
Detection Activity	Filters devices with detection activity where the device was a participant. Enables additional criteria such as category, risk score, and MITRE technique.



Note: You cannot create a device group that contains this criteria option.

5. Select one of the following operators; the operators available are determined by the selected category:

Option	Description
=	Filters devices that are an exact match of the search field for the selected category.
≠	Filters devices that do not exactly match the search field.
≈	Filters devices that include the value of the search field for the selected category.
≈/	Filters devices that exclude the value of the search field for the selected category.
starts with	Filters devices that start with the value of the search field for the selected category.
exists	Filters devices that have a value for the selected category.
does not exist	Filters devices that do not have a value for the selected category.
match	Filters devices that include the value of the search field for the selected category.
and	Filters devices that match the conditions specified in two or more search fields.
or	Filters devices that match at least one condition specified in two or more search fields.
not	Filters devices that do not match the conditions specified in a search field.

6. In the search field, type the string to be matched, or select a value from the drop-down list. The input type is based on the selected category.

For example, if you want to find devices based on Name, type the string to be matched in the search field. If you want to find devices based on Role, select from the drop-down list of roles.




Tip: Depending on the selected category, you can click the Regex icon in the text field to enable matching by regular expression.



7. Click **Add Filter**.
The devices list is filtered to the specified criteria.

Next steps

- Click a device name to view device properties and metrics on the [Device Overview page](#).
- Click **Create Dynamic Group** from the upper right corner to [create a dynamic device group](#) based on the filter criteria.
- Click the command menu  and then select PDF or CSV to export the device list to a file.

Find devices with AI Search Assistant

AI Search Assistant enables you to search for devices with questions written in natural, everyday language to quickly build complex queries compared to building a standard search query with the same criteria.

For example, if you type "Which devices have HTTP traffic with TLS v1.0?", the following AI Search Assistant query is displayed:

```
(Detection Activity where Device Role = As Participant and Type =
  Deprecated SSL/TLS Versions )
```

Here are some things to consider when searching for devices with AI Search Assistant:

- Prompts are mapped to the same [device filter criteria](#) that you specify when building a standard search. The ExtraHop system might be unable to process a query that contains requests for device information that is outside of the criteria.
- Prompts can include absolute and relative time ranges, such as "Which of my devices were participants in stalled data transfers this week?". The current year is applied if a year is not included in the date.
- Prompts should be as clear and concise as possible and we recommend that you try writing a few variations to maximize your results.
- The ExtraHop system can retain user prompts for product improvement purposes; we recommend that you do not include proprietary or confidential data in your prompts.
- You can edit the query filter criteria to refine search results.

Before you begin


- Your ExtraHop system must be [connected to ExtraHop Cloud Services](#).
 - AI Search Assistant must be enabled by your ExtraHop administrator.
1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
 2. At the top of the page, click **Assets**.
 3. Write a prompt in the AI Search Assistant field and press ENTER.




Tip: Click the search prompt field to select a recent query or suggested search.

The AI Search Assistant query output and the results list are displayed.


The screenshot shows the AI Search Assistant interface. At the top, there are tabs for "AI SEARCH ASSISTANT" and "STANDARD SEARCH". Below the tabs is a search bar containing the query "Which devices have HTTP traffic with TLS v1.0?". Below the search bar is the "AI Search Assistant Query" section, which displays the query in a structured format: "(Detection Activity where Device Role = As Participant and Type = Deprecated SSL/TLS Versions)". To the right of the query is an edit icon. Below the query is a "Create Dynamic Group" button. At the bottom of the interface, there is a "Search Results" section showing "7 devices" and a "View Detections" link. Below this is a table with columns: Name, MAC Address, IP Address, Site, and Discovery Time. The first row of the table is partially visible, showing a device name starting with "P-LL534103", a MAC address "74:06:70:50:14:00", and an IP address "10.10.11.175".

4. Optional: From the AI Search Assistant Query section, click the edit icon  to open the Advanced Filter window and refine your query filter criteria.

The screenshot shows the "Advanced Filter" window. It has a title bar with a close icon. The main area contains a list of filter criteria. The first criterion is "MATCH Activity = HTTP Client". The second criterion is "AND Activity = HTTP Server". The third criterion is "AND Detection Activity As Participant". Below these is a "WHERE" section with "Type = Weak Cipher Suite". There are plus and minus icons for adding and removing criteria. At the bottom right, there is a "Done" button.

- a) Click the add filter icon  and select **Add Filter** or **Add Filter Group** to specify more criteria at the top or secondary level of the filter.
A new filter group adds criteria to the result of the original filter. For example, if you search for HTTP clients and servers that were participants in weak cipher suite detections, you can add a filter group to exclude detections with a risk score lower than 30.
- b) Click **Done**.

Next steps

- Click **View Detections** to navigate to the Detections page; the device filter is applied to the summary of detections. Click **Advanced Device Filter** to view and edit filter criteria.
- Click a device name to view device properties and metrics on the [Device Overview page](#).
- Click the command menu  and then select PDF or CSV to export the device list to a file.

Find devices with suggested searches

The ExtraHop system provides several suggested searches with pre-built filters to help you perform common device searches more efficiently. After you select a suggested search, you can edit the filter criteria to refine your results.

1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. At the top of the page, click **Assets**.

3. Click a suggested search prompt.

If AI Search Assistant is enabled, filter criteria is displayed in the AI Search Assistant Query field.


The screenshot shows the AI Search Assistant interface. At the top, there are tabs for "AI SEARCH ASSISTANT" and "STANDARD SEARCH". Below the tabs is a search bar with the prompt "Which devices were victims of phishing attempts?". Below the search bar is the "AI Search Assistant Query" field, which contains the query "(Detection Activity where Device Role = As Victim and Mitre_category = Phishing)". To the right of the query field is an edit icon and a close icon. Below the query field is a "Create Dynamic Group" button. Below the query field is a "Search Results" section showing "3 devices" and a "View Detections" link. Below the search results is a table with columns: Name, MAC Address, IP Address, Site, and Discovery Time. The table contains one row of data.

Name	MAC Address	IP Address	Site	Discovery Time
Device-0000000000000000	00:00:00:00:00:00		currentip-wed-stage.ssp1.extrahop.com	2023-05-03 12:20

Otherwise, the page displays the standard filter.


The screenshot shows the "Find Devices" interface. At the top is a search bar with a dropdown menu for "Name" and a search icon. Below the search bar is a "Search Suggestions" section with four suggestions: "Which devices are involved in data exfiltration?", "Which devices were victims of phishing attempts?", "Which HTTP clients have sent plaintext credentials?", and "Which devices have Command and Control detections?". Below the suggestions is a "More Suggestions" link. Below the suggestions is a filter bar with "Detection Activity = As Victim" and a "Create Dynamic Group" button. Below the filter bar is a "Search Results" section showing "2 devices" and a "View Detections" link. Below the search results is a table with columns: Name, MAC Address, IP Address, Discovery Time, and Analysis Level. The table contains one row of data.

Name	MAC Address	IP Address	Discovery Time	Analysis Level
Device-0000000000000000	00:00:00:00:00:00			


4. Optional: From the AI Search Assistant Query field, click the edit icon  or click the standard filter to open the Advanced Filter window and refine your query.

The screenshot shows the "Advanced Filter" window. At the top is a search bar with a dropdown menu for "Name" and a search icon. Below the search bar is a "Search Suggestions" section with four suggestions: "Which devices are involved in data exfiltration?", "Which devices were victims of phishing attempts?", "Which HTTP clients have sent plaintext credentials?", and "Which devices have Command and Control detections?". Below the suggestions is a "More Suggestions" link. Below the suggestions is a filter bar with "Detection Activity = As Victim" and a "Create Dynamic Group" button. Below the filter bar is a "Search Results" section showing "2 devices" and a "View Detections" link. Below the search results is a table with columns: Name, MAC Address, IP Address, Discovery Time, and Analysis Level. The table contains one row of data.

Name	MAC Address	IP Address	Discovery Time	Analysis Level
Device-0000000000000000	00:00:00:00:00:00			

- a) Click the add filter icon  and select **Add Filter** or **Add Filter Group** to specify more criteria at the top or secondary level of the filter.
A new filter group adds criteria to the result of the original filter. For example, if you search for HTTP clients and servers that were participants in weak cipher suite detections, you can add a filter group to exclude detections that have a risk score lower than 30.
- b) Click **Done**.

Next steps

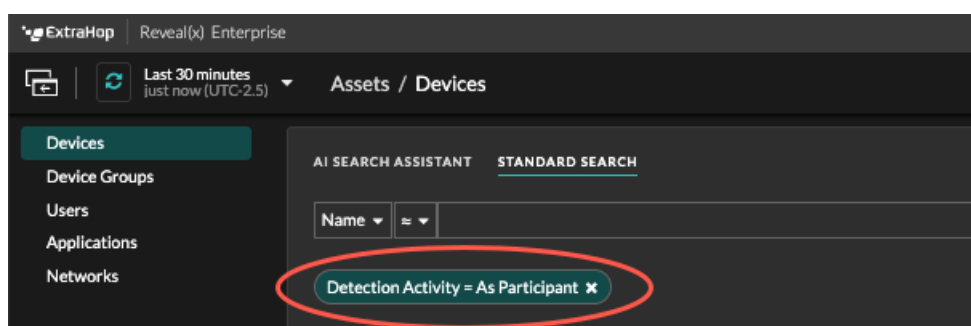
- Click **View Detections** to navigate to the Detections page; the device filter is applied to the summary of detections. Click **Advanced Device Filter** to view and edit filter criteria.
- Click **Create Dynamic Group** from the upper right corner to [create a dynamic device group](#) based on the filter criteria.
- Click a device name to view device properties and metrics on the [Device Overview page](#).
- Click the command menu  and then select PDF or CSV to export the device list to a file.

Find devices by detection activity

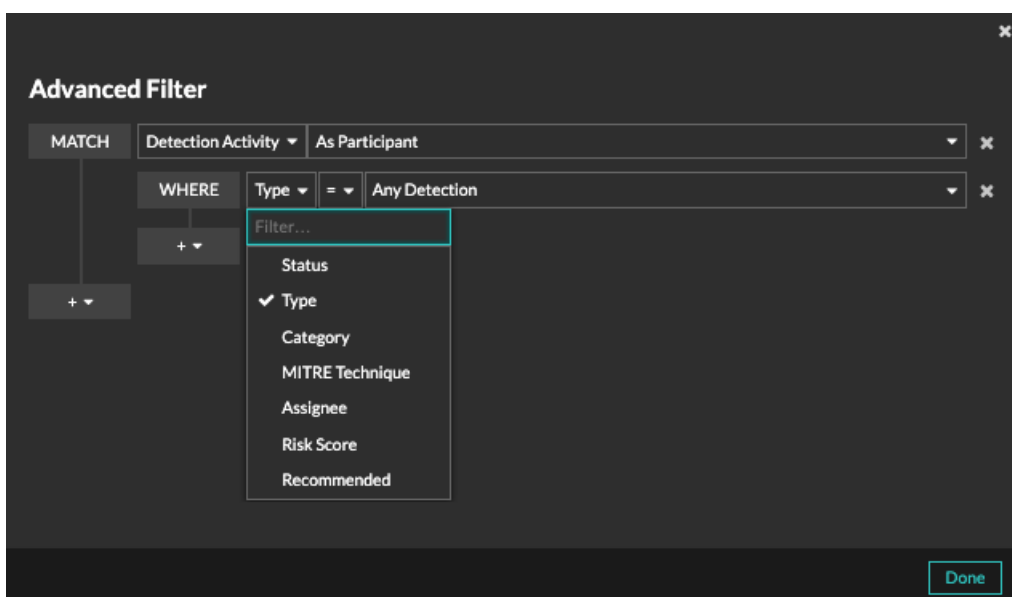
You can search for devices by their associated detections by adding the Detection Activity criteria option to your search filter, and then refining your search further with criteria such as detection categories, risk scores, and MITRE techniques.

1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. At the top of the page, click **Assets** and then click the **Active Devices** chart.
3. Optional: Click **Standard Search** if the tab is displayed.
4. In the trifield filter, click **Name** and select **Detection Activity**.
5. Click **Select an item...** and select one of the following options:

Option	Description
As Participant	Filters devices that participated in a detection.
As Offender	Filters devices that only participated in a detection as an offender.
As Victim	Filters devices that only participated in a detection as a victim.
6. Click **Add Filter**.
7. Optional: To specify additional detection activity criteria, click the filter you just added.




The Advanced Filter opens to display the MATCH criteria you added. A WHERE operator is automatically added at the secondary level of the filter for detection activity criteria.



8. Click **Type** and select one of the following detection activity criteria:

Option	Description
Status	Filters detections by status, such as whether the detection has been acknowledged or closed
Type	Filters detections by type, such as Data Exfiltration or Expired SSL Server Certificates.
Category	Filters detections by category, such as attack, operation, hardening, and intrusion.
MITRE Technique	Filters detections by MITRE technique ID. The MITRE framework is a widely recognized knowledgebase of attacks
Assignee	Filters detections by the assigned user.
Risk Score	Filters detections by risk score.
Recommended	Filters detections that are recommended for triage. (NDR module only)

See [Filtering detections](#) for more information about detection activity criteria.

9. Optional: Click the add filter icon  and select **Add Filter** or **Add Filter Group** to specify more criteria at the top or secondary level of the filter.

A new filter group adds criteria to the result of the original filter. For example, if you search for devices that acted as an offender in exfiltration category detections, you can add a filter group to exclude detections with a closed status from those results.

10. Click **Save**.

Next steps

- Click a device name to view device properties and metrics on the [Device Overview page](#).
- Click the command menu  and then select PDF or CSV to export the device list to a file.

Find devices by protocol activity

The Devices page displays all protocols that are actively communicating on the ExtraHop system during the selected time interval. You can quickly locate a device that is associated with a protocol, or discover a decommissioned device that is still actively communicating over a protocol.

In the following example, we show you how to search for a web server within the group of HTTP servers.

1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. At the top of the page, click **Assets**.
3. From the Devices by Protocol Activity chart, click the number of HTTP servers, as shown in the following figure.

The screenshot shows the ExtraHop interface with the 'Assets' tab selected. The 'Find Devices with AI Search Assistant' section is at the top. Below it, the 'Browse Assets' section shows various asset categories: New Devices (11 new devices), Active Devices (4,147 active devices), Device Groups (114 device groups), Users (35 users), Networks (2 networks), and Applications (101 applications). The 'Devices by Role' section displays a grid of roles such as Domain Controller (7 Devices), File Server (18 Devices), Mobile Device (109 Devices), PC (255 Devices), Vulnerability Scanner (0 Devices), VPN Client (134 Devices), VPN Gateway (4 Devices), Wi-Fi Access Point (39 Devices), IP Camera (0 Devices), Medical Device (0 Devices), Printer (12 Devices), VoIP Phone (85 Devices), Database (0 Devices), Web Server (170 Devices), Load Balancer (0 Devices), Web Proxy Server (3 Devices), Firewall (0 Devices), Gateway (38 Devices), Custom Device (10 Devices), NAT Gateway (18 Devices), and Attack Simulator (5 Devices). The 'Devices by Protocol' section on the right lists protocols with their respective server and client counts. The 'HTTP' protocol is highlighted with a red circle, showing 208 servers and 385 clients.

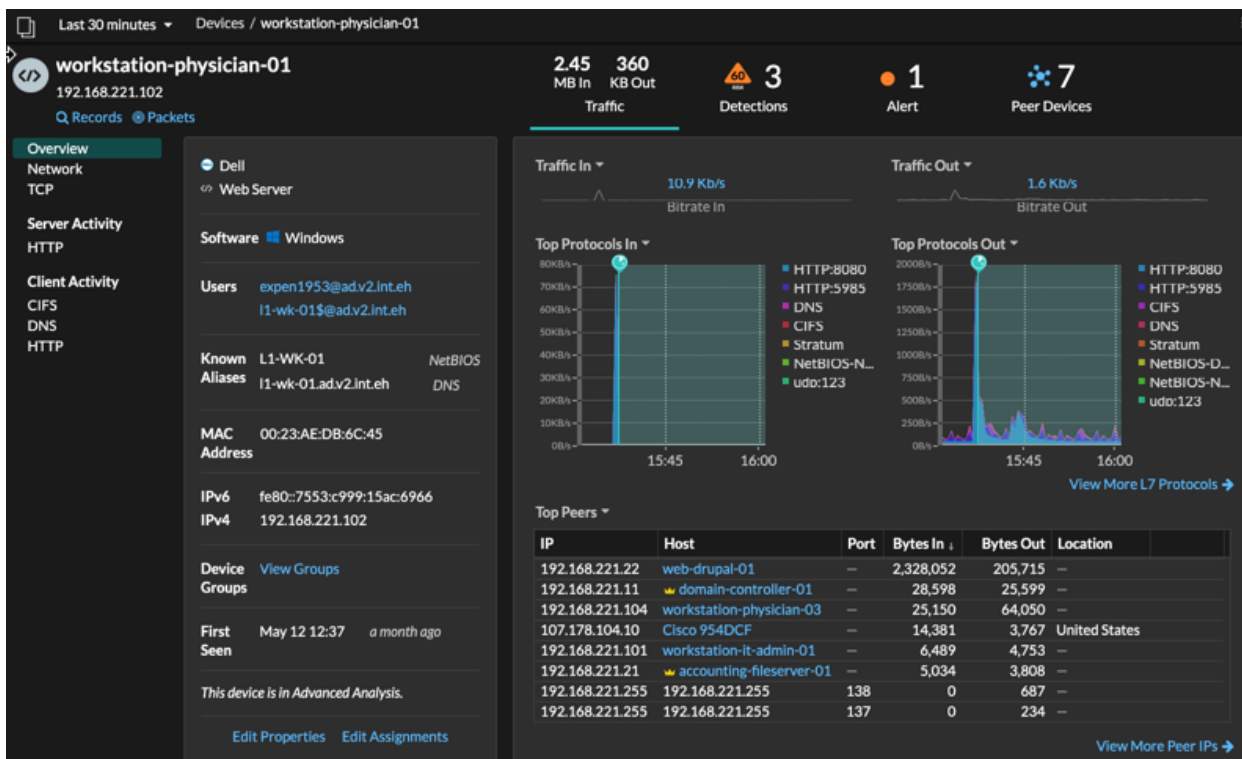
Protocol	Servers	Clients
AAA	3 servers	16 clients
AJP	3 servers	3 clients
CIFS	26 servers	84 clients
Database	4 servers	5 clients
DHCP	4 servers	844 clients
DNS	24 servers	1,471 clients
HTTP	208 servers	385 clients
Kerberos	11 servers	43 clients
LDAP	14 servers	422 clients

Note: If you do not see the protocol you want, the ExtraHop system might not have observed that type of protocol traffic over the wire during the specified time interval, or the protocol might require a module license. For more information, see the [I don't see the protocol traffic I was expecting?](#) section in the License FAQ.

The page displays traffic and protocol metrics associated with the group of HTTP servers.


4. At the top of the page, click **Group Members**.
The page displays a table that contains all of the devices that sent HTTP responses over the wire during the selected time interval.
5. From the table, click a device name.

The page displays traffic and protocol metrics associated with that device, similar to the following image.



Find devices accessed by a specific user

From the Users page, you can see active users and the devices they have logged in to the ExtraHop system during the specified time interval.

 **Tip:** You can also search for users from the global search field at the top of the page.

This procedure shows you how to perform a search from the Users page.

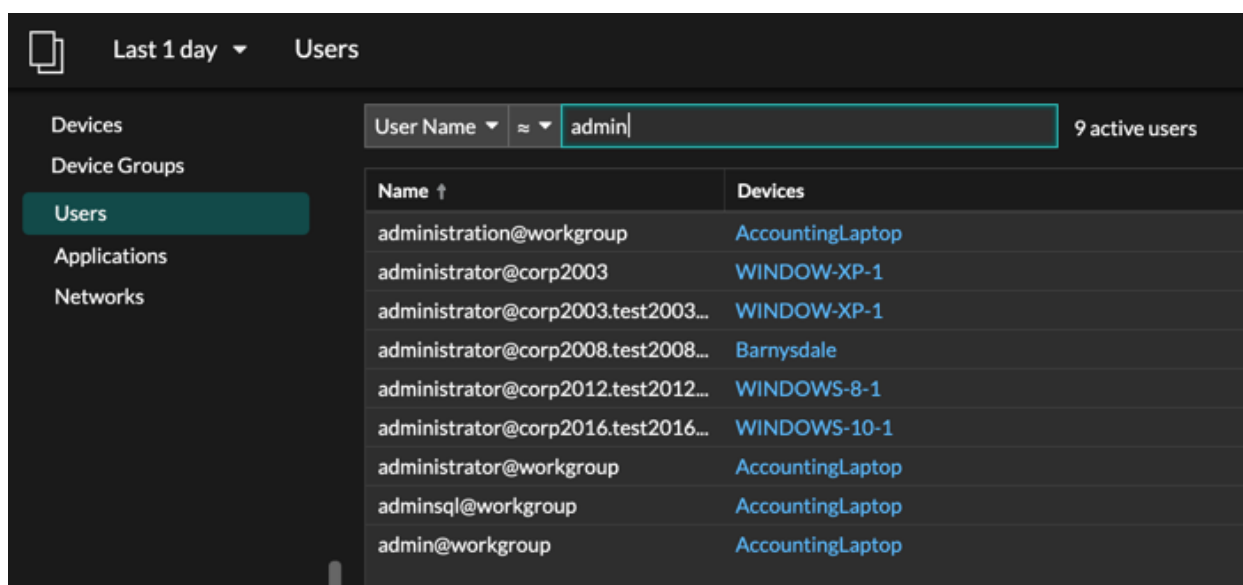
1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. At the top of the page, click **Assets** and then click the **Users** chart.
3. From the search bar, select one of the following categories from the drop-down list:

Option	Description
User Name	Search by user name to learn which devices the user has accessed. The user name is extracted from the authentication protocol, such as LDAP or Active Directory.
Protocol	Search by protocol to learn which users have accessed devices communicating over that protocol.
Device Name	Search by device name to learn which users have accessed the device.

4. Select one of the following operators from the drop-down list:

Option	Description
=	Search for a name or device that is an exact match of the text field.
≠	Search for names or devices that do not exactly match the text field.
≈ (default)	Search for a name or device that includes the value of the text field.
≈/	Search for a name or device that excludes the value of the text field.

- In the text field, type the name of the user or device you want to match or exclude. The Users page displays a list of results similar to the following figure:



- Click the name of a device to open the [Device Overview page](#) and view all of the users that have accessed the device during the specified time interval.

Find peer devices

If you want to know which devices are actively talking to each other, you can drill down by Peer IPs from a device or device group protocol page.

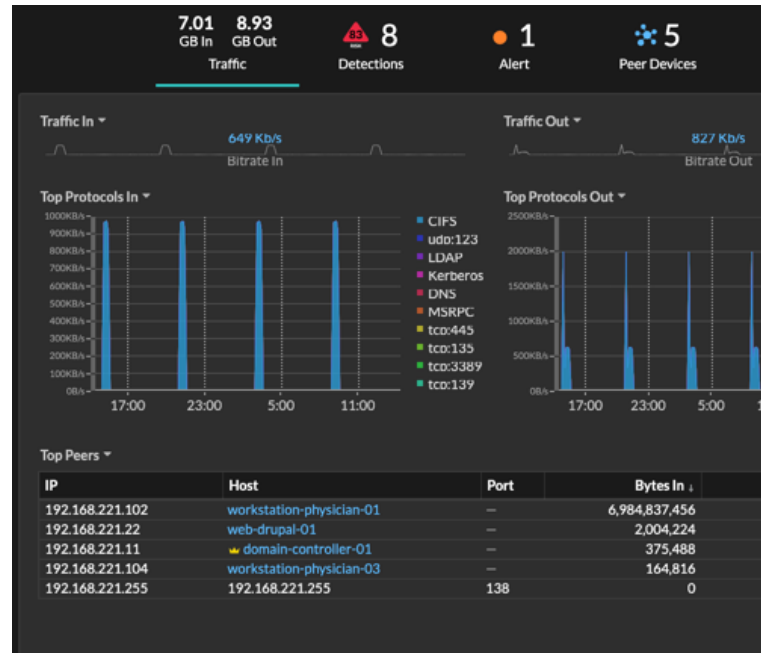
When you [drill down](#) by Peer IP address, you can investigate a list of peer devices, view performance or throughput metrics associated with peer devices, and then click on a peer device name to view additional protocol metrics.

- Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
- At the top of the page, click **Assets** and then select **Device** or **Device Group** in the left pane.
- [Search for a device](#) or device group, and then click the name from the list of results.
- On the Overview page for the selected device or device group, click one of the following links:

Option	Description
For devices	Click View More Peer IPs , located at the bottom of the Top Peers chart.

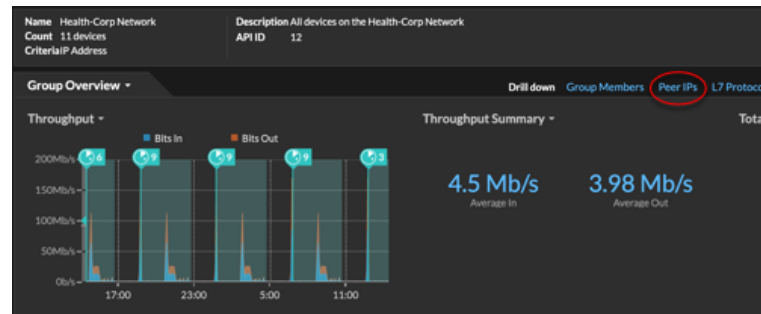
Option

Description

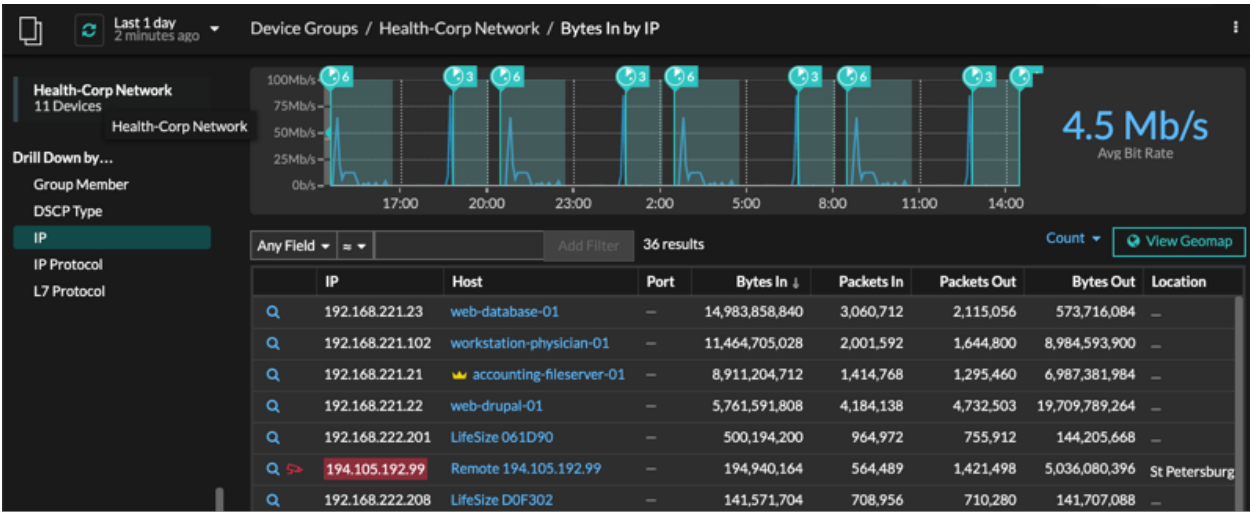


For device groups

Click **Peer IPs**, located in the Details section near the upper right corner of the page.



A list of peer devices appears, which are broken down by IP address. You can investigate network bytes and packets information for each peer device, as shown in the following figure.



View the peer device sending or receiving data from the source device. If available, click the hostname to learn about activity on that device.

View network throughput metrics for traffic associated with peer devices.