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.

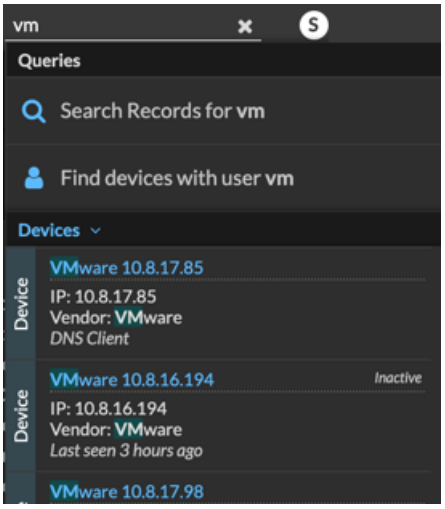
There are several ways to search for a device:

- Find devices from a global search
- Find devices by details
- Find devices with AI Search Assistant
- Find devices by detection activity
- Find devices by protocol activity
- Find devices accessed by a specific user
- Find peer devices

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 trifield 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 trifield 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: • 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.
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 `devices_accross_vlans` setting is set to `False` 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.
Custom Name	Filters devices by the custom name assigned to the device.

Option	Description
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:

```
(Activity = http_client or Activity = http_server) and (Detection Activity
 where Device Role = any and Type = weak_cipher_individual)
```

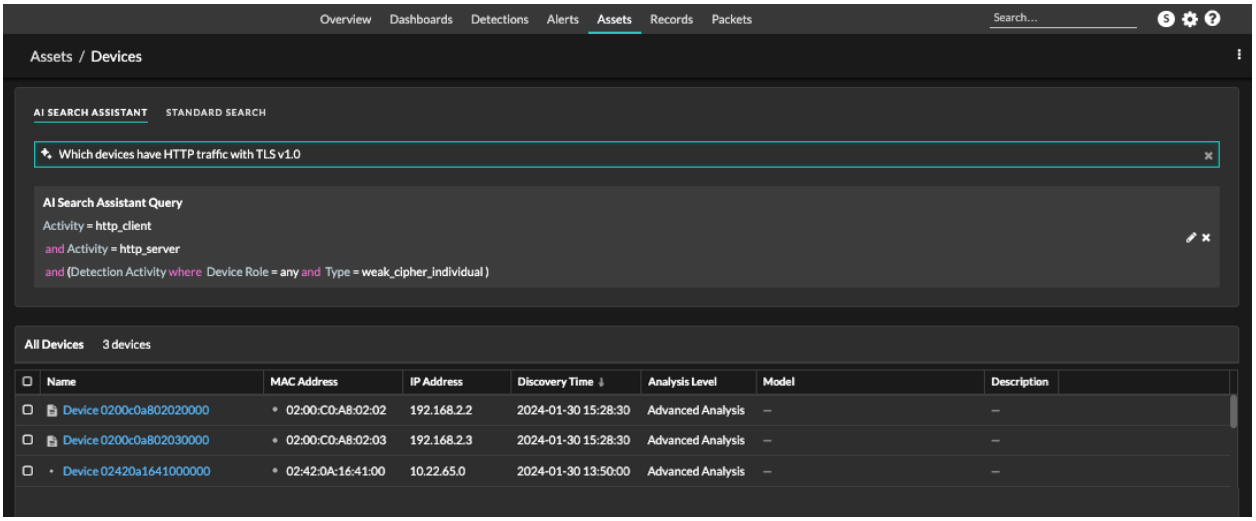
Here are some things to consider when searching for devices with AI Search Assistant:

- 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 should be as clear and concise as possible and we recommend that you try writing a few variations to maximize your results.
- You can edit the query and add standard search criteria to refine results.
- We recommend that you do not include proprietary or confidential data in your prompts.

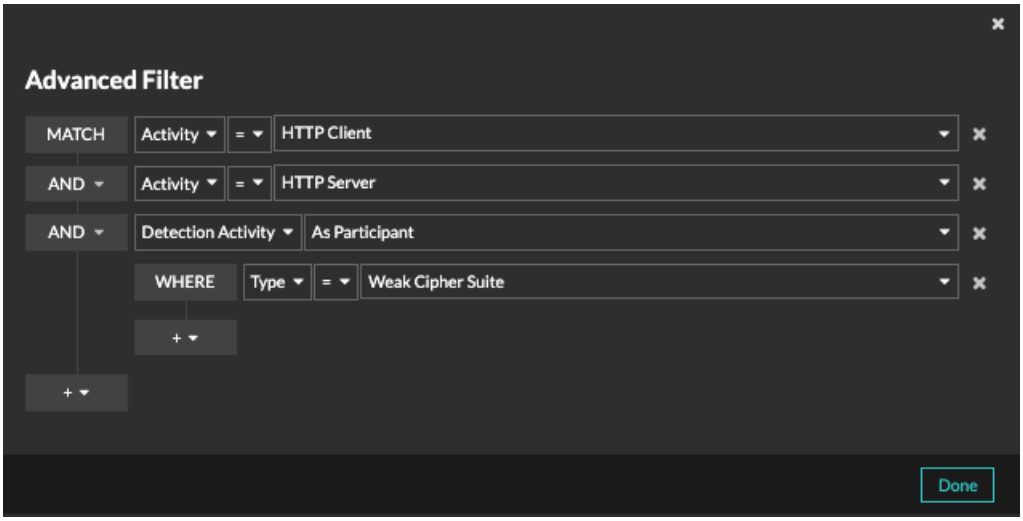
Before you begin

- You must have NDR module access.
- 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 then press ENTER.
   The AI Search Assistant query output and the results list are displayed.



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



   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 **Save**.

5. Optional: Click **Standard Search** and add criteria from the tri-field filter to apply both filters to the search.

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.

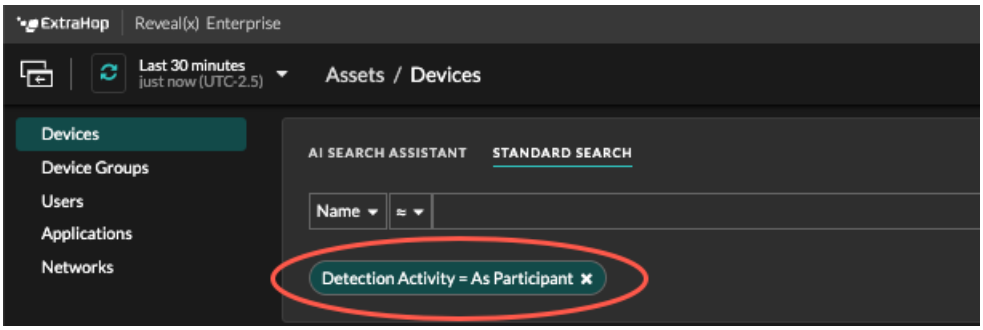
Find devices by detection activity

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.

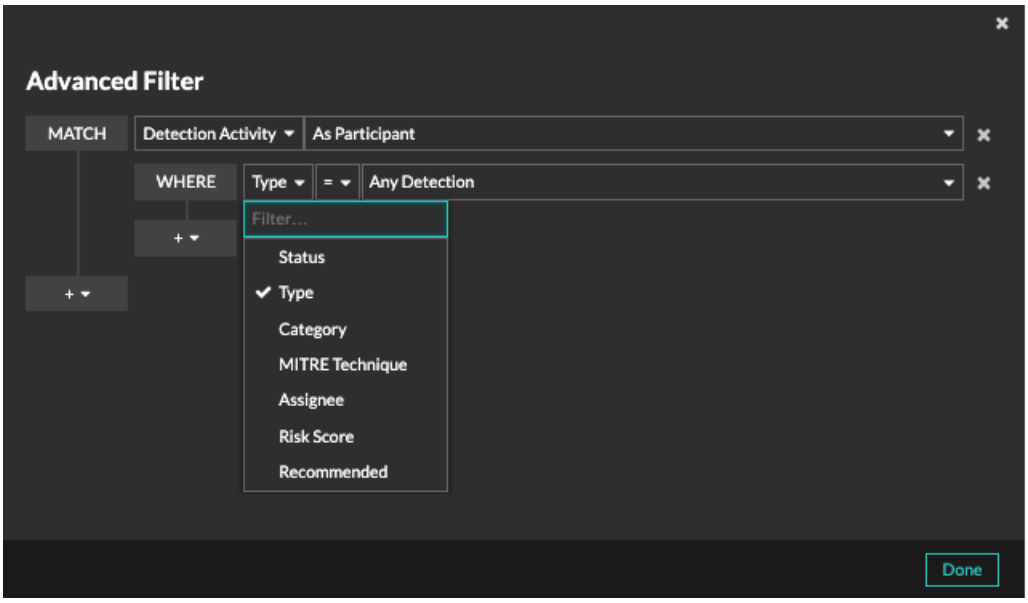
1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. At the top of the page, click **Assets** and then click the **Active Devices** chart.
3. Optional: Click **Standard Search** if the tab is displayed.
4. In the trifield filter, click **Name** and select **Detection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

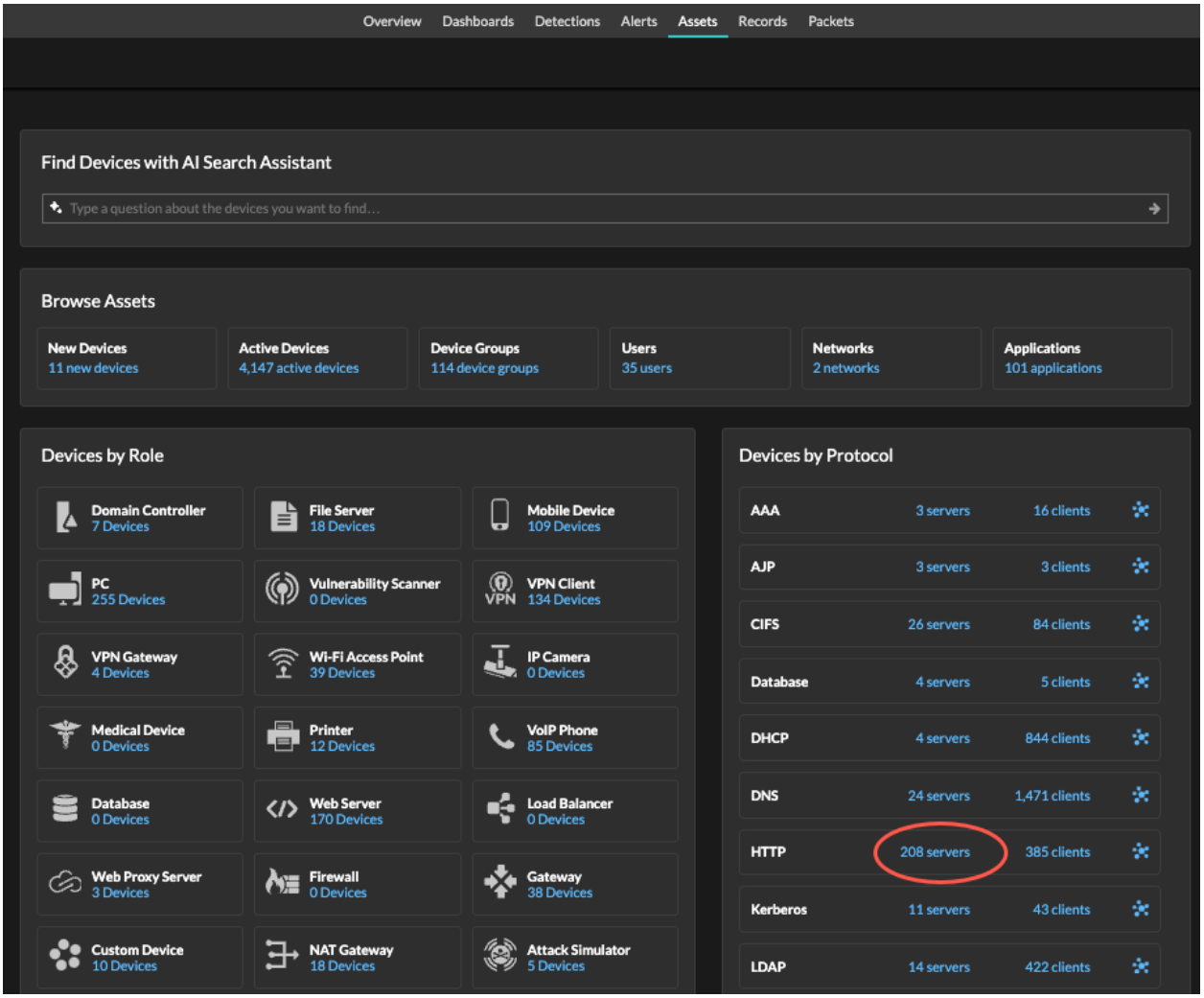
- Click a device name to view device properties and metrics on the Device Overview page.
- Click the command menu ⋮ and then select PDF or CSV to export the device list to a file.

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.

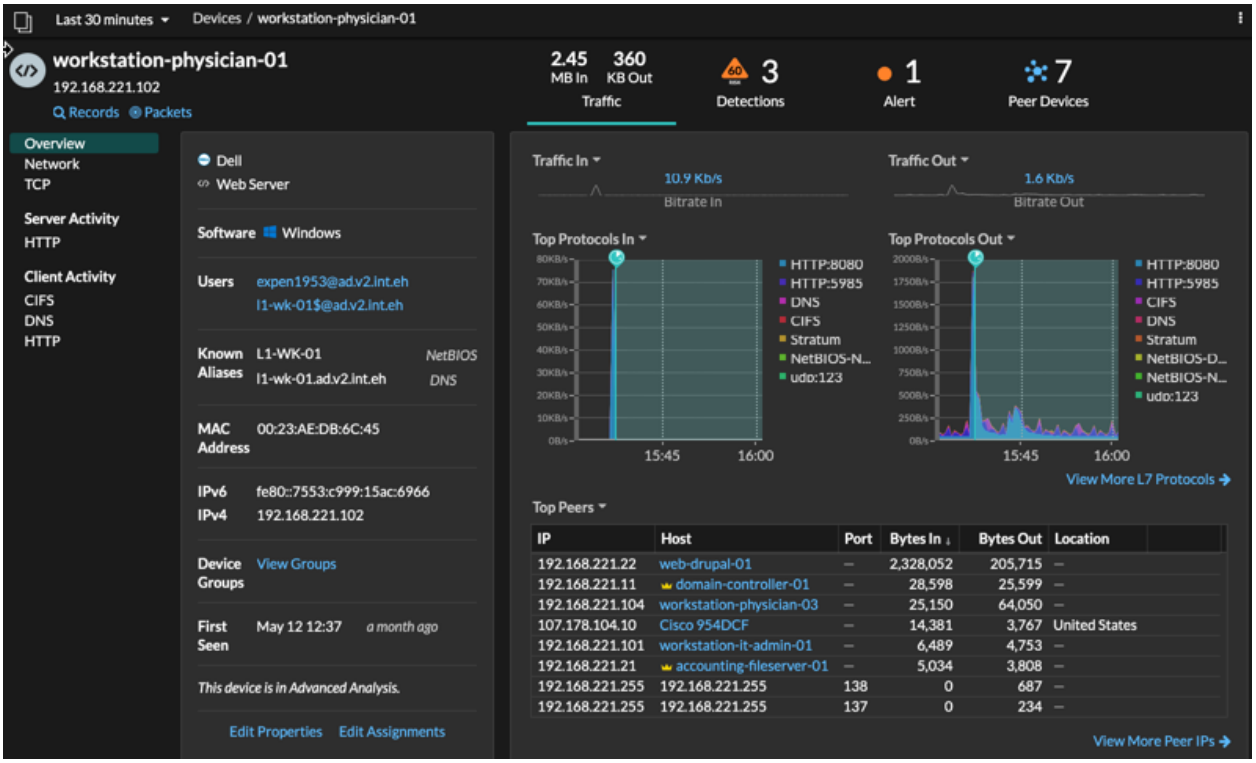
1. Log in to the ExtraHop system through `https://<extrahop-hostname-or-IP-address>`.
2. At the top of the page, click **Assets**.
3. From the Devices by Protocol Activity chart, click the number of HTTP servers, as shown in the following figure.



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:

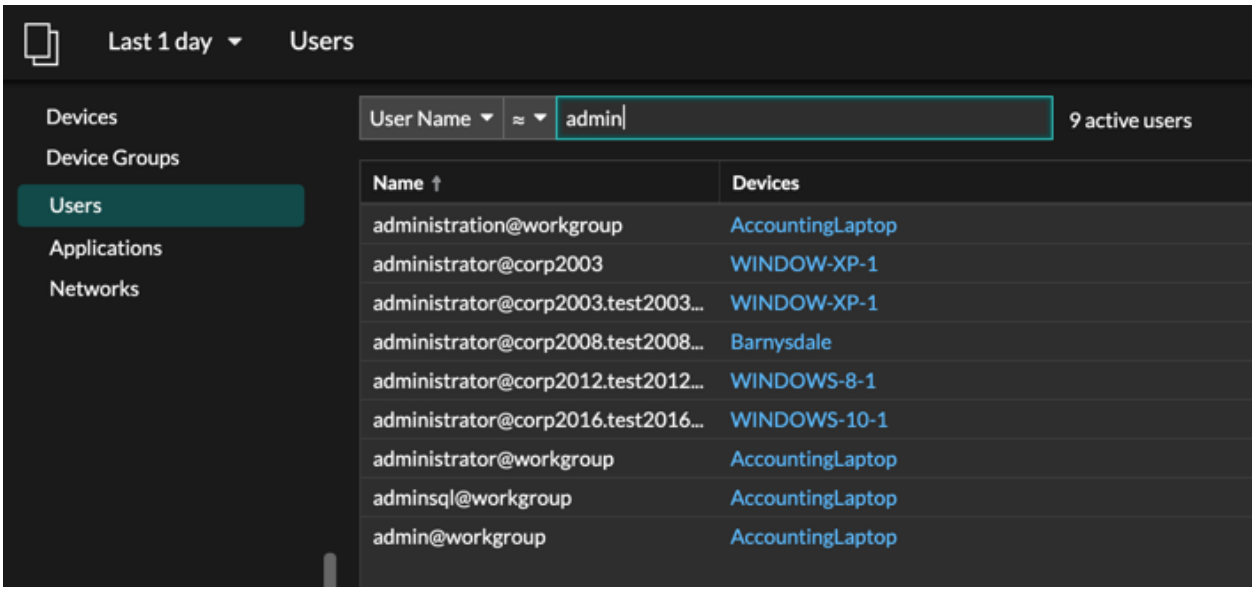
Option	Description
User Name	Search by user name to learn which devices the user has accessed. The user name is extracted from the authentication protocol, such as LDAP or Active Directory.
Protocol	Search by protocol to learn which users have accessed devices communicating over that protocol.
Device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

Option	Description
≠	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.

5. 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:



6. 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.

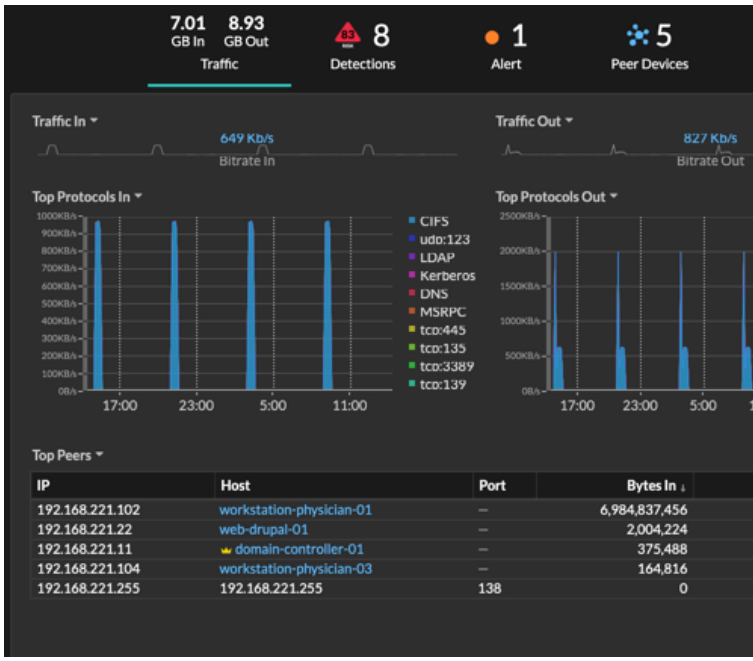
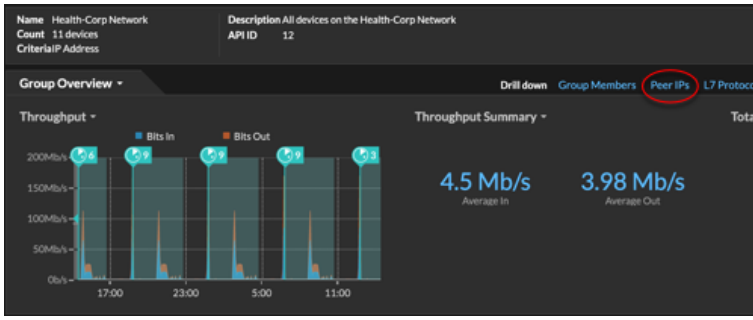
Find peer devices

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.

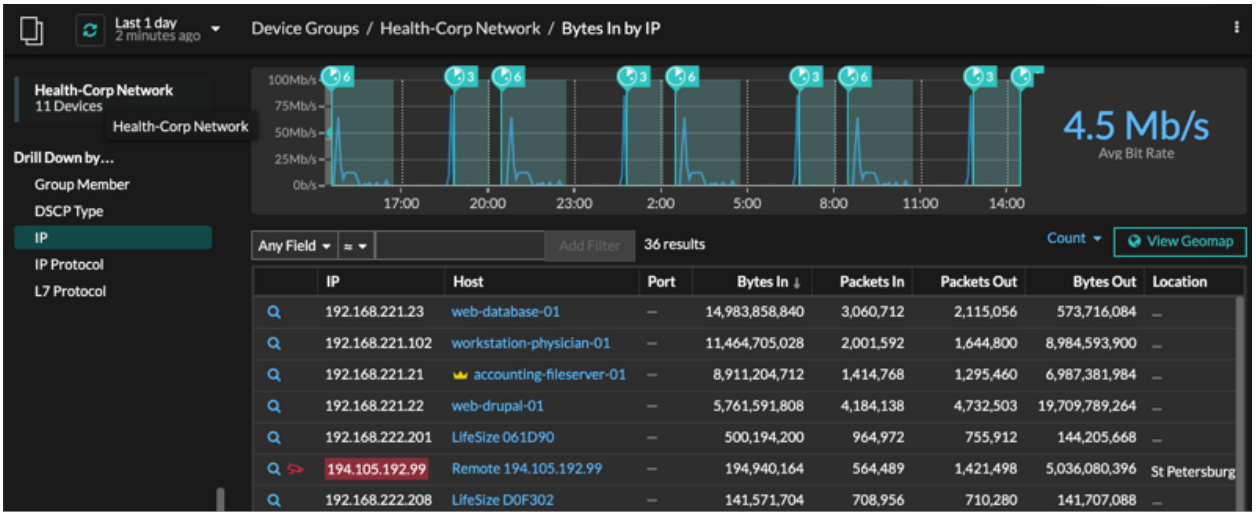
When you drill down by Peer IP address, you can investigate a list of peer devices, view performance or throughput metrics associated with peer devices, and then click on a peer device name to view additional protocol metrics.

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 select **Device** or **Device Group** in the left pane.
3. Search for a device or device group, and then click the name from the list of results.
4. 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.