

Investigate performance detections

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

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

- Did any detections occur at unusual or unexpected times, such as user-activity on weekends or after hours?
- Are any detections appearing in large clusters on the timeline?
- Are there detections appearing for critical assets or high-value endpoints?
- Are devices in the detection also participants in other detections?

Start your investigation

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

NETWORK INFRASTRUCTURE Sep 17 14:00
lasting 7 hours

DNS Server Errors

What caused this detection?
This server sent an excessive number of the DNS NXDOMAIN/QUERY:PTR error, which indicates that domain name lookups failed.
Client linked to this detection:
• ntp.sea.example.com (172.22.1.80)

INVESTIGATION STEPS
View the packets associated with this detection
Acknowledge
Hide Detections Like This

What should I investigate?

| OFFENDER | VICTIM |
|---|---------------------------------------|
| ntp-01.sea.example.com 192.168.6.121 | dns-07.sea.example.com 172.22.1.80 |

| DNS Responses by Response Code | 12h Snapshot | 1hr Peak Value | Expected Range | Deviation |
|--------------------------------|--------------|----------------|----------------|-----------|
| NXDOMAIN/QUERY:PTR | | 6.25 K | 78.4-337 | 1,752% |

Refine your investigation

A detection card includes several links to data within the ExtraHop system. The availability of these links depends on which devices and metrics are associated with the detection. After you click a link, you can return to the detection card by clicking the detection name in the navigation path. Each link is described in the sections below.

Investigation Steps

Click a link in the Investigation Steps section to quickly view metrics, records, or packets associated with the detection.

After clicking a link, you will navigate to either a detail metric page, Records page, or Packets page that contains relevant data. For example, the Investigation Steps for a DNS server errors detection might provide a link to a record query that contains details for each occurrence.

Availability

Because Investigation Step links are tailored to each detection, the number and type of these links vary in availability. In addition, links to records or packets are only available when you have a connected Explore or Trace appliance.

Device name

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

For example, if you get a detection about database transaction failures, you can learn about other activity associated with the server hosting the database instance.

The screenshot shows a detection titled "DNS Server Errors" under the "NETWORK INFRASTRUCTURE" category, dated "Sep 17 14:00" and lasting 7 hours. The description states: "This server sent an excessive number of the DNS NXDOMAIN/QUERY:PTR error, which indicates that domain name lookups failed." Below this, it lists "Client linked to this detection:" with one entry: "ntp.sea.example.com (172.22.1.80)".

On the right, an "INVESTIGATION STEPS" panel includes:

- View the packets associated with this detection
- Acknowledge
- Hide Detections Like This

Below the description, there are two device cards:

- OFFENDER:** ntp-01.sea.example.com (192.168.6.121)
- VICTIM:** dns-07.sea.example.com (172.22.1.80)

At the bottom, a table shows "DNS Responses by Response Code":

| DNS Responses by Response Code | 12h Snapshot | 1hr Peak Value | Expected Range | Deviation |
|--------------------------------|--------------|----------------|----------------|-----------|
| NXDOMAIN/QUERY:PTR | | 6.25 K | 78.4-337 | 1,752% |

Availability

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

Activity map

Click the Activity Map icon next to a device name to see device connections by protocol during the time of the detection. For example, if you get a detection about LDAP authentication errors, you can create an activity map to learn which devices were connected to an LDAP server during the detection.

Availability

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

Detail metric drill down

Click a detail metric link to drill down on a metric value. A detail metric page appears, which lists metric values by a key, such as client IP address, server IP address, method, or error. For example, if you get an authentication detection about an LDAP server, drill down to learn which client IP addresses submitted the invalid credentials that contributed to the total number of LDAP errors.

NETWORK INFRASTRUCTURE

Sep 17 14:00
lasting 7 hours

DNS Server Errors

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Client linked to this detection:

- ntp.sea.example.com (172.22.1.80)

OFFENDER

ntp-01.sea.example.com
192.168.6.121

VICTIM

dns-07.sea.example.com
172.22.1.80

| DNS Responses by Response Code | 12h Snapshot | 1hr Peak Value | Expected Range | Deviation |
|--------------------------------|--------------|----------------|----------------|-----------|
| NXDOMAIN/QUERY:PTR | | 6.25 K | 78.4-337 | 1,752% |

INVESTIGATION STEPS

- View the packets associated with this detection

Acknowledge

Hide Detections Like This

Availability

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

Sparkline

Click the sparkline to create a chart that includes the source, time interval, and drill-down details from the detection, which you can then add to a dashboard for additional monitoring. For example, if you get a detection about web server issues, you can create a chart with the 500 status codes sent by the web server and then add that chart to a dashboard about website performance.

NETWORK INFRASTRUCTURE

Sep 17 14:00
lasting 7 hours

DNS Server Errors

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Client linked to this detection:

- ntp.sea.example.com (172.22.1.80)

OFFENDER

ntp-01.sea.example.com
192.168.6.121

VICTIM

dns-07.sea.example.com
172.22.1.80

| DNS Responses by Response Code | 12h Snapshot | 1hr Peak Value | Expected Range | Deviation |
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| NXDOMAIN/QUERY:PTR | | 6.25 K | 78.4-337 | 1,752% |

INVESTIGATION STEPS

- View the packets associated with this detection

Acknowledge

Hide Detections Like This

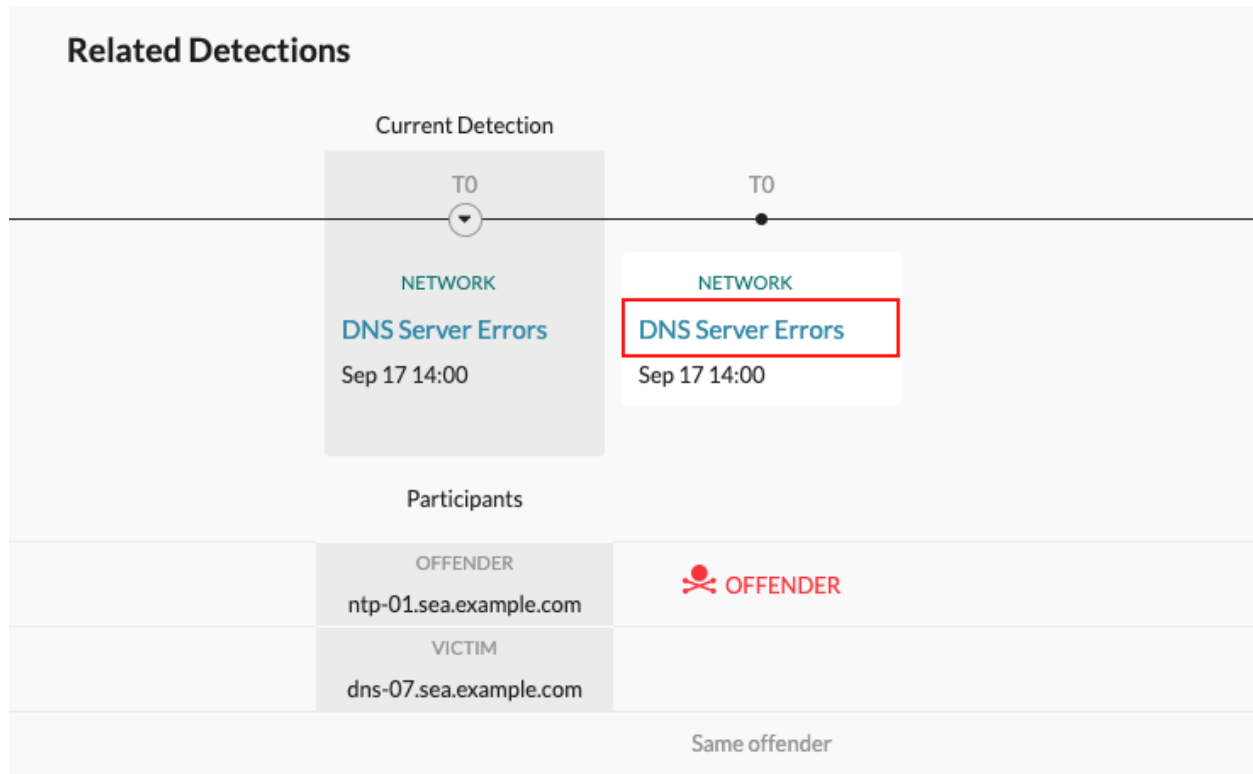
Availability

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

Related detections

Click a related detection to find insight about network, application, and infrastructure problems across multiple detections with shared participants. For example, a device identified as an offender is the likely source of an issue, such as a database server sending an excessive number of response errors. A device identified as a victim is usually negatively affected by the issue, such as clients experiencing slow or failed database

transactions. You can view related detection details to determine if the detection events are similar, see which other devices are involved, and to view metric data.



Availability

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