

# Investigate the root cause of anomalies with the Addy service

Published: 2018-10-27

After connecting a Discover appliance to the ExtraHop Addy service for anomaly detection, you can begin searching for anomalies. For most anomalies, Addy performs an automated investigation for you, which means that you can view detail metrics in the anomaly description. In the following figure, you can see details such as which client and server IP addresses are linked to an unusual number of DNS lookup failures, as well as the host query that could not be resolved. This information helps you immediately begin your investigation into the root cause of this anomaly.

**Aug 10 22:00** ● **DNS Lookup Failures on All Activity** ▾  
 18 hours The application had excessive number of DNS response errors, which indicates that domain name lookups failed. Services might be unable to resolve hostnames.

Client linked to this anomaly:

- 192.168.35.4

Host Query linked to this anomaly:

- www.example.com

Servers linked to this anomaly:

- 172.21.2.3 - 50%
- 172.23.2.3 - 50%

DNS Responses by Response Code	24-hour Snapshot	Peak Value	Expected Range	Deviation
SERVFAIL/QUERY:A		634K	0-12.5K	4,961%

However, if you want to further investigate other metrics related to anomalous network behavior, you can navigate to a protocol page in the Discover or Command appliance.

The following example shows you how to investigate an anomalous DNS lookup failure for a DNS server by navigating to a protocol page, and then find related detail metrics for DNS record types associated with the issue.

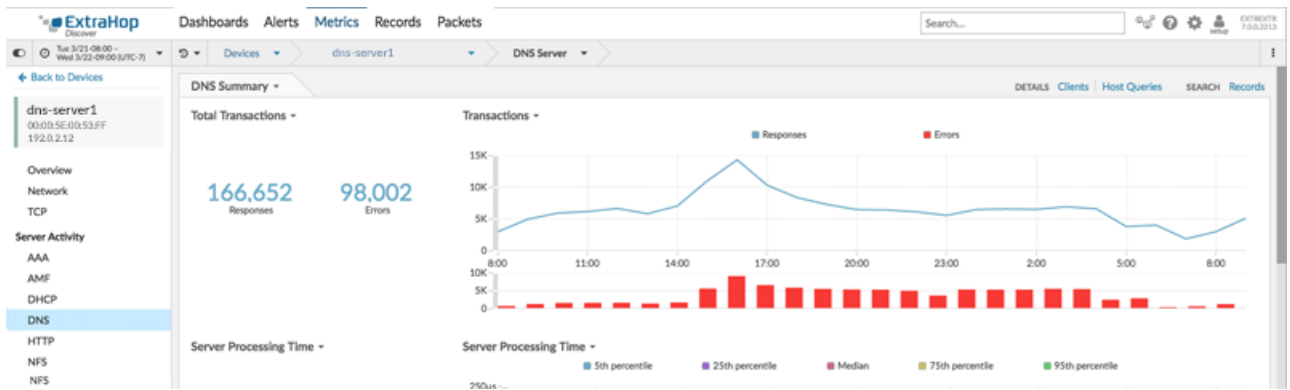
1. Log into the Web UI on the Discover appliance, click **Alerts**, and then click **Anomalies** in the left pane.
2. Find the anomaly that you want to investigate.
3. Click the anomaly title and then select the application or device name from the drop-down, as shown in the figure below.

Click the anomaly title to navigate to the protocol page for this device.  
 For example, go to the DNS protocol page for this DNS server.

**Mar 21 15:00** ● **DNS Lookup Failures on dns-server1** ▾  
 15 hours Unusual increase in errors: DNS lookups failed bec...

DNS Responses by Response Code	Go to device at time of anomaly...	Peak Value	Expected Range	Deviation
XDOMAIN/QUERY:PTR	<a href="#">dns-server1 - DNS</a>	5.18K	114-675	4,510%
XDOMAIN/QUERY:A	<a href="#">Direct link to anomaly</a>	7.14K	999-2.24K	4,902%

A protocol page for the device or application appears, which displays all of the metric data associated with that specific device or application, as shown in the figure below.



- From a protocol page, you can then drill down on metrics to find specific details, and pivot to other protocols to find related metrics, as shown in the figure below.

Scroll down the protocol page to view charts containing the anomalous metric

Click the anomalous metric value in the chart to access drill-down options, which help you to find details about how the anomaly is affecting your network

Click a protocol name to pivot to other metrics associated with the device

**Tip:** To share the anomaly with other ExtraHop users, click the anomaly title and then select **Direct link to anomaly**. An anomaly page with the selected anomaly appears. Copy the URL from the browser window. The URL links directly to the anomaly in the Discover appliance with the same time interval.

### Next steps

- [Generate an activity map](#)
- [Drill down on metrics from device or application protocol pages](#)