

# Hello DQL

## Your first query

Open the Dynatrace instance and go to *Observe and explore > Logs*, make sure that you are in the advanced mode (toggle at the top) and execute the following query:

```
fetch logs
| filter log.source == "source.log"
```

The screenshot shows the Dynatrace 'Logs and events' interface. At the top, there's a header with the Dynatrace logo and the text 'Logs and events Powered by Grail™'. Below this, a sub-header says 'Explore your log data and Kubernetes events in simple mode. For deeper analysis, or to query business events, switch to advanced mode powered by DQL'. A toggle switch is set to 'Switch to Simple Mode'. The query editor shows the query: `fetch logs | filter log.source == "source.log"`. Below the query editor is a 'Run query' button. The results are displayed in a table with columns: timestamp, status, content, loglevel, log.source, and event.type. The table contains 10 rows of log data. An 'Actions' button is visible in the top right corner of the table area.

timestamp	status	content	loglevel	log.source	event.type
2023-01-13 16:26:37	NONE	150.234.24.247 - - [13/Jan/2023 15:26:38 +0000] "GET /index.php?delta=epu HTTP/1.1" Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/15.6.1 Safari/605.1.15" 200 6071	NONE	source.log	LOG
2023-01-13 16:26:37	NONE	73.30.217.29 - - [13/Jan/2023 15:26:39 +0000] "PUT /index.php?alfa=rmycbnsuew6alfa=yifilbSec houucopit HTTP/1.1" Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/105.0.0.0 Safari/537.36" 200 7175	NONE	source.log	LOG
2023-01-13 16:26:37	NONE	83.6.129.74 - - [13/Jan/2023 15:26:41 +0000] "PUT /index.php?echo=oxxovykl HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/103.0.5060.14 Safari/537.36 OPR/89.0.4447.64" 301 7726	NONE	source.log	LOG
2023-01-13 16:26:37	NONE	57.112.126.8 - - [13/Jan/2023 15:26:42 +0000] "PUT /index.php?foxtrot=mywaprpbrh HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:91.0) Gecko/20100101 Firefox/91.0" 301 8013	NONE	source.log	LOG
2023-01-13 16:26:37	NONE	175.178.68.162 - - [13/Jan/2023 15:26:42 +0000] "GET /index.php?hotel=ejuwbcldfe6delta=fwg6al fawriqnpiaz HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/105.0.0.0 Safari/537.36 Edg/105.0.1343.27" 302 4555	NONE	source.log	LOG
2023-01-13 16:26:37	NONE	255.161.219.37 - - [13/Jan/2023 15:26:43 +0000] "GET /index.php?alfa=vlocvntasv6echo=xsdcbst 6bravo=qprsuin HTTP/1.1" Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:103.0) Gecko/2010 0101 Firefox/103.0" 200 924	NONE	source.log	LOG
2023-01-13 16:26:37	NONE	153.202.88.196 - - [13/Jan/2023 15:26:43 +0000] "POST /index.php HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/103.0.5060.134 Safari/537.36 OPR/89.0.4447.83" 500 6827	NONE	source.log	LOG
2023-01-13 16:27:45	NONE	238.42.131.23 - - [13/Jan/2023 15:27:33 +0000] "GET /index.php?hotel=kjbhkdntogk HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.81 Safari/537.36" 200 7194	NONE	source.log	LOG

## Parse this


Break the content field into several, more useful fields, by adding the following command to your query:

```
| parse content, "IPADDR:ip LD TIMESTAMP('dd/MMM/yyyy hh:mm:ss Z') LD
DQS:request LD DQS:usearagent LD INT:response LD DOUBLE:size"
```

The full query should no be:

```
fetch logs
| filter log.source == "source.log"
| parse content, "IPADDR:ip LD TIMESTAMP('dd/MMM/yyyy hh:mm:ss Z') LD
DQS:request LD DQS:usearagent LD INT:response LD DOUBLE:size"
```

Logs and events



Logs and events

Powered by Grail™

Explore your log data and Kubernetes events in simple mode. For deeper analysis, or to query business events, switch to advanced mode powered by [DQL](#)

Switch to Simple Mode

1 fetch logs

2 | filter log.source == "source.log"

3 | parse content, "IPADDR:ip LD TIMESTAMP('dd/MM/yyyy hh:mm:ss Z') LD DQS:request LD DQS:useagent LD INT:response LD DOUBLE:size"

Run query

Search results Visualization type: Table Single value Bar

Actions

timestamp	status	content	loglevel	log.source	event.type	ip	request	response	size	useagent
2023-01-13 16:26:37	NONE	150.234.24.247 - - [13/Jan/2023 15:26:38 +0000] "GET /index.php?delta=epu HTTP/1.1" Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36	NONE	source.log	LOG	150.234.24.247	GET /index.php?delta=epu HTTP/1.1	200	6071	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36
2023-01-13 16:26:37	NONE	73.30.217.29 - - [13/Jan/2023 15:26:39 +0000] "PUT /index.php?alfa=rmozcbsuew&alfa=yifilb&echo=ucopjt HTTP/1.1" Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36	NONE	source.log	LOG	73.30.217.29	PUT /index.php?alfa=rmozcbsuew&alfa=yifilb&echo=ucopjt HTTP/1.1	200	7175	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36
2023-01-13 16:26:37	NONE	83.6.129.74 - - [13/Jan/2023 15:26:41 +0000] "PUT /index.php?echo=oxxowykl HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36	NONE	source.log	LOG	83.6.129.74	PUT /index.php?echo=oxxowykl HTTP/1.1	301	7726	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36
2023-01-13 16:26:37	NONE	57.112.126.8 - - [13/Jan/2023 15:26:42 +0000] "PUT /index.php?foxtrot=mywaprqbrh HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/109.0	NONE	source.log	LOG	57.112.126.8	PUT /index.php?foxtrot=mywaprqbrh HTTP/1.1	301	8013	Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:109.0) Gecko/20100101 Firefox/109.0
2023-01-13 16:26:37	NONE	175.178.68.162 - - [13/Jan/2023 15:26:42 +0000] "GET /index.php?hotel=ejubwcldf&delta=fwq&alfa=riqxnplaz HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36	NONE	source.log	LOG	175.178.68.162	GET /index.php?hotel=ejubwcldf&delta=fwq&alfa=riqxnplaz HTTP/1.1	302	4555	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36
2023-01-13 16:26:37	NONE	255.161.219.37 - - [13/Jan/2023 15:26:43 +0000] "GET /index.php?alfa=vlocvbtasv&echo=xsdb&ct6&bravomqprsuuln HTTP/1.1" Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36	NONE	source.log	LOG	255.161.219.37	GET /index.php?alfa=vlocvbtasv&echo=xsdb&ct6&bravomqprsuuln HTTP/1.1	200	924	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36
2023-01-13 16:26:37	NONE	153.202.88.196 - - [13/Jan/2023 15:26:43 +0000] "POST /index.php HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36	NONE	source.log	LOG	153.202.88.196	POST /index.php HTTP/1.1	500	6827	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36
2023-01-13 16:27:45	NONE	238.42.131.23 - - [13/Jan/2023 15:27:33 +0000] "GET /index.php?hotel=akibhkdntok HTTP/1.1" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36	NONE	source.log	LOG	238.42.131.23	GET /index.php?hotel=akibhkdntok HTTP/1.1	200	7194	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/108.0.0.0 Safari/537.36