

In the Google Cloud console, the Stackdriver Trace **Overview** window displays a summary of the latency data for your application and lets you investigate individual traces in more detail:

- Lists performance insights (#view_insights) that can help you understand how to reduce your application's latency.
- Lists the most frequent application requests (#view_frequent_requests) and RPC calls (#view_frequent_rpc_calls) and their average latencies.
- Displays up to three daily analysis reports (#view_analysis_report). Each report displays the latency data for the previous day for a single RPC endpoint. If data for an endpoint is available from seven days earlier, that earlier data is included in the graph for comparison purposes.
- A list of the most recent traces (#view_recent_traces) with their latency and the time they were made.
- A billing summary of your chargeable trace spans (#chargeable-spans).

To get started using Stackdriver Trace, in the Google Cloud Console select **Trace**, or use the following button:

[Go to Trace \(https://console.cloud.google.com/traces\)](https://console.cloud.google.com/traces)

This is the default view in Trace. To return to this window, click **Overview** in the navigation pane:

The screenshot displays the Stackdriver Trace overview page for a project named 'Cloud Logs Test Project'. The interface includes a navigation menu on the left and a main content area with several panels:

- Overview:** Includes links for '+ CREATE NEW ANALYSIS REPORT' and 'LEARN TRACE API'.
- Insights:** A panel indicating 'No insights to report for the past 7 days.'
- Recent traces:** A table listing recent traces with columns for LATENCY, URI, and TIME. All listed latencies are '<1 ms'.
- Most frequent URIs:** A table showing the most frequent URIs with columns for LATENCY, URI, and REPORT.
- Most frequent RPCs:** A table showing the most frequent RPCs with columns for LATENCY and RPC.
- Chargeable Trace Spans:** A section providing information on trace spans ingested, including 'This month's trace spans ingested 236.32K' and 'Last month's trace spans ingested 493.09K'.
- Daily analysis reports:** The main panel showing a density distribution graph for 'cloud-logs-test-project.appspot.com/<Unknown Operation Name>'. The graph plots '% of total requests' against 'Latency in ms'. Below the graph are two time range selectors: one for 2018-10-07 to 2018-10-08, and another for 2018-10-14 to 2018-10-15.
- Latency:** A table comparing latency across different request percentiles for two time periods.

Request percentile	Latency	Sample Traces	Latency	Sample Traces
25%	0 ms	1 2 3 4	0 ms	1 2 3 4
50%	0 ms	1 2 3 4	0 ms	1 2 3 4
90%	0 ms	1 2 3 4	0 ms	1 2 3 4
95%	0 ms	1 2 3 4	1 ms	1 2 3 4
99%	1 ms	1 2 3 4	2 ms ↑ +100%	1 2 3 4
99.5%	1 ms	1 2 3 4	2 ms ↑ +100%	1 2 3 4

By default, Trace displays data from the previous day, if it is available. Otherwise, Trace displays the most recent data from the previous seven days. If none is available, Trace prompts you to create a custom [analysis report](#) (e/docs/analysis-reports).

The **Insights** pane displays a list of performance insights for your application, if applicable:

Insights

ISSUES

[Slow memcache calls.](#)

The **Insights** pane highlights common problems in your application and can help you reduce latency. For example, an insight might report that your application is making too many consecutive calls to the Datastore `put()` operation and that you might reduce latency if you batch the operations instead.

To view detailed information about an insight, click the name of the insight. The **Insights** pane of the **Trace details** (`/trace/docs/viewing-details`) window describes the potential problem and recommends steps to resolve the problem:

The screenshot displays the 'Trace Details' page in the Google Cloud Platform console. The top navigation bar shows 'Google Cloud Platform' and 'Cloud Trace Python Prober'. The main content area is titled 'Trace Details' and features a 'Timeline' view. The timeline shows three operations: a purple bar for '/probe (126 ms)', a yellow bar for '/datastore_v3.RunQuery (23 ms)', and another yellow bar for '/memcache.Set (62 ms)'. A 'Show logs' button is visible next to the /probe bar. To the right of the timeline is a summary panel for the selected '@0 ms /probe' operation, showing a table of RPCs and their durations. Below the timeline is an 'Insights' section with a table of issues.

Name	RPCs	Total Duration (ms)
/datastore_v3.RunQuery	1	23
/memcache.Set	1	62
/probe	1	126

Issue	Description	Recommendation
Slow memcache calls.	Your app made 1 remote procedure calls to memcache that took more than 50 ms and the slowest call took 61 ms.	Consider reducing the value of <code>max_concurrent_requests</code> for your app.

The **Recent traces** pane displays the most recent traces for a project:

Most recent traces		
LATENCY	URI	TIME
185 ms	/probe	4:49 AM
101 ms	/probe	11:32 A...
122 ms	/probe	8:17 AM
77 ms	/probe	4:28 AM
73 ms	/probe	8:54 AM
78 ms	/probe	12:13 A...

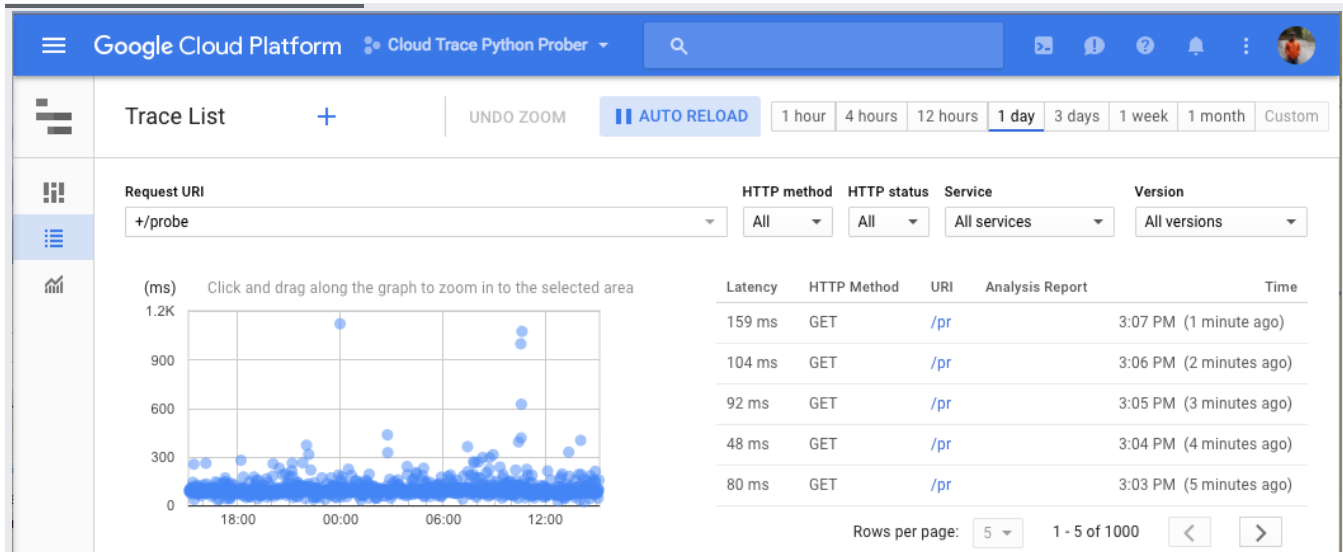
[See more ...](#)

To view the details of a listed trace, click the **URI** to open the [Trace details](/trace/docs/viewing-details) (/trace/docs/viewing-details) window. From the **Trace details** window, you can examine this trace in detail.

The **Most frequent URIs** pane displays a list of URIs for the most frequent requests to your application during the previous day, along with their average latency:

Most frequent URIs		
LATENCY	URI	REPORT
102 ms	/probe	view

To browse and view detailed latency data for *matching requests*, click any URI to open the **Trace list** window. By default, the **Request filter** is populated and data from the previous 1 hour is displayed. You can change the filter and the time range to view additional requests:



For more information, go to [Finding and viewing traces \(/trace/docs/finding-traces\)](/trace/docs/finding-traces).

The **Most frequent RPCs** pane displays a list of the most frequent RPC calls made by your application during the last day, along with their average latency:

Most frequent RPCs	
LATENCY	RPC
62 ms	/datastore_v3....
5 ms	/memcache.Set

To browse latency data for requests where the matching RPC call was made, click an RPC name.

The **Chargeable Trace Spans** pane displays information related to your costs when using Trace:

Chargeable Trace Spans ⓘ
Effective November 1, 2018
[Learn more about Stackdriver Pricing](#)

This month's trace spans ingested
236.32K
since first of month
[View in Metrics Explorer](#)

Last month's trace spans ingested
493.09K
Total for the last full calendar month

- **This month's trace spans ingested** tells you the number of trace spans created and received by Trace after the first day of the current calendar month for your Google Cloud project.
- **Last month's trace spans ingested** tells you the total number of trace spans created and received by Trace in the last full calendar month for your Google Cloud project.

Using these values, you can estimate your costs of using Trace. For pricing information, go to [Trace Pricing \(/stackdriver/pricing#trace-costs\)](#).

The [daily analysis reports \(/trace/docs/analysis-reports\)](#) pane displays up to three auto-generated reports. Each report displays the latency data for the previous day for a single RPC endpoint. If data for an endpoint is available from seven days earlier, that earlier data is included in the graph for comparison purposes. A report is generated for a RPC endpoint only if it is one of the three most frequent RPC endpoints, and only if there are at least 100 traces available.

If enough data isn't available to create at least one auto-generated report, Trace prompts you to create a custom analysis report.

The latency data can be displayed as a *density distribution* or as a *cumulative distribution*:

- By default, the daily analysis report displays data as a density. The horizontal axis displays the latency using a logarithmic scale, and the vertical axis displays the percent of requests for each latency value. The density distribution lets you evaluate the consistency of latency values.
- By clicking the **Cumulative distribution** button, the vertical axis changes to be the percent of requests whose latency is less than, or equal to the value latency value on the horizontal axis. This view lets you determine the percentage of requests whose latency is less than a particular value.

For more information, go to [Creating and viewing analysis reports \(/trace/docs/analysis-reports\)](#).

- [Finding and viewing traces \(/trace/docs/finding-traces\)](/trace/docs/finding-traces)
- [Viewing trace details \(/trace/docs/viewing-details\)](/trace/docs/viewing-details)
- [Creating analysis reports \(/trace/docs/analysis-reports\)](/trace/docs/analysis-reports)
- [Viewing traces across projects \(/trace/docs/cross-project-traces\)](/trace/docs/cross-project-traces)