

Stackdriver Trace supports the ability to let you view in one Google Cloud project, trace spans generated by an application housed in a different Google Cloud project. In this cross-project scenario, Trace automatically filters out spans that you don't have permission to view.

Consider the case where you have Google Cloud projects A and B, and assume that an application hosted by project B makes a gRPC call into an application hosted by project A. If you open the Google Cloud console and select project A, you can only view trace spans generated by the applications hosted by project A. Specifically, you can't view the trace spans generated by project B when it makes a gRPC call into project A.

However, if you leverage the cross-project capability of Trace, from the project A Google Cloud console, you can view the spans generated by the application hosted by project A, *and* you can view those spans generated by the application hosted by project B when it performs the gRPC calls into project A.

This page provides details on setting up Stackdriver Trace so that you can view trace spans related Google Cloud projects in one view.

To view traces across Google Cloud projects, the projects must be in the same organization.

To view trace spans across Google Cloud projects, do the following:

1. Associate each of your Google Cloud projects with the same organization (/resource-manager/docs/creating-managing-organization).

- If you are creating a new project in the context of the organization, it is automatically created under the organization resource.

You can see the organization in which you are creating your project in the **New Project** panel:

## New Project

**i** You have 990 projects remaining in your quota. [Learn more.](#)

**Project name** ?

**Project ID** ?

**Organization** ?

google.com

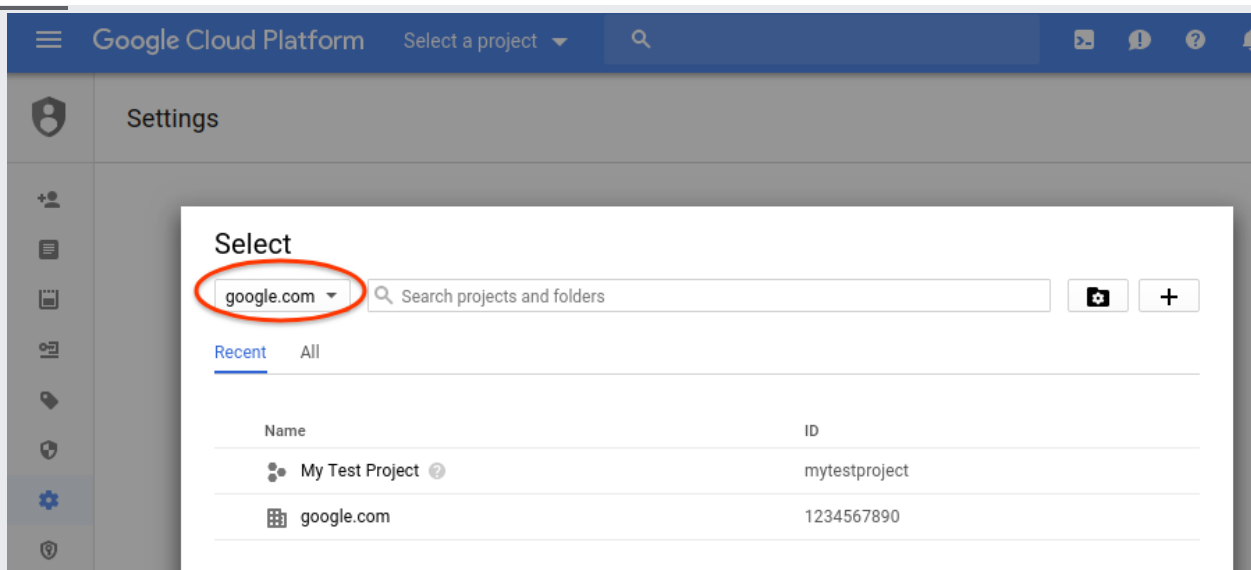
**i** You have logged in under a managed account. Your [domain administrator](#) may be able to access, change or suspend any projects created using this account. If you do not want your domain administrator to access your projects, please log out and create a project under an unmanaged Google Account. For more information, please review Google's [Privacy Policy](#).

- If you have a Google Cloud project that isn't part of an organization, you can move it into your organization. For details, go to [Migrating existing projects](/resource-manager/docs/migrating-projects-billing) (/resource-manager/docs/migrating-projects-billing).

2. Make sure you have the **Cloud Trace User** (/trace/docs/iam#roles) Cloud Identity and Access Management (Cloud IAM) role and **Logging Viewer** (/logging/docs/access-control#permissions\_and\_roles) Cloud IAM role for each project.

3. Make sure you have the **resourcemanager.organizations.get** (/resource-manager/docs/access-control-org#permissions\_and\_roles) permission for read access to the projects' organization. This permission is part of the [Organization viewer](/resource-manager/docs/access-control-org) (/resource-manager/docs/access-control-org) Cloud IAM role.

To test whether you have this permission, open the project selector at the top of the Cloud Console and make sure you can see a drop-down menu of organizations:



#### 4. Configure the applications to write traces to the projects in which they are hosted:

- To force cross-project requests to be traced, attach a [trace context header](/trace/docs/troubleshooting#force-trace) (/trace/docs/troubleshooting#force-trace).
- For information on the language-specific setup guides, go to [Setting Up Stackdriver Trace](/trace/docs/setup/) (/trace/docs/setup/).

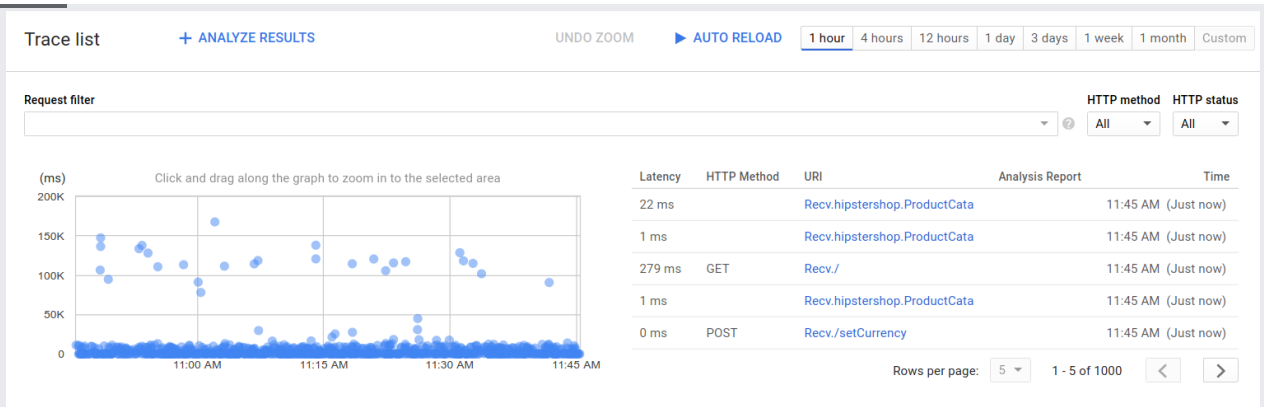
After you have completed the Getting Started steps, do the following:

1. In the Cloud Console, select **Trace**, and then **Trace list**, or click the following button:

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

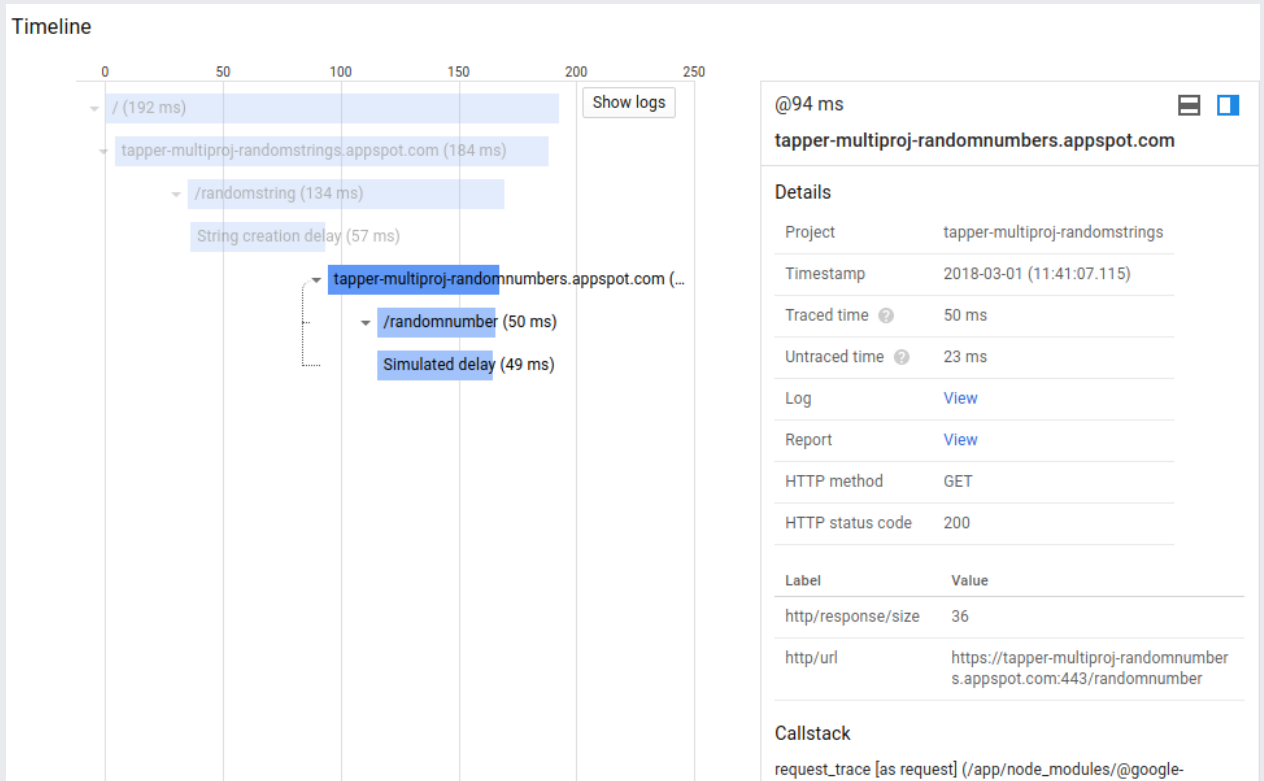
Make sure you select one of the projects you have configured for cross-project trace viewing. In the previous example, you would select either project A or B.

It can take a few minutes for traces to appear the first time you use Trace. For more details, go to [Finding and viewing traces](/trace/docs/finding-traces) (/trace/docs/finding-traces). The following screenshot shows a sample **Trace list** page:



The trace results list and scatter plot will be based on the currently selected project only and not for other projects in the trace.

2. View a trace's details by clicking any request URI in the **Trace list**. The trace details appear below the graph:



Trace spans from all the projects associated with the trace are shown in the trace details. The trace details aren't limited to the traces spans for the currently selected project.

3. Click on any blue bar, which represents a trace span, in the **Timeline** panel. This opens a **Details** panel next to the **Timeline** panel. You can see which **Project** label is associated with the trace span and view related details.

If you see a message **One or more spans of this trace are not shown because you lack the `trace.traces.get` permission for the project where they were written**, you need to get additional permissions to view the whole trace. See [Stackdriver Trace support \(/trace/docs/support\)](/trace/docs/support) for more details.

- [Setting up Stackdriver Trace \(/trace/docs/setup/\)](/trace/docs/setup/)
- [Creating alerting policies \(/trace/docs/trace-alerting\)](/trace/docs/trace-alerting/)
- [Creating analysis reports \(/trace/docs/analysis-reports\)](/trace/docs/analysis-reports/)