

Google Cloud offers [Cloud Identity and Access Management \(Cloud IAM\)](#) (/iam/docs), which lets you give granular access to specific Google Cloud resources and prevents unwanted access to other resources. This page describes the Cloud IAM roles for Stackdriver Trace.

To learn how to assign Cloud IAM roles to a user or service account, read [Managing policies](#) (/iam/docs/managing-policies) in the Cloud IAM documentation.

This section summarizes the permissions and roles Stackdriver Trace supports.

The following table lists the permissions that the caller must have to call each method in the Stackdriver Trace API, `cloudtrace.googleapis.com/v1`:

Method (REST/RPC)

[projects.traces.list](#) (/trace/api/reference/rest/v1/projects.traces/list) / **[ListTracesRequest](#)**
(/trace/api/reference/rpc/google.devtools.cloudtrace.v1#google.devtools.cloudtrace.v1.ListTracesRequest)

[projects.traces.get](#) (/trace/api/reference/rest/v1/projects.traces/get) / **[GetTraceRequest](#)**
(/trace/api/reference/rpc/google.devtools.cloudtrace.v1#google.devtools.cloudtrace.v1.GetTraceRequest)

[projects.patchTraces](#) (/trace/api/reference/rest/v1/projects/patchTraces) / **[PatchTracesRequest](#)**
(/trace/api/reference/rpc/google.devtools.cloudtrace.v1#google.devtools.cloudtrace.v1.PatchTracesRequest)

The following table lists the permissions required to use the Stackdriver Trace pages in the Cloud Console:

Activity	Required permissions
Read-only access to the Trace console.	<code>cloudtrace.insights.get</code> <code>cloudtrace.insights.list</code> <code>cloudtrace.stats.get</code> <code>cloudtrace.tasks.get</code> <code>cloudtrace.tasks.list</code> <code>cloudtrace.traces.get</code> <code>cloudtrace.traces.list</code> <code>resourcemanager.projects.get</code> <code>resourcemanager.projects.list</code>
Add ability to create Analysis reports in the console.	Read-only permissions plus: <code>cloudtrace.tasks.create</code>
Add ability to delete Analysis reports in the console.	Read-only permissions plus: <code>cloudtrace.tasks.delete</code>
Add ability to show logs in the console.	Read-only permissions plus: <code>logging.logEntries.list</code>
Add ability to show the App Engine service and version filter menus.	Read-only permissions plus: <code>appengine.applications.get</code> <code>appengine.services.list</code> <code>appengine.versions.list</code>

Cloud IAM roles include permissions and can be assigned to users, groups, and service accounts. The following roles include the listed permissions for Stackdriver Trace:

Role name	Trace permissions	Description
<code>roles/cloudtrace.cloudtrace.traces.patch</code> agent Cloud Trace Agent		For service accounts. Ability to write traces by sending the data to Trace.

Role name	Trace permissions	Description
roles/cloudtrace.user Cloud Trace User	cloudtrace.insights.get cloudtrace.insights.list cloudtrace.stats.get cloudtrace.tasks.create cloudtrace.tasks.delete cloudtrace.tasks.get cloudtrace.tasks.list cloudtrace.traces.get cloudtrace.traces.list resourcemanager.projects.get resourcemanager.projects.list	Full access to the Trace console and read access to traces.
roles/cloudtrace.admin Cloud Trace Admin	Permissions in roles/cloudtrace.user , plus: cloudtrace.traces.patch	Full access to the Trace console and read-write access to traces.
roles/viewer Project Viewer	cloudtrace.insights.get cloudtrace.insights.list cloudtrace.stats.get cloudtrace.tasks.get cloudtrace.tasks.list cloudtrace.traces.get cloudtrace.traces.list resourcemanager.projects.get resourcemanager.projects.list	Read access to the Trace console and traces.
roles/editor Project Editor	Permissions from roles/viewer , plus: cloudtrace.tasks.create cloudtrace.tasks.delete	Read-write access to the Trace console and read access to traces.
roles/owner Project Owner	Permissions from roles/editor , plus: cloudtrace.traces.patch	Read-write access to the Trace console and traces.

To create a custom role that includes Stackdriver Trace permissions, do the following:

- For a role granting permissions only for the Stackdriver Trace API, choose from the permissions in the preceding section, [API permissions](#) (#api_permissions).
- For a role granting permissions for the Stackdriver Trace API and console, choose permission groups in the preceding section, [Console permissions](#) (#console_permissions).
- To grant the ability to write trace data, include the permission(s) in the role `roles/cloudtrace.agent` in the section [Roles](#) (#roles).

For more information on custom roles, go to [Creating and managing custom roles](#) (/iam/docs/creating-custom-roles).