

Components are the installable parts of the SDK. A component can be a command-line tool (`gcloud`, `bq` and `gsutil`), a set of `gcloud` CLI commands at the Alpha or Beta [release levels](#) (`/sdk/gcloud#release_levels`), or a package that contains dependencies used by a tool in the SDK.

The most commonly-used components are installed by default. If you run a `gcloud alpha` or `gcloud beta` command interactively and the `alpha` or `beta` component is not installed, the `gcloud` CLI asks you whether you want to install it. An affirmative response installs the component and then runs the command. Other components are installed on-demand by the `gcloud` CLI when you run commands that require them.

When you install the SDK, the following components are installed by default:

ID	Name	Description
<code>gcloud</code> (/sdk/gcloud/reference/)	Default <code>gcloud</code> CLI Commands	Tool for interacting with Google Cloud Platform. Only commands at the General Availability and Preview release levels are installed with this component. You must separately install the <code>gcloud alpha</code> Commands and/or <code>gcloud beta</code> Commands components if you want to use commands at other release levels.
<code>bq</code> (/bigquery/bq-command-line-tool)	BigQuery Command-Line Tool	Tool for working with data in Google BigQuery
<code>gsutil</code> (/storage/docs/gsutil)	Cloud Storage Command-Line Tool	Tool for performing tasks related to Google Cloud Storage.
<code>core</code>	Cloud SDK Core Libraries	Libraries used internally by the SDK tools.

The SDK provides two components that contain gcloud CLI Alpha and Beta commands. These components are not installed by default, but you can install them manually at any time after the initial SDK installation. These components are:

ID	Name	Description
alpha	gcloud CLI Alpha Commands	gcloud CLI commands at the Alpha release level.
beta	gcloud CLI Beta Commands	gcloud CLI commands at the Beta release level.

gcloud CLI commands at the General Availability and Preview release levels are part of the gcloud CLI component and are installed automatically when you install the SDK.

A list of all available [additional components](#) (#additional_components) and [external package managers](#) (#external_package_managers) (not installed by default) is available below.

You can list, install, update and remove Google Cloud SDK components to suit your needs.

These instructions will **not** work if you have installed Cloud SDK using a package manager such as APT or yum because SDK Component Manager is disabled when using that method of installation. Use these [packages](#) (/docs/components#external_package_managers) instead.

in: When modifying your installation, the current directory of your terminal must be outside the `google-cloud-sdk` directory of the SDK installation. On Windows, you will need to open your terminal as an Administrator if you have performed a silent installation.

To see a list of components that are available and currently installed, run `gcloud components list` (/sdk/gcloud/reference/components/list):

Note, the output displayed above is not a complete listing of all available components. To view the latest component offerings, update your Cloud SDK installation and run `gcloud components list` (/sdk/gcloud/reference/components/list).

To install a component at the current version of your Cloud SDK installation, run `gcloud components install` (/sdk/gcloud/reference/components/install):

The `gcloud` CLI installs the specified component.

For example, if you want to install the `kubect1` command:

Use the `gcloud components update` (`/sdk/gcloud/reference/components/update`) command to update all installed components to the latest available version of Cloud SDK:

If you have an older version of Cloud SDK installed, the `gcloud` CLI updates all the installed components.

If you'd need to revert to a previously known good version, and installed the SDK directly (outside of a package manager, including via the interactive installer, static versions, Windows installer, or Homebrew), you can use `gcloud components update` to revert to the specified version:

For downgrading versions of Cloud SDK installed via a package manager, refer to these instructions for specifying versions when downloading via [apt-get](#) (/sdk/docs/downloads-apt-get#downgrading-cloud-sdk-versions) or [yum](#) (/sdk/docs/downloads-yum#downgrading-cloud-sdk-versions).

Use the [gcloud components remove](#) (/sdk/gcloud/reference/components/remove) command to remove a specified component by its ID:

You can re-install a component using the [gcloud components install](#) command at any time.

Additional components that contain dependencies for various gcloud CLI commands are also available in the SDK, but not installed by default. One can Run \$ [gcloud components list](#) (/sdk/docs/(/sdk/gcloud/reference/components/list)) for an exhaustive list of components. Additional components that can be installed will be marked with the status **Not Installed**.

If you installed the Cloud SDK through the [apt](#) (/sdk/docs/downloads-apt-get) or [yum](#) (/sdk/docs/downloads-yum) package managers, you can also install additional Cloud SDK components using those same package managers. If your package manager cannot find these packages, read the [installing with apt](#) (/sdk/docs/downloads-apt-get) or [installing with yum](#) (/sdk/docs/downloads-yum) guides to learn how to configure <https://packages.cloud.google.com/> as a package source.

Cloud SDK Component	APT Package	YUM Package
app-engine-go	google-cloud-sdk-app-engine-go	google-cloud-sdk-app-engine-go
app-engine-java	google-cloud-sdk-app-engine-java	google-cloud-sdk-app-engine-java
app-engine-python	google-cloud-sdk-app-engine-python	google-cloud-sdk-app-engine-python
bigtable	google-cloud-sdk-bigtable-emulator	google-cloud-sdk-bigtable-emulator
cbt	google-cloud-sdk-cbt	google-cloud-sdk-cbt
cloud-build-local	google-cloud-sdk-cloud-build-local	google-cloud-sdk-cloud-build-local
datalab	google-cloud-sdk-datalab	google-cloud-sdk-datalab
docker-credential-gcr	Not yet available.	Not yet available.
gcd-emulator	google-cloud-sdk-datastore-emulator	google-cloud-sdk-datastore-emulator
kubect1	kubect1	kubect1
pubsub-emulator	google-cloud-sdk-pubsub-emulator	google-cloud-sdk-pubsub-emulator