

### GCloud

Gcloud command syntax `gcloud <global flags> <service/product> <group/area> <command> <flags> <parameters>`

global flags `--project myprojid`  
format OR `--project=myprojid`

Set config property `gcloud config set <property> <value>`

Check config property `gcloud config get-value <property>`

Remove config property `gcloud config unset <property>`

Interactive config creation `gcloud init`

List all properties in a configuration `gcloud config list`

List all configurations `gcloud config configurations list`

Make new configuration `gcloud config configurations create <NewConfigName>`

Switch to an existing config `gcloud config configurations activate <NewConfigName>`

Specify config in a command `--configuration=ITS_NAME`  
ex. `gcloud --configuration=newconfig config list`

### Global Flags

`--help, -h, --project <ProjectID>, --account <Account>, --filter, --format <JSON, YAML, CSV>, --quite, -q`

### Config Properties

- \* Set "core/account" or "account" to replace "--account"
- \* Set "core/project" or "project" to replace "--project"
- \* Set "compute/region" to replace "--region"
- \* Set "compute/zone" to replace "--zone"

### Global Flags

`--account` User account to use for invocation

`--billing-project` GCP Object that will be charged quota for operations performed in gcloud. Use this flag when you want to use resources from project, but billed to a different project.

`--configuration` configuration to be used for this invocation.

### Global Flags (cont)

`--flags-file` A YAML or JSON file that specifies a `--flag:value` dictionary

`--flatten=[KEY,...]` Flatten output resources slices in KEY into separate records for each item in each slice.

`--format` Format for printing command output resources.

`--help` Display detailed help

`--project` Specify projectId to be used in this invocation

`--quiet` Disable all interactive prompts.

`--verbosity` one of **debug, info, warning, error, critical, none**

`--version, -v` Print version and exit

`-h` Print summary help and exit.

### GCloud 2

Get info on a topic `gcloud topic filters`

### System Administration

Get user `whoami`

Get Machine name `hostname`

Get IP address of current machine `curl api.ipify.org`

Ping with limited repetitions `ping -c 3 myhappyvm`

SSH to the instance `gcloud compute ssh myhappyvm`

Get info stored by metadata service `curl -H "Metadata-Flavor:google" metadata.google.internal/computeMetadata/v1/`

We can ping a Compute instance only using the external IP of the instance.

It is not possible to SSH directly to an instance. Hence use **gcloud compute ssh**

We can drill down into the Metadata service file system using the Curl Output.



### Project

Create a project	<code>gcloud projects create [PROJECT_ID] [--folder=FO-LDER_ID] [--labels=[KEY=VALUE,...]][--name=NAME][--set-as-default]</code>
List all projects for active account	<code>gcloud projects list [--filter=EXPRESSION][--limit=LIMIT][--page-size=PAGE_SIZE][--sort-by=[FIELD,...]][--uri]</code>
Delete a project	<code>gcloud projects delete PROJECT_ID_OR_NUMBER</code>
Print Metadata of a project	<code>gcloud projects describe PROJECT_ID_OR_NUMBER</code>
Undelete a project	<code>gcloud projects undelete PROJECT_ID_OR_NUMBER</code>
Update name of a project	<code>gcloud projects update PROJECT_ID --name=NAME</code>

You can add Project Wide Flags at the end of all of the above commands.  
 --accounts, --billing-project, --configuration, --flags-file, --flatten, --format, --help, --impersonate-service-account, --log-http, --project, --quiet, --trace-token, --user-output-enabled, --verbosity

Run **\$ gcloud help** for details

### Components, SDK

List all installed components	<code>gcloud components list</code>
Install auto-completion tool	<code>sudo apt-get install google-cloud-sdk</code>
Enable auto-completion tool	<code>gcloud beta interactive</code>

### PubSub

Create a topic	<code>gcloud pubsub topics create myTopic</code>
List all topics	<code>gcloud pubsub topics list</code>

### PubSub (cont)

Delete a topic	<code>gcloud pubsub topics delete Test1</code>
Create a subscription for topic myTopic	<code>gcloud pubsub subscriptions create --topic myTopic mySubscription</code>
Delete a subscription	<code>gcloud pubsub subscriptions delete Test1</code>
Publish a message to a topic	<code>gcloud pubsub topics publish myTopic --message "Message"</code>
Pull a published message	<code>gcloud pubsub subscriptions pull mySubscription --auto-ack</code>
Pull all published messages	<code>gcloud pubsub subscriptions pull mySubscription --auto-ack --limit=3</code>

Once a message is pulled, it is deleted from the queue. Messages are pulled randomly.

### Compute

Create an instance	<code>gcloud compute instances create &lt;myvm&gt;</code>
Delete an instance	<code>gcloud compute instances delete &lt;myvm&gt;</code>
Get List of instances	<code>gcloud compute instances list</code>
Get list of machine types	<code>gcloud compute machine-types list</code>
Limit list of machine types	<code>gcloud compute machine-types list --filter="NAME:f1-micro AND ZONE~us-west"</code>
SSH to an instance	<code>gcloud compute ssh myhappyvm</code>

**gcloud compute ssh** will create the SSH keys if it is being run for the first time for an instance.



By **Nilesch** (niparkhe)  
[cheatography.com/niparkhe/](https://cheatography.com/niparkhe/)

Not published yet.  
 Last updated 30th July, 2024.  
 Page 2 of 3.

Sponsored by **CrosswordCheats.com**  
 Learn to solve cryptic crosswords!  
<http://crosswordcheats.com>

### Services

Get list of services	<code>gcloud services list</code>
Get list of enabled services	<code>gcloud services list --enabled</code>
Get list of available services	<code>gcloud services list --available</code>
Get list of available services containing "compute"	<code>gcloud services list --available   grep compute</code>

### Storage

CLI for accessing storage API	<code>gsutil</code>
List all storage buckets	<code>gsutil ls</code>
List objects in a bucket	<code>gsutil ls gs://storage-lab-console</code>
List all objects in a folder	<code>gsutil ls gs://storage-lab-console/**</code> This lists all objects in a flat structure
Create Bucket	<code>gsutil mb [-c class] [-l location] [-p proj_id] gs://new-bucket-name</code>
Get labels for bucket in JSON format	<code>gsutil label get gs://storage-lab-cli/</code>
Add label to bucket	<code>gsutil label ch -l "extralabel:extravalue" gs://storage-lab-cli/</code>
Set labels for a bucket	<code>gsutil label set labels.json gs://storage-lab-cli/</code>
Check status of versioning on bucket	<code>gsutil versioning get gs://storage-lab-cli</code>
Turn on versioning for bucket	<code>gsutil versioning set on gs://storage-lab-cli</code>
Turn off versioning for bucket	<code>gsutil versioning set off gs://storage-lab-cli</code>

### Storage (cont)

Delete a file from bucket	<code>gsutil rm gs://storage-lab-cli/REA-DME.txt</code>
Make a file public in a storage bucket	<code>gsutil acl ch -u AllUsers:R gs://storage-lab-cli/Selfie.jpg</code>
Remove public access for file	<code>gsutil acl ch -d AllUsers gs://storage-lab-cli/Selfie.jpg</code>

### BigQuery

Examine schema of the Shakespeare table in samples dataset	<code>bq show bigquery-public-data:samples.shakespeare</code>
Get help on query command	<code>bq help query</code>
Get list of all commands used by bigquery	<code>bq help</code>
List existing projects in the dataset	<code>bq ls</code>
List datasets in a public dataset project	<code>bq ls bigquery-public-data:</code>
Create a dataset	<code>bq mk babynames</code>
Run a query on BigQuery dataset	<code>bq query --use_legacy=false 'SELECT word FROM ...'</code>
Create or update a table AND load data	<code>bq load &lt;dataset_name&gt;.&lt;table_name&gt; &lt;local_file&gt; name:string,gender:string,count:integer</code>
List tables in a BQ dataset	<code>bq ls babynames</code>
Examine schema of a dataset table	<code>bq show &lt;dataset_name&gt;.&lt;table_name&gt;</code>

`--use_legacy=false` is an optional flag.



By **Nilesch** (niparkhe)  
[cheatography.com/niparkhe/](https://cheatography.com/niparkhe/)

Not published yet.  
Last updated 30th July, 2024.  
Page 3 of 3.

Sponsored by **CrosswordCheats.com**  
Learn to solve cryptic crosswords!  
<http://crosswordcheats.com>