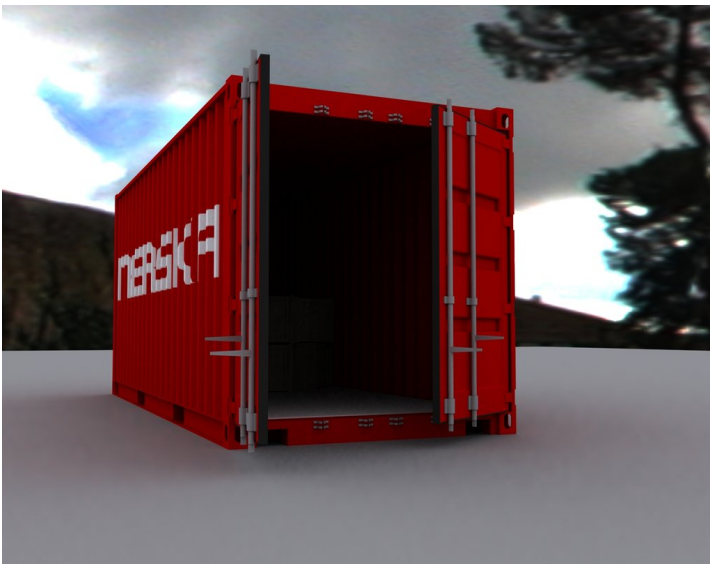


Manual



User GoogleCloud (Free 300 Dollars)

Prerequisite

Recommend to login on google chrome with gmail account.

บัญชีของฉัน

Google

ยินดีต้อนรับ คุณ kuberneteslab kuberneteslab

ควบคุม ปกป้อง และรักษาบัญชีของคุณให้ปลอดภัย ทั้งหมดนี้ในที่เดียว

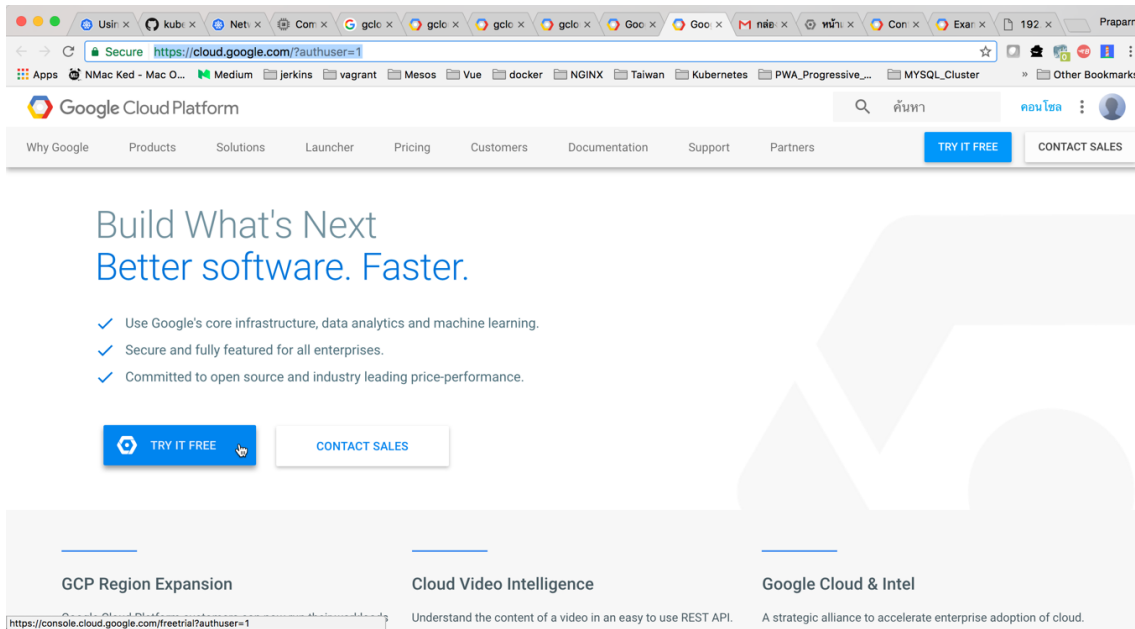
บัญชีของฉันช่วยให้คุณเข้าถึงการตั้งค่าได้อย่างรวดเร็ว รวมถึงเครื่องมือที่ช่วยให้คุณปกป้องข้อมูล ปกป้องความเป็นส่วนตัว และเลือกว่าจะให้ข้อมูลของคุณทำให้บริการต่างๆ ของ Google ทำงานให้คุณดีขึ้นได้อย่างไร

การลงชื่อเข้าใช้และความปลอดภัย >	ข้อมูลและความเป็นส่วนตัว >	การตั้งค่าบัญชี >
ควบคุมรหัสผ่านและการเข้าถึงบัญชี Google การลงชื่อเข้าใช้ Google	จัดการการตั้งค่าการเปิดเผยข้อมูลของคุณและข้อมูลที่เราใช้ในการปรับเปลี่ยนประสบการณ์ในแบบของคุณ ข้อมูลส่วนตัว จัดการกิจกรรมใน Google ของคุณ	ตั้งค่าภาษา การเข้าถึง และการตั้งค่าอื่นๆ ที่ช่วยคุณในการใช้งาน Google ภาษาและเครื่องมือป้องกันข้อมูล การตั้งค่า

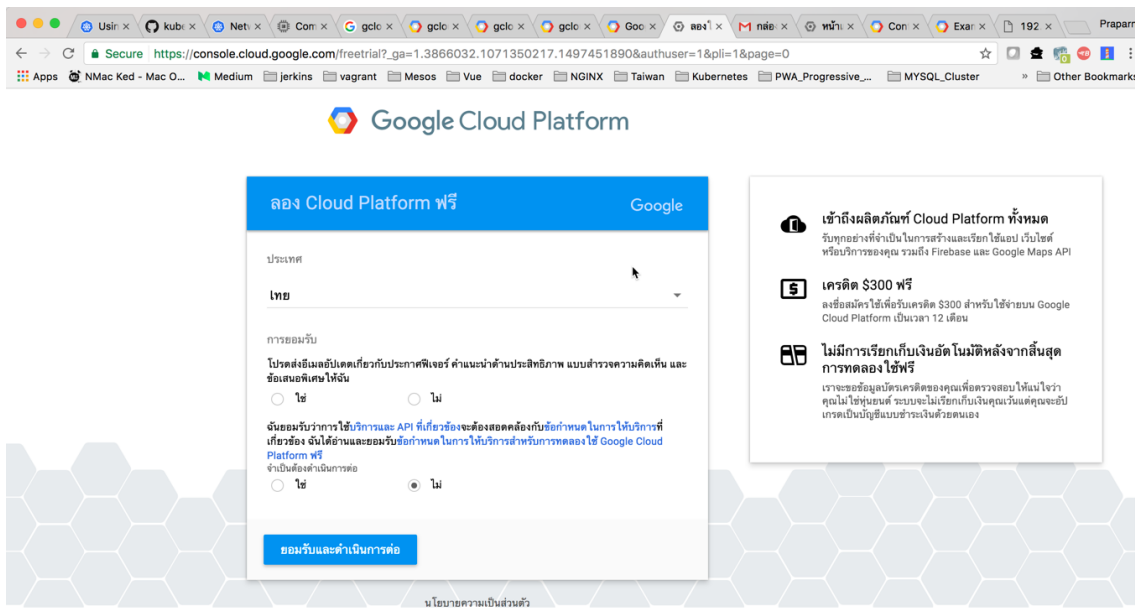
<https://myaccount.google.com/u/1/preferences>

Register for Google Cloud

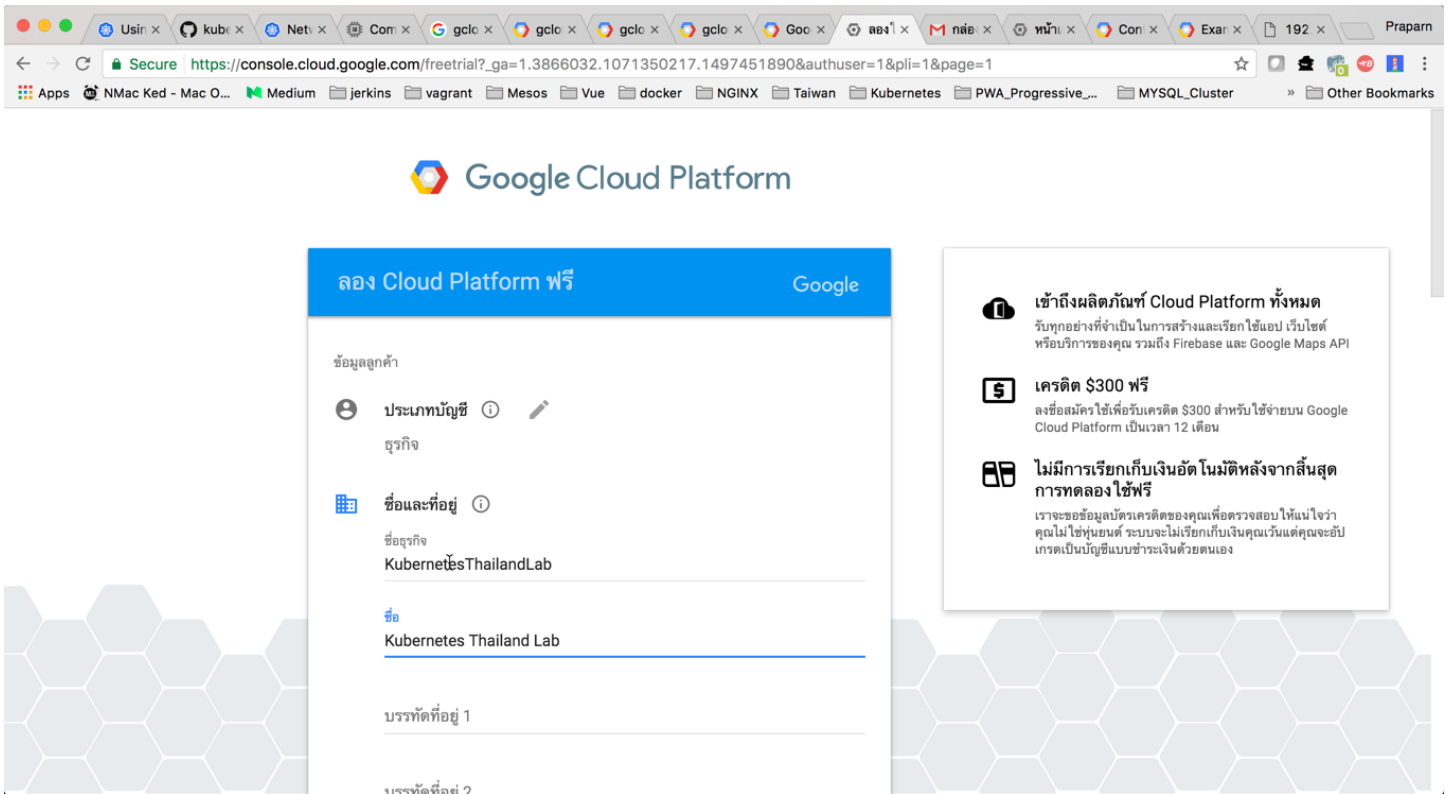
1. Open url: <https://cloud.google.com> and "Try IT FREE"



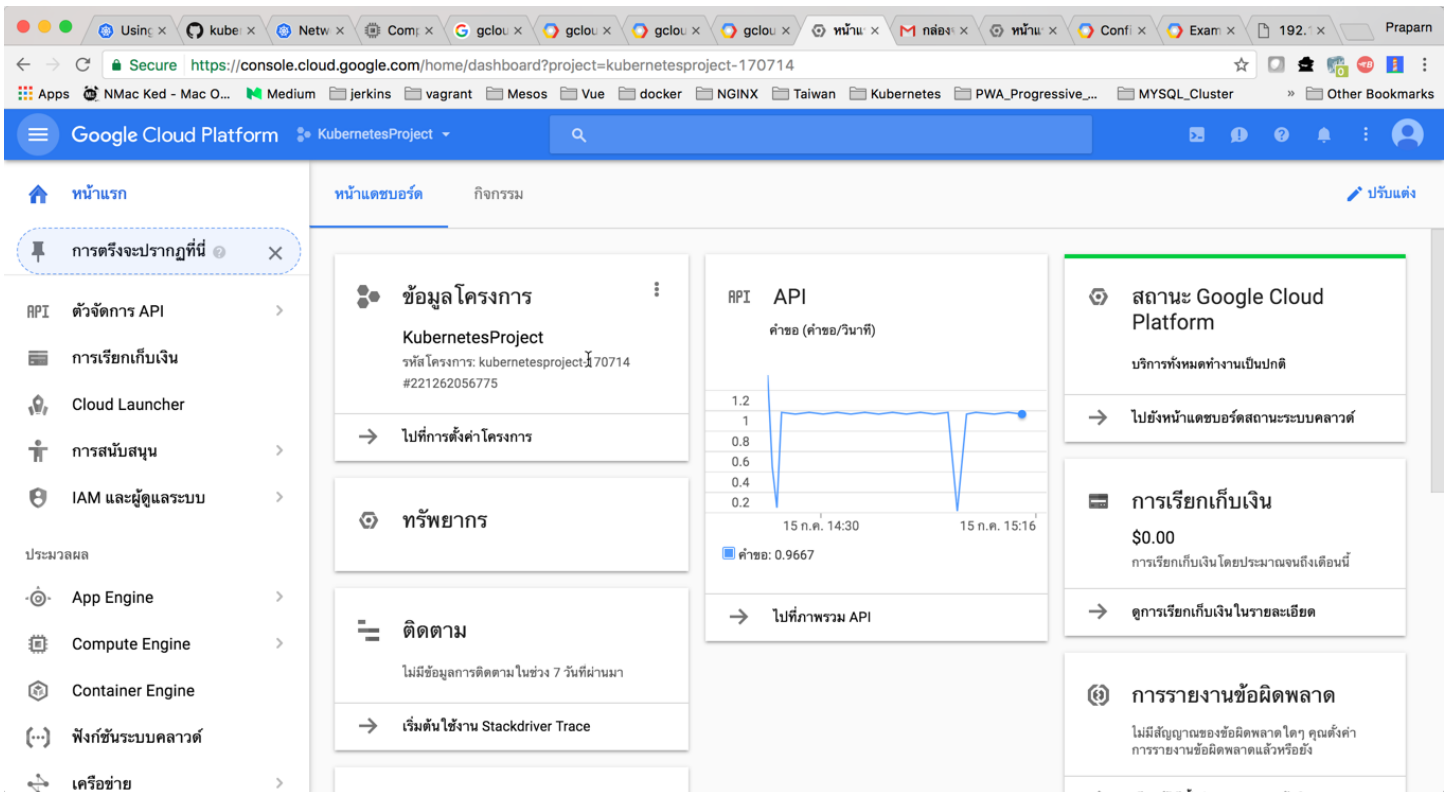
2. Select Country and Access Condition



3. Input require data and accept condition (Need to input credit card/some confidential data)



4. After finished. Choose to create new project name "KubernetesProject" and record project code for reference



Install GCloud Tool

Following Gcloud Instruction/Downlad-install with step like below

1. Install gcloud tool

Ref: <https://cloud.google.com/sdk/downloads>

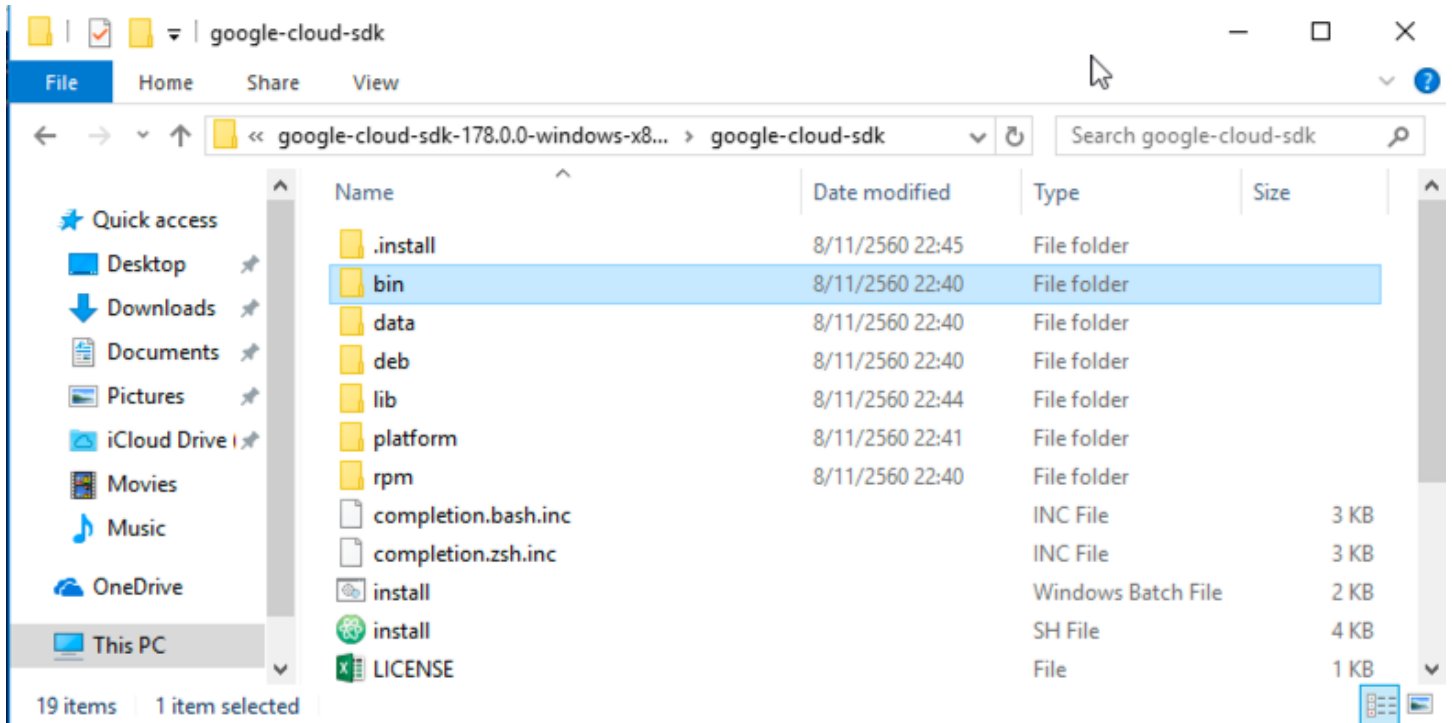
The screenshot shows the Google Cloud Platform documentation page for installing the Cloud SDK. The page is titled "Installing Cloud SDK" and is part of the "Cloud SDK > Documentation" section. The main content area contains the following sections:

- System requirements:** Cloud SDK runs on Linux, Mac OS X and Windows, and requires Python 2.7.x. Some tools bundled with Cloud SDK have additional requirements. For example, Java tools for Google App Engine development require Java 1.7 or later.
- Installation options:** Do one of the following to install Cloud SDK:
 - Download a [versioned archive](#) of any release, including previous releases
 - Run the [interactive installer](#) to download and install the latest release
 - Use [apt-get](#) (Debian and Ubuntu only) to download and install the latest release
 - Use [yum](#) (Red Hat and CentOS) to download and install the latest release
- Versioned archives:** Cloud SDK provides downloadable, versioned archives for each release. Each versioned archive contains a self-contained installation of Cloud SDK in a directory named `google-cloud-sdk` that can be copied to any location on your file system.

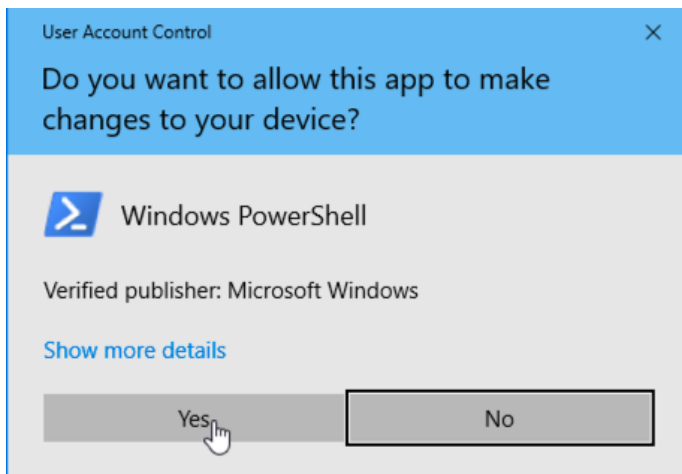
The page also features a left sidebar with navigation links for Cloud SDK, Quickstarts, How-to Guides, APIs & Reference, and Concepts. A right sidebar contains a table of contents for the current page, including System requirements, Installation options, Versioned archives, Previous versions, Interactive installer, Non-interactive (silent) deployment, and Managing an installation.

1.1 For windows (Google Cloud SDK)

1.1.1 Extract google-cloud-sdk-178.0.0-windows zip file to folder



1.1.2 Run powershell as "Administrator" and run install.bat




```

PS C:\kubernetes\google-cloud-sdk-178.0.0-windows-x86_64-bundled-python\google-cloud-sdk> .\install.bat
Welcome to the Google Cloud SDK!

To help improve the quality of this product, we collect anonymized usage data
and anonymized stacktraces when crashes are encountered; additional information
is available at <https://cloud.google.com/sdk/usage-statistics>. You may choose
to opt out of this collection now (by choosing 'N' at the below prompt), or at
any time in the future by running the following command:

    gcloud config set disable_usage_reporting true

Do you want to help improve the Google Cloud SDK (Y/n)? n

Your current Cloud SDK version is: 178.0.0
The latest available version is: 178.0.0

```

Components			
Status	Name	ID	Size
Not Installed	App Engine Go Extensions	app-engine-go	98.9 MiB
Not Installed	Cloud Bigtable Command Line Tool	cbt	4.0 MiB
Not Installed	Cloud Bigtable Emulator	bigtable	3.5 MiB
Not Installed	Cloud Datalab Command Line Tool	datalab	< 1 MiB
Not Installed	Cloud Datastore Emulator	cloud-datastore-emulator	17.7 MiB
Not Installed	Cloud Datastore Emulator (Legacy)	gcd-emulator	38.1 MiB
Not Installed	Cloud Pub/Sub Emulator	pubsub-emulator	33.2 MiB
Not Installed	Emulator Reverse Proxy	emulator-reverse-proxy	14.5 MiB
Not Installed	Google Container Registry's Docker credential helper	docker-credential-gcr	2.1 MiB
Not Installed	gcloud Alpha Commands	alpha	< 1 MiB
Not Installed	gcloud Beta Commands	beta	< 1 MiB
Not Installed	gcloud app Java Extensions	app-engine-java	116.0 MiB
Not Installed	gcloud app PHP Extensions	app-engine-php	19.1 MiB
Not Installed	gcloud app Python Extensions	app-engine-python	6.2 MiB
Not Installed	kubectl	kubectl	12.3 MiB
Installed	BigQuery Command Line Tool	bq	< 1 MiB
Installed	Cloud SDK Core Libraries	core	7.4 MiB
Installed	Cloud Storage Command Line Tool	gsutil	3.3 MiB

```

To install or remove components at your current SDK version [178.0.0], run:
$ gcloud components install COMPONENT_ID
$ gcloud components remove COMPONENT_ID

To update your SDK installation to the latest version [178.0.0], run:
$ gcloud components update

Update %PATH% to include Cloud SDK binaries? (Y/n)?

```

1.1.3 Access to path "bin" and run command "gcloud components install beta"

```

Select cmd.exe /c ""c:\users\prapam\appdata\local\temp\tmpysre8l\python\python.exe" "-S" "C
Your current Cloud SDK version is: 178.0.0
Installing components from version: 178.0.0

-----
These components will be installed.
-----
Name          Version    Size
-----
gcloud Beta  2017.09.15 < 1 MiB
Commands

For the latest full release notes, please visit:
https://cloud.google.com/sdk/release_notes

Do you want to continue (Y/n)? Y

=====
# Creating update staging area
# Installing: gcloud Beta Commands
# Creating backup and activating new installation
=====
Performing post processing steps...

```

1.1.4 Add path of folder "bin" on system variable "Path"

- 1.1.5 Open command prompt and access to path "bin" and run "gcloud init" and Logon system for initial gcloud and following instruction until end

```
C:\kubernetes>cd google-cloud-sdk-178.0.0-windows-x86_64-bundled-python
C:\kubernetes\google-cloud-sdk-178.0.0-windows-x86_64-bundled-python>cd google-cloud-sdk
C:\kubernetes\google-cloud-sdk-178.0.0-windows-x86_64-bundled-python\google-cloud-sdk>cd bin
C:\kubernetes\google-cloud-sdk-178.0.0-windows-x86_64-bundled-python\google-cloud-sdk\bin>gcloud init
Welcome! This command will take you through the configuration of gcloud.

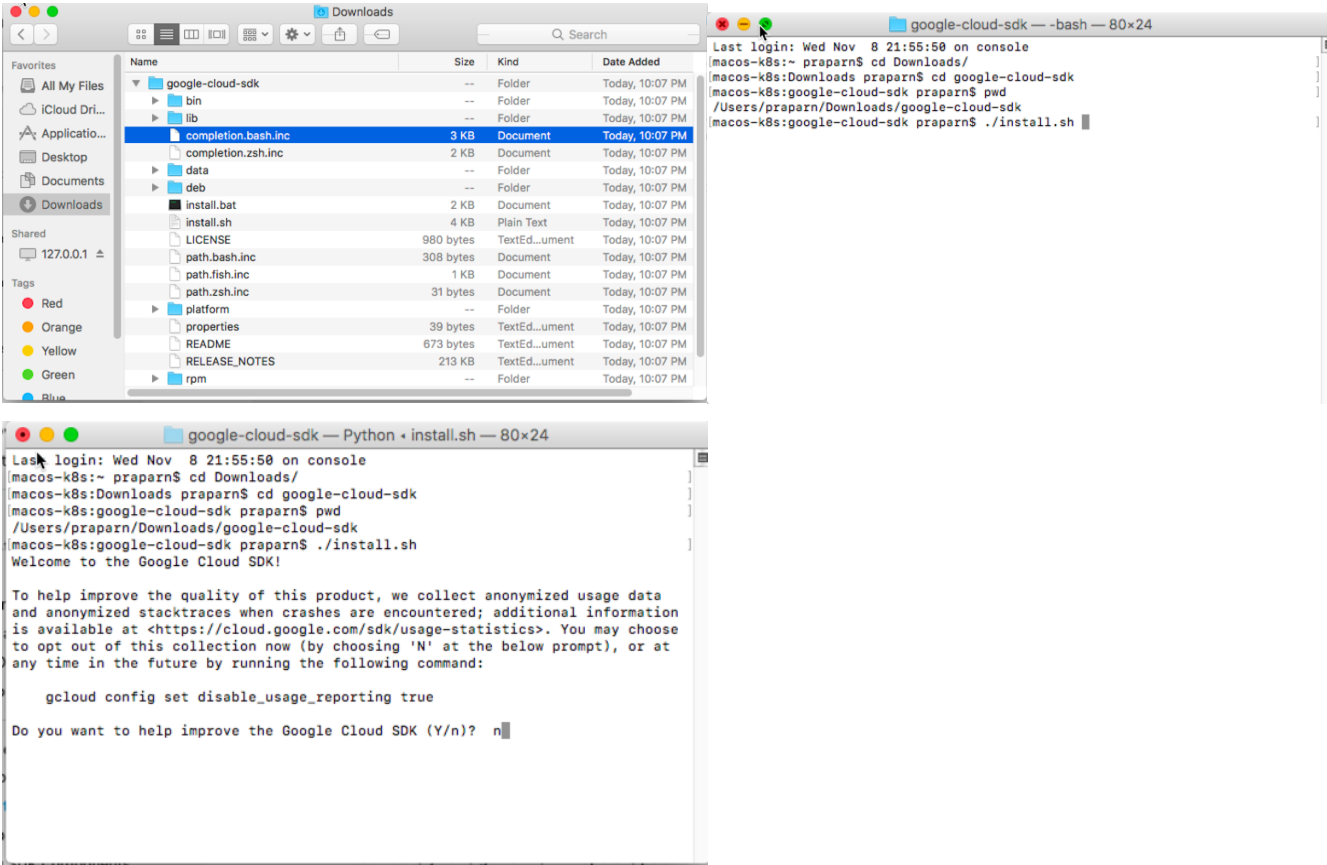
Your current configuration has been set to: [default]

You can skip diagnostics next time by using the following flag:
  gcloud init --skip-diagnostics

Network diagnostic detects and fixes local network connection issues.
Checking network connection.../
```


1.2 For MAC OS X

1.2.1 Extract folder "google-cloud-sdk" and run "install.sh"



Your current Cloud SDK version is: 178.0.0
The latest available version is: 178.0.0

Components			
Status	Name	ID	Size
Not Installed	App Engine Go Extensions	app-engine-go	97.7 MiB
Not Installed	Cloud Bigtable Command Line Tool	cbt	4.0 MiB
Not Installed	Cloud Bigtable Emulator	bigtable	3.5 MiB
Not Installed	Cloud Datalab Command Line Tool	datalab	< 1 MiB
Not Installed	Cloud Datastore Emulator	cloud-datastore-emulator	17.7 MiB
Not Installed	Cloud Datastore Emulator (Legacy)	gcd-emulator	38.1 MiB
Not Installed	Cloud Pub/Sub Emulator	pubsub-emulator	33.2 MiB
Not Installed	Emulator Reverse Proxy	emulator-reverse-proxy	14.5 MiB
Not Installed	Google Container Local Builder	container-builder-local	3.7 MiB
Not Installed	Google Container Registry's Docker credential helper	docker-credential-gcr	2.2 MiB
Not Installed	gcloud Alpha Commands	alpha	< 1 MiB
Not Installed	gcloud Beta Commands	beta	< 1 MiB
Not Installed	gcloud app Java Extensions	app-engine-java	116.0 MiB
Not Installed	gcloud app PHP Extensions	app-engine-php	21.9 MiB
Not Installed	gcloud app Python Extensions	app-engine-python	6.2 MiB
Not Installed	kubect1	kubect1	12.2 MiB
Installed	BigQuery Command Line Tool	bq	< 1 MiB
Installed	Cloud SDK Core Libraries	core	7.4 MiB
Installed	Cloud Storage Command Line Tool	gsutil	3.3 MiB

To install or remove components at your current SDK version [178.0.0], run:
\$ gcloud components install COMPONENT_ID
\$ gcloud components remove COMPONENT_ID

To update your SDK installation to the latest version [178.0.0], run:
\$ gcloud components update

==> Source [~/Downloads/google-cloud-sdk/completion.bash.inc] in your profile to enable shell command completion for gcloud.
==> Source [~/Downloads/google-cloud-sdk/path.bash.inc] in your profile to add the Google Cloud SDK command line tools to your \$PATH.

For more information on how to get started, please visit:
<https://cloud.google.com/sdk/docs/quickstarts>

[macos-k8s:google-cloud-sdk praparn\$]

1.2.2 export \$PATH of google sdk /bin to MAC OS X

```
macos-k8s:bin praparn$ export PATH=$PATH:/Users/praparn/google-cloud-sdk/bin
macos-k8s:bin praparn$ echo $PATH
/usr/local/bin:/usr/bin:/bin:/usr/sbin:/sbin:/Users/praparn/google-cloud-sdk/bin
macos-k8s:bin praparn$
```

1.2.3 run command "gcloud components install beta"

```
macos-k8s:/ praparn$ gcloud components install beta

Your current Cloud SDK version is: 179.0.0
Installing components from version: 179.0.0
```

These components will be installed.		
Name	Version	Size
gcloud Beta Commands	2017.09.15	< 1 MiB

```
For the latest full release notes, please visit:
https://cloud.google.com/sdk/release_notes

Do you want to continue (Y/n)? Y

- Creating update staging area
- Installing: gcloud Beta Commands
- Creating backup and activating new installation

Performing post processing steps...done.

Update done!

macos-k8s:/ praparn$
```

1.2.4 Access to "bin" and Initial by command: gcloud init

```
macos-k8s:bin praparn$ pwd
/Users/praparn/google-cloud-sdk/bin
macos-k8s:bin praparn$ ls
bootstrapping      docker-credential-gcloud  git-credential-gcloud.sh
bg                 endpointcfg.py           gsutil
dev_appserver.py   gcloud                  java_dev_appserver.sh
macos-k8s:bin praparn$ ./gcloud init
Welcome! This command will take you through the configuration of gcloud.

Your current configuration has been set to: [default]

You can skip diagnostics next time by using the following flag:
gcloud init --skip-diagnostics

Network diagnostic detects and fixes local network connection issues.
Checking network connection...done.
Reachability Check passed.
Network diagnostic (1/1 checks) passed.

You must log in to continue. Would you like to log in (Y/n)?
```

Generate Key/Import key (Option)

Following Gcloud Instruction for generate and import SSH Keys to GCloud

<https://cloud.google.com/compute/docs/instances/adding-removing-ssh-keys>

The screenshot shows the Google Cloud Platform documentation page for "Adding and Removing SSH Keys". The page is part of the "Compute Engine" documentation. The navigation menu includes "Why Google", "Products", "Solutions", "Launcher", "Pricing", "Customers", "Documentation" (which is highlighted), "Support", and "Partners". The left sidebar contains a "Compute Engine" section with "Product Overview" and "Documentation", a "Quickstarts" section with "All Quickstarts", "Using a Linux VM", and "Using a Windows VM", and a "How-to Guides" section with "All How-to Guides", "Creating VM Instances", "Adding Storage", "Creating and Managing Custom Images", "Managing Your Instances" (with sub-items: "Stopping or Deleting an Instance", "Resetting or Restarting an Instance", "Creating Disk Snapshots", and "Moving an Instance Between Zones"). The main content area shows the breadcrumb "Compute Engine > Documentation", a search bar with the Thai text "ค้นหา", and a star rating of five stars with the Thai text "ส่งความคิดเห็น". The title "Adding and Removing SSH Keys" is prominently displayed. The main text explains that the guide shows how to use the `gcloud` tool or API methods to add or remove project-wide SSH keys or instance-only SSH keys. It notes that users with these SSH keys are administrators on their instances that can run commands with `sudo`. A blue callout box contains a note: "Note: Setting the `sshKeys` metadata value on the instance metadata instead of the project metadata is deprecated. Compute Engine will stop supporting this metadata value in March 2017. Set the `ssh-keys` instance metadata value to add ssh keys for users on individual instances instead." Below this, it says: "If you simply need to connect to your Linux instances, see [Connecting to Linux Instances](#). If you need to connect to a Windows instance, see [Connecting to Windows instances](#)." An orange callout box contains a caution: "Caution: Using the `gcloud` tool or the API to manage SSH keys on Compute Engine is recommended only for advanced users. See [risks of manual key management](#)."

Following Gcloud Instruction for generate and import SSH Keys to GCloud

*Remark: After generate key with format finished. You must use gcloud for insert sshKeys authentication with Public key to Google Cloud

Add or remove project-wide public keys using the [gcloud tool](#).

1. Obtain your existing project-wide `sshKeys` metadata value for your instance.

```
gcloud compute project-info describe

...
metadata:
  fingerprint: Rq1XCvmRVik=
  items:
  - key: sshKeys
    value: [USERNAME]:ssh-rsa [EXISTING_KEY_VALUE_1] [USERNAME]\n[USERNAME]:ssh-rsa [EXISTING_I
  ...
```

where:

- `[USERNAME]` is the username for your existing keys.
- `[EXISTING_KEY_VALUE_1]` and `[EXISTING_KEY_VALUE_2]` are public key values that are already applied to your project.

2. Merge your existing keys with any new keys that you are adding, and leave out any keys that you want to delete. For this example, the file contains a new `[KEY_VALUE]` followed by one of the existing key values that you obtained in the previous step. The `[EXISTING_KEY_VALUE_1]` is left out, and is removed from the instance in the next step.

```
[USERNAME]:ssh-rsa [KEY_VALUE] [USERNAME]
[USERNAME]:ssh-rsa [EXISTING_KEY_VALUE_2] [USERNAME]
```

where:

- `[USERNAME]` is the username for your existing keys.
- `[KEY_VALUE]` is the new key value that you are adding to the project.
- `[EXISTING_KEY_VALUE_1]` is a public key values that is already applied to your project, but you need to remove it.
- `[EXISTING_KEY_VALUE_2]` is a public key values that is already applied to your project and you want to keep.

3. Use the `compute project-info add-metadata` command to set the project-wide `sshKeys` value. For this example, include the `--metadata-from-file` flag and specify the path to your file on your local client.

```
gcloud compute project-info add-metadata
--metadata-from-file sshKeys=[KEY_FILE_NAME].pub
```

where `[KEY_FILE_NAME]` is the name of your public key file.