

Download desktop docker from <https://www.docker.com/products/docker-desktop/>

For windows system, it only supports win10 pro or enterprise.

For win10 Home, there a trick way to install it.

-- create a file named as **hyperv.cmd**, copy followed code:

```
pushd "%~dp0"

dir /b %SystemRoot%\servicing\Packages\*Hyper-V*.mum >hyper-v.txt

for /f %i in ('findstr /i . hyper-v.txt 2^>nul') do dism /online /norestart /add-package:"%SystemRoot%\servicing\Packages\%i"

del hyper-v.txt

Dism /online /enable-feature /featurename:Microsoft-Hyper-V-All /LimitAccess /ALL
```

--run as administrator

--after installing, it calls restart then restart, then will find

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Apps & features

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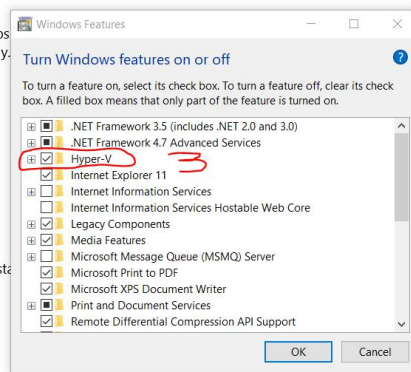
Search this list

Sort by: Name

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[NikenNoSekai][Win10] Overlord - Albedo by... 32.5 MB  
1/12/2019



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To choose the default apps that open your files, links, and more, go to Default app settings.

[Open Default app settings](#)

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--then open cmd as administrator, run following code:

```
REG ADD "HKEY_LOCAL_MACHINE\software\Microsoft\Windows NT\CurrentVersion" /v EditionId /T REG_EXPAND_SZ /d
```

Professional /F

--finally, we can install desktop docker on win10 HOME.

Note: After starting Hyper-V, it will conflict with VM-ware.

(turn off Hyper-V: `"bcdedit /set hypervisorlaunchtype off"`, and also turn off at windows features )

```
Google Cloud SDK Shell
Welcome to the Google Cloud SDK! Run "gcloud -h" to get the list of available commands.

D:\Google\Cloud SDK>color a
D:\Google\Cloud SDK>gcloud components install kubectl
Restarting command:
$ gcloud components install kubectl
D:\Google\Cloud SDK>

These components will be installed.
+-----+-----+-----+
| Name   | Version | Size  |
+-----+-----+-----+
| kubectl | 1.12.8  | 64.9 MiB |
| kubectl | 2019.06.07 | < 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: kubectl
# Installing: kubectl
# Creating backup and activating new installation
# Performing post processing steps... done.

Update done!

WARNING: There are older versions of Google Cloud Platform tools on your system PATH.
Please remove the following to avoid accidentally invoking these old tools:
C:\Program Files\ Docker\ Docker\ Resources\ bin\ kubectl.exe

To take a quick anonymous survey, run:
$ gcloud alpha survey
```

```
Google Cloud SDK Shell

D:\Google\Cloud SDK>gcloud container clusters create bookshelf --scopes "cloud-platform" --num-nodes 2 --enable-basic-auth --issue-client-certificate --enable-ip-alias
WARNING: In June 2019, node auto-upgrade will be enabled by default for newly created clusters and node pools. To disable it, use the "--no-enable-autoupgrade" flag.
WARNING: Starting in 1.12, default node pools in new clusters will have their legacy Compute Engine instance metadata endpoints disabled by default. To create a cluster with legacy instance metadata endpoints disabled in the default node pool, run "clusters create" with the flag "--metadata disable-legacy-endpoints=true".
WARNING: The Pod address range limits the maximum size of the cluster. Please refer to https://cloud.google.com/kubernetes-engine/docs/how-to/flexible-pod-cidr to learn how to optimize IP address allocation. This will enable the autorepair feature for nodes. Please see https://cloud.google.com/kubernetes-engine/docs/node-auto-repair for more information on node autorepairs.
Creating cluster bookshelf in us-west1-b... Cluster is being health-checked (master is healthy)...done.
Created [https://container.googleapis.com/v1/projects/test2333/zones/us-west1-b/clusters/bookshelf].
To inspect the contents of your cluster, go to: https://console.cloud.google.com/kubernetes/workload/_gcloud/us-west1-b/bookshelf?project=test2333
kubeconfig entry generated for bookshelf.
NAME      LOCATION  MASTER_VERSION  MASTER_IP      MACHINE_TYPE  NODE_VERSION  NUM_NODES  STATUS
bookshelf us-west1-b 1.12.8-gke.6    35.227.161.44  n1-standard-1 1.12.8-gke.6  2          RUNNING

D:\Google\Cloud SDK>kubectl get nodes
NAME                                STATUS  ROLES  AGE  VERSION
gke-bookshelf-default-pool-304a72fa-3txb Ready  <none>  41s  v1.12.8-gke.6
gke-bookshelf-default-pool-304a72fa-f74j Ready  <none>  41s  v1.12.8-gke.6

D:\Google\Cloud SDK>
```

```
Google Cloud SDK Shell

NAME                                STATUS  ROLES  AGE  VERSION
gke-bookshelf-default-pool-304a72fa-3txb Ready  <none>  9m35s  v1.12.8-gke.6
gke-bookshelf-default-pool-304a72fa-f74j Ready  <none>  9m35s  v1.12.8-gke.6

D:\Google\Cloud SDK>git clone https://github.com/GoogleCloudPlatform/getting-started-python.git
Cloning into 'getting-started-python'...
remote: Enumerating objects: 100, done.
remote: Counting objects: 100% (100/100), done.
remote: Compressing objects: 100% (68/68), done.
remote: Total 2059 (delta 48), reused 71 (delta 31), pack-reused 1959
Receiving objects: 100% (2059/2059), 338.52 KiB | 1.38 MiB/s, done.
Resolving deltas: 100% (1479/1479), done.

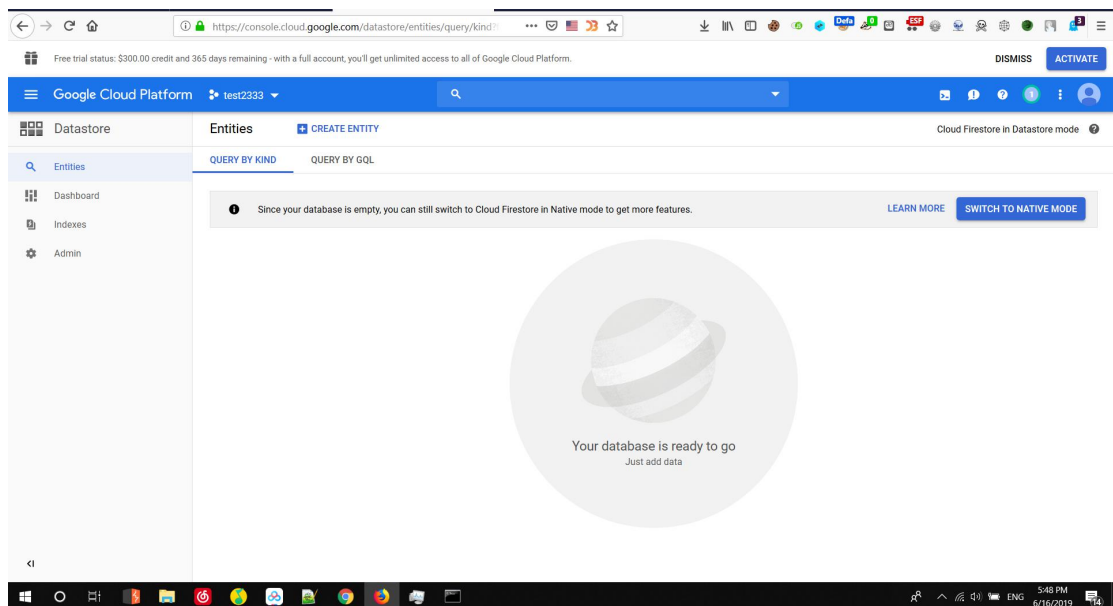
D:\Google\Cloud SDK>cd getting-started-python\optional-kubernetes-engine

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>gsutil mb gs://[test1]
InvalidUrlError: Invalid bucket name in URL "[test1]".

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>gsutil mb gs://test233
Creating gs://test233/...

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>gsutil defacl set public-read gs://test233
Setting default object ACL on gs://test233/...
/ [1 objects]

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>
```



```
import os
```

```
# The secret key is used by Flask to encrypt session cookies.
SECRET_KEY = 'secret'
```

```
# There are three different ways to store the data in the application.
# You can choose 'datastore', 'cloudsql', or 'mongodb'. Be sure to
# configure the respective settings for the one you choose below.
# You do not have to configure the other data backends. If unsure, choose
# 'datastore' as it does not require any additional configuration.
DATA_BACKEND = 'datastore'
```

```
# Google Cloud Project ID. This can be found on the 'Overview' page at
# https://console.developers.google.com
PROJECT_ID = 'test2333'
```

```
# CloudSQL & SQLAlchemy configuration
# Replace the following values the respective values of your Cloud SQL
# instance.
```

```
bucket:
#
# $ gsutil mb gs://<test233>
#
# You also need to make sure that the default ACL is set to public-read,
# otherwise users will not be able to see their upload images:
#
# $ gsutil defacl set public-read gs://<test233>
#
# You can adjust the max content length and allow extensions settings to allow
# larger or more varied file types if desired.
CLOUD_STORAGE_BUCKET = 'test233'
MAX_CONTENT_LENGTH = 8 * 1024 * 1024
ALLOWED_EXTENSIONS = set(['png', 'jpg', 'jpeg', 'gif'])
```

```
# OAuth2 configuration.
# This can be generated from the Google Developers Console at
# https://console.developers.google.com/project/_/apiui/credential.
```

```
Google Cloud SDK Shell - docker build -t gcr.io/test2333/bookshelf.
13 File(s)      19,135 bytes
4 Dir(s)      390,816,673,792 bytes free

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>notepad config.py

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>notepad Dockerfile

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>notepad .dockerignore

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>docker build -t gcr.io/test2333/bookshelf
'docker build' requires exactly 1 argument.
See 'docker build --help'.

Usage: docker build [OPTIONS] PATH | URL | -

Build an image from a Dockerfile

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>docker build -t gcr.io/test2333/bookshelf .
Sending build context to Docker daemon 88.58kB
Step 1/8 : FROM gcr.io/google-appengine/python
latest: Pulling from google-appengine/python
012efc4864f8: Pull complete
2d08728a0525: Pull complete
3c2cba919283: Pull complete
c25d9b9b8434: Pull complete
a6ad84535ebc: Pull complete
fbb1d63be3d6: Downloading [=====>] 165.4MB/185.7MB
750b9582556e: Downloading [=====>] 95.66MB/114.3MB
99f076c51615: Download complete
506359d2c6d8: Download complete
778f4c9b5fe5: Download complete
6557e1690da5: Download complete
```

```
Google Cloud SDK Shell
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>docker build -t gcr.io/test2333/bookshelf .
Sending build context to Docker daemon 88.58kB
Step 1/8 : FROM gcr.io/google-appengine/python
latest: Pulling from google-appengine/python
012efc4864f8: Pull complete
2d08728a0525: Pull complete
3c2cba919283: Pull complete
c25d9b9b8434: Pull complete
a6ad84535ebc: Pull complete
fbb1d63be3d6: Pull complete
750b9582556e: Pull complete
99f076c51615: Pull complete
506359d2c6d8: Pull complete
778f4c9b5fe5: Pull complete
6557e1690da5: Pull complete
Digest: sha256:1bae2d25eddef7f27228f2ef0576643b5fd8e701a64d18470287f00377863cd5
Status: Downloaded newer image for gcr.io/google-appengine/python:latest
Step 2/8 : RUN virtualenv -p python3.4 /env
--> 21723469ecd1
--> Running in e0fcaac24ef2
Running virtualenv with interpreter /opt/python3.4/bin/python3.4
Using base prefix /opt/python3.4
New python executable in /env/bin/python3.4
Also creating executable in /env/bin/python
Installing setuptools, pip, wheel...done.
Removing intermediate container e0fcaac24ef2
--> 5df8830e298
Step 3/8 : ENV VIRTUAL_ENV /env
--> Running in 7fe4f64784e6
Removing intermediate container 7fe4f64784e6
--> 336c49cafb57
Step 4/8 : ENV PATH /env/bin:$PATH
--> Running in 85c9e189a296
Removing intermediate container 85c9e189a296
--> d0642d792357
Step 5/8 : ADD requirements.txt /app/requirements.txt
--> 2976e41712
Step 6/8 : RUN pip install -r /app/requirements.txt
--> Running in 0f168d7da3
DEPRECATION: Python 3.4 support has been deprecated. pip 19.1 will be the last one supporting it. Please upgrade your Python as Python 3.4 won't be maintained after March 2019 (cf PEP 429).
Collecting Flask==1.0.0 (from -r /app/requirements.txt (line 1))
  Downloading https://files.pythonhosted.org/packages/9a/74/670ae9737d4114753b8c8fdr2e8bd212a05d3b361ab15b44937d4d0985/Flask-1.0.3-py2.py3-none-any.whl (92kB)
Collecting google-cloud-datastore==1.7.1 (from -r /app/requirements.txt (line 2))
  Downloading https://files.pythonhosted.org/packages/2b/85/53c4310e6a76534a8e8bcb72a4f1305386a3f42266c0985f64f8f1594284/google_cloud_datastore-1.7.1-py2.py3-none-any.whl (79kB)
Collecting google-cloud-storage==1.13.0 (from -r /app/requirements.txt (line 3))
  Downloading https://files.pythonhosted.org/packages/d7/62/d2e311bf4d1e54fc36dec694418644e024eb0599f1e66ebdcf9f98ad70/google_cloud_storage-1.13.0-py2.py3-none-any.whl (59kB)
Collecting google-cloud-logging==1.8.0 (from -r /app/requirements.txt (line 4))
  Downloading https://files.pythonhosted.org/packages/20/9c/f0c9011b334f250977dd52bae260352587f86a9c6b03e770d6954d9c8405/google_cloud_logging-1.8.0-py2.py3-none-any.whl (104kB)
Collecting google-cloud-error-reporting==0.30.0 (from -r /app/requirements.txt (line 5))
```



```

Google Cloud SDK Shell
Downloading https://files.pythonhosted.org/packages/63/35/4fbc94b5c51bf809a91c175b35398360c9fb9e41bf9544dfc3c4e82bec/protobuf-3.8.0-cp34-cp34m-manylinux1_x86_64.whl (1.2MB)
Collecting grpcio<2.0dev,>=1.8.2, extra == 'grpc' (from google-api-core[grpc]<2.0.0dev,>=1.0.0->google-cloud-datastore==1.7.1->r /app/requirements.txt (line 2))
Downloading https://files.pythonhosted.org/packages/5c/ae/91fc21a644e3392b9c35c2c1c709ab094dc87f1b059996812cfcd6ca24d/grpcio-1.21.1-cp34-cp34m-manylinux1_x86_64.whl (2.2MB)
Collecting cffi==1.11.3,>=1.8 (from cryptography->PyMySQL==0.9.2->r /app/requirements.txt (line 10))
Downloading https://files.pythonhosted.org/packages/d5/a1/7e36ef126fcd72bc39a96166fe2639452808a233c73bf6405714277a852/cffi-1.12.3-cp34-cp34m-manylinux1_x86_64.whl (429kB)
Collecting asn1crypto==0.21.0 (from cryptography->PyMySQL==0.9.2->r /app/requirements.txt (line 10))
Downloading https://files.pythonhosted.org/packages/ea/cd/35485615f45f30a510576f1a56d1e0a7d7bd8ab5ed7cdc600ef7cd06222/asn1crypto-0.24.0-py2.py3-none-any.whl (101kB)
Collecting grpc-google-iam-v1<0.12dev,>=0.11.4 (from google-cloud-pubsub==0.35.2->psq==0.7.0->r /app/requirements.txt (line 16))
Downloading https://files.pythonhosted.org/packages/9b/28/f26f6f731c32a3e31271b0b6e40a8a36a492569e1aed4d8222fa2d744/grpc-google-iam-v1-0.11.4.tar.gz
Collecting cachetools>=2.0.0 (from google-auth<2.0dev,>=0.4.0->google-api-core[grpc]<2.0.0dev,>=1.0.0->google-cloud-datastore==1.7.1->r /app/requirements.txt (line 2))
Downloading https://files.pythonhosted.org/packages/2f/a6/30b0a0bef1223e83e38c1d0e7b5aabc7acfc4110df81a4471655d33e704/cachetools-3.1.1-py2.py3-none-any.whl
Collecting pyparser (from cffi==1.11.3,>=1.8->cryptography->PyMySQL==0.9.2->r /app/requirements.txt (line 10))
Downloading https://files.pythonhosted.org/packages/68/9e/4918c945ae2193ead12b0b001e7f2aeb3567783e3e31b3ab3585e6206a/pyparser-2.19.tar.gz (158kB)
Building wheels for collected packages: SQLAlchemy, googleapis-common-protos, grpc-google-iam-v1, pyparser
Building wheel for SQLAlchemy (setup.py): started
Building wheel for SQLAlchemy (setup.py): finished with status 'done'
Stored in directory: /root/.cache/pip/wheels/c6/b2/b8/54b71f2c27738fc6f9d1b68b6cf653c28a5fa0a9846d902be32
Building wheel for googleapis-common-protos (setup.py): started
Building wheel for googleapis-common-protos (setup.py): finished with status 'done'
Stored in directory: /root/.cache/pip/wheels/9e/3d/c2/1bc0bb7db90ab3216dbc33092bb7ccd0ebfb8ba42b566845
Building wheel for grpc-google-iam-v1 (setup.py): started
Building wheel for grpc-google-iam-v1 (setup.py): finished with status 'done'
Stored in directory: /root/.cache/pip/wheels/b6/c6/31/c20321a5a3fde456fc375b7c2814135e6e98bc0d74c40239d9
Building wheel for pyparser (setup.py): started
Building wheel for pyparser (setup.py): finished with status 'done'
Stored in directory: /root/.cache/pip/wheels/f2/9a/90/de94f856c265ddc949c8b271b0f63e57b26fbd67a4564511
Successfully built SQLAlchemy googleapis-common-protos grpc-google-iam-v1 pyparser
Installing collected packages: Werkzeug, itsdangerous, MarkupSafe, Jinja2, click, Flask, six, protobuf, googleapis-common-protos, chardet, idna, urllib3, certifi, pyparser, cffi, asn1crypto, cryptography, pyOpenSSL, requests, pyasn1, rsa, cachetools, pyasn1-modules, google-auth, pytz, grpcio, google-api-core, google-cloud-core, google-cloud-datastore, google-resumable-media, google-cloud-storage, google-cloud-logging, google-cloud-error-reporting, gunicorn, httplib2, oauth2client, phr, mock, SQLAlchemy, Flask-SQLAlchemy, PyMySQL, PyMongo, Flask-PyMongo, honcho
Successfully installed Flask-1.0.3 Flask-PyMongo-2.3.0 Flask-SQLAlchemy-2.3.2 Jinja2-2.10.1 MarkupSafe-1.1.1 PyMongo-3.7.2 PyMySQL-0.9.2 SQLAlchemy-1.3.4 Werkzeug-0.15.4 asn1crypto-0.24.0 c
cachetools-3.1.1 certifi-2019.6.16 cffi-1.12.3 chardet-3.0.4 click-7.0 colorlog-2.10.0 cryptography-2.7 google-api-core-1.11.1 google-auth-1.6.3 google-cloud-core-0.28.1 google-cloud-datasto
re-1.7.1 google-cloud-error-reporting-0.30.0 google-cloud-logging-1.8.0 google-cloud-pubsub-0.41.0 google-cloud-storage-1.13.0 google-resumable-media-0.3.2 googleapis-common-protos-1.6.0 gr
pc-google-iam-v1-0.11.4 grpcio-1.21.1 gunicorn-19.9.0 honcho-1.0.1 httplib2-0.13.0 idna-2.7 itsdangerous-1.1.0 mock-2.0.0 oauth2client-4.1.3 phr-5.3.0 protobuf-3.8.0 psq-0.7.0 pyOpenSSL-19
.0.0 pyasn1-0.4.5 pyasn1-modules-0.2.5 pyparser-2.19 pytz-2019.1 requests-2.20.1 rsa-4.0 six-1.11.0 urllib3-1.24.3
Removing intermediate container 0f1168d7da3
--> 438e463f1fa
Step 7/8 : ADD . /app
--> 438e463f1fa
Step 9/8 : CMD honcho start -f /app/profile $PROCESSES
--> Running in 19c467ed1228
Removing intermediate container 19c467ed1228
--> 630aad92017c
Successfully built 630aad92017c
Successfully tagged gcr.io/test2333/bookshelf:latest
SECURITY WARNING: You are building a Docker image from Windows against a non-Windows Docker host. All files and directories added to build context will have '-rw-r-xr-x' permissions. It is
recommended to double check and reset permissions for sensitive files and directories.
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>

```

```

Google Cloud SDK Shell

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>gcloud docker -- push gcr.io/test2333/bookshelf
WARNING: gcloud docker will not be supported for Docker client versions above 18.03.

As an alternative, use `gcloud auth configure-docker` to configure `docker` to
use `gcloud` as a credential helper, then use `docker` as you would for non-GCR
registries, e.g. `docker pull gcr.io/project-id/my-image`. Add
--verbosity=error to silence this warning: `gcloud docker
--verbosity=error -- pull gcr.io/project-id/my-image`.

See: https://cloud.google.com/container-registry/docs/support/deprecation-notices#gcloud-docker

The push refers to repository [gcr.io/test2333/bookshelf]
7ea219204638: Pushed
cbd9016831b5: Pushed
af193c501bf0: Pushed
0829bbf83de9: Pushed
6d38fa87bac4: Mounted from google-appengine/python
93f2bbca2238: Mounted from google-appengine/python
27fbfb8fa0c7: Mounted from google-appengine/python
253723c60a0d: Mounted from google-appengine/python
ede3dddee325: Mounted from google-appengine/python
8458e801e60d: Mounted from google-appengine/python
e85a63e99b02: Mounted from google-appengine/python
7b8596a9d912: Mounted from google-appengine/python
84ff92691f90: Mounted from google-appengine/python
9ef82f8bd1d: Mounted from google-appengine/python
af35fbeda945: Mounted from google-appengine/python
latest: digest: sha256:e84096e0c35935611fd2373a76c81af1d74923d8b9f70c3b0f4d5abf99d71e25 size: 3459

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>

```

```

apiVersion: extensions/v1beta1
kind: Deployment
metadata:
  name: bookshelf-frontend
  labels:
    app: bookshelf
# The bookshelf frontend replica set ensures that at least 3
# instances of the bookshelf app are running on the cluster.
# For more info about Pods see:
# https://cloud.google.com/kubernetes-engine/docs/pods/
spec:
  replicas: 3
  template:
    metadata:
      labels:
        app: bookshelf
        tier: frontend
    spec:
      containers:
      - name: bookshelf-app
        # Replace [GCP_PROJECT] with your project ID or use `make template`.
        image: gcr.io/test2333/bookshelf
        # This setting makes nodes pull the docker image every time before
        # starting the pod. This is useful when debugging, but should be turned
        # off in production.
        imagePullPolicy: Always

```

```

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>notepad bookshelf-frontend.yaml
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>notepad bookshelf-frontend.yaml
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>kubectctl create -f bookshelf-frontend.yaml
deployment.extensions/bookshelf-frontend created
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>kubectctl get deployments
NAME          DESIRED  CURRENT  UP-TO-DATE  AVAILABLE  AGE
bookshelf-frontend  3        3        3           0          12s
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>kubectctl get pods
NAME          READY  STATUS   RESTARTS  AGE
bookshelf-frontend-5df88d6ccc-48191  1/1    Running  0          60s
bookshelf-frontend-5df88d6ccc-7j8d6  1/1    Running  0          60s
bookshelf-frontend-5df88d6ccc-v4dl1  1/1    Running  0          60s
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>

```

```

bookshelf-worker.yaml - Notepad
File Edit Format View Help
# Copyright 2015 Google Inc.
#
# Licensed under the Apache License, Version 2.0 (the "License");
# you may not use this file except in compliance with the License.
# You may obtain a copy of the License at
#
# http://www.apache.org/licenses/LICENSE-2.0
#
# Unless required by applicable law or agreed to in writing, software
# distributed under the license is distributed on an "AS IS" BASIS,
# WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
# See the License for the specific language governing permissions and
# limitations under the License
#
# This file configures the bookshelf task worker. The worker is responsible
# for processing book requests and updating book information.

apiVersion: extensions/v1beta1
kind: Deployment
metadata:
  name: bookshelf-worker
  labels:
    app: bookshelf
# The bookshelf worker replica set ensures that at least 2 instances of the
# bookshelf worker pod are running on the cluster.
# For more info about Pods see:
# https://cloud.google.com/kubernetes-engine/docs/pods/
spec:
  replicas: 2
  template:
    metadata:
      labels:
        app: bookshelf
        tier: worker
    spec:
      containers:
      - name: bookshelf-app
        # Replace [GCP_PROJECT] with your project ID or use `make template`.
        image: gcr.io/test2333/bookshelf
        # This setting makes nodes pull the docker image every time before
        # starting the pod. This is useful when debugging, but should be turned
        # off in production.
        imagePullPolicy: Always

```

```
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>notepad bookshelf-worker.yaml

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>kubectl create -f bookshelf-worker.yaml
deployment.extensions/bookshelf-worker created

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
bookshelf-frontend-5df88d6ccc-48191 1/1     Running   0           2m48s
bookshelf-frontend-5df88d6ccc-7j8d6 1/1     Running   0           2m48s
bookshelf-frontend-5df88d6ccc-v4dl1 1/1     Running   0           2m48s
bookshelf-worker-5f8476d5d9-bd17c   1/1     Running   0           10s
bookshelf-worker-5f8476d5d9-tvjz2   1/1     Running   0           10s

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>
```

```
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>kubectl create -f bookshelf-service.yaml
service/bookshelf-frontend created

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>kubectl describe service bookshelf
Name:                                bookshelf-frontend
Namespace:                          default
Labels:                             app=bookshelf
                                     tier=frontend
Annotations:                         <none>
Selector:                           app=bookshelf,tier=frontend
Type:                                LoadBalancer
IP:                                  10.40.9.6
Port:                                <unset> 80/TCP
TargetPort:                         http-server/TCP
NodePort:                            <unset> 30561/TCP
Endpoints:                           10.36.0.5:8080,10.36.0.6:8080,10.36.1.9:8080
Session Affinity:                   None
External Traffic Policy:             Cluster
Events:
  Type           Reason              Age   From           Message
  ---           -
  Normal        EnsuringLoadBalancer 10s   service-controller Ensuring load balancer
```

Google Cloud SDK Shell

```
Normal EnsuringLoadBalancer 10s service-controller Ensuring load balancer

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>ping 10.40.9.6
Pinging 10.40.9.6 with 32 bytes of data:
Request timed out.

Ping statistics for 10.40.9.6:
    Packets: Sent = 1, Received = 0, Lost = 1 (100% loss),
    Control-C
C
D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>kubectl describe service bookshelf
Name:                                bookshelf-frontend
Namespace:                          default
Labels:                             app=bookshelf
                                     tier=frontend
Annotations:                         <none>
Selector:                           app=bookshelf,tier=frontend
Type:                                LoadBalancer
IP:                                  10.40.9.6
LoadBalancer Ingress:                35.233.143.94
Port:                                <unset> 80/TCP
TargetPort:                         http-server/TCP
NodePort:                            <unset> 30561/TCP
Endpoints:                           10.36.0.5:8080,10.36.0.6:8080,10.36.1.9:8080
Session Affinity:                   None
External Traffic Policy:             Cluster
Events:
  Type           Reason              Age   From           Message
  ---           -
  Normal        EnsuringLoadBalancer 13m   service-controller Ensuring load balancer
  Normal        EnsuredLoadBalancer 12m   service-controller Ensured load balancer

D:\Google\Cloud SDK\getting-started-python\optional-kubernetes-engine>
```

Bookshelf - Python on Google Cloud

35.233.143.94/bookshelf

Bookshelf Books

Books

+ Add book

No books found

Quotas and limits

- Release notes
- Frequently asked questions
- Launch checklist
- Migrating your VMs to Compute Engine

- On Windows 2008 R2, installing Python 2.7.9 or newer requires but we recommend installing the latest version.
- Compute Engine does not yet support IPv6. Even if you enable the setting is ignored.
- Once a new instance is created, you cannot connect to it in

