# 1. First install

## 1.1 Google Cloud compute engine configuration

1) Create compute engine of OS: Ubuntu 14.04 LTS

2) Login compute engine and change python version:

sudo rm /usr/bin/python

sudo ln -s /usr/bin/python3.4 /usr/bin/python

PATH=/usr/bin:$PATH

3) Install pip3:

sudo apt-get install python3-setuptools

sudo easy\_install3 pip

4) Install tensorflow:

pip3 install tensorflow

5) Install Flask:

pip3 install flask

6) Install unzip:

sudo apt-get install unzip

## 1.2 Google Cloud firewall rules

1) “VPC Network” -> “Firewall rules” -> “Create Firewall Rule”

2) Add your end-point IP to “Source IP ranges” and tcp:5000 to “Specified protocols and ports”

## 1.3 Start service

1) Upload “TransactionClassification\_NN.zip” to Google Cloud Compute Engine

2) Unzip it by “unzip TransactionClassification\_NN.zip”

3) Enter “TransactionClassification\_NN” directory and start service by python restService.py

## 1.4 Access service

1) Query category based on transaction description

Access type: POST

URL: {Google Cloud Compute Engine IP}:5000/getCategory

Input: {"title":"{description}"} e.g. {"title":"PTV"}

Input format: JSON

2) Add new training data

Access type: POST

URL: {Google Cloud Compute Engine IP}:5000/inputCategory

Input: {"title":"{description}", “category”:”{category}”}

e.g. {"title":"PTV", "category":"Transport"}

Input format: JSON

# 2. Update model

## 2.1 Re-generate training data

1) Update “category.json”

Add keywords into “tags” from different categories

2) Change the file name to “rawData.json” and re-generate training data

python genTrainData.py

## 2.2 Re-start service

python restService.py