ELToD Model on Google Container Engine

Quick Start Guide

Follow the instruction below to get your first model run on the Google Cloud Platform.

## Unzip the package to a folder

The destination folder is referred as [package folder] is this document.

## Set up local machine

You need to install two programs on your local machine: Node.js and Google Cloud SDK.

* Install Node.js : <https://nodejs.org/en/download/>
* Install Google Cloud SDK : <https://cloud.google.com/sdk/docs/>

## Set up Google Container Engine (GCE)

* Open a Google Account or sign in an existing one

<https://accounts.google.com/SignUp?hl=en>

* Create a project and enable billing

<https://cloud.google.com/billing/docs/how-to/modify-project>

Project name and id is “**dta-beta**”.

* Set up storage in the google cloud console https://console.cloud.google.com/
* Create “**eltod-beta**” bucket in the storage.
* Upload “**input**” folder from the [package folder] to the bucket.
* Upload “runlist.json” file from the [package folder] to the bucket.
* Create “**output**” folder in the bucket.
* Launch a command line window or PowerShell window and run “gcloud init”.

<https://cloud.google.com/sdk/gcloud/reference/init>

* Create Docker images
* Launch a command line window or PowerShell window and change the directory to the [package folder]/Dockerfile/main
* Run command “gcloud container builds submit --config cloudbuild.yaml .”.
* Change the directory to the [package folder]/Dockerfile/worker and run the command above again.

## Start model run

* Launch a command line window or PowerShell window and change the directory to the [package folder].
* Run command “node run.js”.
* The model run should finish in about 5 minutes.
* Check [package folder]/output/ folder for the result file.
* Make sure the container cluster is deleted in the cloud console to avoid any unintended charges from Google.