SimAtlas

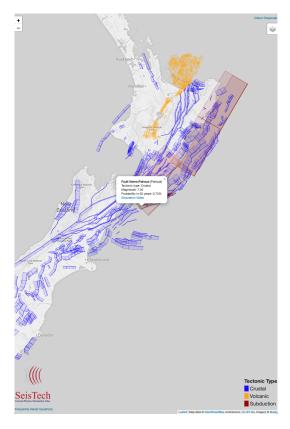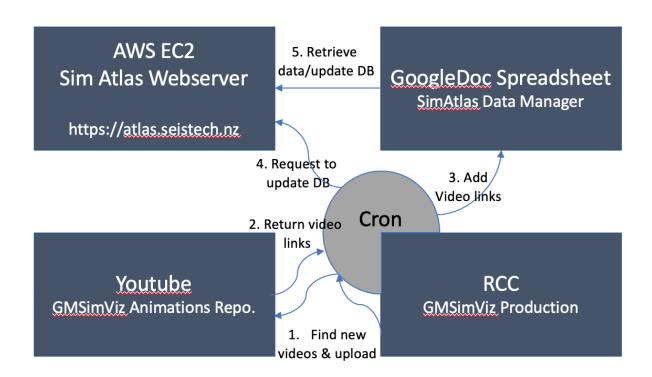## Architecture

Components

- SimAtlas Data Manager: GoogleDoc Spreadsheet (https://bit.ly/2YAmBap) that keeps all the info related to the faults shown in SimAtlas
- SimAtlas Webserver: Based on React(Frontend)+Flask(Backend, API) with Leaflet library. Code is hosted on 1p. (https://quakecoresoft. canterbury.ac.nz/sim_atlas/) Source code (https://github.com/ucgmsim/sim_atlas)
  - ○ React version is not deployed yet but once we go through a few staging versions, will eventually be replaced with the React one.
- Youtube: Hosting GMSimViz animations https://bit.ly/2E2mJ9d
- RCC: Virtual Linux host used for producing GMSimViz videos. (ssh rccuser 10.195.0.37)

Workflow

Data Management

One can add/edit the data at GoogleDoc spreadsheet directoy

GMSimViz

Each day, a few GMSimViz animations (1~5) are produced at RCC. (Jonney's background task)

Auto-Update

RCC has a cronjob installed that is triggered 8am daily, which fully-automatically executes all the 5 actions illustrated above.

Notes

1. Cronjobs are tricky to install if Python script is executed. Note that it will be "root" that runs the command. Be careful about PYTHONPATH. The following Cronjob entry was tested ok.

```
0 8 * * * cd /data/sim_atlas/upload && PYTHONPATH=/home/rccuser/.local/lib/python3.6/site-packages /usr
/bin/python add_video.py
```

2. Logs: The output from add_videos.py is `simatlas_manager.log` (in the same directory as add_videos.py)

```
2019-12-11 13:08:18,458: DEBUG: Uploading Pahaua
2019-12-11 13:08:35,069: DEBUG: out:Uploading file...
Success: https://www.youtube.com/watch?v=VOHSx8tqovo

2019-12-11 13:08:35,069: DEBUG: err:
2019-12-11 13:08:35,070: DEBUG: Pahaua: ['Success: https://www.youtube.com/watch?v=VOHSx8tqovo', '']
2019-12-11 13:08:35,070: DEBUG: Success: Pahaua uploaded: https://www.youtube.com/watch?v=VOHSx8tqovo
...
2019-12-11 13:08:36,342: DEBUG: Updated: faultname=Pahaua video=https://www.youtube.com/watch?
v=VOHSx8tqovo(G313) version=1(H313)
2019-12-11 13:09:06,868: DEBUG: Remotely updated SimAtlas DB: DB update success
```