도커 이미지 활용 시뮬레이션 실행

2021. 06. 24.

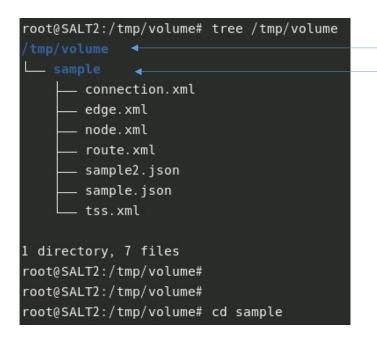
0. 이미지 저장소에서 이미지를 다운로드해 온다.

저장소 : https://hub.docker.com/

이미지 이름: images4uniq/salt:v2.1a.0622

```
root@SALT2:~# sudo docker pull images4uniq/salt:v2.1a.0622
v2.1a.0622: Pulling from images4unig/salt
345e3491a907: Already exists
57671312ef6f: Already exists
5e9250ddb7d0: Already exists
3aabc5395493: Pull complete
500f396b53a6: Pull complete
d437bd476f95: Pull complete
6e651e111103: Pull complete
ae197685a43f: Pull complete
162643343149: Pull complete
e46d63256097: Pull complete
c5dc226df4f7: Pull complete
de9c6c66daae: Pull complete
72958da5424a: Pull complete
84d9f52a81e4: Pull complete
e3cla681fe68: Pull complete
2c21c220886a: Pull complete
9210fc8893aa: Pull complete
b45c3218e2f8: Pull complete
1f7c5e27250d: Pull complete
842babf83e83: Pull complete
Digest: sha256:786ac2e7dd867fde687beb61156c0f7d3e706ea22f373eb740eaae9f23f9be32
Status: Downloaded newer image for images4unig/salt:v2.1a.0622
root@SALT2:~# ls
```

1. 연결할 디렉토리 내용 확인



마운트할 디렉토리 시나리오(데이터) 파일이 존재하는 디렉토리

실행 전이므로 Output 디렉토리가 존재하지 않는다.

2. 시뮬레이션 시나리오 파일

```
root@SALT2:/tmp/volume/sample# cat sample2.json
  "scenario": {
   "id": "sample",
   "time": {
     "begin": 0,
     "end": 7200
    "input": {
     "fileType": "SALT",
     "node": "node.xml",
     "link": "edge.xml",
     "connection": "connection.xml",
     "trafficLightSystem": "tss.xml",
      "route": "route.xml"
    "parameter": {
      "minCellLength": 30,
      "vehLength": 5
    "output": {
     "fileDir": "/uniq/simulator/salt/volume/output/sample/",
     "period": 3600,
     "level": "link",
      "save": 1
```

도커 이미지 상의 절대 경로로 설정

3. 도커 이미지 활용시뮬레이션 실행

마운트 /tmp/volume 을 이미지 상의 /unig/simulator/salt/volume 로 마운트

[%] docker run -v /tmp/volume:/uniq/simulator/salt/volume images4uniq/salt:v2.1a.0622 ./bin/salt-standalone ./volume/sample/sample2.json

상대 경로 이용

절대 경로 이용

[%] docker run -v /tmp/volume:/uniq/simulator/salt/volume images4uniq/salt:v2.1a.0622 /uniq/simulator/salt/bin/salt-standalone /uniq/simulator/salt/volume/sample/sample2.json

디렉토리 마운트

```
root@SALT2:/tmp/volume/sample# sudo docker run -v /tmp/volume:/uniq/simulator/salt/volume images4uniq/salt:v2.1a.0622 /uniq/simulator/salt/
bin/salt-standalone /uniq/simulator/salt/volume/sample/sample2.json
                                                                                                   이미지 이름
                                                                                                                             실행 파일
[SALT Simulator]
                                          인자
----Configuration File : /unig/simulator/salt/volume/sample/sample2.json
Loading Road Network ... done
Loading Vehicle Demand ... done
Loading Traffic Signal System ... done
[Simulation Output (Periodic)] >> /uniq/simulator/salt/volume/output/sample/sample-PeriodicOutput.csv
[Progress status] >> /unig/simulator/salt/volume/output/sample/progress.txt
-----Configuration Done-----
[Simulation Info]
Input
        -Simulation Name: sample
        -Road Network: /unig/simulator/salt/volume/sample/node.xml, /unig/simulator/salt/volume/sample/edge.xml, /unig/simulator/salt/volum
e/sample/connection.xml
        -Vehicle Demand: /uniq/simulator/salt/volume/sample/route.xml
        -Traffic Light System: /uniq/simulator/salt/volume/sample/tss.xml
        -Time Range: 0~7200
Output
        -Output Per Period: /uniq/simulator/salt/volume/output/sample/sample-PeriodicOutput.csv
[Simulation Start]
4% done
```

4. 실행 후 디렉토리 내용 확인

