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# -----
```

version: "2.1"

volumes:

poet-shared:

services:

shell:

image: hyperledger/sawtooth-shell:nightly

container\_name: sawtooth-shell-default

entrypoint: "bash -c \"

sawtooth keygen && \"

tail -f /dev/null \"

\"

validator-0:

image: hyperledger/sawtooth-validator:nightly

container\_name: sawtooth-validator-default-0

expose:

- 4004

- 5050

- 8800

volumes:

- poet-shared:/poet-shared

command: "bash -c \"

sawadm keygen --force && \"

mkdir -p /poet-shared/validator-0 || true && \"

cp -a /etc/sawtooth/keys /poet-shared/validator-0/ && \"

while [ ! -f /poet-shared/poet-enclave-measurement ]; do sleep 1; done && \"

```

while [ ! -f /poet-shared/poet-enclave-basename ]; do sleep 1; done && \
while [ ! -f /poet-shared/poet.batch ]; do sleep 1; done && \
cp /poet-shared/poet.batch / && \
sawset genesis \
  -k /etc/sawtooth/keys/validator.priv \
  -o config-genesis.batch && \
sawset proposal create \
  -k /etc/sawtooth/keys/validator.priv \
  sawtooth.consensus.algorithm.name=PoET \
  sawtooth.consensus.algorithm.version=0.1 \
  sawtooth.poet.report_public_key_pem=\
  \\\"$$$(cat /poet-shared/simulator_rk_pub.pem)\\\" \
  sawtooth.poet.valid_enclave_measurements=$$$(cat
/poet-shared/poet-enclave-measurement) \
  sawtooth.poet.valid_enclave_basenames=$$$(cat /poet-shared/poet-enclave-basename) \
  -o config.batch && \
sawset proposal create \
  -k /etc/sawtooth/keys/validator.priv \
  sawtooth.poet.target_wait_time=5 \
  sawtooth.poet.initial_wait_time=25 \
  sawtooth.publisher.max_batches_per_block=100 \
  -o poet-settings.batch && \
sawadm genesis \
  config-genesis.batch config.batch poet.batch poet-settings.batch && \
sawtooth-validator -v \
  --bind network:tcp://eth0:8800 \
  --bind component:tcp://eth0:4004 \
  --bind consensus:tcp://eth0:5050 \
  --peering static \
  --endpoint tcp://validator-0:8800 \
  --scheduler parallel \
  --network-auth trust

```

\"""

environment:

```

PYTHONPATH: "/project/sawtooth-core/consensus/poet/common:\
/project/sawtooth-core/consensus/poet/simulator:\
/project/sawtooth-core/consensus/poet/core"

```

stop\_signal: SIGKILL

validator-1:

```

image: hyperledger/sawtooth-validator:nightly
container_name: sawtooth-validator-default-1
expose:

```

- 4004
- 5050
- 8800

volumes:

- poet-shared:/poet-shared

command: |

```
bash -c "  
sawadm keygen --force && \  
mkdir -p /poet-shared/validator-1 || true && \  
cp -a /etc/sawtooth/keys /poet-shared/validator-1/ && \  
sawtooth-validator -v \  
  --bind network:tcp://eth0:8800 \  
  --bind component:tcp://eth0:4004 \  
  --bind consensus:tcp://eth0:5050 \  
  --peering static \  
  --endpoint tcp://validator-1:8800 \  
  --peers tcp://validator-0:8800 \  
  --scheduler parallel \  
  --network-auth trust  
"
```

environment:

```
PYTHONPATH: "/project/sawtooth-core/consensus/poet/common:\  
/project/sawtooth-core/consensus/poet/simulator:\br/>/project/sawtooth-core/consensus/poet/core"
```

stop\_signal: SIGKILL

validator-2:

image: hyperledger/sawtooth-validator:nightly

container\_name: sawtooth-validator-default-2

expose:

- 4004
- 5050
- 8800

volumes:

- poet-shared:/poet-shared

command: |

```
bash -c "  
sawadm keygen --force && \  
mkdir -p /poet-shared/validator-2 && \  
cp -a /etc/sawtooth/keys /poet-shared/validator-2/ && \  
sawtooth-validator -v \  
  --bind network:tcp://eth0:8800 \  
  --bind component:tcp://eth0:4004 \  
"
```

```
--bind consensus:tcp://eth0:5050 \  
--peering static \  
--endpoint tcp://validator-2:8800 \  
--peers tcp://validator-0:8800,tcp://validator-1:8800 \  
--scheduler parallel \  
--network-auth trust
```

"

environment:

```
PYTHONPATH: "/project/sawtooth-core/consensus/poet/common:\  
/project/sawtooth-core/consensus/poet/simulator:\br/>/project/sawtooth-core/consensus/poet/core"
```

stop\_signal: SIGKILL

validator-3:

image: hyperledger/sawtooth-validator:nightly

container\_name: sawtooth-validator-default-3

expose:

```
- 4004  
- 5050  
- 8800
```

volumes:

```
- poet-shared:/poet-shared
```

command: |

```
bash -c "
```

```
sawadm keygen --force && \  
mkdir -p /poet-shared/validator-3 && \  
cp -a /etc/sawtooth/keys /poet-shared/validator-3/ && \  
sawtooth-validator -v \  
--bind network:tcp://eth0:8800 \  
--bind component:tcp://eth0:4004 \  
--bind consensus:tcp://eth0:5050 \  
--peering static \  
--endpoint tcp://validator-3:8800 \  
--peers tcp://validator-0:8800,tcp://validator-1:8800,tcp://validator-2:8800 \  
--scheduler parallel \  
--network-auth trust
```

"

environment:

```
PYTHONPATH: "/project/sawtooth-core/consensus/poet/common:\br/>/project/sawtooth-core/consensus/poet/simulator:\br/>/project/sawtooth-core/consensus/poet/core"
```

stop\_signal: SIGKILL

validator-4:

image: hyperledger/sawtooth-validator:nightly

container\_name: sawtooth-validator-default-4

expose:

- 4004

- 5050

- 8800

volumes:

- poet-shared:/poet-shared

command: |

bash -c "

sawadm keygen --force && \

mkdir -p /poet-shared/validator-4 && \

cp -a /etc/sawtooth/keys /poet-shared/validator-4/ && \

sawtooth-validator -v \

--bind network:tcp://eth0:8800 \

--bind component:tcp://eth0:4004 \

--bind consensus:tcp://eth0:5050 \

--peering static \

--endpoint tcp://validator-4:8800 \

--peers

tcp://validator-0:8800,tcp://validator-1:8800,tcp://validator-2:8800,tcp://validator-3:8800 \

--scheduler parallel \

--network-auth trust

"

environment:

PYTHONPATH: "/project/sawtooth-core/consensus/poet/common:\

/project/sawtooth-core/consensus/poet/simulator:\

/project/sawtooth-core/consensus/poet/core"

stop\_signal: SIGKILL

rest-api-0:

image: hyperledger/sawtooth-rest-api:nightly

container\_name: sawtooth-rest-api-default-0

expose:

- 8008

command: |

bash -c "

sawtooth-rest-api \

--connect tcp://validator-0:4004 \

--bind rest-api-0:8008

"

stop\_signal: SIGKILL

rest-api-1:  
image: hyperledger/sawtooth-rest-api:nightly  
container\_name: sawtooth-rest-api-default-1  
expose:  
- 8008  
command: |  
bash -c "  
sawtooth-rest-api \  
--connect tcp://validator-1:4004 \  
--bind rest-api-1:8008  
"  
stop\_signal: SIGKILL

rest-api-2:  
image: hyperledger/sawtooth-rest-api:nightly  
container\_name: sawtooth-rest-api-default-2  
expose:  
- 8008  
command: |  
bash -c "  
sawtooth-rest-api \  
--connect tcp://validator-2:4004 \  
--bind rest-api-2:8008  
"  
stop\_signal: SIGKILL

rest-api-3:  
image: hyperledger/sawtooth-rest-api:nightly  
container\_name: sawtooth-rest-api-default-3  
expose:  
- 8008  
command: |  
bash -c "  
sawtooth-rest-api \  
--connect tcp://validator-3:4004 \  
--bind rest-api-3:8008  
"  
stop\_signal: SIGKILL

rest-api-4:  
image: hyperledger/sawtooth-rest-api:nightly  
container\_name: sawtooth-rest-api-default-4

expose:  
- 8008  
command: |  
bash -c "  
sawtooth-rest-api \  
--connect tcp://validator-4:4004 \  
--bind rest-api-4:8008  
"  
stop\_signal: SIGKILL

cryptoport-tp-0:  
image: cryptoport/cryptoport-python:chime  
container\_name: cryptoport-tp-python-default-0  
expose:  
- 4004  
entrypoint: cryptoport-tp-python -vv -C tcp://validator-0:4004

cryptoport-tp-1:  
image: cryptoport/cryptoport-python:chime  
container\_name: cryptoport-tp-python-default-1  
expose:  
- 4004  
entrypoint: cryptoport-tp-python -vv -C tcp://validator-1:4004

cryptoport-tp-2:  
image: cryptoport/cryptoport-python:chime  
container\_name: cryptoport-tp-python-default-2  
expose:  
- 4004  
entrypoint: cryptoport-tp-python -vv -C tcp://validator-2:4004

cryptoport-tp-3:  
image: cryptoport/cryptoport-python:chime  
container\_name: cryptoport-tp-python-default-3  
expose:  
- 4004  
entrypoint: cryptoport-tp-python -vv -C tcp://validator-3:4004

cryptoport-tp-4:  
image: cryptoport/cryptoport-python:chime  
container\_name: cryptoport-tp-python-default-4  
expose:  
- 4004

entrypoint: cryptoport-tp-python -vv -C tcp://validator-4:4004

settings-tp-0:

image: hyperledger/sawtooth-settings-tp:nightly  
container\_name: sawtooth-settings-tp-default-0  
expose:  
- 4004  
command: settings-tp -v -C tcp://validator-0:4004  
stop\_signal: SIGKILL

settings-tp-1:

image: hyperledger/sawtooth-settings-tp:nightly  
container\_name: sawtooth-settings-tp-default-1  
expose:  
- 4004  
command: settings-tp -v -C tcp://validator-1:4004  
stop\_signal: SIGKILL

settings-tp-2:

image: hyperledger/sawtooth-settings-tp:nightly  
container\_name: sawtooth-settings-tp-default-2  
expose:  
- 4004  
command: settings-tp -v -C tcp://validator-2:4004  
stop\_signal: SIGKILL

settings-tp-3:

image: hyperledger/sawtooth-settings-tp:nightly  
container\_name: sawtooth-settings-tp-default-3  
expose:  
- 4004  
command: settings-tp -v -C tcp://validator-3:4004  
stop\_signal: SIGKILL

settings-tp-4:

image: hyperledger/sawtooth-settings-tp:nightly  
container\_name: sawtooth-settings-tp-default-4  
expose:  
- 4004  
command: settings-tp -v -C tcp://validator-4:4004  
stop\_signal: SIGKILL

poet-engine-0:

image: hyperledger/sawtooth-poet-engine:nightly

container\_name: sawtooth-poet-engine-0

volumes:

- poet-shared:/poet-shared

command: "bash -c \"

```
if [ ! -f /poet-shared/poet-enclave-measurement ]; then \  
    poet enclave measurement >> /poet-shared/poet-enclave-measurement; \  
fi && \  
if [ ! -f /poet-shared/poet-enclave-basename ]; then \  
    poet enclave basename >> /poet-shared/poet-enclave-basename; \  
fi && \  
if [ ! -f /poet-shared/simulator_rk_pub.pem ]; then \  
    cp /etc/sawtooth/simulator_rk_pub.pem /poet-shared; \  
fi && \  
while [ ! -f /poet-shared/validator-0/keys/validator.priv ]; do sleep 1; done && \  
cp -a /poet-shared/validator-0/keys /etc/sawtooth && \  
poet registration create -k /etc/sawtooth/keys/validator.priv -o /poet-shared/poet.batch && \  
poet-engine -C tcp://validator-0:5050 --component tcp://validator-0:4004 \  
\"
```

poet-engine-1:

image: hyperledger/sawtooth-poet-engine:nightly

container\_name: sawtooth-poet-engine-1

volumes:

- poet-shared:/poet-shared

command: "bash -c \"

```
while [ ! -f /poet-shared/validator-1/keys/validator.priv ]; do sleep 1; done && \  
cp -a /poet-shared/validator-1/keys /etc/sawtooth && \  
poet-engine -C tcp://validator-1:5050 --component tcp://validator-1:4004 \  
\"
```

poet-engine-2:

image: hyperledger/sawtooth-poet-engine:nightly

container\_name: sawtooth-poet-engine-2

volumes:

- poet-shared:/poet-shared

command: "bash -c \"

```
while [ ! -f /poet-shared/validator-2/keys/validator.priv ]; do sleep 1; done && \  
cp -a /poet-shared/validator-2/keys /etc/sawtooth && \  
poet-engine -C tcp://validator-2:5050 --component tcp://validator-2:4004 \  
\"
```

poet-engine-3:

```
image: hyperledger/sawtooth-poet-engine:nightly
container_name: sawtooth-poet-engine-3
volumes:
  - poet-shared:/poet-shared
command: "bash -c \"\n  while [ ! -f /poet-shared/validator-3/keys/validator.priv ]; do sleep 1; done && \n  cp -a /poet-shared/validator-3/keys /etc/sawtooth && \n  poet-engine -C tcp://validator-3:5050 --component tcp://validator-3:4004 \n  \"\n"
```

poet-engine-4:

```
image: hyperledger/sawtooth-poet-engine:nightly
container_name: sawtooth-poet-engine-4
volumes:
  - poet-shared:/poet-shared
command: "bash -c \"\n  while [ ! -f /poet-shared/validator-4/keys/validator.priv ]; do sleep 1; done && \n  cp -a /poet-shared/validator-4/keys /etc/sawtooth && \n  poet-engine -C tcp://validator-4:5050 --component tcp://validator-4:4004 \n  \"\n"
```

poet-validator-registry-tp-0:

```
image: hyperledger/sawtooth-poet-validator-registry-tp:nightly
container_name: sawtooth-poet-validator-registry-tp-0
expose:
  - 4004
command: poet-validator-registry-tp -C tcp://validator-0:4004
environment:
  PYTHONPATH: /project/sawtooth-core/consensus/poet/common
stop_signal: SIGKILL
```

poet-validator-registry-tp-1:

```
image: hyperledger/sawtooth-poet-validator-registry-tp:nightly
container_name: sawtooth-poet-validator-registry-tp-1
expose:
  - 4004
command: poet-validator-registry-tp -C tcp://validator-1:4004
environment:
  PYTHONPATH: /project/sawtooth-core/consensus/poet/common
stop_signal: SIGKILL
```

poet-validator-registry-tp-2:

image: hyperledger/sawtooth-poet-validator-registry-tp:nightly  
container\_name: sawtooth-poet-validator-registry-tp-2  
expose:  
- 4004  
command: poet-validator-registry-tp -C tcp://validator-2:4004  
environment:  
PYTHONPATH: /project/sawtooth-core/consensus/poet/common  
stop\_signal: SIGKILL

poet-validator-registry-tp-3:

image: hyperledger/sawtooth-poet-validator-registry-tp:nightly  
container\_name: sawtooth-poet-validator-registry-tp-3  
expose:  
- 4004  
command: poet-validator-registry-tp -C tcp://validator-3:4004  
environment:  
PYTHONPATH: /project/sawtooth-core/consensus/poet/common  
stop\_signal: SIGKILL

poet-validator-registry-tp-4:

image: hyperledger/sawtooth-poet-validator-registry-tp:nightly  
container\_name: sawtooth-poet-validator-registry-tp-4  
expose:  
- 4004  
command: poet-validator-registry-tp -C tcp://validator-4:4004  
environment:  
PYTHONPATH: /project/sawtooth-core/consensus/poet/common  
stop\_signal: SIGKILL

api:

image: cryptoport/cryptoport-python:chime  
container\_name: cryptoport-api-default  
ports:  
- "5000:5000"  
#ports:  
# - "80:80"  
expose:  
- 8000  
stdin\_open: true  
tty: true  
entrypoint: cryptoport-api