이더리움 2.0 테스트넷
벨리데이터 되기
메달라 테스트넷

2020.8.5

Eth2 Launch Pad for Medalla testnet

ETH 2 런치패드를 이용한 Prysm 가입하기

Become a validator and help secure eth2.

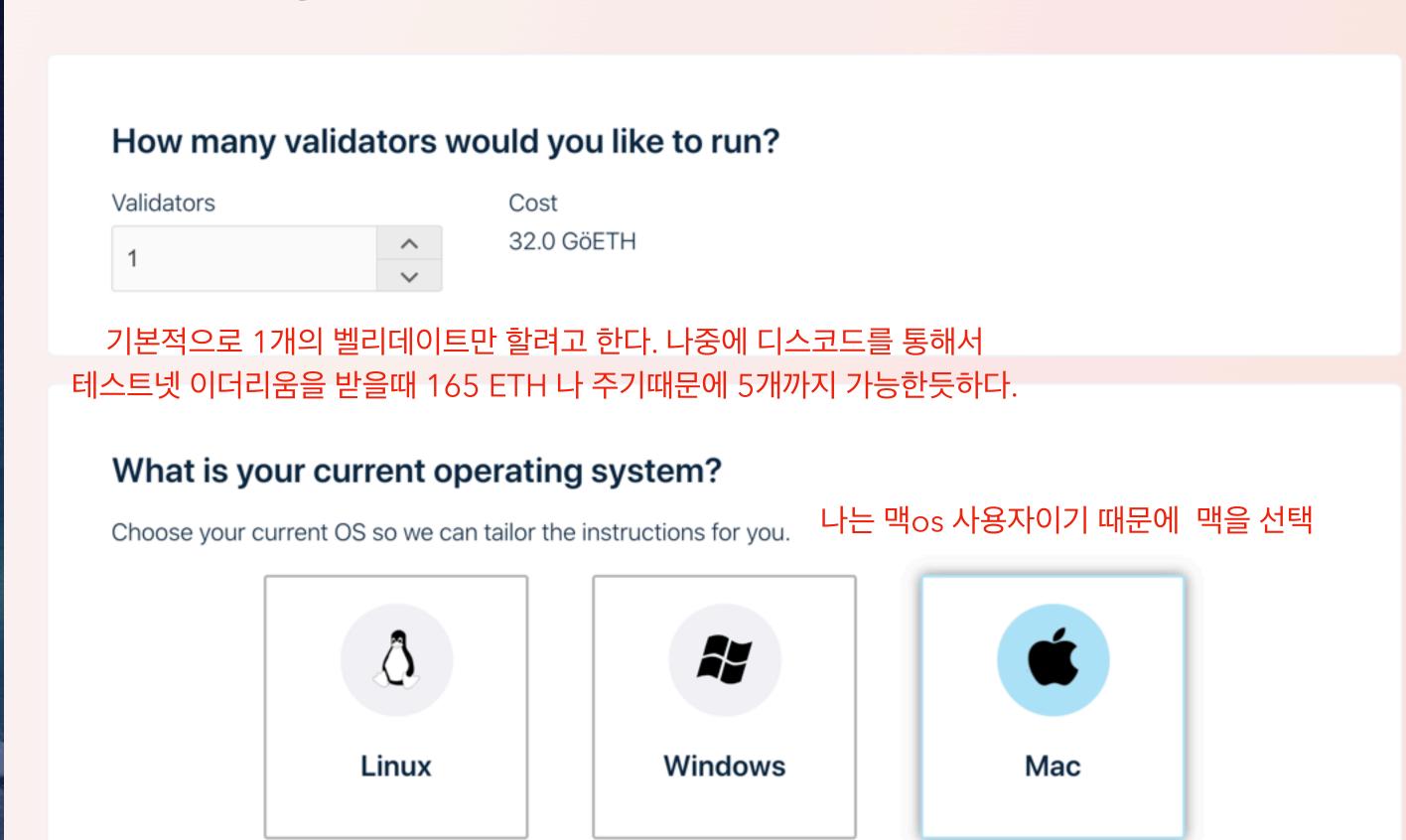Earn continuous payouts for providing a public good to the community.

GET STARTED

테스트넷 가입 고고싱

Introducing eth2 phase 0

Ethereum 2.0 uses proof-of-stake to secure its network.

For this, we need active participants - known as validators - to propose, verify, and vouch for the validity of blocks. In exchange, honest validators receive financial rewards.

Importantly, validators need to post GöETH as collateral - in other words, have some funds at stake. The only way to become a validator is to make a one-way GöETH transaction to the deposit contract on the current Ethereum chain.

Learn More >

첫번째로 이더리움 2.0 벨리데이터가 되기 위한 기본적인 개념과 안내사항 및 경고사항에 대해 설명해주는 것 같다 .

컨티뉴를 쭉 누르다 보면 다음 페이지로 넘어간다

Continue

Generate Key Pairs

How many validators would you like to run?

Validators

1	∧
	∨

Cost

32.0 GöETH

기본적으로 1개의 벨리데이트만 할려고 한다. 나중에 디스코드를 통해서
테스트넷 이더리움을 받을때 165 ETH 나 주기때문에 5개까지 가능한듯하다.

What is your current operating system?

Choose your current OS so we can tailor the instructions for you.

나는 맥os 사용자이기 때문에 맥을 선택

Linux

Windows

Mac

Option 1: Use binary executable file

Download the binary executable file

Please find the binary executable file of the latest deposit-cli release on ethereum/eth2.0-deposit-cli GitHub page for your platform.

이더리움 깃허브에서 제공하고 있는 이더리움을 예치시켜주는 deposit-cli 바이너리 실행 파일을 다운로드

Please make sure that you are downloading from Ethereum Foundation official GitHub account.

Generate deposit keys using the Ethereum Foundation deposit tool

Type the following lines into the terminal window:
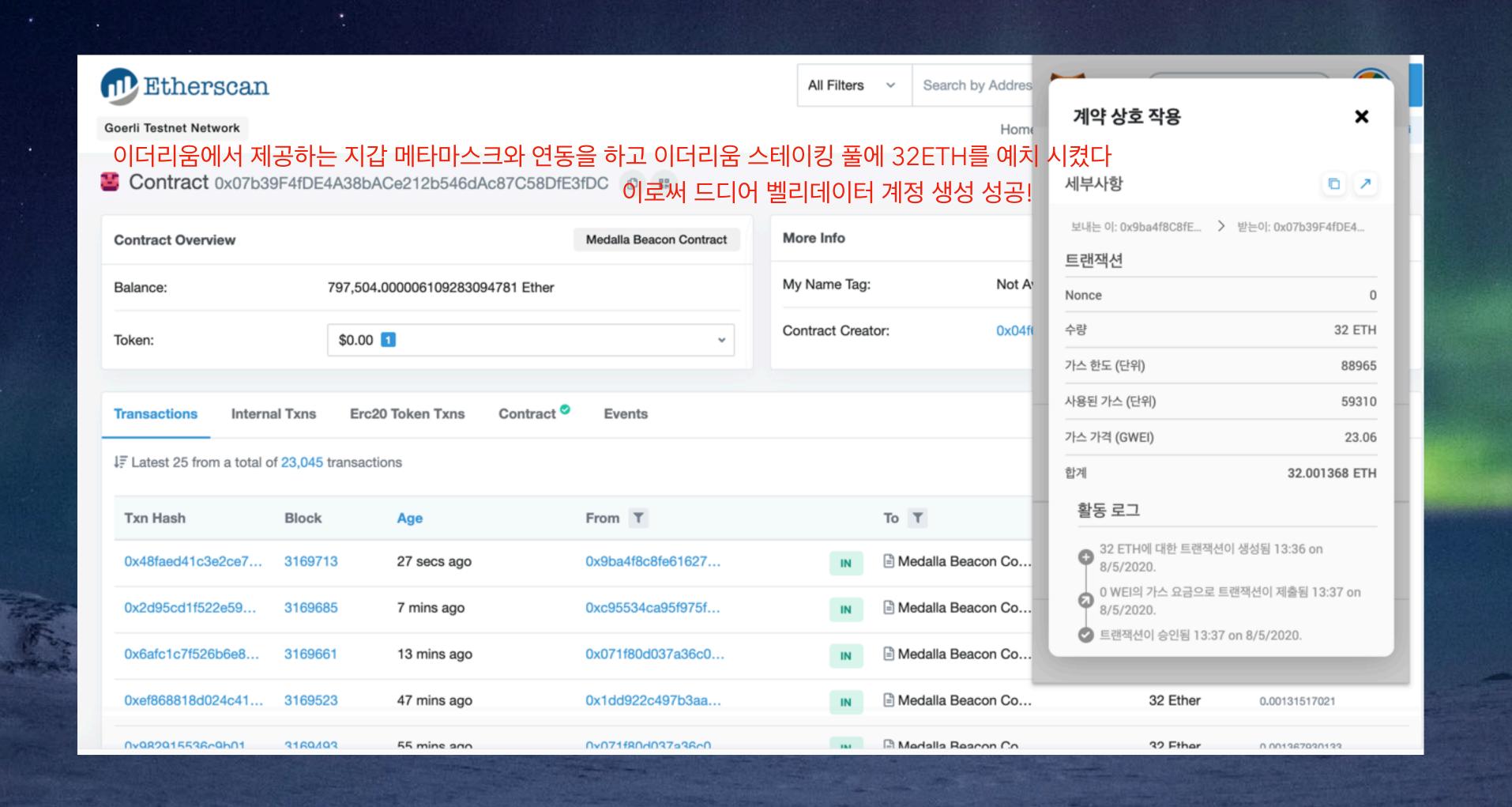
그다음 아래 명령어를 통해 키를 생성하자

```
./deposit --num_validators 1 --chain medalla
```

```
                ####        #####
              ##    ####      ##
          ###     ##   ######     #########################
         ##  ##     ####        ##                        ##
        ##    #####              ##                        ##
        ##     ##                 ##                       ###
    ########                       ##                      ####
    ##        ##  ###        #####                         #####
    #           ##          ##  ##                       # #####
    #            #          ##     #                     #  #####
    ##                     ##                  ##              ##
    ##                     ##                  ##              ##
    ##         ###         ##                  ##              ##
    ###############        ##                  ##              ##
    ###         ##                                            ##
       ##############################                        ##
                ##                                         ###
         #######           ##################           ###
           ##      ## ##          ##    ##     ###
              #############                #############
```

Creating your keys.
Saving your keystore(s).
Creating your deposit(s).
Verifying your keystore(s).
Verifying your deposit(s).

Success!
Your keys can be found at: /Users/gim-yeong-il/Desktop/eth2deposit-cli-de03fe3-darwin-amd64/validator_keys
정상적으로 키를 생성했다. 그나저나 저 코뿔소는 뭔지 모르겠다. 아마 이모닉과 관련이 있는걸까 .?

Press any key.

Etherscan

Goerli Testnet Network

🎃 Contract 0x07b39F4fDE4A38bACe212b546dAc87C58DfE3fDC

이더리움에서 제공하는 지갑 메타마스크와 연동을 하고 이더리움 스테이킹 풀에 32ETH를 예치 시켰다

이로써 드디어 벨리데이터 계정 생성 성공!

Contract Overview	Medalla Beacon Contract
Balance:	797,504.000006109283094781 Ether
Token:	$0.00 1

More Info

My Name Tag:	Not A...
Contract Creator:	0x04f...

계약 상호 작용 ✕

세부사항 📋 ↗

보내는 이: 0x9ba4f8C8fE... ＞ 받는이: 0x07b39F4fDE4...

트랜잭션

Nonce	0
수량	32 ETH
가스 한도 (단위)	88965
사용된 가스 (단위)	59310
가스 가격 (GWEI)	23.06
합계	32.001368 ETH

활동 로그

⊕ 32 ETH에 대한 트랜잭션이 생성됨 13:36 on 8/5/2020.

◉ 0 WEI의 가스 요금으로 트랜잭션이 제출됨 13:37 on 8/5/2020.

✓ 트랜잭션이 승인됨 13:37 on 8/5/2020.

Transactions   Internal Txns   Erc20 Token Txns   Contract ✅   Events

⬇ Latest 25 from a total of 23,045 transactions

Txn Hash	Block	Age	From		To	
0x48faed41c3e2ce7...	3169713	27 secs ago	0x9ba4f8c8fe61627...	IN	📄 Medalla Beacon Co...	
0x2d95cd1f522e59...	3169685	7 mins ago	0xc95534ca95f975f...	IN	📄 Medalla Beacon Co...	
0x6afc1c7f526b6e8...	3169661	13 mins ago	0x071f80d037a36c0...	IN	📄 Medalla Beacon Co...	
0xef868818d024c41...	3169523	47 mins ago	0x1dd922c497b3aa...	IN	📄 Medalla Beacon Co...	32 Ether	0.00131517021
0x982915536c9b01...	3169493	55 mins ago	0x071f80d037a36c0...	IN	📄 Medalla Beacon Co...	32 Ether	0.001367930133

```
gim-yeong-il@gim-yeong-il-ui-MacBookAir  ~/eth2.0-deposit-cli/validator_keys  docker run -it -v $HOME/eth2.0-deposit-cli/validator_keys:/keys \
  -v $HOME/Eth2Validators/prysm-wallet-v2:/wallet \
  -v $HOME/Eth2Validators/prysm-wallet-v2-passwords:/eth2passwords \
  gcr.io/prysmaticlabs/prysm/validator:latest \
  accounts-v2 import --keys-dir=/keys --wallet-dir=/wallet --passwords-dir=/eth2passwords
[2020-08-05 05:53:30]  INFO accounts-v2: (wallet directory) /wallet
Wallet password:
Enter the password for your imported accounts:
Importing accounts, this may take a while...
Wrong password entered, try again:
Incorrect password entered, please try again
Wrong password entered, try again: 이제 이더리움을 정상적으로 예치시킨 벨리데이터 계정과 docker 위에 구동시킨 비콘체인과 연결이다. 정상적으로 연결 완료!
Importing accounts... 100% [===========================================================] [49s:0s]
Successfully imported 1 accounts, view all of them by running accounts-v2 list
gim-yeong-il@gim-yeong-il-ui-MacBookAir  ~/eth2.0-deposit-cli/validator_keys  ✓  1515  14:54:55
```

```
gim-yeong-il@gim-yeong-il-ui-MacBookAir  ~/Desktop/eth2deposit-cli-de03fe3-darwin-amd64  docker run -it -v $HOME/.eth2:/data -p 4000:4000 -p 13000:13000 -p
 12000:12000/udp --name beacon-node \
  gcr.io/prysmaticlabs/prysm/beacon-chain:latest \
  --datadir=/data \
  --rpc-host=0.0.0.0 \  도커위에 비콘체인을 연결 및 구동. 아마 제네시스벨리데이터를 읽어오는걸 보니 모든 벨리데이터의 정보를 받아오는건가 보다.
  --monitoring-host=0.0.0.0
[2020-08-05 04:44:03]  INFO node: Checking DB database-path=/data/beaconchaindata
[2020-08-05 04:44:03]  WARN node: Using default ETH1 connection provided by Prysmatic Labs. Please consider running your own ETH1 node for better uptime, secu
rity, and decentralization of ETH2. Visit https://docs.prylabs.network/docs/prysm-usage/setup-eth1 for more information.
[2020-08-05 04:44:03]  INFO node: Starting beacon node version=Prysm/v1.0.0-alpha.18/ac0237e9cfbb6a66746fccde244feb91929ae4fd. Built at: 2020-08-05 02:14:50+0
0:00
[2020-08-05 04:44:03]  INFO blockchain: Waiting to reach the validator deposit threshold to start the beacon chain...
[2020-08-05 04:44:03]  INFO gateway: Starting JSON-HTTP API address=127.0.0.1:3500
[2020-08-05 04:44:03]  INFO rpc: RPC-API listening on port address=0.0.0.0:4000
[2020-08-05 04:44:03]  WARN rpc: You are using an insecure gRPC server. If you are running your beacon node and validator on the same machines, you can ignore
 this message. If you want to know how to enable secure connections, see: https://docs.prylabs.network/docs/prysm-usage/secure-grpc
[2020-08-05 04:44:05]  INFO powchain: Connected to eth1 proof-of-work chain endpoint=https://goerli.prylabs.net
[2020-08-05 04:45:54]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=512 genesisValidators=508
[2020-08-05 04:46:02]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=1024 genesisValidators=1020
[2020-08-05 04:46:28]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=1536 genesisValidators=1526
[2020-08-05 04:46:52]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=2048 genesisValidators=2037
[2020-08-05 04:47:01]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=2560 genesisValidators=2549
[2020-08-05 04:47:10]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=3072 genesisValidators=3055
[2020-08-05 04:47:54]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=3584 genesisValidators=3480
[2020-08-05 04:48:03]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=4096 genesisValidators=3992
[2020-08-05 04:49:19]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=4608 genesisValidators=4480
[2020-08-05 04:49:49]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=5120 genesisValidators=4980
[2020-08-05 04:50:14]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=5632 genesisValidators=5483
[2020-08-05 04:50:40]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=6144 genesisValidators=5994
[2020-08-05 04:50:50]  INFO powchain: Processing deposits from Ethereum 1 chain deposits=6656 genesisValidators=6506
```

```
st" \
    -v $HOME/Eth2Validators/prysm-wallet-v2-passwords:/eth2passwords \
    gcr.io/prysmaticlabs/prysm/validator:latest \
    --beacon-rpc-provider=127.0.0.1:4000 \
    --wallet-dir=/wallet \
    --passwords-dir=/eth2passwords
[2020-08-05 06:32:54]    INFO accounts-v2: (wallet directory) /wallet
Wallet password:
Wrong password entered, try again:
[2020-08-05 06:33:06]    INFO node: Validating for public key pubKey=0xb1df5c5bbdb8
[2020-08-05 06:33:06]    INFO node: Checking DB databasePath=/home/.eth2
[2020-08-05 06:33:06]    INFO node: Starting validator node version=Prysm/v1.0.0-alpha.18/ac0237e9cfbb6a66746fccde244feb91929
ae4fd. Built at: 2020-08-05 02:11:23+00:00
[2020-08-05 06:33:06]    WARN validator: You are using an insecure gRPC connection. If you are running your beacon node and v
alidator on the same machines, you can ignore this message. If you want to know how to enable secure connections, see: http
s://docs.prylabs.network/docs/prysm-usage/secure-grpc
[2020-08-05 06:33:06]    INFO validator: Waiting for beacon chain start log from the ETH 1.0 deposit contract
[2020-08-05 06:33:06]    INFO validator: Beacon chain started genesisTime=2020-08-04 13:00:08 +0000 UTC
[2020-08-05 06:33:12]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:33:18]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:33:24]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:33:30]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:33:36]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:33:42]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:33:48]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:33:54]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:34:00]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:34:06]    INFO validator: Waiting for beacon node to sync to latest chain head
[2020-08-05 06:34:12]    INFO validator: Waiting for beacon node to sync to latest chain head
9c7b9f374f75096949cdbe8b73f0
[2020-08-05 06:34:14]    INFO initial-sync: Block is not processed error=beacon node doesn't have a block in db with root 0xeaaf96554708f65d5261fe6dfadce8898ff1
b4c501354847011d3c33cae8951d
[2020-08-05 06:34:14]    INFO initial-sync: Block is not processed error=beacon node doesn't have a block in db with root 0x93fb5cd48e8ca805c57776e183c77338fb79
0fd57fb8bcd6f984085731fa2c62
[2020-08-05 06:34:14]    INFO initial-sync: Block is not processed error=beacon node doesn't have a block in db with root 0xb8fefc28f542091328f974225665b57580fc
d87fe2ba76939855eba1d46fe048
[2020-08-05 06:34:14]    INFO initial-sync: Block is not processed error=beacon node doesn't have a block in db with root 0xf284360508003fce03ce4ce57a7a3865e503
fa64aed8c720920d6995b9a6642b
[2020-08-05 06:34:14]    INFO initial-sync: Processing block 0x952aa2f1... 1536/5270 - estimated time remaining 2m50s blocksPerSecond=21.9 peers=17
[2020-08-05 06:34:14]    INFO initial-sync: Block is not processed error=beacon node doesn't have a block in db with root 0xd1cdef5cac2cbf956dd631aad577947c5186
2dda80255c9136cc43c6b9ab2b72
[2020-08-05 06:34:14]    INFO initial-sync: Block is not processed error=beacon node doesn't have a block in db with root 0x952aa2f1663a80123c035e82002a15bef36d
0020a0e86b532825dc48ab3239bb
[2020-08-05 06:34:14]    INFO initial-sync: Block is not processed error=beacon node doesn't have a block in db with root 0xa16e1a099c20540a763b32b64279097f15a9
16fca3d65aa99f2d4ca6c509c0ce
```

doesn't have a block in db with root 0x55b202d4bf6953b856f8d8f93f396245822c

doesn't have a block in db with root 0x1701cdad67779ae9dff533760700e12a6f4b

doesn't have a block in db with root 0x1e90cef6b5bdae3c391e846581c153d8a542

doesn't have a block in db with root 0x0ba99105ca50421df54a4522dca744d6ae71

doesn't have a block in db with root 0xb233f7a3ec64f39a5362ee39038bdf95665f

doesn't have a block in db with root 0x018764e42b4731c43f2f5c0c40df341189d8

doesn't have a block in db with root 0xf076c8d6ed45c41af54bd35286d83e43bd4f

doesn't have a block in db with root 0x5548839c5f7fa8c28df84ce3c9effb1f2608

doesn't have a block in db with root 0x8edaf3deee7373577c597cdf04c097aaaf56

doesn't have a block in db with root 0xfb79b7971f5e15c16a0b6bc65311e469c002

doesn't have a block in db with root 0x05ce0f3c89b4de4ced215690dc8c3b1f15c9

터미널 2개를 열고 도커위에 비콘체인과
밸리데이터 계정을 연동!

헤더블록을
따라가는중
그나저나 벌써
5270개나 생성이
되있었다.

헤더블록을 다 따라가고 나면 드디어 정상적으로 블록을 검증하기 시작한다

```
[2020-08-05 07:00:33]  INFO blockchain: Synced new block block=0xa2d4a1d5... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5381
[2020-08-05 07:00:33]  INFO blockchain: Finished applying state transition attestations=7 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:33]  INFO blockchain: Synced new block block=0x151c70ec... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5382
[2020-08-05 07:00:33]  INFO blockchain: Finished applying state transition attestations=72 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:33]  INFO blockchain: Synced new block block=0xa445ccdd... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5383
[2020-08-05 07:00:33]  INFO blockchain: Finished applying state transition attestations=27 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:34]  INFO blockchain: Synced new block block=0x21177040... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5385
[2020-08-05 07:00:34]  INFO blockchain: Finished applying state transition attestations=23 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:34]  INFO blockchain: Synced new block block=0xaf3b5dfb... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5386
[2020-08-05 07:00:34]  INFO blockchain: Finished applying state transition attestations=70 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:34]  INFO blockchain: Synced new block block=0x0476a74e... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5387
[2020-08-05 07:00:34]  INFO blockchain: Finished applying state transition attestations=31 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:35]  INFO blockchain: Synced new block block=0x3ebc48cb... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5388
[2020-08-05 07:00:35]  INFO blockchain: Finished applying state transition attestations=86 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:35]  INFO blockchain: Synced new block block=0x7e6dd0c5... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5389
[2020-08-05 07:00:35]  INFO blockchain: Finished applying state transition attestations=71 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:36]  INFO blockchain: Synced new block block=0xe7832a9b... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5390
[2020-08-05 07:00:36]  INFO blockchain: Finished applying state transition attestations=52 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:36]  INFO blockchain: Synced new block block=0x253cd86e... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5392
[2020-08-05 07:00:36]  INFO blockchain: Finished applying state transition attestations=78 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:37]  INFO blockchain: Synced new block block=0x125fc470... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5393
[2020-08-05 07:00:37]  INFO blockchain: Finished applying state transition attestations=38 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:37]  INFO blockchain: Synced new block block=0xc8cb08a5... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5394
[2020-08-05 07:00:37]  INFO blockchain: Finished applying state transition attestations=9 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:37]  INFO blockchain: Synced new block block=0xab78f81f... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5395
[2020-08-05 07:00:37]  INFO blockchain: Finished applying state transition attestations=99 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:38]  INFO blockchain: Synced new block block=0x024fec96... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5396
[2020-08-05 07:00:38]  INFO blockchain: Finished applying state transition attestations=38 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:38]  INFO blockchain: Synced new block block=0x38fa39d9... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5397
[2020-08-05 07:00:38]  INFO blockchain: Finished applying state transition attestations=52 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:38]  INFO blockchain: Synced new block block=0x6dd8b896... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5398
[2020-08-05 07:00:38]  INFO blockchain: Finished applying state transition attestations=55 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:39]  INFO blockchain: Synced new block block=0xaeb3bcdd... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5399
[2020-08-05 07:00:39]  INFO blockchain: Finished applying state transition attestations=41 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:39]  INFO blockchain: Synced new block block=0x550b4d1d... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5400
[2020-08-05 07:00:39]  INFO blockchain: Finished applying state transition attestations=90 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:00:40]  INFO blockchain: Synced new block block=0x76a74bed... epoch=168 finalizedEpoch=166 finalizedRoot=0xf3d7face... slot=5401
[2020-08-05 07:00:40]  INFO blockchain: Finished applying state transition attestations=126 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=
```

```
0
[2020-08-05 07:02:21]    INFO blockchain: Synced new block block=0xc178f734... epoch=169 finalizedEpoch=167 finalizedRoot=0xe83dcb4d... slot=5411
[2020-08-05 07:02:21]    INFO blockchain: Finished applying state transition attestations=61 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:02:32]    INFO blockchain: Synced new block block=0xed325a5e... epoch=169 finalizedEpoch=167 finalizedRoot=0xe83dcb4d... slot=5412
[2020-08-05 07:02:32]    INFO blockchain: Finished applying state transition attestations=8 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:02:36]    INFO p2p: Peer disconnected activePeers=29 multiAddr=/ip4/139.162.130.179/tcp/9000/p2p/16Uiu2HAm48cEap5ihnzYSHP8C4Xta7GLtkjE2rQkm5poyhw
ayWte
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=dfe7b7e98cfa pendingAttsCount=7
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=51dae6e6b967 pendingAttsCount=3
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=3b178089c025 pendingAttsCount=9
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=a445ccdd5fc3 pendingAttsCount=3
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=2b930c5a1bbd pendingAttsCount=4
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=0e3e34eb1f49 pendingAttsCount=3
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=59a307e57e1c pendingAttsCount=4
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=48abe3693e6e pendingAttsCount=4
[2020-08-05 07:02:43]    INFO sync: Verified and saved pending attestations to pool blockRoot=b1f433c1efc7 pendingAttsCount=1
[2020-08-05 07:02:44]    INFO sync: Verified and saved pending attestations to pool blockRoot=6dd8b896bee0 pendingAttsCount=22
[2020-08-05 07:02:44]    INFO sync: Verified and saved pending attestations to pool blockRoot=151c70ec5944 pendingAttsCount=1
[2020-08-05 07:02:44]    INFO sync: Verified and saved pending attestations to pool blockRoot=c8cb08a563ea pendingAttsCount=8
[2020-08-05 07:02:44]    INFO blockchain: Synced new block block=0x129ba317... epoch=169 finalizedEpoch=167 finalizedRoot=0xe83dcb4d... slot=5413
[2020-08-05 07:02:44]    INFO blockchain: Finished applying state transition attestations=14 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=0
[2020-08-05 07:02:44]    INFO sync: Verified and saved pending attestations to pool blockRoot=024fec9612c8 pendingAttsCount=26
[2020-08-05 07:02:45]    INFO sync: Verified and saved pending attestations to pool blockRoot=0d305620ecb9 pendingAttsCount=3
[2020-08-05 07:02:45]    INFO sync: Verified and saved pending attestations to pool blockRoot=3ebc48cbeefc pendingAttsCount=8
[2020-08-05 07:02:45]    INFO sync: Verified and saved pending attestations to pool blockRoot=0476a74ee3be pendingAttsCount=5
[2020-08-05 07:02:45]    INFO sync: Verified and saved pending attestations to pool blockRoot=2117704046ac pendingAttsCount=2
[2020-08-05 07:02:45]    INFO sync: Verified and saved pending attestations to pool blockRoot=af3b5dfb47f9 pendingAttsCount=1
[2020-08-05 07:02:45]    INFO sync: Verified and saved pending attestations to pool blockRoot=aeb3bcdd8333 pendingAttsCount=25
[2020-08-05 07:02:46]    INFO sync: Verified and saved pending attestations to pool blockRoot=ab78f81fd38f pendingAttsCount=8
[2020-08-05 07:02:46]    INFO sync: Verified and saved pending attestations to pool blockRoot=e7832a9bef0e pendingAttsCount=4
[2020-08-05 07:02:47]    INFO sync: Verified and saved pending attestations to pool blockRoot=76a74bedc015 pendingAttsCount=33
[2020-08-05 07:02:47]    INFO sync: Verified and saved pending attestations to pool blockRoot=a2d4a1d52350 pendingAttsCount=1
[2020-08-05 07:02:47]    INFO sync: Verified and saved pending attestations to pool blockRoot=38fa39d9cb13 pendingAttsCount=22
[2020-08-05 07:02:47]    INFO sync: Verified and saved pending attestations to pool blockRoot=550b4d1d63d2 pendingAttsCount=20
[2020-08-05 07:02:51]    INFO p2p: Peer connected activePeers=30 direction=Outbound multiAddr=/ip4/35.195.233.219/tcp/9000/p2p/16Uiu2HAmQ1hzhHaF9BCqPs3hScEpsZFF
71KoXycnJLNG9cWrr29S
[2020-08-05 07:02:58]    INFO blockchain: Synced new block block=0xb722026a... epoch=169 finalizedEpoch=167 finalizedRoot=0xe83dcb4d... slot=5414
[2020-08-05 07:02:58]    INFO blockchain: Finished applying state transition attestations=119 attesterSlashings=0 deposits=0 proposerSlashings=0 voluntaryExits=
```

블록 생성중 특이한 경우가 생겼다
아마 블록을 최종적으로 결정하기
위해 벨리데이터 풀에 블록을 저장
하는 순간인가 보다 .
즉 Finality 단계인듯.