

"1"

```
Last login: Wed Dec 22 11:26:41 on ttys000
(base) shrouq@MacBook-Air-S ~ % cd Desktop
(base) shrouq@MacBook-Air-S Desktop % cd Demo
(base) shrouq@MacBook-Air-S Demo % ./geth --datadir ./node1 account new

INFO [12-22|11:43:26.784] Maximum peer count           ETH=50 LES=0 total=50
Your new account is locked with a password. Please give a password. Do not forget this password.
Password:
Repeat password:
[Your new key was generated

Public address of the key: 0x1382d457131429784660A828d6F29Fc4E7bB0142
Path of the secret key file: node1/keystore/UTC--2021-12-22T08-43-28.599927000Z--1382d457131429784660a828d6f29fc4e7bb0142

- You can share your public address with anyone. Others need it to interact with you.
- You must NEVER share the secret key with anyone! The key controls access to your funds!
- You must BACKUP your key file! Without the key, it's impossible to access account funds!
- You must REMEMBER your password! Without the password, it's impossible to decrypt the key!

(base) shrouq@MacBook-Air-S Demo % ./geth --datadir ./node2 account new

INFO [12-22|11:43:51.664] Maximum peer count           ETH=50 LES=0 total=50
Your new account is locked with a password. Please give a password. Do not forget this password.
Password:
Repeat password:
[Your new key was generated

Public address of the key: 0xc4f27c6fb6Fc8F33073A731f4Fcde5bf4e33121a
Path of the secret key file: node2/keystore/UTC--2021-12-22T08-43-53.019000000Z--c4f27c6fb6fc8f33073a731f4fcde5bf4e33121a

- You can share your public address with anyone. Others need it to interact with you.
- You must NEVER share the secret key with anyone! The key controls access to your funds!
- You must BACKUP your key file! Without the key, it's impossible to access account funds!
- You must REMEMBER your password! Without the password, it's impossible to decrypt the key!

(base) shrouq@MacBook-Air-S Demo % ./geth --datadir ./node3 account new

INFO [12-22|11:44:15.443] Maximum peer count           ETH=50 LES=0 total=50
Your new account is locked with a password. Please give a password. Do not forget this password.
Password:
Repeat password:
[Your new key was generated

Public address of the key: 0x70DB617A154F0FF794fa33311f2e8426D29A8977
Path of the secret key file: node3/keystore/UTC--2021-12-22T08-44-18.017124000Z--70db617a154f0ff794fa33311f2e8426d29a8977

- You can share your public address with anyone. Others need it to interact with you.
- You must NEVER share the secret key with anyone! The key controls access to your funds!
- You must BACKUP your key file! Without the key, it's impossible to access account funds!
- You must REMEMBER your password! Without the password, it's impossible to decrypt the key!
```

```
(base) shrouq@MacBook-Air-S Demo % ./puppeth
+-----+
| Welcome to puppeth, your Ethereum private network manager |
| |
| This tool lets you create a new Ethereum network down to |
| the genesis block, bootnodes, miners and ethstats servers |
| without the hassle that it would normally entail. |
| |
| Puppeth uses SSH to dial in to remote servers, and builds |
| its network components out of Docker containers using the |
| docker-compose toolset. |
+-----+

Please specify a network name to administer (no spaces, hyphens or capital letters please)
> shrouq

Sweet, you can set this via --network=shrouq next time!

INFO [12-22|11:45:11.515] Administering Ethereum network      name=shrouq
INFO [12-22|11:45:11.519] No remote machines to gather stats from

What would you like to do? (default = stats)
1. Show network stats
2. Manage existing genesis
3. Track new remote server
4. Deploy network components
> 2

1. Modify existing configurations
2. Export genesis configurations
3. Remove genesis configuration
> 3
INFO [12-22|11:48:55.722] Genesis block destroyed

What would you like to do? (default = stats)
1. Show network stats
2. Configure new genesis
3. Track new remote server
4. Deploy network components
> 2

What would you like to do? (default = create)
1. Create new genesis from scratch
2. Import already existing genesis
> 1

Which consensus engine to use? (default = clique)
1. Ethash - proof-of-work
2. Clique - proof-of-authority
> 2

How many seconds should blocks take? (default = 15)
>
```

"2"

Demo — puppeth — 173x39



```
How many seconds should blocks take? (default = 15)
[> ]]

Which accounts are allowed to seal? (mandatory at least one)
[> 0x1382d457131429784660A828d6F29Fc4E7bB0142
> 0xc4f27c6fb6Fc8F33073A731f4FcdE5bF4e33121A
> 0x70DB617A154F0FF794fa33311f2E8426D29A8977
[> 0x
[

[Which accounts should be pre-funded? (advisable at least one)
[> 0x1382d457131429784660A828d6F29Fc4E7bB0142
> 0xc4f27c6fb6Fc8F33073A731f4FcdE5bF4e33121A
> 0x70DB617A154F0FF794fa33311f2E8426D29A8977
[> 0x66D63Ee5191683564240EE02D10810582DdE31aB
[> 0x
[

[Should the precompile-addresses (0x1 .. 0xff) be pre-funded with 1 wei? (advisable yes)
[> no

Specify your chain/network ID if you want an explicit one (default = random)
[> 1315
INFO [12-22|11:56:21.519] Configured new genesis block

[What would you like to do? (default = stats)
1. Show network stats
2. Manage existing genesis
3. Track new remote server
4. Deploy network components
> ^C
>
INFO [12-22|11:57:06.315] No remote machines to gather stats from
[

[What would you like to do? (default = stats)
1. Show network stats
2. Manage existing genesis
3. Track new remote server
4. Deploy network components
> ]]
```

"3"

```
Last login: Wed Dec 22 11:42:18 on ttys000
[(base) shrouq@MacBook-Air-S ~ % cd Desktop
[(base) shrouq@MacBook-Air-S Desktop % cd Demo
[(base) shrouq@MacBook-Air-S Demo % ./puppeth
+-----+
| Welcome to puppeth, your Ethereum private network manager |
| This tool lets you create a new Ethereum network down to |
| the genesis block, bootnodes, miners and ethstats servers |
| without the hassle that it would normally entail. |
|
| Puppeth uses SSH to dial in to remote servers, and builds |
| its network components out of Docker containers using the |
| docker-compose toolset. |
+-----+
Please specify a network name to administer (no spaces, hyphens or capital letters please)
> shrouq
[
Sweet, you can set this via --network=shrouq next time!

INFO [12-22|12:01:05.779] Administering Ethereum network      name=shrouq
INFO [12-22|12:01:05.783] No remote machines to gather stats from

What would you like to do? (default = stats)
1. Show network stats
2. Manage existing genesis
3. Track new remote server
4. Deploy network components
> 2
[
1. Modify existing configurations
2. Export genesis configurations
3. Remove genesis configuration
> 3
[INFO [12-22|12:01:33.751] Genesis block destroyed

What would you like to do? (default = stats)
1. Show network stats
2. Configure new genesis
3. Track new remote server
4. Deploy network components
> 2
[
What would you like to do? (default = create)
1. Create new genesis from scratch
2. Import already existing genesis
> 1
[
```

"4"

```
What would you like to do? (default = create)
 1. Create new genesis from scratch
 2. Import already existing genesis
> 1
[ Which consensus engine to use? (default = clique)
 1. Ethash - proof-of-work
 2. Clique - proof-of-authority
> 2
[ How many seconds should blocks take? (default = 15)
>
[ Which accounts are allowed to seal? (mandatory at least one)
> 0x1382d457131429784660A828d6F29Fc4E7bB0142
[> 0xc4f27c6fb6Fc8F33073A731f4Fcde5bf4e33121A
[> 0x70DB617A154F0FF794fa33311f2E8426D29A8977
[> 0x
[ Which accounts should be pre-funded? (advisable at least one)
> 0x1382d457131429784660A828d6F29Fc4E7bB0142
[> 0xc4f27c6fb6Fc8F33073A731f4Fcde5bf4e33121A
[> 0x70DB617A154F0FF794fa33311f2E8426D29A8977
[> 0x66D63Ee5191683564240EE02D10810582DdE31aB
[> 0x
[ Should the precompile-addresses (0x1 .. 0xff) be pre-funded with 1 wei? (advisable yes)
> no

[Specify your chain/network ID if you want an explicit one (default = random)
> 1315
INFO [12-22|12:04:32.892] Configured new genesis block
[ What would you like to do? (default = stats)
 1. Show network stats
 2. Manage existing genesis
 3. Track new remote server
 4. Deploy network components
> 2
[ 1. Modify existing configurations
 2. Export genesis configurations
 3. Remove genesis configuration
> 2

[Which folder to save the genesis specs into? (default = current)
  Will create shrouq.json, shrouq-aleth.json, shrouq-harmony.json, shrouq-parity.json
>
INFO [12-22|12:06:07.389] Saved native genesis chain spec      path=shrouq.json
ERROR[12-22|12:06:07.390] Failed to create Aleth chain spec    err="unsupported consensus engine"
[ERROR[12-22|12:06:07.390] Failed to create Parity chain spec   err="unsupported consensus engine"
INFO [12-22|12:06:07.391] Saved genesis chain spec            client=harmony path=shrouq-harmony.json
```

"5"

Demo — puppeth — 130x30



"6"

```
S > 2
>
I[ 1. Modify existing configurations
N 2. Export genesis configurations
N 3. Remove genesis configuration
> 2

[Which folder to save the genesis specs into? (default = current)
 Will create shrouq.json, shrouq-aleth.json, shrouq-harmony.json, shrouq-parity.json
>
INFO [12-22|12:06:07.389] Saved native genesis chain spec
ERROR[12-22|12:06:07.390] Failed to create Aleth chain spec
[ERROR[12-22|12:06:07.390] Failed to create Parity chain spec
INFO [12-22|12:06:07.391] Saved genesis chain spec
path=shrouq.json
err="unsupported consensus engine"
err="unsupported consensus engine"
client=harmony path=shrouq-harmony.json

What would you like to do? (default = stats)
1. Show network stats
2. Manage existing genesis
3. Track new remote server
4. Deploy network components
> ^C
>
INFO [12-22|12:06:53.598] No remote machines to gather stats from

What would you like to do? (default = stats)
1. Show network stats
2. Manage existing genesis
3. Track new remote server
4. Deploy network components
>
```

Demo — geth --datadir node1 --unlock 1382d457131429784660A828d6F29Fc4E7bB0142 --mine --http --allow-insecure-unlock — 177x36



"7"

```
Last login: Wed Dec 22 11:57:22 on ttys001
[(base) shrouq@MacBook-Air-S ~ % cd Desktop
[(base) shrouq@MacBook-Air-S Desktop % cd Demo
[(base) shrouq@MacBook-Air-S Demo % ./geth init --datadir node1 shrouq.json
INFO [12-22|12:11:35.021] Maximum peer count
INFO [12-22|12:11:35.025] Set global gas cap
INFO [12-22|12:11:35.026] Allocated cache and file handles
INFO [12-22|12:11:35.112] Writing custom genesis block
INFO [12-22|12:11:35.115] Persisted trie from memory database
INFO [12-22|12:11:35.116] Successfully wrote genesis state
INFO [12-22|12:11:35.116] Allocated cache and file handles
INFO [12-22|12:11:35.192] Writing custom genesis block
INFO [12-22|12:11:35.192] Persisted trie from memory database
INFO [12-22|12:11:35.193] Successfully wrote genesis state
(base) shrouq@MacBook-Air-S Demo % ./geth init --datadir node2 shrouq.json
INFO [12-22|12:12:29.019] Maximum peer count
INFO [12-22|12:12:29.023] Set global gas cap
INFO [12-22|12:12:29.024] Allocated cache and file handles
INFO [12-22|12:12:29.106] Writing custom genesis block
INFO [12-22|12:12:29.108] Persisted trie from memory database
INFO [12-22|12:12:29.109] Successfully wrote genesis state
INFO [12-22|12:12:29.109] Allocated cache and file handles
INFO [12-22|12:12:29.184] Writing custom genesis block
INFO [12-22|12:12:29.185] Persisted trie from memory database
[INFO [12-22|12:12:29.185] Successfully wrote genesis state
(base) shrouq@MacBook-Air-S Demo % ./geth init --datadir node3 shrouq.json
INFO [12-22|12:12:36.583] Maximum peer count
INFO [12-22|12:12:36.585] Set global gas cap
INFO [12-22|12:12:36.585] Allocated cache and file handles
INFO [12-22|12:12:36.660] Writing custom genesis block
INFO [12-22|12:12:36.661] Persisted trie from memory database
INFO [12-22|12:12:36.663] Successfully wrote genesis state
INFO [12-22|12:12:36.663] Allocated cache and file handles
INFO [12-22|12:12:36.737] Writing custom genesis block
INFO [12-22|12:12:36.738] Persisted trie from memory database
INFO [12-22|12:12:36.744] Successfully wrote genesis state
INFO [12-22|12:11:35.021] Maximum peer count
INFO [12-22|12:11:35.025] Set global gas cap
INFO [12-22|12:11:35.026] Allocated cache and file handles
INFO [12-22|12:11:35.112] Writing custom genesis block
INFO [12-22|12:11:35.115] Persisted trie from memory database
INFO [12-22|12:11:35.116] Successfully wrote genesis state
INFO [12-22|12:11:35.116] Allocated cache and file handles
INFO [12-22|12:11:35.192] Writing custom genesis block
INFO [12-22|12:11:35.192] Persisted trie from memory database
INFO [12-22|12:11:35.193] Successfully wrote genesis state
nodes=7 size=1009.00B time="242.75µs" gcnodes=0 gctime=0s livenodes=1 livesize=0.00B
database=chaindata hash=3317c9..cb14b0
database=/Users/shrouq/Desktop/Demo/node1/geth/chaindata cache=16.00MiB handles=16
nodes=7 size=1009.00B time="102.75µs" gcnodes=0 gctime=0s livenodes=1 livesize=0.00B
database=lightchaindata hash=3317c9..cb14b0
database=/Users/shrouq/Desktop/Demo/node1/geth/lightchaindata cache=16.00MiB handles=16
nodes=7 size=1009.00B time="126.292µs" gcnodes=0 gctime=0s livenodes=1 livesize=0.00B
database=chaindata hash=3317c9..cb14b0
database=/Users/shrouq/Desktop/Demo/node2/geth/chaindata cache=16.00MiB handles=16
nodes=7 size=1009.00B time="126.917µs" gcnodes=0 gctime=0s livenodes=1 livesize=0.00B
database=lightchaindata hash=3317c9..cb14b0
database=/Users/shrouq/Desktop/Demo/node2/geth/lightchaindata cache=16.00MiB handles=16
nodes=7 size=1009.00B time="144.042µs" gcnodes=0 gctime=0s livenodes=1 livesize=0.00B
database=chaindata hash=3317c9..cb14b0
database=/Users/shrouq/Desktop/Demo/node3/geth/chaindata cache=16.00MiB handles=16
nodes=7 size=1009.00B time="203.5µs" gcnodes=0 gctime=0s livenodes=1 livesize=0.00B
database=lightchaindata hash=3317c9..cb14b0
database=/Users/shrouq/Desktop/Demo/node3/geth/lightchaindata cache=16.00MiB handles=16
```

" 8"
part2

```
Demo — geth --datadir node1 --unlock 1382d457131429784660A828d6F29Fc4E7bB0142 --mine --http --allow-insecure-unlock — 177x52
```

(base) shrouq@MacBook-Air-S Demo % ./geth --datadir node1 --unlock "1382d457131429784660A828d6F29Fc4E7bB0142" --mine --http --allow-insecure-unlock

```
INFO [12-22|13:02:55.910] Starting Geth on Ethereum mainnet...
INFO [12-22|13:02:55.911] Bumping default cache on mainnet
INFO [12-22|13:02:55.913] Maximum peer count
WARN [12-22|13:02:55.918] Sanitizing cache to Go's GC limits
INFO [12-22|13:02:55.921] Set global gas cap
INFO [12-22|13:02:55.921] Allocated trie memory caches
INFO [12-22|13:02:55.922] Allocated cache and file handles
INFO [12-22|13:02:56.131] Opened ancient database
INFO [12-22|13:02:56.134] Initialised chain configuration
  nstantinople: 0 Petersburg: 0 Istanbul: 0, Muir Glacier: <nil>, Berlin: <nil>, London: <nil>, Arrow Glacier: <nil>, Engine: clique"
INFO [12-22|13:02:56.135] Initialising Ethereum protocol
INFO [12-22|13:02:56.137] Loaded most recent local header
INFO [12-22|13:02:56.137] Loaded most recent local full block
[INFO [12-22|13:02:56.137] Loaded most recent local fast block
WARN [12-22|13:02:56.138] Failed to load snapshot, regenerating
INFO [12-22|13:02:56.138] Rebuilding state snapshot
INFO [12-22|13:02:56.139] Regenerated local transaction journal
INFO [12-22|13:02:56.139] Resuming state snapshot generation
INFO [12-22|13:02:56.141] Gasprice oracle is ignoring threshold set threshold=2
INFO [12-22|13:02:56.142] Generated state snapshot
WARN [12-22|13:02:56.143] Error reading unclean shutdown markers
INFO [12-22|13:02:56.143] Starting peer-to-peer node
INFO [12-22|13:02:56.144] Stored checkpoint snapshot to disk
INFO [12-22|13:02:56.240] New local node record
INFO [12-22|13:02:56.242] IPC endpoint opened
INFO [12-22|13:02:56.242] HTTP server started
INFO [12-22|13:02:56.243] Started P2P networking
8b9d70658883f9db5831a3ab32bce0@127.0.0.1:30303
Unlocking account 1382d457131429784660A828d6F29Fc4E7bB0142 | Attempt 1/3
Password: INFO [12-22|13:02:58.840] New local node record
INFO [12-22|13:02:59.430] Mapped network port
INFO [12-22|13:02:59.830] Mapped network port
INFO [12-22|13:03:06.624] Looking for peers
INFO [12-22|13:03:17.195] Looking for peers
INFO [12-22|13:03:27.530] Looking for peers
INFO [12-22|13:03:37.863] Looking for peers
INFO [12-22|13:03:47.890] Looking for peers
INFO [12-22|13:03:57.996] Looking for peers
INFO [12-22|13:04:08.051] Looking for peers
INFO [12-22|13:04:18.191] Looking for peers
INFO [12-22|13:04:28.197] Looking for peers
INFO [12-22|13:04:38.482] Looking for peers
INFO [12-22|13:04:48.488] Looking for peers
INFO [12-22|13:04:58.742] Looking for peers
INFO [12-22|13:05:08.814] Looking for peers
INFO [12-22|13:05:18.822] Looking for peers
INFO [12-22|13:05:28.823] Looking for peers
INFO [12-22|13:05:38.823] Looking for peers
INFO [12-22|13:05:49.009] Looking for peers
INFO [12-22|13:05:59.147] Looking for peers
  provided=1024 updated=4096
  ETH=50 LES=0 total=50
  provided=4096 updated=2730
  cap=50,000,000
  clean=409.00MiB dirty=682.00MiB
  database=/Users/shrouq/Desktop/Demo/node1/geth/chaindata cache=1.33GiB handles=5120
  database=/Users/shrouq/Desktop/Demo/node1/geth/chaindata/ancient readonly=false
  config="{ChainID: 1315 Homestead: 0 DAO: <nil> DAOSupport: false EIP150: 0 EIP155: 0 EIP158: 0 Byzantium: 0 Co
  network=1 dbversion=<nil>
  number=0 hash=3317c9..cb14b0 td=1 age=1h59s
  number=0 hash=3317c9..cb14b0 td=1 age=1h59s
  number=0 hash=3317c9..cb14b0 td=1 age=1h59s
  err="missing or corrupted snapshot"
  transactions=0 accounts=0
  root=60e93d..c83306 accounts=0 slots=0 storage=0.00B elapsed="766.708µs"
  accounts=4 slots=0 storage=280.00B elapsed=3.535ms
  error="leveldb: not found"
  instance=Geth/v1.10.13-stable-7a0c19f8/darwin-amd64/go1.17.2
  number=0 hash=3317c9..cb14b0
  seq=1,640,167,376,236 id=3e2425f4cee071e1 ip=127.0.0.1 udp=30303 tcp=30303
  url=/Users/shrouq/Desktop/Demo/node1/geth.ipc
  endpoint=127.0.0.1:8545 prefix= cors= vhosts=localhost
  self=enode://31546a2b07193a99863626a49df6972097c0586af3924dea91e7f559e65fb52b726284c736ef307e96740e83fb3f65a
  seq=1,640,167,376,237 id=3e2425f4cee071e1 ip=100.89.12.112 udp=30303 tcp=30303
  proto=tcp extport=30303 intport=30303 interface="UPNP IGDv1-IP1"
  proto=udp extport=30303 intport=30303 interface="UPNP IGDv1-IP1"
  peercount=0 tried=33 static=0
  peercount=0 tried=30 static=0
  peercount=0 tried=35 static=0
  peercount=0 tried=30 static=0
  peercount=0 tried=36 static=0
  peercount=0 tried=40 static=0
  peercount=0 tried=34 static=0
  peercount=0 tried=32 static=0
  peercount=0 tried=28 static=0
  peercount=0 tried=37 static=0
  peercount=0 tried=36 static=0
  peercount=0 tried=37 static=0
  peercount=0 tried=34 static=0
  peercount=0 tried=31 static=0
  peercount=0 tried=33 static=0
  peercount=0 tried=38 static=0
  peercount=0 tried=28 static=0
  peercount=0 tried=33 static=0
```

```
Demo — geth --datadir ./node2 --unlock c4f27c6fb6Fc8F33073A731f4FcdE5bF4e33121A --ipcdisable --mine --port 30304 --bootnodes enode://31546a2b07193a99863626a49adf697209... ]
```

(base) shrouq@MacBook-Air-S Demo % ./geth --datadir ./node2 --unlock "c4f27c6fb6Fc8F33073A731f4FcdE5bF4e33121A" --ipcdisable --mine --port 30304 --bootnodes enode://31546a2b07193a99863626a49adf6972097c0586af3924dea91e7f559e65fb52b726284c736ef307e96740e83fb3f65a8b9d70658883f9db5831a3ab32bce07@127.0.0.1:30303

[INFO [12-22|14:02:01.557] Starting Geth on Ethereum mainnet...

INFO [12-22|14:02:01.557] Bumping default cache on mainnet

INFO [12-22|14:02:01.558] Maximum peer count

WARN [12-22|14:02:01.566] Sanitizing cache to Go's GC limits

INFO [12-22|14:02:01.566] Set global gas cap

INFO [12-22|14:02:01.566] Allocated trie memory caches

INFO [12-22|14:02:01.566] Allocated cache and file handles

INFO [12-22|14:02:01.778] Opened ancient database

INFO [12-22|14:02:01.783] Initialised chain configuration

nople: 0 Petersburg: 0 Istanbul: 0, Muir Glacier: <nil>, Berlin: <nil>, London: <nil>, Arrow Glacier: <nil>, Engine: clique"

INFO [12-22|14:02:01.785] Initialising Ethereum protocol

INFO [12-22|14:02:01.787] Loaded most recent local header

INFO [12-22|14:02:01.787] Loaded most recent local full block

INFO [12-22|14:02:01.787] Loaded most recent local fast block

WARN [12-22|14:02:01.788] Failed to load snapshot, regenerating

INFO [12-22|14:02:01.788] Rebuilding state snapshot

INFO [12-22|14:02:01.790] Resuming state snapshot generation

INFO [12-22|14:02:01.790] Regenerated local transaction journal

INFO [12-22|14:02:01.791] Generated state snapshot

INFO [12-22|14:02:01.792] Gasprice oracle is ignoring threshold set threshold=2

WARN [12-22|14:02:01.793] Error reading unclean shutdown markers

INFO [12-22|14:02:01.793] Starting peer-to-peer node

INFO [12-22|14:02:01.795] Stored checkpoint snapshot to disk

INFO [12-22|14:02:01.905] New local node record

INFO [12-22|14:02:01.907] Started P2P networking

a85947e9a4bbb2e3c22ba771@127.0.0.1:30304

Unlocking account c4f27c6fb6Fc8F33073A731f4FcdE5bF4e33121A | Attempt 1/3

Password: INFO [12-22|14:02:04.339] New local node record

INFO [12-22|14:02:05.101] Mapped network port

INFO [12-22|14:02:05.499] Mapped network port

INFO [12-22|14:02:11.947] Looking for peers

INFO [12-22|14:02:22.950] Looking for peers

ERROR[12-22|14:02:28.025] Snapshot extension registration failed

INFO [12-22|14:02:33.286] Looking for peers

INFO [12-22|14:02:43.612] Looking for peers

INFO [12-22|14:02:53.624] Looking for peers

INFO [12-22|14:03:03.797] Looking for peers

INFO [12-22|14:03:14.278] Looking for peers

INFO [12-22|14:03:24.282] Looking for peers

INFO [12-22|14:03:34.292] Looking for peers

INFO [12-22|14:03:44.616] Looking for peers

INFO [12-22|14:03:54.636] Looking for peers

INFO [12-22|14:04:04.792] Looking for peers

INFO [12-22|14:04:14.812] Looking for peers

INFO [12-22|14:04:24.946] Looking for peers

INFO [12-22|14:04:34.946] Looking for peers

INFO [12-22|14:04:44.960] Looking for peers

INFO [12-22|14:04:55.261] Looking for peers

provided=1024 updated=4096

ETH=50 LES=0 total=50

provided=4096 updated=2730

cap=50,000,000

clean=409.00MiB dirty=682.00MiB

database=/Users/shrouq/Desktop/Demo/node2/geth/chaindata cache=1.33GiB handles=5120

database=/Users/shrouq/Desktop/Demo/node2/geth/chaindata/ancient readonly=false

config="{ChainID: 1315 Homestead: 0 DAO: <nil> DAOSupport: false EIP150: 0 EIP155: 0 EIP158: 0 Byzantium: 0 Constantine: 0 London: <nil>, Arrow Glacier: <nil>, Engine: clique}"

network=1 dbversion=<nil>

number=0 hash=3317c9..cb14b0 td=1 age=2h4s

number=0 hash=3317c9..cb14b0 td=1 age=2h4s

number=0 hash=3317c9..cb14b0 td=1 age=2h4s

err="missing or corrupted snapshot"

root=60e93d..c83306 accounts=0 slots=0 storage=0.00B elapsed=1.013ms

transactions=0 accounts=0

accounts=4 slots=0 storage=280.00B elapsed=2.205ms

error="leveldb: not found"

instance=Geth/v1.10.13-stable-7a0c19f8/darwin-amd64/go1.17.2

number=0 hash=3317c9..cb14b0

seq=1,640,170,921,903 id=afcd62a1a5bb959b ip=127.0.0.1 udp=30304 tcp=30304

self=enode://c03f588ddd8182fc35b34d08f078d962a3496c3464e99a88bb3d03af8b66b9c79ca817f528f38cd8adbfb721546942af28390b

seq=1,640,170,921,904 id=afcd62a1a5bb959b ip=100.89.12.112 udp=30304 tcp=30304

proto=tcp extport=30304 intport=30304 interface="UPNP IGDv1-IP1"

proto=udp extport=30304 intport=30304 interface="UPNP IGDv1-IP1"

peercount=1 tried=28 static=0

peercount=1 tried=31 static=0

peer=c5b271da err="peer connected on snap without compatible eth support"

peercount=1 tried=30 static=0

peercount=1 tried=27 static=0

peercount=1 tried=36 static=0

peercount=1 tried=40 static=0

peercount=1 tried=33 static=0

peercount=1 tried=31 static=0

peercount=1 tried=41 static=0

peercount=1 tried=37 static=0

peercount=1 tried=34 static=0

peercount=1 tried=41 static=0

peercount=1 tried=38 static=0

peercount=1 tried=29 static=0

peercount=1 tried=31 static=0

peercount=1 tried=40 static=0

peercount=1 tried=30 static=0

"9"

```
Demo — geth --datadir ./node3 --unlock 70DB617A154F0FF794fa33311f2E8426D29A8977 --ipcdisable --mine --port 30305 --bootnodes enode://31546a2b07193a99863626a49adf... [ ] [ ] [ ]
```

Last login: Wed Dec 22 13:37:30 on ttys003
((base) shrouq@MacBook-Air-S ~ % cd Desktop
((base) shrouq@MacBook-Air-S Desktop % cd Demo
((base) shrouq@MacBook-Air-S Demo % ./geth --datadir ./node3 --unlock "70DB617A154F0FF794fa33311f2E8426D29A8977" --ipcdisable --mine --port 30305 --bootnodes enode://31546a2b07193a99863626a49adf6972097c0586af3924dea91e7f559e65fb52b726284c736ef307e96740e83fb3f65a8b9d70658883f9db5831a3ab32bce07@127.0.0.1:30303
INFO [12-22|14:15:45.074] Starting Geth on Ethereum mainnet...
INFO [12-22|14:15:45.074] Bumping default cache on mainnet
INFO [12-22|14:15:45.074] Maximum peer count
WARN [12-22|14:15:45.078] Sanitizing cache to Go's GC limits
INFO [12-22|14:15:45.084] Set global gas cap
INFO [12-22|14:15:45.085] Allocated trie memory caches
INFO [12-22|14:15:45.085] Allocated cache and file handles
INFO [12-22|14:15:45.289] Opened ancient database
INFO [12-22|14:15:45.292] Initialised chain configuration
staminople: 0 Petersburg: 0 Istanbul: 0, Muir Glacier: <nil>, Berlin: <nil>, London: <nil>, Arrow Glacier: <nil>, Engine: clique"
INFO [12-22|14:15:45.293] Initialising Ethereum protocol
INFO [12-22|14:15:45.295] Loaded most recent local header
INFO [12-22|14:15:45.296] Loaded most recent local full block
INFO [12-22|14:15:45.296] Loaded most recent local fast block
WARN [12-22|14:15:45.296] Failed to load snapshot, regenerating
INFO [12-22|14:15:45.296] Rebuilding state snapshot
INFO [12-22|14:15:45.297] Resuming state snapshot generation
INFO [12-22|14:15:45.297] Regenerated local transaction journal
INFO [12-22|14:15:45.298] Generated state snapshot
INFO [12-22|14:15:45.299] Gasprice oracle is ignoring threshold set
WARN [12-22|14:15:45.301] Error reading unclean shutdown markers
INFO [12-22|14:15:45.301] Starting peer-to-peer node
INFO [12-22|14:15:45.301] Stored checkpoint snapshot to disk
INFO [12-22|14:15:45.394] New local node record
INFO [12-22|14:15:45.395] Started P2P networking
567eb295a31b425b2b672549f6cdca0127.0.0.1:30305
Unlocking account 70DB617A154F0FF794fa33311f2E8426D29A8977 | Attempt 1/3
Password: INFO [12-22|14:15:47.759] New local node record
INFO [12-22|14:15:48.569] Mapped network port
INFO [12-22|14:15:48.973] Mapped network port
INFO [12-22|14:15:55.570] Looking for peers
INFO [12-22|14:16:05.644] Looking for peers
INFO [12-22|14:16:15.763] Looking for peers
INFO [12-22|14:16:25.766] Looking for peers
INFO [12-22|14:16:35.962] Looking for peers
INFO [12-22|14:16:46.111] Looking for peers
INFO [12-22|14:16:56.432] Looking for peers
INFO [12-22|14:17:06.440] Looking for peers
INFO [12-22|14:17:16.500] Looking for peers
INFO [12-22|14:17:26.766] Looking for peers
INFO [12-22|14:17:36.769] Looking for peers
INFO [12-22|14:17:47.100] Looking for peers
INFO [12-22|14:17:57.101] Looking for peers
INFO [12-22|14:18:07.105] Looking for peers
INFO [12-22|14:18:17.161] Looking for peers
provided=1024 updated=4096
ETH=50 LES=0 total=50
provided=4096 updated=2730
cap=50,000,000
clean=409.00MiB dirty=682.00MiB
database=/Users/shrouq/Desktop/Demo/node3/geth/chaindata cache=1.33GiB handles=5120
database=/Users/shrouq/Desktop/Demo/node3/geth/chaindata/ancient readonly=false
config="{ChainID: 1315 Homestead: 0 DAO: <nil> DAOSupport: false EIP150: 0 EIP155: 0 EIP158: 0 Byzantium: 0 Constantinople: 0 Petersburg: 0 Istanbul: 0, Muir Glacier: <nil>, Berlin: <nil>, London: <nil>, Arrow Glacier: <nil>, Engine: clique}"
network=1 dbversion=<nil>
number=0 hash=3317c9..cb14b0 td=1 age=2h13m48s
number=0 hash=3317c9..cb14b0 td=1 age=2h13m48s
number=0 hash=3317c9..cb14b0 td=1 age=2h13m48s
err="missing or corrupted snapshot"
root=60e93d..c83306 accounts=0 slots=0 storage=0.00B elapsed="680.292µs"
transactions=0 accounts=0
accounts=4 slots=0 storage=280.00B elapsed=1.629ms
threshold=2
error="leveldb: not found"
instance=Geth/v1.10.13-stable-7a0c19f8/darwin-amd64/go1.17.2
number=0 hash=3317c9..cb14b0
seq=1,640,171,745,392 id=c04598a32cf82a40 ip=127.0.0.1 udp=30305 tcp=30305
self=enode://6d4ba133adeff277f4a98204e29c7f1e953b5f18fce895c945a7a555c021f7ad8ba2e7ce11e91aabac1c42eb83e08f25d4a
proto=udp extport=30305 intport=30305 interface="UPNP IGDv1-IP1"
proto=tcp extport=30305 intport=30305 interface="UPNP IGDv1-IP1"
peercount=1 tried=33 static=0
peercount=1 tried=36 static=0
peercount=1 tried=26 static=0
peercount=1 tried=30 static=0
peercount=1 tried=35 static=0
peercount=1 tried=34 static=0
peercount=1 tried=37 static=0
peercount=1 tried=31 static=0
peercount=1 tried=29 static=0
peercount=1 tried=34 static=0
peercount=1 tried=33 static=0
peercount=1 tried=20 static=0
peercount=1 tried=29 static=0
peercount=2 tried=32 static=0
peercount=1 tried=32 static=0

"10"

Launching Network

The image shows two terminal windows side-by-side, each displaying a log of network activity. The left window is titled "Demo -- zsh -- 149x44" and is labeled "node1". The right window is titled "Demo -- zsh -- 158x44" and is labeled "node2". Both windows show a continuous stream of log entries from a process named "Demo". The logs include numerous "INFO" messages indicating the program is "Looking for peers" and tracking "peercount" and "static" values. There are also several "ERROR" messages, particularly in the node2 log, related to "snapshot extension registration failed" and "peer connected on snap without compatible eth support". The logs end with a "Fatal: Failed to read password: prompt aborted" message at the bottom of both windows.

```
INFO [12-23|06:45:30.078] Looking for peers
INFO [12-23|06:45:40.077] Looking for peers
INFO [12-23|06:45:50.073] Looking for peers
INFO [12-23|06:46:00.408] Looking for peers
INFO [12-23|07:02:14.378] Looking for peers
INFO [12-23|07:02:24.379] Looking for peers
INFO [12-23|07:02:34.416] Looking for peers
INFO [12-23|07:02:44.527] Looking for peers
INFO [12-23|07:02:54.527] Looking for peers
INFO [12-23|07:15:29.354] Looking for peers
INFO [12-23|07:15:39.585] Looking for peers
INFO [12-23|07:15:49.671] Looking for peers
INFO [12-23|07:15:59.750] Looking for peers
INFO [12-23|07:16:10.027] Looking for peers
INFO [12-23|07:33:49.221] Looking for peers
INFO [12-23|07:33:59.232] Looking for peers
INFO [12-23|07:34:09.297] Looking for peers
INFO [12-23|07:34:19.572] Looking for peers
INFO [12-23|07:49:12.925] Looking for peers
INFO [12-23|07:49:23.060] Looking for peers
INFO [12-23|07:49:33.591] Looking for peers
INFO [12-23|07:49:43.591] Looking for peers
INFO [12-23|07:49:53.722] Looking for peers
INFO [12-23|08:07:59.141] Looking for peers
INFO [12-23|08:08:09.184] Looking for peers
INFO [12-23|08:08:19.333] Looking for peers
INFO [12-23|08:08:29.491] Looking for peers
INFO [12-23|08:08:39.494] Looking for peers
INFO [12-23|08:08:49.661] Looking for peers
INFO [12-23|08:08:59.684] Looking for peers
INFO [12-23|08:09:09.823] Looking for peers
INFO [12-23|08:09:19.827] Looking for peers
INFO [12-23|08:09:29.962] Looking for peers
INFO [12-23|08:09:40.008] Looking for peers
INFO [12-23|08:09:50.027] Looking for peers
INFO [12-23|08:10:00.131] Looking for peers
INFO [12-23|08:10:10.150] Looking for peers
INFO [12-23|08:10:20.151] Looking for peers
INFO [12-23|08:10:30.152] Looking for peers
INFO [12-23|08:10:40.212] Looking for peers
INFO [12-23|08:13:01.713] Looking for peers
^C
Fatal: Failed to read password: prompt aborted
(base) shrouq@MacBook-Air-S Demo %
```



```
INFO [12-23|06:45:44.969] Looking for peers
INFO [12-23|06:45:54.976] Looking for peers
ERROR [12-23|06:46:01.502] Snapshot extension registration failed
INFO [12-23|06:46:05.302] Looking for peers
INFO [12-23|07:02:18.633] Looking for peers
INFO [12-23|07:02:28.935] Looking for peers
INFO [12-23|07:02:39.022] Looking for peers
INFO [12-23|07:02:49.119] Looking for peers
INFO [12-23|07:02:59.305] Looking for peers
INFO [12-23|07:15:34.140] Looking for peers
INFO [12-23|07:15:44.323] Looking for peers
INFO [12-23|07:15:54.332] Looking for peers
INFO [12-23|07:16:04.649] Looking for peers
INFO [12-23|07:33:43.826] Looking for peers
INFO [12-23|07:33:53.856] Looking for peers
INFO [12-23|07:34:03.962] Looking for peers
INFO [12-23|07:34:14.028] Looking for peers
INFO [12-23|07:34:24.066] Looking for peers
ERROR [12-23|07:49:14.559] Snapshot extension registration failed
INFO [12-23|07:49:27.561] Looking for peers
INFO [12-23|07:49:37.755] Looking for peers
INFO [12-23|07:49:47.931] Looking for peers
INFO [12-23|08:07:54.352] Looking for peers
INFO [12-23|08:08:04.365] Looking for peers
INFO [12-23|08:08:14.451] Looking for peers
INFO [12-23|08:08:24.522] Looking for peers
INFO [12-23|08:08:34.656] Looking for peers
ERROR [12-23|08:08:39.167] Snapshot extension registration failed
INFO [12-23|08:08:44.680] Looking for peers
INFO [12-23|08:08:54.968] Looking for peers
INFO [12-23|08:09:05.104] Looking for peers
INFO [12-23|08:09:15.163] Looking for peers
ERROR [12-23|08:09:20.475] Snapshot extension registration failed
INFO [12-23|08:09:25.170] Looking for peers
INFO [12-23|08:09:45.289] Looking for peers
INFO [12-23|08:09:55.290] Looking for peers
INFO [12-23|08:10:05.292] Looking for peers
INFO [12-23|08:10:15.292] Looking for peers
INFO [12-23|08:10:25.622] Looking for peers
INFO [12-23|08:10:35.631] Looking for peers
INFO [12-23|08:12:57.317] Looking for peers
^C
Fatal: Failed to read password: prompt aborted
(base) shrouq@MacBook-Air-S Demo %
```

Demo -- zsh -- 178x50

```
INFO [12-23|06:28:31.198] Looking for peers
INFO [12-23|06:28:41.344] Looking for peers
INFO [12-23|06:28:51.514] Looking for peers
INFO [12-23|06:29:01.681] Looking for peers
INFO [12-23|06:45:26.235] Looking for peers
INFO [12-23|06:45:36.364] Looking for peers
INFO [12-23|06:45:46.650] Looking for peers
INFO [12-23|06:45:56.983] Looking for peers
INFO [12-23|06:46:07.010] Looking for peers
INFO [12-23|07:02:20.331] Looking for peers
INFO [12-23|07:02:30.444] Looking for peers
INFO [12-23|07:02:48.643] Looking for peers
INFO [12-23|07:02:50.684] Looking for peers
INFO [12-23|07:15:25.592] Looking for peers
INFO [12-23|07:15:35.941] Looking for peers
INFO [12-23|07:15:45.981] Looking for peers
INFO [12-23|07:15:56.109] Looking for peers
INFO [12-23|07:16:06.280] Looking for peers
INFO [12-23|07:33:45.614] Looking for peers
INFO [12-23|07:33:55.772] Looking for peers
INFO [12-23|07:34:05.779] Looking for peers
INFO [12-23|07:34:15.912] Looking for peers
INFO [12-23|07:49:09.332] Looking for peers
INFO [12-23|07:49:19.467] Looking for peers
INFO [12-23|07:49:29.505] Looking for peers
INFO [12-23|07:49:39.581] Looking for peers
INFO [12-23|07:49:49.593] Looking for peers
INFO [12-23|08:07:55.243] Looking for peers
INFO [12-23|08:08:05.311] Looking for peers
INFO [12-23|08:08:15.313] Looking for peers
INFO [12-23|08:08:25.387] Looking for peers
INFO [12-23|08:08:35.452] Looking for peers
INFO [12-23|08:08:45.474] Looking for peers
INFO [12-23|08:08:55.629] Looking for peers
INFO [12-23|08:09:05.642] Looking for peers
INFO [12-23|08:09:16.634] Looking for peers
INFO [12-23|08:09:26.661] Looking for peers
INFO [12-23|08:09:36.845] Looking for peers
INFO [12-23|08:09:46.942] Looking for peers
ERROR[12-23|08:09:53.624] Snapshot extension registration failed
INFO [12-23|08:09:56.964] Looking for peers
INFO [12-23|08:10:07.294] Looking for peers
INFO [12-23|08:10:17.297] Looking for peers
INFO [12-23|08:10:27.308] Looking for peers
INFO [12-23|08:10:37.344] Looking for peers
INFO [12-23|08:12:59.087] Looking for peers
INFO [12-23|08:13:09.100] Looking for peers
^C
Fatal: Failed to read password: prompt aborted
(base) shrouq@MacBook-Air-S Demo %
```

node3

Part3

METAMASK

الإعداد

إعدادات الشبكات > Add a network

تحذير: A malicious network provider can lie about the state of the blockchain and record your network activity. Only add custom networks you trust.

اسم الشبكة: SuperFunNetwork

عنوان جديد لاستدعاء الإجراء عن بعد: http://127.0.0.1:8545

معرف السلسلة: 1315

Currency Symbol (Optional):

منصّع Block Explorer (Optional):

إلغاء

حفظ

METAMASK

إرسال

تم اكتشاف عنوان جديد! انقر هنا لإضافته إلى دفتر عناوينك.

الأصل: 9046256971665327767466483203803;

المبلغ: 5000 ETH (Max)

الحد الأقصى لوحدات جاس (GWEI): 1

الحد الأقصى لوحدات جاس (GWEI): 21000

إلغاء

التالي



