#### Avalanche L1 本地部署文档(Cyberchain)

#### 一、 创建 Avalanche L1

这一步我是根据官网 <a href="https://build.avax.network/docs/tooling/create-avalanche-l1">https://build.avax.network/docs/tooling/create-avalanche-l1</a>, 的教程进行的操作,

#### 二、部署 Avalanche (Cyberchain)

1、我在这一步时遇到了 bad CPU type 的问题,最后通过重新编译后再替换 avalanchego 后得以解决,命令如下:

cd avalanchego

./scripts/build.sh

2、部署命令与参数配置

### avalanchego % avalanche blockchain deploy cyberchain Network ready to use. Using [P-custom18jma8ppw3nhx5r4ap8clazz0dps7rv5u9xde7p] to be set as a change owner for leftover AVAX AvalancheGo path: /Users/frank/.avalanche-cli/bin/avalanchego/avalanchego-v1.13.0/avalanchego Local cluster cyberchain-local-node-local-network not found. Creating... Starting local avalanchego node using root: /Users/frank/.avalanche-cli/local/cyberchain-local-node-local-network ... Booting Network. Wait until healthy... Avalanchego started and ready to use from /Users/frank/.avalanche-cli/local/cyberchain-local-node-local-network Node logs directory: /Users/frank/.avalanche-cli/local/cyberchain-local-node-local-network/<NodeID>/logs Network ready to use. URI: http://127.0.0.1:60088 NodeID: NodeID-HGPAtWm6U7bQahLmgQMbLsv8B3cNmF2pR Your blockchain control keys: [P-custom18jma8ppw3nhx5r4ap8clazz0dps7rv5u9xde7p] Your blockchain auth keys for chain creation: [P-custom18jma8ppw3nhx5r4ap8clazz0dps7rv5u9xde7p] CreateSubnetTx fee: 0.000010278 AVAX Blockchain has been created with ID: 2W9boARgCWL25z6pMFNtkCfNA5v28VGg9PmBgUJfuKndEdhrvw Now creating blockchain... CreateChainTx fee: 0.000129566 AVAX DEPLOYMENT RESULTS Chain Name l cyberchain Subnet ID | 2W9boARgCWL25z6pMFNtkCfNA5v28VGg9PmBgUJfuKndEdhrvw | VM ID | kowAU8jP3Xjtrnt9yNxEuQTvA9HKoPoHxYJLi9iASLTtVTWNn Blockchain ID | 2JXQBU29nL2Kqvj8aTcuBNCN5KcEeBNciab6ygcmCYtnRU37pE P-Chain TXID |

| TOKEN I  |  |                         |                                       |
|--|--|-------------------------|---------------------------------------|
| Token Name   cyberk Token  |  |                         |                                       |
|  |  |                         |                                       |
| Network ready to use.  |  |                         |                                       |
| URI: http://l27.0.0.1:60088<br>NodeID: NodeID-HGPAtNm6U7bQahLmgQMc<br>Your blockchain control keys: [P-cc<br>Your blockchain auth keys for chair | DELIVERS CHAFTER  INITIAL TOKEN ALLOCATION  OF CHAFTER THE THE CHAFTER |                         |                                       |
| DESCRIPTION   ADDI   | D: Zidenakagan zeszegen kiek (Masszawagon-lagastrukradianiszon<br>RESS AND PRIVATE KEY<br>NT RESULTS   | I AMOUNT (CY            | BERK)   AMOUNT (WEI)                  |
| <br>  ewoq   | db97C7cEcE249c2b98bDC0226Cc4C2A57BF52FC<br>89e99c94b6912bfc12adc093c9b51124f0dc54ac7a766b2bc5ccf558d8027   | 1000000                 | 1000000000000000000000000000000000000 |
| 1  | 75519Ecdd83fbC060c532f1f43dC6053603DdE9<br>9f9698b0d96a0e09b36b95302614936baddffee2aa2dc4c1ceadb3d4af6e3   | -+<br>  600<br> <br> -+ | 6000000000000000000000000000000000000 |

| Blockchain has Now creating b | been created with ID: 2W9boAL1WNOC  | ESNEKCfNASv28VGg9PmBgU3fuKndEdhrvw |                |
|-------------------------------|---|------------------------------------|----------------|
| NODE ID                       | DEPLOYMENT RESULTS  |                                    | +<br>  L1<br>+ |
| <br>  NodeID-HGPAtWm6<br>     | U7bQahLmgQMbLsv8B3cNmF2pR   |                                    | l cyberchain   |
| I M IO                        | zwyboakgcmizszepmintkchnasyzsyegyi<br>  kowAU8jP3Xjtrnt9yNxEuQTvA9HKoPoHx | GLigiASLTtVTWNn I                  | ·<br>          |
| Blockchain I                  | D   2JXQBU29nL2Kqvj8aTcuBNCN5KcEeBNci                                     | WALLET CONNECTION                  |                |
| Network RPC URL               | http://127.0.0.1:60088/   | /ext/bc/2JXQBU29nL2Kqvj8aT         | cuBNCN5KcEeBN  |
| <br>  Network Name<br>        | cyberchain<br>-+  |                                    |                |
| Chain ID<br>+                 | 250526<br>-+  |                                    |                |
| Token Symbol<br>+             | cyberk<br>  |                                    |                |
| l Token Name                  | l cyberk Token  |                                    |                |

## 三、MetaMask 配置本地网络

1. 打开 MetaMask, 选择 "Add a network"。

### 2. 填入以下网络信息:

。 网络名称: Cyberchain

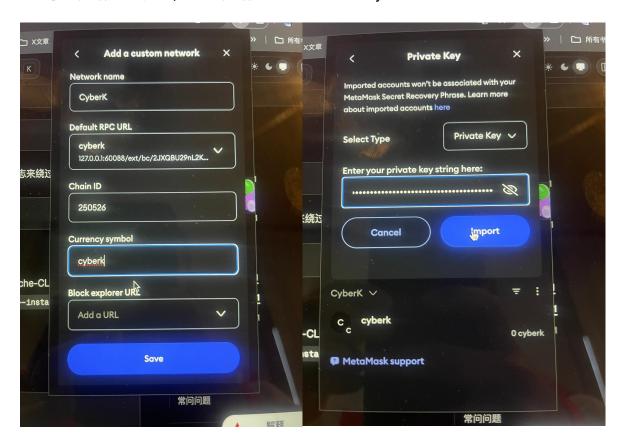
#### o RPC URL:

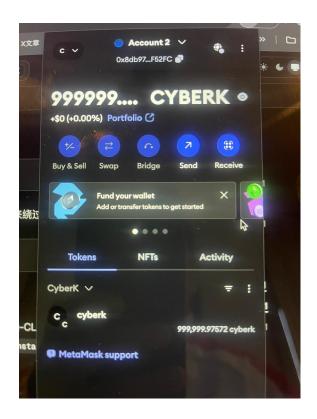
http://127.0.0.1:60088/ext/bc/2JXQBU29nL2Kqvj8aTcuBNCN5KcEeBNciab6ygcmCYtnRU37pE/rpc

o Chain ID: 250526

。 代币符号: cyberk

3. 导入初始账户私钥,账户初始余额: 1000000 cyberk





# 四、部署 ERC20 代币空投合约 (CyberToken.sol)

- 1. 在 Remix IDE 中创建并部署 CyberToken.sol 合约,合约文件已上传 github 中。
- 2. 使用 Remix 的 "Injected Provider (MetaMask)" 部署合约,确认合约部署成功。

## 五、代币交互 (空投)

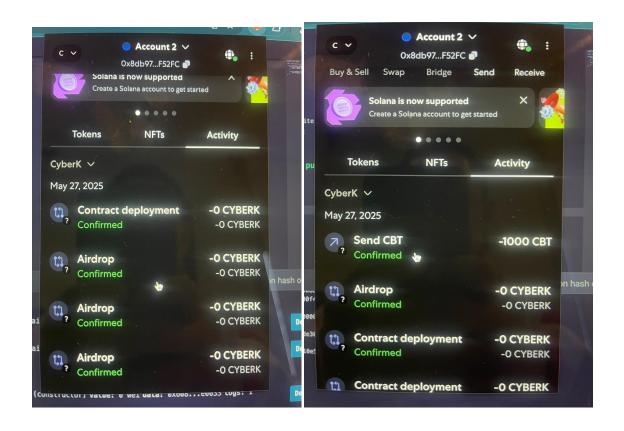
# 空投操作

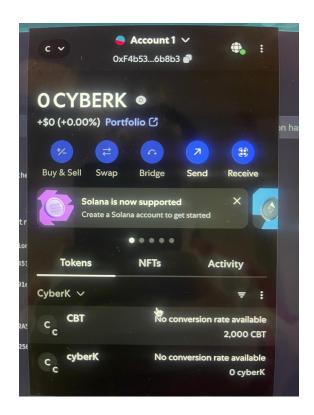
- 使用合约的 airdrop 方法,在 Remix 中执行空投 1000CBT 代币给 Account1(如图)。
- MetaMask 显示交易确认,代币铸造成功。

### 转账操作

• 使用合约的 transfer 方法,向 Account1 地址转账 1000 CBT。

MetaMask 中确认转账交易, 查看余额减少,同时 Account1 显示收到了 CBT. (如图)





六、交互演示视频

由于只做了空投功能的合约,所以这次视频录制很短,大致是在 Remix 上的操作交互等。