

安顺链节点入网部署文档

前言

!

面向对象：本文档主要面向运维人员、客户方实施人员

部署内容：适用于部署BSN算力中心环境安顺链外部节点入网

前置条件：算力中心整体服务完成部署

一、版本信息

 版本号：1.1

July

17

 创建日期2023-2-14

 审核人周晓明

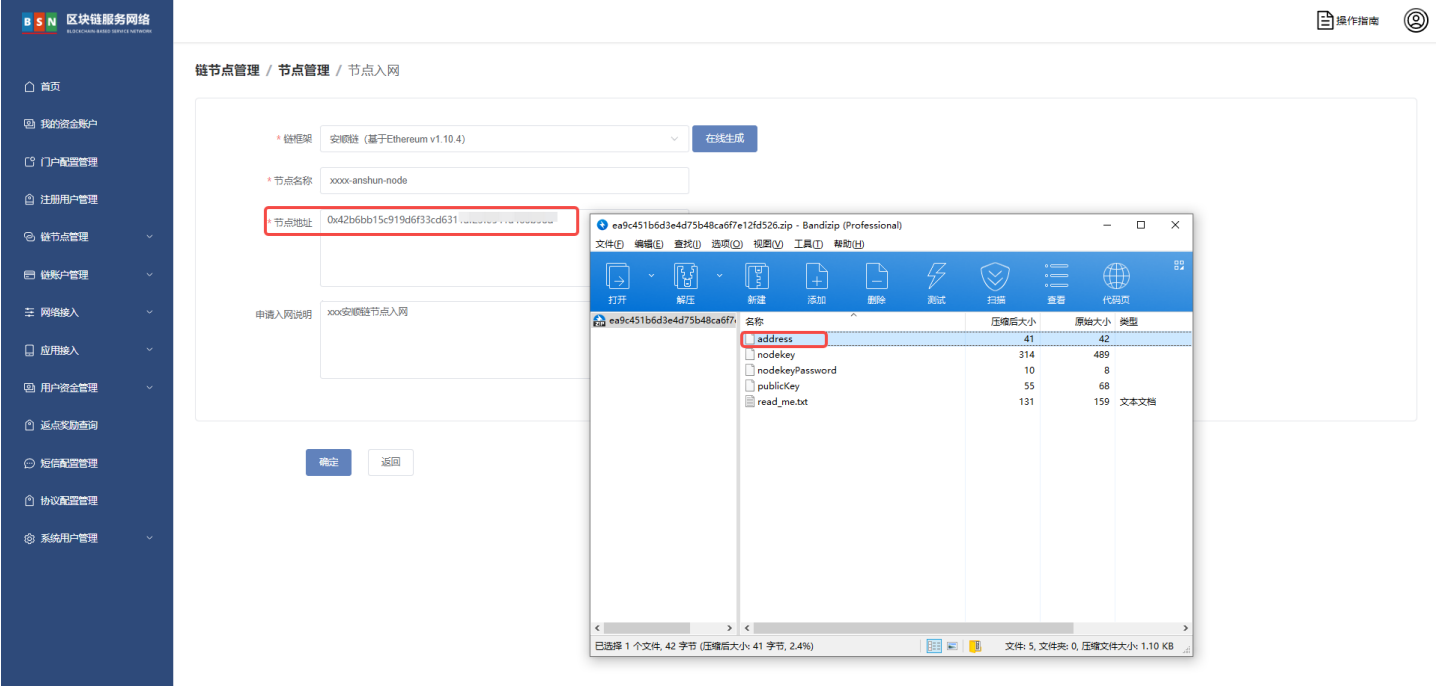
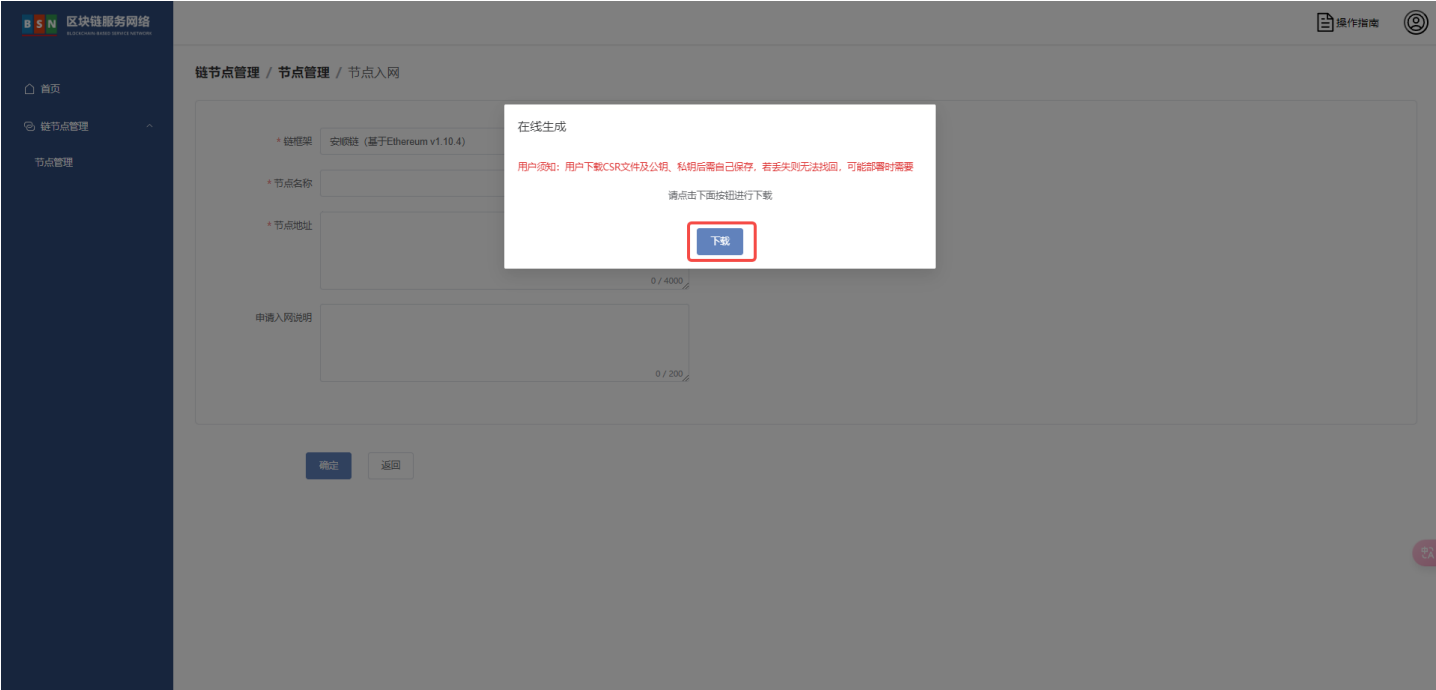
二、变更日志

时间	版本号	变更人	主要变更内容
2023-12-25	V1.0	张云龙	编写文件大纲及文档填充


三、安顺链节点入网

登录 BSN城市算力中心运营系统

依次点击【链节点管理】 【节点管理】 【节点入网】 如下图



点击【确定】

 审核时间：**大约30分钟**，可以先准备历史数据

审核通过后填写 链外部节点公网IP

链外部节点启动文件以及历史数据准备

下载docker-compose启动文件到 安顺链外部节点 服务器

```
1 sudo wget -P /bsn/ https://data-center.s3.cn-northwest-1.amazonaws.com.cn/v2.2.1
```

解压

```
1 sudo tar -xzvf /bsn/anshun-node.tar.gz -C /bsn/
```

将**算力中心运营平台**在线生成的文件 **address nodekeyPassword** 上传至/bsn/anshun-node/node/目录下

目录结构如下

```
1 [root@AWS-NGX01-A161 node]# tree /bsn/anshun-node/  
2 /bsn/anshun-node/  
3 |— docker-compose.yaml  
4 |— node  
5     |— address  
6     |— nodekeyPassword  
7     |— start.sh
```

下载创世块文件

```
1 wget https://anshunchain.s3.cn-northwest-1.amazonaws.com.cn/config/genesis.json
```

初始化节点数据

```
1 docker run -i --rm -v /bsn/anshun-node/node:/root bsnddc/anshunchain:v1.7.0  
  geth --datadir /root/ init /root/genesis.json  
2 docker run -i --rm -v /bsn/anshun-node/node:/root bsnddc/anshunchain:v1.7.0  
  geth genesisTool generate --basePath /root --nodeCount 4 --nodePass "$(cat  
  /bsn/anshun-node/node/nodekeyPassword)"
```

初始化后的目录结构

```
1 [root@AWS-NGX01-A161 node]# tree /bsn/anshun-node/  
2 /bsn/anshun-node/
```

```

3  |— docker-compose.yaml
4  |— node
5      |— address
6      |— genesis.json
7      |— geth
8          |— chaindata
9              |— 000001.log
10             |— CURRENT
11             |— LOCK
12             |— LOG
13             └— MANIFEST-000000
14          |— lightchaindata
15              |— 000001.log
16             |— CURRENT
17             |— LOCK
18             |— LOG
19             └— MANIFEST-000000
20          |— LOCK
21          └— nodekey
22  |— keystore
23  |— nodekeyPassword
24  └— start.sh
25

```

上传nodekey 到 **/bsn/anshun-node/node/geth/** 下进行覆盖

复制**/bsn/anshun-node/node/genesis.json**创世块文件到**/bsn/anshun-node/node/geth/**目录下

```
1 cp -a /bsn/anshun-node/node/genesis.json /bsn/anshun-node/node/geth/
```

下载**static-nodes.json**到**/bsn/anshun-node/node/geth/**目录下

```
1 wget https://anshunchain.s3.cn-northwest-1.amazonaws.com.cn/config/static-nodes.json -P /bsn/anshun-node/node/geth/
```

启动节点

```
1 cd /bsn/anshun-node/
2 docker compose up -d # 或者 docker-compose up -d
```

日志输出

```
1 [root@AWS-NGX01-A161 anshun-node]# docker logs -f anshun-node
2 INFO [12-25|12:55:29.636] Maximum peer count                      ETH=100 LES=0
3 INFO [12-25|12:55:29.636] Smartcard socket not found, disabling    err="stat /ru
4 DEBUG[12-25|12:55:29.640] FS scan times                           list="219.603
5 DEBUG[12-25|12:55:29.641] FS scan times                           list="30.319µ
6 WARN [12-25|12:55:29.641] Using deprecated resource file /opt/geth/nodekey, plea
7 TRACE[12-25|12:55:29.640] Started watching keystore folder         path=/opt/get
8 WARN [12-25|12:55:29.826] Found deprecated node list file /opt/geth/static-nodes
9 DEBUG[12-25|12:55:29.828] Sanitizing Go's GC trigger               percent=100
10 INFO [12-25|12:55:29.828] Set global gas cap                       cap=40,000,00
11 INFO [12-25|12:55:29.828] Allocated trie memory caches             clean=154.00M
12 INFO [12-25|12:55:29.828] Allocated cache and file handles         database=/opt
13 DEBUG[12-25|12:55:29.854] Chain freezer table opened              database=/opt
14 DEBUG[12-25|12:55:29.854] Chain freezer table opened              database=/opt
15 DEBUG[12-25|12:55:29.854] Chain freezer table opened              database=/opt
16 DEBUG[12-25|12:55:29.854] Chain freezer table opened              database=/opt
17 DEBUG[12-25|12:55:29.854] Chain freezer table opened              database=/opt
18 INFO [12-25|12:55:29.854] Opened ancient database                 database=/opt
19 INFO [12-25|12:55:29.855] Initialised chain configuration          config="{Chai
20 DEBUG[12-25|12:55:29.860] Current full block not old enough        number=0 hash
21 INFO [12-25|12:55:30.013] [epoch]                                load current
22 INFO [12-25|12:55:30.013] [epoch]                                read epoch="{
23 INFO [12-25|12:55:30.013] Initialising Ethereum protocol          network=10898
24 INFO [12-25|12:55:30.023] Loaded most recent local header          number=0 hash
25 INFO [12-25|12:55:30.023] Loaded most recent local full block      number=0 hash
26 INFO [12-25|12:55:30.023] Loaded most recent local fast block      number=0 hash
27 DEBUG[12-25|12:55:30.024] Loaded snapshot journal                  diskroot=db9f
28 DEBUG[12-25|12:55:30.024] Reinjecting stale transactions           count=0
29 INFO [12-25|12:55:30.026] Loaded local transaction journal          transactions=
30 INFO [12-25|12:55:30.026] Regenerated local transaction journal     transactions=
31 DEBUG[12-25|12:55:30.027] Recalculated downloader QoS values       rtt=20s confi
32 INFO [12-25|12:55:30.027] Gasprice oracle is ignoring threshold set threshold=2
33 INFO [12-25|12:55:30.027] Starting peer-to-peer node               instance=Geth
34 TRACE[12-25|12:55:30.046] Adding static node                       id=5645da097e
35 TRACE[12-25|12:55:30.046] Starting p2p dial                        id=5645da097e
36 DEBUG[12-25|12:55:30.046] TCP listener up                          addr=[::]:303
37 INFO [12-25|12:55:30.048] New local node record                    seq=2 id=0f4b
38 INFO [12-25|12:55:30.048] Started P2P networking                   self="enode:/
39 DEBUG[12-25|12:55:30.049] IPCs registered                          namespaces=ad
40 INFO [12-25|12:55:30.049] IPC endpoint opened                      url=/opt/geth
41 DEBUG[12-25|12:55:30.050] Allowed origin(s) for WS RPC interface [*]
42 INFO [12-25|12:55:30.050] HTTP server started                      endpoint=[::]
43 INFO [12-25|12:55:30.050] WebSocket enabled                        url=ws://[::]
44 DEBUG[12-25|12:55:32.147] Couldn't add port mapping                proto=tcp ext
```

```
45 TRACE[12-25|12:55:45.047] Dial error id=5645da097e
46 INFO [12-25|12:55:45.047] Looking for peers peercount=0 t
47 DEBUG[12-25|12:55:50.027] Recalculated downloader QoS values rtt=20s confi
48 TRACE[12-25|12:56:05.048] Starting p2p dial id=5645da097e
49 INFO [12-25|12:56:05.048] Looking for peers peercount=0 t
50 DEBUG[12-25|12:56:10.028] Recalculated downloader QoS values rtt=20s confi
51 TRACE[12-25|12:56:20.049] Dial error id=5645da097e
52 INFO [12-25|12:56:20.049] Looking for peers peercount=0 t
53
```

端口说明

- p2p端口: 30300
- json rpc: 8545
- Ws port: 8546

块高查询

```
1 curl -X POST --header 'Content-Type: application/json' --data '{"jsonrpc": "2.0"
```