1 创建MW地址

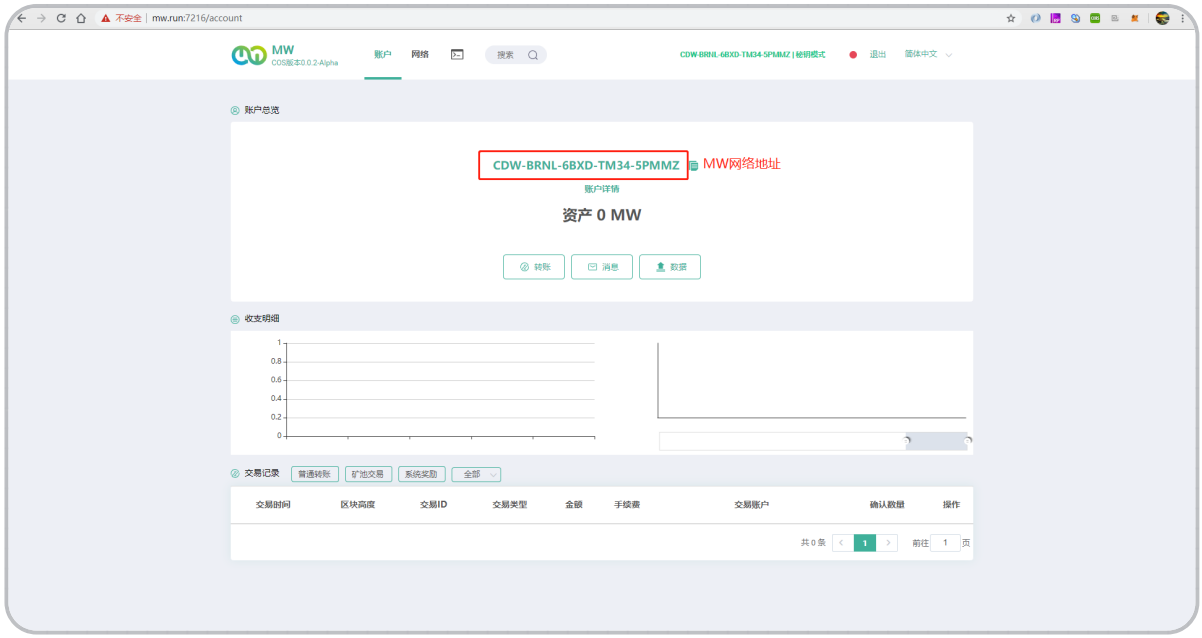
1.1 创建MW地址过程会得到 MW地址密钥，创建完成后会显示 MW地址。**切记保存好 MW地址密钥，MW地址密钥是矿机在MW网络的重要凭证，不可找回。**

1. 在浏览器地址栏打开 https://testboot.mw.run/login，点击‘没有账户? 创建账户’：

2. MW网络会算法生成一个 MW地址密钥，保存好地址密钥，点击‘下一步’：

3. 输入第2步保存的地址密钥，点击‘进入客户端’：

4. 成功后进入，MW地址 创建完成，在主界面显示有 MW网络地址；保存好地址密钥，MW地址密钥是矿机在MW网络的重要凭证。



1.2 MW挖矿程序安装

1. MW挖矿程序安装前必须是已拿到‘矿机编号’，否则无法顺利安装，且编号必须同矿机主板序列号对应；
2. 登录Linux(Ubuntu)系统，切换到 root ：

```
#命令如下两种都可
sudo su -
su root
```

3. 保持在 root 根目录，执行下载安装脚本：

```
wget http://mwfs.oss-cn-shenzhen.aliyuncs.com/cos/client/hub/hub_install_cos.sh
```

4. 给安装脚本赋予执行权限，确认赋权成功：

```
chmod 667 hub_install_cos.sh
```

5. 执行安装脚本，开始安装MW矿机程序。

   安装为执行hub_install_cos.sh 脚本带 '矿机编号' 参数，注意要指定的主板序列号对应。

   这里的 1011 是**示例**，切记注意。

```
./hub_install_cos.sh 1011
```

脚本执行过程如下，**安装完成后需要重启一次矿机，正常会自动重启一次设备，若长时间重启不成功手动操作一次，确保设备重启完成。**

```

root@mwfs-0001:~# wget http://mwfs.oss-cn-shenzhen.aliyuncs.com/cos/client/hub/hub_install_cos.sh
--2020-04-18 01:42:21--  http://mwfs.oss-cn-shenzhen.aliyuncs.com/cos/client/hub/hub_install_cos.sh
Resolving mwfs.oss-cn-shenzhen.aliyuncs.com (mwfs.oss-cn-shenzhen.aliyuncs.com)... 120.77.166.28
Connecting to mwfs.oss-cn-shenzhen.aliyuncs.com (mwfs.oss-cn-shenzhen.aliyuncs.com)|120.77.166.28|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2484 (2.4K) [application/x-sh]
Saving to: 'hub_install_cos.sh'

hub_install_cos.sh                                  100%[=============================================================================================>]   2.43K  --.-KB/s    in 0s

2020-04-18 01:42:21 (165 MB/s) - 'hub_install_cos.sh' saved [2484/2484]

root@mwfs-0001:~# ll
total 44
drwx------  6 root root 4096 Apr 18 01:42 ./
drwxr-xr-x 23 root root 4096 Apr 17 10:09 ../
-rw-------  1 root root   84 Apr 17 18:30 .bash_history
-rw-r--r--  1 root root 3106 Apr  9  2018 .bashrc
-rw-r--r--  1 root root 2484 Apr 16 02:53 hub_install_cos.sh
drwxr-xr-x  3 root root 4096 Apr 17 10:24 .hubSetting/
drwxr-xr-x  9 root root 4096 Apr 17 10:25 mwfs/
drwxr-xr-x  2 root root 4096 Apr 17 10:25 .mwfs/
-rw-r--r--  1 root root  148 Aug 17  2015 .profile
drwx------  2 root root 4096 Apr 17 10:11 .ssh/
root@mwfs-0001:~# chmod 667 hub_install_cos.sh
root@mwfs-0001:~# ./hub_install_cos.sh
you must input the client number as the parameter
root@mwfs-0001:~# ./hub_install_cos.sh 1011
install the jq command
Hit:1 http://archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:3 http://archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:4 http://archive.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
```

```
Fetched 252 kB in 3s (79.1 kB/s)
Reading package lists... Done
Reading package lists... Done
Building dependency tree
Reading state information... Done
jq is already the newest version (1.5+dfsg-2).
0 upgraded, 0 newly installed, 0 to remove and 195 not upgraded.
Reading package lists... Done
Building dependency tree
Reading state information... Done
zip is already the newest version (3.0-11build1).
0 upgraded, 0 newly installed, 0 to remove and 195 not upgraded.
sudo: cd: command not found
download the install.sh from oss...
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  3766  100  3766    0     0  47670      0 --:--:-- --:--:-- --:--:-- 47670
download the hub config file[1000] from oss...
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100    44  100    44    0     0    916      0 --:--:-- --:--:-- --:--:--   916
download the mwfs.zip from oss...
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100  204M  100  204M    0     0  25.1M      0  0:00:08  0:00:08 --:--:-- 24.9M
clean un-necessary folders and files before install ...
unzip mwfs.zip...
replace mwfs/jre/LICENSE? [y]es, [n]o, [A]ll, [N]one, [r]ename: A
chmod x to shells...
api url is https://mw.run/sc/ssHardwareProduct
[ OK ] Current environment has been set to test
follow is your os infos
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 18.04.2 LTS
Release:        18.04
Codename:       bionic
you can use the "yum install -y redhat-lsb" to install

check or rename hostname to MW-Client
check jq whether installed
Read the cpu serial no of the machine
Current machine isn't firefly board, use the dmidecode to get the serial number
[ OK ] Current machine's serial number is PM00000000000A0027
[ WARN ] Configuration file /root/.hubSetting/.tempCache/.sysCache already exists, don't re-
create it
[ OK ] Set the machine's configuration file /root/.hubSetting/.tempCache/.sysCache done
[INFO] read the factoryNum=1000, mwfsAccount=soul_1000@mw.run, diskCapacity=0 from
~/hub_info.txt
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100   428    0    50  100   378    142   1080 --:--:-- --:--:-- --:--:--  1222
```

```
[ OK ] Current serial number and owner information has been saved in MwMgr system

* * * * * /root/mwfs/MwfsNetDaemon.sh
[ OK ] cron task be set
copy init_mwfs_hub.sh to /etc/init.d/ and set it auto start
[ OK ] auto start be set
delete ~/mwfs.zip...

[ OK ] installation is finished
delete un-necessary files to clean the project...
[ TIP ] you can manually input command 'reboot' to restart or run /root/mwfs/start.sh to start the MW now!

clean un-necessary files and folders after the cos installation is successful ...
clean un-necessary files after the cos installation is successful ...
[ OK ] Client-1000 COS be installed and reboot the machine now!



Rebooting.

```

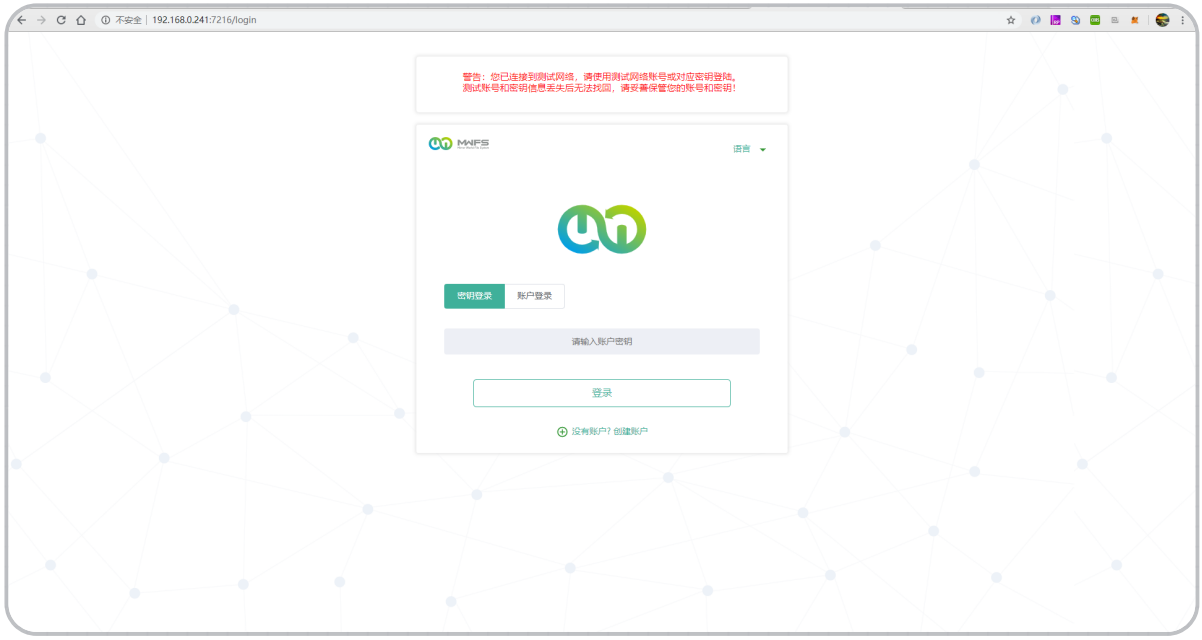
6. 检测安装，安装完成后查找端口是否启动：

```
lsof -i tcp:7216
```

当端口启动则安装启动正常，类似如下：

```
root@mwfs-0001:~# lsof -i tcp:7216
COMMAND   PID USER   FD   TYPE DEVICE SIZE/OFF NODE NAME
java    31942 root   80u  IPv6 144909      0t0  TCP *:7216 (LISTEN)
java    31942 root   82u  IPv6 146286      0t0  TCP mwfs-0001:7216->_gateway:50554 (ESTABLISHED)
java    31942 root   95u  IPv6 144912      0t0  TCP mwfs-0001:7216->_gateway:50553 (ESTABLISHED)
java    31942 root  108u  IPv6 146287      0t0  TCP mwfs-0001:7216->_gateway:50561 (ESTABLISHED)
java    31942 root  110u  IPv6 146288      0t0  TCP mwfs-0001:7216->_gateway:50555 (ESTABLISHED)
java    31942 root  111u  IPv6 144046      0t0  TCP mwfs-0001:7216->_gateway:50562 (ESTABLISHED)
java    31942 root  112u  IPv6 144047      0t0  TCP mwfs-0001:7216->_gateway:50558 (ESTABLISHED)
```

7. 网络可访问范围内，可以访问 http://ip:7216 <IP为矿机IP地址> 访问，正常能打开 MW矿机客户端 UI 界面。



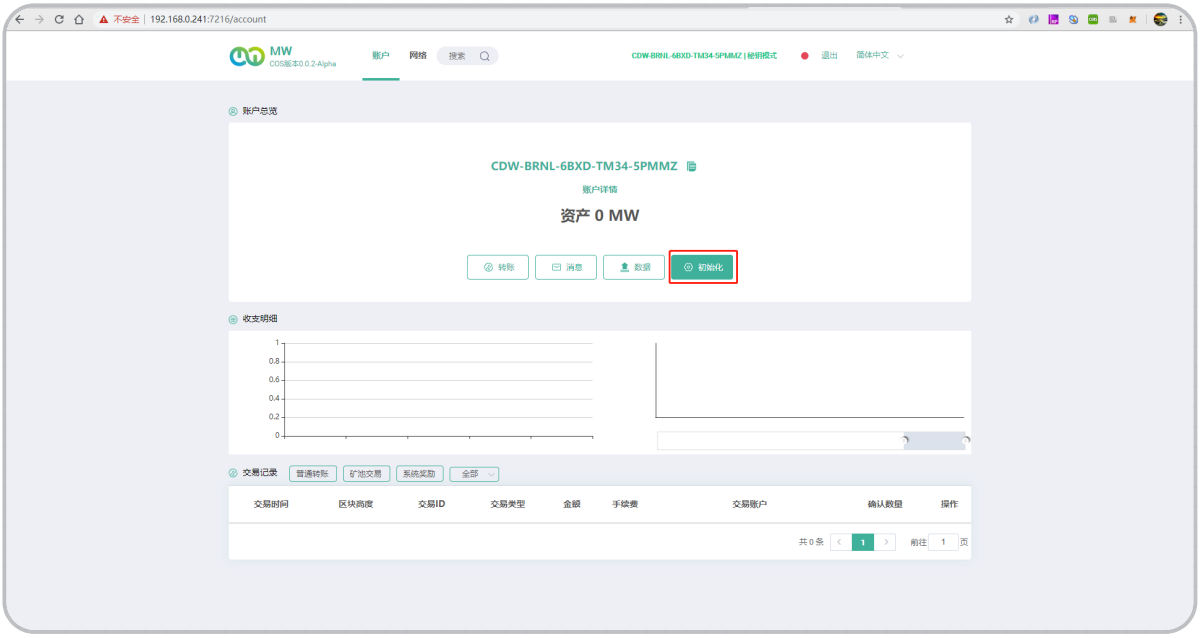
1.3 矿机绑定认证激活

一个在 http://mw.run:7216/login 创建的 MW私钥账户 只能绑定唯一一台矿机设备，注意不要重复绑定；

在成功安装 MW挖矿程序 和MW地址有**大于等于133个MW**后，才能激活矿机，且才能成功接入MW网络开启挖矿。

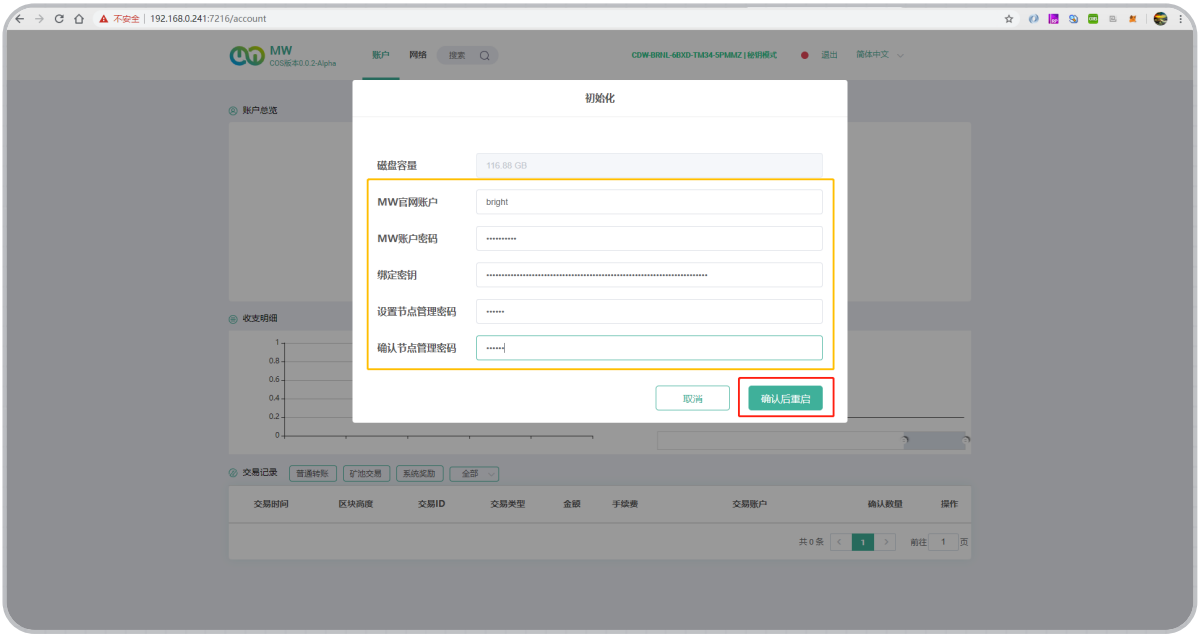
1. 打开安装成功的MW挖矿程序 UI： http://ip:7216 <IP为矿机IP地址>；打开地址后如 1.2 第7步截图；
2. 用一个未绑定的 MW地址密钥 登录矿机终端，登录成功后即绑定矿机设备完成；

3. 登录成功后如下图，点击‘初始化’按钮进入矿机认证激活页面：

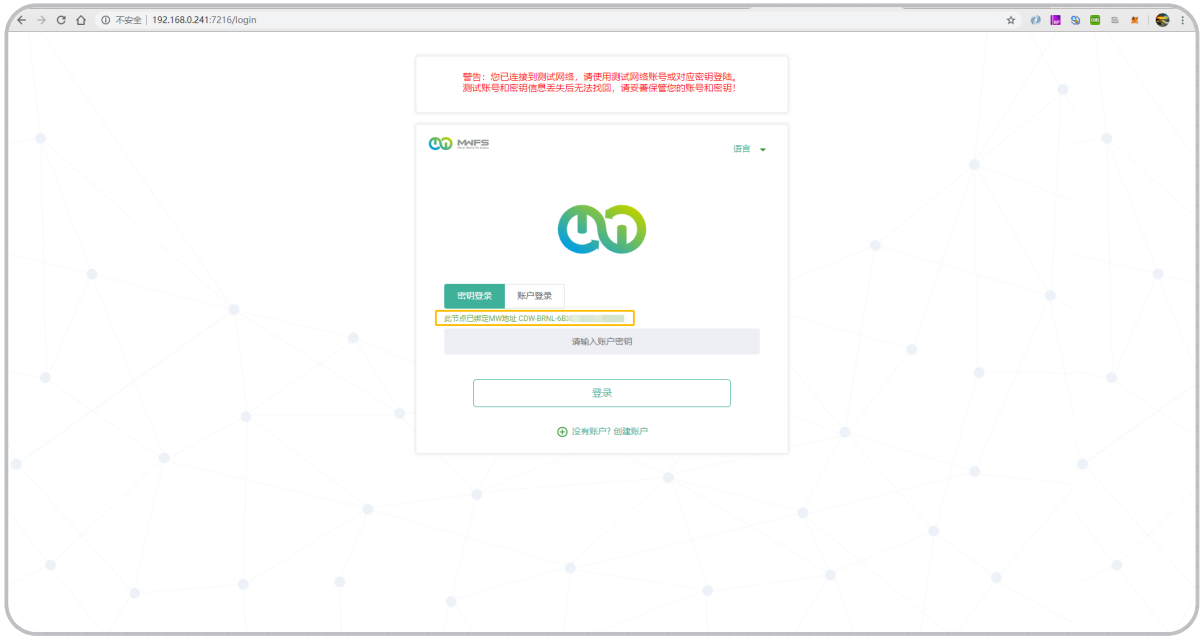


4. 在矿机认证激活页面，输入认证激活信息，然后点击‘确认后重启’完成激活：

#	参数名称	参数输入
1	MW官网账户	MW账号
2	MW账户密码	MW账户密码
3	绑定密钥	MW地址密钥；即当前矿机登录的 MW地址密钥。
4	节点管理密码	设置一个绑定当前矿机设备、MW地址的‘管理密码’；这个密码后期设备解绑等重要操作时需要验证，注意保存好‘节点管理密码’。



5. 触发‘确认后重启’后矿机会再次重启，等待重启完成后重新登录 http://ip:7216/ <IP为矿机IP地址>，打开地址UI 会显示‘此节点已绑定MW地址 CDW-BRNL-6BXD-……’，输入 MW地址密钥 登录矿机终端 UI；等待认证激活在MW网络上区块确认打包。

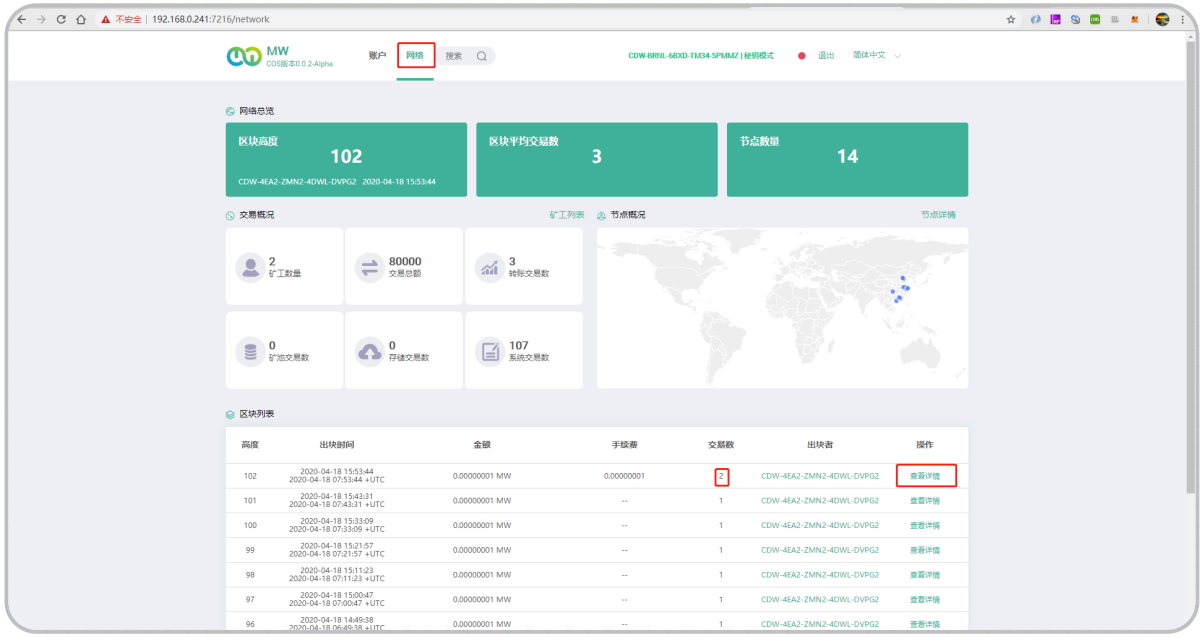


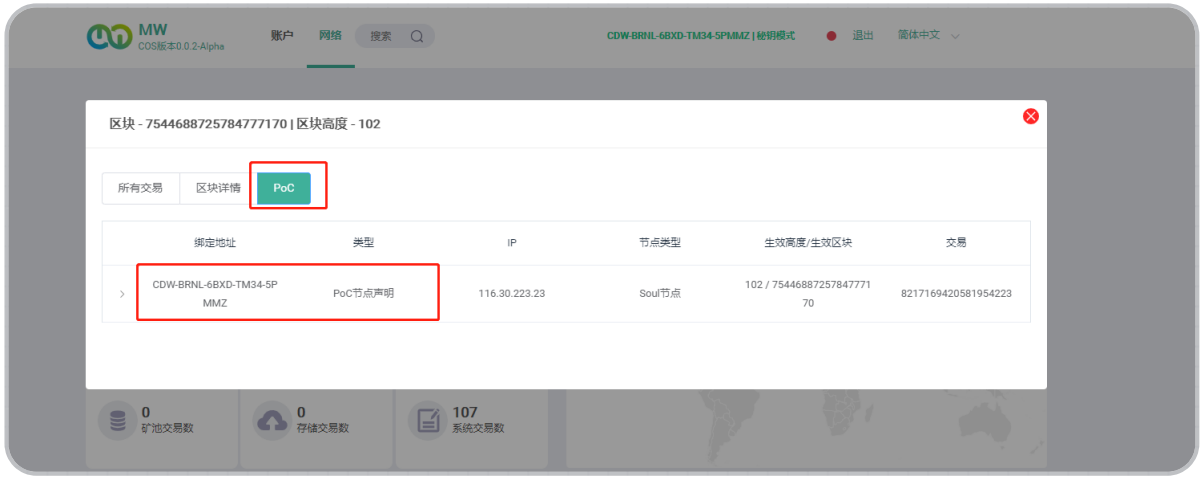
6. 查看‘认证激活’在MW网络区块打包情况，**已认证矿机才能开始在MW网络挖矿，区块网络打包完成后自动开启挖矿**。

矿机认证激活在MW网络上体现为‘PoC节点声明’，一般在激活操作后的下一个区块中（最长为一个出块间隔10分钟）。登录矿机终端 UI后，在 **网络>区块列表** 查找交易数大于1的区块详情，在区块详情中 选择 ‘PoC’

选项卡，能查看到PoC节点声明信息，绑定地址存在 MW地址既网络确认成功。

下两图为查看PoC节点声明示例：




MW
COS版本0.0.2-Alpha
账户
网络
搜索
CDW-BRNL-6BXD-TM34-5PMMZ | 秘钥模式
退出
简体中文
区块 - 75446887257847771 70 | 区块高度 - 102
所有交易
区块详情
PoC
绑定地址
类型
IP
节点类型
生效高度/生效区块
交易
CDW-BRNL-6BXD-TM34-5P MMZ
PoC节点声明
116.30.223.23
Soul节点
102 / 75446887257847771 70
8217169420581954223
0
矿池交易数
0
存储交易数
107
系统交易数