Ubuntu 离线安装 clickhouse

1、安装 clickhouse 前期文件准备

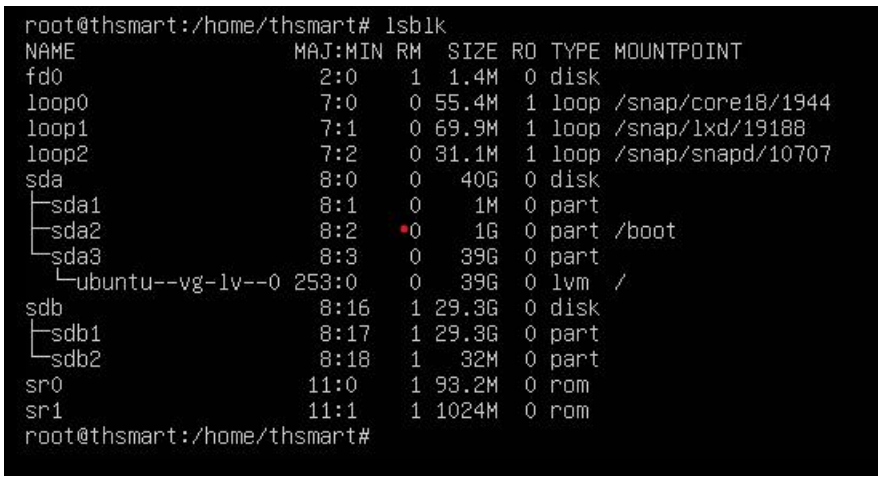
Docker 安装包准备 clickhouse-client_22.3.3.44_all.deb

clickhouse-common-static_22.3.3.44_amd64.deb

clickhouse-server_22.3.3.44_all.deb

2、将 U 盘挂载到 ubuntu 系统

首先查看是否识别 U 盘，执行 lsblk



将 U 盘进行挂载执行 mount /dev/sdb1 /mnt/clickhouse1

取消挂载执行 umount /mnt/clickhouse1

把安装包文件夹 clickhouse1 复制到/opt 目录下

执行 cp -r click house1/opt

3、对 deb 文件进行安装

安装 clickhouse-common-static_22.3.3.44_amd64.deb 执行 dpkg --install clickhouse-common-static_22.3.3.44_amd64.deb

安 装 clickhouse-server_22.3.3.44_all.deb 执 行 **dpkg --install** clickhouse-server_22.3.3.44_all.deb

```
root@thsmart:/opt/clickhouse1# dpkg --install clickhouse-server_22.3.3.44_all.deb
Selecting previously unselected package clickhouse-server.
(Reading database ... 71236 files and directories currently installed.)
Preparing to unpack clickhouse-server_22.3.3.44_all.deb ...
Unpacking clickhouse-server (22.3.3.44) ...
Setting up clickhouse-server (22.3.3.44) ...
ClickHouse binary is already located at /usr/bin/clickhouse
Symlink /usr/bin/clickhouse-server already exists but it points to /clickhouse. Will replace the old symlink to /usr/bin/clickhouse.
Creating symlink /usr/bin/clickhouse-server to /usr/bin/clickhouse.
Creating symlink /usr/bin/clickhouse-client to /usr/bin/clickhouse.
Creating symlink /usr/bin/clickhouse-local to /usr/bin/clickhouse.
Creating symlink /usr/bin/clickhouse-benchmark to /usr/bin/clickhouse.
Symlink /usr/bin/clickhouse-copier already exists but it points to /clickhouse. Will replace the old symlink to /usr/bin/clickhouse.
Creating symlink /usr/bin/clickhouse-copier to /usr/bin/clickhouse.
Creating symlink /usr/bin/clickhouse-obfuscator to /usr/bin/clickhouse.
```

安 装 clickhouse-client_22.3.3.44_all.deb4 执 行 **dpkg --install** clickhouse-client_22.3.3.44_all.deb

```
root@thsmart:/opt/clickhouse1# dpkg --install clickhouse-client_22.3.3.44_all.deb
Selecting previously unselected package clickhouse-client.
(Reading database ... 71250 files and directories currently installed.)
Preparing to unpack clickhouse-client_22.3.3.44_all.deb ...
Unpacking clickhouse-client (22.3.3.44) ...
Setting up clickhouse-client (22.3.3.44) ...
root@thsmart:/opt/clickhouse1#
```

6 执行 systemctl start clickhouse-server，并查看启动状态执行 systemctl status clickhouse-server

```
root@thsmart:/opt/clickhouse1# systemctl start clickhouse-server
root@thsmart:/opt/clickhouse1# systemctl status clickhouse-server
● clickhouse-server.service - ClickHouse Server (analytic DBMS for big data)
     Loaded: loaded (/lib/systemd/system/clickhouse-server.service; disabled; vendor preset: enabled)
     Active: active (running) since Sat 2023-07-22 00:31:11 UTC; 9s ago
   Main PID: 27709 (clickhouse-watch)
      Tasks: 206 (limit: 9417)
     Memory: 80.5M
     CGroup: /system.slice/clickhouse-server.service
             ├─27709 clickhouse-watchdog        --config=/etc/clickhouse-server/config.xml --pid-file=/run/clickhouse-server/clickhouse-server.pid
             └─27720 /usr/bin/clickhouse-server --config=/etc/clickhouse-server/config.xml --pid-file=/run/clickhouse-server/clickhouse-server.pid

Jul 22 00:31:11 thsmart systemd[1]: Started ClickHouse Server (analytic DBMS for big data).
Jul 22 00:31:11 thsmart clickhouse-server[27709]: Processing configuration file '/etc/clickhouse-server/config.xml'.
Jul 22 00:31:11 thsmart clickhouse-server[27709]: Logging trace to /var/log/clickhouse-server/clickhouse-server.log
Jul 22 00:31:11 thsmart clickhouse-server[27709]: Logging errors to /var/log/clickhouse-server/clickhouse-server.err.log
```

7、进入服务器操作执行 clickhouse-client --password=123456

```
root@thsmart:/opt/clickhouse1# clickhouse-client --password=123456
ClickHouse client version 22.3.3.44 (official build).
Connecting to localhost:9000 as user default.
Connected to ClickHouse server version 22.3.3 revision 54455.

thsmart :)
```

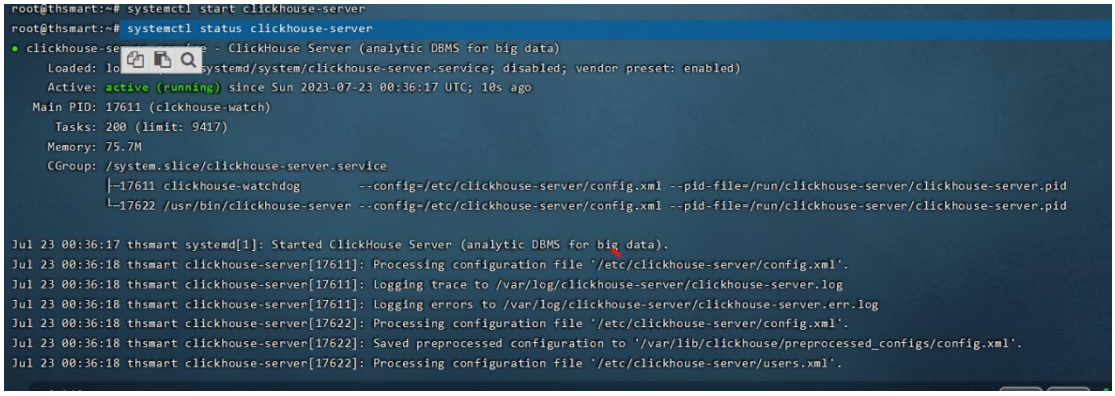
8、替换/etc/clickhouse-server/下面的 conf.xml 和 user.xml

```
root@thsmart:/etc/clickhouse-server# ls
config.d  config.xml  users.d  users.xml
```

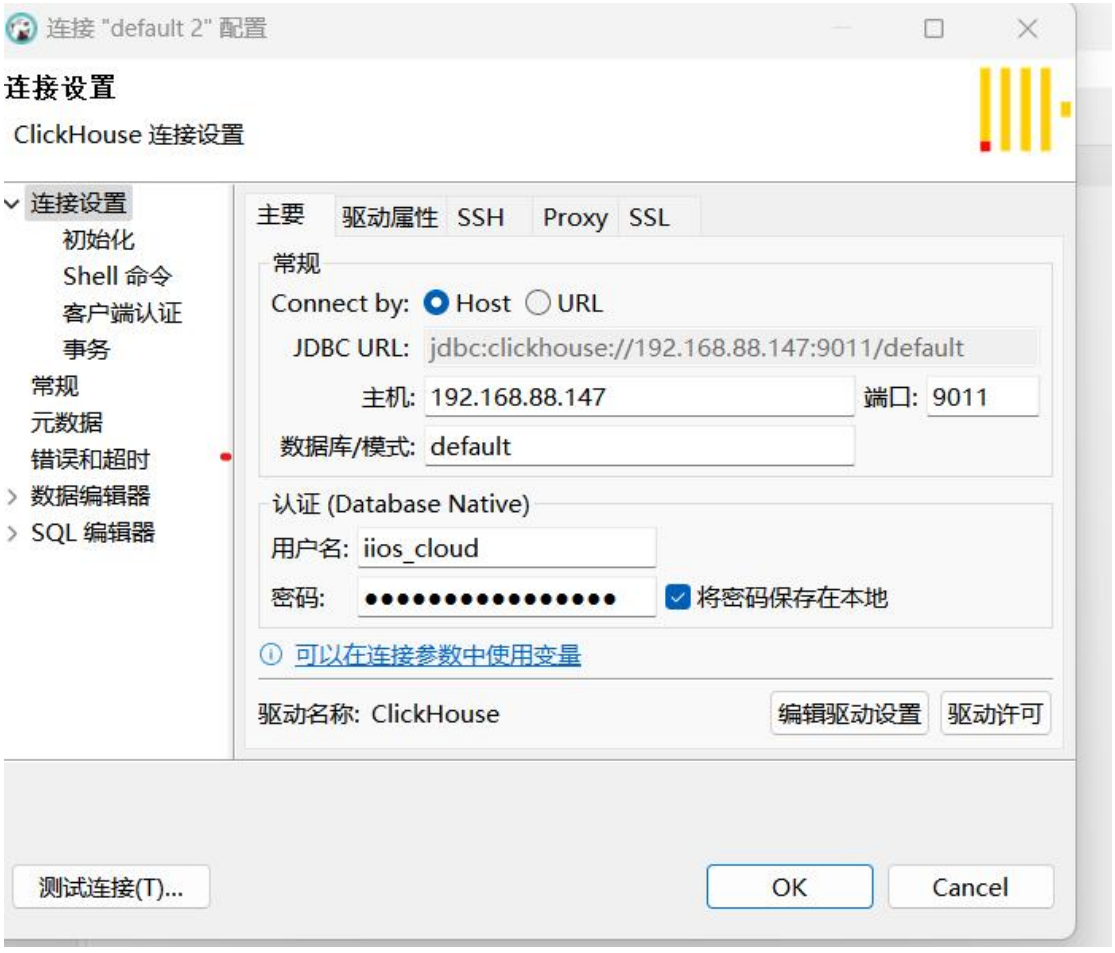
9、停止 clickhouse-server 执行 systemctl stop clickhouse-server

10、启动 clickhouse-server 执行 systemctl start clickhouse-server

11、查看 clickhouse-server 状态执行 systemctl status clickhouse-server



12、使用 DBeaver 软件测试连接



数据库：默认库名：default 用户名：iios_cloud 密码：52M!y&fokdamh9vk

13、设置 clickhouse-server 自启执行

```
root@thsmart:~# systemctl enable clickhouse-server
Synchronizing state of clickhouse-server.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable clickhouse-server
Created symlink /etc/systemd/system/multi-user.target.wants/clickhouse-server.service → /lib/systemd/system/clickhouse-server.service.
root@thsmart:~#
```

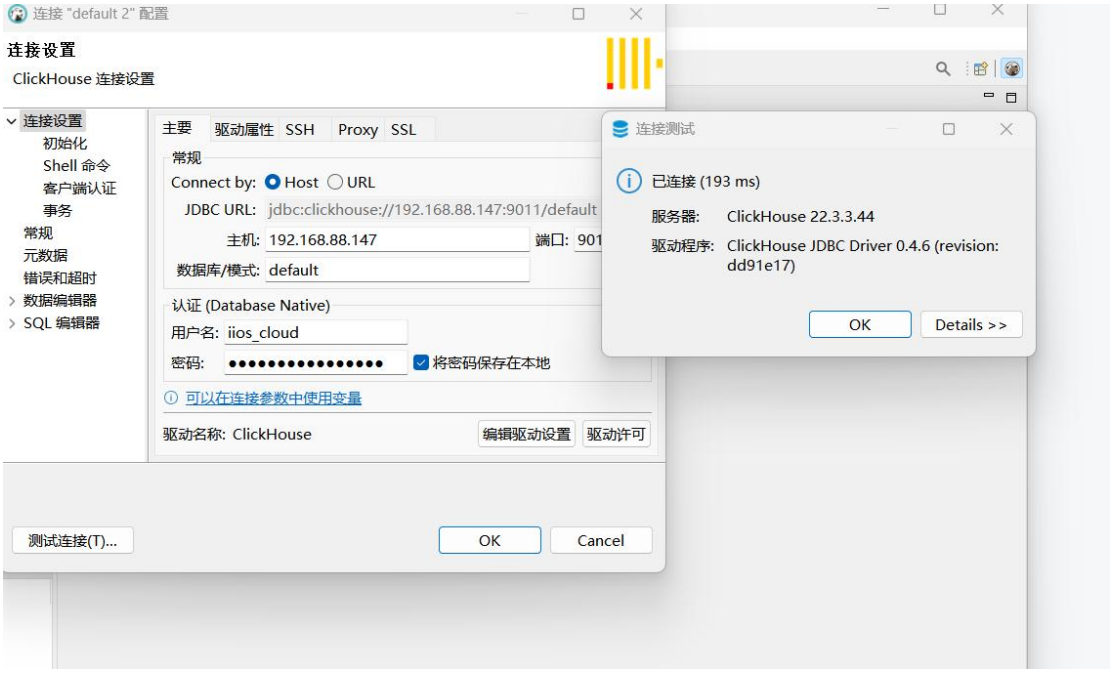
14、ubuntu 系统重启执行 reboot

15、再次查看 clickhouse-server 状态执行 systemctl status clickhouse-server

```
● clickhouse-server.service - ClickHouse Server (analytic DBMS for big data)
     Loaded: loaded (/lib/systemd/system/clickhouse-server.service; enabled; vendor preset: enabled)
     Active: active (running) since Sun 2023-07-23 00:46:35 UTC; 1min 52s ago
   Main PID: 853 (clickhouse-watch)
      Tasks: 200 (limit: 9417)
     Memory: 476.1M
     CGroup: /system.slice/clickhouse-server.service
             ├─853 clickhouse-watchdog        --config=/etc/clickhouse-server/config.xml --pid-file=/run/clickhouse-server/clickhouse-server.pid
             └─951 /usr/bin/clickhouse-server --config=/etc/clickhouse-server/config.xml --pid-file=/run/clickhouse-server/clickhouse-server.pid

Jul 23 00:46:35 thsmart systemd[1]: Started ClickHouse Server (analytic DBMS for big data).
Jul 23 00:46:36 thsmart clickhouse-server[853]: Processing configuration file '/etc/clickhouse-server/config.xml'.
Jul 23 00:46:36 thsmart clickhouse-server[853]: Logging trace to /var/log/clickhouse-server/clickhouse-server.log
Jul 23 00:46:36 thsmart clickhouse-server[853]: Logging errors to /var/log/clickhouse-server/clickhouse-server.err.log
Jul 23 00:46:38 thsmart clickhouse-server[951]: Processing configuration file '/etc/clickhouse-server/config.xml'.
Jul 23 00:46:38 thsmart clickhouse-server[951]: Saved preprocessed configuration to '/var/lib/clickhouse/preprocessed_configs/config.xml'.
Jul 23 00:46:38 thsmart clickhouse-server[951]: Processing configuration file '/etc/clickhouse-server/users.xml'.
Jul 23 00:46:38 thsmart clickhouse-server[951]: Merging configuration file '/etc/clickhouse-server/users.d/default-password.xml'.
Jul 23 00:46:38 thsmart clickhouse-server[951]: Saved preprocessed configuration to '/var/lib/clickhouse/preprocessed_configs/users.xml'.
lines 1-19
```

16、再次测试连接

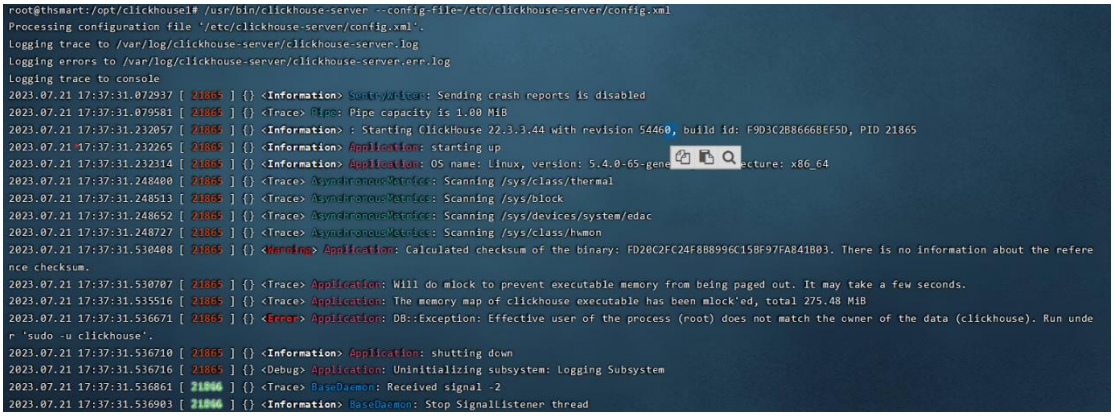


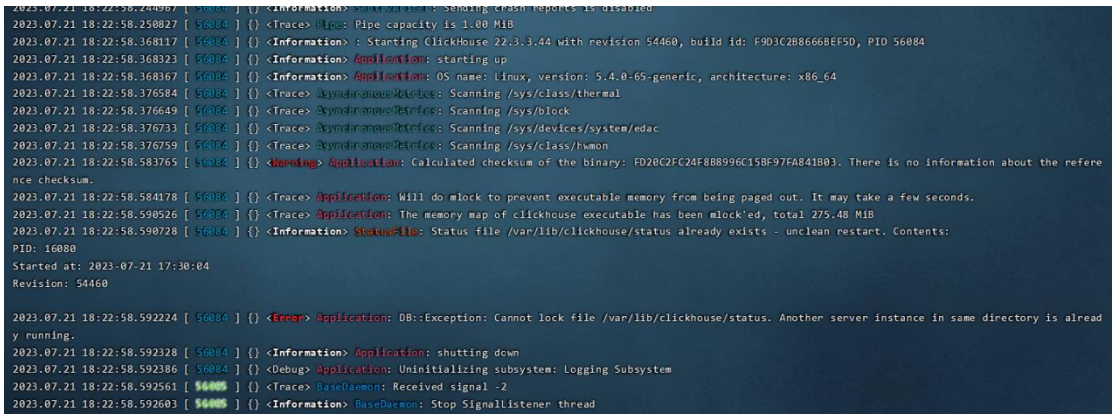
17、问题备注

当替换或更改 conf.xml 和 user.xml 后执行 clickhouse-server restart 出现一下问题

```
root@thsmart:/etc/clickhouse-server# clickhouse restart
/var/run/clickhouse-server/clickhouse-server.pid file exists and contains pid = 7065.
The process with pid = 7065 is running.
Sent terminate signal to process with pid 7065.
Waiting for server to stop
/var/run/clickhouse-server/clickhouse-server.pid file exists and contains pid = 7065.
The process with pid = 7065 is running.
Waiting for server to stop
/var/run/clickhouse-server/clickhouse-server.pid file exists and contains pid = 7065.
The process with pid = 7065 is running.
Waiting for server to stop
/var/run/clickhouse-server/clickhouse-server.pid file exists and contains pid = 7065.
The process with pid = 7065 is running.
Waiting for server to stop
/var/run/clickhouse-server/clickhouse-server.pid file exists and contains pid = 7065.
The process with pid = 7065 is running.
Waiting for server to stop
/var/run/clickhouse-server/clickhouse-server.pid file exists and contains pid = 7065.
```

说明没有重启成功、可以执行以下操作 /usr/bin/clickhouse-server --config-file=/etc/clickhouse-server/config.xml





查看报错内容，怀疑是 clikhouse-server 起重复了，可以查看 clickhouse-server 的进程并 kill 掉，执行 ps -ef | grep clickhouse-server

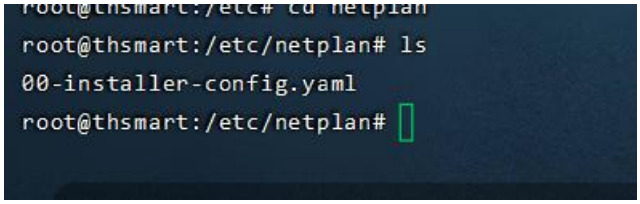
kill 掉执行 kill pid 号

再次执行 service clickhouse-server start

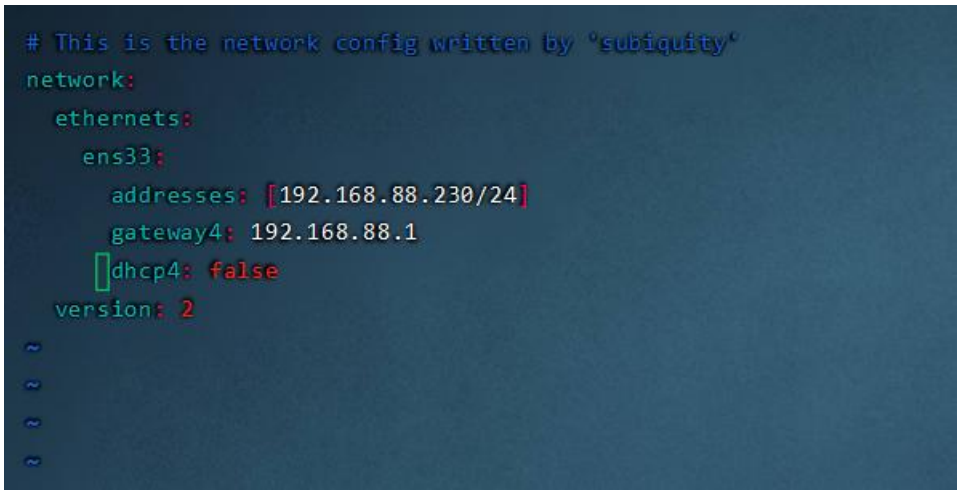
service clickhouse-server status

ubuntu 固定 ip 地址修改

首先进入，执行 cd /etc/netplan#



修改 ip 地址格式如下



最后执行 netplan apply