Ebox Linux 系统

安装 SMDC11.0 操作手册

前置条件：

1、首先本地电脑或者 linux 系统，已安装连接 SSH 的工具。

2、准备安装 SMDC11.0 的 linux 文件：

SMDCMonitor_11.0.0.20260211-5231.deb

SMDCRun_11.0.0.20260211-5231.deb

otnet-sdk-6.0.406-linux-x64.tar.gz

SMDCRun.service

SMDCMonitor.service

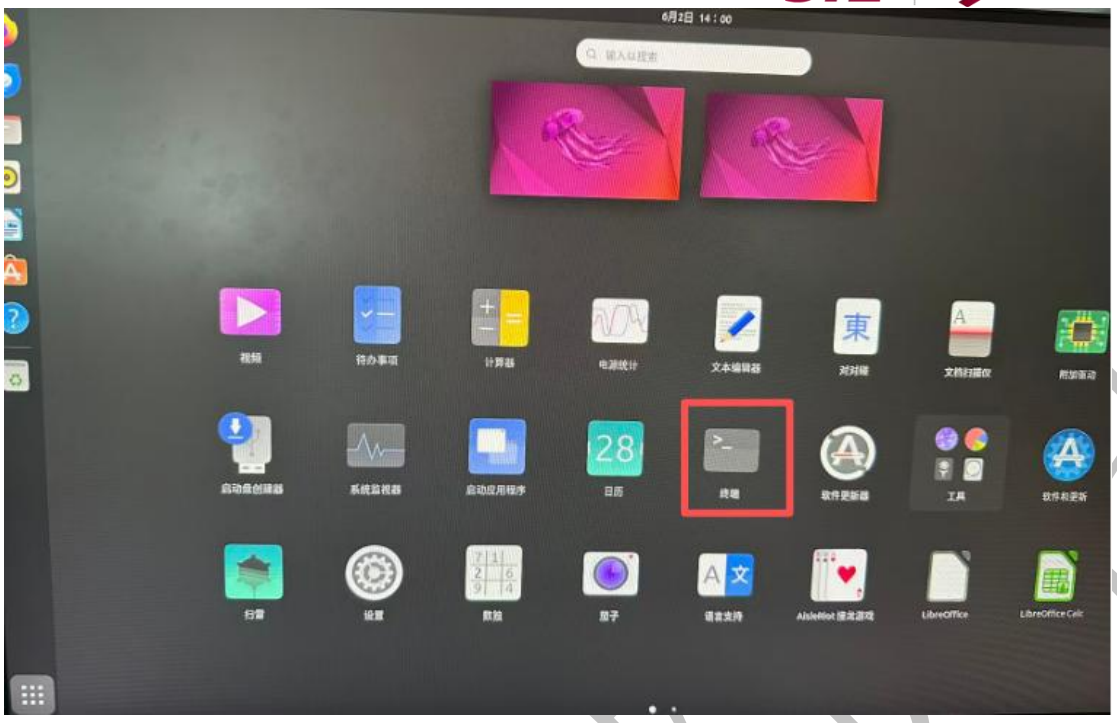
具体操作指引：

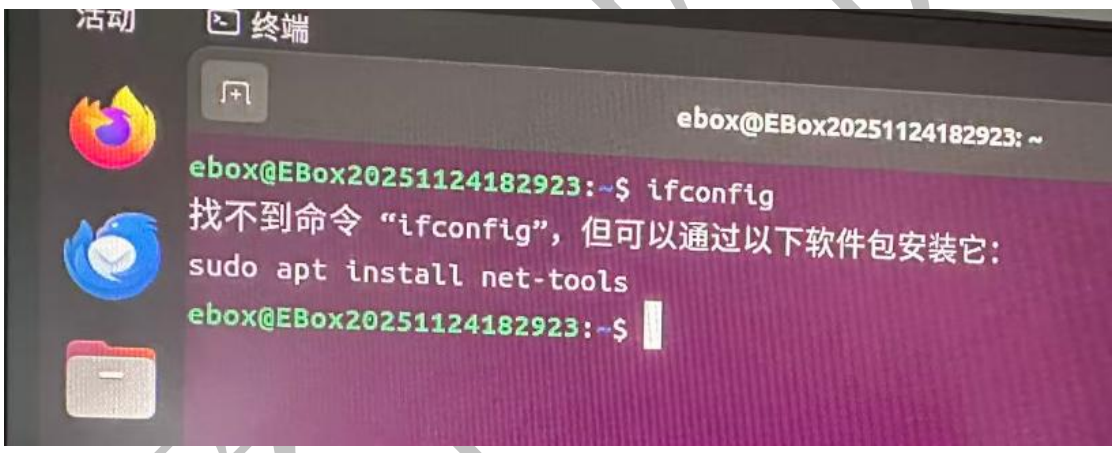
第一步：

进入 linux 系统 ebox，查看当前 ebox 地址 ip，打开终端输入：

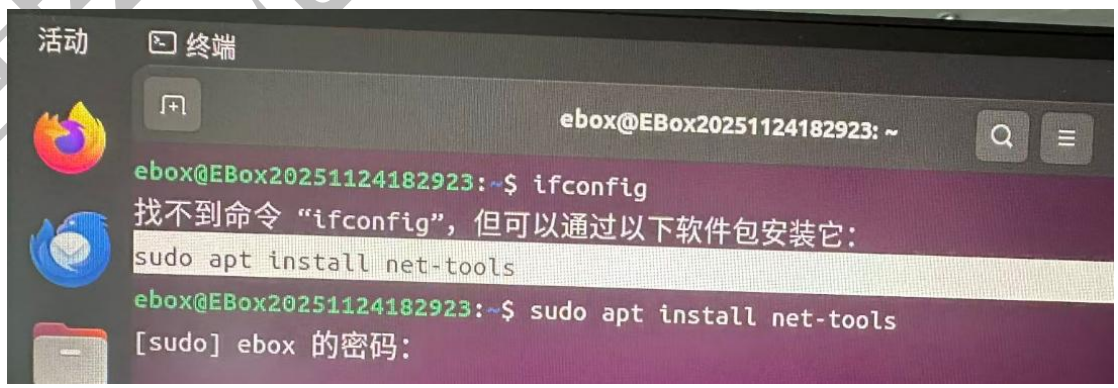
ifsonfig

赛意内部资料



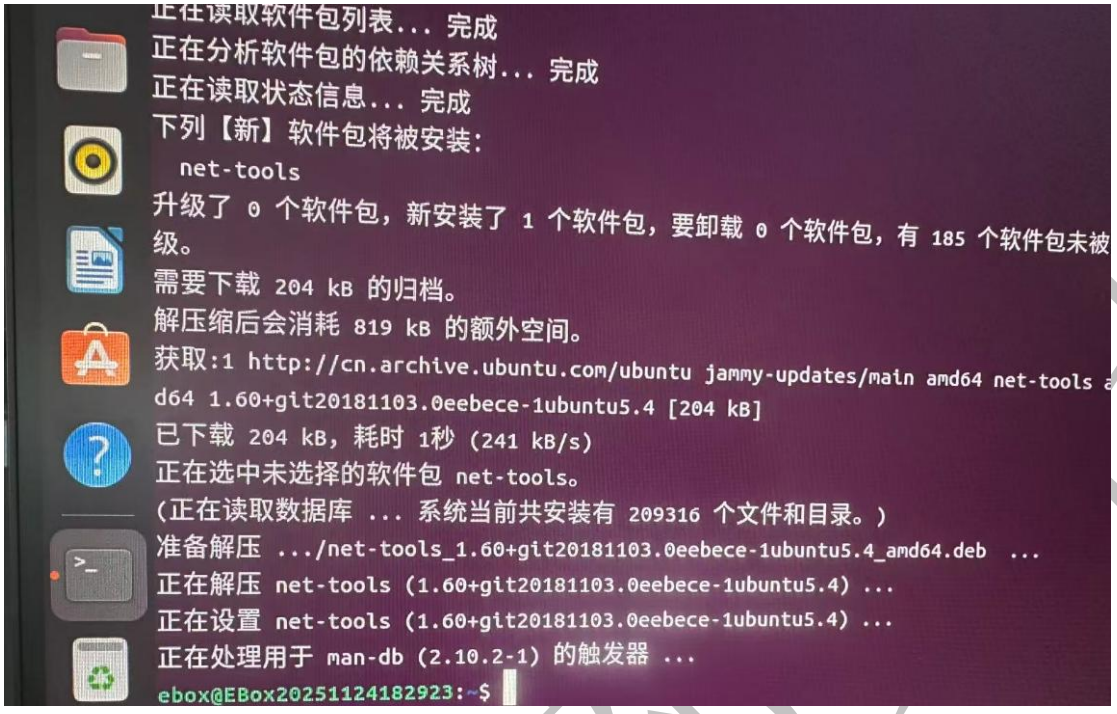


提示找不到命令，则按照提示输入安装命令：sudo apt install net-tools

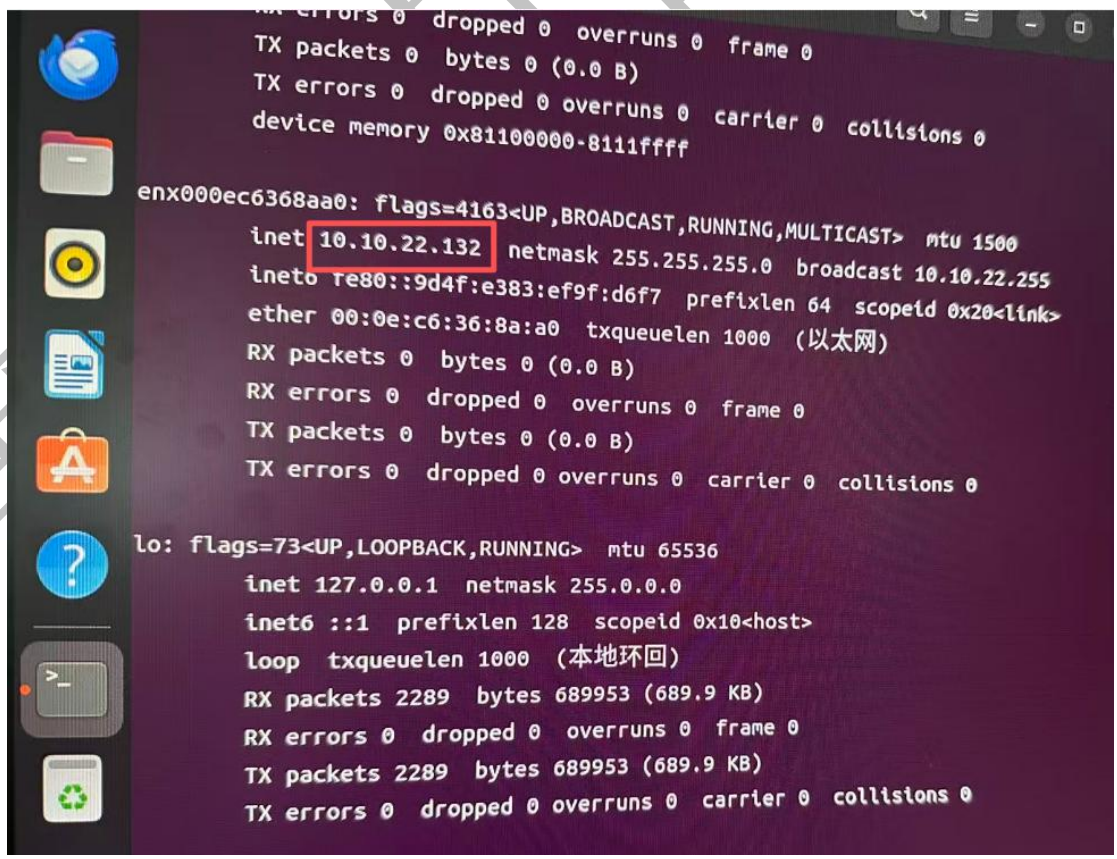


再根据提示输入：ebox 密码即可（默认出厂配置 ebox 账号和密码

都是一样的：ebox），则开始进行安装



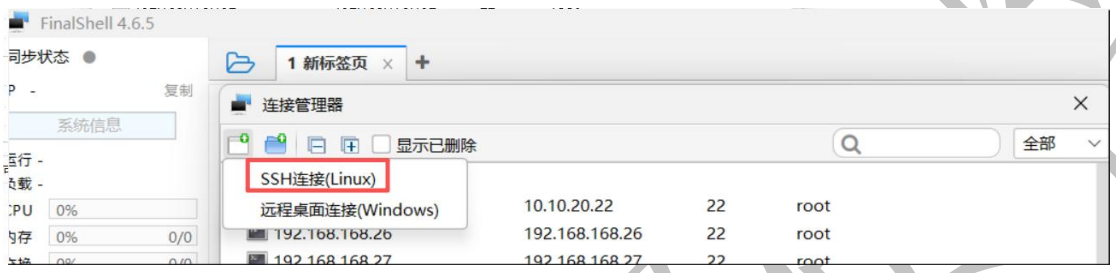
这个页面显示：说明已安装完成，然后再次输入命令：ifconfig，找到 inet 后面的 ip 地址，就是当前 ebox 地址



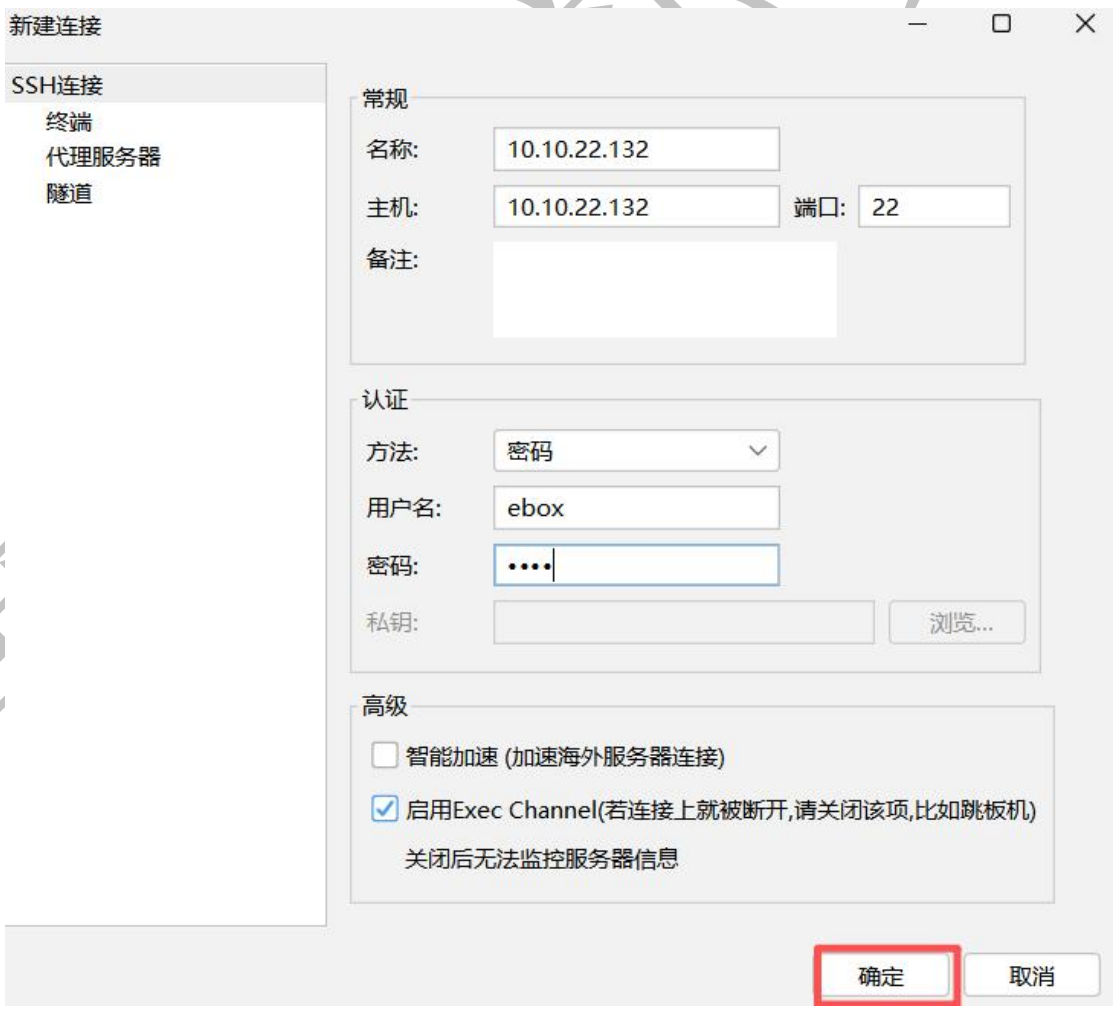
第二步：

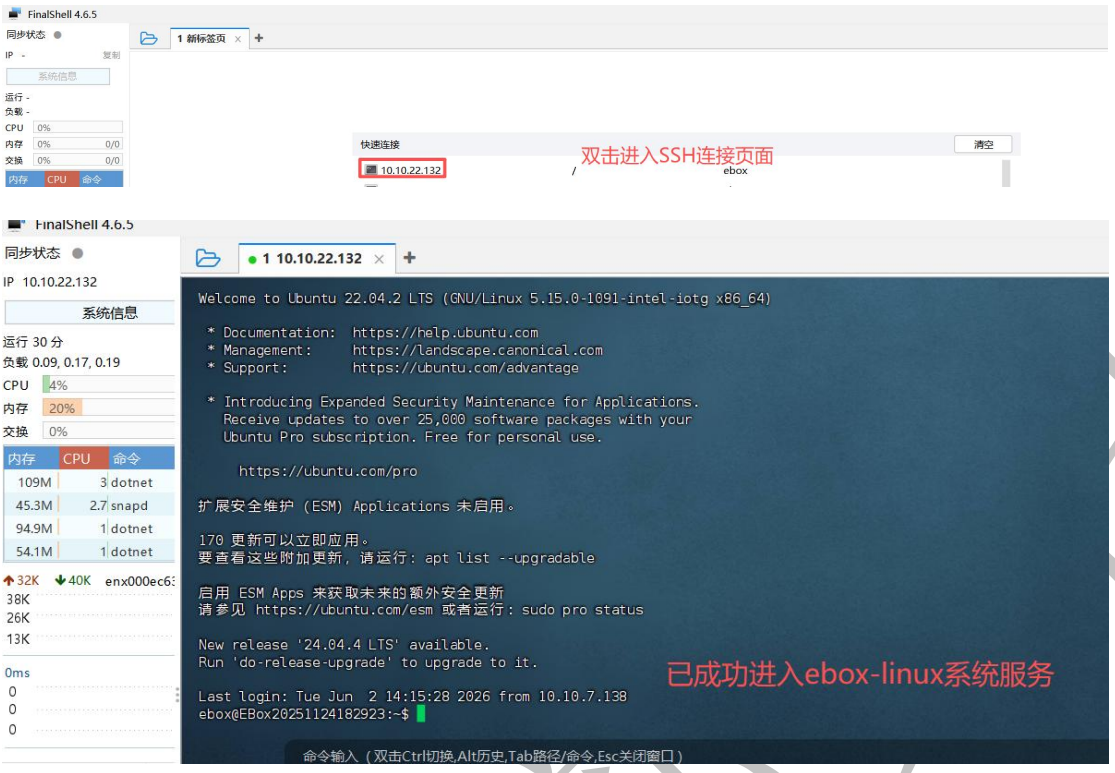
使用 finalshell (这里可以使用其他工具，只要可以把连接 SSH 即可)

工具连接 ebox ip 和端口（默认：22）



输入名称、主机、端口，再输入用户名和密码，点击【确定】

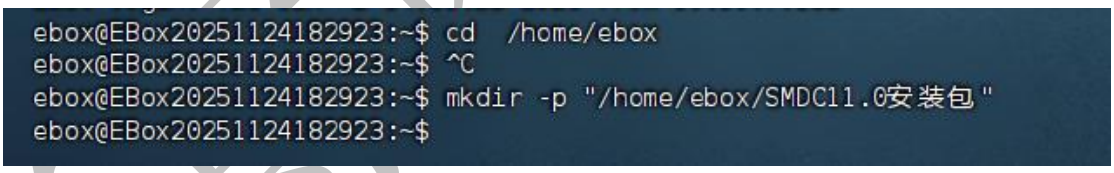




第三步：

进入目录：cd　/home/ebox　创建文件：SMDC11.0 安装包

输入命令：mkdir -p "/home/ebox/SMDC11.0 安装包"



再输入命令：ls，查看是否存在已创建文件夹



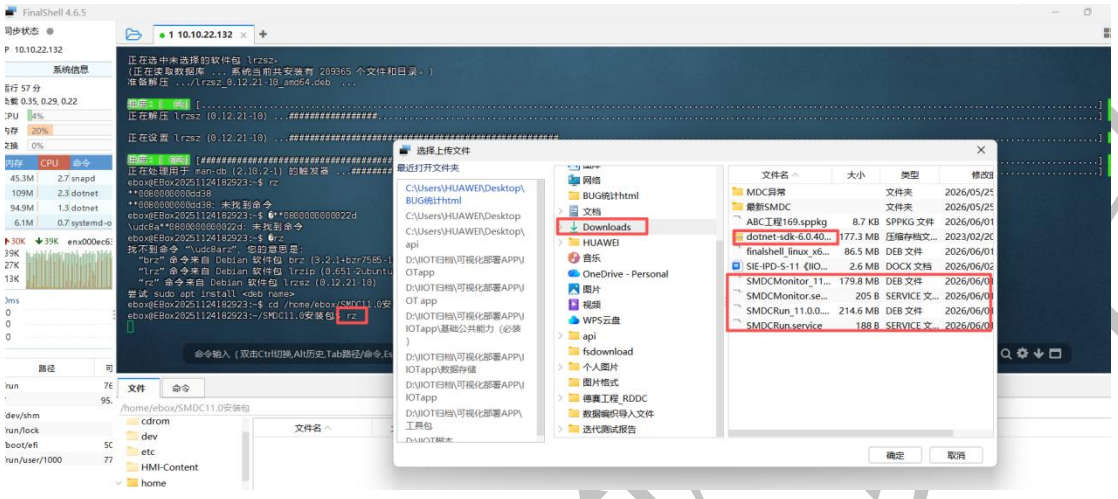
第四步：

把安装 SMDC11.0 需要的文件全部都上传到：SMDC11.0 安装包里面，

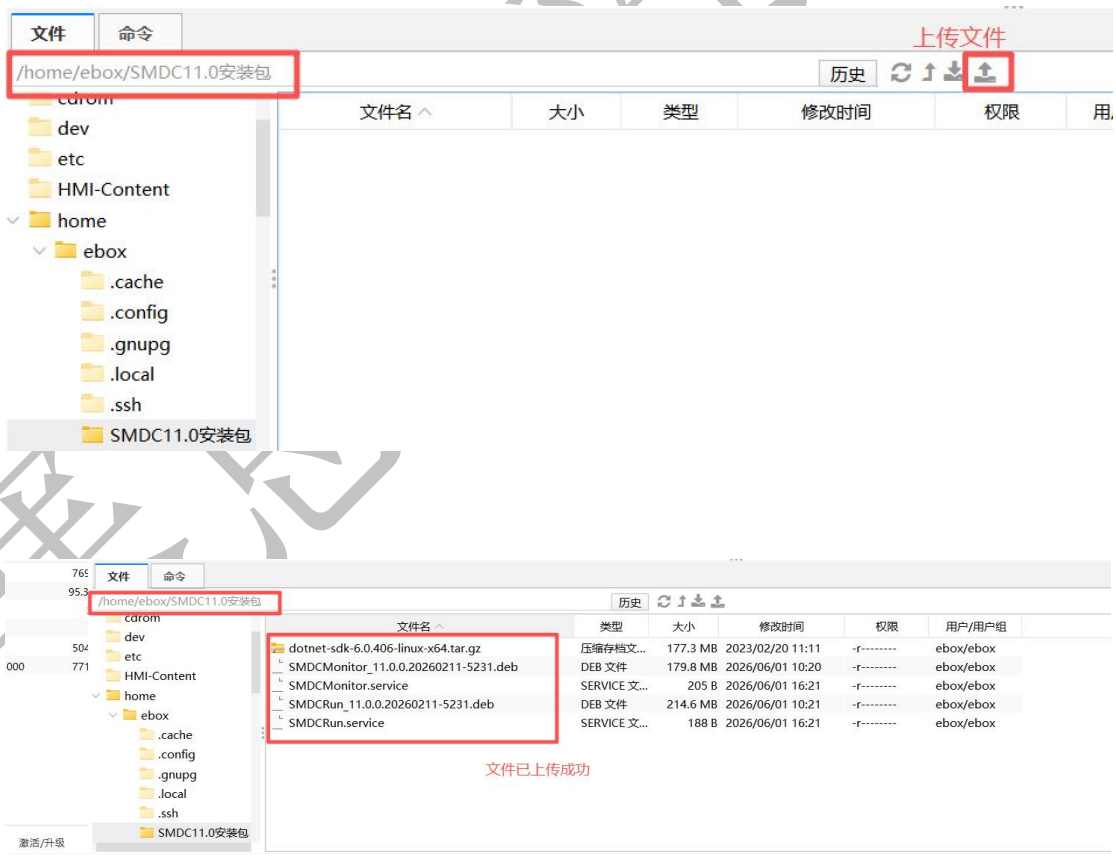
方式一：

首先进入目录：cd /home/ebox/SMDC11.0 安装包，然后输入命令：

rz 选择需要上传文件：



方式二：另外 finalshell 工具本身就支持手动上传文件



第五步：

进入目录：cd /home/ebox/SMDC11.0 安装包

```
ebox@EBox20251124182923:~/SMDC11.0安装包$ cd /home/ebox/SMDC11.0安装包
ebox@EBox20251124182923:~/SMDC11.0安装包$
```

然后解压文件：

sudo tar -zxvf dotnet-sdk-6.0.406-linux-x64.tar.gz -C /usr/share/dotnet

```
ebox@EBox20251124182923:~/SMDC11.0安装包$ sudo tar -zxvf  dotnet-sdk-6.0.406-linux-x64.tar.gz -C /usr/share/dotnet
[sudo] ebox 的密码：
```

输入 ebox 密码：ebox，然后回车

```
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.SignalR.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Authentication.Abstractions.dll
./shared/Microsoft.AspNetCore.App/6.0.14/System.Diagnostics.EventLog.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.DataProtection.Extensions.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Html.Abstractions.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.Extensions.Logging.EventSource.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.Extensions.Localization.Abstractions.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Routing.Abstractions.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Mvc.Localization.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.Extensions.Localization.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Http.Results.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.Extensions.Configuration.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.Extensions.Configuration.Binder.dll
./shared/Microsoft.AspNetCore.App/6.0.14/THIRD-PARTY-NOTICES.txt
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.DataProtection.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Hosting.Abstractions.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.Net.Http.Headers.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.Extensions.Configuration.CommandLine.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Http.Extensions.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.Extensions.Logging.Debug.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Cryptography.Internal.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.ResponseCaching.Abstractions.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.SignalR.Common.dll
./shared/Microsoft.AspNetCore.App/6.0.14/Microsoft.AspNetCore.Antiforgery.dll
ebox@EBox20251124182923:~/SMDC11.0安装包$
                                                已解压完成
```

第六步：

安装监听程序：

sudo dpkg -i SMDCMonitor_11.0.0.20260211-5231.deb

```
ebox@EBox20251124182923:~/SMDC11.0安装包$ sudo dpkg -i SMDCMonitor_11.0.0.20260211-5231.deb
正在选中未选择的软件包 smdcmonitor。
(正在读取数据库 ... 系统当前共安装有 209386 个文件和目录。)
准备解压 SMDCMonitor_11.0.0.20260211-5231.deb  ...
正在解压 smdcmonitor (11.0.0) ...
正在设置 smdcmonitor (11.0.0) ...
installed dotnet6 dotnet: /usr/bin/dotnet /usr/share/dotnet /usr/share/man/man1/dotnet.1.gz
cp: 是否覆盖 '/lib/systemd/system/SMDCMonitor.service'?
在系统启动时启用和激活防火墙
跳过添加已经存在的规则
跳过添加已经存在的规则 (v6)
跳过添加已经存在的规则
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跳过添加已经存在的规则
跳过添加已经存在的规则 (v6)
ebox@EBox20251124182923:~/SMDC11.0安装包$
```

安装运行程序：

sudo dpkg -i SMDCRun_11.0.0.20260211-5231.deb

```
ebox@EBox20251124182923:~/SMDC11.0安装包$ sudo dpkg -i SMDCRun_11.0.0.20260211-5231.deb
(正在读取数据库 ... 系统当前共安装有 209599 个文件和目录。)
准备解压 SMDCRun_11.0.0.20260211-5231.deb  ...
Failed to add a watch for /run/systemd/ask-password: inotify watch limit reached
Removed /etc/systemd/system/multi-user.target.wants/SMDCMonitor.service.
Removed /etc/systemd/system/multi-user.target.wants/SMDCRunner.service.
Removed /etc/systemd/system/multi-user.target.wants/SMDCOPCUAService.service.
Removed /etc/systemd/system/multi-user.target.wants/SMDCLog.service.
Removed /etc/systemd/system/multi-user.target.wants/HMIServer.service.
Removed /etc/systemd/system/multi-user.target.wants/APIProxy.service.
正在解压 smdcrun (11.0.1) 并覆盖 (10.0.0) ...
dpkg: 警告：无法删除原有的目录 /usr/SMDCRun/Demo/Modules ：目录非空
dpkg: 警告：无法删除原有的目录 /usr/SMDCRun/Demo ：目录非空
dpkg: 警告：无法删除原有的目录 /usr/SMDCRun ：目录非空
正在设置 smdcrun (11.0.1) ...
installed dotnet6 dotnet: /usr/bin/dotnet /usr/share/dotnet /usr/share/man/man1/dotnet.1.gz
Created symlink /etc/systemd/system/multi-user.target.wants/SMDCRun.service → /lib/systemd/system/SMDCRun.service.
在系统启动时启用和激活防火墙
跳过添加已经存在的规则
跳过添加已经存在的规则 (v6)
跳过添加已经存在的规则
跳过添加已经存在的规则 (v6)
跳过添加已经存在的规则
跳过添加已经存在的规则 (v6)
跳过添加已经存在的规则
跳过添加已经存在的规则 (v6)
跳过添加已经存在的规则
跳过添加已经存在的规则 (v6)
ebox@EBox20251124182923:~/SMDC11.0安装包$
```

第七步：

把 SMDC11.0 安装包文件夹的这两个文件，复制到：/lib/systemd/system 目录下 SMDCRun.service 和 SMDCMonitor.service

复制：SMDCRun.service 文件输入命令：

sudo cp SMDCRun.service /lib/systemd/system

```
ebox@EBox20251124182923:~/SMDC11.0安装包$ sudo cp SMDCRun.service /lib/systemd/system
ebox@EBox20251124182923:~/SMDC11.0安装包$
```

复制：SMDCMonitor.service 文件输入命令：

sudo cp SMDCMonitor.service　/lib/systemd/system

```
ebox@EBox20251124182923:~/SMDC11.0安装包$ sudo cp SMDCMonitor.service  /lib/systemd/system
ebox@EBox20251124182923:~/SMDC11.0安装包$
```

第八步：

进入目录：　cd　/lib/systemd/system

```
ebox@EBox20251124182923:~/SMDC11.0安装包$ cd  /lib/systemd/system
ebox@EBox20251124182923:/lib/systemd/system$
```

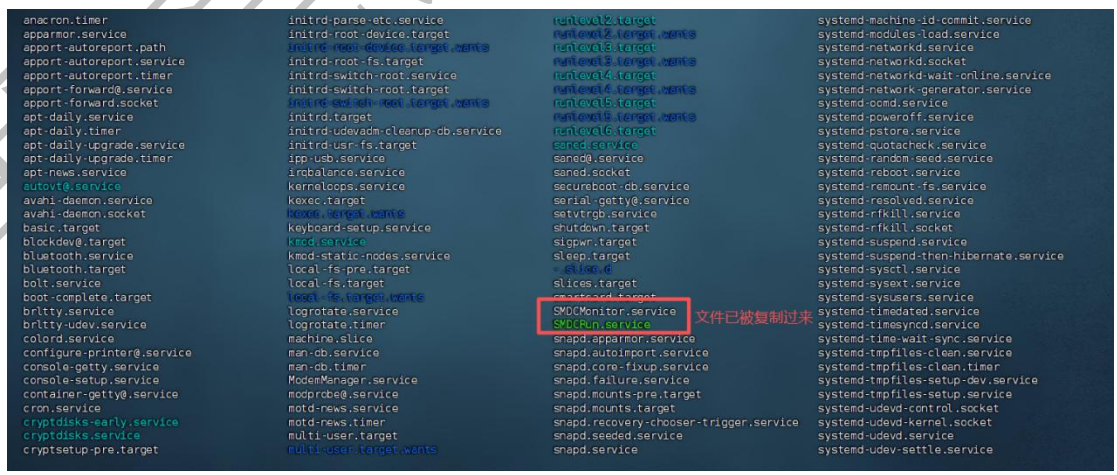
然后再执行这个命令：sudo systemctl daemon-reload

```
ebox@EBox20251124182923:/lib/systemd/system$ sudo systemctl daemon-reload
ebox@EBox20251124182923:/lib/systemd/system$
```

输入查看命令：ls，

查看 SMDCMonitor.service 和 SMDCRun.service 文件是否存在

```
ebox@EBox20251124182923:/lib/systemd/system$ ls
```



然后重启监听程序：systemctl restart SMDCMonitor　然后根据

提示输入：密码 ebox

```
ebox@EBox20251124182923:/lib/systemd/system$ systemctl restart SMDCMonitor
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ===
重新启动“SMDCMonitor.service”需要认证。
Authenticating as: ebox,,, (ebox)
Password:
==== AUTHENTICATION COMPLETE ===
ebox@EBox20251124182923:/lib/systemd/system$
```

第九步：

回到根据目录：cd /

```
ebox@EBox20251124182923:/lib/systemd/system$ cd /
ebox@EBox20251124182923:/$
```

查看监听程序状态是否正常：systemctl status SMDCMonitor，显示 runing 说明已正常

```
ebox@EBox20251124182923:/$ systemctl status SMDCMonitor
● SMDCMonitor.service - SMDCMonitor service
     Loaded: loaded (/lib/systemd/system/SMDCMonitor.service; disabled; vendor preset: enabled)
     Active: active (running) since Tue 2026-06-02 15:13:50 CST; 2min 53s ago
   Main PID: 65684 (dotnet)
      Tasks: 27 (limit: 9169)
     Memory: 33.6M
        CPU: 2.684s
     CGroup: /system.slice/SMDCMonitor.service
             └─65684 dotnet /usr/SMDCMonitorService/MonitorService.dll

6月 02 15:13:52 EBox20251124182923 dotnet[65684]: 2026-06-02 15:13:52.2201|SMDCMonitor|INFO|EBox20251124182923|dotnet|5|SMDCMonitor.Monitor|进程状态修改:  /usr/SMDCRunnerCore: -1
6月 02 15:13:52 EBox20251124182923 dotnet[65684]: info: Microsoft.Hosting.Lifetime[14]
6月 02 15:13:52 EBox20251124182923 dotnet[65684]:       Now listening on: http://[::]:7696
6月 02 15:13:52 EBox20251124182923 dotnet[65684]: info: Microsoft.Hosting.Lifetime[0]
6月 02 15:13:52 EBox20251124182923 dotnet[65684]:       Application started. Press Ctrl+C to shut down.
6月 02 15:13:52 EBox20251124182923 dotnet[65684]: info: Microsoft.Hosting.Lifetime[0]
6月 02 15:13:52 EBox20251124182923 dotnet[65684]:       Hosting environment: Production
6月 02 15:13:52 EBox20251124182923 dotnet[65684]: info: Microsoft.Hosting.Lifetime[0]
6月 02 15:13:52 EBox20251124182923 dotnet[65684]:       Content root path: /usr/SMDCMonitorService/
6月 02 15:13:52 EBox20251124182923 dotnet[65684]: 2026-06-02 15:13:52.2601|SMDCMonitor|INFO|EBox20251124182923|dotnet|14|SMDCMonitor.MonitorSmdcTask|停止进程: /usr/SMDCRunnerCore  status:-1
ebox@EBox20251124182923:/$
```

查看运行程序状态是否正常：systemctl status SMDCRun，

如果显示状态不是 runing，

```
ebox@EBox20251124182923:/$ systemctl status SMDCRun
Warning: The unit file, source configuration file or drop-ins of SMDCRun.service changed on disk. Run 'systemctl daemon-reload' to reload units.
× SMDCRun.service - SMECRun service
     Loaded: loaded (/lib/systemd/system/SMDCRun.service; enabled; vendor preset: enabled)
     Active: failed (Result: exit-code) since Tue 2026-06-02 15:05:23 CST; 11min ago
    Process: 59782 ExecStart=/usr/share/dotnet6/dotnet /usr/SMDCRunnerCore/SMDCRun.dll (code=exited, status=203/EXEC)
   Main PID: 59782 (code=exited, status=203/EXEC)
        CPU: 1ms

6月 02 15:05:23 EBox20251124182923 systemd[1]: Started SMECRun service.
6月 02 15:05:23 EBox20251124182923 systemd[59782]: SMDCRun.service: Failed to locate executable /usr/share/dotnet6/dotnet: No such file or directory
6月 02 15:05:23 EBox20251124182923 systemd[59782]: SMDCRun.service: Failed at step EXEC spawning /usr/share/dotnet6/dotnet: No such file or directory
6月 02 15:05:23 EBox20251124182923 systemd[1]: SMDCRun.service: Main process exited, code=exited, status=203/EXEC
6月 02 15:05:23 EBox20251124182923 systemd[1]: SMDCRun.service: Failed with result 'exit-code'.
ebox@EBox20251124182923:/$
```

则需要再次重启监听程序：systemctl restart SMDCMonitor，按照提示输入：密码 ebox

```
ebox@EBox20251124182923:/$ systemctl restart SMDCMonitor
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ===
重新启动"SMDCMonitor.service"需要认证。
Authenticating as: ebox,,, (ebox)
Password:
==== AUTHENTICATION COMPLETE ===
ebox@EBox20251124182923:/$
```

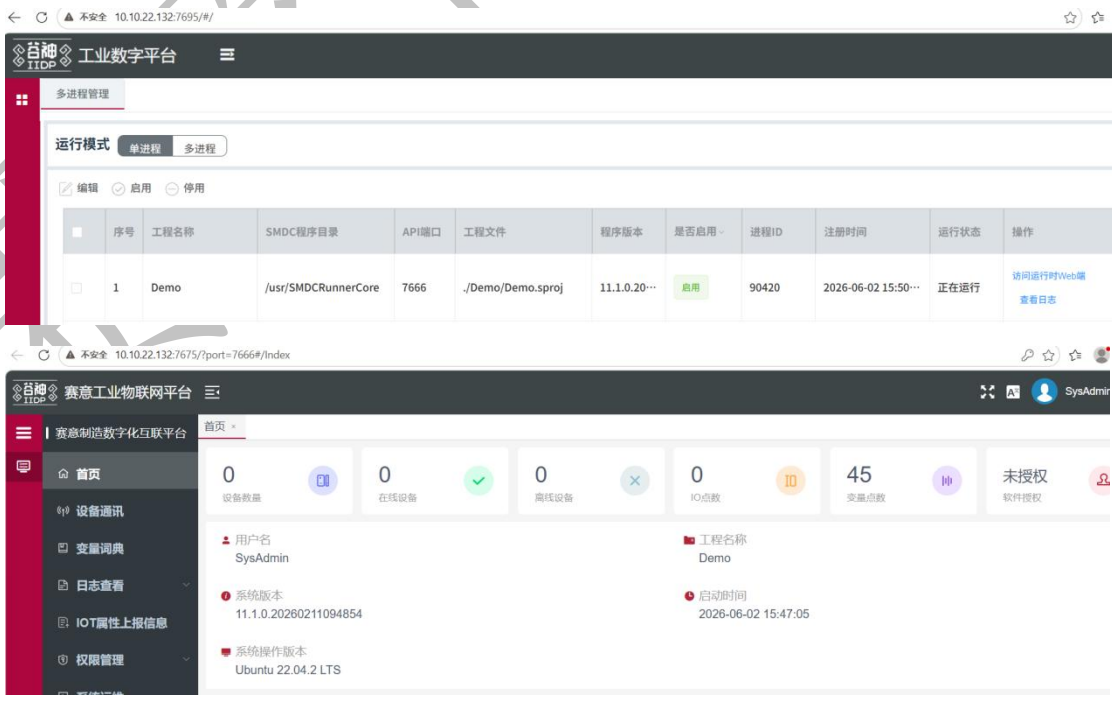
然后再次查看运行程序：systemctl status SMDCRun　是否显示 runing：说明已正常

```
ebox@EBox20251124182923:/$ systemctl status SMDCRun
● SMDCRun.service - SMECRun service
     Loaded: loaded (/lib/systemd/system/SMDCRun.service; enabled; vendor preset: enabled)
     Active: active (running) since Tue 2026-06-02 15:47:03 CST; 2min 46s ago
   Main PID: 90420 (dotnet)
      Tasks: 32 (limit: 9169)
     Memory: 61.2M
        CPU: 8.956s
     CGroup: /system.slice/SMDCRun.service
             └─90420 dotnet /usr/SMDCRunnerCore/SMDCRun.dll

6月 02 15:47:05 EBox20251124182923 sudo[90475]:     root : PWD=/usr/SMDCRunnerCore ; USER=root ; COMMAND=/usr/sbin/dmide
6月 02 15:47:05 EBox20251124182923 sudo[90474]:     root : PWD=/usr/SMDCRunnerCore ; USER=root ; COMMAND=/usr/sbin/dmide
6月 02 15:47:05 EBox20251124182923 sudo[90475]: pam_unix(sudo:session): session opened for user root(uid=0) by (uid=0)
6月 02 15:47:05 EBox20251124182923 sudo[90474]: pam_unix(sudo:session): session opened for user root(uid=0) by (uid=0)
6月 02 15:47:05 EBox20251124182923 sudo[90475]: pam_unix(sudo:session): session closed for user root
6月 02 15:47:05 EBox20251124182923 sudo[90474]: pam_unix(sudo:session): session closed for user root
6月 02 15:47:05 EBox20251124182923 dotnet[90420]: http://+:7666
6月 02 15:47:07 EBox20251124182923 dotnet[90420]: Topshelf.Hosts.ConsoleRunHost Information: 0 :
6月 02 15:47:07 EBox20251124182923 dotnet[90420]: The SMDCRun service is now running, press Control+C to exit.
6月 02 15:47:07 EBox20251124182923 dotnet[90420]: The SMDCRun service is now running, press Control+C to exit.
ebox@EBox20251124182923:/$
```

第十步：

访问运行时页面：http://10.10.22.132:7695/#/查看工程是否正常运行



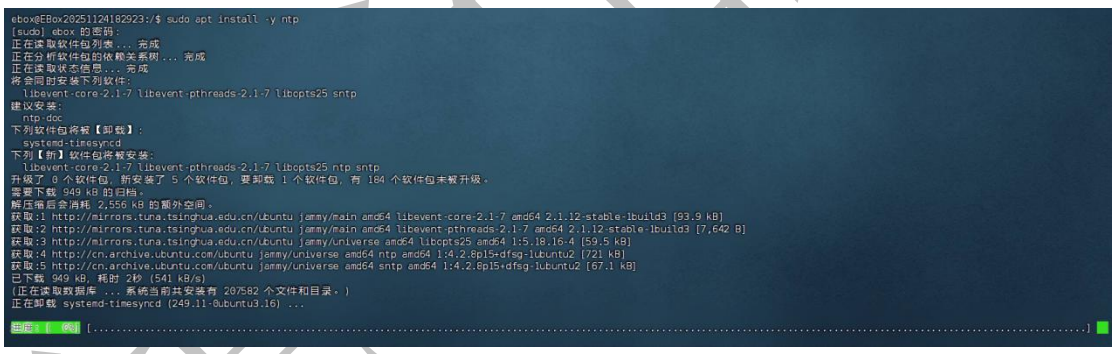
注意：如果进入 web 运行时页面无法打开，则需要开放端口，根据下面提供截图，自行开放端口即可。

开放端口

类型	命令示例	说明
单个TCP	`sudo ufw allow 80/tcp`	开放HTTP服务端口
单个UDP	`sudo ufw allow 53/udp`	开放DNS服务端口
端口范围	`sudo ufw allow 3000:4000/tcp`	开放连续端口区间

第十一步：

安装 ntp 服务，时间同步服务，安装命令如下：sudo apt install -y ntp



查看 ntp 是否运行成功：sudo systemctl status ntp，显示 runing 则说明成功。

```
ebox@EBox20251124182923:/$ sudo systemctl status ntp
● ntp.service - Network Time Service
     Loaded: loaded (/lib/systemd/system/ntp.service; enabled; vendor preset: enabled)
     Active: active (running) since Tue 2026-06-02 15:31:45 CST; 2min 36s ago
       Docs: man:ntpd(8)
    Process: 78699 ExecStart=/usr/lib/ntp/ntp-systemd-wrapper (code=exited, status=0/SUCCESS)
   Main PID: 78705 (ntpd)
      Tasks: 2 (limit: 9169)
     Memory: 1.3M
        CPU: 46ms
     CGroup: /system.slice/ntp.service
             └─78705 /usr/sbin/ntpd -p /var/run/ntpd.pid -g -u 130:137

6月  02 15:31:49 EBox20251124182923 ntpd[78705]: Soliciting pool server 185.209.85.222
6月  02 15:31:49 EBox20251124182923 ntpd[78705]: Soliciting pool server 84.16.67.12
6月  02 15:31:49 EBox20251124182923 ntpd[78705]: Soliciting pool server 111.230.189.174
6月  02 15:31:50 EBox20251124182923 ntpd[78705]: Soliciting pool server 211.68.71.26
6月  02 15:31:50 EBox20251124182923 ntpd[78705]: Soliciting pool server 193.182.111.14
6月  02 15:31:50 EBox20251124182923 ntpd[78705]: Soliciting pool server 162.159.200.1
6月  02 15:31:50 EBox20251124182923 ntpd[78705]: Soliciting pool server 185.125.190.56
6月  02 15:31:51 EBox20251124182923 ntpd[78705]: Soliciting pool server 185.125.190.57
6月  02 15:31:51 EBox20251124182923 ntpd[78705]: Soliciting pool server 116.203.151.74
6月  02 15:31:51 EBox20251124182923 ntpd[78705]: Soliciting pool server 95.111.202.5
ebox@EBox20251124182923:/$
```

禁忌内部资料