



通过python脚本获取设备支持的netconf能力集

NETCONF

郭文浩

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问题描述

因为有不同的设备不同版本，支持的capabilities都有不同，如何能快速的获取设备支持的netconf能力集

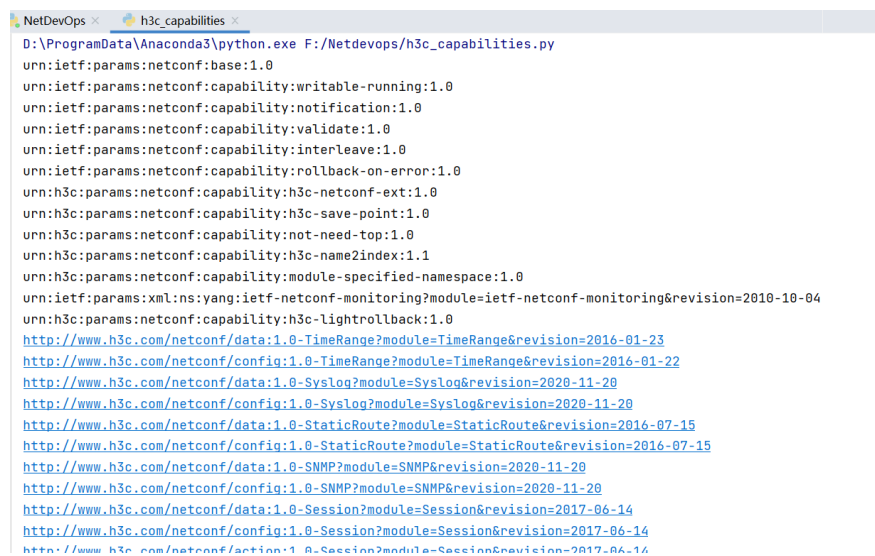
解决方法

准备好python环境, 使用pip3 install ncclient

如果出现了如下报错, 在代码中添加 hostkey_verify=False

```
Traceback (most recent call last):
  File "F:/Netdevops/h3c_capabilities.py", line 2, in
    m = manager.connect(host="x.x.x.x", port=830, username="username", password="username")
  File "D:\ProgramData\Anaconda3\lib\site-packages\ncclient\manager.py", line 176, in connect
    return connect_ssh(*args, **kwargs)
  File "D:\ProgramData\Anaconda3\lib\site-packages\ncclient\manager.py", line 143, in connect_ssh
    session.connect(*args, **kwargs)
  File "D:\ProgramData\Anaconda3\lib\site-packages\ncclient\transport\ssh.py", line 351, in connect
    raise SSHUnknownHostError(known_hosts_lookups[0], fingerprint)
ncclient.transport.errors.SSHUnknownHostError: Unknown host key [76:1d:66:55:26:2e:e3:9b:b7:ed:24:af:26:56:cd:d9] for [x.x.x.x]
```

```
from ncclient import manager
m = manager.connect(host="x.x.x.x", port=830, username="username", password="password", hostkey_verify=False)
for a in m.server_capabilities: #查看server端的capabilities
    print(a)
for a in m.client_capabilities: #查看client端的capabilities
    print(a)
获知能力集
```



```
NetDevOps x h3c_capabilities x
D:\ProgramData\Anaconda3\python.exe F:/Netdevops/h3c_capabilities.py
urn:ietf:params:netconf:base:1.0
urn:ietf:params:netconf:capability:writable-running:1.0
urn:ietf:params:netconf:capability:notification:1.0
urn:ietf:params:netconf:capability:validate:1.0
urn:ietf:params:netconf:capability:interleave:1.0
urn:ietf:params:netconf:capability:rollback-on-error:1.0
urn:h3c:params:netconf:capability:h3c-netconf-ext:1.0
urn:h3c:params:netconf:capability:h3c-save-point:1.0
urn:h3c:params:netconf:capability:not-need-top:1.0
urn:h3c:params:netconf:capability:h3c-name2index:1.1
urn:h3c:params:netconf:capability:module-specified-namespace:1.0
urn:ietf:params:xml:ns:yang:ietf-netconf-monitoring?module=ietf-netconf-monitoring&revision=2010-10-04
urn:h3c:params:netconf:capability:h3c-lightrollback:1.0
http://www.h3c.com/netconf/data:1.0-TimeRange?module=TimeRange&revision=2016-01-23
http://www.h3c.com/netconf/config:1.0-TimeRange?module=TimeRange&revision=2016-01-22
http://www.h3c.com/netconf/data:1.0-Syslog?module=Syslog&revision=2020-11-20
http://www.h3c.com/netconf/config:1.0-Syslog?module=Syslog&revision=2020-11-20
http://www.h3c.com/netconf/data:1.0-StaticRoute?module=StaticRoute&revision=2016-07-15
http://www.h3c.com/netconf/config:1.0-StaticRoute?module=StaticRoute&revision=2016-07-15
http://www.h3c.com/netconf/data:1.0-SNMP?module=SNMP&revision=2020-11-20
http://www.h3c.com/netconf/config:1.0-SNMP?module=SNMP&revision=2020-11-20
http://www.h3c.com/netconf/data:1.0-Session?module=Session&revision=2017-06-14
http://www.h3c.com/netconf/config:1.0-Session?module=Session&revision=2017-06-14
```

