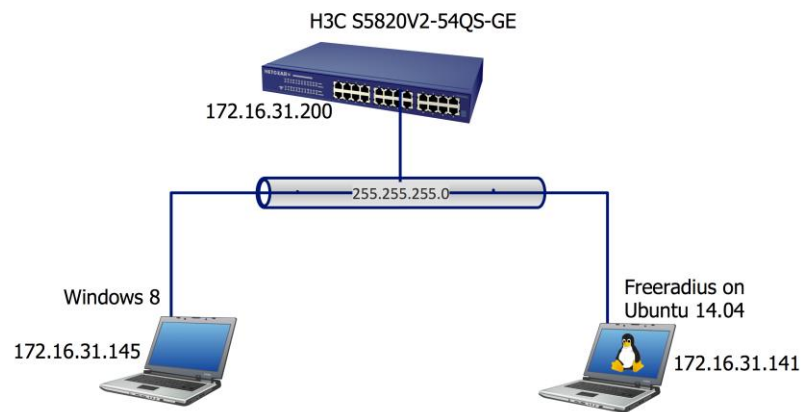


H3C COMWARE 7 FREERADIUS REMOTE AAA SIMULATION USING HCL

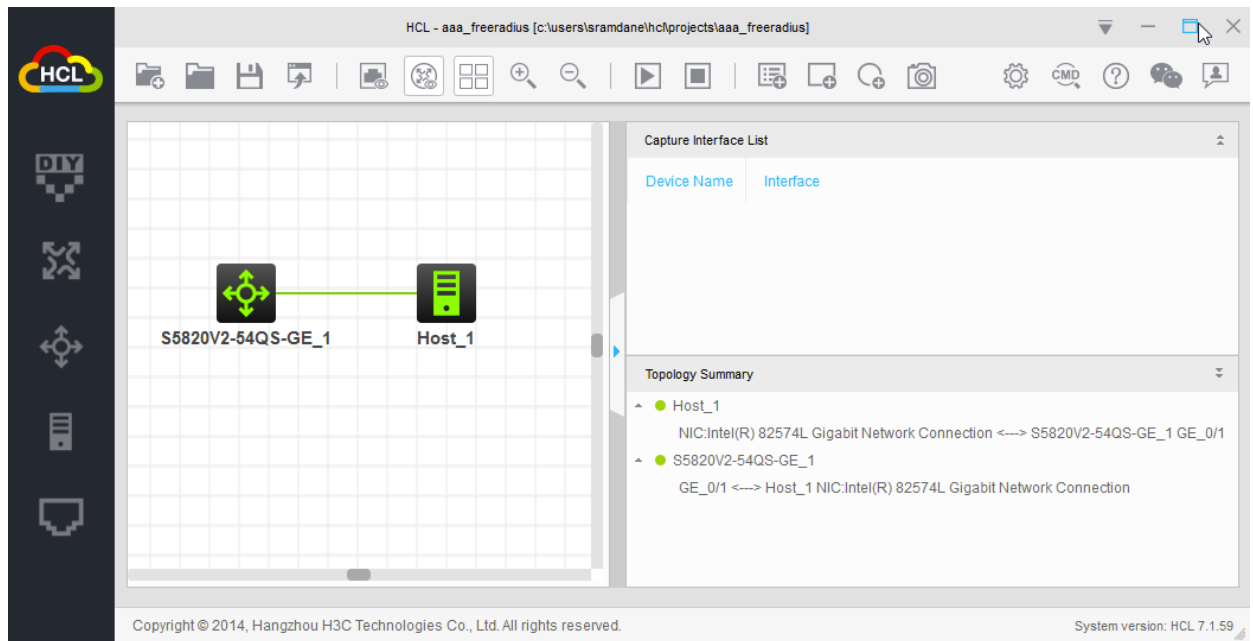


1 Network Diagram

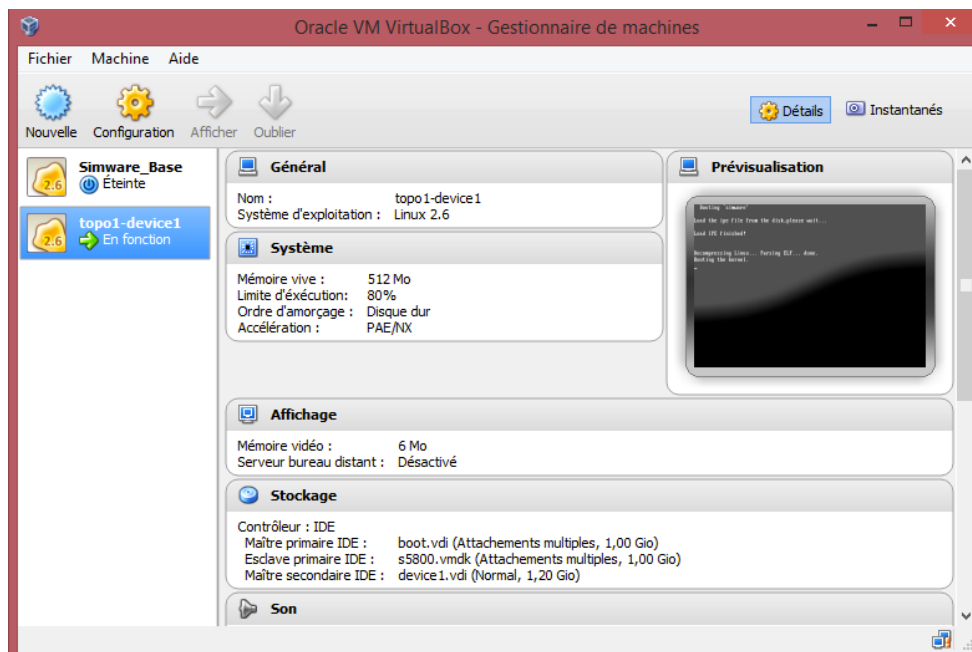


2 HCL Configuration

- After installing HCL with the embedded VirtualBox, Start the Virtual Box and wait for VirtualBox to start and then start HCL
- Create in HCL a topology by adding and interconnecting a switch and a host and start the topology



- When both Virtual Box, HCL and the topology successfully start the status in VirtualBox will be as shown in the following picture



- Configure the network in the internetwork and check using ping that communication is possible between the hosts and the NE in the internetwork

```
Command Prompt

C:\Users\srandane>netsh interface ipv4 show addresses Ethernet0

Configuration for interface "Ethernet0"
    DHCP enabled:                Yes
    IP Address:                  172.16.31.149
    Subnet Prefix:               172.16.31.0/24 (mask 255.255.255.0)
    InterfaceMetric:             10

C:\Users\srandane>ping 172.16.31.200

Pinging 172.16.31.200 with 32 bytes of data:
Reply from 172.16.31.200: bytes=32 time=22ms TTL=255
Reply from 172.16.31.200: bytes=32 time=1ms TTL=255
Reply from 172.16.31.200: bytes=32 time=1ms TTL=255
Reply from 172.16.31.200: bytes=32 time=2ms TTL=255

Ping statistics for 172.16.31.200:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 22ms, Average = 6ms

C:\Users\srandane>ping 172.16.31.141

Pinging 172.16.31.141 with 32 bytes of data:
Reply from 172.16.31.141: bytes=32 time<1ms TTL=64
Reply from 172.16.31.141: bytes=32 time<1ms TTL=64
Reply from 172.16.31.141: bytes=32 time=4ms TTL=64
Reply from 172.16.31.141: bytes=32 time<1ms TTL=64

Ping statistics for 172.16.31.141:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 4ms, Average = 1ms

C:\Users\srandane>_
```

3 Add user in local database

- The user that will be used to log into the switch will be user name “admin” and password “hello”

```
sramdane@ubuntu: ~  
File Edit View Search Terminal Help  
sramdane@ubuntu:~$ sudo /usr/sbin/useradd admin  
sramdane@ubuntu:~$ sudo passwd admin  
Enter new UNIX password:  
Retype new UNIX password:  
passwd: password updated successfully  
sramdane@ubuntu:~$ █
```

4 Configure Freeradius

Freeradius is installed on Ubuntu from the repository and minimal configuration's alteration is used to demonstrate remote radius AAA login to the Comware 7 switch. The IP address configuration is as bellow-shown

```
sramdane@ubuntu: ~  
File Edit View Search Terminal Help  
sramdane@ubuntu:~$ ifconfig  
eth0      Link encap:Ethernet  HWaddr 00:50:56:3c:5d:42  
          inet addr:172.16.31.141  Bcast:172.16.31.255  Mask:255.255.255.0  
          inet6 addr: fe80::250:56ff:fe3c:5d42/64 Scope:Link  
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
          RX packets:44 errors:0 dropped:0 overruns:0 frame:0  
          TX packets:144 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:1000  
          RX bytes:4865 (4.8 KB)  TX bytes:16697 (16.6 KB)  
  
lo        Link encap:Local Loopback  
          inet addr:127.0.0.1  Mask:255.0.0.0  
          inet6 addr: ::1/128 Scope:Host  
          UP LOOPBACK RUNNING  MTU:65536  Metric:1  
          RX packets:169 errors:0 dropped:0 overruns:0 frame:0  
          TX packets:169 errors:0 dropped:0 overruns:0 carrier:0  
          collisions:0 txqueuelen:0  
          RX bytes:25094 (25.0 KB)  TX bytes:25094 (25.0 KB)  
  
sramdane@ubuntu:~$ █
```

4.1 Edit the client configuration file in Freeradius and add necessary attributes

```
sramdane@ubuntu: ~  
File Edit View Search Terminal Help  
sramdane@ubuntu:~$ sudo gedit /etc/freeradius/clients.conf  
sramdane@ubuntu:~$ █
```

```
client 5800 {  
    # Allowed values are:  
    #     dotted quad (1.2.3.4)  
    #     hostname   (radius.example.com)  
    ipaddr = 172.16.31.200
```

```
#  
secret          = 123456
```

- Edit the users configuration file in Freeradius and add the necessary attributes for the users

```
sramdane@ubuntu: ~
File Edit View Search Terminal Help
sramdane@ubuntu:~$ sudo gedit /etc/freeradius/clients.conf
sramdane@ubuntu:~$ sudo gedit /etc/freeradius/users
sramdane@ubuntu:~$ █
```

- After the user authentication has succeeded, the radius server will return one of the Cisco AVPairs to give the role the user shall get when he/she logs into the device. You can use one of the listed here. Note that you do not need more than one to be returned. I have tested using each one and the result is the expected.

```
admin@test Cleartext-Password := "hello"
Service-Type = NAS-Prompt-User,
# Cisco-AVPair = "shell:roles=\network-operator\""
# Cisco-AVPair = "shell:roles=\network-admin\""
# Cisco-AVPair = "shell:priv-lvl=15"
```

4.2 Start the Freeradius server

- Check that Freeradius is not started as a service and if it is stop it

```
sramdane@ubuntu: ~
File Edit View Search Terminal Help
sramdane@ubuntu:~$ sudo netstat -lnp | grep freeradius
udp        0      0 127.0.0.1:18120      0.0.0.0:*                3871/freeradius
udp        0      0 172.16.31.141:1812  0.0.0.0:*                3871/freeradius
udp        0      0 172.16.31.141:1813  0.0.0.0:*                3871/freeradius
udp        0      0 172.16.31.141:1814  0.0.0.0:*                3871/freeradius
udp        0      0 0.0.0.0:34860       0.0.0.0:*                3871/freeradius
sramdane@ubuntu:~$
sramdane@ubuntu:~$ sudo /etc/init.d/freeradius stop
* Stopping FreeRADIUS daemon freeradius [ OK ]
sramdane@ubuntu:~$
sramdane@ubuntu:~$ sudo netstat -lnp | grep freeradius
sramdane@ubuntu:~$
sramdane@ubuntu:~$ sudo freeradius -XXX
```

- Wait until you see

```
Wed Nov 5 06:55:50 2014 : Debug: Listening on authentication address 172.16.31.141 port 1812
Wed Nov 5 06:55:50 2014 : Debug: Listening on accounting address 172.16.31.141 port 1813
Wed Nov 5 06:55:50 2014 : Debug: Listening on authentication address 127.0.0.1 port 18120 as server inner-tunnel
Wed Nov 5 06:55:50 2014 : Debug: Listening on proxy address 172.16.31.141 port 1814
Wed Nov 5 06:55:50 2014 : Info: Ready to process requests.
█
```

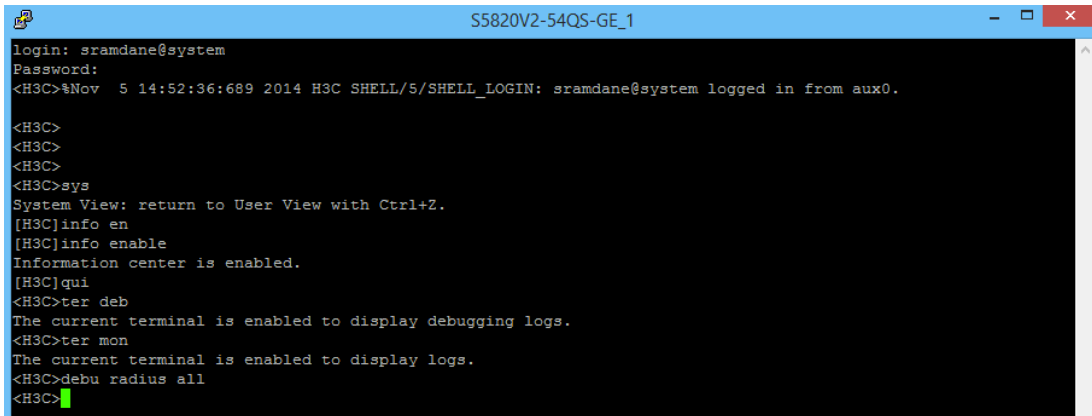
5 Switch configuration

```
#
interface Vlan-interface1
 ip address 172.16.31.200 255.255.255.0
#
interface GigabitEthernet1/0/1
 port link-mode bridge
 combo enable fiber
 stp edged-port
#
line vty 0 63
 authentication-mode scheme
 user-role network-operator
#
 ssh server enable
#
 radius scheme freeradius
 primary authentication 172.16.31.141 key cipher
 $c$3$wLryqv6YA+fodlCjcKUauEqgAq8FgGoCg==
 primary accounting 172.16.31.141 key cipher $c$3$T3mWzy3VlrMAGjbg+fB+sBpi1Ls0pK8ipA==
 accounting-on enable
 nas-ip 172.16.31.200
#
 domain test
 authentication login radius-scheme freeradius
 authorization login radius-scheme freeradius
 accounting login radius-scheme freeradius
#
 domain default enable test
#
```


6

Test login into the switch using SSH

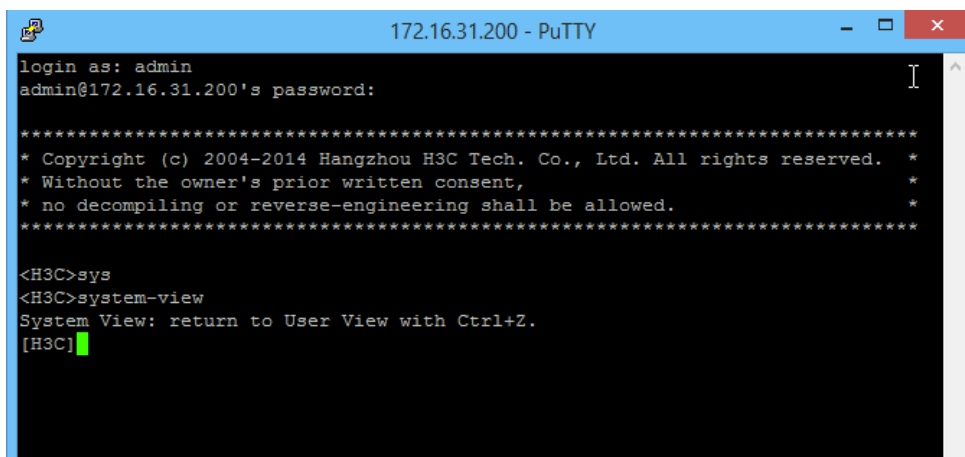
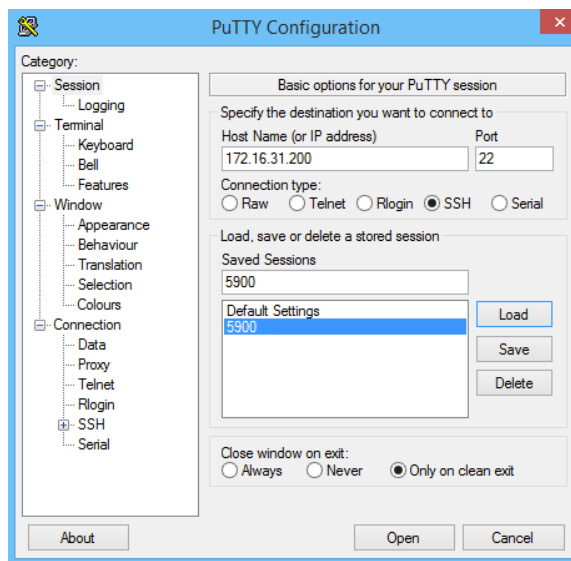
- Login into the switch using console to setup debugging attributes



```
login: sramdane@system
Password:
<H3C>%Nov 5 14:52:36:689 2014 H3C SHELL/5/SHELL_LOGIN: sramdane@system logged in from aux0.

<H3C>
<H3C>
<H3C>
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]info en
[H3C]info enable
Information center is enabled.
[H3C]qui
<H3C>ter deb
The current terminal is enabled to display debugging logs.
<H3C>ter mon
The current terminal is enabled to display logs.
<H3C>debu radius all
<H3C>
```

- Open SSH session for example using putty and login using the user “admin” and password “hello”



```
172.16.31.200 - PuTTY
login as: admin
admin@172.16.31.200's password:

*****
* Copyright (c) 2004-2014 Hangzhou H3C Tech. Co., Ltd. All rights reserved. *
* Without the owner's prior written consent, *
* no decompiling or reverse-engineering shall be allowed. *
*****

<H3C>sys
<H3C>system-view
System View: return to User View with Ctrl+Z.
[H3C]
```

7 Result of debugging from the switch

```
<H3C>*Nov 5 15:01:10:921 2014 H3C RADIUS/7/EVENT:
PAM_RADIUS: Processing RADIUS authentication.
*Nov 5 15:01:10:922 2014 H3C RADIUS/7/EVENT:
PAM_RADIUS: Sent authentication request successfully.
*Nov 5 15:01:10:924 2014 H3C RADIUS/7/EVENT:
Processing AAA request data.
*Nov 5 15:01:10:926 2014 H3C RADIUS/7/EVENT:
Got request data successfully, primitive: authentication.
*Nov 5 15:01:10:929 2014 H3C RADIUS/7/EVENT:
Getting RADIUS server info.
*Nov 5 15:01:10:930 2014 H3C RADIUS/7/EVENT:
Got RADIUS server info successfully.
*Nov 5 15:01:10:932 2014 H3C RADIUS/7/EVENT:
Created request context successfully.
*Nov 5 15:01:10:935 2014 H3C RADIUS/7/EVENT:
Created request packet successfully, dstIP: 172.16.31.141, dstPort: 1812, VPN instance: --(public),
socketFd: 23, pktID: 34.
*Nov 5 15:01:10:938 2014 H3C RADIUS/7/EVENT:
Added packet socketfd to epoll successfully, socketFd: 23.
*Nov 5 15:01:10:950 2014 H3C RADIUS/7/EVENT:
Mapped PAM item to RADIUS attribute successfully.
*Nov 5 15:01:10:950 2014 H3C RADIUS/7/EVENT:
Got RADIUS username format successfully, format: 1.
*Nov 5 15:01:10:951 2014 H3C RADIUS/7/EVENT:
Added attribute user-name successfully, user-name: admin@test.
*Nov 5 15:01:10:951 2014 H3C RADIUS/7/EVENT:
Filled RADIUS attributes in packet successfully.
*Nov 5 15:01:10:951 2014 H3C RADIUS/7/EVENT:
Composed request packet successfully.
*Nov 5 15:01:10:952 2014 H3C RADIUS/7/EVENT:
Created response timeout timer successfully.
*Nov 5 15:01:10:952 2014 H3C RADIUS/7/PACKET:
  User-Name="admin@test"
  User-Password=*****
  Service-Type=Login-User
  NAS-Identifier="H3C"
  Acct-Session-Id="000000012014110515011000000001081 208"
  Framed-IP-Address=172.16.31.149
  NAS-IP-Address=172.16.31.200
  H3c-Product-Id="H3C S5820V2-54QS-GE"
```

H3c-Nas-Startup-Timestamp=1415192286

*Nov 5 15:01:10:954 2014 H3C RADIUS/7/EVENT:

Sent request packet successfully.

*Nov 5 15:01:10:957 2014 H3C RADIUS/7/PACKET:

01 22 00 99 23 11 a1 d6 f2 29 c9 37 ee 8c 6d 51
34 03 f9 d8 01 0c 61 64 6d 69 6e 40 74 65 73 74
02 12 99 32 a8 8e 50 39 59 c8 60 e7 cd 69 f2 68
aa e7 06 06 00 00 01 20 06 48 33 43 00 2c 28
30 30 30 30 30 30 31 32 30 31 34 31 31 30 35
31 35 30 31 31 30 30 30 30 30 30 31 30 38
31 20 20 32 30 38 08 06 ac 10 1f 95 04 06 ac 10
1f c8 1a 1b 00 00 63 a2 ff 15 48 33 43 20 53 35
38 32 30 56 32 2d 35 34 51 53 2d 47 45 1a 0c 00
00 63 a2 3b 06 54 5a 1e de

*Nov 5 15:01:10:958 2014 H3C RADIUS/7/EVENT:

Sent request packet and create request context successfully.

*Nov 5 15:01:10:958 2014 H3C RADIUS/7/EVENT:

Added request context to global table successfully.

*Nov 5 15:01:10:959 2014 H3C RADIUS/7/EVENT:

Reply SocketFd recieved EPOLLIN event.

*Nov 5 15:01:10:959 2014 H3C RADIUS/7/EVENT:

Received reply packet succuessfully.

*Nov 5 15:01:10:960 2014 H3C RADIUS/7/EVENT:

Found request context, dstIP: 172.16.31.141, dstPort: 1812, VPN instance: --(public), socketFd: 23, pktID: 34.

*Nov 5 15:01:10:960 2014 H3C RADIUS/7/EVENT:

The reply packet is valid.

*Nov 5 15:01:10:960 2014 H3C RADIUS/7/EVENT:

Decoded reply packet successfully.

*Nov 5 15:01:10:964 2014 H3C RADIUS/7/PACKET:

Service-Type=NAS-Prompt-User
Cisco-AVPair="shell:roles="network-admin""

*Nov 5 15:01:10:965 2014 H3C RADIUS/7/PACKET:

02 22 00 3d 6d 40 98 b8 66 33 d8 ce d8 e8 f0 8a
fd f9 1f 89 06 06 00 00 00 07 1a 23 00 00 00 09
01 1d 73 68 65 6c 6c 3a 72 6f 6c 65 73 3d 22 6e
65 74 77 6f 72 6b 2d 61 64 6d 69 6e 22

*Nov 5 15:01:10:984 2014 H3C RADIUS/7/EVENT:

PAM_RADIUS: Fetched authentication reply-data successfully, resultCode: 0

*Nov 5 15:01:10:984 2014 H3C RADIUS/7/EVENT:

PAM_RADIUS: Received authentication reply message, resultCode: 0

*Nov 5 15:01:10:989 2014 H3C RADIUS/7/EVENT:

Sent reply message successfully.

*Nov 5 15:01:10:991 2014 H3C RADIUS/7/EVENT:

PAM_RADIUS: Processing RADIUS authorization.

*Nov 5 15:01:10:995 2014 H3C RADIUS/7/EVENT:

PAM_RADIUS: RADIUS Authorization successfully.

%Nov 5 15:01:11:052 2014 H3C SSHS/6/SSHS_LOG: Accepted password for admin from 172.16.31.149 port 49163.

%Nov 5 15:01:11:260 2014 H3C SSHS/6/SSHS_CONNECT: SSH user admin (IP: 172.16.31.149) connected to the server successfully.

*Nov 5 15:01:11:784 2014 H3C RADIUS/7/EVENT:

PAM_RADIUS: RADIUS accounting started.

*Nov 5 15:01:11:786 2014 H3C RADIUS/7/EVENT:

PAM_RADIUS: Sent accounting-start request successfully.

*Nov 5 15:01:11:803 2014 H3C RADIUS/7/EVENT:

Processing AAA request data.

*Nov 5 15:01:11:805 2014 H3C RADIUS/7/EVENT:

Got request data successfully, primitive: accounting-start.

*Nov 5 15:01:11:806 2014 H3C RADIUS/7/EVENT:

Getting RADIUS server info.

*Nov 5 15:01:11:808 2014 H3C RADIUS/7/EVENT:

Got RADIUS server info successfully.

*Nov 5 15:01:11:810 2014 H3C RADIUS/7/EVENT:

Created request context successfully.

*Nov 5 15:01:11:814 2014 H3C RADIUS/7/EVENT:

Created request packet successfully, dstIP: 172.16.31.141, dstPort: 1813, VPN instance: --(public), socketFd: 29, pktID: 20.

*Nov 5 15:01:11:817 2014 H3C RADIUS/7/EVENT:

Added packet socketfd to epoll successfully, socketFd: 29.

*Nov 5 15:01:11:818 2014 H3C RADIUS/7/EVENT:

Mapped PAM item to RADIUS attribute successfully.

*Nov 5 15:01:11:819 2014 H3C RADIUS/7/EVENT:

Got RADIUS username format successfully, format: 1.

*Nov 5 15:01:11:824 2014 H3C RADIUS/7/EVENT:

Added attribute user-name successfully, user-name: admin@test.

*Nov 5 15:01:11:836 2014 H3C RADIUS/7/EVENT:

Filled RADIUS attributes in packet successfully.

*Nov 5 15:01:11:838 2014 H3C RADIUS/7/EVENT:

Composed request packet successfully.

*Nov 5 15:01:11:840 2014 H3C RADIUS/7/EVENT:

Created response timeout timer successfully.

*Nov 5 15:01:11:849 2014 H3C RADIUS/7/PACKET:

User-Name="admin@test"
NAS-Identifier="H3C"
Framed-IP-Address=172.16.31.149
Acct-Session-Id="000000012014110515011100000001081 210"
NAS-IP-Address=172.16.31.200
Acct-Status-Type=Start
Acct-Delay-Time=0
Event-Timestamp="Nov 5 2014 15:01:11 UTC"
H3c-Product-Id="H3C S5820V2-54QS-GE"
H3c-Nas-Startup-Timestamp=1415192286

*Nov 5 15:01:11:860 2014 H3C RADIUS/7/EVENT:

Sent request packet successfully.

*Nov 5 15:01:11:862 2014 H3C RADIUS/7/PACKET:

04 14 00 93 31 ee 9c 67 43 62 35 37 ee d6 ee 4a
35 44 00 dd 01 0c 61 64 6d 69 6e 40 74 65 73 74
20 06 48 33 43 00 08 06 ac 10 1f 95 2c 28 30 30
30 30 30 30 30 31 32 30 31 34 31 31 30 35 31 35
30 31 31 31 30 30 30 30 30 30 31 30 38 31 20
20 32 31 30 04 06 ac 10 1f c8 28 06 00 00 00 01
29 06 00 00 00 00 37 06 54 5a 3b b7 1a 1b 00 00
63 a2 ff 15 48 33 43 20 53 35 38 32 30 56 32 2d
35 34 51 53 2d 47 45 1a 0c 00 00 63 a2 3b 06 54
5a 1e de

*Nov 5 15:01:11:869 2014 H3C RADIUS/7/EVENT:

Sent request packet and create request context successfully.

*Nov 5 15:01:11:871 2014 H3C RADIUS/7/EVENT:

Added request context to global table successfully.

*Nov 5 15:01:11:993 2014 H3C RADIUS/7/EVENT:

Reply SocketFd recieved EPOLLIN event.

*Nov 5 15:01:11:995 2014 H3C RADIUS/7/EVENT:

Received reply packet succuessfully.

*Nov 5 15:01:12:008 2014 H3C RADIUS/7/EVENT:

Found request context, dstIP: 172.16.31.141, dstPort: 1813, VPN instance: --(public), socketFd: 29, pktID: 20.

*Nov 5 15:01:12:010 2014 H3C RADIUS/7/EVENT:

The reply packet is valid.

*Nov 5 15:01:12:011 2014 H3C RADIUS/7/EVENT:

Decoded reply packet successfully.

*Nov 5 15:01:12:036 2014 H3C RADIUS/7/PACKET:

05 14 00 14 10 01 3b a0 d4 42 3a 60 57 a6 f9 cf
21 dd 29 27

*Nov 5 15:01:12:044 2014 H3C RADIUS/7/EVENT:

PAM_RADIUS: Fetched accounting-start reply-data successfully, resultCode: 0

*Nov 5 15:01:12:044 2014 H3C RADIUS/7/EVENT:

PAM_RADIUS: Received accounting-start reply message, resultCode: 0

*Nov 5 15:01:12:054 2014 H3C RADIUS/7/EVENT:

Sent reply message successfully.

%Nov 5 15:01:12:646 2014 H3C SHELL/5/SHELL_LOGIN: admin logged in from 172.16.31.149.

8 Result of debugging from Freeradius

rad_recv: Access-Request packet from host 172.16.31.200 port 64129, id=34, length=153

User-Name = "admin@test"

User-Password = "hello"

Service-Type = Login-User

NAS-Identifier = "H3C"

Acct-Session-Id = "000000012014110515011000000001081 208"

Framed-IP-Address = 172.16.31.149

NAS-IP-Address = 172.16.31.200

H3C-Product-ID = "H3C S5820V2-54QS-GE"

H3C-NAS-Startup-Timestamp = 1415192286

Wed Nov 5 07:17:59 2014 : Info: # Executing section authorize from file /etc/freeradius/sites-enabled/default

Wed Nov 5 07:17:59 2014 : Info: +- entering group authorize {...}

Wed Nov 5 07:17:59 2014 : Info: ++[preprocess] returns ok

Wed Nov 5 07:17:59 2014 : Info: ++[chap] returns noop

Wed Nov 5 07:17:59 2014 : Info: ++[mschap] returns noop

Wed Nov 5 07:17:59 2014 : Info: ++[digest] returns noop

Wed Nov 5 07:17:59 2014 : Info: [suffix] Looking up realm "test" for User-Name = "admin@test"

Wed Nov 5 07:17:59 2014 : Info: [suffix] No such realm "test"

Wed Nov 5 07:17:59 2014 : Info: ++[suffix] returns noop

Wed Nov 5 07:17:59 2014 : Info: [eap] No EAP-Message, not doing EAP

Wed Nov 5 07:17:59 2014 : Info: ++[eap] returns noop

Wed Nov 5 07:17:59 2014 : Info: [files] users: Matched entry admin@test at line 1

Wed Nov 5 07:17:59 2014 : Info: ++[files] returns ok

Wed Nov 5 07:17:59 2014 : Info: ++[expiration] returns noop

Wed Nov 5 07:17:59 2014 : Info: ++[logintime] returns noop

Wed Nov 5 07:17:59 2014 : Info: ++[pap] returns updated

Wed Nov 5 07:17:59 2014 : Info: Found Auth-Type = PAP

Wed Nov 5 07:17:59 2014 : Info: # Executing group from file /etc/freeradius/sites-enabled/default

Wed Nov 5 07:17:59 2014 : Info: +- entering group PAP {...}

Wed Nov 5 07:17:59 2014 : Info: [pap] login attempt with password "hello"

Wed Nov 5 07:17:59 2014 : Info: [pap] Using clear text password "hello"

Wed Nov 5 07:17:59 2014 : Info: [pap] User authenticated successfully

Wed Nov 5 07:17:59 2014 : Info: ++[pap] returns ok

Wed Nov 5 07:17:59 2014 : Info: # Executing section post-auth from file /etc/freeradius/sites-enabled/default

Wed Nov 5 07:17:59 2014 : Info: +- entering group post-auth {...}

Wed Nov 5 07:17:59 2014 : Info: ++[exec] returns noop

Sending Access-Accept of id 34 to 172.16.31.200 port 64129

Service-Type = NAS-Prompt-User

```
Cisco-AVPair = "shell:roles=\"network-admin\""
Wed Nov 5 07:17:59 2014 : Info: Finished request 0.
Wed Nov 5 07:17:59 2014 : Debug: Going to the next request
Wed Nov 5 07:17:59 2014 : Debug: Waking up in 4.9 seconds.
rad_recv: Accounting-Request packet from host 172.16.31.200 port 64130, id=20, length=147
  User-Name = "admin@test"
  NAS-Identifier = "H3C"
  Framed-IP-Address = 172.16.31.149
  Acct-Session-Id = "000000012014110515011100000001081 210"
  NAS-IP-Address = 172.16.31.200
  Acct-Status-Type = Start
  Acct-Delay-Time = 0
  Event-Timestamp = "Nov 5 2014 07:01:11 PST"
  H3C-Product-ID = "H3C S5820V2-54QS-GE"
  H3C-NAS-Startup-Timestamp = 1415192286
Wed Nov 5 07:18:00 2014 : Info: # Executing section preacct from file /etc/freeradius/sites-enabled/default
Wed Nov 5 07:18:00 2014 : Info: +- entering group preacct {...}
Wed Nov 5 07:18:00 2014 : Info: ++[preprocess] returns ok
Wed Nov 5 07:18:00 2014 : Info: [acct_unique] WARNING: Attribute NAS-Port was not found in request, unique ID MAY be inconsistent
Wed Nov 5 07:18:00 2014 : Info: [acct_unique] Hashing ',Client-IP-Address = 172.16.31.200,NAS-IP-Address = 172.16.31.200,Acct-Session-Id = "000000012014110515011100000001081 210",User-Name = "admin@test"'
Wed Nov 5 07:18:00 2014 : Info: [acct_unique] Acct-Unique-Session-ID = "0b9be332c9abb1e5".
Wed Nov 5 07:18:00 2014 : Info: ++[acct_unique] returns ok
Wed Nov 5 07:18:00 2014 : Info: [suffix] Looking up realm "test" for User-Name = "admin@test"
Wed Nov 5 07:18:00 2014 : Info: [suffix] No such realm "test"
Wed Nov 5 07:18:00 2014 : Info: ++[suffix] returns noop
Wed Nov 5 07:18:00 2014 : Info: ++[files] returns noop
Wed Nov 5 07:18:00 2014 : Info: # Executing section accounting from file /etc/freeradius/sites-enabled/default
Wed Nov 5 07:18:00 2014 : Info: +- entering group accounting {...}
Wed Nov 5 07:18:00 2014 : Info: [detail] expand: %{Packet-Src-IP-Address} -> 172.16.31.200
Wed Nov 5 07:18:00 2014 : Info: [detail] expand: /var/log/freeradius/radacct/%{Packet-Src-IP-Address}:-%{Packet-Src-IPv6-Address}}/detail-%Y%m%d -> /var/log/freeradius/radacct/172.16.31.200/detail-20141105
Wed Nov 5 07:18:00 2014 : Info: [detail] /var/log/freeradius/radacct/%{Packet-Src-IP-Address}:-%{Packet-Src-IPv6-Address}}/detail-%Y%m%d expands to /var/log/freeradius/radacct/172.16.31.200/detail-20141105
Wed Nov 5 07:18:00 2014 : Info: [detail] expand: %t -> Wed Nov 5 07:18:00 2014
Wed Nov 5 07:18:00 2014 : Info: ++[detail] returns ok
Wed Nov 5 07:18:00 2014 : Info: ++[unix] returns noop
Wed Nov 5 07:18:00 2014 : Info: [radutmp] expand: /var/log/freeradius/radutmp -> /var/log/freeradius/radutmp
```


Wed Nov 5 07:18:00 2014 : Info: [radutmp] expand: %{User-Name} -> admin@test
Wed Nov 5 07:18:00 2014 : Debug: rlm_radutmp: No NAS-Port seen. Cannot do anything.
Wed Nov 5 07:18:00 2014 : Debug: rlm_radutmp: WARNING: checkrad will probably not work!
Wed Nov 5 07:18:00 2014 : Info: ++[radutmp] returns noop
Wed Nov 5 07:18:00 2014 : Info: ++[exec] returns noop
Wed Nov 5 07:18:00 2014 : Info: [attr_filter.accounting_response] expand: %{User-Name} -
> admin@test
Wed Nov 5 07:18:00 2014 : Debug: attr_filter: Matched entry DEFAULT at line 12
Wed Nov 5 07:18:00 2014 : Info: ++[attr_filter.accounting_response] returns updated
Sending Accounting-Response of id 20 to 172.16.31.200 port 64130
Wed Nov 5 07:18:00 2014 : Info: Finished request 1.
Wed Nov 5 07:18:00 2014 : Info: Cleaning up request 1 ID 20 with timestamp +1330
Wed Nov 5 07:18:00 2014 : Debug: Going to the next request
Wed Nov 5 07:18:00 2014 : Debug: Waking up in 3.9 seconds.
Wed Nov 5 07:18:04 2014 : Info: Cleaning up request 0 ID 34 with timestamp +1329
Wed Nov 5 07:18:04 2014 : Info: Ready to process requests.