Supervisor : DR \ Mohamed Faisal

Report of the results

Students:

فيرينا أشرف وديع

محمد محمود مختار

محمد هاني حمدان

محمد احمد جلال

عمر وليد عمر

(1) ping result

```
C:\>ping 1.0.0.5

Pinging 1.0.0.5 with 32 bytes of data:

Reply from 1.0.0.5: bytes=32 time<1ms TTL=127
Reply from 1.0.0.5: bytes=32 time=1ms TTL=127
Reply from 1.0.0.5: bytes=32 time<1ms TTL=127
Reply from 1.0.0.5: bytes=32 time<1ms TTL=127

Ping statistics for 1.0.0.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

```
C:\>ping 192.168.1.4

Pinging 192.168.1.4 with 32 bytes of data:

Reply from 192.168.1.4: bytes=32 time=64ms TTL=125
Reply from 192.168.1.4: bytes=32 time=2ms TTL=125
Reply from 192.168.1.4: bytes=32 time=2ms TTL=125
Reply from 192.168.1.4: bytes=32 time=75ms TTL=125

Ping statistics for 192.168.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 75ms, Average = 35ms
```

```
C:\>ping 192.168.2.3

Pinging 192.168.2.3 with 32 bytes of data:

Reply from 192.168.2.3: bytes=32 time=6ms TTL=125
Reply from 192.168.2.3: bytes=32 time=3ms TTL=125
Reply from 192.168.2.3: bytes=32 time=5ms TTL=125
Reply from 192.168.2.3: bytes=32 time=3ms TTL=125

Ping statistics for 192.168.2.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 6ms, Average = 4ms
```

```
C:\>ping 192.168.3.3

Pinging 192.168.3.3 with 32 bytes of data:

Reply from 192.168.3.3: bytes=32 time=58ms TTL=126
Reply from 192.168.3.3: bytes=32 time=1ms TTL=126
Reply from 192.168.3.3: bytes=32 time=2ms TTL=126
Reply from 192.168.3.3: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.3.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 58ms, Average = 15ms
```

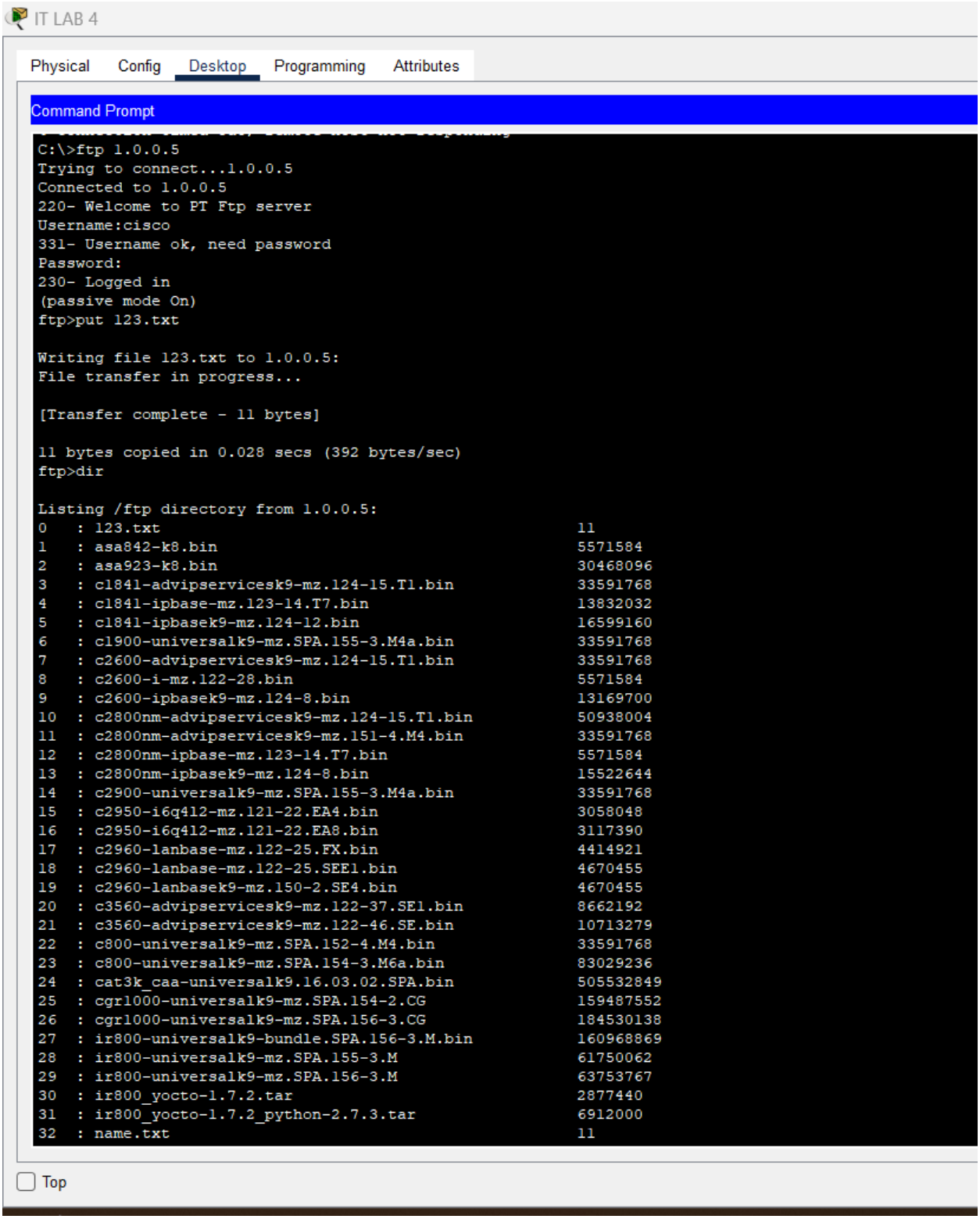
```
C:\>ping 128.168.0.3

Pinging 128.168.0.3 with 32 bytes of data:

Reply from 128.168.0.3: bytes=32 time=27ms TTL=128
Reply from 128.168.0.3: bytes=32 time<1ms TTL=128
Reply from 128.168.0.3: bytes=32 time<1ms TTL=128
Reply from 128.168.0.3: bytes=32 time=20ms TTL=128

Ping statistics for 128.168.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 27ms, Average = 11ms
```

```
C:\>ping 192.168.4.2

Pinging 192.168.4.2 with 32 bytes of data:

Reply from 192.168.4.2: bytes=32 time=2ms TTL=126
Reply from 192.168.4.2: bytes=32 time=2ms TTL=126
Reply from 192.168.4.2: bytes=32 time=1ms TTL=126
Reply from 192.168.4.2: bytes=32 time=2ms TTL=126

Ping statistics for 192.168.4.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms
```

(2) FTP server :

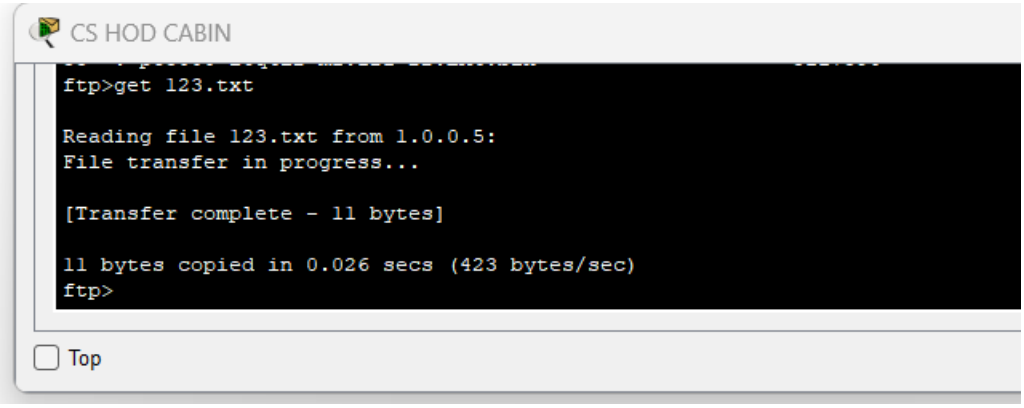
In pc (IT LAB 4) -----→ network 192.168.1.0

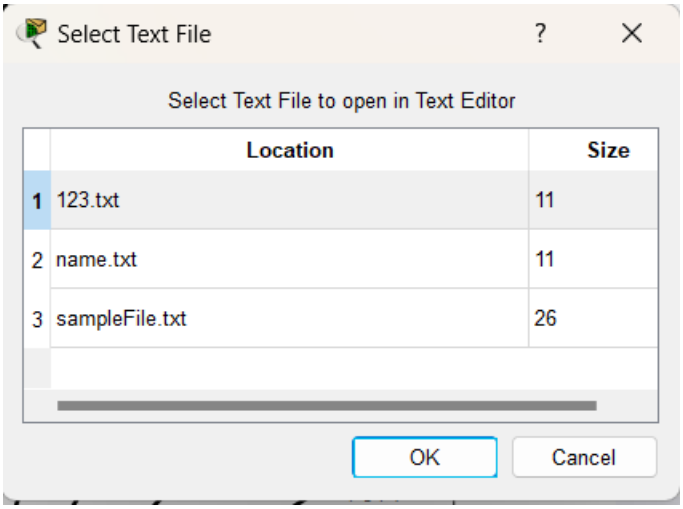
First we open a connection with the ftp server then we enter the username and password for authentication then we uploaded file 123.txt in the ftp server

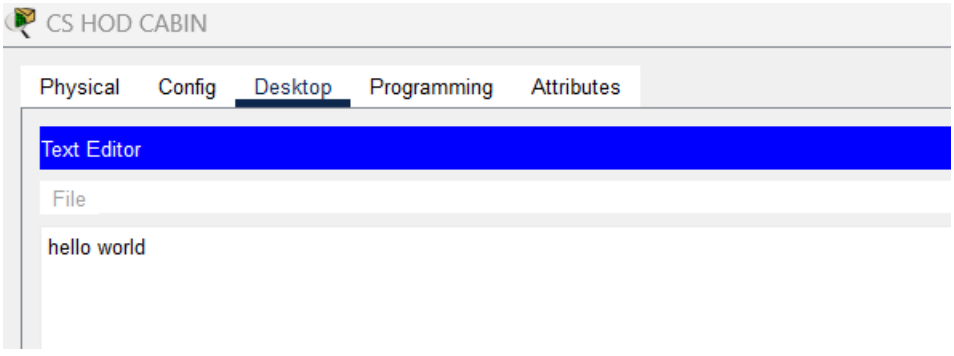


In pc (HOD Cabin) --→ in network 192.168.2.0

We open the session with the ftp server then we get the file uploaded

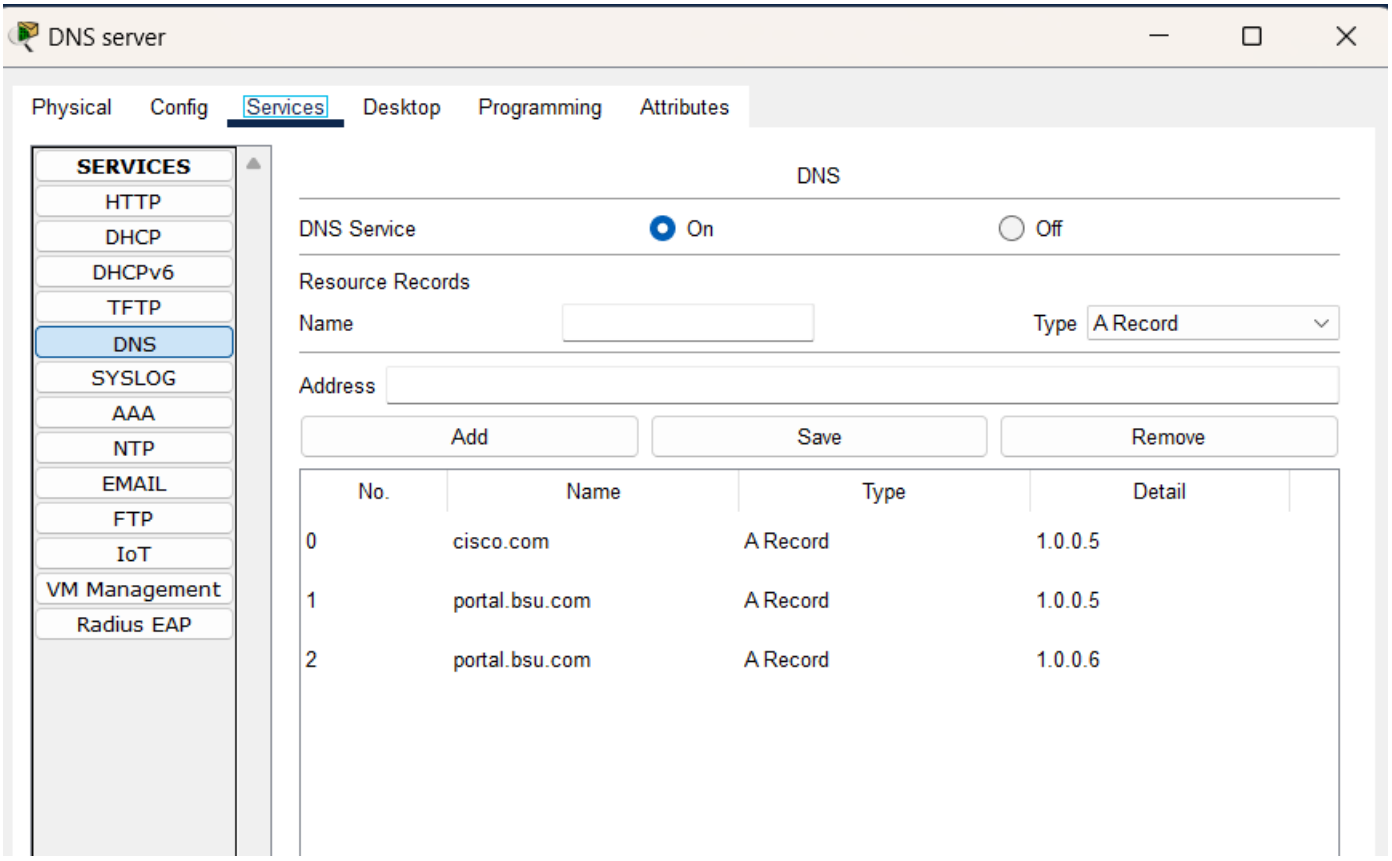






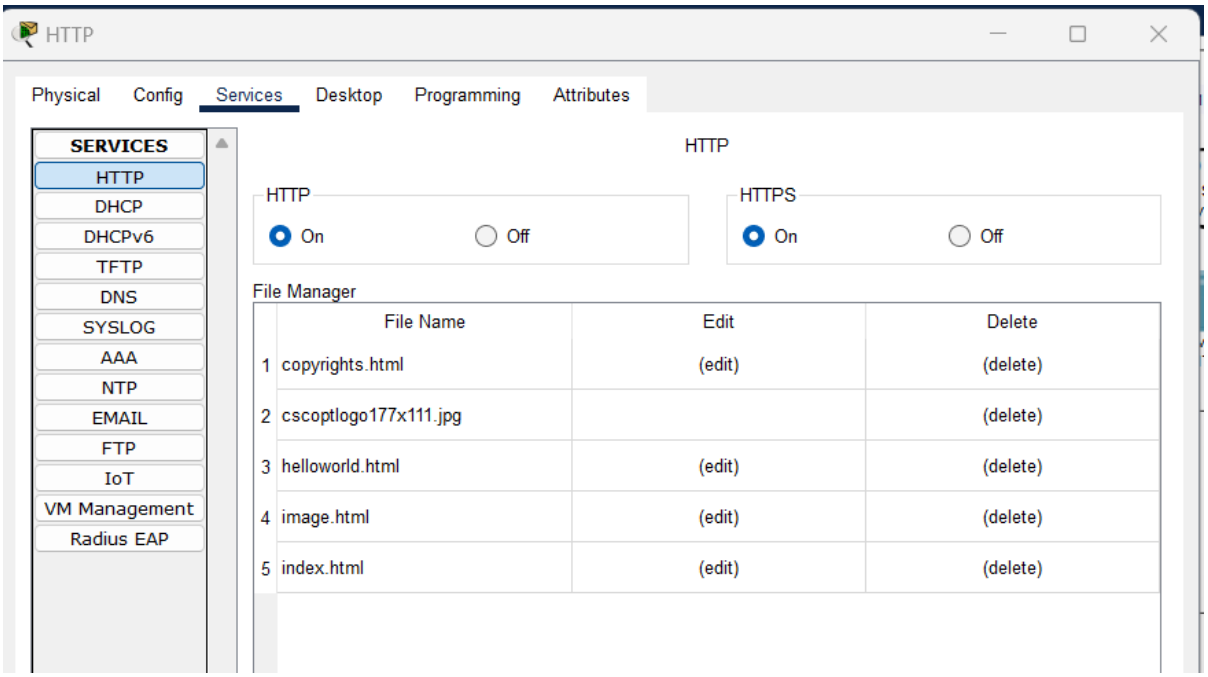
(3) DNS SERVER :

We define a record with an IP address then we run the nslookup command that returns the IP address of the record

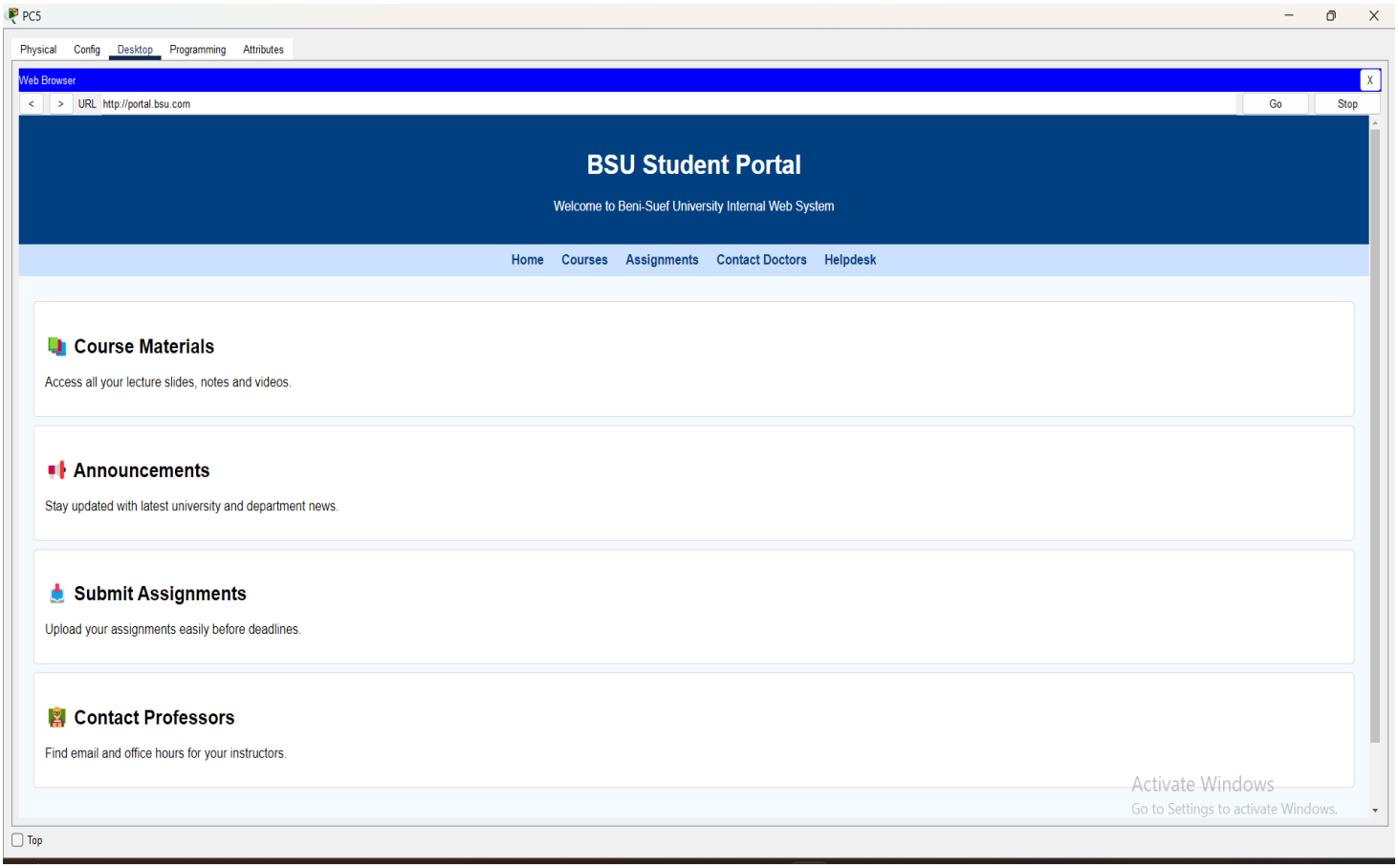



```
C:\>nslookup cisco.com

Server: [1.0.0.2]
Address:  1.0.0.2

Non-authoritative answer:
Name:    cisco.com
Address:   1.0.0.5
```

(4) HTTP / HTTPS server :



Our BSU Portal



(5) MAIL Serve:

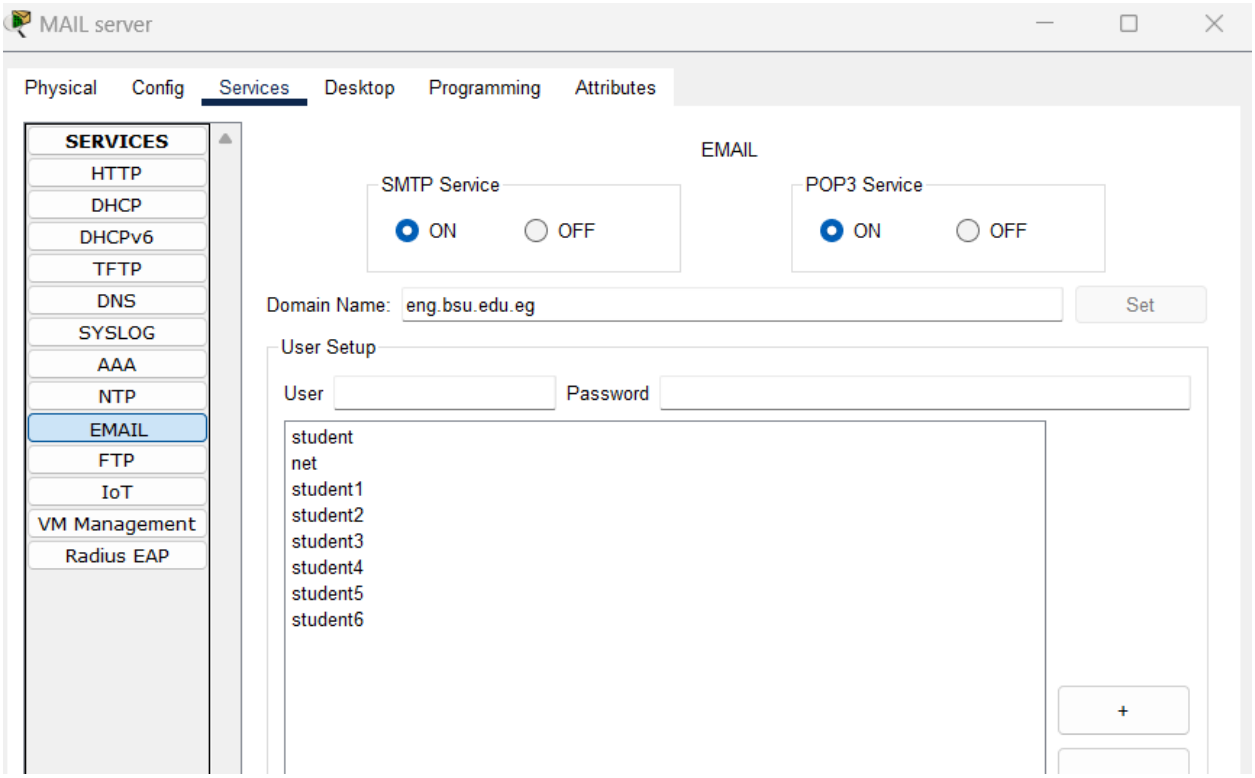
Stores messages received and sent through the network

Smtp protocol used for sending messages

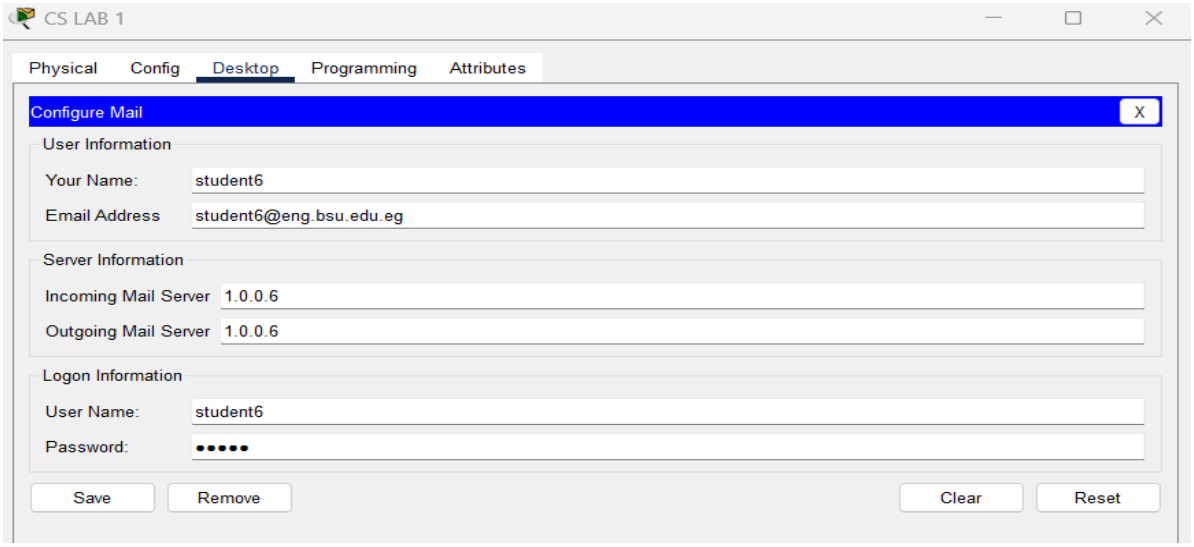
Pop3 used for receiving messages

User agent used to create or read messages

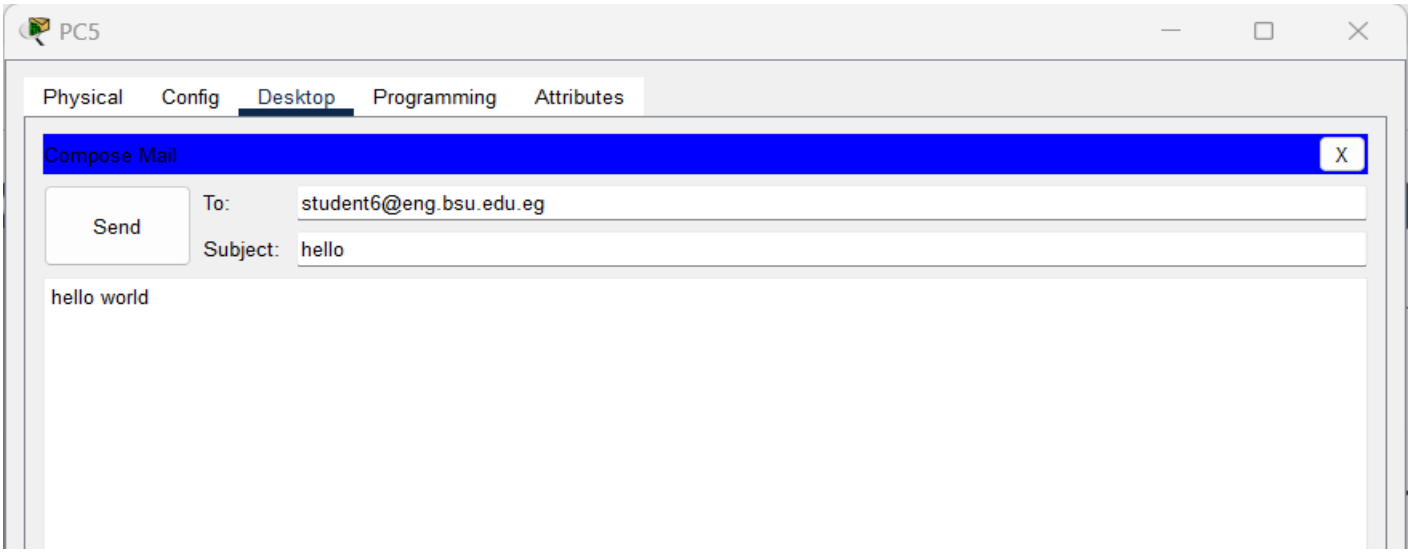
we created an email server same as our university email



Email configuration

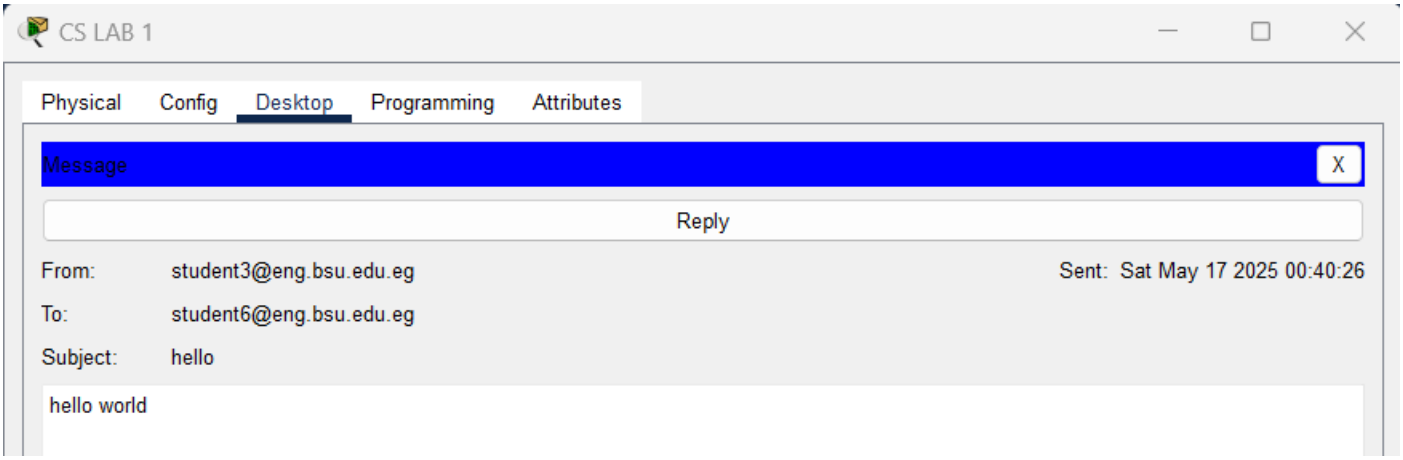


#composing a message:

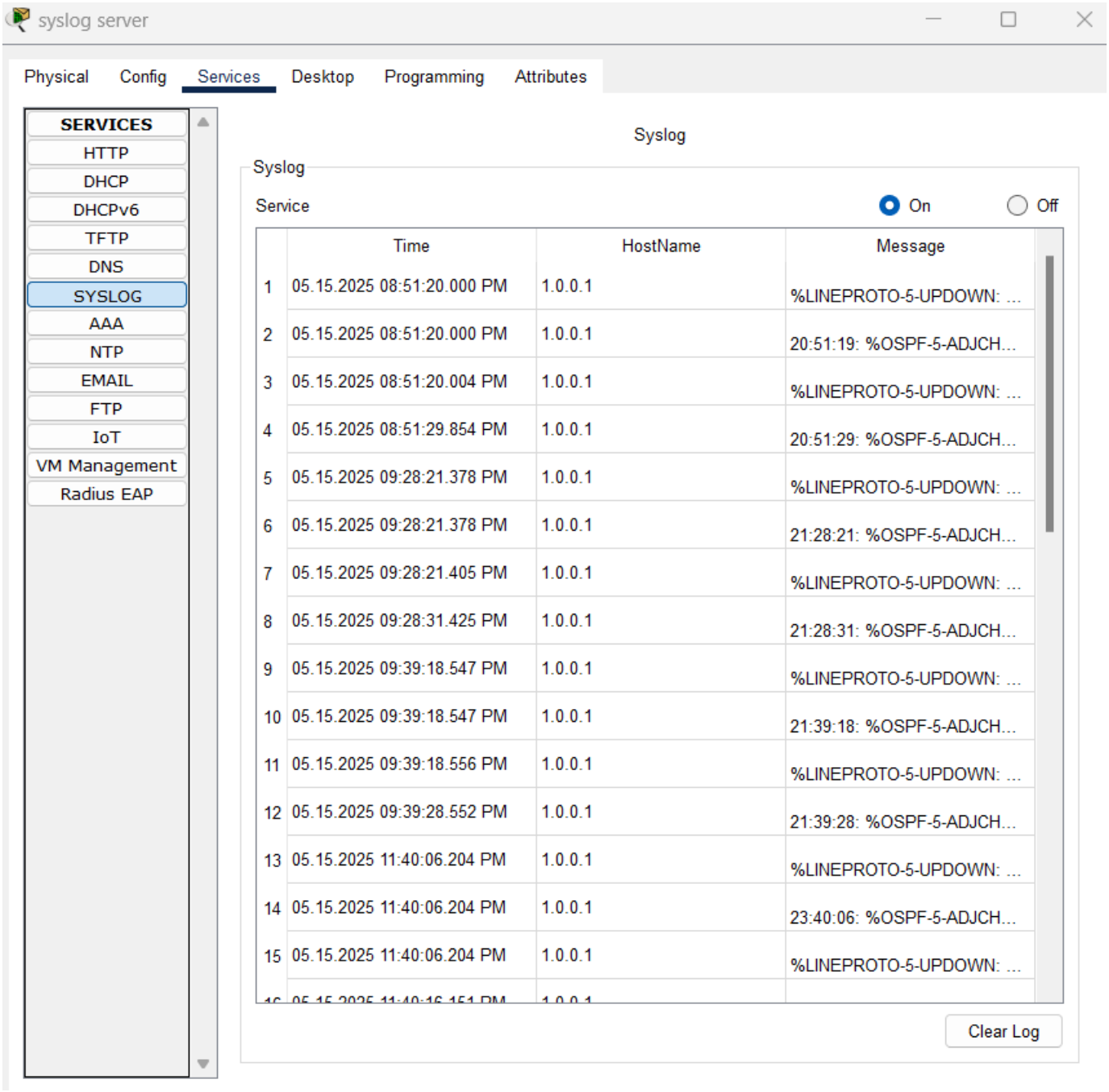


#sending it

#receiving it on the another device



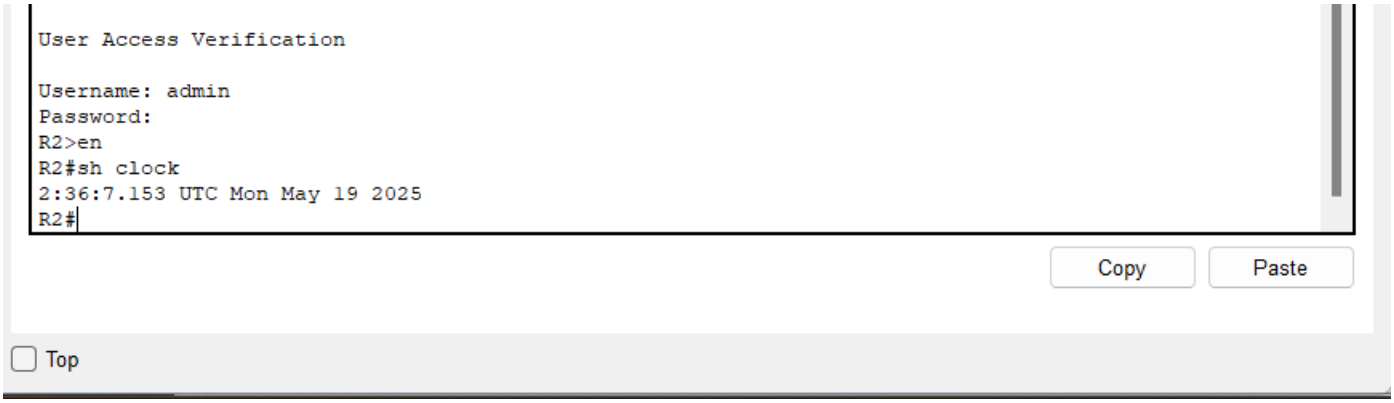
(6)syslog server : collects logs from the all network with date , time and IP



(7)NTP server:

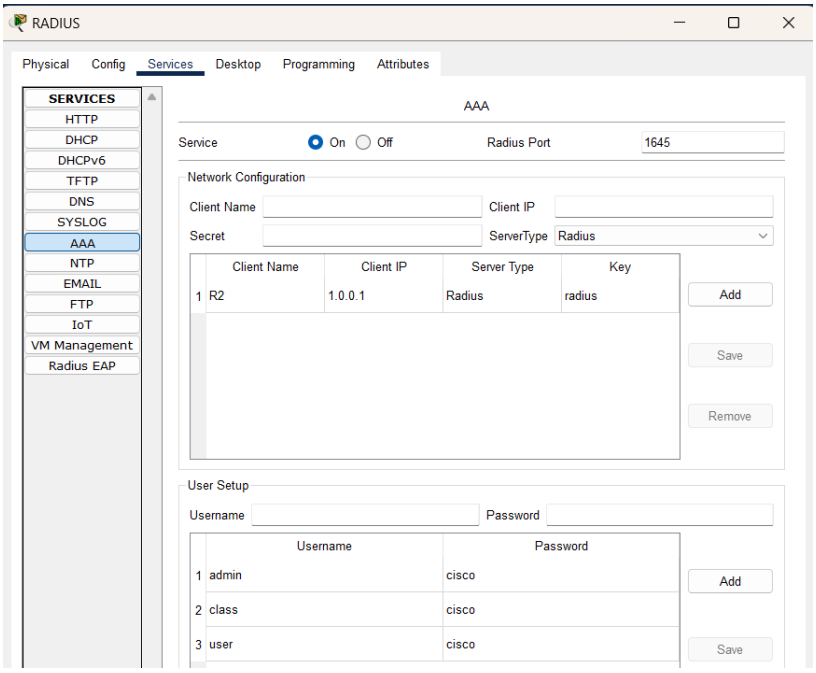
To collect logs correctly you need to set the time

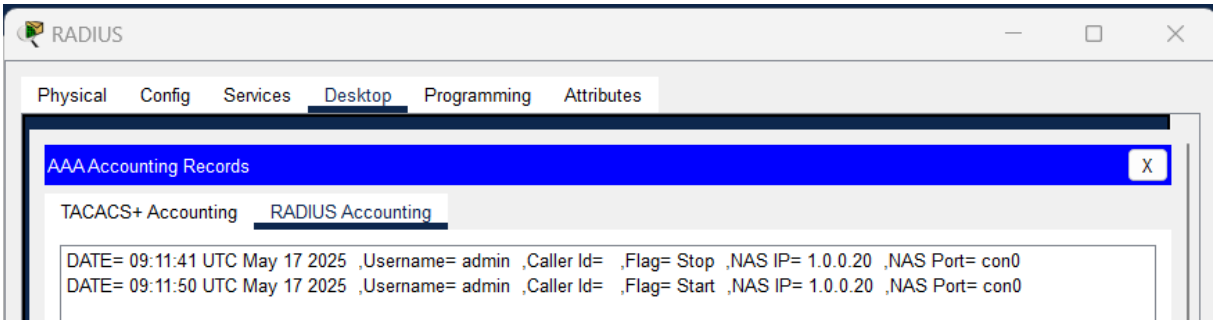
So we use the ntp server to set the time true

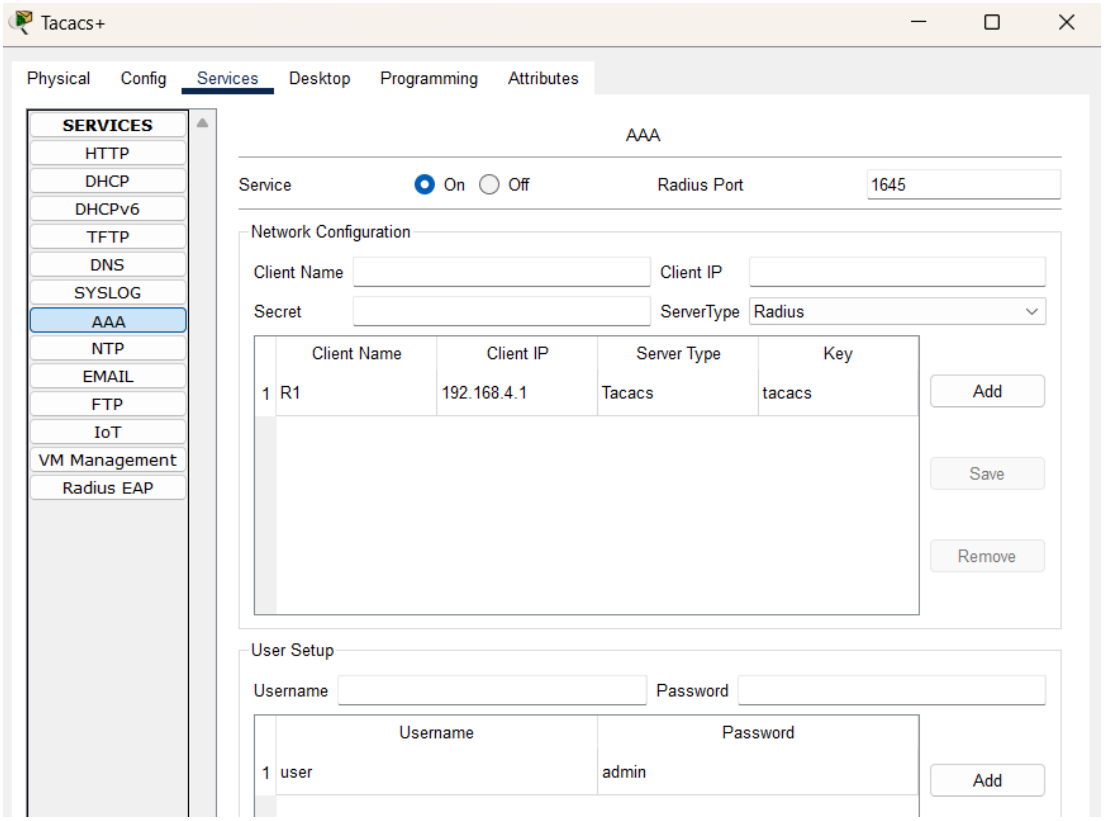


(8) Radius & Tacacs+ servers:

Used for AAA authentication






Tacacs+
Physical
Config
Services
Desktop
Programming
Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
AAA
Service
On
Off
Radius Port
1645
Network Configuration
Client Name
Client IP
Secret
ServerType
Radius
Client Name
Client IP
Server Type
Key
1
R1
192.168.4.1
Tacacs
tacacs
Add
Save
Remove
User Setup
Username
Password
Username
Password
1
user
admin
Add


AAA Accounting Records
X
TACACS+ Accounting
RADIUS Accounting
DATE= 09:45:44 UTC May 17 2025 ,Username= user ,Caller Id= ,Flag= Stop ,NAS IP= 192.168.4.1 ,NAS Port= con0
DATE= 09:45:52 UTC May 17 2025 ,Username= user ,Caller Id= ,Flag= Start ,NAS IP= 192.168.4.1 ,NAS Port= con0