

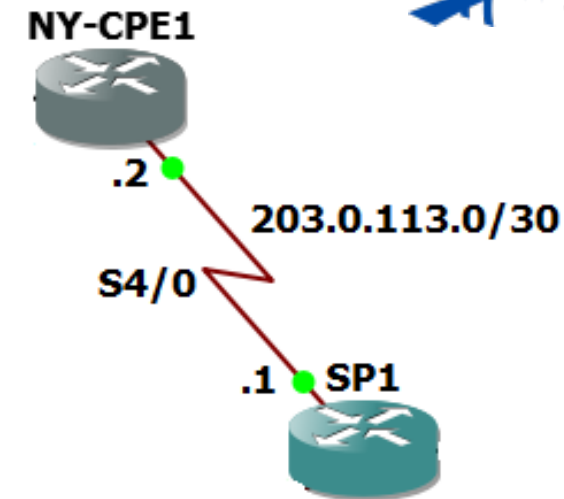
PAP vs CHAP Authentication



- Password Authentication Protocol (PAP) or Challenge Handshake Authentication Protocol (CHAP) can optionally be used to authenticate PPP sessions.
- PAP authenticates using a static user name and password combination.
- CHAP creates a unique challenge phrase (a randomly generated string) for each authentication.
- CHAP is more secure than PAP because all transmitted information is dynamic.

PPP with PAP Authentication (One Way)

```
SP1(config)#username NY1 password Flackbox
SP1(config)#int s4/0
SP1(config-if)#clock rate 128000
SP1(config-if)#encapsulation ppp
SP1(config-if)#ppp authentication pap callin
SP1(config-if)#ip add 203.0.113.1 255.255.255.252
SP1(config-if)#no shutdown
```



```
NY-CPE1(config)#int s4/0
NY-CPE1(config-if)#ip add 203.0.113.2 255.255.255.252
NY-CPE1(config-if)#encapsulation ppp
NY-CPE1(config-if)#ppp pap sent-username NY1 password Flackbox
NY-CPE1(config-if)#no shutdown
```

PPP with PAP Authentication (Two Way)



```
SP1(config)#username NY1 password Flackbox
SP1(config)#int s4/0
SP1(config-if)#clock rate 128000
SP1(config-if)#encapsulation ppp
SP1(config-if)#ppp authentication pap
SP1(config-if)#ppp pap sent-username Prov password Cisco
SP1(config-if)#ip add 203.0.113.1 255.255.255.252
SP1(config-if)#no shutdown
```

```
NY-CPE1(config)#username Prov password Cisco
NY-CPE1(config)#int s4/0
NY-CPE1(config-if)#ip add 203.0.113.2 255.255.255.252
NY-CPE1(config-if)#encapsulation ppp
NY-CPE1(config-if)#ppp authentication pap
NY-CPE1(config-if)#ppp pap sent-username NY1 password Flackbox
NY-CPE1(config-if)#no shutdown
```