

PPP

Point-to-Point Protocol

CyberQuince

Point-to-Point Protocol

PPP is a network protocol used to establish a direct connection between two nodes. It can provide authentication, transmission encryption, and compression.

Originally designed to work with ***serial connections***, PPP was adopted by ISPs to provide dial up Internet access.

PPPoE, PPP over Ethernet, extends the original capability of PPP by encapsulating the packets in Ethernet frames.

PPP – Authentication

- **PAP** (Password Authentication Protocol) is the less secure method – passwords are transmitted in clear text.
- **CHAP** (Challenge Handshake Authentication Protocol) still doesn't use encryption, but it uses hashing. “Challenge” means that the credentials are checked periodically, even after the connection has been established.

PPP – Configuration

```
GW(config)# username Int password cyber  
Int(config)# username GW password cyber
```

```
GW(config)# interface serial 0/0/0  
GW(config-if)# encapsulation ppp  
GW(config-if)# ppp authentication chap
```

```
Int(config)# interface serial 0/0/0  
Int(config-if)# encapsulation ppp  
Int(config-if)# ppp authentication chap
```

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