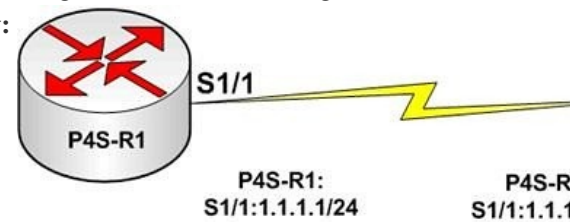


## CCNA ICND2 Lab13 - CHAP Authentication

**Lab Tips:** PPP supports device authentication through the two following protocols: PPP Authentication Protocol (PAP) and Challenge Handshake Authentication Protocol (CHAP). CHAP processes the password through Basic MD5 HASH algorithm and sends the processed data. The authentication experiences three handshakes. **Topology:**



**Lab Requirements:** 1. Specify a unique host name for the router. 2. Write the host name and password of the remote router. 3. Perform PPP encapsulation and CHAP authentication configuration on the WAN interface. **Note:** 1. The user name must be the host name of the router. 2. In the global mode, configure each router's user name and password on the other. 3. CHAP and PAP have almost the same configuration except that CHAP does not need to send the user name. CHAP parameters are specified in the **ppp authentication** command. **Lab Process:** Router(config)#hostname PS4-R1 *Specify the unique host name*  
P4S-R1(config)#username PS4-R2 password cisco / *The user name and password of the remote router.* P4S-R1(config)#interface serial 1/1 P4S-R1(config-if)#ip address 1.1.1.1 255.255.255.0  
P4S-R1(config-if)#clock rate 64000 P4S-R1(config-if)#encapsulation ppp P4S-R1(config-if)#ppp authentication pap chap / *Configure CHAP* P4S-R1(config-if)#no shutdown  
Router(config)#hostname PS4-R2 / *Configure the other device* P4S-R2(config)#username PS4-R1 password cisco P4S-R2(config)# interface serial 1/1 P4S-R2(config-if)#ip address 1.1.1.2 255.255.255.0 P4S-R2(config-if)#encapsulation ppp P4S-R2(config-if)# ppp authentication chap P4S-R2(config-if)#no shutdown