CCNA Quick Notes - PPP

1.PPP can be used over what physical WAN interfaces?   PPP can be used on the following: Asynchronous serial interfaces   High-Speed Serial Interface (HSSI)   ISDN   Synchronous serial interfaces   2.PPP is a data link layer protocol that provides network-layer services. What are the two sublayers of PPP?   The two sublayers of PPP are the following: Network Core Protocol (NCP) is the component that encapsulates and configures multiple network layer protocols. Some examples<>   Link Control Protocol (LCP) is used to establish, configure, maintain, and terminate PPP connections.   3.What features does LCP offer to PPP encapsulation?   LCP offers authentication, callback, compression, error detection, and multilink to PPP encapsulation.   The two methods of authentication on PPP links are: Password Authentication Protocol (PAP)   Challenge Handshake Authentication Protocol (CHAP)   PAP is the less-secure of the two methods; passwords are sent in clear text and are exchanged only upon initial link establishment.   CHAP is used upon initial link establishment and periodically to make sure that the router is still communicating with the same host. CHAP passwords are exchanged as MD5 encrypted values.   4.What two protocols are available for compression on PPP links?   The two protocols available for compression are Stacker and Predictor.   5.What three phases are used to establish a PPP session?   The three phases used to establish a PPP session are the following: Step 1. Link establishment--Each PPP device sends LCP packets to configure and test the link (Layer 1).   Step 2. Authentication phase (optional)--If authentication is configured, either PAP or CHAP is used to authenticate the link. Authentication must take place before the network layer protocol phase can begin (Layer 2).   Step 3. Network layer protocol phase--PPP sends NCP packets to choose and configure one or more network layer protocols to be encapsulated and sent over the PPP data link (Layer 3).   Note on authentication: Hostname and passwords are case-sensitive.   6.How do you enable PPP encapsulation on a Cisco router serial interface?   To enable PPP encapsulation on a serial interface, enter the encapsulation ppp interface command: RouterB(config-if)#encapsulation ppp   7.How do you enable PPP authentication using PAP or CHAP on a Cisco router?   To enable PPP authentication on a Cisco router, follow these steps: Step 1. Make sure that each router has a host name assigned to it using the hostname command   Step 2. On each router, define the username of the remote router and password that both routers will use with the username name password password command.   Step 3. Configure PPP authentication with the ppp authentication {chap chap pap pap chap pap} interface command. (If both PAP and CHAP are enabled, the first method you specify in the command is used. If the peer suggests the second method or refuses the first method, the second method is used.)   For example: RouterB(config)#hostname RouterB   RouterB(config)#username RouterA password cisco   RouterB(config)#int s0 RouterB(config-if)#ppp authentication chap pap   8.What is the default encapsulation on a Cisco serial interface?   HDLC   PDF Version | Download