

## Class Activity - PPP Persuasion

### Objectives

Describe the benefits of using PPP over HDLC in a WAN.

This activity can be completed individually or in small groups of 2-3 students per group.

### Scenario

Your network engineering supervisor recently attended a networking conference where Layer 2 protocols were discussed. He knows that you have Cisco equipment on the premises, but he would also like to offer security and advanced TCP/IP options and controls on that same equipment by using the Point-to-Point Protocol (PPP).

After researching the PPP protocol, you find it offers some advantages over the HDLC protocol, currently used on your network.

Create a matrix listing the advantages and disadvantages of using the HDLC vs. PPP protocols. When comparing the two protocols, include:

- Ease of configuration
- Adaptability to non-proprietary network equipment
- Security options
- Bandwidth usage and compression
- Bandwidth consolidation

Share your chart with another student or class. Justify whether or not you would suggest sharing the matrix with the network engineering supervisor to justify a change being made from HDLC to PPP for Layer 2 network connectivity.

### Resources

- Internet access to the World Wide Web
- Word processing or spreadsheet software