

VPNs at a Glance

Objective

Explain the use of VPNs in securing site-to-site connectivity in a small- to medium-sized business network.

Scenario

A small- to medium-sized business is growing and needs customers, teleworkers, and wired/wireless employees to be able to access the main network from any location. As the network administrator for the business, you have decided to implement VPNs for security, network access ease, and cost savings.

It is your job to ensure that all of the network administrators start the VPN planning process with the same knowledge set.

Four basic VPN informational areas need to be researched and presented to the network administrative team:

- Concise definition of VPNs
- Some general VPN facts
- IPsec as a VPN security option
- Ways VPNs use tunneling

Resources

- World Wide Web access
- Word processing or presentation software

Directions

Step 1: Individual students research all four of the following topics and take notes on their research:

- a. Topic 1: A concise definition of VPNs
- b. Topic 2: Five general facts about VPNs
- c. Topic 3: IPsec defined as a security option when using VPNs
- d. Topic 4: A graphic showing how VPNs use tunneling

Step 2: After students research their topics, groups of four students will be formed to discuss their individual research.

- a. Each group will agree on
 - 1) One concise VPN definition
 - 2) Five facts describing VPNs
 - 3) One definition of IPsec as a VPN security option
 - 4) One graphic showing a VPN network using tunneling

Step 3: Each group will design a four-slide presentation (one slide per topic) to deliver to the class for discussion.