Lab – Researching WAN Technologies

Objectives

Part 1: Investigate Dedicated WAN Technologies and Providers

Part 2: Investigate a Dedicated Leased Line Service Provider in Your Area

Background / Scenario

Today's broadband Internet services are fast, affordable. With the use of VPN technology, the connection can also be secure. However, many companies still need a 24-hour dedicated connection to the Internet, or a dedicated point-to-point connection from one office location to another. In this lab, you will investigate the cost and availability of purchasing a dedicated T1 Internet connection for your home or business.

Required Resources

A device with Internet access.

Step 1: Research WAN technology characteristics.

Use search engines and websites to research the following WAN technologies. Blank lines are provided for technologies not listed in the table. Put your findings in the table below.

WAN Technology	Dedicated Connection (yes/no)	Last Mile Media: Copper (yes/no)	Last Mile Media: Fiber (yes/no)	Last Mile Media: Wireless (yes/no)	Speed/Range
T1/DS1					
T3/DS3					
OC3 (SONET)					
Frame Relay					
ATM					
MPLS					
EPL (Ethernet Private Line)					

Step 2: Discover dedicated WAN technology service providers.

Using a search engine, research dedicated WAN technology offered by the service providers. Complete the table below by identifying each service provider's dedicated WAN services, based on the information provided

on the website. Use the extra lines provided in the table to record additional service providers in your local area.

Internet Service Provider	T1/DS1/PRI	T3/DS3	OC3 (SONET)	Frame Relay	ATM	MPLS	EPL (Ethernet Private Line)
Comcast							
CenturyLink							
AT&T							
Windstream							
XO Communications							
Verizon							

Reflection

1. What are the disadvantages to using a dedicated WAN connection for personal home use? What would be a better solution?

2. Technology is always evolving. Give some examples of new WAN-related technologies encountered during your search.