Understanding Switches



This video tutorial focuses on OSI Level Two devices. Here, you will learn about the difference between hubs and switches. You will also learn about the differences between managed and unmanaged switches. Related topics such as QoS and the Spanning Tree Protocol are also included. Specific topics include:

- Basic Switch Concepts
- Managed vs. Unmanaged Switches
- Speed
- Trunk Connections
- VLANs
- QOS
- Spanning Tree Protocol

Table 1 Eli the Computer Guy's Understanding Switches Video Tutorial.

You can find this video tutorial at:

https://www.youtube.com/watch?v=9yYqNqTNnqI

Instructions

For this Assignment, you will first view the Understanding Switches Tutorial. After viewing the tutorial, answer the related questions. When you have completed your answer to your online portfolio. Please label the link to your assignment "Understanding Switches."

Questions

- 1. Define, compare and contrast hubs and switches.
- 2. On which OSI model layer, do switches reside?
- 3. On which OSI model layer do hubs reside?
- 4. What information does the first half of the MAC address contain?
- 5. What information does the last half of the MAC address contain?
- 6. What access methodology does Ethernet utilize?
- 7. Briefly explain the difference between managed and unmanaged switches.
- 8. Compare and contrast full and half duplex communications.
- 9. What is a VLAN? Briefly describe its function.
- 10. What is QOS? Briefly describe an environment where it would be useful.
- 11. What is the spanning tree protocol? What problem does it prevent?