

MAC and Choose...

Objectives

Explain basic switching concepts.

In this activity, you will indicate your knowledge of Ethernet technology by successfully comparing legacy to current standards. You will speculate on potential future Ethernet technology standards, and explain why MAC addresses and framing formats have stayed basically the same, in order to assist data transmission, during Ethernet's evolution.

Background/Scenario

Note: This activity is best completed in groups of 2-3 students.

Please view the video, The History of Ethernet, located at the following link:

<http://www.netevents.tv/video/bob-metcalfe-the-history-of-ethernet>

Topics discussed in the video include not only where we have come from in Ethernet development, but where we are going with Ethernet technology in the future!

1. After viewing the video and comparing its contents to what you read in the chapter, go to the web and search for information about Ethernet:
 - How was Ethernet used when it was first developed?
 - How has Ethernet stayed the same over the past 25 years? What changes are being made to make it more useful and applicable to today's data transmission methods?
2. Collect three pictures of old, current, and possible future Ethernet physical media and devices. Focus your search on switches if possible. Share these pictures with the class and discuss:
 - How have Ethernet physical media and intermediary devices changed?
 - How have Ethernet physical media and intermediary devices stayed the same?
 - How do you think the Ethernet will change in the future? What factors could influence these changes?

Required Resources

- Internet access to video, The History of Ethernet, located at: <http://www.netevents.tv/video/bob-metcalfe-the-history-of-ethernet>
- Hard- or soft-copy media for recording answers to questions and for in-class sharing.

Reflection

1. How was Ethernet used when it was first developed?
2. How has Ethernet stayed the same over the past 25 years? What changes are being made to make it more useful and applicable to today's data transmission methods?
3. How have Ethernet physical media and intermediary devices changed?

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4. How have Ethernet physical media and intermediary devices stayed the same?
5. How do you think the Ethernet will change in the future? What factors could influence these changes?