

Switch Trio

Objective

Verify the Layer 2 configuration of a switch port connected to an end station.

Scenario

You are the network administrator for a small- to medium-sized business. Corporate headquarters for your business has mandated that on all switches in all offices, security must be implemented. The memorandum delivered to you this morning states:

"By Monday, April 18, 20xx, the first three ports of all configurable switches located in all offices must be secured with MAC addresses — one address will be reserved for the printer, one address will be reserved for the laptop in the office, and one address will be reserved for the office server.

If a port's security is breached, we ask you to shut it down until the reason for the breach can be certified.

Please implement this policy no later than the date stated in this memorandum. For questions, call 1.800.555.1212. Thank you. The Network Management Team"

Work with a partner in the class and create a Packet Tracer example to test this new security policy. Once you have created your file, test it with, at least, one device to ensure it is operational or validated.

Save your work and be prepared to share it with the entire class.

Reflection

1. Why would one port on a switch be secured on a switch using these scenario parameters (and not all the ports on the same switch)?
2. Why would a network administrator use a network simulator to create, configure, and validate a security plan, instead of using the small- to medium-sized business' actual, physical equipment?