

Lab Report

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## Your Performance

Your Score: 0 of 1 (0%)  
Elapsed Time: 33 seconds

Pass Status: Not Passed  
Required Score: 100%

## Task Summary

Actions you were required to perform:

- ✖ In the Networking Closet, replace the patch cable for Office 2

## Explanation

Following are steps an expert might take to troubleshoot this problem:

1. In Office 1, ping each **workstation** in the network. This should verify the connectivity problem between Office 1 and Office 2 (pinging the computers in the Networking Closet and Lobby succeeds, but the ping to Office 2 fails). The scope of the problem could be isolated to the computer in Office 2.
2. In Office 2, ping each **workstation** in the network. Each ping attempt fails regardless of the remote workstation. Again, the scope of the problem could be isolated to the computer in Office 2.
3. In the Networking Closet, confirm that the scope of the problem is limited to Office 2 by pinging each **workstation** in the network (pinging Office 1 and Lobby succeeds, but the ping to Office 2 fails).
4. In Office 2, check the **network connection** in the Networking and Sharing Center or the **status lights** on the NIC. The diagram in the Network and Sharing Center shows the network connection as disconnected from any network, and the link and status lights on the NIC also show it is disconnected. A disconnected status is displayed when the NIC does not have a connection to the network. Possible causes for a disconnected status include:
  - Bad NIC
  - Faulty cable
  - Unplugged cable
  - Switch or hub port either disabled or faultyBecause the scope of the problem is currently limited to the Office 2, you should look for common errors or solutions that you can try quickly.
5. Confirm that the **network cable** is connected to the NIC and the wall plate. Both ends of the cable are connected correctly.
6. In Office 2, replace the **cable** between the workstation and the wall plate. After you replace the cable, the disconnected status is still displayed in the Network and Sharing Center. You could replace the NIC in Office 2, but you should continue to replace cables because you can test the results quickly.
7. In the Networking Closet, check the **switch** to ensure that it is powered on. The power light for the device indicates that it is powered on. Also, since Office 1 can communicate through the switch, you know that the device is not turned off.
8. In the Networking Closet, observe the **activity lights** for all ports on the switch. There are activity lights for other ports, yet there is a lack of activity for Port 4. Possible causes include:
  - The cable between Office 2's patch panel port and the switch is bad or disconnected.
  - Port 4 on the switch is disabled or shutdown.
9. In the Networking Closet, confirm that the **network cable** is connected to Office 2's patch panel port and the switch. Both ends of the cable are connected correctly.
10. In the Networking Closet, replace the **patch panel cable**, as you can test this solution quickly. The activity light for Port 4 now indicates network activity.
11. In Office 2, check the **network connection** in the Networking and Sharing Center or the **status lights** on the NIC. The diagram in the Network and Sharing Center shows a connection to the network and internet, and the link and status lights on the NIC also show it is functioning normally.
12. In Office 2, ping each **workstation** in the network. Each ping attempt succeeds regardless of the remote workstation.
13. In Office 1, ping **Office 2** to confirm the resolution of the original problem. The ping attempt is successful.

Replacing the NIC in Office 2 and making a console connection to the switch to confirm if port 2 is disabled are two viable approaches for this problem. Yet, as indicated earlier, you should look for common errors or solutions that can you can test quickly.