**6-2 Project One: Network Modification Brief**

Joshua Merren

Southern New Hampshire University

CYB-210

Professor Siddiqi

10 April 2024

1. **Network Reconfiguration**
2. Properly configure the **VLAN** for guest and video connections to meet the project requirements. Submit a screenshot of the VLAN table.

A screenshot of a computer

Description automatically generated

1. A screenshot of a computer

   Description automatically generatedProperly configure the **guest wireless network** to meet the project requirements. Submit a screenshot of the wireless settings for the wireless router.
2. Make sure that **devices** are connected to the guest wireless network to meet the project requirements. IP addresses for the devices should be noted in the network diagram PNG or PDF.

A diagram of a wireless device

Description automatically generated

1. Make sure that **cameras**are connected to the video network to meet the project requirements. IP addresses for the cameras should be noted in the network diagram PNG or PDF.

A screen shot of a webcam

Description automatically generated

1. Make sure that guest and video networks are **properly segmented.** Submit screenshots of ping tests that prove you have met this project requirement.

A screenshot of a computer program

Description automatically generatedA screenshot of a computer

Description automatically generated

Network Diagram:

A diagram of a computer network

Description automatically generated

1. **Explanation of Network Segregation**  
   Articulate your response to the questions below.
   1. Describe **how network traffic was segmented** to meet the project requirements for guest and video connections.

The start to the segmentation was to create multiple VLANS. I configured the VLANS through the switch and added VLAN 70 and VLAN 80. VLAN 70 was created for the Guest network and VLAN 80 was created as the Video Network for the cameras. VLAN 50 was already created for the computers, so I did not need to configure that VLAN. I then went into the router and configured the IP address (192.168.70.1) for the Guest Network and the starting IP address (192.168.70.10) with a maximum number of users at 70. I then set the router to DHCP and disabled the authentication. I also configured the IP address (192.168.80.10) and IP address (192.168.80.11) for the lobby camera and door camera. This has created 3 subnets to keep the networks segmented from one another.

* 1. Explain how you considered the **scalability** of the guest wireless network in order to meet the project requirements (IP addressing, leasing, and so on).

Scalability was considered in my configuration by limiting the number of users to 70 to start. I could not changed the time to 4 hours but more than likely they will not be there for 4 hours at a time. With that being said I think only allowing 70 total guests is appropriate for the DMV. I also think if it needs to be changed, you can easily go into the GUI of the Router and change it from 70, and everything will be fine since the subnets are already set and ready to go.