**08/10/2020**

What the tool does:

The first thing that the script does is opening the switches.txt file. From there it extracts the name of all switches and their IP addresses. It displays the options on the screen so that the user can see to what network devices they can connect. Then, the script asks whether the user wants to access all of them (**option 0**) or only one switch (**option 1**). If the user selects **option 0**, the script will establish a SSH connection, one at a time, with each switch. If the user selects **option 1**, the script will establish a SSH connection only with a single device. The user is asked then for the IP address of the switch they want to connect to. If the IP is not in the switches.txt file, the script returns an error message, informing the user that it could not find the specified IP address.

After the connection has been established, the script performs a running-config backup and stores it in a .txt file in the same directory. Then, the output of “show interfaces status” is displayed on the screen so that the user can see the available interfaces and their corresponding configuration. The script asks afterwards what interface the user wants to modify. If an interface number is introduced that is not available within the switch, the script prints an error and reprompts for an input. If the interface is available on the switch, the script requests the switchport mode. There are two options, either *access* or *trunk.* If another option is introduced, the script will return an error. After receiving the switchport mode, the script asks for a VLAN number. Once again, if the VLAN number surpasses 4094, the user is faced with an error. Finally, the script returns the new configuration of the interface from the “show interfaces status” output.

Then, the script returns to the line where the user can choose option 0 or option 1.

Notes:

1. Even if the *trunk* option is available for the user to choose, I did not write any code to handle that option specifically. In the future I will update the script so that it can also configure trunk interfaces if needed;
2. After the configuration is done and the script displays the new configuration of the interface, the “[-] Could not find the specified IP address” message appears. Due to the structure of the code, the script prints that message if the user chooses option 1 and if the code is executed until the end;
3. I did not implement a goodbye message when the user presses CTRL+C;
4. The script does not return the current switchport mode of the interface. I will add that option later;