23/10/2020

The purpose of the code is to create VLANs on a single/multiple switches. The user is asked for login credentials (the same for logging into the switches). The code checks in **login.txt** file whether the user/password combination is valid. Then, the code asks for device(s) information. As the user enters the IP (if he selected the option to configure only one switch), it checks in **authorization.txt** file to see whether the user has authorization to access that device. When multiple switches are being configured, the user is allowed to enter all IPs. Then, based on the authorization from the same txt file, he is afterwards told for which switches he does not possess authorization to log in. The script resumes with the switches for which the user has authorization.

After the authorization protocol took place, the user is asked for the VLAN name(s)/ID(s) he wants to configure. The script then attempts a SSH connection. It can handle SSH timeouts, asking the user if he wants to retry the connection or pass to the next device. If there was only one device from the beginning, the program ends. If the SSH connection is successful, the script checks for existing VLAN names/IDs. If **any** of the VLAN names/IDs introduced by the user already exist, the script skips the configuration for this device. It then proceeds to the next switch in line.

For a better overview of this script’s structure, please check the **vlan\_creation.vsdx** file. It contains a logical diagram of this script.