Running AP Rename Script

This script is for bulk rename of APs on an IOS-XE based WLC such as the 9800 series controllers.

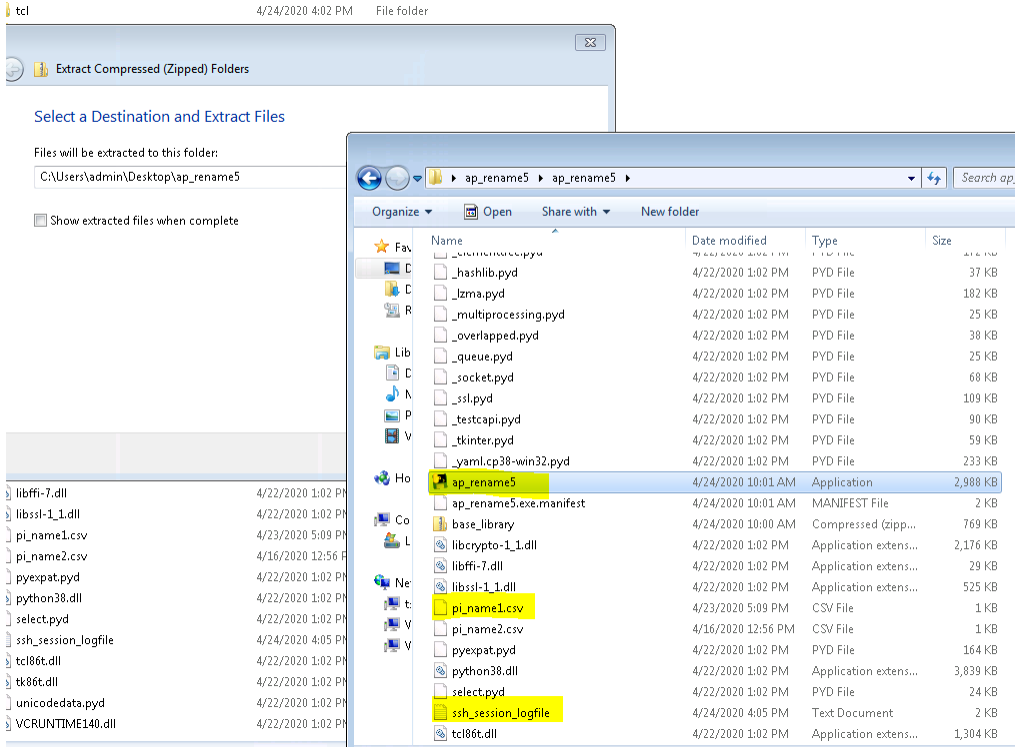
THIS SCRIPT IS IN NO WAY ENDORSED BY OR MAINTAINED BY CISCO SYSTEMS INC. USE OF IT IS AT THE USERS OWN RISK.

Script Function Outline

Takes input from CSV file that is placed in same directory as the Script (.exe) file	•CSV file contains: •AP Name (The desired Name of AP after the renaming) •Ethernet MAC (MAC of target AP to rename. Must be the "Ethernet" MAC, not "Radio" MAC)
Formats CSV Data	• MACs formatted to xxxx.xxxx.xxxx format • AP Names to lowercase
Connect to WLC via SSH and gathers info on Registered APs	• Prompts user for target WLC IP and Credentials to login • Gathers current AP's Name and Ethernet MAC
Compares info from CSV and WLC	• Looks for matching MAC Addresses • Displays any matches found and displays them for user
Creates commands for renaming Aps	•For each match command is created "ap name {current name from WLC} name {desired AP name from CSV}
Sends commands to WLC to rename APs	
Displays results	•logfile is created in same directory as script "ssh_session_logfile.txt"

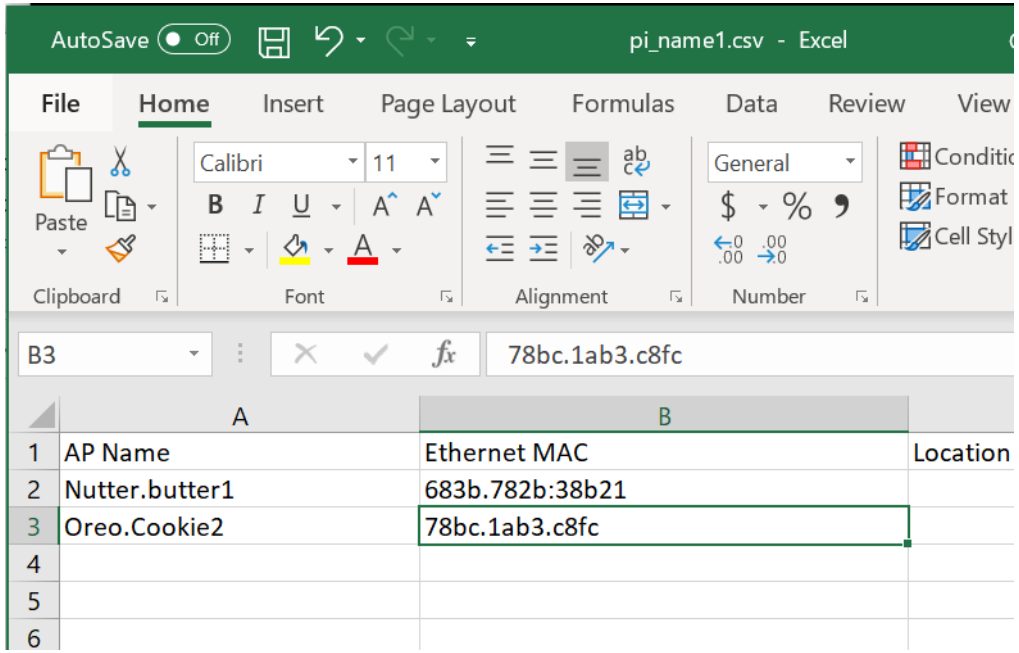
Extract Script and Contents

- Extract contents of “ap_rename.zip”* to a folder on PC.
- Open “ap_rename”* folder
  - “ap_rename.exe”* is main script executable
  - “.csv” files for importing get placed in this folder.
    - Example file “pi_name1.csv” is there for reference
  - “ssh_session_logfile.txt” – is created upon connection to WLC and logs all session output for reference. NOTE! This file is purged upon re-running script. If you desire to save the results, copy the file before running script again.
- *Name may differ slightly upon revisions



Import CSV

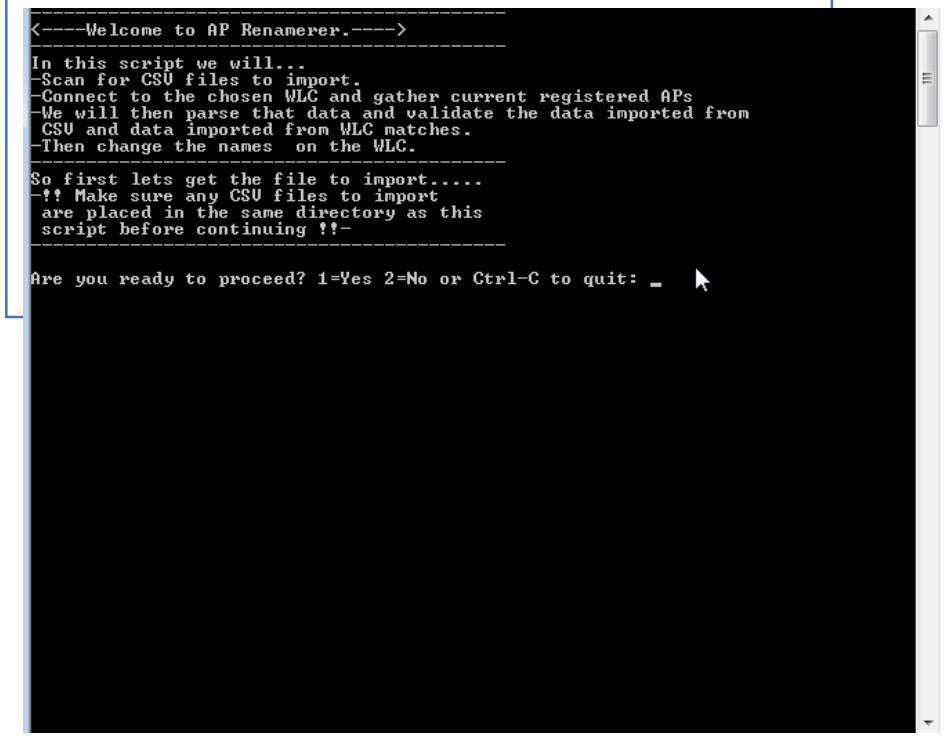
- CSV file format is same as PI Import file.
- Populate “AP Name” and “MAC Address fields”. All others are ignored.
- Script attempts to “normalize” and validate MAC address format for errors.
- Script may not catch all errors. Please try and ensure no character errors exist.



Step 1: Execute Script

Execute the “ap_rename.exe” executable to start script

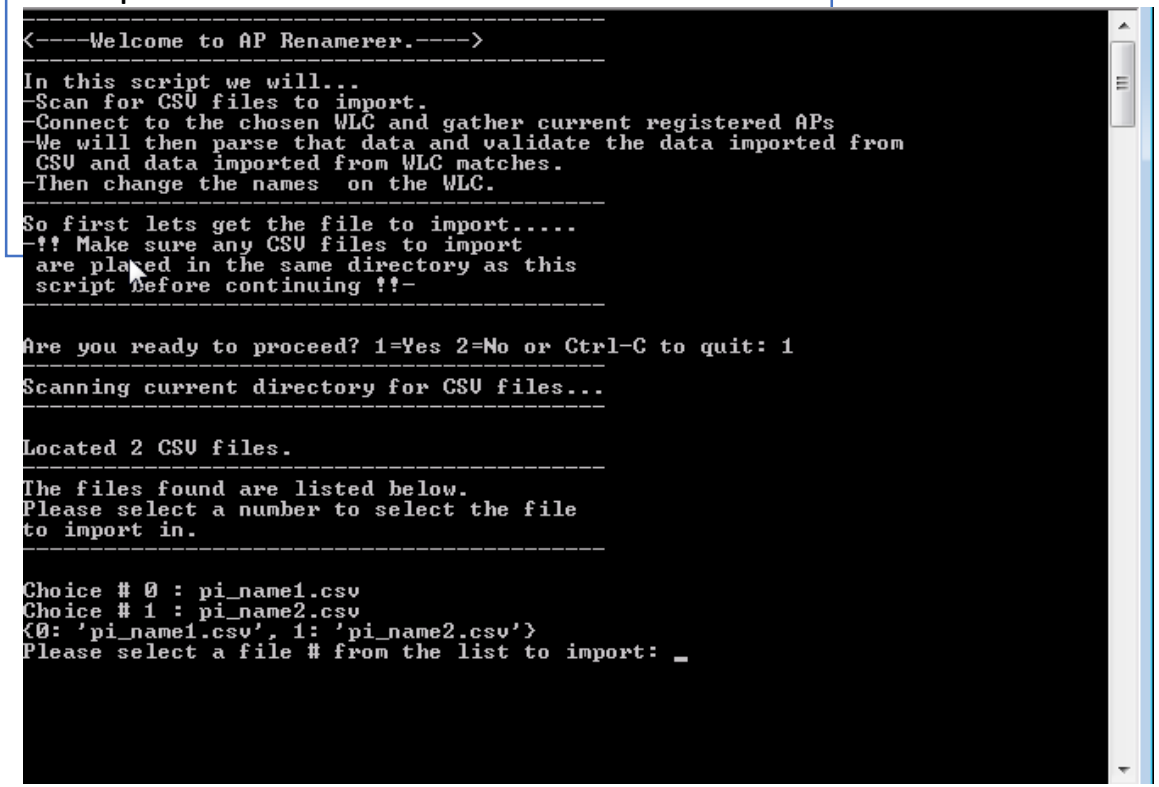
- Script executes and prompts user



Step 2: Select CSV

Choose discovered CSV to import

- Script scans and finds any CSV file in directory to import.
- Input # associated with file



Step 3: WLC Info

After script imports and displays CSV results, input info to connect to target WLC

- Script will prompt for Ip address and credentials necessary to SSH to WLC to gather currently registered APs

```
checked against REGEX to make sute they are
in format xxxx.xxxx.xxxx before proceeding
----------------------------------------

Incorrect format: 6c:41:0e:17:03:5c
6c410e17035c
6c41.0e17.035c
Format is now correct...adding to list: 6c41.0e17.035c
Incorrect format: 6c410e173bcc
6c410e173bcc
6c41.0e17.3bcc
Format is now correct...adding to list: 6c41.0e17.3bcc
Incorrect format: 6c410e175fbc
6c410e175fbc
6c41.0e17.5fbc
Format is now correct...adding to list: 6c41.0e17.5fbc
Incorrect format: 6c410e173bca
6c410e173bca
6c41.0e17.3bca
Format is now correct...adding to list: 6c41.0e17.3bca
Incorrect format: 6c410e175fbb
6c410e175fbb
6c41.0e17.5fbb
Format is now correct...adding to list: 6c41.0e17.5fbb
----------------------------------------
We located the below entries in the CSV file.
----------------------------------------

['dllstxatapn01v281a', '6c41.0e17.035c']
['DLLCTX04APN02V088A', '6c41.0e17.3bcc']
['DLLCTX04APN02V088B', '6c41.0e17.5fbc']
['DLLCTX04APN02V088C', '6c41.0e17.3bca']
['DLLCTX04APN02V088D', '6c41.0e17.5fbb']
['DLLCTX04APN02V088E', 'f4bd.9e9b.a0fc']
['DLLCTX04APN02V088F', 'f4bd.9e9b.9eb4']
['Nutter.butter1', '683b.782b.38b2']
['Oreo.Cookie2', '78bc.1ab3.c8fc']
----------------------------------------
Now we will connect to  a WLC to pull currently
 connected and Registered APs.
----------------------------------------

Lets gather info for the WLC we will connect to....
Enter IP address of WLC:
```

Step 4: Validate WLC

Scripts returns SSH prompt received from WLC

- Ensure this is the prompt expected from the target WLC
- If so, confirm and proceed

```
['Oreo.Cookie2', '78bc.1ab3.c8fc']
----------------------------------------
Now we will connect to  a WLC to pull currently
 connected and Registered APs.
----------------------------------------

Lets gather info for the WLC we will connect to....
Enter IP address of WLC: 198.18.134.100
Enter username-'must have priv15'  :admin
Enter password in cleartext: C1sco12345
{'ip': '198.18.134.100', 'user': 'admin', 'pass': 'C1sco12345'}
Is the above connection info correct? 1=Yes, 2=No   : 1
Connection Successful!
----------------------------------------
CONNECTED via SSH-
Device returned : C9800-WLC#
----------------------------------------

Is the above CLI prompt the prompt you were
expecting from the correct WLC in exec mode?
1= Yes  ! 2=No or Ctrl-C to quit :
```

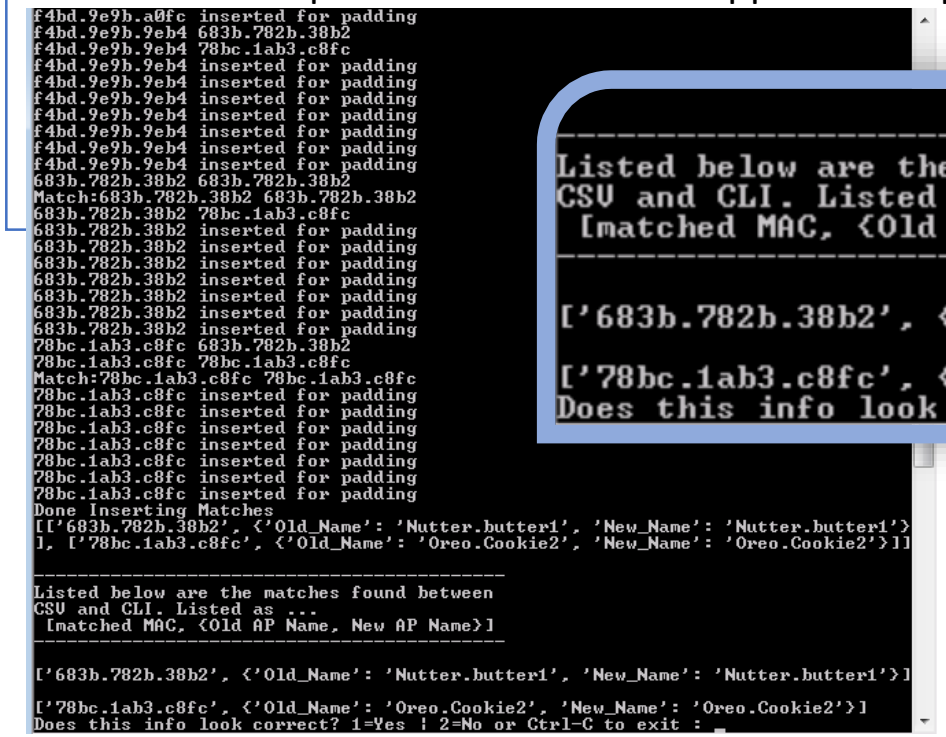
Step 5: Comparison

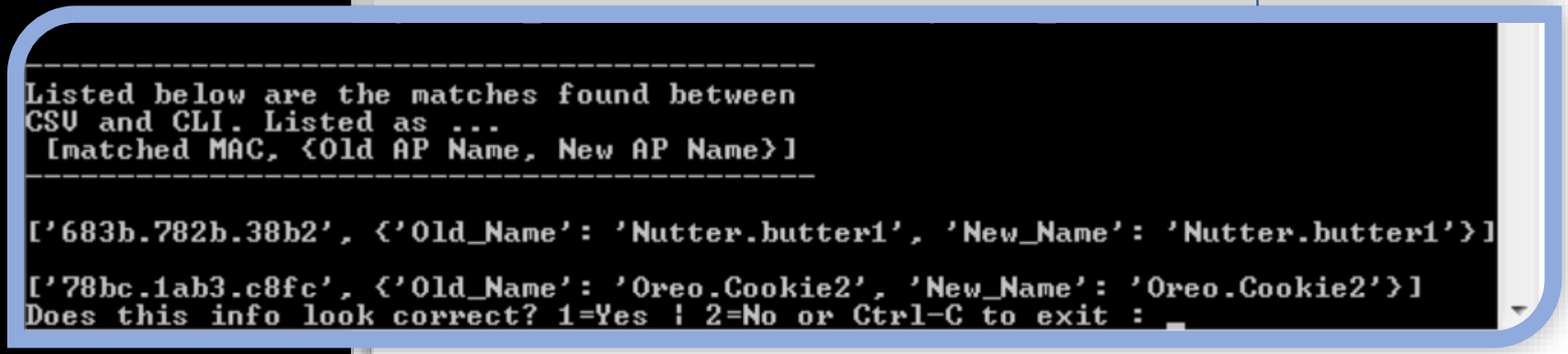
Script compares CSV and WLC info gathered an looks for matching MAC addresses.

- Matches found are displayed and shown

  [matches_MAC, {Old_AP_Name, New_AP_Name}

- Confirm and proceed if information appears as expected

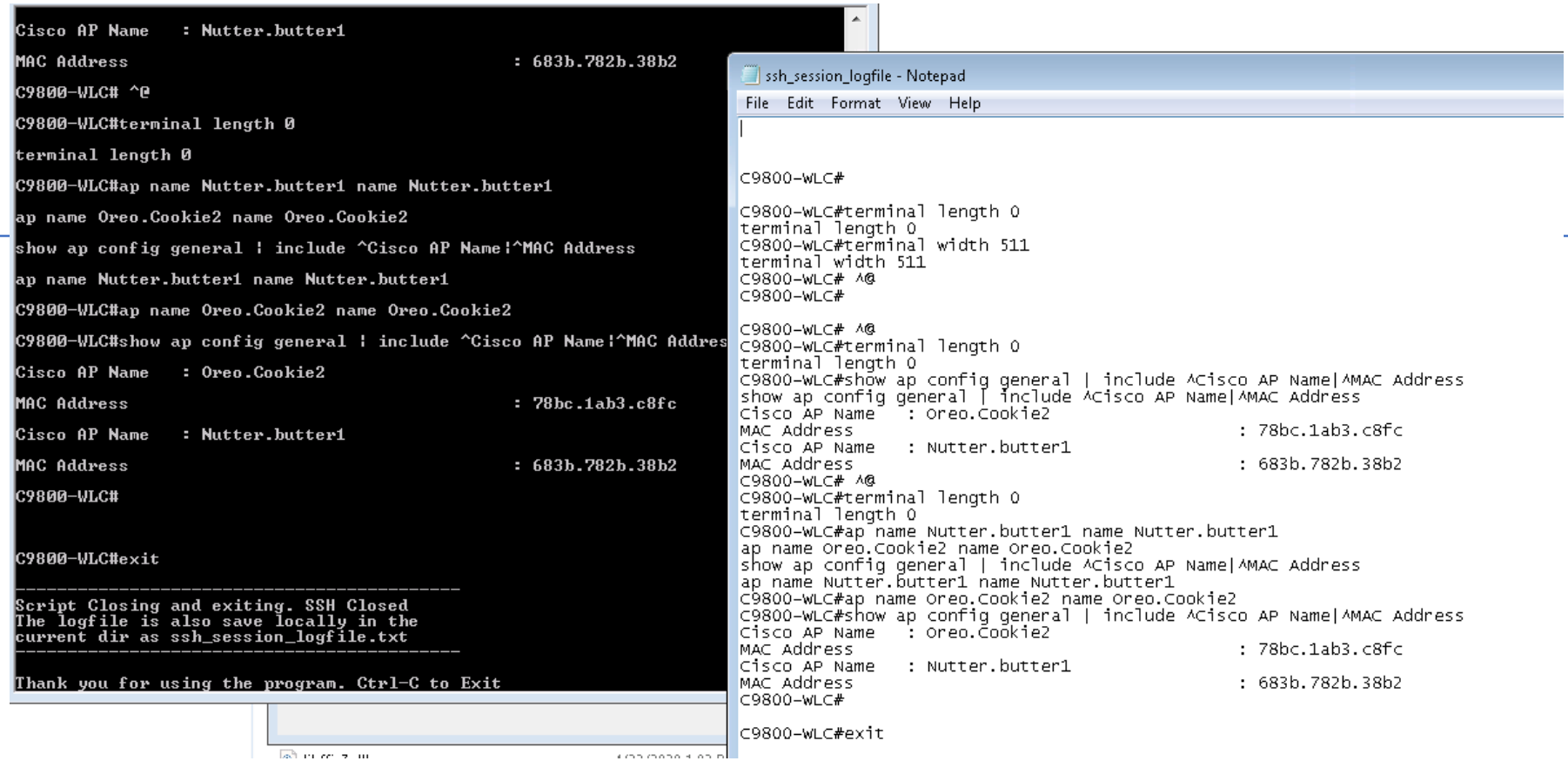


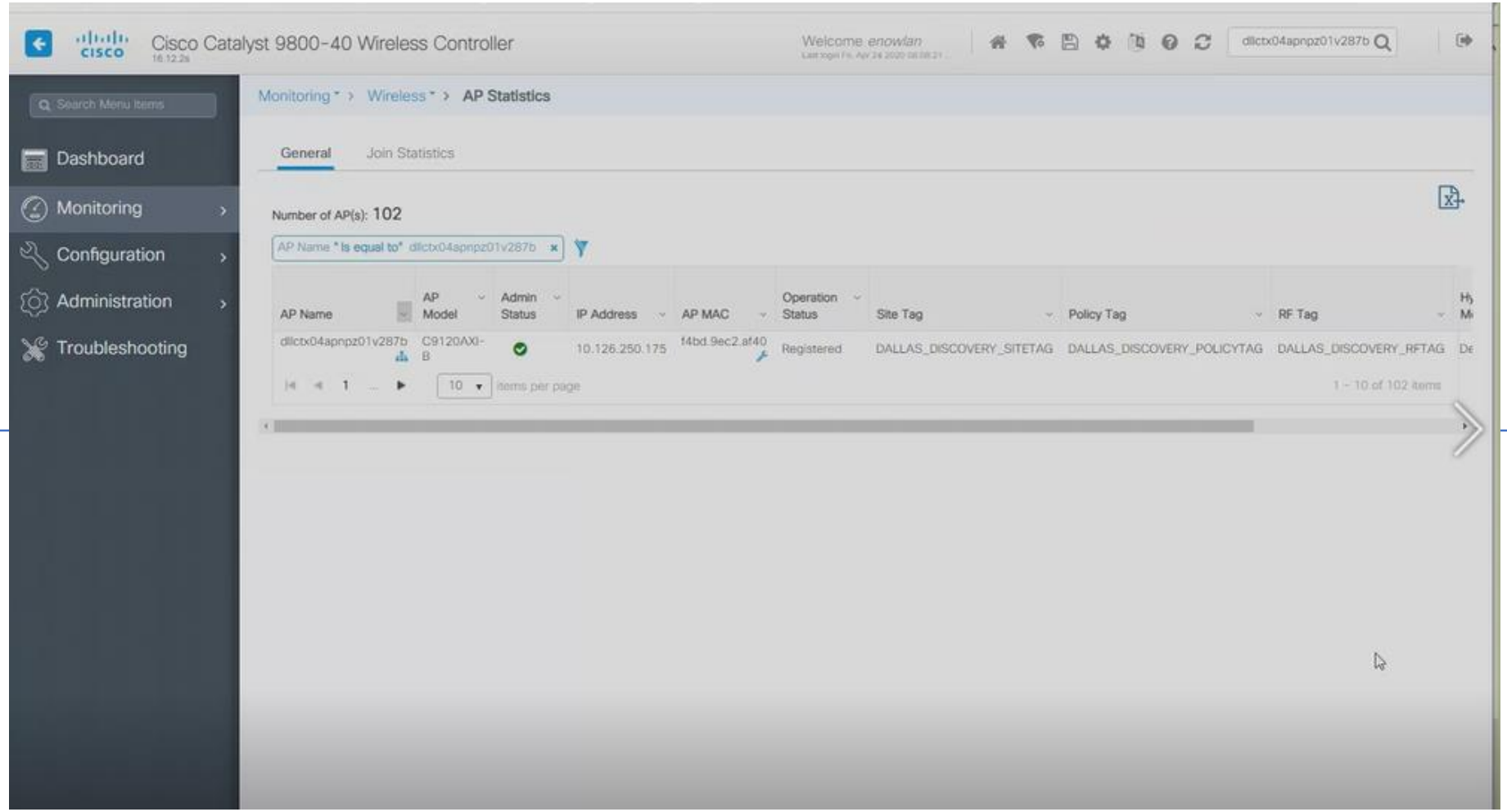


Step 6: Script Completion

Script creates and sends commands to WLC based on matches found to rename APs

- Commands are send in bulk and executes one after another
- After completion, results of complete session logfile are printed on screen
- Logfile is also saved in local folder as “ssh_session_logfile.txt” – This file is purged and recreated during each execution of script



Step 7: WLC Validation

Check WLC and validate AP names are changed as desired