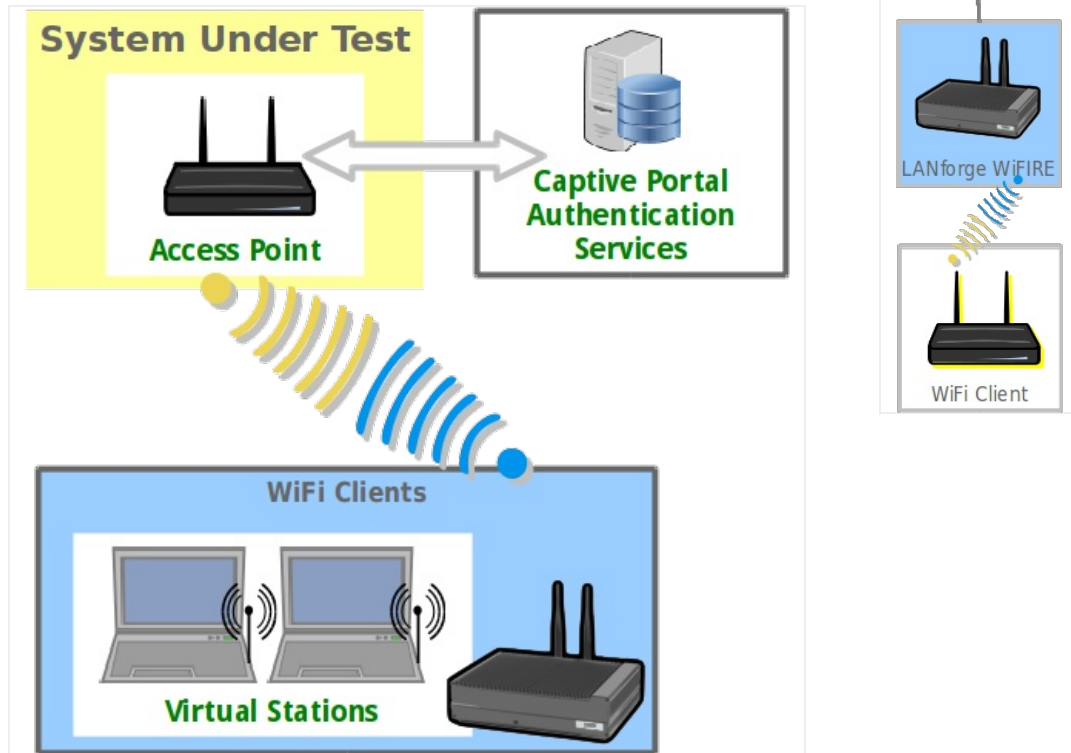


WiFi Captive Portal Login

Goal: Create many user sessions to a WiFi captive portal gateway.

Airports, arenas and coffee shops often offer open WiFi service that is gated with a web sign-on form. This is called a captive portal. LANforge can run a custom login script on a virtual station to emulate sign-in on the captive portal web page. The following example will create one hundred stations and have them authenticate through a captive WiFi portal.

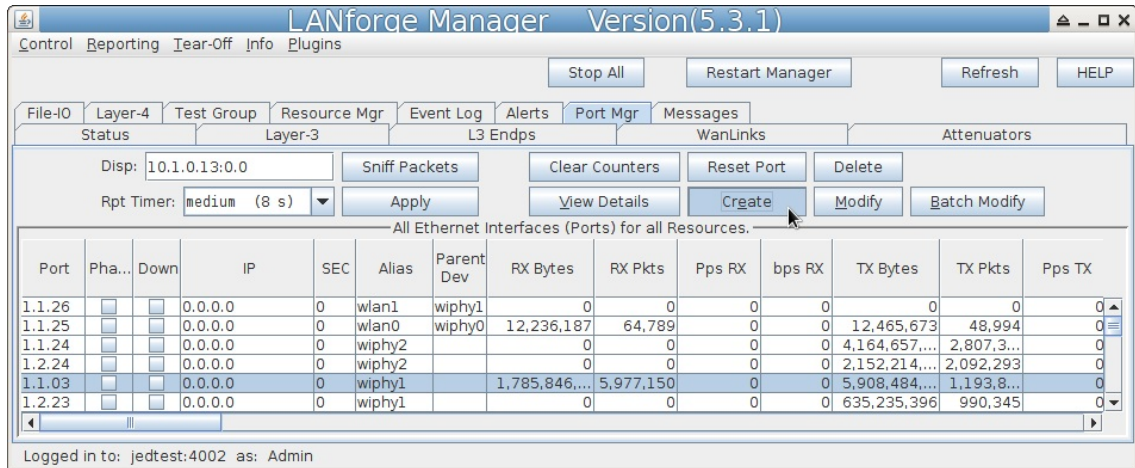


1. Prepare a portal login script (`1f_ifup_post`)
2. The `1f_ifup_post` script will be called after DHCP assignment for a station occurs. It can also be called before DHCP release. This script is called from the LANforge resource hosting the virtual station.
 - A. The script should be in directory `/home/lanforge/`.
 - B. LANforge will pass these arguments to the script
 - A. `-i` - station device
 - B. `--ip4` - station ip address
 - C. `--ip6` - station ipv6 address
 - D. `--dns` - station DNS address
 - E. `--mgt` - pipe name for reporting results to LANforge
 - C. Custom parameters to the script can be provided.
 - D. The script can have another name.

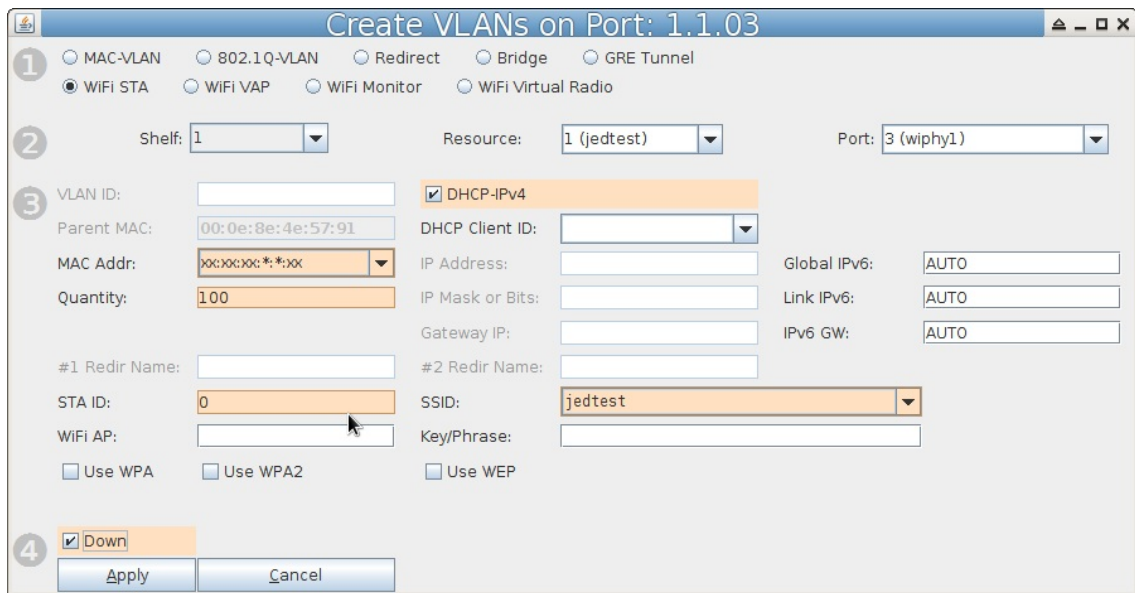
- E. LANforge expects these return values:
- A. **OK**
 - B. **FAIL**
 - C. **FAIL:reason**, this provides feedback on failure occurrence.

3. Create WiFi stations

- A. In the **Ports** tab, select wiphy1 and click **Create**

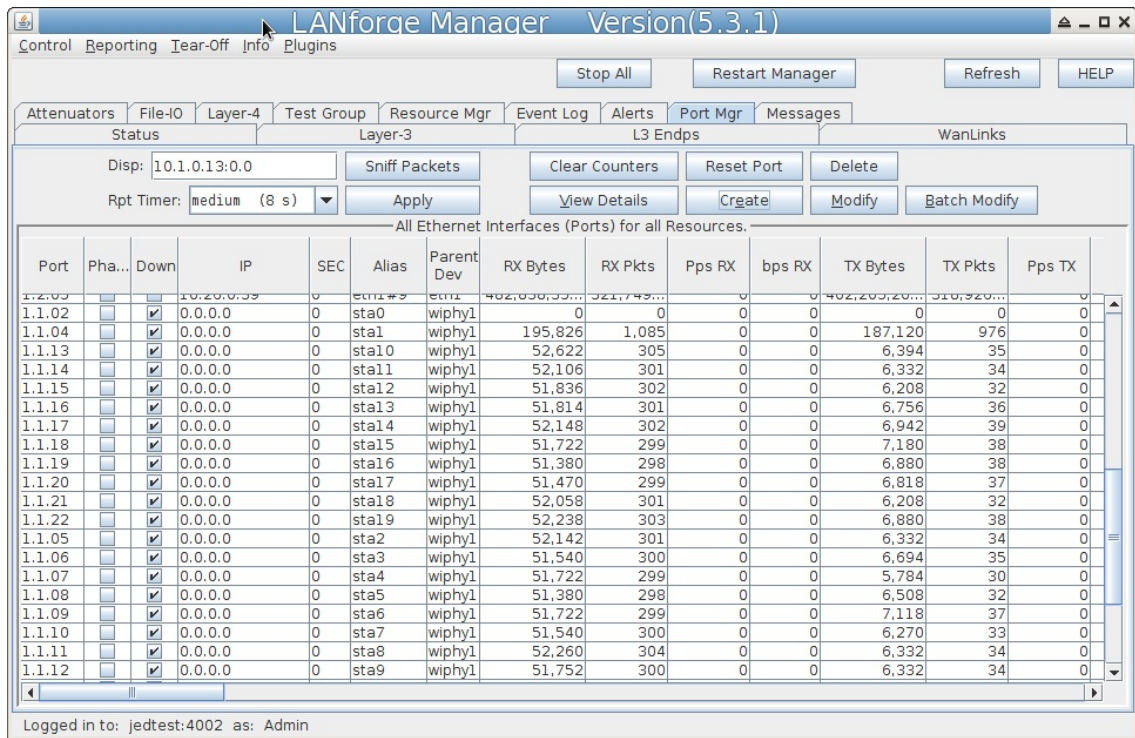


- B. In the **Create VLANs** window, craft ten wifi stations:



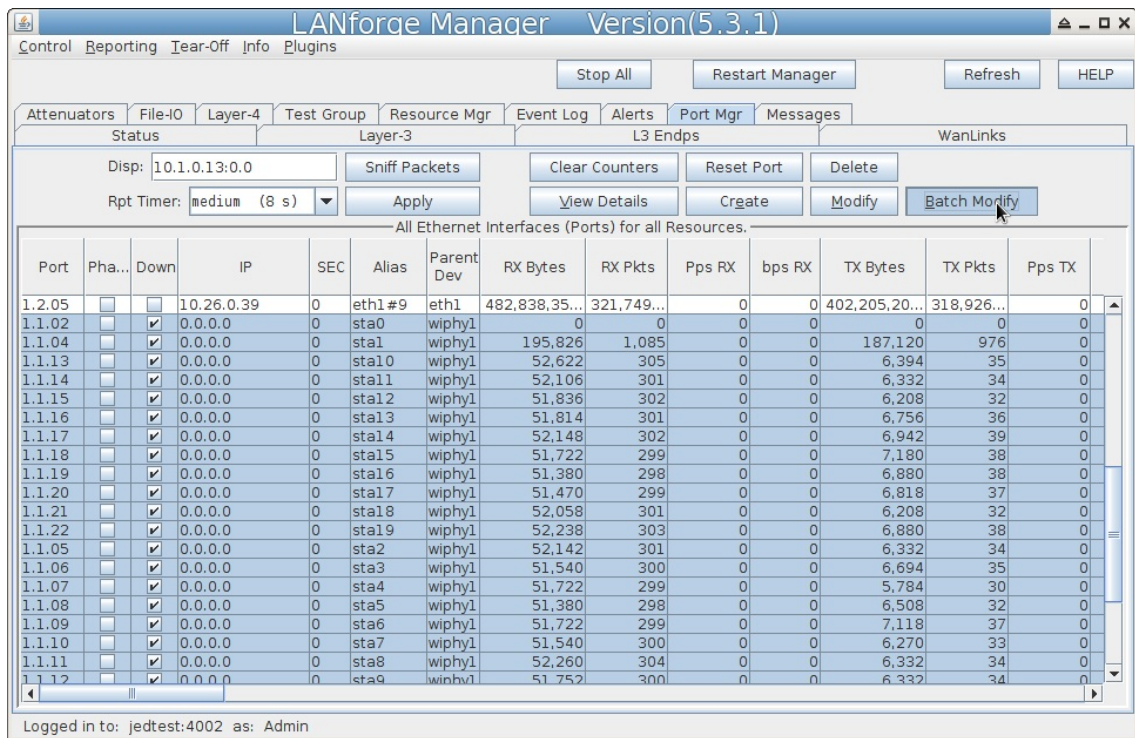
- A. Select **WIFI STA**
- B. For MAC address, choose **xx:xx:xx:*:*:xx**
- C. Select **DHCP-IPv4**
- D. Enter Quantity **100**
- E. Specify **0** for STA ID
- F. The example SSID for this cookbook is **jedtest**
- G. Select the **Down** option. This postpones the stations making a DHCP request until they are explicitly admin up.
- H. ...and then click **Apply**

C. You will see ten station created:

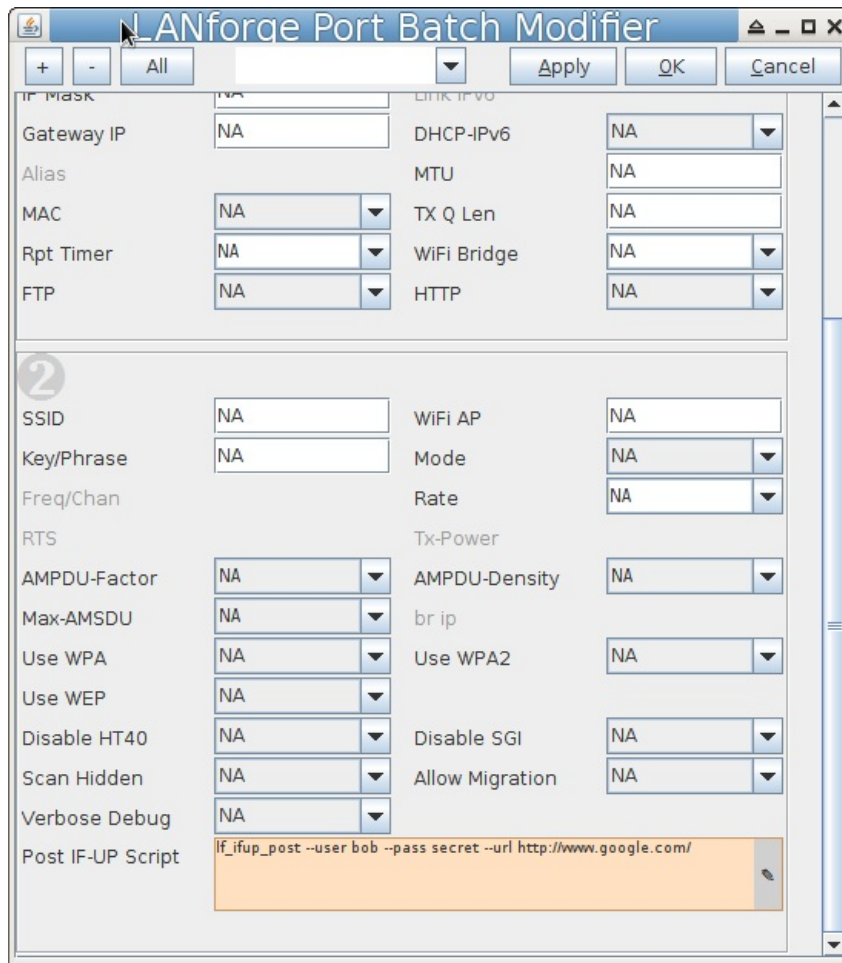


4. Batch Modify Stations in order to update `1f_ifup_post` parameters

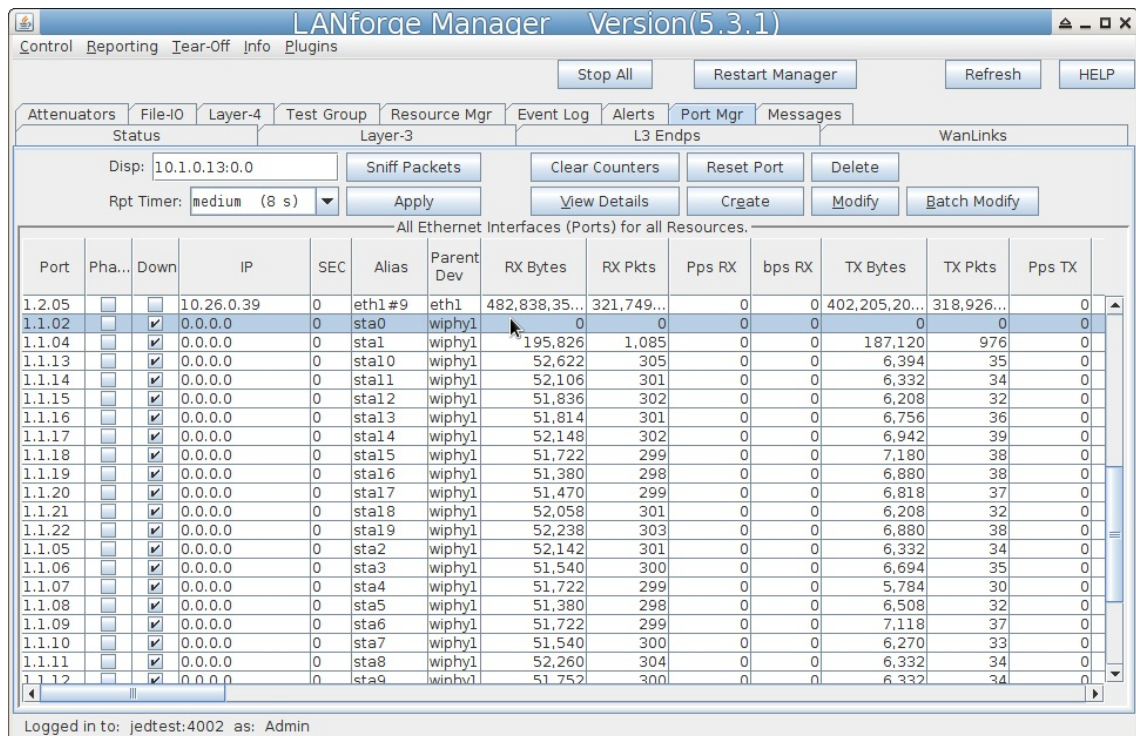
A. Highlight stations and click **Batch Modify**



B. In the Batch Modify screen, click the + button and expand to Group 2.

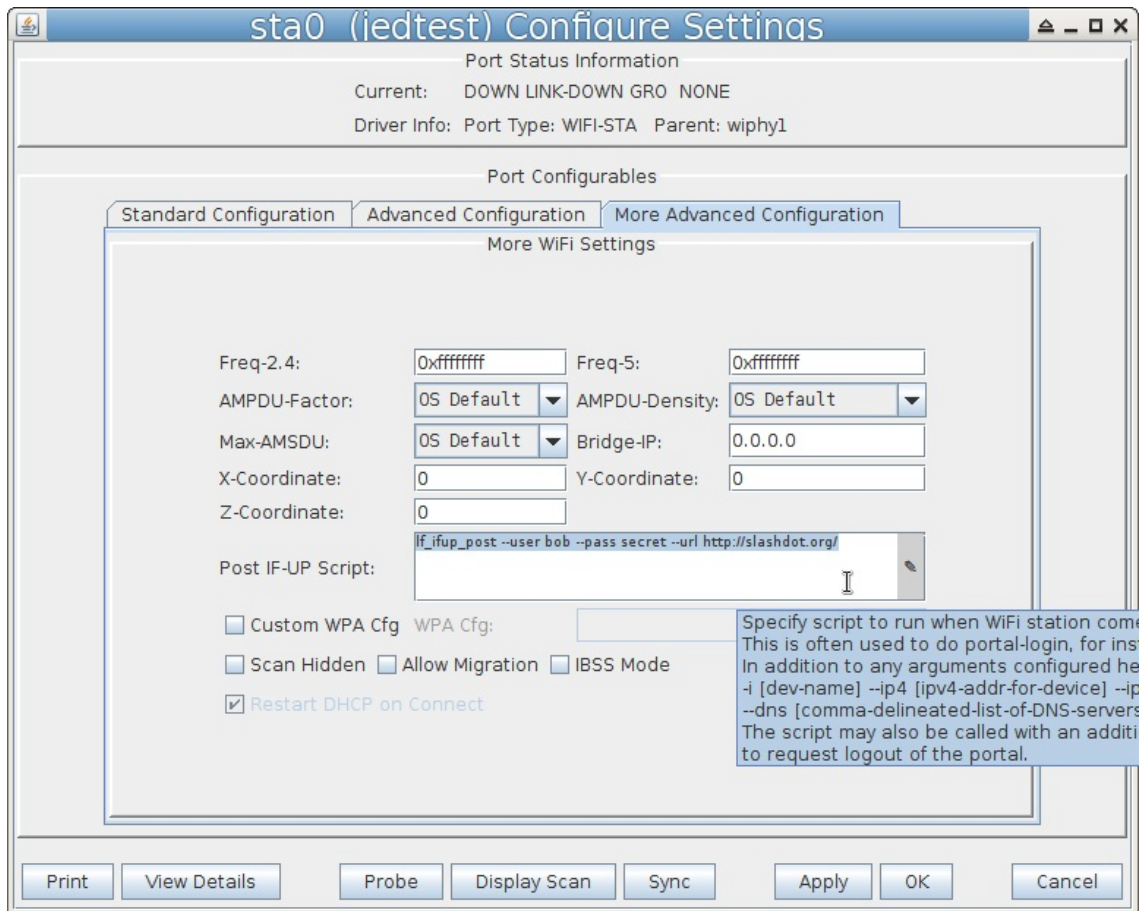


C. Edit the IF POST field. Enter the file name and any extra arguments that the script will want for this port.
Example: lf_ifup_post --user bob --pass secret --url http://slashdot.org/



D. Click the **Apply** button to apply the changes. Do not close the window yet.

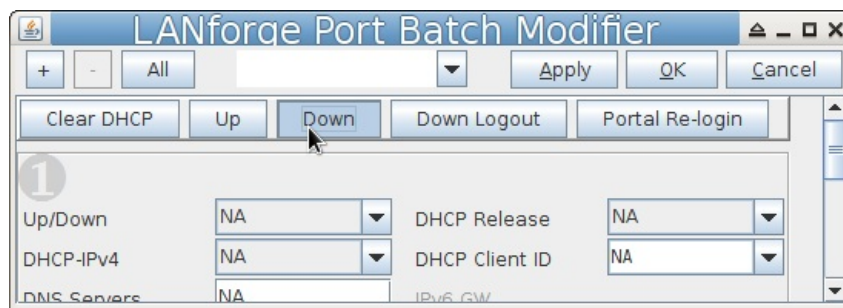
- E. To check the value of each port's **IF/UP Post** you can use the Ports tab. In the port Configure Settings window, in the **More Advanced Tab** you can find the IF/UP script value.



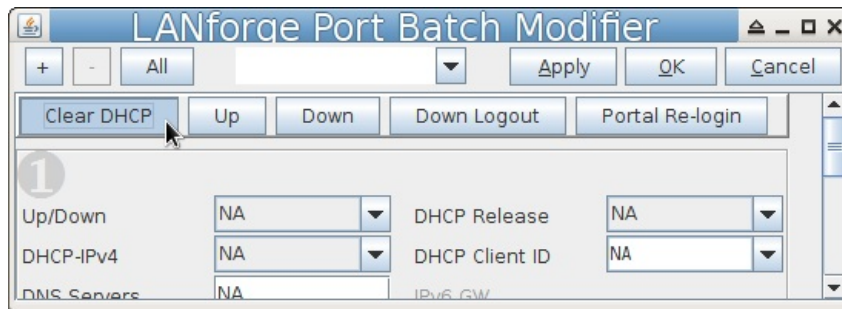
5. Testing a station. We will toggle it up and down and look at the logs to find problems.
- Highlight one of your stations in the Ports tab.
 - Set the Report Time to **1s** and click **Apply**
 - In the Batch Modify window, click the **Up** button. This is the same as setting **Up/Down** to **UP** and clicking **Apply**
 - Watch the Wireless Messages and LANforge Messages windows for error messages. The Ports tab will update the station status.

6. Use the Batch Modify window to **Force DHCP Renewal**

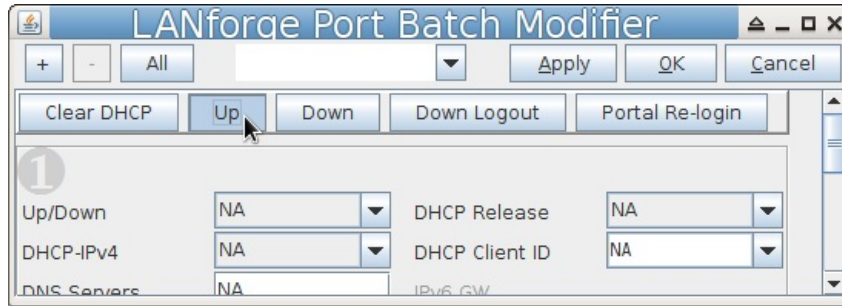
- Click **Down**



B. click **Clear DHCP**



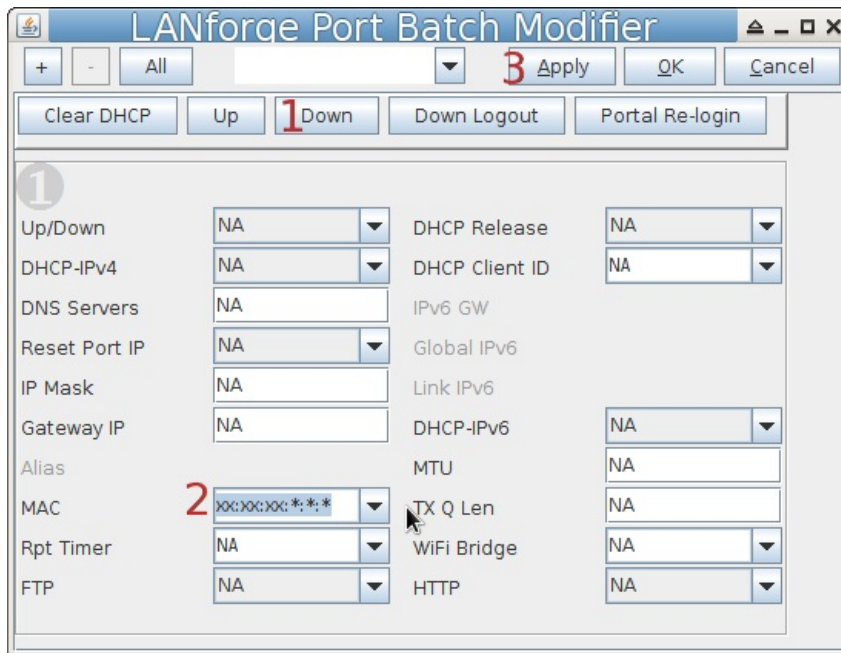
C. click **Up**



7. Use the Batch Modify window to **Re-Login to Portal**

- A. Click **Portal Re-Login**
- B. If you wanted to change other parameters:
- C. Click **Down Logout**
- D. Set Up/Down to **Down**
- E. Change another station parameters and then click **Apply**
- F. Click **Up**

8. Use the Batch Modify window to **Change station MAC addresses**



- A. Click **Down**
- B. Set MAC Addr to `xx:xx:xx:~*~*` randomize the mac address
- C. Click **Apply**

