Procedure For Changing a MinerBytes Client System's Wi-Fi Networking Connections

All commands in `backticks` are case-sensitive.

0) While the MinerBytes sign is on a network with Internet access, open the MinerBytes WebUI (https://minerbytes.mst.edu)
1) Find the name of the sign and click the calendar button on that sign's card.
2) Delete all playlists so it has no playlist assigned. Assign the playlist named "Wi-Fi Modification".
3) Open the case far enough to insert a USB keyboard or wireless keyboard dongle and attach it.
4) Press <Ctrl>+<Alt>+<F1> to open the terminal. [1]
5) Run `systemctl mboverlay stop` and the MinerBytes branding overlay should disappear.
6) Run `rw` to make the configuration filesystem read/write
7) Run `cd /config/wpa_supplicant`. Use tab completion to ensure the proper directory input.
8) Using your preferred text editor, edit wpa_supplicant.conf. An example in Nano:
   a. Run `nano wpa_supplicant.conf` (be sure to use tab completion)
   b. Using the arrow keys, scroll down to the network you wish to edit or to the bottom for a new network.
   c. Update/add the SSID and/or the Pre-Shared Key (PSK), being sure to correctly use the double quotes the same way other networks in the file are configured.
   d. When finished, save the file. Press <Ctrl>+<O> to save the file (Write**O**ut)
   e. The file's full path will be displayed as the file to write. Just hit <Enter>.
   f. Quit Nano by pressing <Ctrl>+<x> (E**x**it)

   NOTE: If you get errors writing the file, exit Nano without saving (<Ctrl>+<X> then <N> to discard changes) and ensure the configuration filesystem is set to read/write (step 6). `rw` can be run multiple times with no ill effects if there's uncertainty of the filesystem's writability.

9) From this point you can test to see if you have Internet access. Run `ping -c4 1.1.1.1` (or ping 8.8.8.8) and watch for replies in the terminal output that reads something similar to: "64 bytes from 1.1.1.1" with other data.[2]
10) The system should be connected to the Wi-Fi network now. Verify by running `ifconfig wlan0` to see if you have an IP address assigned by DHCP.
11) If the connection appears to be working, either run the following:
    a. `ro` to set the filesystems read-only
    b. `systemctl start mboverlay` to restart the MinerBytes branding overlay
    c. <Ctrl>+<Alt>+<F2> to switch the screen to the MinerBytes Client display
       i. OR
    d. Alternatively, you may simply run `reboot` for step 11 instead of substeps 8) a.-c.

Troubleshooting Information:

[1]If steps 0, 1, & 3 were not executed on a known good network, the MinerBytes sign will not be able to reach the server to download the asset from that playlist. If the current asset has videos, it will show up on top of the terminal. You will need to run the following between steps **4)** and **5)** by typing into the terminal blind or with few breaks between assets to see. `killall mbclient_watchdog.sh` followed by `killall MBClient`. This will stop the MinerBytes Client software and its associated watchdog. A reboot will be necessary at the end of the procedure.

[2] If there is no output from the ping commands, that means that ping cannot reach the specified device and you may not have Internet access. Run `reboot` and if the sign still does not have a connection, repeat steps 4, 5, 6, & 9 again to check for mistakes and then ask for help troubleshooting.