Milestone #4
NetBSD Wifi Browser Project 2022
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1 General Progress Report

Progress in the API was brought to a version 1.0 fully functional state during the progress of Milestone 5. During this time, the API removed the use of file I/O, making it possible to use the API without root permissions if operating on a configuration file that is not accessible without root permission. The API is currently in development for v1.01 which will feature cleaner output, especially when listing scanned networks and configured networks, making it easier for user interface implementers to utilize the data passed to it.

CLI component of our project is fully completed. Additional testing still required. Seg faults are very common, but the CLI by itself experiences no seg faults. Will definitely need to do additional debugging next quarter.

TUI is still mainly in the design and research phase. There has been some small ground made on the actual development of the TUI but the large majority of the work put in since last Milestone has been designing and researching ncurses functions that will be useful when implementing the TUI.

Accomplishments

- Wifi Browser API v1.0 is finished and fully functional!

- CLI interface is now fully completed. Additional testing still required.

- TUI bug fixing from testing

Targets Not Met:

- Finished TUI with support for all API features

2 Git Branch Report

One additional branch was used to clean up the output provided by `wpa_supplicant` (branch `output`) to preserve the functionality of the API in v1.0 state. Beyond this, most work was performed on `master`.

3   Individual Progress

Kevin: 3 hours

- TUI implementation

- Ncurses research in subwindows and mouse events

- Refined Design and plan for layout of TUI

Dylan: 13 hours 15 minutes

- Finished API to v1.0

- Converted all configuration manipulation to `wpa_supplicant`'s provided interface (`wpa_ctrl`)

- Removed the necessity for root permissions in using the API

- Reimplemented editing of network configurations to be more expandable and easier for developers to utilize

- Implemented auto WPA-EAP network configuration

- Started `wpa_supplicant` output cleanup for easier use in user interface implementation.

- Initialized 492 presentation

Stephen: 11 hours 40 minutes

- Finished CLI component of our application

- Implemented additional commands depending on whether the command affects the focused configuration file or simply displays network information

- CLI now represents a more focused command line interface. Hyphens are used to to represent various string operators