What is LogAnalyze?

The goal of this was to develop a tool that made visualization of the massive amounts of data logged by Uprev easier, and to automate as much of the tedious cell-by-cell adjustments as possible. This tool was largely inspired by DJamps online tuning tool (thanks, man!). The goal here was to help automate things and make the app available offline. It's not perfect, but it IS free. I'll add stuff as I have time and learn more.

Setup

You can rescale the BFS axis labels if you need to by opening the 'BFSconfig.txt' file and changing the numbers accordingly.

Minimum Parameters for Logging

User should log the following parameters as a minimum:

- AFR (both banks)
- AF Correction (both banks)
- MAF voltage (support will be added for second MAF bank soon)
- Ignition Timing
- Engine speed (RPM)
- Base Fuel Schedule
- Intake Air Temperature
- Injector Duty Cycle
- Fuel Compensation x-trace
- Target AFR
- Knock Strength

Additionally, the program supports logging the following:

- TPS pedal position 1 and 2
- Vehicle speed
- LC1 wideband Lambda sensor (for 03/early 04 cars)

My understanding is that the LC1 gets somewhat erratic at low load, so corrections for the LC1 are throttle based, using values for higher load.

General Fuel Tuning Strategy

- Start with the MAF sensor.

- Set all fuel comp table values to 100. **You used to have to set the Target AFR table on the map you were tuning to a single value, but it is not necessary with this app, as it takes target AFR into account when generating a correction value.**

- Log a few easy pulls (back off if it's too lean, obviously).

- Apply the corrections to the MAF table. The app will ask you if you want to generate a new MAF table that can be copied and pasted directly into Uprev. To do this, it needs you to copy your old MAF table to the clipboard. Click in the first cell of the MAF table in Uprev, then hit CTRL+A to select all the cells, then CTRL+C to copy them to the clipboard. Once this is done, click ‘OK’ in the app dialog box. The app will then generate a table that can be directly copied into Uprev.

- Once MAF corrections are generally less than 5%, you can do a pull and apply the fuel comp table that the program generates. You will have to copy and paste column by column on this one. For some reason, Uprev will not allow pasting the whole table at once.