Ensemble MD Performance Testing Journal

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1 Week of 5/25/15

- Constructed basic outline for performance testing. Testing will be exhaustive analysis of all factors
- Began testing cases of the test plan in preparation for automation
- Modified exec_plugins/pipeline/static.py to output the execution profile with my modified format
- Encountered trouble reading my generated data (separate from the execution profile) into pandas data frame and selecting the data that I needed
- Began writing code to parse the modified execution_profile file

2 Week of 6/1/15

- Discovered that using the Python csv module was MUCH more convenient than trying to write my own code using tokenization.
- Successfully read data into the panda dataframe, but had trouble modifying the data inside the dataframe due to an issue with modifying a copy versus a view. I resolved the issue quickly
- Realized that there is no programmatic way to modify the number of steps in the pipeline. To solve this, my plan is to create several test scripts with a varying number of pipeline steps and have a master script run those.
- Began testing the automation of the contour plots. The plan is to generate all the plots and store them in a separate graphs directory
- Encountered MongoDB error when testing: "Too many somethings". Ioannis mentioned that the database may be full, and that Andre was looking into it.
- Once the code for the contour plots have been written up, then I should be ready to run the entire experiment