Sterling Baldwin Supported Projects: ACME

Quarterly Report for April 1, 2017 - June 31, 2017

Quarter Accomplishments:

- Implemented the new version of the coupled diagnostic into the acme_workflow, finding and fixing several issues stopping their code from working correctly.
- Setup automated secure web hosting of diagnostic results for both AMWG as well as the coupled diagnostics.
- Setup identical development/production environments on aims4 and acme1, including SLURM resource managers on each server as well as Globus data transfer nodes.
- Worked with beta users to find and fix numerous bugs, refined the user experience for the configuration process by implementing nested configuration objects.
- Attended and presented a poster on the acme_workflow at the ACME PI all hands meeting in DC.
- Began the process of migrating the acme workbench from the legacy Angular (version 1.14) to the modern Angular (version 4.1).

Next Quarter's Roadmap

- Release the automated workflow to all acme users.
- Create web UI for integrating the automated workflow with the workbench.
- Create backend services to tie the workflow into the workbench.

Resources Required to Achieve Goals

• The acme1 server has been very unstable. Only 1.8TB of the requested 100TB is available on intern drives on the machine, and although we've been trying to use the GPFS networked drive attached to /p/cscratch/ its unpredictability has heavily impacted the reliability of the server. When I was the only person using the machine, it was just a problem I could work around, but now that we have outside users requesting access and every time we have an issue it not affects our users by destroying their work mid-run but makes our whole team look bad. I've been talking about this problem for months and don't know what I can do to solve it.