Jason Boutte
Supported Projects: DREAM

Quarterly Report for October 1, 2016 – December 31, 2016

Quarter Accomplishments:
* Learn Synda/start testing replicating data [January]
* Perform health check on our ESGF node, wrote scripts to check status of the replicated datasets relative to the federation [January]
* Split our ESGF mapfiles by institute for unpublish/publish [January]
* Pass ESGF replication status/knowledge to Jeff Painter [January]
* Write WPS message library to replace OWSLib in ESGF CWT API [January]
* Migrate ESGF CWT WPS to use CDAS2 as backend, stack is as follows Django-Celery-CDAS2 [January-February]
* Prepare ESGF replication scripts for Jeff, made reusable [February]
* Implement queuing for ESGF CWT WPS asynchronous calls throw Celery/RabbitMQ [February]
* Setup RabbitMQ server for ESGF PID publishing [February]
* Setup WPS server on aims2 [March]
* Setup SSL for aims2 CWT WPS Server
* Wrote testing/documentation for CWT WPS/End-user API [March]
* Implement OpenID authentication for ESGF CWT WPS [March-April]

Next Quarter's Roadmap
* Finish implementing/testing OpenID authentication for ESGF CWT WPS [April]
* Migrate our old CDMS2/CDAT processes to CDAS2 for ESGF CWT WPS [April]
* Release ESGF CWT End-user API 2.0 on conda, involves finalizing unit testing/documentation [April]
* Begin internal testing of WPS at LLNL [April]
* Implement user/resource management CWT WPS [April-June]
* Implement federated/load-balancing workflow for CWT WPS[April-May]
* Automating ESGF CWT WPS docker builds [May]
* Design/implement authentication for ESGF CWT WPS federated operation [May]
* Investigate possible use-cases of VISuS (http://atlantis.sci.utah.edu/) [May]
* Implement resource management for ESGF CWT WPS [May-June]
* Begin external testing of WPS [May-June]
* Add additional CWT WPS backends (Ophidia, Dask) [June]

Resources Required to Achieve Goals
* N/A