

**Jason Boutte**  
**Supported Projects: DREAM**

**Quarterly Report for April 1, 2017 – June 30, 2017**

**Quarter Accomplishments:**

- Finished implementing/testing OpenID authentication for ESGF CWT WPS [April]
- Finished migrating our old CDAT processes to ESGF CWT WPS [April]
- Finished setting up ESGF CWT WPS on aims2 for internal testing at LLNL [April]
- Finished implementing better user management. [April-June]
- Finished updating documentation for ESGF CWT End-user API 2.0 [May]
- Finished updating unit testing for ESGF CWT End-user API 2.0 [May]
- Released ESGF CWT End-user API 2.0 on conda [May]
- Created web management interface [April]
- Investigate possible use-cases of VISuS (<http://atlantis.sci.utah.edu/>) [May]
- Automating ESGF CWT WPS docker builds [June]
- Finished adding Dask support for computation [June]
- Began CoG integration for WPS [June]

**Next Quarter's Roadmap:**

- Finish CoG integration for CWT WPS [July]
- Deploy Test CoG for CWT WPS on aims2 [July]
- Update web management interface for CWT WPS from React to Angular [July]
- Add CWT WPS user metrics (User origin, Process and File usage) [July]
- Add CWT WPS process metrics (Average CPU time, Memory usage) [July]
- Update CWT WPS Docker Compose to use version 3 [July-August]
- Add parallel I/O through Dasks distributed framework [August]
- Deploy CWT WPS on Federated Testbed [August]
- Begin external testing of CWT WPS with CWT [August]
- Design CWT WPS federated operation (Security, Data management, Cache sharing) [September]
- Install Ophidia on aims2 [August-September]
- Add CWT WPS workflow support [September]
- Add CWT WPS Ophidia process [September]
- Investigate VISuS for data access for CWT WPS processes [September]

**Resources Required to Achieve Goals**

- N/A