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Supported Projects: ESGF, CF Conventions

Quarterly Report for October 2017 – December 2017 (Q1, FY18)

Note that I am working part-time. This quarter I took a two-week vacation.

This quarter's accomplishments:
- Set up a system for forwarding CF Conventions entries in the Github issue tracker to the CF Metadata mailing list. It supports filtering, but I haven't implemented that yet.
- Continued benchmarking data replication performance in ESGF. Ramp-up time is a clear bottleneck, which suggests that somehow we should transfer many files in one lump.
- Continued classifying data on CSS-01 and CSS-02 and transferring it to CSS-03, and improving the classification and transfer scripts. This project is finished for data in normal directory paths.
- Tested ESGF replication, including Synda and our replication procedures and coordination with our old replication system, by downloading higher-priority CMIP-5 data and diagnosing the reasons for problems with Synda and finding workarounds and fixes.
- Using what I learned from the testing, I wrote a script to migrate information on completed files and datasets, from the old replication database to the new Synda database. I used it successfully for searches, but it needed further work to support downloads and other features of Synda.
- Reported 14 bugs and missing features in Synda. I have more which I will report if the Synda developers make progress on these ones.

Plans for next quarter:
- Start replication for CMIP6 as data becomes available. I probably should enhance the Synda database with fields to keep track of when and where data is published.
- Improve my script for migrating information from the old replication database to the new Synda database.
- Continue work on moving data from CSS-01 and CSS-02 to CSS-03. This is mostly finished, but there is some data in unusual places which I should look at directly, without my scripts.
- Replicate missing CMIP-5 data, especially that needed at PCMDI.
- As needed, support other data management activities.
- The CF Conventions documentation will need a low level of support indefinitely. In particular, the email system needs some filters to send user comments to the mailing list, and system messages to the maintainer.