Data Transfer with Globus Online

Overview

Globus Online (GO) is a service that facilitates high throughput data transfer among its endpoints. Many other Universities and Laboratories have endpoints with the GO. SLAC has an public endpoint (slac#osg) that can access most of the NFS, GPFS and Lustre storage managed by the Scientific Computing Service of the SLAC Computing Division.

Using Globus Online at SLAC

The use Globus Online with SLAC, you need three things

- 1. A free Globus Online account
- 2. A SLAC unix computer account
- 3. Have SLAC enable your to use the SLAC endpoint

You can open a free account at Globus Online web page (below) and manage data transfers through the Web UI

http://www.globusonline.org

GO also provides a Command Line Interface (CLI). All Globus related commands are under the command line toold "globus". At SLAC, we installed "globus" in a Singularity container. To use it, login into centos7.slac.stanford.edu or other machine with Singularity installed, and type "singularity exec /afs /slac/package/globuscli/globuscli.img globus --help" (Singularity currently doesn't work well with YFS. So if you home directory is in AFS, you may want to take this container image somewhere else and run from there, until we address Singularity/YFS issue).

Once you have a SLAC unix computer account, e-mail unix-admin@slac.stanford.edu to enable you to access the SLAC endpoint (slac#osg).

Delegate Usage Authorization to Stake Holders (FYI only)

The System Security Plan (SSP) for GlobusOnline (approved on Dec. 13, 2012, RT# 361857) permits one week proxy lifetime by default (and maximum), and delegate to the stake holders the privilege of authorizing users to use GO systems.

We have setup several AFS groups containing lists of users that are authorized to use GO. These AFS groups are **globusonline:kipac, globusonline:lcls**, etc. People in their respected owning group, **globusonline:owner-*** are stake holders that can authorize and remove GO users on their systems. A cron job running hourly on machines with globusonline=XXX options in /etc/taylor.opts will update the access privilege according to these AFS groups.