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# Simplifying Large-Scale Data Movement with Globus Online

File transfer is both a critical and frustrating aspect of high-performance computing. For a relatively mundane task, moving terabytes of data reliably and efficiently can be surprisingly complicated. One must discover endpoints, determine available protocols, negotiate firewalls, configure software, manage space, negotiate authentication, configure protocols, detect and respond to failures, identify, diagnose and correct network misconfigurations, integrate with file systems, and a host of other things. Automating these makes a researcher's life much, much easier. In this session, Globus co-founder Steve Tuecke will provide a technical and user-focused overview of Globus Online: a fast, reliable file transfer service that simplifies large-scale, secure data movement without requiring construction of custom end-to-end systems. Globus Online is being used by over 1000 researchers at dozens of global facilities to easily and securely get their data where it needs to go. According to one user, "Globus Online is the most beneficial grid technology I have ever seen... We moved over 700 GB of simulation output from a supercomputer in Tennessee to one in Texas in just 90 minutes. The same transfer would have taken over 3 days with scp." Globus Online removes the manual aspect of data movement and transfer management, re-trying failed jobs and making it easy to track status and results. This session will cover the process of signing up to Globus Online and using both GUI and CLI interfaces to move data between computing source and destination "endpoints." It will also cover use of the Globus Connect feature, which allows users to transfer files between Globus Online endpoints and their local servers or laptops, even if behind a firewall, without the complexity of a full Globus Toolkit install. The presentation will include a demonstration as well as highlights from several user case studies.

## Required Facilities

Internet connectivity

## Duration (90min sessions)

90 minutes

**Primary author:** Ms BASS, Mary (Computation Institute, University of Chicago and Argonne National Laboratory)

**Co-author:** Mr TUECKE, Steve (Computation Institute, University of Chicago and Argonne National Laboratory)

**Presenter:** Mr TUECKE, Steve (Computation Institute, University of Chicago and Argonne National Laboratory)