

# High-Performance Data Transfer with Globus

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UNIVERSITY OF FLORIDA | High-Performance Computing

# HiPerGator

*The University of Florida Supercomputer for Research*

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- ▶ Grid computing solutions since 1997
- ▶ Mission: to help researchers focus on their research
  - Providing powerful tools built for solving the problems of data-intensive research

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## Sign Up

Manage Transfers Groups Support Log in [Sign Up](#)

Sign Up Already a member? Sign In

Full Name

Email

Username  ✔ Available  
Your username can only contain lower case letters and must begin with one or more capital numbers.

Password  ✔ Strong  
Better passwords are longer, use mixed case letters with punctuation and numbers.

Show Password

I have read and agree to the Globus Terms of Service and Privacy Policy.

Please email me updates about Globus

[Register](#)

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## Confirm email

**Email validation is required.**

Please confirm your e-mail address by clicking on the link in your registration e-mail. Check your email inbox and proceed to the location provided, and we'll have you on your way.

Can't find your validation email?

Confirm your e-mail address:

[Re-send Validation Code](#)

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## Transferring data

- Between two endpoints

Support Quick Links magitz

- Transfer Files
- Activity
- Groups

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The screenshot shows the 'Transfer Files' interface with two authentication panels. The left panel is for endpoint 'ufrccgo' and the right panel is for 'fsurcc@lustre'. Both panels require a MyProxy Server, Username, Password, and Server DN. The 'Authenticate' buttons are visible at the bottom of each panel.

The screenshot shows the 'Transfer Files' interface with the source endpoint 'ufrccgo' selected. The file list shows several files with names like 'AEXF-read\_1.tq' and sizes ranging from 2.6 GB to 17.37 GB. The destination endpoint 'fsurcc@lustre' is also visible.

The screenshot shows the 'Transfer Files' interface with the transfer progress bar at the top. Below the file lists, the 'Activity' section shows a notification: 'ufrccgo to fsurcc@lustre transfer started a few seconds ago'.

The screenshot shows the 'Activity' interface with a completed transfer task. The task ID is 'f7cea92-9e55-11e3-b3d8-2200a971261'. The status is 'SUCCEEDED'. A table shows the transfer details:

Files	2
Directories	0
Bytes Transferred	5,575,505,452
Pending	0
Succeeded	2
Cancelled	0
Expired	0
Failed	0
Retrying	0
Skipped	0

## Confirmation email

**SUCCEEDED - f7cea92-9e55-11e3-b3d8-2200a971261**  
 Globus Online Notification  
 Sent: Tuesday, February 25, 2014 at 2:55 PM  
 To: Czizendanner, Matt

==== Task Details ====

```

Task ID      : f7cea92-9e55-11e3-b3d8-2200a971261
Task Type   : TRANSFER
Status      : SUCCEEDED
Request Time: 2014-02-25 19:49:42Z
Deadline    : 2014-02-26 19:49:42Z
Completion Time: 2014-02-25 19:54:27Z
Total Tasks : 2
Tasks Successful: 2
Tasks Expired: 0
Tasks Cancelled: 0
Tasks Failed: 0
Tasks Pending: 0
Tasks Retrying: 0
Command     : API @ 1.10 go
Label       : n/a
Source Endpoint: ufrccgo
Destination Endpoint: fsurcc@lustre
Sync Level  : n/a
Data Encryption: No
Checksum Verification: Yes
Delete      : No
Files       : 2
Files Skipped: 0
Directories: 0
Expansions  : 0
Bytes Transferred: 5575505452
Bytes Checksummed (Sync): 0
MBits/sec   : 156.585
Faults      : 0
  
```

- Info about transfer
- 5GB moved at 156MB/sec

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## Transfer Options

Label This Transfer

Transfer Settings

- only transfer new or changed files
- delete files on destination that do not exist on source
- preserve source file modification times
- verify file integrity after transfer
- encrypt transfer

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## Globus Connect Personal

globus connect personal For researchers and other small sites

- Client application
  - Allows you to set your computer as an Endpoint

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Manage Endpoints

Create Globus Connect Personal Endpoint

Step 1 Get Your Globus Connect Personal Setup Key

Endpoint Name: magitz#demo

Generate Setup Key

Step 2 Download & Install Globus Connect Personal

for Mac OS X for Linux for Windows

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Create Globus Connect Personal Endpoint

Step 1 Get Your Globus Connect Personal Setup Key

Endpoint Name: magitz#demo

Generate Setup Key

Setup Key: d5f2a81b-78f1-02d7cc1d88ff

Copy the key above to your clipboard.

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Globus Connect Personal

Setup

Initial Setup

Setup Key: d5f2a81b-78f1-02d7cc1d88ff

Automatically check for updates

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## Globus to Galaxy

Stay tuned...

UFRC Beta Tools

- Export dataset out to file on scratch storage
- Get Data via Globus Online Transfer data from Globus endpoint to Galaxy
- Send Data via Globus Online Transfer data from Galaxy to Globus endpoint

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- ▶ Help Request Tickets
  - <https://support.hpc.ufl.edu>
  - For any kind of question or help requests
  - Searchable database of solutions
- ▶ <http://wiki.hpc.ufl.edu>
  - Documents on hardware and software resources
  - Various user guides
  - Many sample submission scripts

