

# Globus: Beyond File Transfer

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globus

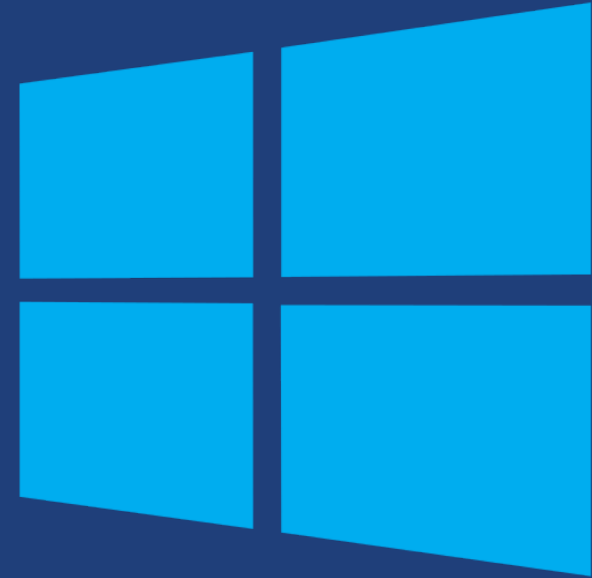


# Endpoints – Barrier to entry?

- **Storage abstraction**
  - All transfers happen between two endpoints
  - Globus Connect instantiates endpoints
- **Test / Demo Endpoints**
  - Globus Tutorial Endpoint 1
  - Globus Tutorial Endpoint 2
  - ESnet Test Endpoints
    - Contain file samples of various sizes
- **Globus Connect Personal**
  - Now your laptop is an endpoint
  - <https://www.globus.org/globus-connect-personal>



# Globus Connect Personal



- **Installers do not require admin access**
- **Zero configuration; auto updating**
- **Handles NATs**
- **Installs in seconds – easy to delete - I'll prove it!**

# The Globus Web App - Accounts

- **A Globus Account is**
  - A Primary Identity
  - Possible Linked Identities
- **Linking Identities**
- **Managing Identities**
- **Consents**



# The Globus Web App - Hidden in Plain Sight

- **The Hamburger Menu**
  - Not always the same – based on the type of endpoint and the storage behind it
  - A great place to get the link to a share
- **Transfer Settings**
  - label – when using the activity monitor it's nice to see a recognizable name
  - sync - 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
- **Search**
  - The magic of the magnifying glass
  - Search for: Endpoints / Users / Groups



# Activity Monitoring

- **Recent / History / Filter**
- **Drilling Down**
  - File transfer statistics
  - Overview
  - Event Log
  - Cancelling an active task



# Groups

- **What can they be used for?**
  - Sharing: Access permissions for more than one person
  - Roles: Endpoint management and monitoring
- **Groups**
  - Creating groups and setting the visibility
  - Members (invitations), Subgroups, Settings
  - Settings
    - Policies / Membership Fields / Terms & Conditions
  - Roles
    - Giving others authority over your groups

# Endpoint Sharing and Roles

- **Sharing**

- Select the directory and create the “share”
- A “share” is another type of endpoint
- Share with: Users / Groups / All Globus Users

- **Roles**

- Giving others (or groups of others) control or monitoring rights for your endpoints





# Bookmarks

- **Just like browser bookmarks – frequently used, or maybe not used frequently enough!**
- **Creating a bookmark**
- **Using a bookmark**
- **Sorting and Filtering**
- **Editing and Deleting**



# Globus Command Line Interface

```
(globus-cli) jupiter:~ vas$ globus
Usage: globus [OPTIONS] COMMAND [ARGS]...

Options:
  -v, --verbose          Control level of output
  -h, --help            Show this message and exit.
  -F, --format [json|text] Output format for stdout. Defaults to text
  --map-http-status TEXT Map HTTP statuses to any of these exit codes:
                        0,1,50-99. e.g. "404=50,403=51"

Commands:
  bookmark      Manage Endpoint Bookmarks
  config        Modify, view, and manage your Globus CLI config.
  delete        Submit a Delete Task
  endpoint      Manage Globus Endpoint definitions
  get-identities Lookup Globus Auth Identities
  list-commands List all CLI Commands
  login         Login to Globus to get credentials for the Globus CLI
  logout        Logout of the Globus CLI
  ls            List Endpoint directory contents
  mkdir         Make a directory on an Endpoint
  rename        Rename a file or directory on an Endpoint
  task          Manage asynchronous Tasks
  transfer      Submit a Transfer Task
  version       Show the version and exit
  whoami        Show the currently logged-in identity.
```

**Open source, uses  
Python SDK**

**[docs.globus.org/cli](https://docs.globus.org/cli)  
[github.com/globus/  
globus-cli](https://github.com/globus/globus-cli)**



# The Globus CLI

- **Installation**
  - [docs.globus.org/cli/installation](https://docs.globus.org/cli/installation)
  - Prerequisites
- **Logging On (remember the consents?)**
  - globus login / logout
- **Getting help / list of commands**
  - globus –help
  - globus list-commands
- **Doing something**
  - It all about the UUIDs
  - Don't forget the file paths!

# The Globus CLI – Let's do a few things...

- **Find endpoints**
  - `globus endpoint search Midway`
  - `globus endpoint search ESNet`
  - `globus endpoint search --filter-scope=recently-used`
- **Find endpoint contents**
  - `globus ls af7bda53-6d04-11e5-ba46-22000b92c6ec`
  - `globus ls af7bda53-6d04-11e5-ba46-22000b92c6ec:syncTest`
- **Transfer a file**
  - From ESnet Read-Only Test DTN at CERN to Midway
  - Note the specific paths
  - `globus transfer d8eb36b6-6d04-11e5-ba46-22000b92c6ec:/~/data1/1M.dat af7bda53-6d04-11e5-ba46-22000b92c6ec:/~/1M.dat`
- **Transfer a directory**
  - From Globus Tutorial Endpoint 2 to Midway (create directory and contents)
  - `globus transfer --recursive ddb59af0-6d04-11e5-ba46-22000b92c6ec:/~/sync-demo af7bda53-6d04-11e5-ba46-22000b92c6ec:/~/syncDemo`