

Introducing the New Globus CLI (alpha)



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What is this for? Isn't there already a CLI?



What is this for? Isn't there already a CLI?

The old CLI works well enough for today's needs, but it is limited. We're reaching those limits, and we need to move in a new direction.



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- ▶ Mismatches between CLI and API functionality
- ▶ Difficult to transition from the CLI to the API
- ▶ Commands are all piped over SSH, clunky shell ergonomics



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- ▶ Improved scripting support
- ▶ Better authentication model
- ▶ Uniform interface to all of Globus



How do you get it?

Installation

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You now have the `globus` command at your disposal. Feel free to

```
$ globus --help
```



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If you ever forget, you can always remind yourself with

```
$ globus login
```

which prints login help.



`tokens.globus.org` tokens are only good for 2 days, so don't try to build anything on this stuff (yet)!
Remember, the CLI is still in alpha.



You have the CLI installed, and you have credentials.
Make sure it's all setup right by firing a command at each of our services.



```
$ globus auth get-identities \  
  --usernames 'go@globusid.org' 'sirosen@xsede.org' | cut -d'|' -f1,2,3  
ID | Full Name | Username  
-----|-----|-----  
508e5ef6-cb9b-11e5-abe1-431ce3f42be1 | Stephen Isaac Rosen | sirosen@xsede.org  
c699d42e-d274-11e5-bf75-1fc5bf53bb24 | www.globus.org | go@globusid.org
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Hey, lookit that! It's cut friendly!

We'll need the ID for go@globusid.org later – we could

```
$ globus ... | grep 'go@globusid.org' | cut  
  -d'|' -f1
```

and store it in a variable, but there is a better way.





What if you want something machine-parseable?



What if you want something machine-parseable?
All Globus CLI commands support JSON formatted output.

```
$ globus auth get-identities --format JSON --usernames 'sirosen@xsede.org'
{
  "identities": [
    {
      "username": "sirosen@xsede.org",
      "status": "used",
      "name": "Stephen Isaac Rosen",
      "id": "508e5ef6-cb9b-11e5-abe1-431ce3f42be1",
      "identity_provider": "36007761-2cf2-4e74-a068-7473afc1d054",
      "organization": "Globus",
      "email": "sirosen@uchicago.edu"
    }
  ]
}
```



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Let's search for the Tutorial Endpoints (you may know them as "go#ep1" and "go#ep2")



```
$ globus transfer endpoint search \  
  --filter-owner-id 'c699d42e-d274-11e5-bf75-1fc5bf53bb24' \  
  --filter-fulltext 'Tutorial' | cut -d'|' -f2,3  
ID                                     | Display Name  
-----|-----  
cf9bcaa5-6d04-11e5-ba46-22000b92c6ec | Globus S3 Tutorial Endpoint  
ddb59aef-6d04-11e5-ba46-22000b92c6ec | Globus Tutorial Endpoint 1  
ddb59af0-6d04-11e5-ba46-22000b92c6ec | Globus Tutorial Endpoint 2
```

That UUID is the Identity ID for `go@globusid.org`



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That UUID is the Identity ID for `go@globusid.org`
Little bit of a lie here – I trimmed whitespace in the above by piping to `sed -e 's/^\s*//g' -e 's/\s*$//g'`



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Wherever the CLI takes an Identity ID, it can also take (and implicitly translate) an Identity Username.



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Simple rules (at least for now):

- ▶ If it succeeds, exit with status 0
- ▶ If it fails, exit with status 1
- ▶ If arguments are bad, exit with status 2



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So far so good. But what about seeing what caused the error?



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So, we try to show you what went wrong in a human-friendly format:

```
$ globus transfer endpoint search --filter-owner-id go@globusid.org
Globus CLI Error: A Transfer API Error Occurred.
HTTP status: 400
request_id: h0khd4VRK
code: BadRequest
message: fulltext filter is required for scope 'all'
$ echo $?
1
```



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This is just pretty formatting of an API error. We try to be consistent in naming commandline arguments similarly to server-side parameters, so these should always make some kind of sense.



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Check out the help on the endpoint search command, and it should provide some guidance:

```
$ globus transfer endpoint search --help
```



```
$ globus list-commands
```

```
Globus CLI Commands
```

```
=====
```

```
globus list-commands
```

```
  Show a short description for all Globus CLI commands. For detailed  
  help text, run the specific command you want to know more about with  
  the `--help` option
```

```
globus login
```

```
  Get authentication credentials for the Globus CLI. Necessary before  
  any Globus CLI commands which require authentication will work
```

```
== AUTH ==
```

```
Interact with Globus Auth API. Inspect Tokens, Identities, and Identity Sets,  
consent to service terms, revoke and manage Consents, and manage OAuth Clients
```

```
globus auth get-identities
```

```
  Inspect Globus Auth Identities
```

```
globus auth token-introspect
```

```
  Inspect Globus Auth Tokens
```

```
== TRANSFER ==
```

```
Interact with Globus Transfer API. Transfer, Delete, List, and Rename files on  
Endpoints, manage your Endpoints and Shares, and monitor your ongoing Transfer  
Tasks
```





- ▶ Globus Auth View Identities



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- ▶ Transfer async Tasks, ls, mkdir, and rename



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- ▶ Transfer Endpoint Role + ACL Management



More Info

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Be a Mensch! Give Us Your Feedback and Contributions!

- ▶ Open GitHub issues and Pull Requests (<https://github.com/globus/globus-cli/issues>)
- ▶ Help us determine good CLI behaviors on the Developer mailing list: developer-discuss@globus.org