



Globus Online: File Transfer and Sharing for Scientists

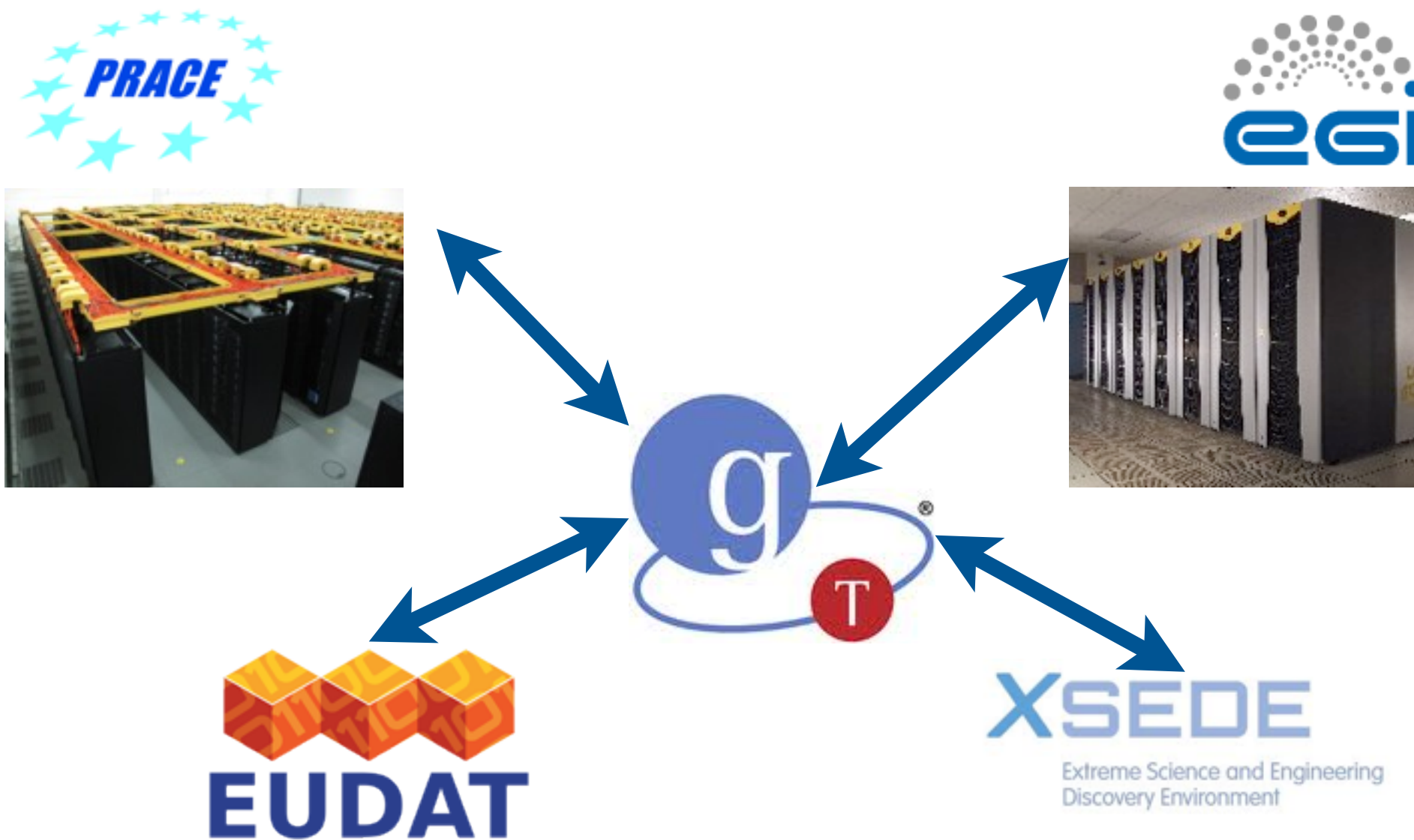
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Leibniz Supercomputing Centre

Initiative for Globus in Europe



The big Picture



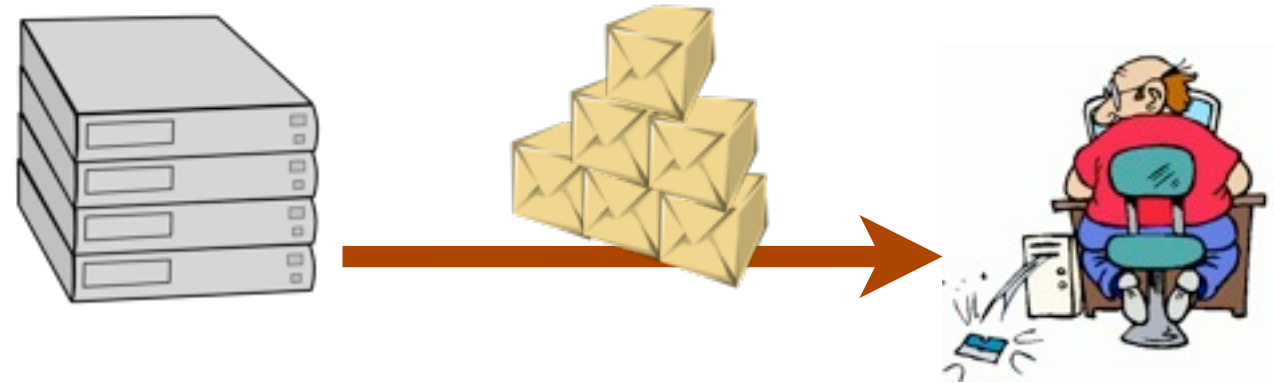
INITIATIVE FOR GLOBUS IN EUROPE



- GT and related software packaging for Linux
- IGE testbed
- Training portal
- Globus Online EU
- European Globus Community Forum:
 - Shape a community of European Globus users
 - Leverage future Globus developments
 - Visit us at <http://www.egcf.eu/>

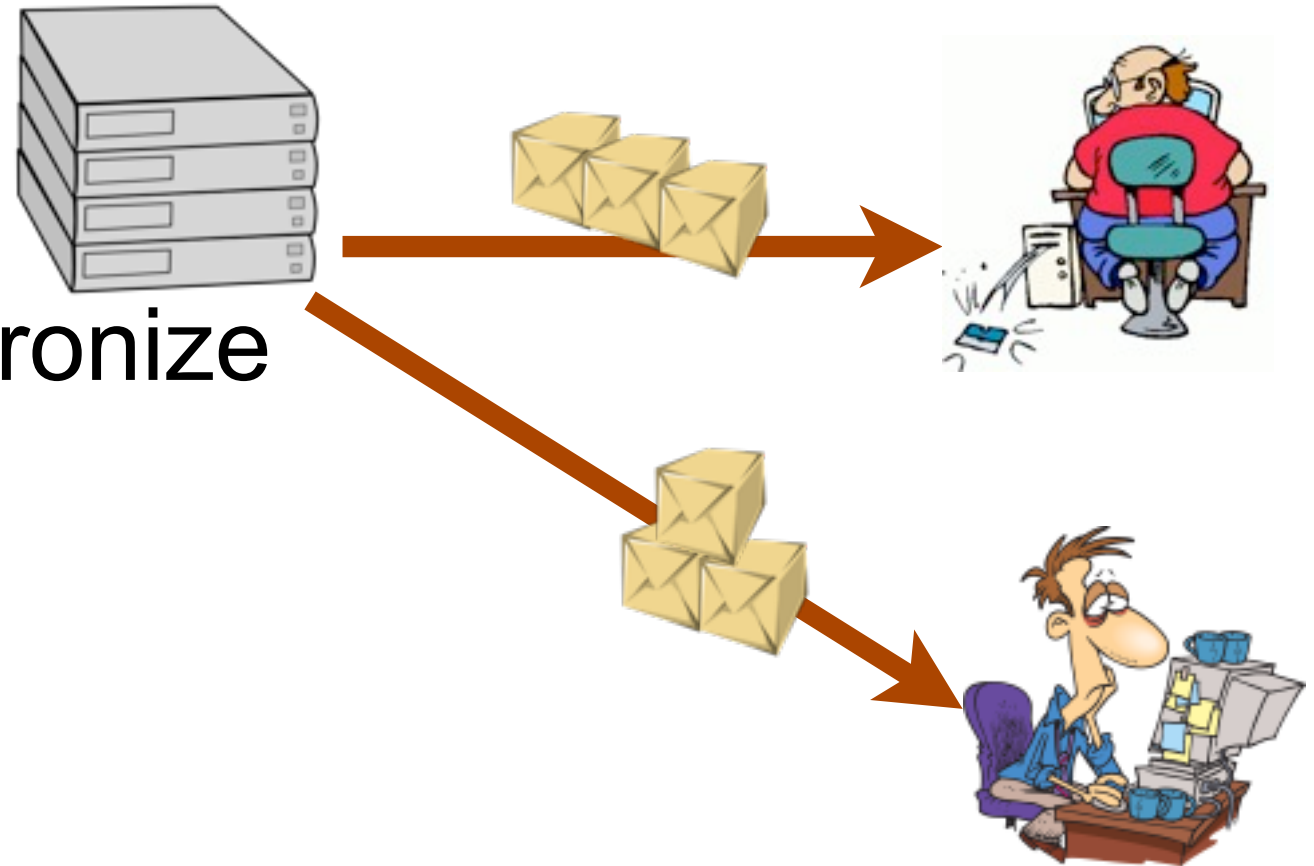


- Focus is on **Data**
 - Moving





- Focus is on **Data**
 - Moving
 - Sharing and Synchronize
- regardless of
 - Configuration
 - NAT issues
 - Transfer failures
 - Administrative domains
 - Interfaces
 - Last mile





Globus Online: “Reliable File Transfer. No IT required”, multi-platform cloud-based service





- **Use case:** data stage in
 - From a resource
 - Server or user's platform
 - Behind NAT
 - With dynamic IPs
 - Without Globus nor certificates
 - To an endpoint



MyProxy
Credential Management Service



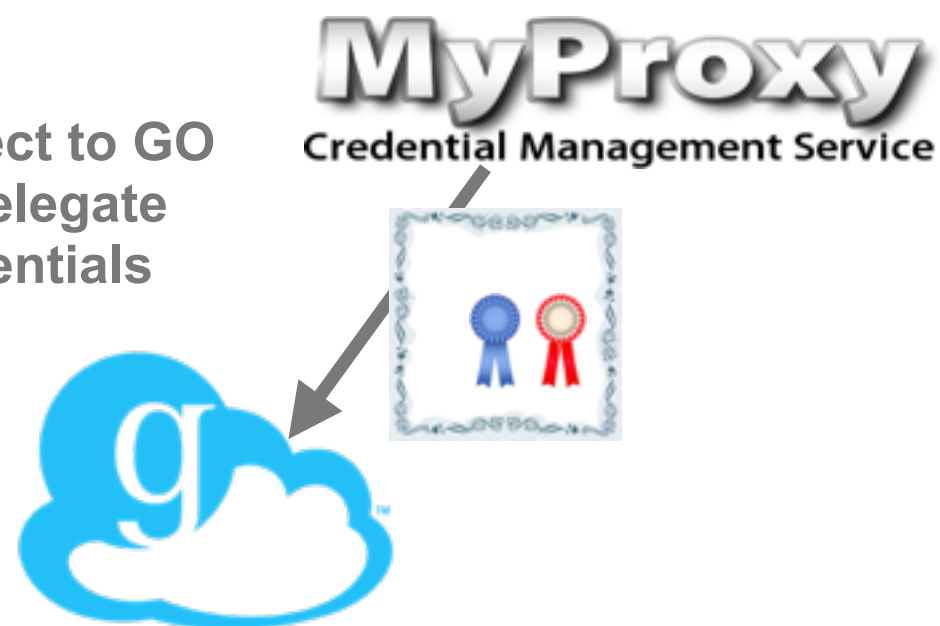
1 Upload proxy



- **Use case: data stage-in**

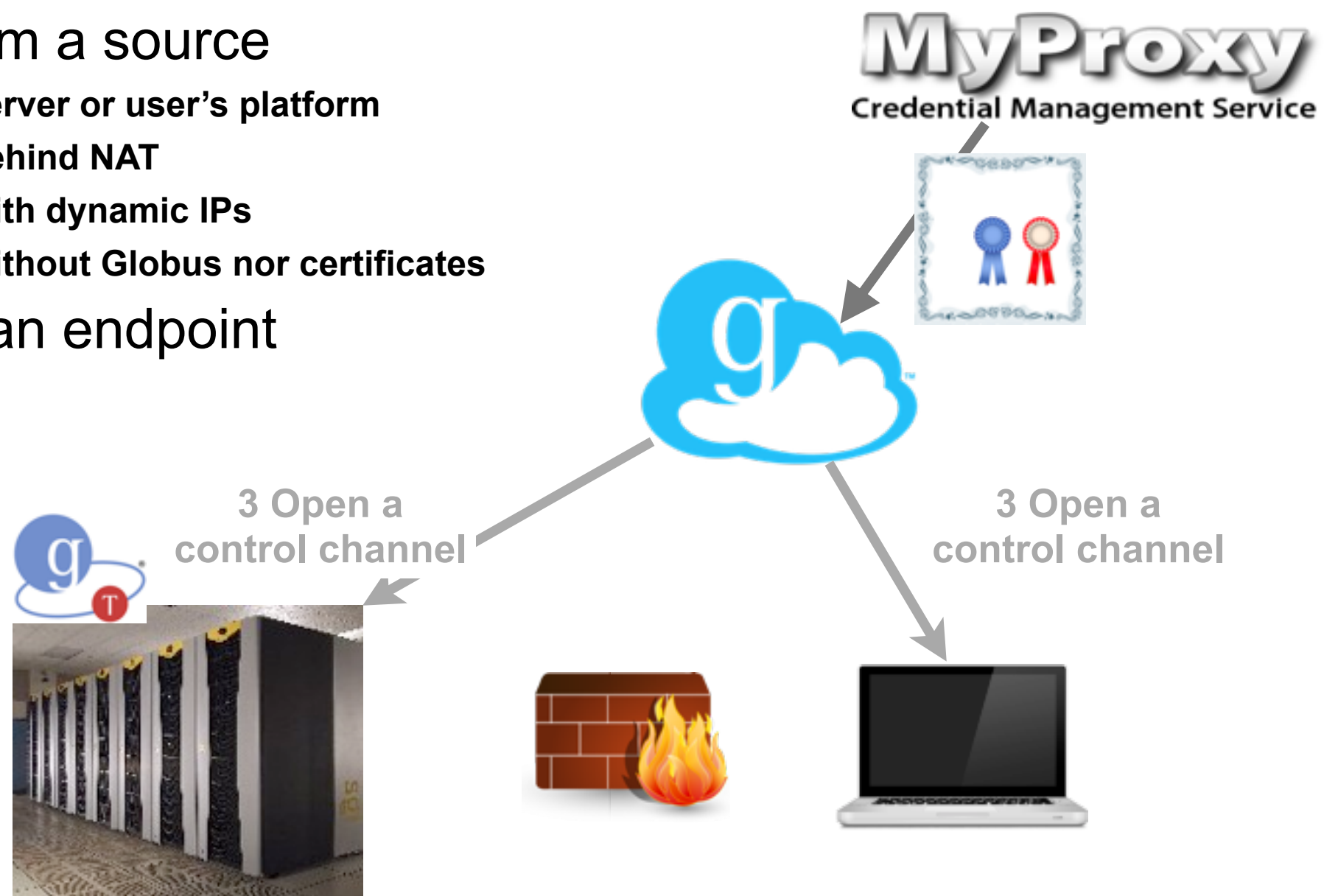
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2 Connect to GO and delegate credentials





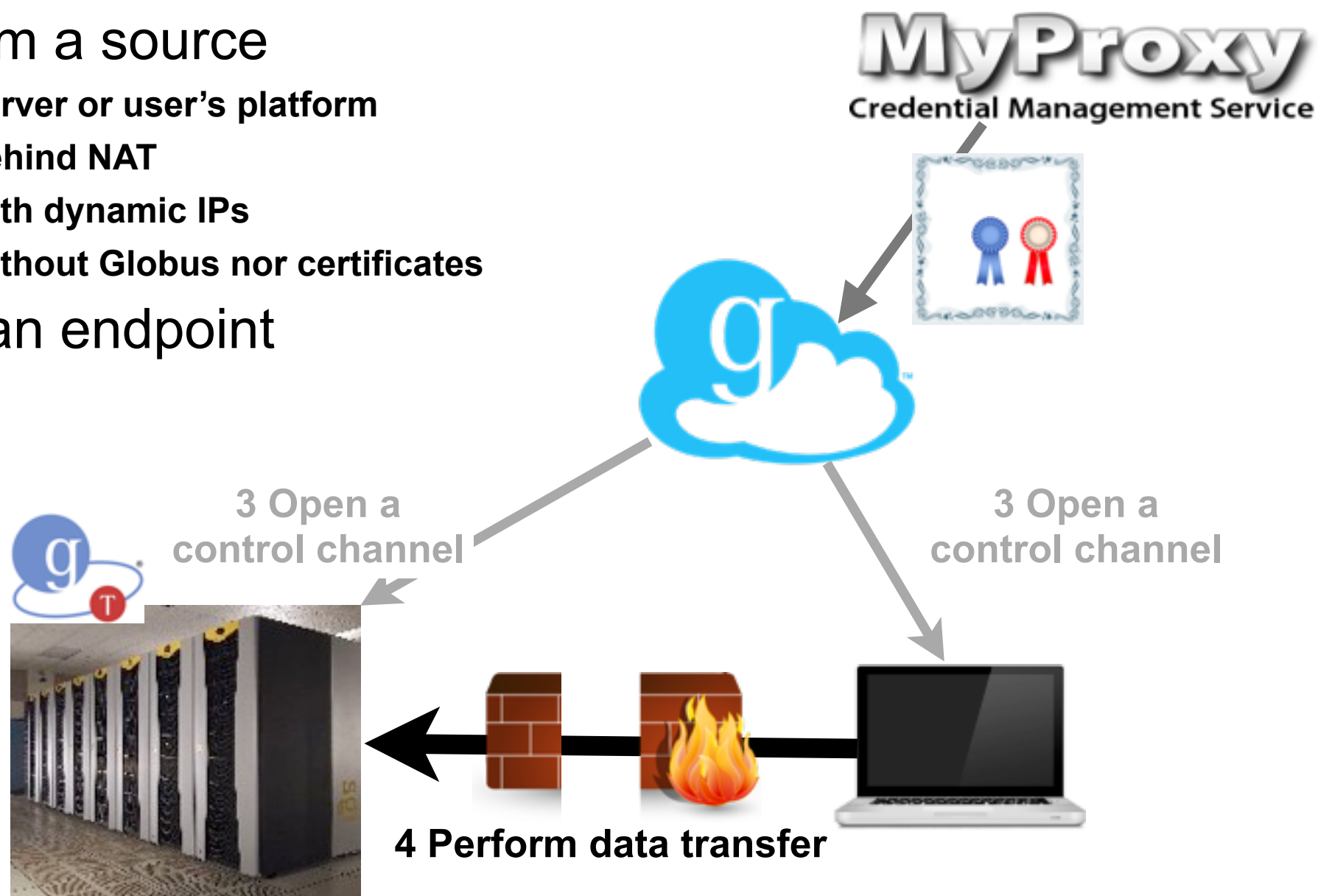
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- Dropbox
- disclose password (scp, sftp)



- But what if users want to **manage** data with more **freedom**?
- ~~Dropbox~~
 - 20 users, 4TB, 2670 \$/year
- ~~disclose password (scp, sftp)~~

Machine	SCP [MB/s]	GridFTP no, streams [MB/s]	GridFTP with streams (max) [MB/s]
SuperMUC	54	200	238 (3)
SuperMIG	60	189	217 (4)
LRZ Linux Cluster (lxlogin3)	49	77	55 (3)
LRZ Linux Cluster (lxgt2)	43	92	152 (4)

Provided by Cerlane Leong, LRZ

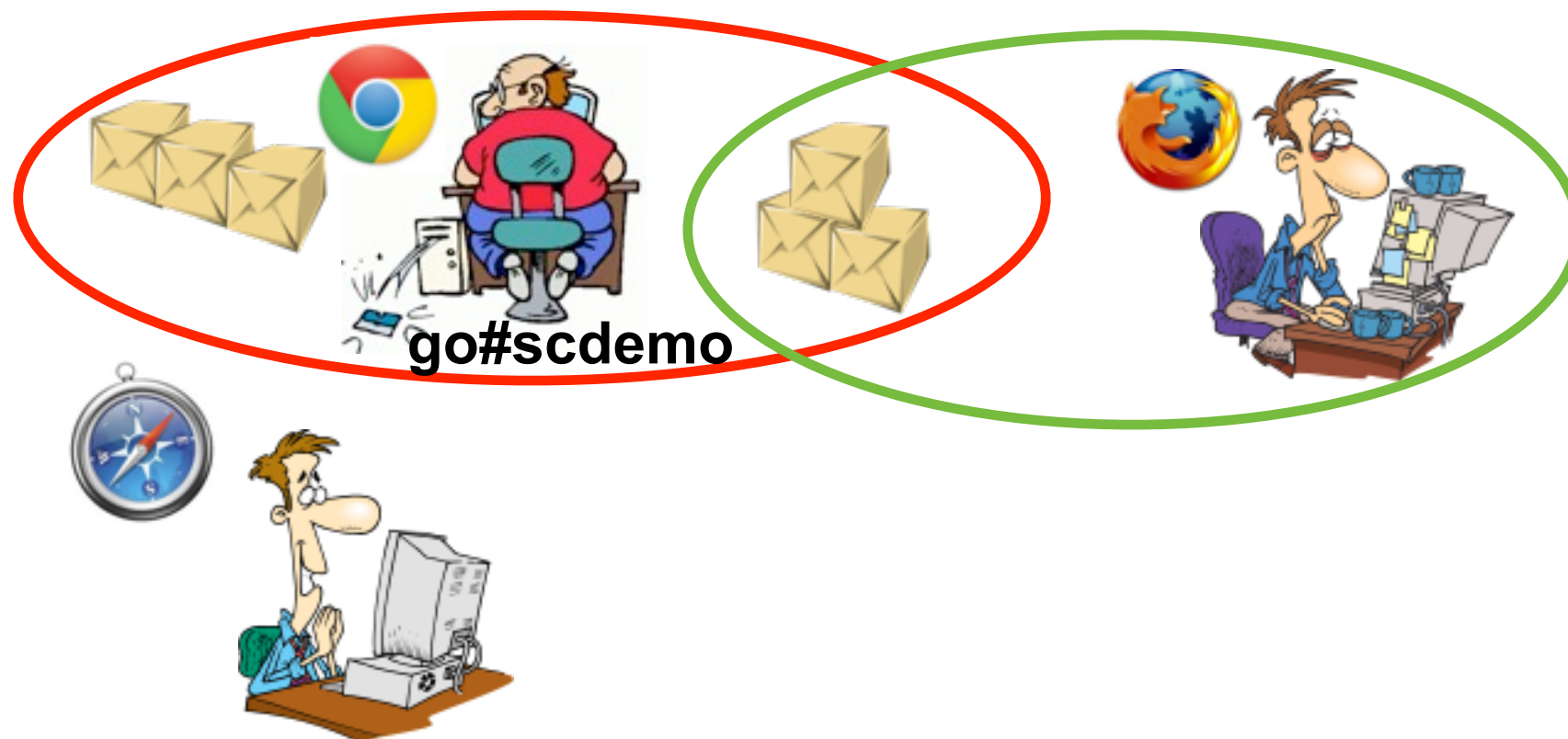


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- Use of “shared” endpoint is for free
- Creation of “shared” endpoint requires a subscription



What Globus Online can do for you

- Easy application setup / Platform independency
 - ✓ Globus Connect
 - ✓ Cloud service, always up to date
- Manage user permissions
 - ✓ Group management
- Integration with the current workflows
 - ✓ REST API, Command Line Interface
- Integration with the existing security infrastructure
 - ✓ OAuth module for MyProxy
- Wide variety of archive size (hundreds MB to PB)
 - ✓ Globus Online is meant for big data
- Transfer monitoring
 - ✓ Get detailed situation via API or CLI
- Handle possible glitches
 - ✓ Globus Online is automatic
- Synchronization
 - ✓ Multiple transfer options: Verify integrity, Transfer only new/changed files, Preserve timestamp



Thank you for your attention