



ilifu Online Training – Advanced

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Data Transfers

- http://docs.ilifu.ac.za/#/data/data_transfer
- Do not use login node!
- transfer.ilifu.ac.za
 - For cp, wget, scp, rsync (internal ilifu transfers / external transfers) – e.g.
 - `$ cp -a /users/$USER/scripts/ /idia/users/$USER/`
 - `$ scp /path/to/file/<filename> <username>@transfer.ilifu.ac.za:/idia/users/$USER/scripts/`
- Globus
 - Much faster than scp and rsync
 - A few to 10 Gbps locally (e.g. SARA0 archive, CHPC, local server)
 - 1.2 Gbps to Perth, 5 Gbps to Netherlands (compared to 10s Mbps)
 - Uses dedicated data transfer node (DTN)
 - Checks file integrity and includes similar functionality to rsync

Data Transfers: Globus

- http://docs.ilifu.ac.za/#/data/data_transfer?id=transfer-using-globus-online (two authentication steps)
- User-friendly globus connect built on top of GridFTP
 - GUI/web app or CLI
- Can connect any arbitrary end points
 - Server (DTN), desktop, etc for Mac OS X, Windows & Linux
 - Offers user-friendly but computationally efficient transfer service



Data Transfers: Globus

- Globus recommended for larger or more frequent transfers
 - Run background job from user-friendly web app with file browser
 - Avoids fiddling with scp, keeping active connection, and long wait times
- Symbolic links (symlinks) aren't included
 - http://docs.ilifu.ac.za/#/data/data_transfer?id=configuring-a-transfer
 - e.g. CASA Multi-MS (MMS)
 - Can be repaired with rsync and “preserve source file modification times”
- Demo!



THANK YOU

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