

Data transfer (Grid/CNAF) news

Tutorial on Grid data management on the Virgo wiki:

```
https://workarea.ego-gw.it/ego2/virgo/data-analysis/data/grid-lcg-data-management/
```

Tutorial on data management at CNAF:

```
https://workarea.ego-gw.it/ego2/virgo/data-analysis/data/virgo-data-management-at-cnaf-bologna/
```

Third-party copy using GSIFTP

- Gergely's suggestion for LIGO-Virgo data transfer
- Copy data from Hannover (GSIFTP server) to CNAF (SRM) using lcg-cp:

```
lcg-cp -v -b --src-protocols gsiftp -U srmv2  
gsiftp://atlas1.atlas.aei.uni-hannover.de/home/collaalb/test  
srm://storm-fe-archive.cr.cnaf.infn.it:8444/srm/managerv2?  
SFN=/virgo4/virgo/test
```

Folders behind GSIFTP servers can be listed with uberftp:

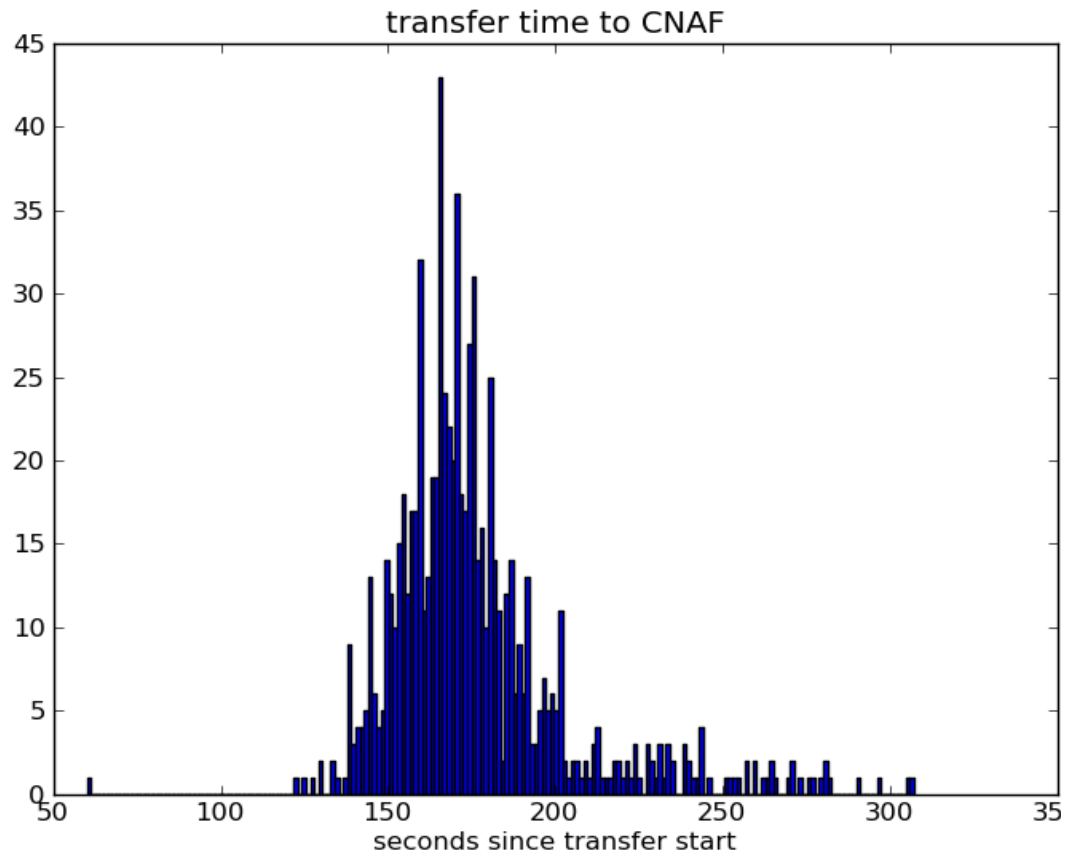
```
uberftp -dir gsiftp://atlas3.atlas.aei.uni-  
hannover.de//atlas/user/atlas3/
```

Tests

- 5 TB of data transferred from AEI to CNAF using the Grid-DT framework (run in the Virgo Rome farm UI)

6 GB files -> 40 MB/s
3 transfer threads in parallel

Full dataset transferred and
registered in LFC in 13
hours



Found issues - Questions

- Seems impossible to choose checksum type:
 - GSIFTP endpoint always returns md5
 - SRM at CNAF (StoRM) configured to return Adler
- Does iRODS allow third party copies through GSIFTP?