



TM and © Laurent de Brunhoff

Data Transfer Tools

Tim Adye

Rutherford Appleton Laboratory

Workshop on

Distributed Analysis at Tier A Centres

SLAC

15th December 2001

- bbftp [Gilles Farrache et al, IN2P3]
- bbcp [Andy Hanushevsky, SLAC]
 - Supplants sfc
- GridFTP [Globus team]

- Generic interface [Tim Adye, RAL]

bbftp

- Used for most **data exports** and **SP imports**, **Objectivity** and **Kanga**
- New (beta) version supports
 - **QBSS** (QBone Scavenger Service)
 - **Grid certificates** (Linux version)
- Not so good at transferring many **“small” files** with many streams
 - **Problem copying Kanga streams to INFN**

<http://doc.in2p3.fr/bbftp>

bbcp

- Used for **INFN** Kanga data (?) exports and SP imports
- Pipelined clocked transfer
 - Graceful fallback on router shaping
 - Can limit transfer rate
- Can specify **QoS**
- Single thread/socket setup for all files
 - No problem with lots of small files
- Optional MD5 **checksum**
- Better **firewall** handling

<http://www.slac.stanford.edu/~abh/bbcp/>

Generic Interface

- Perl module that provides a single interface to different ftp protocols
 - Currently supports scp, sftp, and bbftp
 - OO and modular design allows others to be easily added
 - Want to add bbcp, ftp, and others
- Provides some “missing” functionality for different tools
- Used by Kanga skimImport
- Maybe this is useful elsewhere
 - Perl and command-line interface