



GridFTP Working Group

GGF10

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- GGF Intellectual Property Notice



Agenda

- Status of GridFTP documents
- Status of GridFTP v2.0 development
- GridFTP v2.0 prototype implementation
- Future plans



Status

- Two documents passed public review
 - GridFTP: Protocol Extensions to FTP for the Grid, W. Allcock (editor) – GFD.20
 - GridFTP Protocol Improvements, I. Mandrichenko (editor) – GFD.21



Status of GridFTP v2.0 development

- Unidirectional data transfers
 - Proposed X mode (improvement of E mode)
 - Working prototype will be presented
- Ordering of PASV/PORT and STOR/RETR
 - Proposed new GET/PUT commands
- Disconnection of idle control channels
 - Idea is to use server feedback sent as 1xx responses
- Control of contents and frequency of server feedback
 - Need concrete proposal/definition
- Unreliable EOF communication
 - Proposed new EOF command



Status of GridFTP v2.0 development

- Data integrity verification
 - New commands to send/query checksum value for a file
 - Checksum verification of each block in X mode
- Structured directory listing, support for IPv6
 - Adopt IETF standards
- Packed transfers
 - No concrete proposal
- Flexible striping
 - Very complicated problem, no concrete proposal



GridFTP v2.0 Prototype Implementation

- Simple client and server written in Python
- Implemented S and X mode of data transfers
- Data flow is independent of data socket connection
 - Can do all 4 combinations of store/retrieve and passive/active
- Dynamic bandwidth allocation: data channels can be gracefully closed/opened at any time
- Implemented optional checksum verification of each data block
 - Protection of data channel from transmission errors



Plans for future

- Goal: produce GridFTP v2.0 draft document by GGF11
- Deadline for proposals: April 16, 2004 ?
- Summarize received proposals into draft document
- Continue working on prototype(s)
- Present draft document and experience with prototypes during GGF11