
GT 4.2.1 Migrating Guide for GridFTP

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<titleabbrev>Migrating Guide</titleabbrev>

The following provides available information about migrating from previous versions of the Globus Toolkit.

1. Migrating GridFTP from GT3 or GT4.0

If you are running GT 3.0.0 or greater, the migration for GridFTP is relatively painless. There were only new features added. No changes were made to the existing protocol or APIs, so any existing *client* or application built using our client APIs will work unchanged. You may install new clients and servers on an as-opportunity-permits basis and will have no problems. Any combination of old/new client/server will work.

To upgrade your server, either install it in a \$GLOBUS_LOCATION different than the GT 3 installation (either as part of an entire GT 4 installation or by doing just make `gridftp`). Alternately, you can statically link the new server to avoid versioning issues and replace the existing executable. The configuration files are very different, so you will need to update the configuration.

To upgrade your client, simply build the client and use the new client as you would the old one.

Below is a list of new functionality available in GT 3.2 and higher (note that the MLST/MLSD feature is used by RFT in GT 3.2 and higher and is required if you want to be able to specify a directory to move):

New Functionality in 3.2:

- Server Improvements
 - Structured File Info
 - MLST, MLSD
 - checksum support
 - chmod support
- globus-url-copy changes
 - File globbing support
 - Recursive dir moves
 - RFC 1738 support
 - Control of restart
 - Control of DC security

2. Migrating GridFTP from GT2

If you are running a version 2.2 or earlier, it is deprecated, unsupported, has major bugs leading to stability problems, has known potential security exploits via the wuftp *server*, and has a protocol incompatibility with later versions due to an error in the security code. Your GT 2.2 *clients* will not work with newer servers (GT 2.4.0 and greater) and new clients will not work with GT 2.2 servers. You should immediately upgrade to GT 4.2.1.

If you are running GT 2.4.0 or greater, the migration for GridFTP is relatively painless. There were only new features added. No changes were made to the existing protocol or APIs, so any existing client or application built using our client APIs will work unchanged. You may install new clients and servers on an as-opportunity-permits basis and will have no problems. Any combination of old/new client/server will work.

To upgrade your server, either install it in a \$GLOBUS_LOCATION different than the GT 2 installation (either as part of an entire GT 4 installation or by just doing `make gridftp`). Alternately, you can statically link the new server to avoid versioning issues and replace the existing executable. The configuration files are very different, so you will need to update the configuration.

To upgrade your client, simply build the client and use the new client as you would the old one.

Below is a list of new functionality available in GT 3.2 and higher (note that the MLST/MLSD feature is used by RFT in GT 3.2 and higher and is required if you want to be able to specify a directory to move):

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Glossary

C

client	A process that sends commands and receives responses. Note that in GridFTP, the client may or may not take part in the actual movement of data.
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S

server

A process that receives commands and sends responses to those commands. Since it is a server or service, and it receives commands, it must be listening on a port somewhere to receive the commands. Both FTP and GridFTP have IANA registered ports. For FTP it is port 21, for GridFTP it is port 2811. This is normally handled via `inetd` or `xinetd` on Unix variants. However, it is also possible to implement a daemon that listens on the specified port. This is described more fully in the Architecture section of the GridFTP Developer's Guide.