

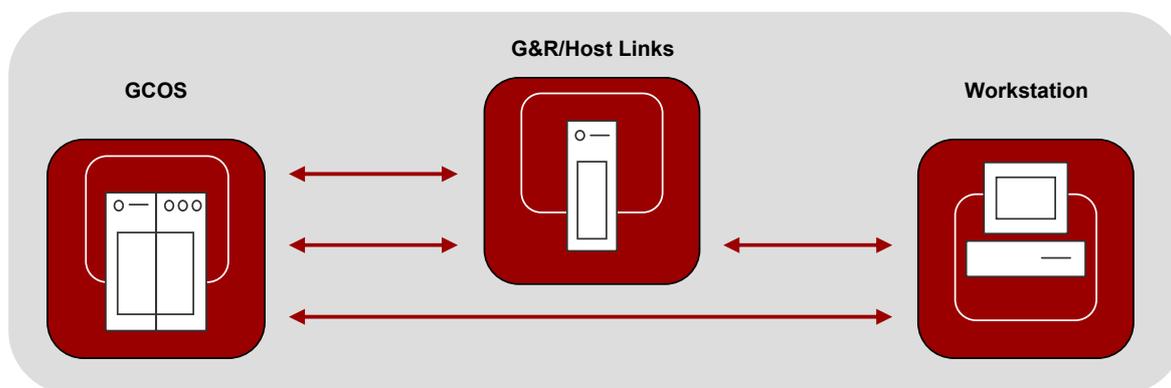
## ***High-speed file transfer between your Bull mainframe and your Open Systems***

### **Opening up your Bull mainframe file system**

UFT (Unified File Transfer) is a file transfer protocol that defines how to transfer files between heterogeneous systems in a DSA network. G&R/GUFT is our implementation of UFT; which allows you to transfer files efficiently and reliably between your Bull mainframe and your Open Systems. GUFT is available on all UNIX, Linux and Windows platforms supported by the G&R Host Links product line. This includes UNIX, Linux and Windows servers running on 32-bit or 64-bit platforms.

GUFT supports all the most common Bull mainframe file types and formats. You can distribute databases from your mainframe and store them as text files on your Open System for further processing, or you can transfer your files without any logical record processing (in 'binary mode') between your systems e.g. for backup purposes.

Both sides can initiate file transfers in either direction. Bull mainframes have both UFT client and server implementations.



**You can establish file transfer sessions between your mainframe and your Host Links system, from your mainframe via Host Links to your workstation, or directly between your mainframe and your workstation**

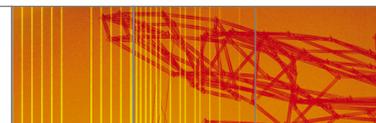
### **Bull mainframe UFT clients**

Terminal users connected to your Bull mainframe, e.g. logged on to IOF on GCOS7 or to TSS on GCOS8 can initiate GUFT file transfers interactively. Batch routines on your Bull mainframe system can invoke unattended UFT transfers. The GUFT server on your Open System is started on-demand to send or receive the files as directed, and it can even redirect files to or from the local file system on the user's workstation.

### **The GUFT server**

Each time your mainframe initiates a file transfer your Host Links system launches a GUFT server automatically to handle the transfer request.

GUFT has no limitation on the number of file transfers that you can launch simultaneously; the only limitations are the hardware resources (typically the communication link) of your system.



**The GUFT clients**

Users logged on to the Host Links systems can initiate file transfers, or they can initiate them directly from their own workstation.

Several GUFT clients are available, all included with GUFT:

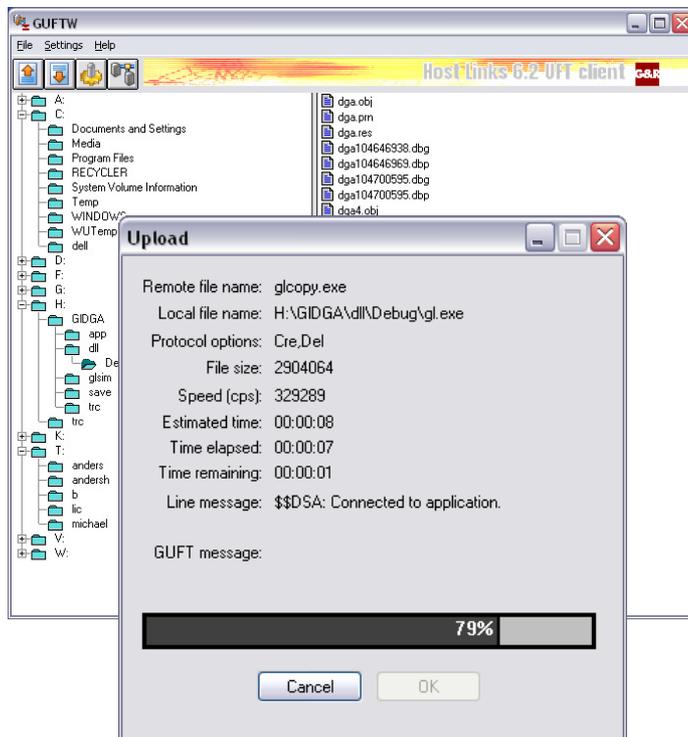
- There is a command line version, suitable for unattended file transfers from .bat or script files.
- There is an easy to use interactive UNIX/Linux version that includes a file management interface. It allows you to navigate in the local file system, create and delete local and remote files, and issue file transfer requests interactively.
- A Windows GUI version offers an interface with buttons, menus and dialog boxes for easy access to all functions. It saves all communication parameters as well as file history information for future use.

Additionally, it offers an interface for navigating through the local file system and selecting files.

Online help is available. Within the configuration dialog boxes, the help is context sensitive to the parameter you are entering.

While a file transfer is in progress, GUFT for Windows updates the screen with status information (number of bytes transferred, bytes per second and elapsed time) and, when information on file sizes is available, a progress bar.

- There is an unattended Windows background application, GUFTws. It sends and receives files via a Host Links GUFT server.



**A GUFT Windows client program with an active file transmission upload request**

**Communications**

**Between GUFT server and GUFTws:**

- G&R Ggate protocol over TCP/IP

**Between GUFT and Bull mainframe:**

- DSA or DIWS over TCP/IP (RFC1006)
- DSA or DIWS over OSI Transport Stack

**Supported file functions**

Send, receive, create, delete, rename, append

**Supported file types**

UNIX/Windows files in 'text' or 'binary' mode  
UFAS sequential, indexed and relative  
GCOS8 GFRC and TSS ASCII

**Supported UFT mainframes**

GCOS 8/9000  
GCOS 7/7000  
GCOS6/HVS/HVX  
G&R/Host Links on all platforms listed below

**Supported platforms**

Windows 2000/XP/2003  
Linux  
AIX 5L  
Solaris  
HP-UX 11i