

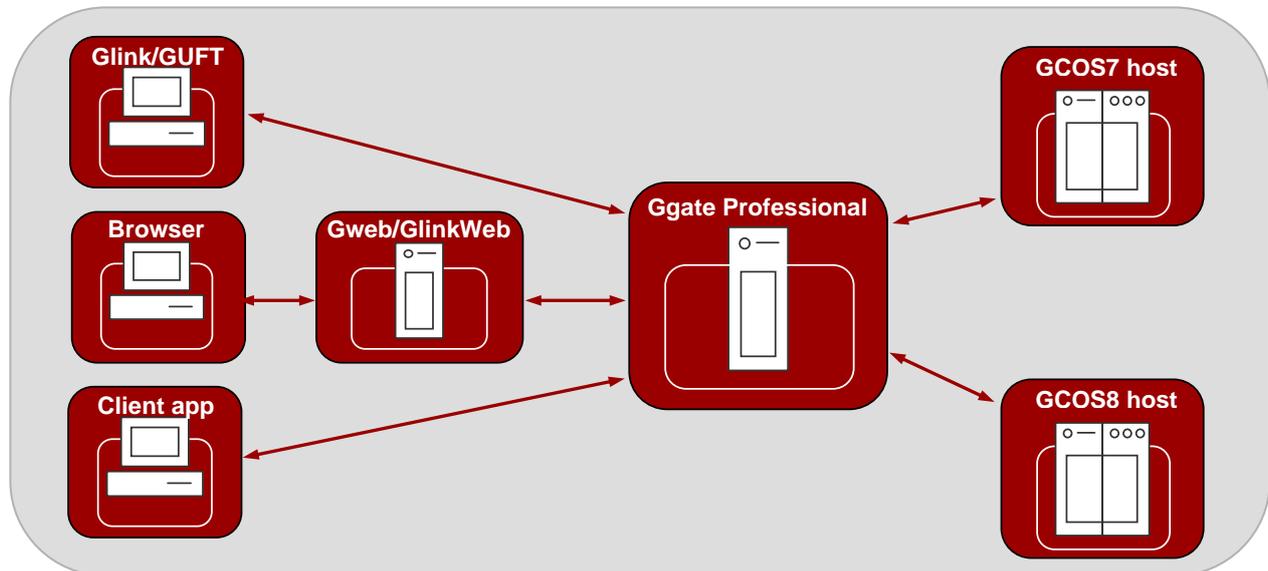
The most efficient and scalable gateway to Bull systems Available for Windows, Linux and AIX

Opening up Bull mainframes

Are you looking for a new gateway to your Bull mainframes? Are you tired of buying proprietary hardware based gateways that do not offer the throughput available in commodity state-of-the-art solutions? Then you are looking for Ggate Professional Edition. Ggate Professional Edition is a 100% software solution that runs on standard Open Systems hardware, under standard, Open Systems operating systems using standard Open Systems network components and protocols.

We designed Ggate Professional Edition for speed and scalability, with no internal restrictions or built-in limits to

stop you from taking advantage of the capacity offered by your Open Systems platform. Ggate Professional Edition is the perfect solution, whether your requirement is Bull mainframe access for less than a hundred or for many thousand concurrent users. When your business grows and you need access for more users, all you need is an extension of your Ggate Professional Edition license. Ggate Professional Edition also allows you secure your mainframe communications by offering SSL/TLS encryption and authentication between your clients and Ggate.



What is Ggate Professional Edition?

Ggate Professional Edition is a 100% software solution that installs and runs on any major Open Systems platform and operating system: Windows, Linux and AIX. Ggate provides you with a gateway between a standard TCP/IP network and Bull's internal DSA network. Client and server applications can access Ggate from anywhere in the Intranet, Extranet or Internet over TCP/IP. To reach the Bull mainframes Ggate uses native DSA protocol, over either TCP/IP, following the RFC1006 standard, or OSI

Transport protocols (LAN or WAN). G&R's native DSA over TCP/IP is always the preferred choice if available on the Bull mainframe. From the client to Ggate, Gallagher & Robertson products such as Glink, GUFT and Gweb use the optimized G&R/Ggate protocol. Products from other vendors must use telnet or telnet-VIP (TNVIP) protocol when connecting through Ggate Professional Edition.

Load balancing and back-up

You license Ggate Professional Edition by number of concurrent sessions, distributed over multiple servers if desired. The license fee is the same whether you allocate all sessions to a single server or split them over multiple servers. If you install Ggate on multiple servers, we recommend that you also install G&R Gproxy on every Ggate server. Gproxy collects statistics about all available Ggate servers in the network and balances the load between the servers; either equally between the servers or according to an assigned load factor if the hardware capacities of the servers differ. If you shut down one or more of the Ggate servers for maintenance, Gproxy will distribute their licenses to the remaining servers.

You can license Gproxy independently per server, but it is also available in the GgatePlus Professional Edition package, which includes Ggate Professional Edition, Gproxy, Gspool and GUFT server. You license GgatePlus by total number of Ggate sessions, but you can install it on as many servers as necessary. Each server included in the license can run Gspool and GUFT, in addition to Ggate and Gproxy.

Client applications

Both the Windows and Java versions of Glink include script languages and APIs that allow you to automate host interaction and build your own client application with a customized user interface. GlinkAPI and the programmatic interfaces offered in the Host Links product GIAPI allow you also to build server applications that communicate through Ggate to the Bull mainframes.

Security

You can configure Ggate to use SSL between itself and the client to provide security and privacy, using encryption and authentication. This means that Ggate and your user workstations can encrypt all network traffic between them, and that you can, if you want, authenticate all your users. The users, who may be your business-partners, can also be sure that they are connecting to your Ggate server, and not something masquerading as your server.

Scalability

We designed Ggate to be robust, scalable and to take advantage of multiprocessor architectures. On Linux and UNIX operating systems, each session is an independent process that has no influence on other processes. The operating system can, at any time, schedule any session to execute on the least loaded processor. On Windows systems, each session executes as an independent thread with the same benefits. Memory is the most important resource, and as long as there is available memory and network capacity, you will be able to maximize utilization of the processor power of your chosen Ggate server.

Performance

During Ggate qualification tests on Bull's new GCOS8 Network Server Processor (GNSP), Bull reached 15,000 concurrent sessions and 2,600 TPS on a single quad-CPU GNSP.

Supported platforms

Windows Server 2003/2008 (32/64), 2008 R2 (64), 2012 (64)
Linux kernel 2.6, 32 and 64 bit
AIX Version 5.3 and 6.1

Ggate Professional Edition is bundled with Bull's GCOS8 Network Service Processor (GNSP). It is qualified to run in the Windows partition of Bull's DPS7000 XTA (Diane) and on NovaScale 9000 (Helios) GCOS8 systems

Communications

Between client and Ggate:

- G&R Ggate protocol over TCP/IP
- TNVIP, TN3270 or Telnet over TCP/IP

Between Ggate and Bull mainframe:

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

Transport stacks

We supply RFC1006 for all Linux, UNIX and Windows platforms. For Windows we also offer the Marben OSIAM OSI-transport stack (available from G&R only)

Security

Secure Socket Layer (SSL/TLS)

Memory requirements

Ggate itself requires approximately 100 kb per session, but calculate 250 kb per session when you size your system if you want to include OS and TCP/IP resources

G&R clients that can use Ggate Professional Edition

- **Glink Professional Edition:** Terminal emulation package for Windows workstations. Includes GlinkAPI for development of client applications
- **Glink Enterprise Edition:** Server-based package. Runs on a Windows server in web-mode or run on workstations controlled from the server
- **Glink for Java Professional Edition:** Client version runs as a java applet or java application. The integrated API allows you to build your own user interface and/or automate host interaction
- **Glink for Java Enterprise Edition:** Server version for development of server applications and web-applications
- **GlinkWeb:** Java or .NET extension to the Glink product family that gives web users access to mainframe applications from their browser
- **Gweb Professional Edition:** Plug and play web-enabling of Bull and IBM mainframes
- **Host Links:**
GUFT: Bull Unified File Transfer client and server
Gspool: Bull network printer emulation
GIAPI: APIs in C and Perl on top of terminal emulation or direct to the communications layer
Qsim, V78sim, Pthru and G3270: Bull and IBM Terminal emulation for asynchronous terminals connected to UNIX