

Gproxy for high performance, high availability access to your mainframe systems

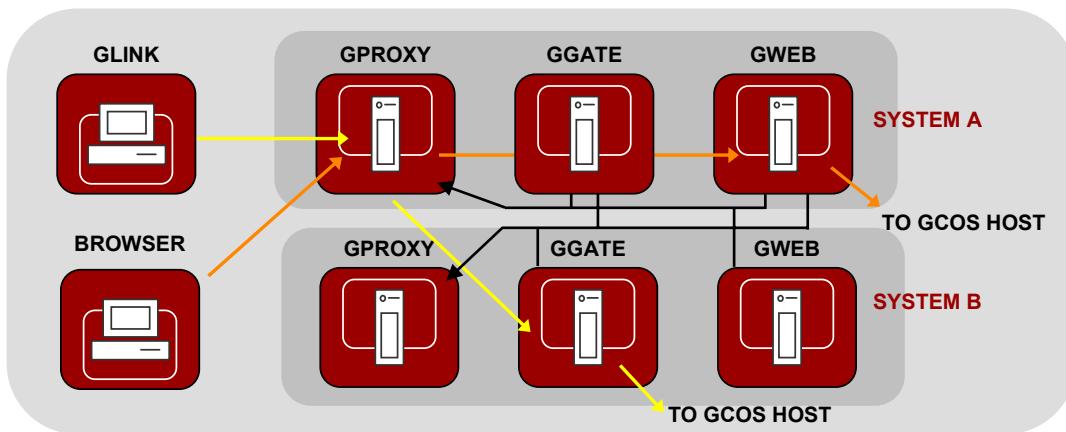
Load balancing, backup, recovery and monitoring for Host Links products

Host Links products

Ggate is acclaimed as the most performant gateway to Bull systems for Glink (Windows and Java) and third party emulators using TNVIP. GlinkWeb and Gweb are widely acknowledged to be highly performant tools for web enabling any Bull or IBM mainframe application. If your need is to combine functionality and performance with high availability then you should spread your Ggate, Gweb and Glink licenses over two or more systems, and install a copy of **Gproxy** on each system.

Gproxy

Gproxy is a network management component. Its function is to monitor Host Links products in your network by analyzing statistical information that these products periodically distribute. In any network each Gproxy knows the status of all the systems in the network and immediately detects problems, e.g. if one of the systems goes down, or a server is terminated. Using this knowledge Gproxy offers you load balancing, backup, recovery and monitoring services



Redirection: Gproxy knows the status and load of every server and transparently redirects users to the server with the lightest workload.

How does Gproxy work?

When your users connect to Ggate, Gweb or the Glink for Java server through Gproxy, it transparently redirects them to an operative system, and the chosen system is the one with the lightest workload. If one of your Host Links systems becomes unavailable because of maintenance or a fault, Gproxy distributes the licenses from the missing system among the remaining systems, recovering your licensed session limit.

Gproxy continuously maintains a configurable set of status reports, including a fully configurable 'Alarm log', as web

pages. Your system administrators can use a browser to monitor Host Links activity as closely as you require.

Gproxy supports data encryption and authentication in the initial dialog before redirecting to the Host Links products configured to use it, thus keeping the entire dialog, including sensitive logon information, totally secure.

Like all the other Host Links servers, Gproxy runs on standard Open Systems hardware, under standard Open Systems operating systems using standard Open Systems network access and protocols.

What can Gproxy do for you?

Load balancing

Gproxy performs load balancing for Ggate, Gweb and the GlinkJ server. Gproxy bases its load balancing on statistical information these products broadcast at regular intervals. Gproxy uses the same broadcasts to detect any non-responsive program by the absence of its statistics. Load balancing ensures that Gproxy always directs users connecting to a server to an operational system and that the chosen server is the lightest loaded server in the network. The redirection dialog between Gproxy and the user is fast, efficient, and completely transparent.

Backup and recovery

Gproxy operates as a license server for other Host Links products. In license-server mode, Gproxy is responsible for allocating and de-allocating licenses for the local applications, and periodically distributing license statistics to other Gproxy license servers in the network. The license statistics allow Gproxy to know the state and current usage of the shared licenses on all other systems. In the event that one or more of the systems should fail, the remaining Gproxy license servers take over the licenses belonging to the failing systems. When the inactive system comes back on line, Gproxy automatically resumes normal operation.

Report generation

Optionally, Gproxy uses the statistical information broadcast from the various Host Links components to generate and continuously maintain a set of HTML reports.

The screenshot shows a Microsoft Internet Explorer window displaying the Gproxy demo page. The title bar reads "Gproxy demo page - Microsoft Internet Explorer". The main content area is titled "System report". On the left, there is a sidebar with a yellow background containing links such as "System", "Licenses", "Summary", "Details", "MIB", "Ggate Load", "Glinks Load", "Gwebs Load", "Ggate server", "GlinkJ server", "Users", "Sessions", "Routes", "HEX Dump", and "Alarms". The main content area displays "System information" and "License server information". Under "System information", it shows IP addr.: gproxy.gar.no, Node name: LAG1, System ID: gproxy, Time: 21:43:57,437, Base dir.: D:\gar, Started: Wed Sep 07 16:07:37 2005. Under "License server information", it shows Installation: G&R A/S Platform: * Release: SSL mode: No, Customer no: 7654, Reference no: 4567, Community: 0. It also lists "Load balance information" and "Event information" with various statistics and event counts.

Your administrators can display all reports that are of particular interest in separate browser windows, or can choose to have only selected reports, for example the system report or the summary report, active and then select the appropriate report whenever an interesting network event occurs in the summary report.

SNMP proxy agent

You can configure Gproxy to act as an SNMP 'proxy agent' and report to one or more SNMP management systems. Gproxy sends SNMP 'enterprise specific traps'. The SNMP trap format is available as an enterprise specific MIB extension. Gproxy uses two trap formats: 'event-trap format' and 'statistic-trap format'.

Alarm logging

Gproxy optionally generates a log of 'Alarms'. This log, which is in HTML format, contains error messages that Host Links applications generate whenever an event has taken place that might need some sort of manual intervention.

The screenshot shows a Microsoft Internet Explorer window displaying the Gproxy demo page. The title bar reads "Gproxy demo page - Microsoft Internet Explorer". The main content area is titled "Alarm log". On the left, there is a sidebar with a yellow background containing links such as "System", "Licenses", "Summary", "Details", "MIB", "Ggate Load", "Glinks Load", "Gwebs Load", "Ggate server", "GlinkJ server", "Users", "Sessions", "Routes", "HEX Dump", and "Alarms". The main content area displays a log of alarm events. The log entries include:

- Seq.: 001, Time: Wed Sep 07 14:16:24 , Program: Gutsrv 620, Address: gproxy.gar.no -> Severity: Info (6), 401 : Client session disconnected
- Seq.: 002, Time: Wed Sep 07 14:16:34 , Program: GL_dsc 621, Address: gproxy.gar.no -> Severity: High (3), 0 : Refusing connection from rmbx:D02424 mode:LAH1 to lmbr URK, reason 0082 (UNKNOWN)
- Seq.: 003, Time: Wed Sep 07 14:22:00 , Program: Gspool 620, Address: gproxy.gar.no -> Severity: Critical (2), 0 : \$SDSA: Session error: Request denied, mailbox in use by another process
- Seq.: 004, Time: Wed Sep 07 14:24:03 , Program: Gspool 620, Address: gproxy.gar.no -> Severity: Critical (2), 356 : Spooler/print-device check failed, session aborted
- Seq.: 005, Time: Wed Sep 07 14:28:50 , Program: Gutsrv 620, Address: gproxy.gar.no -> Severity: Low (4), 408 : Could not assign local file
- Seq.: 006, Time: Wed Sep 07 14:29:11 , Program: Gutsrv 620, Address: gproxy.gar.no -> Severity: Info (6), 401 : Client session disconnected
- Seq.: 007, Time: Wed Sep 07 14:29:22 , Program: Ggate 620, Address: gproxy.gar.no -> Severity: Low (4), 211 : Operator requested DISConnect of all clients
- Seq.: 008, Time: Wed Sep 07 14:31:25 , Program: Ggate 620, Address: gproxy.gar.no -> Severity: High (3), 210 : Insufficient Ggate client licenses
- Seq.: 009, Time: Wed Sep 07 15:16:06 , Program: Gspool 620, Address: 193.216.112.09 -> Severity: Critical (2), 356 : Spooler/print-device check failed, session aborted

Alarm texts and severity levels are fully configurable, making it possible for your system administrators to filter out only events of particular interest. The alarm log makes it easier for your administrator to investigate possible abnormalities, and simplifies the task of supervising and managing Host Links products.

Secure logon

You can configure Gproxy to use Secure Socket Layer (SSL) between itself and the clients that connect through Gproxy for load balancing purposes. This means that your user workstations and Gproxy can encrypt highly sensitive log-on dialog, and that you can, if necessary, authenticate all your users. Note that Glink clients using Secure Shell (SSH) can connect via standard Gproxy to Ggate for load balancing because of the SSH-tunneling feature of Glink SSH support. This assumes that Gproxy and Ggate both run on systems with SSH support.

Supported platforms

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

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GALLAGHER
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