

Glink for Java  
Version 6.7  
Software Release Bulletin  
Copyright (c) Gallagher & Robertson A/S 2006  
All Rights Reserved

Gallagher & Robertson A/S, Kongens gate 23, N- 0153 Oslo, Norway  
Tel: +47 23357800 Fax: +47 23357801  
World Wide Web server: <http://www.glink.com/>  
Internet: [glinkj@gar.no](mailto:glinkj@gar.no)

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

# This release (6.7.0)

This is the code base of release 6.7. Any updates will have the same release identifier (6.7) and an update number (6.7.1). Although there have been various enhancements and corrections, this version is mainly an update of the GlinkWeb functionality which now also supports the ASP.NET platform.

## Supported platforms

### *Glink server platforms*

The Glink server is needed for license and configuration management for server mode installations and otherwise when licensing is by session rather than by workstation.

Supported 32 bit UNIX/Linux platforms:

|       |  |
|-------|--|
| 386l2 | Intel Pentium PCs, Linux kernel 2.x        |
| 386so | Intel Pentium PCs, Solaris release 7/8     |
| hpp11 | Hewlett-Packard, HP-UX 11.x                |
| ppca5 | Bull Escala, AIX 5L for Power V5.1/5.2/5.3 |
| rs6a4 | Bull Escala/Estrella, IBM RS/6000, AIX 4.3 |
| spaso | Sun SPARC, Solaris 7/8                     |

Supported 64 bit UNIX/Linux platforms:

|       |                                    |
|-------|------------------------------------|
| i64l2 | Intel Itanium 2, Linux kernel 2.x  |
| a64l2 | AMD/Intel x64_86, Linux kernel 2.x |
| i64h1 | Hewlett-Packard, HP-UX 11i v2      |

### UNIX 32 bit deliveries by special request

The following platforms can be delivered by special request, at a cost based on time and materials and time frame depending on available test and qualification resources.

|       |                                      |
|-------|--------------------------------------|
| 386v3 | Intel Pentium PCs, SCO UNIX R5       |
| alpdu | Alpha, Digital Unix 4.x              |
| hppul | Hewlett-Packard, HP-UX 10.x          |
| rs6a1 | Bull DPX/20 and IBM RS/6000, AIX 4.2 |

Supported 32 bit Windows platforms

|       |  |
|-------|--|
| 386pc | Windows 2000, Windows XP, Windows 2003 |
|-------|--|

Supported 64 bit Windows platforms

|       |   |
|-------|---|
| i64pc | Windows XP, Windows 2003 on Intel Itanium 2 |
|-------|---|

## **Application mode installation**

| <b>Installers</b> | <b>Platform (assuming Java 2)</b> |
|-------------------|-----------------------------------|
| windows           | Windows 2000, XP, 2003            |
| windows itanium   | Windows XP on Intel Itanium       |
| macosx            | Mac OS X                          |
| solaris sparc     | Solaris SPARC                     |
| solaris intel     | Solaris Intel                     |
| aix5              | AIX 5L on PowerPC                 |
| hpux              | HP-UX on PA-RISC and Itanium2     |
| linux             | LINUX on Intel                    |
| unix              | All Java 2 enabled UNIX           |
| other             | Other Java 2 enabled platforms    |

Support for Mac OS Classic was stopped at R6.3, since the platform doesn't support Java 2. However, Mac OS X comes with a full Java 2 JRE, and a Glink Application installation package is available for the platform. Note there is no Java 2 support on AIX4.x and so it is not an Enterprise/Application platform.

## **Installation instructions**

Detailed instructions on installing Glink in all modes on UNIX, Linux or Windows platforms are included in the Glink for Java Installation and Configuration manual, and should be consulted before you run the installation program. The manual is included in the delivery, and can otherwise be found at:

<http://www.gar.no/docinfo/>

## **Incompatibilities**

### **Mixing releases**

You cannot mix components from this release with components from an earlier release. This release (R6.7) requires that the Glink for Java server, if used for session licensing, be release R6.3.

### **Java 2 Runtime Environment**

GlinkJ is delivered with Java 2 Runtime Environment, Version 1.5, but can still be used with Java 2 Runtime Environment, Version 1.4.2.

### **New license file**

You need a new license file with a 6.7 release number. Glink license keys are divided into 3 groups, Edition, Emulations and Licensing. You need a license key from each group to have a valid Glink license.

## Redirection must be configured

In order to make connections via the Glink server the `-redir` parameter must be set in the server startup.

## **Components and licensing**

Editions:

### *Standard Edition*

The Standard Edition license allows Glink to be used as a terminal emulator that simply displays the screens the host sends, with automatic facelifting.

### *Professional Edition*

The Glink Professional Edition license enables the Glink API for workstations, with up to five simultaneous sessions.

### *Enterprise Edition*

The Glink Enterprise Edition license enables the GlinkAPI for servers, with as many simultaneous sessions as are licensed. It also enables GlinkWeb. Server-side applications, GlinkWeb, Applet and workstation clients can share an Enterprise Edition license, allowing all usage of Glink in all modes to be controlled by a single license for simultaneous sessions.

Emulations:

### *Glink for Java Open*

Include VTnn, ANSI and Minitel emulations

### *Glink for Java ALL*

Glink for Java Open  
Async DKU (DKU7102)  
All Synchronous DKU models  
All VIP7800 and HDS models  
VIP 7700, VIP 7760  
IBM3270  
IBM5250

Licensing

### *Server*

The license scheme is per session and is handled by the Glink for Java server.

### *Stand-alone*

The license scheme is per user (per seat).

# New Products

## ***.NET version of GlinkApi***

The optimized version (core version) of Glink for Java has been ported to .NET making the Glink API available to .NET applications that provide the user interface themselves. You can build .NET Windows applications, ASP.NET Web services or ASP.NET Web sites. GlinkWeb for example is an ASP.NET site that is built on top of this GlinkApi version.

The configuration system is the same as for the Glink Java version. The Glink Java Administration utility is therefore delivered with this product together with the Glink Java client for your convenience.

## ***ASP.NET version of GlinkWeb***

GlinkWeb is now available as an ASP.NET Web application that runs under the control of a Web Application Server with ASP.NET support such as Microsoft's Internet Services Manager.

A Virtual Directory on your IIS Web server is more or less all that is needed to set up GlinkWeb on your Web server. The quick guide displayed at installation time, describes how to do this. Once you have configured access to your business applications with the Glink Administration utility, you can run these from your browser. GlinkWeb will generate automatic facelifting for the application screens.

The development phase is greatly simplified by running GlinkWeb as a Web site within Visual Studio 2005 (or Visual Web Developer 2005 Express). Just select the project file in the delivery to run GlinkWeb from within Visual Studio. You then have easy access to both the Web Forms pages delivered and the ones generated by the GlinkWeb Forms Assistant. Syntax checking and debugging facilities are provided to help you to build your new GlinkWeb application.

As with the Java version ASP.NET GlinkWeb converts business application screens into web pages. It uses ASP.NET Web Form pages to generate the output. You do basic facelifting by adjusting these to give a custom view of the application.

You do more advanced facelifting using the GlinkWeb Forms Assistant to step through a business application and identify the screens to be facelifted. The Assistant generates a Web Form Page for each screen identified, which becomes responsible for generating the output to the client. The Web Form pages can then be modified to give a custom view of the application, quite divorced from the look and feel of the original screens. The Web Form page interacts with GlinkWeb through the GlinkPage API to access parts or all of the screen data. A Web Form Page can also

simulate user input and therefore bypass specific screens when convenient.

### ***Face-lift GlinkWeb using the Eclipse IDE***

For the Java version of GlinkWeb, the Eclipse Web Tools Platform (WTP) is well suited for facelifting GlinkWeb. WTP is an extension to Eclipse, an open source IDE that is freely available at <http://www.eclipse.org/webtools>. The current version is 1.5.x and the Windows download module for this is for example wtp-all-in-one-sdk-R-1.5.1-200609230508-win32.zip. Detailed information on how to set up the Eclipse Web Tools Platform and run GlinkWeb within it is given in the read\_me.html file displayed when installing GlinkWeb.

Step through your host application in the GlinkWeb Forms Assistant and assign Java Server Pages to handle the various host screens. Then edit, run and debug these within Eclipse. Finally, deploy your solution to your production Web server using the GlinkWeb deploy utility.

## **Enhancements**

### ***GlinkWeb***

This version of GlinkWeb uses Java Server Pages to generate all the Web page output. This means that the HTML template files used for automatic facelifting are no longer used and are replaced with JSP files. The Java Server pages interact with GlinkWeb through the GlinkPage API for both simple and more advanced facelifting.

The HTML code generated uses CSS classes for text, input fields, buttons, messages and warnings to simply modifications of the layout.

Business applications are often controlled through function keys usage. So are some of the local browser functions, preventing key input like F1, F2 etc. from being sent to the business applications. The JavaScript routines that control the browser keyboard have now been extended to pass these function keys to the business application to give the user an interface more like a real terminal.

### ***GlinkApi***

The new GlinkEvent.DATA\_BLOCK event is added. It notifies that a data block has been received and is posted only if GlinkApi.notifyDataBlocks(true) is called first. The event is normally not needed; you should wait for the TURN\_RECEIVED before processing the received data. If enabled you'll receive a

DATA\_BLOCK event each time the emulator has finished processing a block of data received in a single TCP read.

The new GlinkApi.GetDataChars method is added. It returns a char array of the given screen area and can be used instead of the GlinkApi.getString.

The new GlinkApi.GetGlinkVersion method is added. It returns the Glink version information as a text string.

## **Glink**

For some applications using the GlinkApi it can be handy to place the resources normally found in the directories "no/gar/data" and "no/gar/images" in a resource file. In addition the "glink.ini" file must be placed at "no/gar/glink.ini". If the GlinkJ config server is not used, the config files together with the license file must be placed in the "no/gar/config" directory. Note that the configuration is static in this case. To use the resource file facility, make your Glink configurations and then place the files and directories described above in a "no" directory. Run the Java JDK utility, "jar.exe cf glres.jar no/" and place the generated resource file, glres.jar, in the Java classpath.

The 5250 emulation code has been improved with extended attribute handling.