



***GlinkProxy***  
***User Guide***

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



Microsoft, Windows, MS, are registered trademarks of Microsoft Corp.  
IBM and PC are registered trademarks of IBM Corp.

Any other product names are trademarks of their respective owners.

GlinkProxy, version 1.7  
© Gallagher & Robertson AS, 2021  
All Rights Reserved

**GALLAGHER & ROBERTSON AS**, Grini Næringspark 3, N-1361 Østerås, Norway  
Tel: +47 23357800  
www: <http://www.gar.no/>  
e-mail: [support@gar.no](mailto:support@gar.no)

# Contents

---

<b>Contents .....</b>	<b>i</b>
<b>Warranty .....</b>	<b>1</b>
<b>Introduction.....</b>	<b>2</b>
How it works .....	3
Firewall considerations .....	3
Client disconnects .....	4
<b>Getting started .....</b>	<b>5</b>
Delivery.....	5
Installation and setup .....	5
Startup .....	6
Entering license information .....	7
<b>Settings.....</b>	<b>8</b>
Command line parameters.....	11
Glink for Android and iOS Proxy Server Settings .....	14
<b>Using GlinkProxy.....</b>	<b>16</b>
File menu.....	16
Manage sessions .....	17
Generate text report.....	18
Generate Excel report.....	18
Enter new license info.....	18
Suspend/resume logins to server .....	18
Exit.....	18
Edit menu .....	19
Settings menu .....	19
<b>GlinkProxy in background .....</b>	<b>20</b>
General tab .....	20
Triggers tab.....	20
Actions tab.....	20
Monitoring background GlinkProxy.....	21

**Contents**

**ProxyLog ..... 22**

# Warranty

---

While Gallagher & Robertson AS have made every effort to ensure that this software package should function as described, no warranty of any kind, express or implied, is made by us. Gallagher & Robertson AS shall not be liable for any damages, direct, indirect, special, or consequential arising from a failure of this program to operate in the manner desired by the user. Gallagher & Robertson AS shall not be liable for any damage to data or property that may be caused directly or indirectly by the use of this program. In no event will Gallagher & Robertson AS be liable to you for any damages, including lost profits, savings or other incidental or consequential damages arising from your use or inability to use the program, or for any claim by any other party. Any dispute arising in connection with this warranty will be settled under Norwegian law.

Gallagher & Robertson AS confirm their intention that the software should function as described and will make all reasonable efforts to ensure that errors in the software reported in writing to our office in Norway be corrected in future releases of the software.

Gallagher & Robertson AS grant you as a registered user of GlinkProxy a license to use the software and to make those copies you deem necessary for your own security. The package itself remains the property of Gallagher & Robertson AS and we expect you to take all reasonable precautions to ensure that illegal copies are not made by a third party.

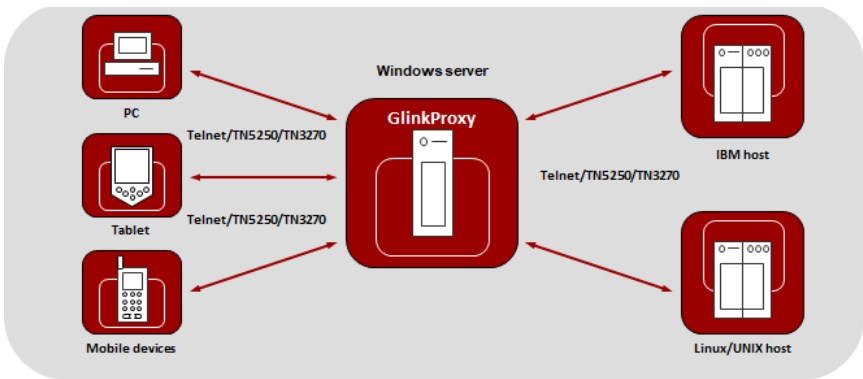
# Introduction

---

*GlinkProxy* is a server application designed to provide persistent host connections for Glink clients running on Windows, Android, or iOS platforms where the connection from the client device is unreliable. This may be because the device enters sleep mode or goes out of WiFi range for example. If the client connection to the proxy server is lost for any reason, then the server will retain the connection to the host. This allows the client to reconnect to the server again and continue seamlessly from the point at which the connection was lost.

The *GlinkProxy* server runs on a Windows server, and it will support large numbers of client sessions on commodity hardware, for example 5000 sessions running a total load of 1000 transactions per second. Simultaneous connections to multiple hosts using different terminal protocols are supported transparently. *GlinkProxy* supports TN250, TN3270, Telnet, TNVIP and Ggate communication protocols.

The following image provides a conceptual overview of *GlinkProxy*.



*The GlinkProxy application runs on a Windows server that can be located near the host computer. It will allow the traffic from the mobile computers, tablets, or PCs with Glink to be routed through the GlinkProxy server to the host. The GlinkProxy server will keep the connection to the host application even if the connection to the client computers with Glink is lost. When Glink reconnects, the session with the host application will resume as if the connection was not lost.*

## ***How it works***

GlinkProxy is a server application that acts as a link between a Glink terminal emulation client and a host, maintaining an established session with the host even though the client device might go idle, enter power-saving mode or move out of Wi-Fi range. This is how it works:

1. Glink connects to the GlinkProxy application server.
2. GlinkProxy connects to the host application and establishes a session with the host on behalf of Glink and keeps track of the session information.
3. GlinkProxy maintains the host connection, even if the connection between Glink and GlinkProxy goes idle or dead. You can configure how long GlinkProxy should maintain the host connection after the connection between Glink and GlinkProxy has been terminated. GlinkProxy can also differentiate between normal user initiated disconnects and unexpected disconnects with an error.
4. When a Glink client reconnects after having been idle or lost the connection, the GlinkProxy server sends the session information to Glink and Glink continues the session.

## ***Firewall considerations***

The GlinkProxy server will need to be able to accept incoming connections from the client devices, and this will usually involve configuring an opening in the Windows firewall to allow these through. In most cases Windows will ask you for permission to do this as soon as you start the server, so you just need to OK this directly.

If you need to do this manually at some point then GlinkProxy accepts incoming TCP/IP connections on port 30855 (0x7887) by default, or another port of your choosing which you can set up with the /PORT command line parameter used to start the server. In either case the port in use is displayed prominently in the server window.

# ***Client disconnects***

There are basically two kinds of client disconnects, voluntary and involuntary. These will be seen by the GlinkProxy server as a normal disconnect and an error disconnect respectively and will be treated differently. By default, a normal disconnect will also cause the host connection to be terminated and the session will be over. When the disconnect is abnormal on the other hand, then the host connection will be maintained for a configurable length of time (default 30 minutes) during which time the client will be able to pick up the session at the exact place where the connection was broken.

There is also an option whereby the host connection may also be maintained even though the client device disconnected normally, this can be set up with a shorter timeout to allow reconnection to sessions that were terminated by mistake.



# Getting started

---

## Delivery

The GlinkProxy application is delivered as a zip-file containing the GlinkProxy executable file, the ProxyLog executable, the product documentation, and optionally a text file with license information.

## Installation and setup

1. Copy the file to the Windows server on which you want to run the GlinkProxy software.
2. Create a folder for GlinkProxy, for example C:\GlinkProxy, and unzip the GlinkProxy package here
3. Start `glinkproxy.exe` without parameters by double-clicking the icon or typing “GlinkProxy” at a command prompt. If the folder in which you installed GlinkProxy does not contain a text license file named `glinkproxy.license.txt` then you will now be asked to enter your license information. Either type it in or copy-and-paste it into the text box. Click "OK" twice. You may also need to specify "Allow access" to the network for GlinkProxy when Windows Defender Firewall or other firewall prompts for it.
4. You now have a running instance of GlinkProxy with default parameters.
5. With default parameters, GlinkProxy will
  - Keep the host connection for 30 minutes if the Glink device goes idle, enters power-saving mode, or moves out of Wi-Fi range and prematurely terminates the session to GlinkProxy. If Glink reconnects within 30 minutes, the session is resumed as if it never was disconnected from GlinkProxy.
  - Disconnect the host connection immediately if the Glink user disconnects the session.

## Getting started

- Allow Glink to change the disconnect timeout values.
  - Not send any keepalive packets unless specified by Glink.
6. Open the Settings menu if you want to change some of these values and save the changes.

In the Settings section, you can read more about the Settings menu, its parameters and how you can set them from the command prompt. You will also find a description of the proxy server parameters that can be set in Glink for Android and Glink for iOS.

## Startup

If GlinkProxy is started without command line parameters, it will use default parameters the first time it is started and saved parameters on all following executions. If started with command line parameters (listed below), the command line parameters will override the previously saved parameters. For simplicity, it is recommended that you click Settings inside GlinkProxy to modify and save parameters and that you start GlinkProxy without any command line parameters.

## Entering license information

If the folder in which you installed GlinkProxy does not contain a text file named `glinkproxy.license.txt` with your license information, then you will be asked for this the first time you start the server.

Glink Proxy Server license information

Please enter license information for the proxy server. Note that the host address supplied here must match the address of the machine on which you are running the server

Customer name:

Serial number:

Maximum sessions:

Maximum devices:

Expiry date (yymmdd):

Supported release:

Server host address:

License key:

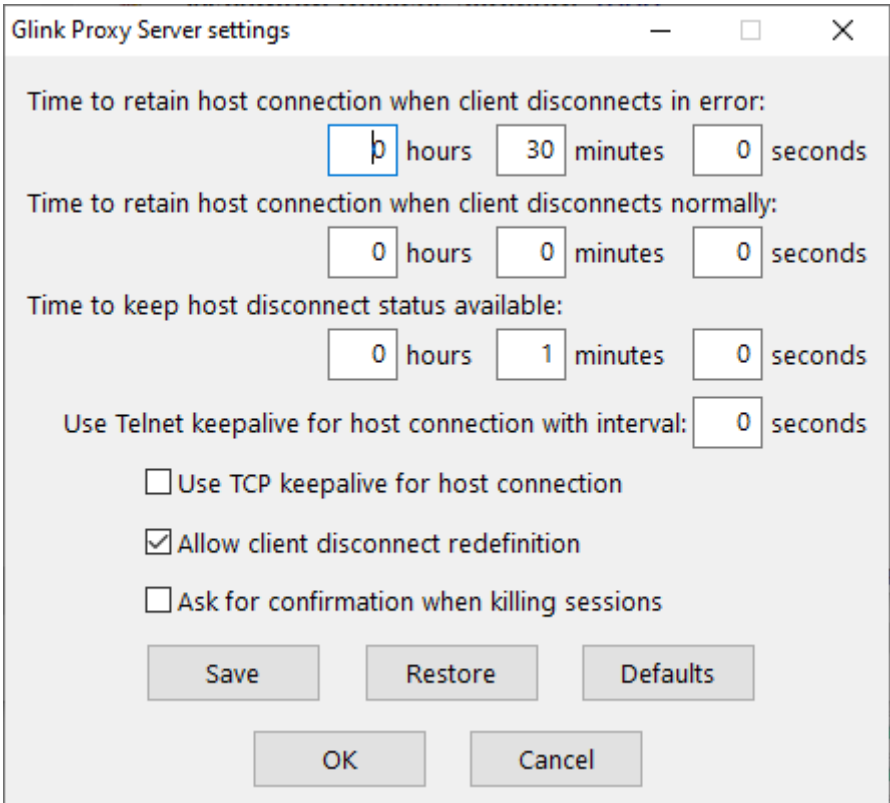
You can either enter the supplied license information directly here or use the import function, where you can paste your copied license information exactly as it is directly into a free text multiline entry field. If the license information is correct, then the server will immediately be up and running.

# Settings

---

The default parameter settings in GlinkProxy will work fine for most users, keeping in mind that most of the parameters also can be set from the Glink client on a per session basis. The main parameters you need to consider is how long you would like GlinkProxy to retain disconnected sessions. The default is to retain sessions that are abnormally disconnected for 30 minutes and not to retain sessions that are normally disconnected by the user. You can change these parameters both in GlinkProxy settings and in the Glink client's Proxy server settings.

Click "Settings" on the menu bar to open the GlinkProxy settings menu.



In this menu you can configure:

- **Time to retain host connection when client disconnects in error.**

The server will preserve sessions to the host when the connection is terminated abnormally. This parameter may be used to specify a timeout (in seconds) after which the host connection will be closed (same as /ED command line parameter). Note that the Glink client may redefine this timeout if this has not been disabled (/ACR, /NCR or Allow client disconnect redefinition)

- **Time to retain host connection when client disconnects normally.**

This parameter specifies how a normal disconnect from the client should be processed. The default is zero, i.e., simply terminate the host connection immediately. Otherwise, the parameter tells the server to keep the connection active for the configured amount of time, allowing the client to reconnect until the timer expires (same as /ND command line parameter). Note that the Glink client may redefine this timeout if this has not been blocked (/ACR, /NCR or Allow client disconnect redefinition)

- **Time to keep host disconnect status available.**

This parameter specifies how long the server will retain host disconnect status (in seconds). The default value is 3600.

- **Use Telnet keepalive for host connection with interval.**

This parameter enables use of Telnet keepalives between GlinkProxy and the host. The default is not to use Telnet keepalives, but it can be very useful if the session is idle for long periods, and you want to avoid being disconnected by the host due to inactivity.

- **Use TCP keepalive for host connection.**

This parameter enables use of TCP keepalives between GlinkProxy and the host. The default is not to use TCP keepalives. The actual keepalive interval is a Windows system parameter.

## Settings

- **Allow client disconnect redefinition.**

This parameter allows redefinition of the /ND and /ED timeouts by the Glink client. This is the default, but you may use this parameter to override /NCR that might have been saved in Settings/Save.

- **Ask for confirmation when killing sessions.**

In the Manage sessions menu, you can kill selected sessions. When this option is enabled, the administrator must confirm the intention to kill the specific session.

- **Save**

Click to save modified parameter values

- **Restore**

Click to restore parameter values to the saved values

- **Defaults**

Click to set default parameter values

- **OK**

Click to save parameters and exit the settings menu

- **Cancel**

Click to cancel changes and exit the settings menu

## Command line parameters

The GlinkProxy application is provided as a standalone program *glinkproxy.exe*. Its behavior is controlled by parameters set and saved in the Settings menu inside the application, but you can also use the following command line parameters to override the saved parameters.

Parameter	Description	Comment
/ACR	Allow Client Redefine	This parameter allows redefinition of the /ND and /ED timeouts by the Glink client. This is the default, but you may use this parameter to override /NCR that might have been saved in Settings/Save.
/DLT nn	Disconnect List Timeout	This specifies how long the server will retain host disconnect status (in seconds). The default value is 3600.
/DEBUG	Debug	If this is specified, then a separate window will open to display debug information for server activity.
/ED nn	Error Disconnect timeout	The server will preserve sessions to the host when the connection is terminated abnormally or when the /ND parameter has kept the session in hold. The /ED parameter may be used to specify a timeout (in seconds) after which the host connection will be closed. Note that the Glink client may redefine this timeout if this has not been disabled by the /NCR command line parameter.
/EK	Enter Key	When this option is specified, the licensing form will be displayed to let you inspect or modify the licensing data. The server will terminate immediately after exiting the dialog
/KT nn	Telnet Keepalive	This parameter enables sending of Telnet keepalive packets every nn seconds from GlinkProxy to the host. The default is not to send Telnet keepalive packets, but it can be very useful if the session is idle for long periods, and you want to avoid being disconnected by the host due to inactivity.

## Settings

Parameter	Description	Comment
/KA	TCP Keepalive	This enables use of TCP keepalives between GlinkProxy and the host. The default is not to use TCP keepalives. The actual keepalive interval is a Windows system parameter.
/MI	Monitor interval	This defines how often GlinkProxy should query the main server when running in monitor mode (in seconds). The default value is 2 seconds.
/MON	Monitor	Run GlinkProxy to monitor the actual server. Default is to monitor on the local machine, but /PS can be used to monitor from a remote machine. Note that /PW can be used to apply password security for this option.
/NCR	No Client Redefine	This parameter prevents redefinition of the /ND and /ED timeouts by the Glink client.
/ND nn	Normal Disconnect timeout	This specifies how a normal disconnect from the client should be processed. The default is zero, i.e., simply terminate the host connection immediately. Otherwise, the parameter tells the server to keep the connection active for that number of seconds, allowing the client to reconnect until the timer expires. Note that the Glink client may redefine this timeout if this has not been blocked by the /NCR command line parameter.
/NP	No password	Don't require password for remote access (can be used to remove a password specified interactively).
/PORT nn	Port number	The server listens by default on port number 30855 (0x7887). This parameter may be used to override this with a port number of your choice.
/PS xxxxx	Server address	This specifies the address of the server when you are using GlinkProxy to monitor the actual server with the /MON option.
/PW xxxxx	Password	Defines a password for use with GlinkProxy running as a monitor or for the ProxyLog program.
/Q		Run in quiet mode with no unsolicited messages from the server.

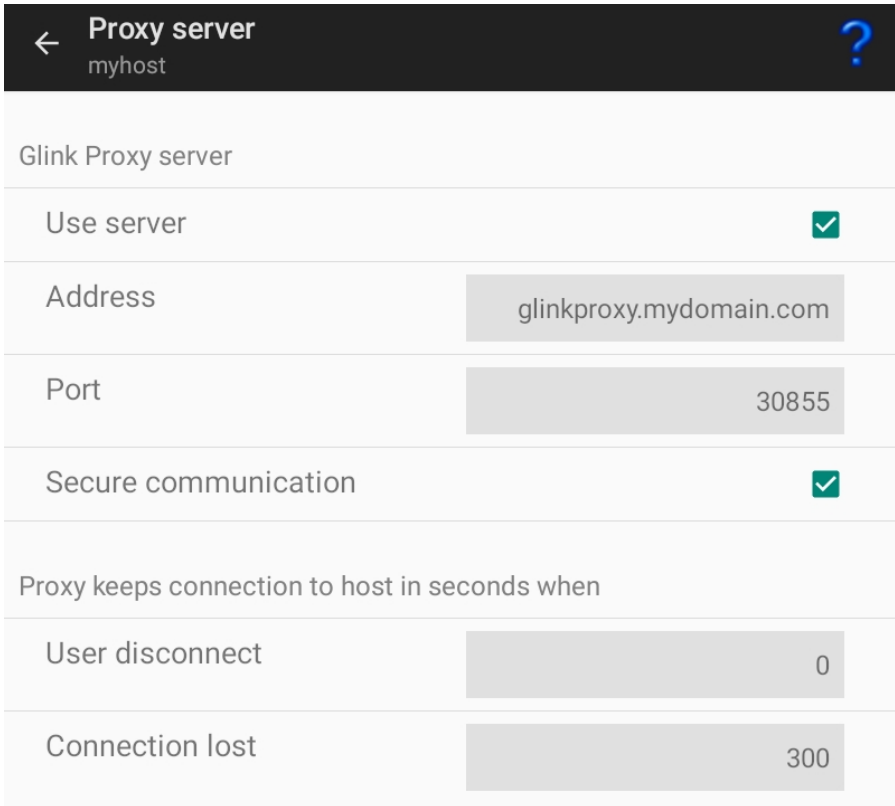


Parameter	Description	Comment
/VERBOSE	Verbose debug	Supplied as well as the /DEBUG parameter this tells the server to display all data sent and received (default is to display only the first 16 bytes of each block).

The Settings/Save option available while the server is running will save many of these settings and you will then only need to use the above to override the saved values. This applies to /ACR, /DLT, /ED, /KA, /NCR and /ND.

# Glink for Android and iOS Proxy Server Settings

Glink 5250, Glink 3270, Glink VT and Glink for Android and iOS can communicate with TN5250, TN3270, Telnet, TNVIP and Ggate protocols via GlinkProxy to host systems. This is enabled in the **Menu** → **Settings** → **Proxy server** menu:



Parameter	Value	Description
Use server	on/OFF	Check this option to enable communication thru a GlinkProxy server
Address	ip-addr	Configure the address of the server running GlinkProxy (not the application host)

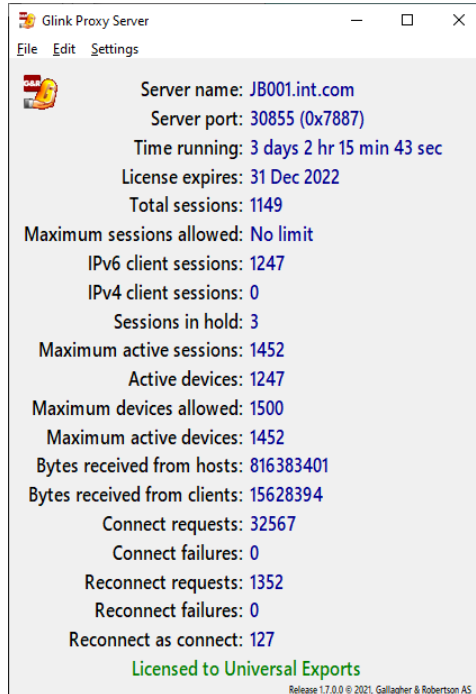
Parameter	Value	Description
Port	nn	Configure the port number GlinkProxy is listening to. The default is 30855
Secure communication		Specifies that the data flow between the Glink client and the Glink Proxy server should be encrypted
User disconnect	nn	Specifies the number of seconds the proxy server should keep the connection to the host application after a user initiated disconnect. The default value is 0, which means that the connection to the host is disconnected immediately. This is what happens without a proxy server. Set this parameter to a non-zero value if you want that the proxy server should keep the session to the host the configured number of seconds after a user initiated disconnect
Connection lost	nn	Specifies the number of seconds the proxy server should keep the connection to the host application after the connection to Glink is dropped with an error, for example if the device goes idle, enter power-saving mode, or move out of Wi-Fi range. When the device is woken up or the network connection is reestablished, the user can reconnect and resume the session with the host application.

When Glink is configured to use a proxy server, it will send server address and keepalive settings to the proxy server. The proxy server will use these parameters to connect to the host application server and maintain the connection to it. Keepalive settings, user disconnect and connection lost settings from Glink will override settings in GlinkProxy if GlinkProxy is set up to allow Glink to change these parameters. For all communications, the proxy server is a transparent communication gateway between Glink and the host application.

# Using GlinkProxy

---

GlinkProxy runs as a desktop application and will show statistics of its activity in its main window. You will also find a menu line at the top.



## File menu

The *File menu* has the following choices:

- *Manage sessions*
- *Generate text report*
- *Generate Excel report*
- *Enter new license info*
- *Suspend/Resume logins to server*
- *Exit*

## Manage sessions

The *Manage sessions* screen provides a snapshot of the sessions up to the time you click this menu item. Click the *Refresh list* button to get an updated list of sessions. In Session selection you can choose if you want to see *All sessions*, *Connected sessions* or *Disconnected sessions*. You can also decide if you want to display by *Device* or *Session*.

If you want to kill one or more sessions, make a session selection and click the *Kill selected session(s)* button.

Glink Proxy Server session list

Session selection

All sessions  Connected sessions  Disconnected sessions

Display by

Device  Session

Session list

UnivExpo01	1f75a77d3c91c9f2DE	{4E2F689D-B13A-44BA-81DB-5856901B9556}	(conn)
UnivExpo01	20710386683a6ba0HE	{24C077AF-F526-4776-87EB-761D5F6FD47C}	(conn)
UnivExpo01	20af881c0d838c1091	{08FE8526-041A-4C4A-8DED-8FED6CD74923}	(conn)
UnivExpo01	20e1278a1c1c1f34XR	{763FEC12-416E-4FB3-B9FE-3D20132562FE}	(conn)
UnivExpo01	24839a082642642a7M	{0F1F510C-0C09-40A6-8DF8-531CEB0EAEFE}	(conn)
UnivExpo01	24d1493c0cba6ead48	{5C8DC6CB-104F-446E-A0BC-EE53309E01CD}	(conn)
UnivExpo01	24d1493c0cba6ead48	{7A1B2297-E30D-4A5D-8A68-38A90788AE44}	(disc)
UnivExpo01	25cc2d286f87a2c95W	{449D6D30-E9F5-4C49-B56E-53E55EBECC2D}	(conn)
UnivExpo01	2609e02545f3e83d85	{A856219C-C7E7-4963-A08A-6F4DAB8A1938}	(conn)
UnivExpo01	264a742c35bc055d7Z	{22B00DF15-62FD-4A60-8267-371823AC7897}	(conn)
UnivExpo01	267b1a1a2badfb030S	{38373E94-7598-46CA-B775-049121C621E1}	(conn)
UnivExpo01	26d6f75b209a02c9P0	{1F912753-9D4C-425D-AC19-911ADF3A4813}	(conn)
UnivExpo01	278b7b9a634a2485CA	{500C3E16-2E8D-40FF-848B-36B30309F333}	(conn)
UnivExpo01	278b7b9a634a2485CA	{B7ADCE5A-7F5B-4C8D-8669-324F783B7AA8}	(conn)
UnivExpo01	288480772d9130d670	{EB878647-EE40-42E1-9415-1F7F2C2CA9C0}	(conn)
UnivExpo01	28abfec16fc6f1499Y	{3A002C65-51C2-44DB-819A-0E1ACE3C641B}	(conn)
UnivExpo01	28c615461906825eWY	{31127D89-C16D-4E6D-8E50-AD3172E7788F}	(conn)
UnivExpo01	29ade92806df3e49X5	{5ADEB354-110A-4D62-A394-A2E9164A998C}	(conn)

Kill selected session(s)

Done Refresh list

## Using GlinkProxy

# Generate text report

If you click this menu item, GlinkProxy will generate a status report in text format and show it in Notepad.

```
Glink Proxy Server status report
Sess# Status Sess IPAddr ID Token Host name Port Conn Disc Reco send recv save nrec
0 run UnivExp001 192.168.2.45:10324 6c3189a2380269acWR {88F98222-3E69-47EF-AB3E-9F68570BF652} UNIVEXPO01 23 08:45 69709 1007 8192 0
1 run UnivExp001 192.168.2.225:15904 51b4b0d0513a2794T6 {85C1EEF5-68C0-4717-84DE-7F1D08AC1647} UNIVEXPO01 23 11:37 31631 790 12288 0
2 run UnivExp001 192.168.1.129:5023 6b0ec1501e178ceKJ {D102111D-AE89-48FE-BDFA-9ED98219AE7F} UNIVEXPO01 23 10:57 12:43 12:44 8403 310 8192 1
3 run UnivExp001 192.168.1.213:7627 49742b2b064f03d7MV {629A4416-A378-48FD-986A-2C24E406CF3C} UNIVEXPO01 23 08:49 11366 980 12288 0
4 run UnivExp001 192.168.1.206:7410 441c6de4315d0777CK {A88D4263-F5F6-49AC-B09F-903E8EBF9958} UNIVEXPO01 23 10:48 85940 710 8192 0
5 run UnivExp001 192.168.1.76:3380 60149e86595762206H {021C6C7C-CF7A-4F80-B19E-D97F518EC1F9} UNIVEXPO01 23 11:19 12038 944 8192 0
6 run UnivExp001 192.168.2.155:13734 39b6a17e18c72f7XZ {481B840F-EF38-408C-85F9-91483AC31784} UNIVEXPO01 23 08:10 57384 1442 8192 0
7 run UnivExp001 192.168.1.165:6139 59e95b15352d9b69W8 {59508C19-BCD7-4A6B-8BF0-9205F4AC8664} UNIVEXPO01 23 10:11 68402 1626 10240 0
8 run UnivExp001 192.168.2.40:10169 3a460599150b20feM7 {F6881170-9E6A-4796-B208-2235BA92FE0F} UNIVEXPO01 23 09:56 41153 1130 8192 0
9 run UnivExp001 192.168.2.233:16152 4446dc154cd8799H7 {367611C5-DF56-4810-9EEE-23BD7A2943DC} UNIVEXPO01 23 09:24 11003 879 16384 0
10 run UnivExp001 192.168.2.38:10107 62bbeca50426c3393B {E13A0856-8EAD-4777-8AAE-CSA2EEFFFF9} UNIVEXPO01 23 09:51 13:43 13:43 83167 165 4096 1
```

# Generate Excel report

If you click this menu item, GlinkProxy will generate a status report in Excel format and show it in Excel.

Glink Proxy Server status report														
Sess#	Status	Sess	IPAddr	ID	Token	Host name	Port	conn	disc	reco	send	recv	save	nrec
0	run	UnivExp001	192.168.2.45:10324	6c3189a2380269acWR	{88F98222-3E69-47EF-AB3E-9F68570BF652}	UNIVEXPO01	23	08:45			69709	1007	8192	0
1	run	UnivExp001	192.168.2.225:15904	51b4b0d0513a2794T6	{85C1EEF5-68C0-4717-84DE-7F1D08AC1647}	UNIVEXPO01	23	11:37			31631	790	12288	0
2	run	UnivExp001	192.168.1.129:5023	6b0ec1501e178ceKJ	{D102111D-AE89-48FE-BDFA-9ED98219AE7F}	UNIVEXPO01	23	10:57	12:43	12:44	8403	310	8192	1
3	run	UnivExp001	192.168.1.213:7627	49742b2b064f03d7MV	{629A4416-A378-48FD-986A-2C24E406CF3C}	UNIVEXPO01	23	08:49			11366	980	12288	0
4	run	UnivExp001	192.168.1.206:7410	441c6de4315d0777CK	{A88D4263-F5F6-49AC-B09F-903E8EBF9958}	UNIVEXPO01	23	10:48			85940	710	8192	0
5	run	UnivExp001	192.168.1.76:3380	60149e86595762206H	{021C6C7C-CF7A-4F80-B19E-D97F518EC1F9}	UNIVEXPO01	23	11:19			12038	944	8192	0
6	run	UnivExp001	192.168.2.155:13734	39b6a17e18c72f7XZ	{481B840F-EF38-408C-85F9-91483AC31784}	UNIVEXPO01	23	08:10			57384	1442	8192	0
7	run	UnivExp001	192.168.1.165:6139	59e95b15352d9b69W8	{59508C19-BCD7-4A6B-8BF0-9205F4AC8664}	UNIVEXPO01	23	10:11			68402	1626	10240	0
8	run	UnivExp001	192.168.2.40:10169	3a460599150b20feM7	{F6881170-9E6A-4796-B208-2235BA92FE0F}	UNIVEXPO01	23	09:56			41153	1130	8192	0
9	run	UnivExp001	192.168.2.233:16152	4446dc154cd8799H7	{367611C5-DF56-4810-9EEE-23BD7A2943DC}	UNIVEXPO01	23	09:24			11003	879	16384	0
10	run	UnivExp001	192.168.2.38:10107	62bbeca50426c3393B	{E13A0856-8EAD-4777-8AAE-CSA2EEFFFF9}	UNIVEXPO01	23	09:51	13:43	13:43	83167	165	4096	1

# Enter new license info

If you click this menu item, GlinkProxy will open the license info screen and allow you to update the license information. Note that if you are using a text license file `glinkproxy.license.txt` then you can simply replace that file with the new information. The server checks for updates once every 60 seconds.

# Suspend/resume logins to server

If you click this menu item, GlinkProxy will either suspend or resume accepting new connections from Glink clients. Clients already connected will not be affected.

# Exit

If you click this menu item, GlinkProxy will terminate after you have confirmed that this is what you want to do.

## ***Edit menu***

The *Edit menu* has the following choices:

- *Set/Change password.* This choice will allow you to define a password that will be required when monitoring GlinkProxy activity with the /MON parameter. This option is only available when using the main server or when monitoring on the same machine.
- *Reset global counters.* This choice will reset all the system-wide counters.
- *Always on top.* When this option is enabled, the GlinkProxy application will always appear on top of other applications on the desktop.

## ***Settings menu***

The *Settings menu* is described in the Settings section.

# ***GlinkProxy in background***

---

You should always set up and test GlinkProxy as a normal foreground program to start with and ensure that it's running smoothly. Once this has been done however you may prefer to set things up so that GlinkProxy will start up automatically whenever the system is restarted and run unobtrusively in the background. You can do this using the Task Scheduler. To open the task scheduler press `Windows+R` keys and enter `taskschd.msc` in the run window. Then click on the 'create task' option in the righthand frame of the window that opens (you don't actually need to use the full version and can just use the 'create basic task' button, but the below will allow you to select more options if you need them)..

## ***General tab***

Here you enter a name that will be used to refer to the task, and optionally a descriptive text. Also select the option to run whether a user is logged in or not. We recommend that you configure the task using an account with administrator privileges, and in any case an account which has permission to log in as a batch task in local group policies.

## ***Triggers tab***

Press the 'New' button, and in the box that opens select the 'at startup' option in the 'begin task' you see in the top line.

## ***Actions tab***

Press the 'New' button and enter (or browse to) the location for the GlinkProxy executable in the 'program' text box. If you need additional parameters these may be entered in the text box provided for this.

You are of course free to set up any additional configuration parameters as you wish but the above should be sufficient for basic usage.

Exit with 'OK' and you should be good to go.



## ***Monitoring background GlinkProxy***

If you're running GlinkProxy in the background as described above, then you can run another copy in foreground to keep track of activity using the /MON command line parameter. This can be done either on the same machine or remotely using the /PS (and maybe /PORT) command line parameter.

If no password has been defined, either with the /PW command line parameter on the main server or interactively in the main server's edit menu, then the monitor may be run from any machine in the network. When a password has been defined then GlinkProxy (also ProxyLog, see separate section) will require this password before starting.

The /MI command line parameter defines the interval for collecting status from the main server, where the default is 2 seconds.

Most menu options available on the main server are removed when running as a monitor. Exceptions are 'exit' and 'always on top'. The option to change passwords is also available if you are running on the same machine as the main server.

# ProxyLog

ProxyLog is a standalone program that can be used to provide a continuous status report for GlinkProxy. If a password has been defined for GlinkProxy then this must be provided before ProxyLog will start, otherwise it will go straight to the log display:

The screenshot shows a window titled "GlinkProxy log utility" with a menu bar (File, Settings, Help) and a status bar (Release 17.0.0 © 2021, Gallagher & Robertson AS). The main area displays configuration details and a table of log entries.

Configuration details:

- Server name: JB001.int.com
- Server port: 30855 (0x7887)
- License expires: 31 Dec 2022
- Maximum sessions allowed: No limit
- Maximum devices allowed: 1500

Log entries table:

Time	Runtime	Sess	IPv6	Hold	MaxSess	Dev	MaxDev	Host	Client	Conn	Reconn	R	as	C
11:43:26	5d 04:14:09	1199	1199	2	1267	1199	1267	1448483	55037	1632	17	6		6
11:43:46	5d 04:14:29	1197	1197	2	1267	1197	1267	1449901	55094	1634	17	6		6
11:44:06	5d 04:14:49	1197	1197	2	1267	1197	1267	1451131	55187	1634	17	6		6
11:44:26	5d 04:15:09	1197	1197	2	1267	1197	1267	1452795	55247	1634	17	6		6
11:44:46	5d 04:15:29	1197	1197	2	1267	1197	1267	1454787	55305	1634	17	6		6
11:45:06	5d 04:15:49	1194	1194	2	1267	1194	1267	1456741	55360	1637	17	6		6
11:45:26	5d 04:16:09	1196	1196	3	1267	1196	1267	1457773	55439	1639	17	6		6
11:45:46	5d 04:16:29	1199	1199	3	1267	1199	1267	1459772	55527	1642	17	6		6
11:46:06	5d 04:16:49	1202	1202	4	1267	1202	1267	1461553	55577	1645	17	6		6
11:46:26	5d 04:17:09	1201	1201	4	1267	1201	1267	1462813	55669	1646	17	6		6
11:46:46	5d 04:17:29	1198	1198	3	1267	1198	1267	1464301	55753	1649	18	6		6
11:47:06	5d 04:17:49	1197	1197	3	1267	1197	1267	1465642	55834	1650	18	6		6
11:47:26	5d 04:18:09	1200	1200	2	1267	1200	1267	1466666	55914	1653	19	6		6
11:47:46	5d 04:18:29	1200	1200	2	1267	1200	1267	1468301	56011	1653	19	6		6
11:48:06	5d 04:18:49	1200	1200	3	1267	1200	1267	1469499	56082	1653	19	6		6
11:48:26	5d 04:19:09	1202	1202	3	1267	1202	1267	1471299	56155	1655	19	6		6
11:48:46	5d 04:19:29	1203	1203	2	1267	1203	1267	1473086	56248	1656	20	6		6
11:49:06	5d 04:19:49	1200	1200	2	1267	1200	1267	1474968	56300	1659	20	6		6
11:49:26	5d 04:20:09	1203	1203	2	1267	1203	1267	1476689	56399	1662	20	6		6
11:49:46	5d 04:20:29	1201	1201	2	1267	1201	1267	1477878	56449	1664	20	6		6
11:50:06	5d 04:20:49	1201	1201	2	1267	1201	1267	1479026	56538	1664	20	6		6

Data here apart from the first timestamp column corresponds with the same data as shown on the main GlinkProxy display. The file menu provides options to save the contents of the log to file, either as aligned text columns as you see in the display or using tabs to separate the columns in a format suitable for import into a spreadsheet. There is also an option for clearing the contents of the log (this may be useful if you haven't defined a maximum size for the log and don't want to run into memory issues).

Several execution options may be set either interactively through the settings menu item or as options in the ProxyLog command line. We'll describe these in connection with the command line first, this should make the settings dialog self-explanatory. Note that although options specified interactively are saved between sessions, these will be overridden by command line parameters when these are used.

Param	Description	Comment
/DD	Display duplicate lines	Display identical lines (apart from the time stamp and run time values) on separate lines in the log. This is the default.
/IZ	Include zero columns	Include columns consisting only of zero values. The default is to suppress these.
/LI nn	Log interval	How often (in seconds) to display a new line in the log. The default is 20 seconds
/ML nn	Maximum log lines	Specifies the maximum number of lines to display in the log. A value of zero says that no limit applies. The default is 500000 lines.
/ND	No duplicate lines	Don't display lines that are identical except for time stamp and runtime values. This the default.
/NZ	No zero columns	Suppress columns that consist only of zero values. This is the default.
/PORT nn	GlinkProxy port	Specifies the port number used by GlinkProxy when GlinkProxy has been set up with a non-standard port. The default is the standard 30855 (0x7887).
/PS xx	GlinkProxy address	This is used when you are logging activity on a different machine. The default is 'localhost' i.e., log for the same machine as ProxyLog.

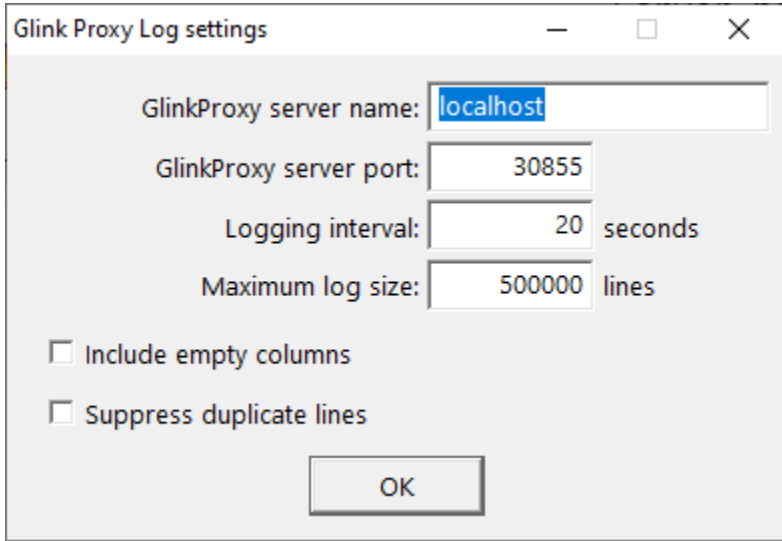
A summary of these options is available interactively from the help menu item.

Note that if you run with no limit to the log size then the program will delete the earliest lines in the log when it detects that Windows is no longer able to save data there (because there is no more available memory or because internal Windows limitations apply). This is not recommended as it can cause excessive use both of CPU and memory. The default values of 20 second log intervals and 500000 lines allow for a log period of 115 days with a memory use of less than 100Mb.

The log itself is a standard text window which means that you are free to delete sections or enter comments there as you wish. This is of course difficult to do while the log is being updated in real time and for that reason a pause option is provided in the file menu so that you can suspend logging while editing.

## ProxyLog

The settings dialog looks like this and allows you to set any of the above options interactively:



The screenshot shows a window titled "Glink Proxy Log settings" with standard window controls (minimize, maximize, close). The settings are as follows:

- GlinkProxy server name: localhost
- GlinkProxy server port: 30855
- Logging interval: 20 seconds
- Maximum log size: 500000 lines
- Include empty columns
- Suppress duplicate lines
- OK button

The values shown here are the default values supplied with the program.