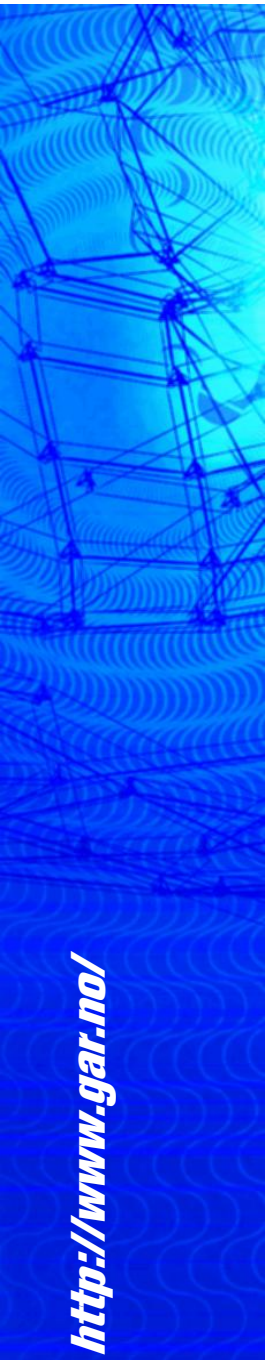


GLINK™

Glink 5250 for iOS User Guide

Glink 5250 for iOS, version 2.5.6

GALLAGHER & ROBERTSON AS, Grini Næringspark 3, N-1361 Østerås, Norway
Tel: +47 23357800
www: https://www.gar.no/
e-mail: support@gar.no

Contents

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 a Glink for iOS application 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.

Privacy policy

Glink does not collect, store, or transmit information about its users, nor usage of the application. The applications access the camera only when the user activates barcode scanning with the built-in camera. Storage is only accessed when the user imports/ exports a configuration, print, or send debug-trace, scroll back-data, screen-data with e-mail. The applications also access Bluetooth settings and pair with Bluetooth devices like keyboards and barcode scanners.

Introduction

Glink 5250 for iPad/iPhone/iPod touch is an iOS-version of Gallagher & Robertson's best-selling terminal emulation program, Glink Professional Edition for Microsoft Windows. Glink for iPad/iPhone runs on Apple iPad, iPhone and Apple Mac devices with Apple M1/M2 chip running Apple's iOS operating system, providing access to a wide range of host systems.

Glink 5250 is used to access applications running on IBM host systems. Glink 5250 has emulations for the IBM 5250 terminals.

Glink brings you a high quality and proven emulator on your iPad, iPhone or Mac with M1/M2 chip devices.

Features

- IBM5250 terminal emulation, all screen sizes
- TN5250 communication to host
- SSL/TLS support for secure communication
- SSH tunneling for Telnet protocol
- Multiple concurrent host sessions
- Support for program texts in German, French, Portuguese and Norwegian
- Configurable multiline toolbar with function keys and macros
- Configurable hotspots for function keys, option numbers and URLs
- Macro recording for auto-login and for assignment to toolbar or key
- Pop-up standard keyboard with support of international characters
- Tab/shift-Tab and arrow-keys supported on external Bluetooth keyboard
- Colors can be customized
- Multiple host configurations supported
- Export and import of configurations
- Supports Managed App Configuration, which allows users to configure Glink remotely through Mobile Device Management
- Optional password protected configurations
- Optional auto-connect at startup
- Optional use of double-tap as Enter/Transmit
- IBM5250 emulation supports Double Byte Character Sets (DBCS) like Chinese, Japanese and Korean
- Configurable scrollback buffer contains history of your host session

- Print or e-mail host print data
- Print or e-mail terminal emulation content or scrollback buffer content
- Zoom and scroll
- Blinking attribute supported
- Blinking cursor supported
- Two finger swipe gesture to move cursor
- Tap and hold to open http:// or https:// URL in internal or external browser
- Tap and hold to open Mail with e-mail address on screen
- Barcode scanning with built-in camera supported
- Linea Pro and Infinea Tab barcode scanner/magnetic card reader support
- Socket Mobile barcode scanners connected in iOS mode (Bluetooth Accessory Protocol)
- Other Bluetooth barcode scanners like Opticon OPN2002 connected as external keyboard

Support

You can contact Gallagher & Robertson (G&R) technical support by sending an e-mail to support@gar.no or by using our contact form on our website.

Please include product name, version number and information about the device you are running the product on in addition to your question or problem description. It may also be useful for us to have a debug trace of your complete host session up to the problem. You can send an e-mail with the debug-content as an attachment directly from the debug screen.

How to purchase/order a Glink license

Glink for iOS licenses can be purchased online on Apple App Store or in Apple Business Manager (ABM). For large quantities, contact us at gar@gar.no for a quote for private Glink Enterprise applications in ABM. Glink for Android can be purchased on the Google Play Store and G&R online web shop.

Delivery and Installation

If you purchase Glink for iOS on Apple App Store, installation and licensing is handled by the Apples App Store app on your iOS device or in the Apple Business Manager store. You must be logged in to Apple App Store with the same account as you purchased the Glink app with

Setup

If you are installing Glink for iOS for the first time, you have no sessions defined. Tap NEW to define a new session. Choose a session name, set the host address and the other basic options before tapping SAVE in the upper right corner. To configure other options tap SETTINGS, to connect to the configured host tap CONNECT. When in the Glink main screen, tap the menu icon in the upper right corner and then Help to learn more about the product. Help is also available from the menu icon in all settings screens, explaining how to use and set all options.

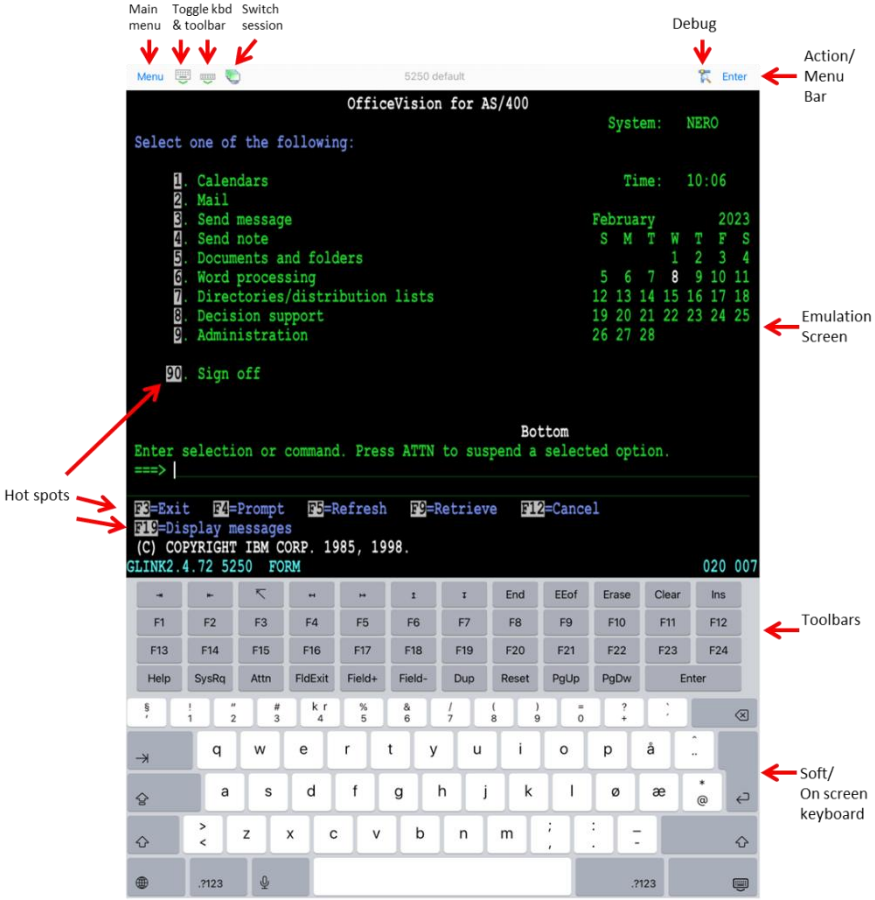
You will also find a description of all available options in this document.

The Glink emulator screen

Action bar

You will find the Glink action bar at the top row of the Glink screen. Here you will find the status of the current session (*Connected/Disconnected*), the *name* of the current session, a *Disconnect icon* that will disconnect the session if tapped, a *Toolbar toggle icon* that will bring the toolbar up/down when tapped, *a Keyboard toggle* that will bring the on-screen keyboard up/down when tapped, an (optional) *ENTER* button that will send Enter to the host when tapped, an (optional) *Debug icon* that will show the content of the debug buffer when tapped, a *Print icon* that will be displayed if Glink has received print and that will show the received print data if tapped. To the very right, you will find the *Menu icon* that will bring up the main menu when tapped. In **Menu -> Settings -> Screen options** you can configure *Use double tap* to toggle the display of the Action bar. The Action bar can initially be off or on and toggled with a double tap on the screen. This way you can free up more space to the Emulation screen.

Emulation screen



The emulation screen will show the data sent from the host and typed/scanned by the user. In **Menu -> Settings -> Screen options** you can customize the look of the emulation screen. The most important options are the *Font size*, *Show toolbar*, *Limit screen view (x,y)* and the options for *Hotspots*.

The Font size can be set to a specific size between 6 and 36, but it can also be set to Auto or Fit screen. If you have a large display, you probably want to set it to Fit screen. With this setting Glink will select the best font size and stretch/squeeze it to fill the entire screen. If you select Auto, Glink will normally display all rows in

portrait mode and all columns in landscape mode, the rest of the host screen can be dragged into view by tap-and-drag left/right/up/down on the screen.

Show toolbar can be set to Auto, Mulitiline, Single-line, Off, Vertical and Horizontal. In Auto mode Glink will switch between Single-line and Multiline, depending on the available space.

Limit screen view (x,y) is very useful if your host application only use the upper left part of the screen, for example 20 columns and 10 rows. Then you would set this parameter to 20,10 and maybe combine it with Font size Fit Screen.

In **Menu -> Settings -> Screen colors** you set the background color, foreground (text) color and you can adjust the colors themselves.

Toolbars

The toolbars are fully configurable. The toolbar is scrollable horizontally and you can have as many rows/bars and buttons as you want. In Multiline mode all rows are shown, while in Single-line mode only one row is shown at the time, but you can toggle between the different toolbars using the toggle-icon on the very left on the toolbar. You can also use the Toolbar toggle icon on the action bar to show/hide the toolbar. In Menu -> Settings -> Toolbar setup you can add, modify, remove and move (remove/paste) buttons and add/remove toolbars (rows) and adjust the button size.

Soft/on-screen keyboard

Glink can use any standard IOS keyboard available on the device. This means that you can switch between keyboards for different languages, default IOS keyboard or other keyboards.

Physical keys and keyboards

Glink supports physical keys on the device itself and external keyboards connected with USB or Bluetooth. All keys can be mapped to terminal functions and macros in Menu -> Settings -> Keyboard ->

Getting started

Create a new session

Glink always enters the *Sessions* screen at startup. Tap the *New configuration* button to define a configuration for your host.

Give your new configuration a name and type the IP address of your host system. The IP address may be a numeric address of the form 129.1.1.150, or a symbolic name (such as www.gar.no). If you need to connect to a port other than the default, this may be added to the end of the address, using a colon (:) to separate it from the rest of the address. For example, to connect to port 1311 you should specify 129.1.1.150:1311 or *www.gar.no:1311*.

If you are using the multi-emulation version of Glink, you can also choose terminal emulation and host communication protocol for the configuration in this screen. Tap *Save* when you are done.

Repeat the process to configure more host systems. For IBM and VT hosts you may now be ready to go, and if you select the session in the sessions screen a connection attempt will be made. For Bull host systems and some IBM hosts you need to configure Ggate/TNVIP/TN3270/TN5250 protocol options before you can connect to your host system. Select the configuration and tap *Menu* > *Settings* to enter directly into the configuration menus. If you try to *Connect* to the selected configuration and the connection fails, then you must go to *Menu* > *Settings* to correct or complete the connection parameters. This is also the place to go if you need to modify the IP address of your host system.

Start a session

Tap *Menu* > *Sessions* to see the list of available configurations. Tap the name of a configuration to select it and connect. Glink displays the main screen and connects to the selected host. If a Connect macro is defined for this session, it will be executed.

The session menu list is displayed when Glink is started. In the *General options* in the Action bar drop down menu in the main screen you can configure Glink to auto connect to the first session in the list instead.

To run multiple sessions, select *New session* at the bottom of the Sessions screen under the *SESSIONS* STARTED label. If more than one session is configured, select the session to start.

Switching session

If you have started more than one session, the session switch icon (multiple green screens) is displayed at the top bar, next to the keyboard icon. Tap this icon to see a list of active sessions. The current session has a check mark. The icon to the left of the name of the session shows the connection state, green for connected and red for disconnected. Tap a session name to switch to it.

You can also switch session by tapping a name in the Sessions started list in Menu-> Sessions screen.

Zoom and font size

Use two fingers to zoom in and out and one finger to scroll/move the screen. In Menu-> Settings-> Screen options you can change the initial Font size and Font style, Cursor type and configure 3D effect for input fields.

Text size

The default value for a tablet device is to adjust the text size to match the screen size. To do that, the characters are stretched or squeezed.

The default value for a smaller device (phone) is to select a text size (font size) that is readable and, in most cases, suitable for the screen size.

Use zoom or scroll to see hidden parts of the display. The initial text size is set in *Menu->Settings->Screen options->Font size.*

Keyboard

Glink uses the standard on-screen iOS keyboard. The keyboard is activated by tapping the *keyboard* icon next to the *Menu* button or the main screen close to the cursor position or an input field. In the latter case the cursor will be positioned in the tapped field. Tap the *keyboard* icon next to the *Menu* button or main screen outside input fields or on a different line than the cursor is positioned, to remove the keyboard. The keyboard can be configured to always be up in *Menu* > *General options*.

External keyboard

When using an external keyboard, set the option Menu-> General options-> Keyboard up on. Glink will then be ready for keyboard input when connected to a host application (otherwise you have to tap at an input field first).

Glink support several keyboard shortcuts for function and control keys when using an external Bluetooth keyboard, see *Keyboard shortcuts* for a list.

Device buttons and external keyboard buttons can also be remapped, select Settings->Keyboard and then see *Keyboard mappings* button.

Keyboard shortcuts

The default shortcuts for external keyboard are listed below. Glink also supports user defined key mapping. The listed shortcuts can therefore be remapped.

Shortcuts for keyboards with function keys

For all emulations:

```
F1 to F12          : F1 to F12
```

For IBM emulations:

```
F13 to F24         : shift+F1 to shift+F12 or alt+F1 to alt+F12
```

Shortcuts for keyboards without function keys

For IBM 5250 emulations the following shortcuts are defined:

```
F1  to F10         : Alt+1 to Alt+0
F11 to F20         : Ctrl+1 to Ctrl+0
F21 to F24         : shift+Ctrl+1 to shift+Ctrl+4
```

Other shortcuts

```
Escape              : Escape
Tab                 : Tab
Backtab             : Shift/Tab
Home                : Alt+Cursor up
End field           : Alt+Cursor right
Arrow keys          : Cursor up/down/left/right
Connect             : Alt+C
Disconnect          : Alt+D
Break               : Alt+B
New/next window     : Alt+N
Show this page      : Alt+H
```

IBM 5250 shortcuts

```
Field+              : Alt+  +
Field-              : Alt+  -
FieldExit           : Ctrl+ +
Attn                : Esc
SysRq               : Ctrl+ Esc
PageUp              : Ctrl+Cursor Up
PageDown            : Ctrl+Cursor Down
```

Keyboard mapping

Glink is set up with a default keyboard mapping. You may override the default mapping or add a mapping for a hardware button (key) on the device itself or a key on an external keyboard.

The list box displays the keys mapped if any.

Press the key or button to map (i.e. Volume up button). Select the keyboard icon button to bring up the soft keyboard if need.

Once a key is pressed, a new row is added. Select the **Map** button to map the key to a function or macro.

If the key you want to map is the last one of two input keys, select **No** for mapping the first key and **Yes** for the second one.

If a macro is selected, select the **Macro** button to define the actual macro.

Select the **Remove** option from the drop-down list to remove a key mapping.

Toolbar

The toolbar can be configured to show a single-line toolbar with a *select* button to step through the toolbar lines or as a multiline toolbar to show all the toolbar lines. Even when the multiline toolbar option is selected, Glink will in most cases use the single-line toolbar to save space when the keyboard is up. The default value for this option is to use multiline toolbar for a big screen (for example tablet) and single-line for a small screen (for example phone).

The default toolbars differ from emulation to emulation, but in general there is one for cursor movements, one or two for function keys and one for other keys. All toolbars can be customized to your needs, and you can add macros to all of them with your own text on the buttons. The toolbar area becomes horizontally scrollable if there are more buttons defined than can be displayed on the screen. Go to *Menu > Settings > Toolbar setup* to customize your toolbar, or to *Menu > Settings > Screen options* to change the setting of the *Use multiline toolbar* option.

Hotspots

Glink can be configured to create dynamic push buttons for screen text that refer to function keys, number options and URLs.

For example, if *F1* is part of the screen text, it will be highlighted as a push button and the function F1 will be assigned to it and executed when tapped.

Likewise, if *1=Search* is part of the screen text, the number **1** will be highlighted. When tapped, this number is added to the current cursor position and optionally followed by the *Enter* function to transmit it.

Copy/Paste

Tap and hold to bring up a copy/paste popup menu. Tap and hold a word to select and copy a word, tap and hold the empty space area in front of the word to select and copy the rest of the line. Tap and hold an input field to paste to or copy from this field. To clear the clipboard, tap and hold an area of the screen where the rest of the line is empty.
In the Scrollback buffer, you can select and copy text in the same way as you for example do in the Safari browser.
The paste function may also be added as a button to your toolbar.

Hyperlinks and mail addresses

If URLs or mail addresses are displayed, long-tap a hyperlink or mail address to bring up a popup menu. For URLs you may display the content in Glink or in a browser app. If a mail address is selected, you get the option to send a mail to the addressee.

Export and Import configurations

You can export your current set of configurations for back-up purposes or to share them with other users. The export function is an option in the action bar drop down menu. You will be asked if you want to include Connect macros before you are taken to the Send Mail function with your configurations attached to the message.

The configurations are sent as a file-attachment named config.xxx, where xxx is either glinki, glink5250, glink3270 or glinkvt; depending on the App you are using. These filename-extensions are associated with Glink when you install Glink. This filename-extension is associated with Glink. This means that if you receive a Glink configurations file as an e-mail attachment and export it to the files system, you can import it into Glink by tapping the file. Glink will be started and inform you that you have received a new set of Glink configuration files. If you tap the *Install* button to install it, you will get a new set of configurations that will replace your current configurations. All your current configurations will be overwritten and lost.

The export and import functions allow administrators to prepare and customize configurations for a large group of users and distribute the configurations by e-mail, web-page, dropbox, sky-drive and other utilities that can receive files on the IOS device.

MDM configuration support

If Glink is deployed by a mobile device management (MDM) system, the Glink configuration can be completely controlled by the MDM system, making Glink ready for use without any need for configuration by the end user. See the *Glink MDM configuration parameters* section.

Proxy server

If the network connection to your host is unstable and there is a risk of losing the connection to the host from time to time, you should consider running our *GlinkProxy application* on a server.

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 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 mobile computer is lost. When Glink re-connects, the session with the host application will resume as if the connection was not lost.

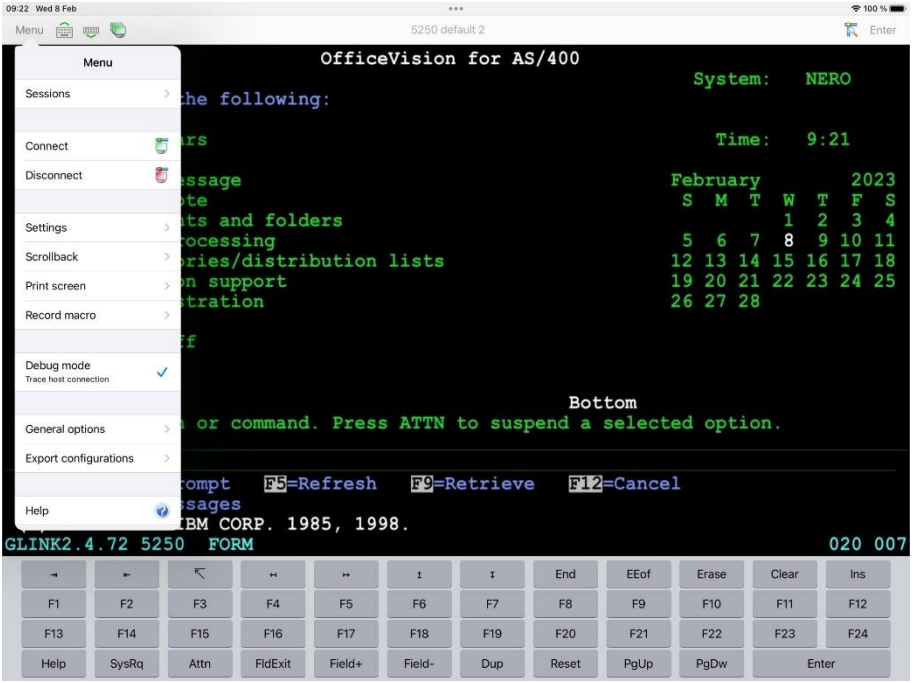
See the section about *The GlinkProxy Session Persistence Server*.

Gestures

In the main screen Glink recognizes the following gestures:

- *Tap*
  If allowed by the emulation, moves the cursor to the position (normally within an input field)
- *One finger drag*
  Moves the screen content if larger than the screen size
- *Two finger drag*
  Moves the cursor
- *Two finger pinch zoom*
  Zooms the Glink screen
- *Double tap*
  Resets zooming or optional does the send (Enter) function
- *Tap and hold*
  Shows copy/paste options

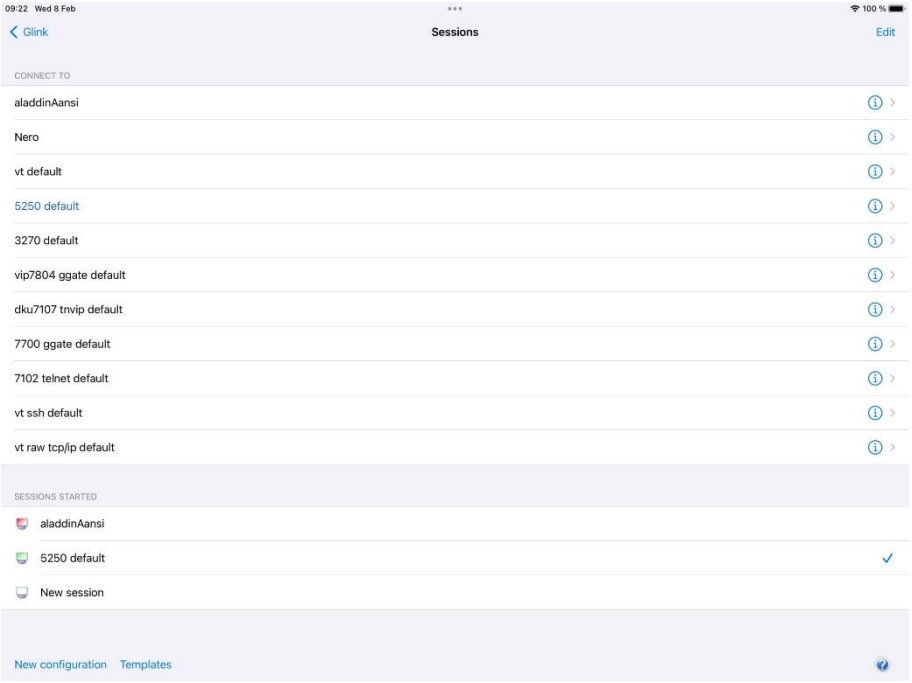
Menu



The menu in the main emulator screen has the following choices:

- Sessions
- Connect
- Disconnect
- Settings
- Scrollback
- Print screen
- Record macro
- Debug mode – trace host connection
- Print logging (VT, ANSI, VIP, DKU, 7700, 7102)
- General options
- Export configurations
- Help

Sessions



The Sessions screen allows you to change the current host session and add new host configurations. Most parameter settings are per session. The current configuration is displayed in blue. By tapping Settings in the Menu, you can change the configuration parameters for that session. By tapping a different session than the one that has a check mark, you can switch the main screen to this session.

Connect

Tap here to connect to the host specified in the current session configuration. If a Connect macro is defined for this session, it will be executed.

Disconnect

Tap here to disconnect the current session.

Settings

Tap here to modify configuration parameters for the current session. Below you see the Settings screen for a Glink 5250 session.

Scrollback

Tap here to enter the Scrollback buffer. Here you will see all the data that has scrolled off the top of your main screen and all the forms that you have accessed since you connected the current Glink session, provided that the size of your buffer is big enough. You configure the Scrollback length (in pages) in *Menu* > *Settings* > *General*. The content of the scrollback buffer can be printed or sent as an e-mail attachment and you can mark and copy selected text. If text is marked when you tap the *Mail* or *Print* button, only the marked text will be sent/printed. Tap the *Glink* button to return to the main screen.

Print screen

Tap here to print or e-mail the current screen content. It can be printed/e-mailed either as text or as a JPEG image. Tap the *Glink* button to return to the emulation window.

Record macro

Tap here to record a macro. Before you tap the *Start recording* button to start recording, you must choose whether you want to record a *Toolbar macro* that you will assign to a button on the toolbar (default) or if you want to record a *Connect macro* that will be executed every time you connect this session to the host, or if you want to record a *Keyboard macro* that you want to assign to a physical key.
The *Connect macro* is typically used to logon on to the host, start the desired host application and position the user in the desired startup form. *Toolbar macros* and *Keyboard macros* are typically defined for frequently used operations to avoid time consuming navigation and typing.

When recording a macro, you can use the *Pause* button next to the *Enter* button to specify that you want to wait for user input or that the execution of the macro should pause a number of milliseconds at this stage. This is useful if the host unlocks the keyboard and allows keyboard-/macro-input before it has completed its output to the terminal. User input can be collected at macro startup or at the stage where the input is required.

When you are at the end of the macro function you wanted to record, you go to *Menu* > *Record Macro* and assign a button text and tap *Save recording* or press a key that you want to map the recorded macro to. The macro will now be saved to the current toolbar or to the key you pressed. You can move it to a different toolbar from *Menu* > *Settings Toolbar setup*. If you made a typing error during the recording, you must tap *Cancel* in *Menu* > *Record Macro* to delete the recorded macro and go back to the main screen. *Toolbar macros* are removed when you remove their buttons from the toolbar. *Keyboard macros* are removed when you remove their keyboard mapping from *Menu* > *Settings* > *Keyboard mapping*. To remove a *Connect macro* you first must tap *Connect macro* in *Menu* > *Record Macro*, then tap *Remove connect macro*. If you want to define a completely new *Connect macro*, you now tap the *Start recording* button. If you don't tap *Remove connect macro* before you tap the *Start recording* button, you will extend the current *Connect macro*.

Pause the macro

At any point during the macro recording sequence, you can specify that the execution of the macro can be suspended for either user input or for a time interval.

Wait for user input

Header text
Specify the prompt value.

Ask user at macro start
The user is requested for input either at startup or at the stage where the input is required.

Password
If checked, the input field is set as a password entry field.

Input value
You can also specify an input value that is added to the current screen but not recorded. For example, if a password is requested, your password should not be recorded if recording is to continue.

Wait for a time interval

Specify the number of milliseconds the macro should be suspended at this stage.

Debug mode

Tap here to enable/disable *Debug mode*. In this mode all data sent to and from the host is written to a Debug screen. When enabled, you will see a *Debug* icon at the top right of the screen, next to the *Enter* button. Tap the *Debug* icon to go to the Debug screen. The content of the debug screen can be printed or sent as an e-mail attachment, and you can mark and copy selected text. If text is marked when you tap the *Mail* or *Print* button, only the marked text will be sent/printed. Tap the *Glink* button to return to the main screen.

Debug

When *Debug mode* is enabled all data sent to and from the host is written to this Debug screen, and you will see a *Debug* icon at the top right of the screen, next to the *Enter* button. Tap the *Debug* icon to go to the Debug screen. The content of the debug screen can be printed or sent as an e-mail attachment, and you can mark and

copy selected text. If text is marked when you tap the *Mail* or *Print* button, only the marked text will be sent/printed.

You enable the text-marking feature by holding a finger on the screen until the magnifier appears. When you release the finger, you will have a start- and end-marker that you can move to the desired positions.

Tap *Clear* to clear the debug screen.

Tap *Print* to Print the debug screen. If text is marked when you tap the *Print* button, only the marked text will be printed. If no text is marked, you are allowed to select a Page Range before you print. You must select a printer and how many copies to print before tapping the *Print* button.

Tap *Options* to set Print options, like *Font size* and *Page orientation*.

Tap *Mail* to Mail the debug screen. If text is marked when you tap the *Mail* button, only the marked text will be sent. The debug text is sent as a file-attachment named debug.txt.

Tap *Mail config* to Mail your set of configurations to yourself for back-up purposes or to someone else for sharing. The configurations are sent as a file-attachment named config.xxx, where xxx is either glinki, glink5250, glink3270 or glinkvt; depending on the App you are using. When you tap *Mail config*, you will be asked if you want to include Connect macros (if you have any) before you are taken to the Send Mail function with your configurations attached to the message.

Tap *Arrow-up* icon to position at the start of the Debug buffer.

Tap *Arrow-down* icon to position at the end of the Debug buffer.

Tap the *Glink* button to return to the main screen.

Print logging

Tap here to toggle this option. When enabled a check mark is shown and all sent and received data is logged/captured to the print buffer.

Not available for Glink5250 and Glink3270

General options

These options are common for all the sessions defined.

Never Auto-Lock when connected

When selected, this option disables the IOS "sleep" setting when Glink is the active (visible) app and is connected to the host application.

Toolbar - Click on keypress

Off	No click
Sound 1	Click sound 1
Sound 2	Click sound 2

Show iOS status bar

The iOS status bar is by default always displayed at the top of the screen. If you prefer to use this space for the emulation screen in Glink, you can turn off the iOS status bar so that it is never displayed or only displayed in Portrait mode.

This option has no effect for versions prior to iOS 7.

Keyboard up

Default
Glink will show the keyboard when you click at an input field and hide it when you click outside an input field.

On
This option will always show the keyboard. You can still hide the keyboard with the keyboard button located at the toolbar.

Off
Keyboard appearance will be controlled by the keyboard button only.

Key repeat

When selected, this option enables you to repeat a keystroke multiple times without pressing the key more than once (external/physical keyboard only).

Auto-connect session at startup

Normally Glink displays the Session screen at startup. Use this option if you want to skip the Session screen and instead connect to the first session defined in the Session screen.

Please note that you can reorder the session list by doing a long press at a entry in the session list, and then move the entry by dragging it when a rectangle is shown around the entry.

Password - Protect Settings

This option prevents users from changing or viewing the configurations. The password is required for the functions, *Settings*, *General options*, *New configuration* function and *Export configurations.*

Export configurations

Use this function to export your configurations by mail for back-up purpose or for sharing. The configurations are sent as a file-attachment named config.glinki You will be asked if you want to include Connect macros (if you have any) before you are taken to the Send Mail function with your configurations attached to the message. To import the configurations, send it to your device by mail and select the attachment.

Help

Tap here to enter the online help pages.

Connect icon (Green monitor)

Tap here to connect to the host specified in the current session configuration. If a Connect macro is defined for this session, it will be executed.

Keyboard icon

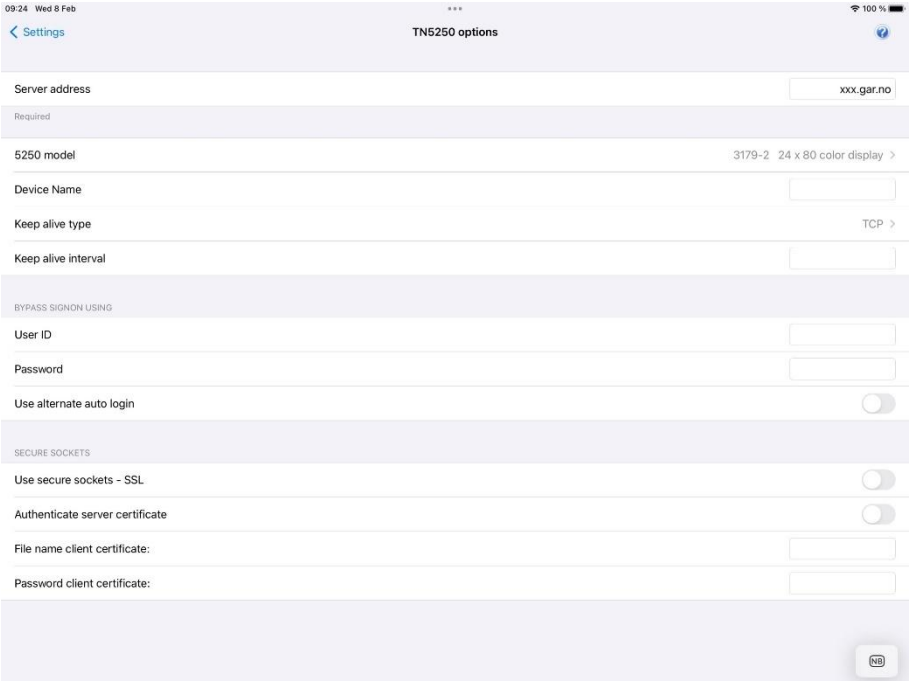
Tap here to bring the on-screen keyboard up/down.

Toolbar icon

Tap here to bring the on-screen toolbar up/down.

Settings - Communication

TN5250 options



TN5250 is a variation of the Telnet protocol and is used by the IBM5250 emulation to connect to IBM hosts over a TCP/IP network. You can either connect directly to the host if it's running a Telnet server, or via a TN5250 gateway.

Server address

The Server address is normally the TCP/IP address to the server/gateway you connect through to reach the host, for example a G&R Ggate server (using native Ggate

protocol, TNVIP, TN3270, TN5250 or Telnet), a Bull TNVIP server, an IBM TN3270 server, an IBM TN5250 server or the host itself.

The address may be a numeric address of the form 129.1.1.150, or a symbolic name (such as www.gar.no).

If you need to connect to a port other than the default, this may be added to the end of the address, using a colon (:) to separate it from the rest of the address. For example, to connect to port 1311 you should specify 129.1.1.150:1311 or www.gar.no:1311.

The default ports in Glink are:

G&R Ggate native protocol 30841
Telnet, TNVIP, TN3270, TN5250 23
Note that the Bull TNVIP servers on Unix/Linux or Windows generally use non-standard ports, normally 7323, and you must add this to the IP address.

IPv6 address

If an IPv6 address is specified and you have to specify a port number, use the following syntax:

[IPv6 address]:port

for example

[2001:db8:85a3:0:0:8a2e:370:7334]:673

5250 model

This option is provided so that you may select the appropriate 5250 model. This will be used to set the screen size, adjust the screen attribute handling, and to provide terminal identification to the host machine where appropriate. All of the models have screens with 24 rows of 80 columns, except the 3477-x models which have 27 rows of 132 columns:

```
5555-C01 is 24 x 80 DBCS (Double-Byte Char. Set) display
5555-B01 is 24 x 80 DBCS monochrome display
3477-FC  is 27 x 132 display
3477-FG  is 27 x 132 monochrome display
3180-2   is 27 x 132 monochrome display
3179-2   is 24 x 80 display
```

```
3196-A1  is 24 x 80 monochrome display
5292-2   is 24 x 80 display
5291-1   is 24 x 80 monochrome display
5251-11  is 24 x 80 monochrome display
3812-1   is printer
5553-B01 is DBCS printer
```

If you select a printer type, you will probably also need to specify the printer device name to connect to.

Device name

This option allows you to choose a specific device name (DEVNAME) when you connect to a TN5250 server or AS/400.

Some special characters in the device name field can be used to generate the device name:

```
  =         Collision Avoidance ID
  *         Short Session ID
  %         Session Type ID
  &COMPN    Device network host name (Android version)
  &COMPNBT Device Bluetooth name (Android version)
  &WIP      Wifi IP address (Android version)
  &MAC      Mac address (Android version)
  &MAC_     Short Mac address (Android version)
  &MAC#n    Last n characters of the Mac address (Android
version)
```

The Collision Avoidance ID enables the generation of a new Device name if the Telnet server rejects the previous name. The Collision Avoidance ID has a value in the range 1-9 and A-Z. For example, if ABC= is specified, ABC1, ABC2 and so on will be generated. If ABC== is specified, a random 2-character string will replace the == characters, and so on for ABC=== and ABC====.

The Short Session ID gets the value A if you start one session only. If you start multiple sessions within Glink, the second session will get the Value B and so on. For example, if ABC* is specified, the first session will get ABCA. If that name is already in use, the session will be rejected.

The Session Type ID replaces the character % with the character S for Screen models and P for Printer models. For example, if %ABC* is specified, the first session

will get SABCA if the model is a display type and PABCA if the model is a printer type.

Android only
The **&COMPN** is replaced by the network device name (hostname) if defined for the device. For some Android devices only the Device Bluetooth name is set. To pick up the Device Bluetooth name use &COMPNBT.

Android only
The **&WIP** is replaced by the Wifi IP address formatted as a hex string. For example, if the Wifi IP address of the device is 10.66.1.133, the string 0A420185 will represent the address and will be used as the device name.

Android only
The **&MAC** is replaced by the device Mac address formatted as a hex string. The 6 octets mac address is formatted as a 12-character hex string.

Android only
The **&MAC_** is replaced by the last part of the device Mac address formatted as a hex string. The last 3 octets is formatted as a 6-character hex string.

Android only
The **&MAC#n** (where n is a number from 1 to 9) is replaced by the last n characters of the device Mac address formatted as a hex string.

Keep in mind that the device name should not exceed 10 characters. If the resulting string is longer than 10 characters, Glink will strip excessive characters. Normally at the beginning, but if &WIP is used, Glink will cut up to 4 of the first characters in the IP address before stripping off characters from the beginning of the generated device name. For example, will the first device name *RFT&WIP=* on a device with IP address 10.66.1.133 become RFT4201851.

Keep alive

Keep alive type

There are two keep alive types, **TCP** and **Telnet**. The TCP type is handled by the OS and the Telnet type is handled by Glink.

TCP keep alive

Specifies how often TCP sends keep alive probes. TCP sends keep alive probes to verify that an idle connection is still open. By default, keep alive probes are sent

after 2 hours of inactivity or not at all. It depends on the version of the operating system. The number of keep alive probes that are sent is also system specific.
The keep alive parameter allows you to set both the keep alive time and the keep alive interval in seconds. The format is **time, interval**

For example:

`1200,5`
Specifies that keep alive probes will be sent after 20 minutes of inactivity, and then repeated every 5 seconds until the max number of keep alive probes has been reached.

`1800`
Specifies that keep alive packets will be send after 30 minutes of inactivity, and then repeated every second until the max number of keep alive probes has been reached. One-second interval is the default value.

Telnet keep alive

Specifies how often Glink sends a telnet No Operation Packet (NOP). In this case only an interval can be specified in seconds. The format is **interval**
For example:

`60`
Specifies that a telnet NOP will be sent after one minute of inactivity, and then repeated every minute of inactivity.

Bypass signon using

If the host is configured for *Auto sign-on*, you can specify the *User ID* and *Password* to bypass the initial sign-on screen.

If the host does not support this functionality or is not set up for it, check the *Use alternate auto login* parameter. Glink will instead fill in the *User ID* and *Password* in the Login screen to do an *Auto-login*.

Please note if a connect macro is defined it will be ignored if the *Auto-login* is defined.

Printer options

The AS/400 will require the following device information when connecting a 5250 printer session.

Message queue name

This option tells the AS/400 the name of the message queue to use when sending operational messages. The default AS/400 message queue name of QSYSOPR should be used in most cases. Consult your AS/400 system administrator before changing this option.

Message queue library

This option tells the AS/400 the name of the library containing the message queue used for sending operational messages. The default AS/400 message queue library of *LIB should be used in most cases. Consult your AS/400 system administrator before changing this option.

Font ID

This option tells the AS/400 the font identifier to use when printing.

Form feed type

This option tells the AS/400 the form feed type to use for printing:

- Automatic sheet feeder
- Continuous paper roll form feeder
- Manual sheet feeder

Secure sockets

Use secure sockets - SSL

Check this option to use a secure connection to the host. The host side must of course support this type of connection. The default value for the port number is 992 (GGate 30851). If the host side uses another port number, specify the port number in the host address field, for example:

```
myhost.com:842
```

When connected, a lock icon will be shown in the toolbar. Tap the icon to view the host certificate information.

IPv6 address
If an IPv6 address is specified and you have to specify a port number, use the following syntax:

```
[IPv6 address]:port
```

for example

```
[2001:db8:85a3:0:0:8a2e:370:7334]:673
```

Authenticate server certificate

Glink verifies that the server certificate is from a Trusted root certificate authority in order to accept the SSL connection.

File name client certificate

Specify the name of the client certificate if the server needs to validate the Glink client.

Android version only
If the configured client certificate file is not found, Glink will look for the file in the auto import directory. If still not found, the user gets the option to import a client certificate file using the configured file name.

iOS version only
If the client certificate is not found, the user will get a warning message that the client certificate file must be imported.

See also:
How to import a PSKC #12 certificate (.p12 file)

Password client certificate

Supply the PSKC #12 password if defined.

How to import a private key file

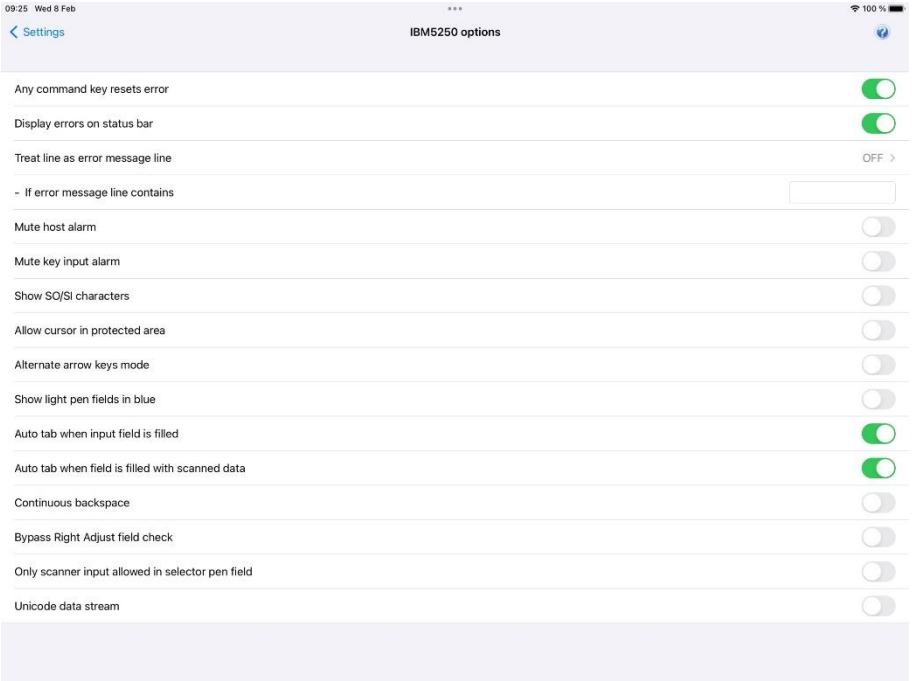
Glink will handle files with *.glinki* as the file name extension, i.e *myfile.glinki*. One way to import it is to send it as a mail to your device with *myfile.glinki* as an attachment. Click on the attachment and Glink will ask if you want to import it as a new configuration (your configuration will not be overwritten in this case).
The *myfile.glinki* must have the following format:

```
[file:my_pk_file]
Add the content of the private key here...
```

Glink will create a file with the file name *my_pk_file* with the content supplied. In the Telnet or SSH configuration dialog box, enter *my_pk_file* in the *Private key file* field.

Settings – Emulation

IBM 5250 emulation options



Any command key resets error

If an error has occurred, normally the keyboard is unlocked with the Reset command key only. If this option is checked, any command key will reset the error state and unlock the keyboard.

Display error on status bar

Normally error messages are displayed in line 25 of the 5250 screens. If the option is checked, errors are instead displayed in the status bar of Glink.

Treat line as error message line

Text from the host at the line specified will be regarded as an error text and will be displayed on the status line together with a notification sound. Text starting after position 10 on this line will not be regarded as an error text.

If error message line contains

If one or more search strings are specified, the *error message line* specified above must contain one of these strings to be treated as an error message line.

The whole line is search for a matching string. An optional column parameter can be added, then a matching string must start in that column.

The error message line is display on the status line but can be suppressed with an optional parameter. The notification sound is played in both cases.

The parameter supports the following syntax:

```
text1:text2;col=n,msg=false
```

Please note that search strings are separated with colon. Any optional parameters are preceded with a semicolon. These parameters again are separated with a comma. Some examples:

`MAIN`	The line must contain *MAIN*
`MAIN;msg=false`	The line must contain *MAIN*. No message, only notification sound
`MAIN;col=2,msg=false`	The line must contain *MAIN* at column 2. No message, only notification sound
`MAIN:OFCTSK;col=2`	The line must contain *MAIN* or *OFCTSK* at column 2.

Mute host alarm

Ignore alarms issued by the host application (The volume control and alarm sound is configured in the iOS/Android Settings).

Mute key input alarm

Ignore key input error alarms (The volume control and alarm sound is configured in the iOS/Android Settings).

Show SO/SI characters

If the host is using double byte character set like Chinese, Japanese or Korean, it might be convenient to see where SO and SI characters are in the input fields.

Allow cursor in protected area

Normally if you point outside an input field, the cursor is not moved to this location. Instead, the keyboard, if displayed, is hidden (removed). If this option is checked, the cursor is instead moved to the protected location without changing the keyboard state.

Alternate arrow keys mode

By default, the arrow keys can move the cursor to any position on the screen. The new position can be in a protected area.

If this option is checked and the arrow key brings the cursor to a protected area, Glink will do a Tab to the next input field for Arrow Down and Arrow Right or do a Back Tab to the previous field for Arrow Up and Arrow Left.

Show light pen fields in blue

Sometimes in can be convenient to distinguish fields that the host application has set as light pen fields from other type of fields.

Auto tab when input field is filled

The cursor is moved to the next field automatically when the current input field is filled. Sometimes it may be convenient to turn off this behavior, for example when input data comes from a scanner with a Tab character as suffix.

Continuous backspace

By default, backspace stops deleting characters at the beginning of the current input field. If this option is checked, backspace will continue to delete characters in the previous input field.

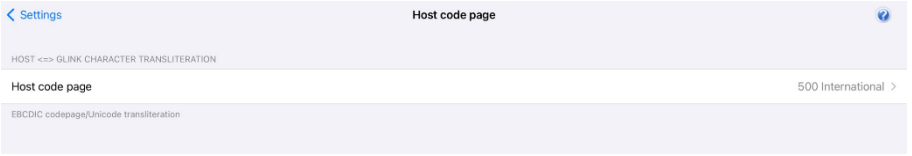
If the device has an alphanumeric keypad that contains both numbers and letters on the same keys, this option will allow input until proper character has been typed at the end of a field without moving to the next field. The reason is that alphanumeric keypad uses backspace when switching character (for the character c, the keyboard will send the characters a+backspace+b+backspace+c

Bypass Right Adjust field check

Input fields that are defined as Right Adjust should be right adjusted with FieldExit, Field+ or Field- and give an error if not.

Some emulators bypass this check and send the field without right adjusting. With this option checked, Glink will do the same.

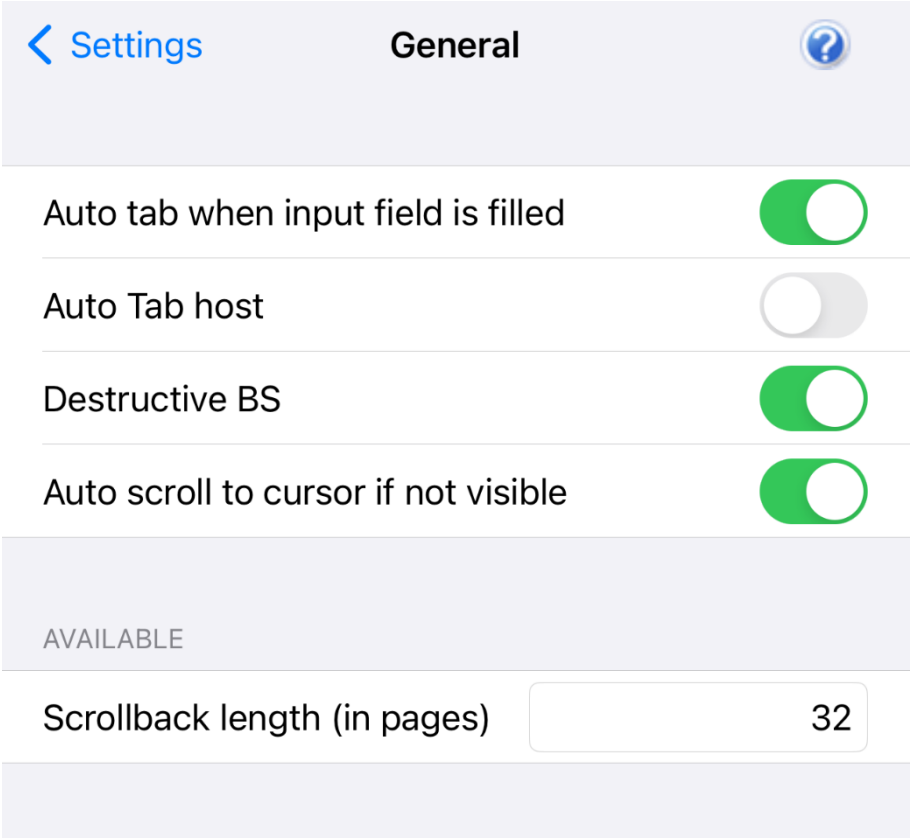
5250 Transliteration - Host code page



The IBM host is set up to use an EBCDIC code page. Glink needs to know which code page is used by the host to convert EBCDIC characters to Unicode characters used internally by Glink.

Code page	Euro	Countries
037	1140	Australia, Brazil, Canada, New Zealand, Portugal, South Africa, USA
273	1141	Austria, Germany
1388		China
880		Cyrillic
1025		Cyrillic
277	1142	Denmark, Norway
278	1143	Finland, Sweden
280	1144	Italy
930		Japan
930E		Japan (930 Extended)
939		Japan
1399		Japan
933		Korea
1364		Korea
870		Latin 2
284	1145	Latin America, Spain
285	1146	Ireland, United Kingdom
297	1147	France
500	1148	International
	1149	Iceland
1026	1155	Turkey
937		Taiwan
1371		Taiwan

5250 General Options



Auto Tab when input field is filled

If this option is selected, then an automatic tab to the next field of a form will be performed as soon as the last character of the field has been typed. If not selected, then no action will be performed until either the Tab key or the next character is entered.

Auto Tab host

This option controls whether automatic tabbing (move to the next field of the form when the last character of a field is entered) should also be applied to input coming from the host machine. The normal Glink action here is not to perform such automatic tabbing for host data even when local auto-tab is set. The option may be required for host applications developed using emulators that assume that auto-tabbing applies equally to local and host data.

Destructive backspace

Effective only for modes where characters are being echoed locally by the emulator, this option specifies that the backspace key should replace the character backspaced over with a space character. Note that in insert mode backspace will in any case delete such characters and move that part of the line following the cursor one character to the left.

Auto scroll to cursor if not visible

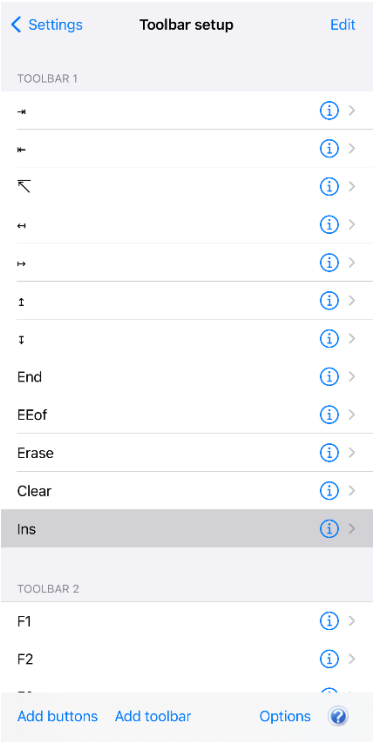
This option controls whether Glink automatically should scroll the screen so that the cursor position is visible on the screen or not. It is by default enabled, and when enabled, Glink will always scroll the screen to display the cursor position. When disabled, Glink will display the top left portion of the screen when it receives a new screen from the server and the display will not follow the cursor when it is moved. The user can scroll the display to the cursor position by tapping the screen or scroll freely by dragging the screen, but each new screen will default to the top left corner.

Scrollback length

This option lets you specify the maximum number of scrollback pages saved. Note that each extra page of scrollback you configure will cost extra memory allocated.

Settings – Screen

Toolbar setup



For the *Screen options -> Show toolbar* values: *Auto, Multiline* and *Single-line* the toolbars will be displayed horizontally with *Toolbar 1* as the first toolbar row, *Toolbar 2* as the second toolbar row and so on.

For the value *Vertical*, the toolbar is shown on the right side of the screen. The number of toolbars configured will decide the number of toolbar columns, but the toolbar buttons will be distributed from left to right from the top and down, so that the Toolbar 1 buttons will be shown on the first rows, then the Toolbar 2 buttons will follow on the next rows and so on.

For example, like this:

For the value *Horizontal*, the toolbar is shown at the bottom of the screen using horizontal page scrolling. The number of toolbar buttons that is displayed on each "page" is decided by the options *Max visual buttons per* row and *Max visual toolbar* rows. The number of toolbar rows shown on the screen can be less than the number of toolbar rows defined. The redundant rows are appended to the end of the visual rows.

Edit

The Edit button allows you to either delete buttons from the toolbars or to move a button to a new position, either within the same toolbar or to a different toolbar. Tap the stop icon and confirm by tapping the Delete button to delete a button. Tap, hold and drag the list-icon on the button you want to move to its new position. Tap Done to exit Edit-mode.

Add buttons

This option allows you to add new buttons to the current position in the current toolbar, so before tapping Add buttons you have to select the toolbar and toolbar-position where you want to insert the new toolbar button(s). From the Add buttons screen you can select one or more buttons to be inserted. The button can either be used to activate a predefined function (key) or a Macro. Tap Save when you have completed your selection or tap Cancel to return to the Toolbar setup screen. If you decided to add a Macro, tap the detail-icon on the righthand side of the new button

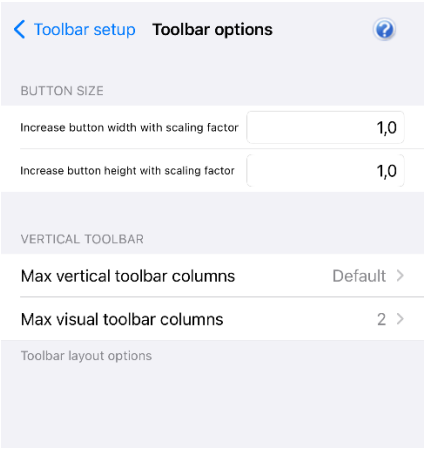
with text Macro to configure the macro to be executed. See Macro string section below on how to define a macro string.

Note that the simplest way to define a Toolbar macro is to use the macro-recording feature available from Menu > Record macro. See the help page for Record macro

Add toolbar

This option allows you to add new buttons to a new toolbar. From the Add toolbar screen you can select one or more buttons to be inserted. Tap Save when you have completed your selection or tap Cancel to return to the Toolbar setup screen.

Options



The size of the toolbar buttons be changed, both the width and the height.

Toolbar options

Increase button width with scaling factor
The original button width can be adjusted with a scaling factor. A factor of 2.0 will double the size. Try a factor of 1.2 to increase the width slightly.

Please note that the width for an individual button can be doubled by preceding the button text with a * (star). For example, if the button text is modified from *Enter* to **Enter*, the button text shown is *Enter* but the button width is doubled. If the button text starts with ****Enter**, the button width will be tripled and so on.

Increase button height with scaling factor
The original button height can be adjusted with a scaling factor. A factor of 2.0 will double the size. Try a factor of 1.2 to increase the height slightly.

If a parameter format error is detected, the size is set to the original size.

Toolbar 1-n buttons

Each button in a toolbar can be modified by tapping the detail-icon on the righthand side. You can modify this button-position to perform a different function by tapping the Button selected line. You can also modify the text displayed on the button for this particular function by editing the Button text field. If the Button selected is a Macro, you have to define the Macro string to be executed when the button is tapped.

Button size

This option allows you to adjust the width and height for all the toolbar buttons with a scaling factor (from 0.2 to 5.0).

Please note that the width for an individual button can be doubled by preceding the button text with a * (star). If the button text starts with **, the button width will be tripled and so on. For example, if the button text is modified from Enter to *Enter, the button text shown is Enter but the button width is doubled.

Vertical toolbar

The toolbar is shown on the right side of the screen when *Settings->Screen options->Show toolbar->Vertical* is selected. By default, the number of toolbars columns shown on the right-side screen will match the number of toolbars defined.
The toolbar buttons will be distributed from left to right from the top and down, so that the Toolbar 1 buttons will start on the first row and continue on the next row(s), then the Toolbar 2 buttons will follow on the next rows and so on.

Toolbar layout options

The number of vertical toolbar columns can be configured independently of the number of toolbars defined, see *Settings->Toolbar setup->Options -> Vertical toolbar*. And the number toolbar columns shown on the right side of the screen can

be less than the vertical toolbar columns number enabling horizontal toolbar scrolling.

Max vertical toolbar columns

The default value is the same as the number of toolbars defined. This parameter redefines the number of vertical toolbar columns.

Max visual toolbar columns

The number of columns shown is by default equal to the number of Vertical toolbar columns. If the visual number is less, horizonal toolbar scrolling shows hidden columns. If the number is larger, the default value is used.

Horizontal toolbar layout

The toolbar is shown at the bottom of the screen using horizontal page scrolling. The Horizontal toolbar options are used when *Settings->Screen options->Show toolbar->Horizontal* is selected. The number of toolbar buttons that is displayed on each "page" is decided by the options Max visual buttons per row and Max visual toolbar rows. The number of toolbar rows shown on the screen can be less than the number of toolbar rows defined

When *Max visual buttons per* row is less than the number om buttons configured on a row and you swipe the toolbar horizontally, it will snap to the next "page" of buttons.

Max visual buttons per row

The default value is the number of buttons to fit the screen width.

Max visual toolbar rows

The number of rows shown is by default equal the number of toolbar rows defined. If the number is less, the redundant rows are appended to the end of the visual rows. If the number is larger, the default value is used.

Macro string

When entering a macro string, in addition to plain text, there are several conventions, all of which are signaled using the caret (^). If you wish to enter a 'real' caret, then you must type it twice (^^).

Control characters may be entered using the normal convention with a letter following the caret symbol. For example, a return is ^M and a line feed is ^J.

You may also send specific ASCII codes in hexadecimal, decimal, or octal form by following the caret with a $, #, or & character, and the desired code:

`^#ddd` decimal specification
`^&ooo` octal specification
`^$hh` hexadecimal specification

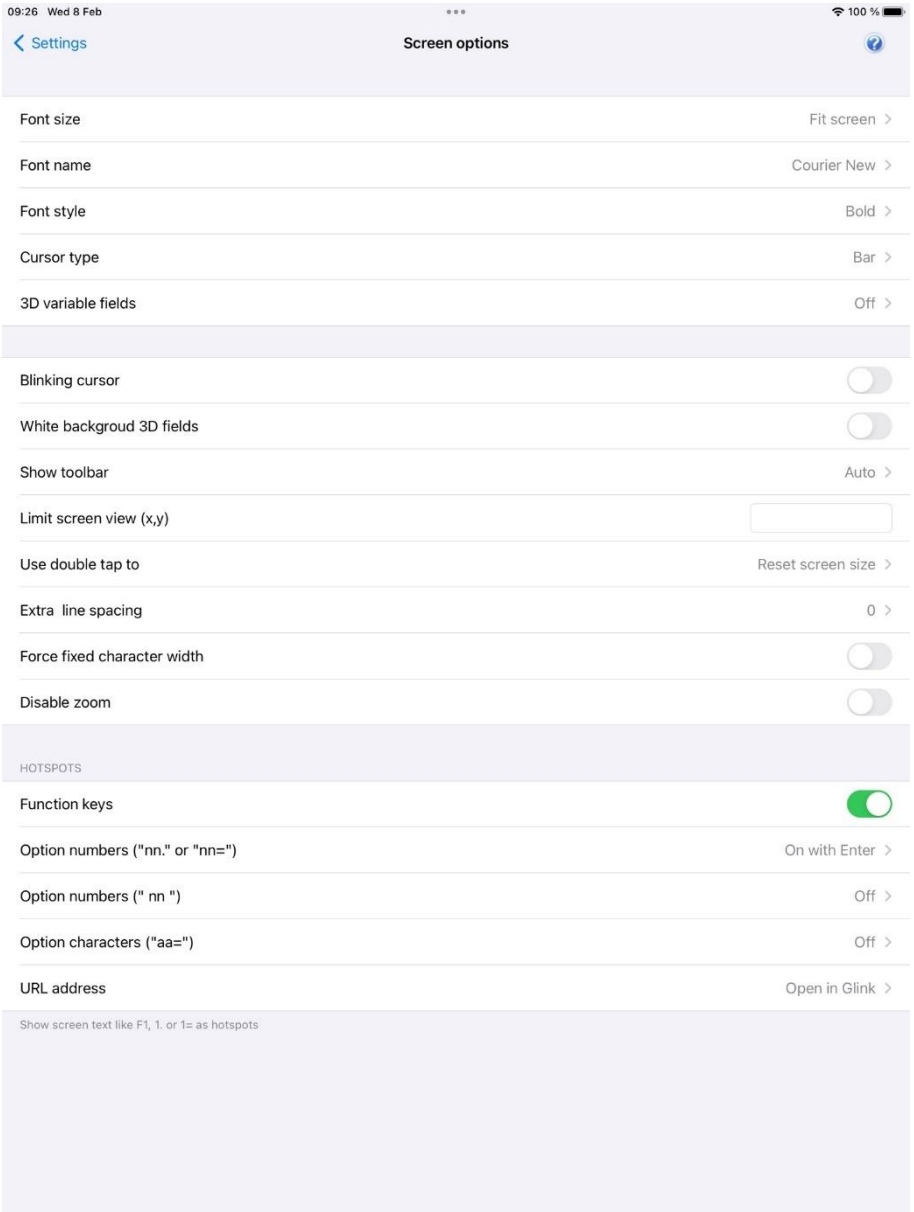
Note that decimal and octal codes must be 3 digits and prefixed with 0 if it is 2-digit codes.

Transmitting the string you have defined on a macro can be awkward if you are working in multiple environments where you sometimes need a CR terminator and sometimes need an ETX or EOT. To do this transparently, use the conventional form ^! (caret + exclamation mark). The correct line terminator will be sent depending on the mode in which the emulator is operating. Note that if a macro contains multiple transmits then the macro execution will be suspended on each transmit and resumed when the host has responded. This functionality is only reliable for host connections with a 'turn' mechanism that signals when the host response is finished (DSA, Ggate and TNVIP).

Function codes (for those using synchronous interfaces) may be sent using the form '^=x', where 'x' is the function code you wish to be sent with the next message to be transmitted.

If the last character in the macro string typed in is '^', it will be ignored. This can in fact be useful: in that trailing spaces are deleted from the input you type; you can use an appropriately placed '^' at the end of the string to ensure that required trailing spaces are actually included. For example, entering 'ABC ^' will provide a trailing space after the 'ABC'.

Screen Options



Font size

This option defines the initial font size to be used when Glink is started. If a large font is selected, some part of the screen display may not be visible without scrolling to it.

The *Auto* value selects a font size that is readable and, in most cases, suitable for the screen size.

The *Fit screen* options adjust the Glink display to fit the screen size. To do that, the characters will be stretched or squeezed.

Font name

This option defines the name of the font used in the emulator window. Only mono spaced fonts are available.

Font style

Here you may choose the display style for your chosen font *(iOS only)*.

Cursor type

The cursor indicates the current screen position for the emulator (as opposed to the mouse cursor, which operates independently). This option is used to choose one of the three available cursor types — a block cursor, a horizontal line cursor, or a vertically bar cursor.

3D variable fields

This option enables use of 3D effects for variable fields for those emulations that support the use of forms. You have four options, "On without attributes", "On with attributes", "On without underline" and "Show as underline". Normally a 3D field has white background, but you may keep the initial attributes set by the host for those input fields. The attributes can for example be specific background color or underlined text.

Blinking cursor

Here you may choose the cursor to blink. Please have in mind that a blinking cursor requires more resources, so screen updating, and scrolling might look better without it.

White background 3D fields

This option forces the background of a 3D variable field to always be white regardless of the default background color selected.

Similar, if the host specific sets the background color for an input field, the background color will still be white.

if you want the foreground color to always be black, select the 3D variable fields option "On without attributes".

Show toolbar

The toolbar can be shown as a horizontal single-line toolbar under the emulation screen with a toggle button to switch between the toolbars defined or as a horizontal multiline toolbar where all the toolbars defined are shown. If the multiline toolbar option is selected, Glink will still use the single-line toolbar to save space when the keyboard is up. For big screens operating in landscape mode, the toolbars can be shown vertically on the right side of the emulation screen if the vertical toolbar option is selected.

The *Auto* value means *Multiline* for a big screen (for example tablet) and *Single-line* for a small screen (for example phone).

The *Off* value means that the toolbar is not shown by default.

The *Vertical* value means that the toolbar is shown on the right side of the screen. The number of toolbars configured will decide the default number of toolbar columns, but the toolbar buttons will be distributed from left to right from the top and down, so that the *Toolbar 1* buttons will be shown on the first rows, then the *Toolbar 2* buttons will follow on the next rows and so on.

A Multiline toolbar like this:

Will look like this when the vertical option is selected:

For the value *Horizontal*, the toolbar is shown at the bottom of the screen using horizontal page scrolling.

Note that you can change the number of buttons and the number of toolbars in *Settings -> Toolbar* setup. Here you can Add toolbars, Add buttons, Modify buttons, Move buttons, Remove buttons, adjust the button size by the use of scaling factors and configure the Vertical or Horizontal toolbar layout.

Limit screen view (x,y)

If a host application uses just a part of the screen, the screen view may be decreased to match this size. The right and lower part will just be cut off and not visible. For example, if the parameter is set to "40,20", only the first 40 characters of each line up to line 20 will be visible. This parameter has no impact on the emulation itself. "x" limits only the number of columns, ",y" limits only the number of rows.

Use double tap to

This option specifies the action performed when double tapping the Glink screen, either *Reset screen size*, *Perform Enter* or *Toggle Menu bar On/Off*.

The *Reset screen size* sets the initial screen size, the *Perform Enter* does an Enter (Send) command and the *Toggle Menu bar On/Off (On)/Toggle Menu bar On/Off (Off)* toggles the menu bar *On* or *Off*. In the latter case, the menu bar is initially hidden. When the menu bar is hidden, it can be handy to add an Enter button to the toolbar (acts as a connect command if the session is disconnected)..

Extra line spacing

Add extra space between the lines (gives more space for hotspots if used). A negative number will decrease the standard line spacing.

Force fixed character width

Glink uses a fixed font, but for some special characters and symbols, the width may still vary. This option forces Glink to update the screen character by character at the correct position. Might slow down the screen update (Android option only).

Hotspots

The hotspot options tell Glink to search for specific keywords on the screen and highlight these as push buttons and assign a function to each of them.

For example, if the F6 text is on the screen, it will be highlighted as a push button and the function F6 will be assigned to it and executed when tapped.

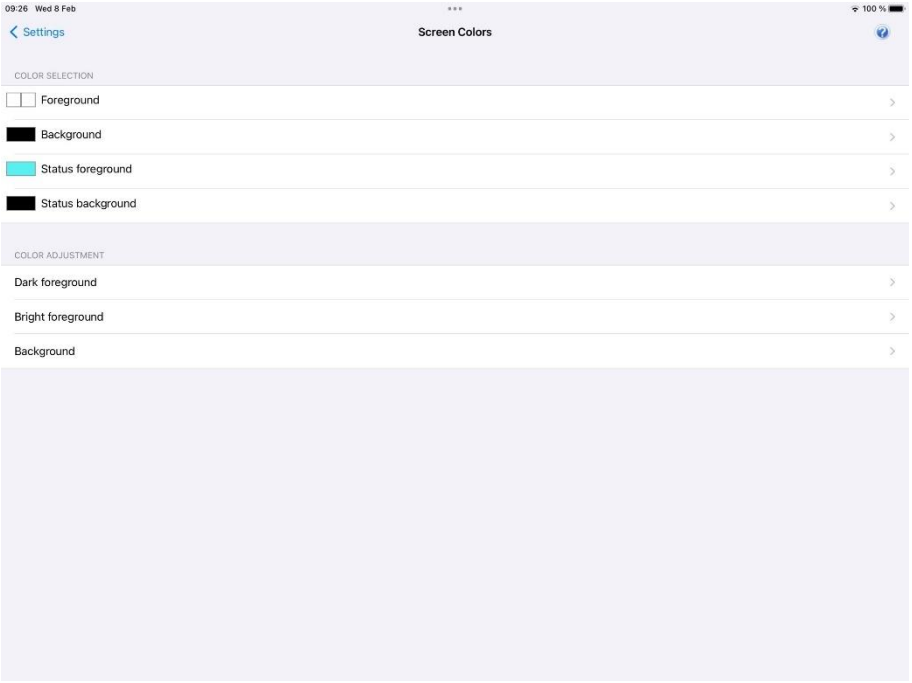
If Option numbers is enabled, text like 2. or 2= will be searched for and highlighted (the number only). If this hotspot is tapped, the number is added at the current cursor position. Optionally it can be followed by the Enter function to transmit it. Numbers larger than 99 is not converted to hotspots.

If the next Option numbers is enabled, numbers that are both proceeded and followed by a space will be searched for and highlighted. If this hotspot is tapped, the number is added at the current cursor position and optionally followed by an Enter function to transmit it. Numbers larger than 99 is not converted to hotspots.

If Option characters is enabled, characters followed by the = character will be highlighted. If this hotspot is tapped, the character(s) is added at the current cursor position and optionally followed by an Enter function to transmit it. For example, S will be regarded as a hotspot for the text S=Search.

If URL address is enabled, URLs will be highlighted. If this hotspot is tapped, Glink will either open an external browser or use the built-in browser in Glink to display the URL content.

Screen Colors



Color selection

The screen color options allow you to choose the default foreground and background colors for the emulator screen and for the status line.

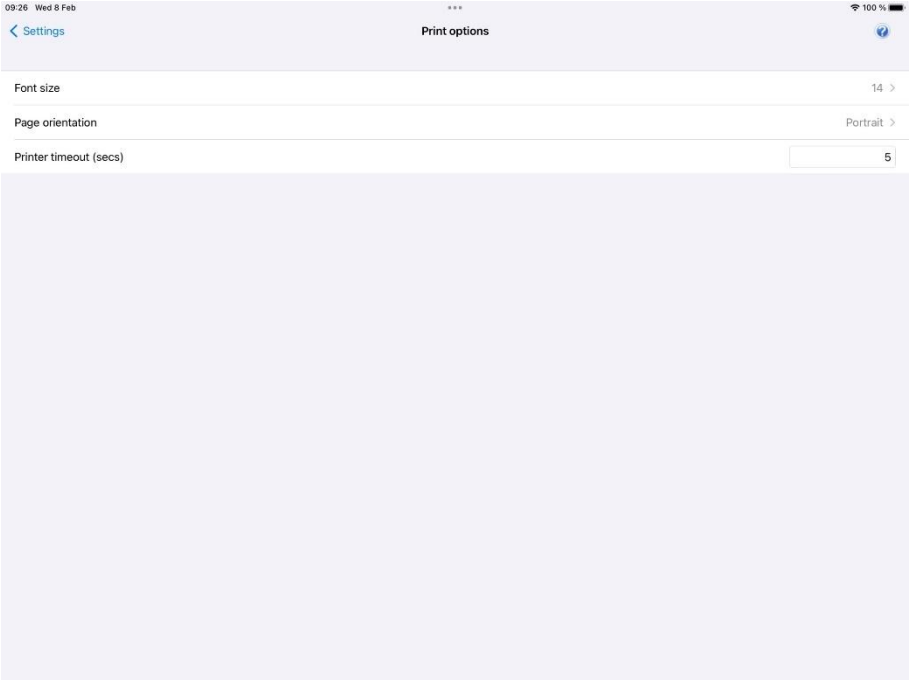
The default name of the colors available are listed together with icon. If the color name does not match the color icon, the color has been adjusted.

Color adjustment

The color adjustment options allow you to adjust the 8 dark plus 8 bright foreground colors and the 8 background colors. The original color's names are displayed in the color adjustment display. If a color has been adjusted, it may not match the name for that color.

Settings – Devices

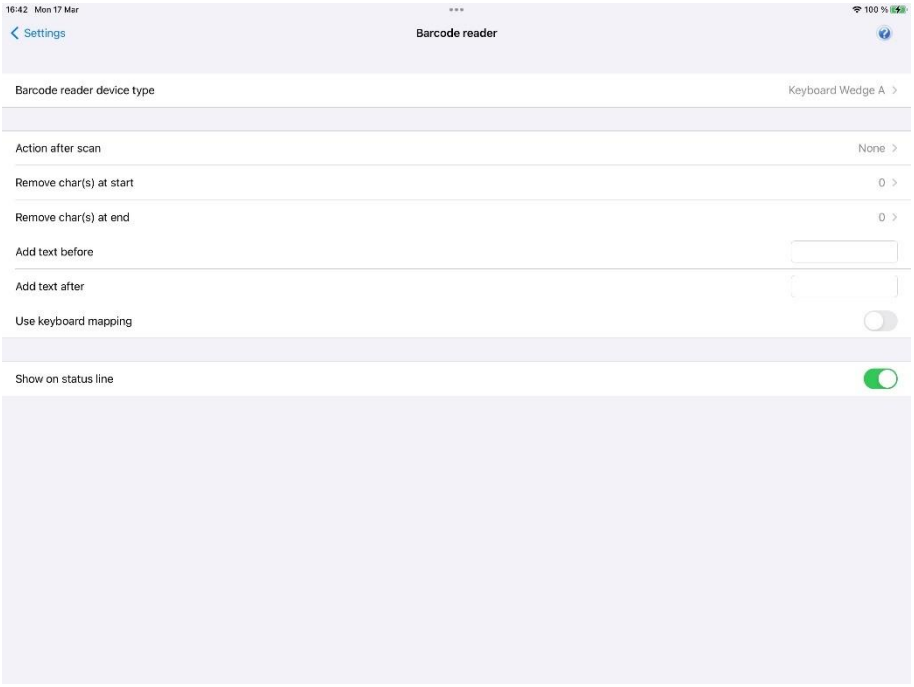
Print options



Here you can adjust the Font size and Page orientation so that the print data will have the desired look when printed.

Tap the Print data button to return to the print data screen.

Barcode reader setup



Barcode reader device type

Barcode reader device type is either *Keyboard Wedge* or *Keyboard Wedge A*. The barcode data is inserted as normal input data at the current cursor location of the Glink display.

When the barcode scanner is used as a HID keyboard (Keyboard Wedge) input device, Glink will not know if the data is coming from the actual keyboard or from the scanner. The “More options” described below is not in use for scanners operating in *Keyboard wedge* mode.

If you want to use these options in Glink, select *Keyboard Wedge* A(dvanced) mode and configure the barcode scanner to send the prefix and suffux described below in the Keyboard Wedge A section.

`Key-board Wedge`	Default. Scanned data is received as keyboard input. Glink cannot separate scanned data from keyboard input.
`Key-board Wedge A`	Scanned data is still received as keyboard input, but if special prefix and suffix characters is configured, use Keyboard Wedge A(dvanced) to enable use the options below.

Keyboard Wedge A

The Keyboard Wedge A(dvanced) mode requires that the barcode scanner (not Glink) is set up with hex ***0E (SO***) as prefix character and hex ***0F (SI)*** as suffix character. Some devices let you select ***SO (shift out)*** as the prefix and ***SI (shift in)*** as the suffix, others let you configure the hex value. For others it is not possible to specify these low ascii characters, or low ascii characters are stripped off. In this case, specify the prefix as the string ***^$0E*** and the suffix as the string ***^$0F***.

If the prefix and the suffix are not set up properly, the default Keyboard Wedge mode will be used instead.

When the Keyboard Wedge A(dvanced) mode is selected, the options described under More options below are available.

To check that Keyboard Wedge A(dvanced) is configured correctly, enable the option *Show on status line* to have the scanned data displayed in inverse text on the status line at the bottom of the Glink screen.

More options

Please note that most scanner software can be configured with options like the ones below. Make sure that these options are either set in Glink or in the Barcode Scanner settings itself. Check the Barcode Scanner manual.

Action after scan

`None`	Do no action after scanning
`Tab`	Do Tab after scanning
`Enter`	Do Enter after scanning
`FldExit`	Do Field Exit after scanning (5250 emulation mode only)

Remove char(s) at start

Removes one or more characters at the beginning of the barcode.

Remove char(s) at end

Removes one or more characters at the end of the barcode.

Add text before

Add text before the barcode.

Add text after

Add text after the barcode (the Action after scan will be added after this text).

Use keyboard mapping

Enable this option if keyboard mapping should be applied for scanned data. For example, if colon (:) is mapped to the *Tab* function and the semicolon (;) is mapped to the *Enter* function, a scanned barcode "1234:5678;" will be interpreted as key input 1234**Tab**5678**Enter.** Another example can be that you want to remove (Ignore) the Group Separator (GS - hex 1D) character in a barcode

Show on status line

Enable this option to display the scanned data as a status message at the bottom of the screen as well.

Keyboard options

Glink uses any of the standard iOS keyboards configured. The keyboard configurations are found in the iOS Settings app in the **General-> Keyboard** section.

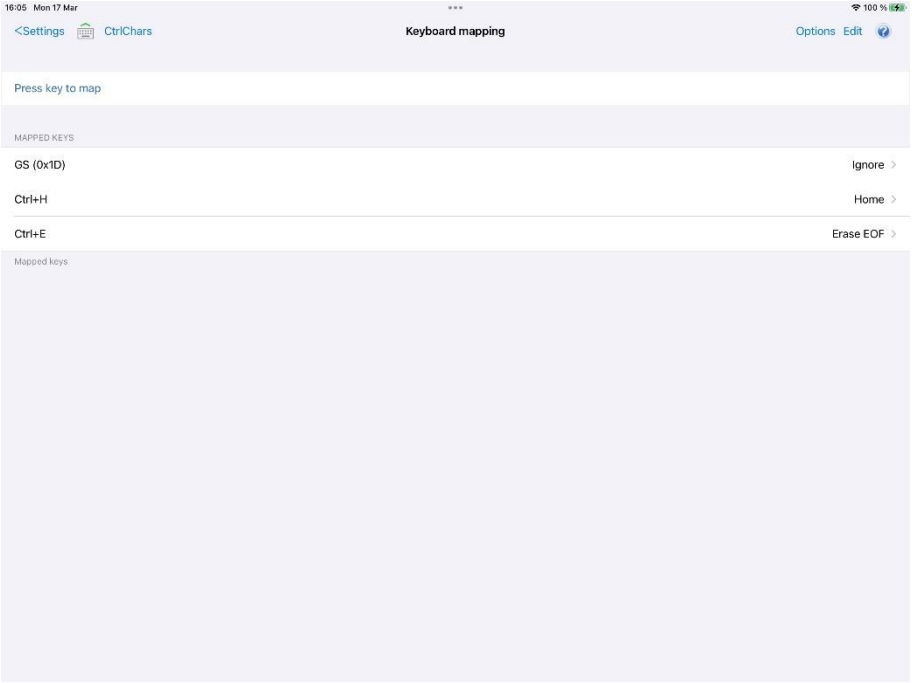
External keyboard

When using an external keyboard, in the Glink main screen, select *Menu-> General options-> Keyboard up on*. Glink will then be ready for keyboard input when connected to a host application (otherwise you must tap at an input field first).

Glink support several keyboard shortcuts for function and control keys. To display a list of these shortcuts, press and hold the *cmd* key until the list is displayed.
See Keyboard Shortcuts in the *Getting started* section.

Keys can be mapped or remapped, select Setting->Keyboard mapping option.

Keyboard mapping



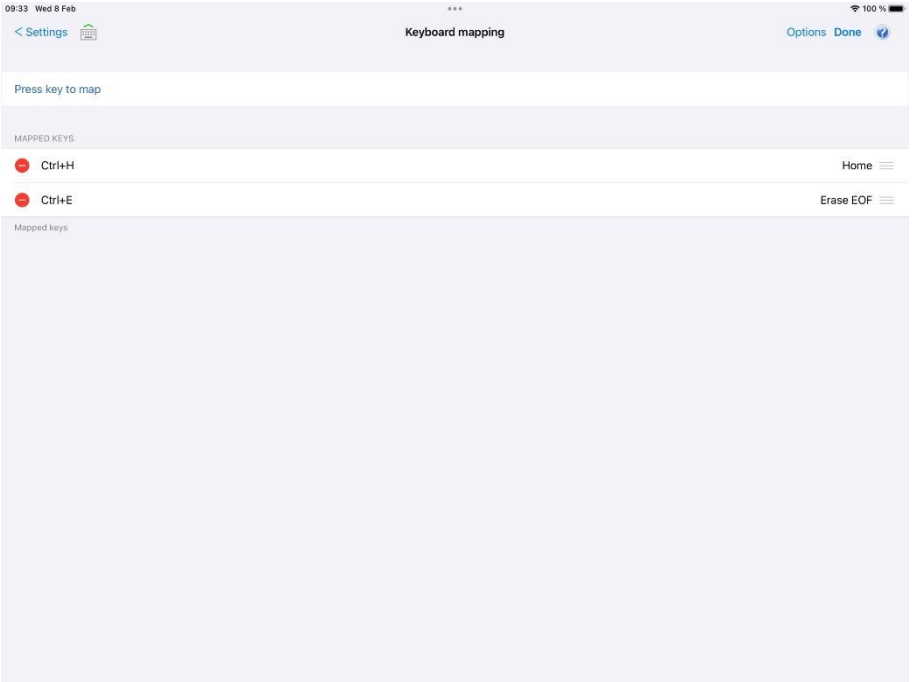
Glink is initially set up with a default keyboard mapping when using an external keyboard. You may override the default mapping or add a new mapping.

The list box displays the mapped keys if any.

Tap **CtrlChars** to map a low ASCII control character. You will get a list of control characters from hex 00 (0x00) to hex 1F (0x1F). This is useful if you for example want to remove the GS (0x1D) (Group Separator) character from a scanned barcode.

Press the key to map. Select the keyboard icon button to bring up the soft keyboard if needed. Once a key is pressed and confirmed to map, a new row is added. Select the *Key not mapped* entry to map the key to a function or macro. If a macro is selected, select the **Detail disclosure button** to define the actual macro.

Select the **Edit** option to remove a key mapping.



Please note that prior iOS 13.4 various keys on the external keyboard (like the function keys F1, F2...) are not supported by iOS and cannot be mapped.

Define macro

The macro must be defined and the *Macro string* field below defines the macro.

Button text
The button text is information only and is not used when the macro is executed.

Macro string
When entering a macro string, in addition to plain text, there are several conventions, all of which are signaled using the caret (^). If you wish to enter a 'real' caret then you must type it twice (^^).

Control characters may be entered using the normal convention with a letter following the caret symbol. For example, a return is ^M and a line feed is ^J.

You may also send specific ASCII codes in hexadecimal, decimal, or octal form by following the caret with a $, #, or & character, and the desired code:
`^#ddd` decimal specification
`^&ooo` octal specification
`^$hh` hexadecimal specification

Note that decimal and octal codes must be 3 digits and prefixed with 0 if it is 2 digit codes.

Macro string tip
Use the Record toolbar macro function to define the required macro and then copy the macro string generated and insert it as *Macro string*. The generated string is found in Setting->Toolbar setup. Select the macro and then the Modify function found in the drop-down Action list.

Distributing Glink configurations from an EMM/MDM

Glink has many configuration parameters that are available through the *Settings* screens in Glink.

A Glink configuration can be prepared and tested on one device, then exported from this device and imported by Glink on other devices. If your MDM does not allow you to distribute the exported Glink configuration file as it is, it will probably allow you to distribute Glink parameters to a managed Enterprise version of Glink, either using a menu to set the Glink parameters or by importing a JSON formatted configuration file containing the Glink parameters. Either way, you will find the parameters in the exported Glink configuration file very useful when setting up such a configuration. Make a note of which parameters you have set/changed, because these are the parameters you must configure and distribute from your MDM. It is not necessary to distribute default parameter values.

Below you will find some examples on how you can distribute a Glink configuration file.

Download the Glink configuration from a web server

The managed versions of Glink (all iOS versions and Glink VT/5250/3270 Enterprise for Android) can be configured directly from the MDM if the MDM supports managed app configuration. The MDM either use a menu to set the Glink parameters or it imports a JSON formatted configuration file containing the Glink parameters. The method and format vary with the different MDMs.

The MDM server can instruct Glink to import a Glink configuration file from a network location with the following parameters:

config.version	This parameter (key-name) specifies the version of the MDM parameters. If the version number is equal to the version number on the device, the rest of the parameters are ignored by Glink.

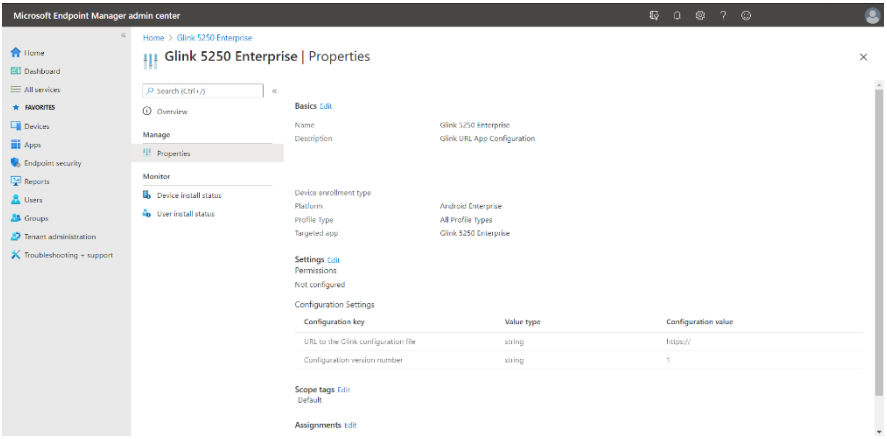
config.url	This parameter (key-name) provides the URL of the Glink configuration file. Please note that this parameter is ignored if the *config.version* parameter is missing or the version number is the same as the version number on the device. So every time you update the configuration file, you must remember to update the *config.version* parameter

Here is an example:

```
config.version=2
config.url=http://myhost.mydomain.xx/glink/group1/config.glinki
```

Depending on the MDM, these two parameters are either configured in a menu in the MDM console (MobileIron, Meraki, Intune) or in a JSON file uploaded to the MDM (Google Admin) or defined in an MDM-menu (Intune).

Here is an example from Microsoft Intune (Android):



Set Glink parameters from the MDM

The iOS versions and the managed Glink Enterprise for Android versions of Glink (Glink 5250 Enterprise, Glink VT Enterprise, Glink 3270 Enterprise and Glink Enterprise) can be configured directly from the MDM if the MDM supports managed app configuration. The MDM either use a menu to set the Glink parameters or it imports a JSON formatted configuration file containing the Glink parameters. The method and format vary with the different MDMs.

Here are three key parameters that are explicitly defined with information texts and that are the minimum set of parameters required for a host session configuration:

config.version	This parameter (key-name) specifies the version of the MDM parameters. If the version number is equal to the version number on the device, the rest of the parameters are ignored.
config.name	This is the name of the configuration (session) and must be provided. The configuration is created if it does not already exist. Additional parameters will be set for this selected configuration.
com.servername	This specifies the IP address of your host

Here is an example:

```
config.version=1
config.name=myhost
com.servername=myhost.mydomain.com
```

These parameters are sufficient to create a host configuration with default values. For other parameters you have to check your exported Glink configuration file, *config.glinki*. These parameters must be defined as parameter_key /parameter_value pairs.

For example:

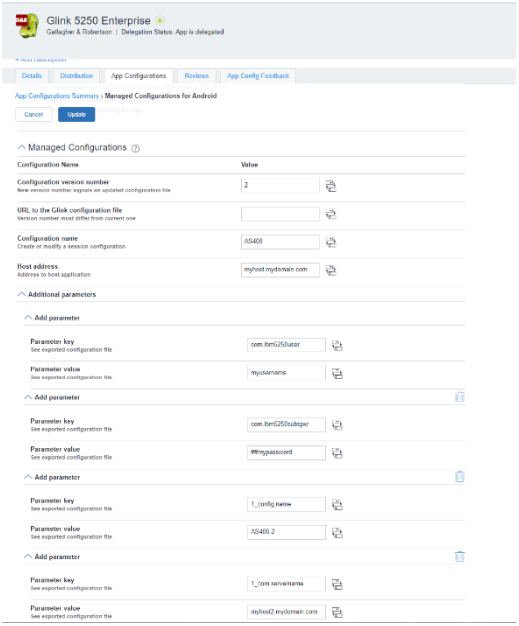
```
Parameter key 1_config.name / Parameter value myhost2
Parameter key 1_com.servername / Parameter value host2.mydomain.com
Parameter key 2_config.name / Parameter value myhost3
Parameter key 2_com.servername / Parameter value host3.mydomain.com
```

Parameters for the first session, named with *config.name*, you do not need a prefix, but other sessions need a prefix. Session 2 parameters are prefixed with **1_**, session 3 parameters are prefixed with **2_** and so on.

How you set these parameters will depend on your MDM. Different methods are used. While some MDMs present a menu with the parameters that can be set (MobileIron, Meraki, Intune), others require a JSON-/XML-file with key-name and key-value pairs (Google Admin, Intune).

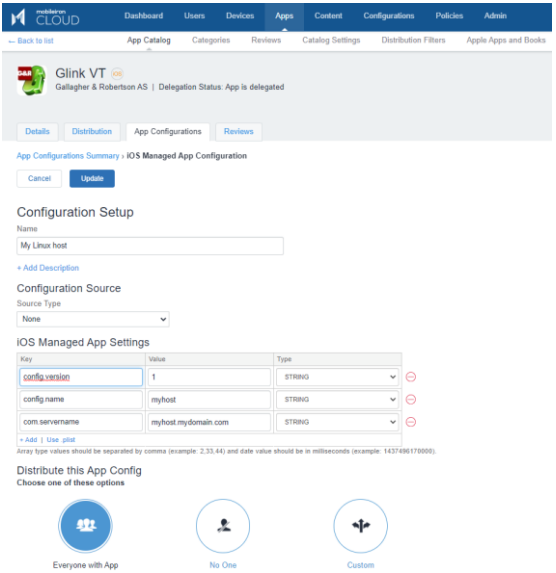
Here are some examples:

MobileIron (Android):

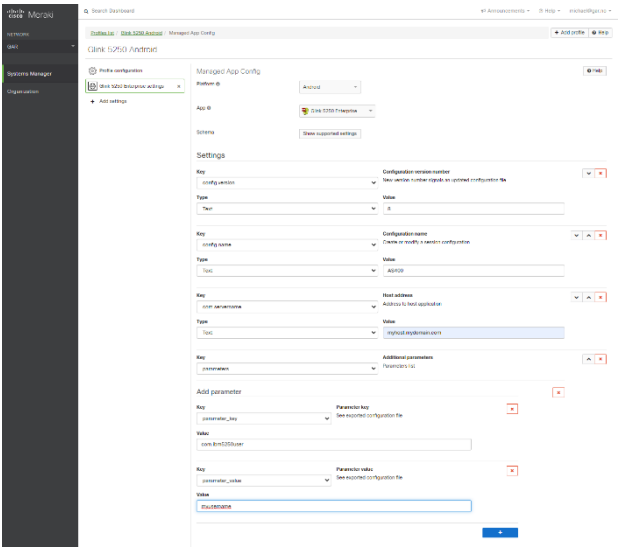


MobileIron (iOS):

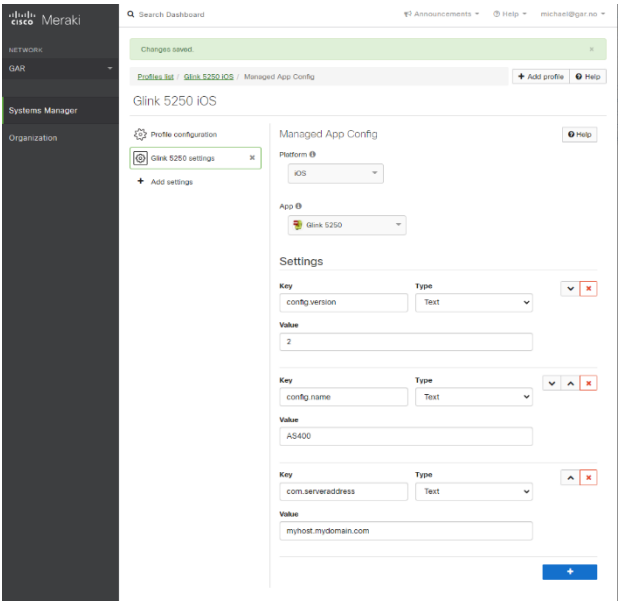
Distributing Glink configurations from an EMM/MDM



Meraki (Android):



Meraki (iOS):



General options

Parameters that are common to all sessions and configured in the *General options* menu, must be configured in a *config.name* named *GeneralOptions*, **without** a *n_* prefix.

For example:

```
Parameter key config.name / Parameter value GeneralOptions
Parameter key screen.noautolock / Parameter value true
```

Passwords

Passwords are normally entered as the encrypted string you see in an exported Glink configuration file. Starting from version 2.4.3 you can also specify passwords in clear text if you use the prefix ##. For example, the password that protects access to *Settings*, *General options*, *New configuration*, *Export configurations* and more:

```
Parameter key config.name / Parameter value GeneralOptions
Parameter key screen.cfgpassword / Parameter value ##settingpassword
```

or the password for an auto-logon to IBM AS400/iSeries:

Parameter key *config.name* / **Parameter value** *AS400*
Parameter key *com.servername* / **Parameter value** *myhost.mydomain.com*
Parameter key *com.ibm5250user* / **Parameter value** *username*
Parameter key *com.ibm5250subspw* / **Parameter value** *##as400password*
Parameter key *com.ibm5250usealtlogin* / **Parameter value** *true*

Toolbar

If you want to configure your own toolbar(s), you might want to remove the default toolbars with all their buttons before you start defining your own. To do that, you can use the parameter *toolbar.remove* and set it to *true*. Then you can add your own buttons, for example like this:

Parameter key *toolbar.remove* / **Parameter value** *true*
Parameter key *toolbar.cmd0* / **Parameter value** 54,Left,,\u21a4
Parameter key *toolbar.cmd1* / **Parameter value** 51,Up,,\u21a5
Parameter key *toolbar.cmd2* / **Parameter value** 52,Down,,\u21a7
Parameter key *toolbar.cmd3* / **Parameter value** 53,Right,,\u21a6

Remove a session configuration

If you want to remove a session (*config.name*) from your configuration, you can use the parameter *config.remove*, for example:

Parameter key *config.remove* / **Parameter value** *AS400*

XML Schema for the iOS version

The AppConfig Community, is sponsored by industry leading device management vendors, have defined a standard schema to configure apps. Using this definition, the Glink parameters can be specified in an XML document using the following syntax:

```
<managedAppConfiguration>
<version>1</version>
<bundleId>no.gar.glink5250</bundleId>
<dict>
   <string keyName="config.name">
       <defaultValue>
              <value>MyConfigName</value>
       </defaultValue>
   </string>
   <string keyName="com.servername">
       <defaultValue>
              <value>MyServerAddress</value>
       </defaultValue>
   </string>
</dict>
</managedAppConfiguration>
```

Please note that the **bundleId** must match the Glink version you are using; either no.gar.glinkvt, no.gar.glink5250, no.gar.glink3270, no.gar.glink for the standard Glink versions or no.gar.eglinkvt, no.gar.eglink5250, no.gar.eglink3270 or no.gar.eglink for the Enterprise versions of Glink.

Example XML Schema Glink VT for iOS

Below you will find an example XML schema for Glink VT Enterprise for iOS for a SSH connection to *myserver1.domain.xx*.

Note that to set the General options parameters the *config.name* parameter must have the value *GeneralOptions*. Parameters for the first *Session* are prefixed with *1_*.

The example also includes the use of the *config.url* parameter with value: *http://mywebserver.domain.xx/glinkvt/group1/config.glinki*, which you can use to instruct Glink VT to download a Glink configuration file from a webserver.

```
<managedAppConfiguration>
<version>1</version>
<bundleId>no.gar.eglinkvt</bundleId>
<dict>
  <integer keyName="config.version">
```

```
      <defaultValue>
        <value>1</value>
      </defaultValue>
    </integer>
    <string keyName="config.url">
      <defaultValue>
        <value>http://mywebserver.domain.xx/glinkvt/group1/con-
fig.glinki</value>
      </defaultValue>
    </string>
    <string keyName="config.name">
      <defaultValue>
        <value>GeneralOptions</value>
      </defaultValue>
    </string>
    <boolean keyName="screen.noAutoLock">
      <defaultValue>
        <value>false</value>
      </defaultValue>
    </boolean>
    <boolean keyName="screen.autoConnect">
      <defaultValue>
        <value>false</value>
      </defaultValue>
    </boolean>
    <string keyName="screen.showKeyboard">
      <defaultValue>
        <value>0</value>
      </defaultValue>
      <constraint>
        <values>
          <value>0</value>
          <value>1</value>
          <value>2</value>
        </values>
      </constraint>
    </string>
     <string keyName="1_config.name">
      <defaultValue>
        <value>myserver1</value>
      </defaultValue>
    </string>
    <boolean keyName="1_emu.allowLcase">
      <defaultValue>
        <value>false</value>
      </defaultValue>
    </boolean>
    <string keyName="1_emu.type">
      <defaultValue>
        <value>VT</value>
      </defaultValue>
    </string>
    <boolean keyName="1_emu.autoTabL">
      <defaultValue>
        <value>false</value>
      </defaultValue>
```

```
</boolean>
<string keyName="1_screen.foregroundMagentaLo">
  <defaultValue>
    <value>#ff00ff</value>
  </defaultValue>
</string>
<string keyName="1_screen.foregroundRedLo">
  <defaultValue>
    <value>#f01818</value>
  </defaultValue>
</string>
<string keyName="1_screen.foregroundBlueLo">
  <defaultValue>
    <value>#7890f0</value>
  </defaultValue>
</string>
<string keyName="1_screen.fontName">
  <defaultValue>
    <value>Courier</value>
  </defaultValue>
</string>
<integer keyName="1_screen.variable3Ds">
  <defaultValue>
    <value>1</value>
  </defaultValue>
</integer>
<integer keyName="1_screen.scrColor">
  <defaultValue>
    <value>3</value>
  </defaultValue>
</integer>
<integer keyName="1_screen.stsColor">
  <defaultValue>
    <value>3</value>
  </defaultValue>
</integer>
<string keyName="1_screen.foregroundYellowLo">
  <defaultValue>
    <value>#ffff00</value>
  </defaultValue>
</string>
<string keyName="1_screen.foregroundWhiteLo">
  <defaultValue>
    <value>#ffffff</value>
  </defaultValue>
</string>
<string keyName="1_screen.foregroundCyanLo">
  <defaultValue>
    <value>#58f0f0</value>
  </defaultValue>
</string>
<string keyName="1_screen.foregroundGreenLo">
  <defaultValue>
    <value>#24d830</value>
  </defaultValue>
```

```
    </string>
    <string keyName="1_com.type">
      <defaultValue>
        <value>SSH</value>
      </defaultValue>
    </string>
    <string keyName="1_com.serverName">
      <defaultValue>
        <value>myserver1.domain.xx</value>
      </defaultValue>
    </string>
    <boolean keyName="1_com.usessh">
      <defaultValue>
        <value>true</value>
      </defaultValue>
    </boolean>
    <string keyName="1_com.sshUser">
      <defaultValue>
        <value>Username</value>
      </defaultValue>
    </string>
    <string keyName="1_com.sshPassword">
      <defaultValue>
        <value>##Password</value>
      </defaultValue>
    </string>
  </dict>
  <presentation defaultLocale="en-US">
        <field keyName="config.version" type="input">
            <label>
                <language value="en-US">Configuration version num-
ber</language>
            </label>
            <description>
                <language value="en-US">The version number must be
present and different from the current version for the Configuration
URL to take</language>
            </description>
        </field>
        <field keyName="config.url" type="input">
            <label>
                <language value="en-US">URL of Configuration
file</language>
            </label>
            <description>
                <language value="en-US">This parameter provides the
URL of the Glink configuration file. Please note that this parameter
is ignored if the config.version parameter is missing or the version
matches the version on the device</language>
            </description>
        </field>
    <fieldGroup>
      <name>
        <language value="en-US">GeneralOptions</language>
      </name>
        <field keyName="config.name" type="input">
```

```
            <label>
                <language value="en-US">Configuration name GeneralOp-
tions</language>
            </label>
            <description>
                <language value="en-US">Configuration name GeneralOp-
tions is required for setting parameters in General Options</language>
            </description>
        </field>
        <field keyName="screen.noAutoLock" type="checkbox">
            <label>
                <language value="en-US">Never Auto-Lock when con-
nected</language>
            </label>
            <description>
                <language value="en-US">Disable iOS Auto-Lock feature
when connected</language>
            </description>
        </field>
        <field keyName="screen.autoConnect" type="checkbox">
            <label>
                <language value="en-US">Auto-connect at start-up</lan-
guage>
            </label>
            <description>
                <language value="en-US">Auto-connect first session at
start-up</language>
            </description>
        </field>
  <field keyName="screen.showKeyboard" type="select">
    <label>
      <language value="en-US">Keyboard up</language>
    </label>
    <description>
      <language value="en-US">By default Glink will show the keyboard
when you click an input field and hide it if you click outside. If you
select On, an external keyboard will always be connected if you have
one or the keyboard will always be shown</language>
    </description>
    <options>
      <option selected="true" value="0">
        <language value="en-US">Default</language>
      </option>
      <option value="1">
        <language value="en-US">On</language>
      </option>
      <option value="2">
        <language value="en-US">Off</language>
      </option>
    </options>
  </field>
        <field keyName="1_config.name" type="input">
            <label>
                <language value="en-US">Configuration name for ses-
sion</language>
```

```
            </label>
            <description>
                <language value="en-US">Name of session configura-
tion</language>
            </description>
        </field>
    </fieldGroup>
  <fieldGroup>
      <name>
        <language value="en-US">Emulation options</language>
      </name>
      <field keyName="1_emu.allowLcase" type="input">
        <label>
          <language value="en-US">emu.allowLcase</language>
        </label>
        <description>
          <language value="en-US">Allow lowercase to host</language>
        </description>
      </field>
      <field keyName="1_emu.type" type="input">
        <label>
          <language value="en-US">emu.type</language>
        </label>
        <description>
          <language value="en-US">Emulation Mode</language>
        </description>
      </field>
      <field keyName="1_emu.autoTabL" type="input">
        <label>
          <language value="en-US">emu.autoTabL</language>
        </label>
        <description>
          <language value="en-US">Auto tab when input field is
filled</language>
        </description>
      </field>
    </fieldGroup>
    <fieldGroup>
      <name>
        <language value="en-US">Screen options</language>
      </name>
      <field keyName="1_screen.foregroundMagentaLo" type="input">
        <label>
          <language value="en-
US">screen.foregroundMagentaLo</language>
        </label>
        <description>
          <language value="en-US">Magenta</language>
        </description>
      </field>
      <field keyName="1_screen.foregroundRedLo" type="input">
        <label>
          <language value="en-US">screen.foregroundRedLo</language>
        </label>
        <description>
          <language value="en-US">Red</language>
```

```
  </description>
</field>
<field keyName="1_screen.foregroundBlueLo" type="input">
  <label>
    <language value="en-US">screen.foregroundBlueLo</language>
  </label>
  <description>
    <language value="en-US">Blue</language>
  </description>
</field>
<field keyName="1_screen.fontName" type="input">
  <label>
    <language value="en-US">screen.fontName</language>
  </label>
  <description>
    <language value="en-US">Font name</language>
  </description>
</field>
<field keyName="1_screen.variable3Ds" type="input">
  <label>
    <language value="en-US">screen.variable3Ds</language>
  </label>
  <description>
    <language value="en-US">3D variable fields</language>
  </description>
</field>
<field keyName="1_screen.scrColor" type="input">
  <label>
    <language value="en-US">screen.scrColor</language>
  </label>
  <description>
    <language value="en-US">Screen color</language>
  </description>
</field>
<field keyName="1_screen.stsColor" type="input">
  <label>
    <language value="en-US">screen.stsColor</language>
  </label>
  <description>
    <language value="en-US">Status line color</language>
  </description>
</field>
<field keyName="1_screen.foregroundYellowLo" type="input">
  <label>
    <language value="en-US">screen.foregroundYellowLo</language>
  </label>
  <description>
    <language value="en-US">Yellow</language>
  </description>
</field>
<field keyName="1_screen.foregroundWhiteLo" type="input">
  <label>
    <language value="en-US">screen.foregroundWhiteLo</language>
  </label>
  <description>
```

```
        <language value="en-US">White</language>
      </description>
    </field>
    <field keyName="1_screen.foregroundCyanLo" type="input">
      <label>
        <language value="en-US">screen.foregroundCyanLo</language>
      </label>
      <description>
        <language value="en-US">Cyan</language>
      </description>
    </field>
    <field keyName="1_screen.foregroundGreenLo" type="input">
      <label>
        <language value="en-US">screen.foregroundGreenLo</language>
      </label>
      <description>
        <language value="en-US">Green</language>
      </description>
    </field>
  </fieldGroup>
  <fieldGroup>
    <name>
      <language value="en-US">Communication options</language>
    </name>
    <field keyName="1_com.type" type="input">
      <label>
        <language value="en-US">com.type</language>
      </label>
      <description>
        <language value="en-US">Comms interface</language>
      </description>
    </field>
    <field keyName="1_com.serverName" type="input">
      <label>
        <language value="en-US">com.serverName</language>
      </label>
      <description>
        <language value="en-US">Server address</language>
      </description>
    </field>
    <field keyName="1_com.usessh" type="input">
      <label>
        <language value="en-US">com.usessh</language>
      </label>
      <description>
        <language value="en-US">Use SSH connection</language>
      </description>
    </field>
    <field keyName="1_com.sshUser" type="input">
      <label>
        <language value="en-US">com.sshUser</language>
      </label>
      <description>
        <language value="en-US">User name:</language>
      </description>
    </field>
```

```
      <field keyName="1_com.sshPassword" type="input">
        <label>
          <language value="en-US">com.sshPassword</language>
        </label>
        <description>
          <language value="en-US">Password:</language>
        </description>
      </field>
    </fieldGroup>
  </presentation>
</managedAppConfiguration>
```

Example .plist file for Glink VT for iOS

Below you will find an example .plist-file for Glink VT Enterprise for iOS for a SSH connection to *myserver1.domain.xx*.

Note that to set the General options parameters the *config.name* parameter must have the value *GeneralOptions*. Parameters for the first *Session* are prefixed with *1_*.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.ap-
ple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
    <key>config.version</key>
    <integer>1</integer>
    <key>config.name</key>
    <string>GeneralOptions</string>
    <key>screen.noAutoLock</key>
    <true/>
    <key>1_config.name</key>
    <string>myserver1</string>
    <key>1_com.servername</key>
    <string>myserver1.domain.xx</string>
    <key>1_com.sshUser</key>
    <string>Username</string>
    <key>1_com.sshPassword</key>
    <string>##PASSWORD</string>
    <key>1_com.useSSH</key>
    <true/>
    <key>1_com.type</key>
    <string>SSH</string>
    <key>1_emu.type</key>
    <string>VT</string>
    <key>1_emu.autotabl</key>
    <false/>
    <key>1_screen.foregroundmagentalo</key>
    <string>#ff00ff</string>
    <key>1_screen.foregroundredlo</key>
    <string>#f01818</string>
    <key>1_screen.foregroundbluelo</key>
    <string>#7890f0</string>
    <key>1_screen.foregroundyellowlo</key>
    <string>#ffff00</string>
    <key>1_screen.foregroundwhitelo</key>
    <string>#ffffff</string>
    <key>1_screen.foregroundcyanlo</key>
    <string>#58f0f0</string>
    <key>1_screen.foregroundgreenlo</key>
    <string>#24d830</string>
    <key>1_screen.fontname</key>
    <string>Courier</string>
    <key>1_screen.variable3Ds</key>
    <integer>1</integer>
```

```
    <key>1_screen.scrColor</key>
    <integer>3</integer>
    <key>1_screen.stsColor</key>
    <integer>3</integer>
</dict>
</plist>
```

Example XML schema Glink 5250 for iOS

Below you will find an example XML schema for Glink 5250 Enterprise for iOS for a TN5250 connection to *myserver1.domain.xx*.

Note that to set the General options parameters the *config.name* parameter must have the value *GeneralOptions*. Parameters for the first *Session* are prefixed with *1_*.

The example also includes the use of the *config.url* parameter with value: *http://mywebserver.domain.xx/glink5250/group1/config.glinki*, which you can use to instruct Glink VT to download a Glink configuration file from a webserver.

```
<managedAppConfiguration>
    <version>1</version>
    <bundleId>no.gar.eglink5250</bundleId>
    <dict>
    <string keyName="config.version">
      <defaultValue>
        <value>1</value>
      </defaultValue>
    </string>
    <string keyName="config.url">
      <defaultValue>
        <value>http://mywebserver.domain.xx/glink5250/group1/con-
fig.glink5250</value>
      </defaultValue>
    </string>
    <string keyName="config.name">
      <defaultValue>
        <value>GeneralOptions</value>
      </defaultValue>
    </string>
    <boolean keyName="screen.noAutoLock">
      <defaultValue>
        <value>false</value>
      </defaultValue>
    </boolean>
    <boolean keyName="screen.autoConnect">
      <defaultValue>
        <value>false</value>
      </defaultValue>
    </boolean>
    <string keyName="screen.showKeyboard">
      <defaultValue>
        <value>0</value>
      </defaultValue>
      <constraint>
        <values>
          <value>0</value>
```

```
      <value>1</value>
      <value>2</value>
    </values>
  </constraint>
</string>
<string keyName="1_config.name">
  <defaultValue>
    <value>myhost1</value>
  </defaultValue>
</string>
<string keyName="1_com.servername">
  <defaultValue>
    <value>myserver1.domain.xx</value>
  </defaultValue>
</string>
<string keyName="1_com.ibm5250User">
  <defaultValue>
    <value>Username</value>
  </defaultValue>
</string>
<string keyName="1_com.ibm5250SUBSPW">
  <defaultValue>
    <value>##Password</value>
  </defaultValue>
</string>
<boolean keyName="1_com.ibm5250UseAltLogin">
  <defaultValue>
    <value>false</value>
  </defaultValue>
</boolean>
<string keyName="1_com.tn5250maindevice">
  <defaultValue>
    <value>#XX*======</value>
  </defaultValue>
</string>
<string keyName="1_com.ibm5250Model">
  <defaultValue>
    <value>0</value>
  </defaultValue>
  <constraint>
    <values>
      <value>0</value>
      <value>1</value>
      <value>2</value>
      <value>3</value>
      <value>4</value>
      <value>5</value>
      <value>6</value>
      <value>7</value>
      <value>8</value>
      <value>9</value>
      <value>10</value>
      <value>11</value>
    </values>
  </constraint>
```

```
</string>
<boolean keyName="1_com.useSSL">
  <defaultValue>
    <value>false</value>
  </defaultValue>
</boolean>
<boolean keyName="1_com.valServerCert">
  <defaultValue>
    <value>false</value>
  </defaultValue>
</boolean>
<string keyName="1_emu.ibmCodePage">
  <defaultValue>
    <value>500</value>
  </defaultValue>
  <constraint>
    <values>
      <value>037</value>
      <value>1140</value>
      <value>273</value>
      <value>1141</value>
      <value>1388</value>
      <value>880</value>
      <value>1025</value>
      <value>277</value>
      <value>1142</value>
      <value>278</value>
      <value>1143</value>
      <value>875</value>
      <value>280</value>
      <value>1144</value>
      <value>930</value>
      <value>930E</value>
      <value>939</value>
      <value>1399</value>
      <value>933</value>
      <value>1364</value>
      <value>870</value>
      <value>284</value>
      <value>1145</value>
      <value>285</value>
      <value>1146</value>
      <value>297</value>
      <value>1147</value>
      <value>500</value>
      <value>1148</value>
      <value>1149</value>
      <value>1026</value>
      <value>1155</value>
      <value>937</value>
      <value>1371</value>
    </values>
  </constraint>
</string>
<boolean keyName="1_emu.anyCmdResets">
  <defaultValue>
```

```
        <value>true</value>
      </defaultValue>
    </boolean>
    <boolean keyName="1_emu.errToStatBar">
      <defaultValue>
        <value>true</value>
      </defaultValue>
    </boolean>
    <boolean keyName="1_emu.anywhereOk">
      <defaultValue>
        <value>false</value>
      </defaultValue>
    </boolean>
  </dict>
<presentation defaultLocale="en-US">
        <field keyName="config.version" type="input">
            <label>
                <language value="en-US">Configuration version num-
ber</language>
            </label>
            <description>
                <language value="en-US">The version number must be
present and different from the current version for the Configuration
URL to take</language>
            </description>
        </field>
        <field keyName="config.url" type="input">
            <label>
                <language value="en-US">URL of Configuration
file</language>
            </label>
            <description>
                <language value="en-US">This parameter provides the
URL of the Glink configuration file. Please note that this parameter
is ignored if the config.version parameter is missing or the version
matches the version on the device</language>
            </description>
        </field>
        <field keyName="config.name" type="input">
            <label>
                <language value="en-US">Configuration name GeneralOp-
tions</language>
            </label>
            <description>
                <language value="en-US">Configuration name GeneralOp-
tions is required for setting parameters in General Options</language>
            </description>
        </field>
        <field keyName="screen.noAutoLock" type="checkbox">
            <label>
                <language value="en-US">Never Auto-Lock when con-
nected</language>
            </label>
            <description>
```

```
                <language value="en-US">Disable iOS Auto-Lock feature
when connected</language>
            </description>
        </field>
        <field keyName="screen.autoConnect" type="checkbox">
            <label>
                <language value="en-US">Auto-connect at start-up</lan-
guage>
            </label>
            <description>
                <language value="en-US">Auto-connect first session at
start-up</language>
            </description>
        </field>
  <field keyName="screen.showKeyboard" type="select">
    <label>
      <language value="en-US">Keyboard up</language>
    </label>
    <description>
      <language value="en-US">By default Glink will show the keyboard
when you click an input field and hide it if you click outside. If you
select On, an external keyboard will always be connected if you have
one or the keyboard will always be shown</language>
    </description>
    <options>
      <option selected="true" value="0">
        <language value="en-US">Default</language>
      </option>
      <option value="1">
        <language value="en-US">On</language>
      </option>
      <option value="2">
        <language value="en-US">Off</language>
      </option>
    </options>
  </field>
        <field keyName="1_config.name" type="input">
            <label>
                <language value="en-US">Configuration name for ses-
sion</language>
            </label>
            <description>
                <language value="en-US">Name of session configura-
tion</language>
            </description>
        </field>
        <field keyName="1_com.servername" type="input">
            <label>
                <language value="en-US">Host address</language>
            </label>
            <description>
                <language value="en-US">Address of host</language>
            </description>
        </field>
        <field keyName="1_com.ibm5250User" type="input">
            <label>
```

```
                <language value="en-US">User ID</language>
            </label>
            <description>
                <language value="en-US">User name for Auto logon</lan-
guage>
            </description>
        </field>
        <field keyName="1_com.ibm5250SUBSPW" type="input">
            <label>
                <language value="en-US">Password</language>
            </label>
            <description>
                <language value="en-US">Password for Auto logon</lan-
guage>
            </description>
        </field>
        <field keyName="1_com.ibm5250UseAltLogin" type="checkbox">
            <label>
                <language value="en-US">Use Alternate Login</language>
            </label>
            <description>
                <language value="en-US">Check this to fill in the User
name and password in the Sign-on screen</language>
            </description>
        </field>
        <field keyName="1_com.tn5250maindevice" type="input">
            <label>
                <language value="en-US">Device name</language>
            </label>
            <description>
                <language value="en-US">Name of display</language>
            </description>
        </field>
        <field keyName="1_com.ibm5250Model" type="select">
            <label>
                <language value="en-US">5250 Model</language>
            </label>
            <description>
                <language value="en-US">0=3179-2, 1=3180-2, 2=3196-A1,
3=3477-FC, 4=3477-FG, 5=5251-11, 6=5291-1, 7=5292-2, 8=5555-C01,
9=5555-B01,10=3812-1, 11=5553-B01</language>
            </description>
            <options>
                <option selected="true" value="0">
                    <language value="en-US">3179-2 24x80 color</lan-
guage>
                </option>
                <option value="1">
                    <language value="en-US">3180-2 27x132 mono</lan-
guage>
                </option>
                <option value="2">
                    <language value="en-US">3196-A1 24x80 mono</lan-
guage>
                </option>
```

```
                <option value="3">
                    <language value="en-US">3477-FC 27x132 color</lan-
guage>
                </option>
                <option value="4">
                    <language value="en-US">3477-FG 27x132 mono</lan-
guage>
                </option>
                <option value="5">
                    <language value="en-US">5251-11 24x80 mono</lan-
guage>
                </option>
                <option value="6">
                    <language value="en-US">5291-1 24x80 mono</lan-
guage>
                </option>
                <option value="7">
                    <language value="en-US">5292-2 24x80 color</lan-
guage>
                </option>
                <option value="8">
                    <language value="en-US">5555-C01 24x80 Double-Byte
color</language>
                </option>
                <option value="9">
                    <language value="en-US">5555-B01 24x80 Double-
Byte</language>
                </option>
                <option value="10">
                    <language value="en-US">3812-1 Printer</language>
                </option>
                <option value="11">
                    <language value="en-US">5553-B01 Printer</lan-
guage>
                </option>
            </options>
        </field>
        <field keyName="1_com.useSSL" type="checkbox">
            <label>
                <language value="en-US">Use secure sockets -
SSL</language>
            </label>
            <description>
                <language value="en-US">Use a secure SSL/TLS connec-
tion to host</language>
            </description>
        </field>
        <field keyName="1_com.valServerCert" type="checkbox">
            <label>
                <language value="en-US">Authenticate server certifi-
cate</language>
            </label>
            <description>
                <language value="en-US">Verify that the server certif-
icate is from a Trusted root certificate authority</language>
            </description>
```

```
        </field>
        <field keyName="1_emu.ibmCodePage" type="select">
            <label>
                <language value="en-US">Host Code-Page</language>
            </label>
            <description>
                <language value="en-US">EBCDIC Codepage</language>
            </description>
            <options>
                <option value="037">
                    <language value="en-US">037 AU,CA, NZ, PT, ZA,
US</language>
                </option>
                <option value="1140">
                    <language value="en-US">1140 AU,CA, NZ, PT, ZA,
US</language>
                </option>
                <option value="273">
                    <language value="en-US">273 AT, DE</language>
                </option>
                <option value="1141">
                    <language value="en-US">1141 AT, DE</language>
                </option>
                <option value="1388">
                    <language value="en-US">1388 CN</language>
                </option>
                <option value="880">
                    <language value="en-US">1025 Cyrillic</language>
                </option>
                <option value="1025">
                    <language value="en-US">1025 Cyrillic</language>
                </option>
                <option value="277">
                    <language value="en-US">277 DK, NO</language>
                </option>
                <option value="1142">
                    <language value="en-US">1142 DK, NO</language>
                </option>
                <option value="278">
                    <language value="en-US">278 FI, SE</language>
                </option>
                <option value="1143">
                    <language value="en-US">1143 FI, SE</language>
                </option>
                <option value="875">
                    <language value="en-US">875 GR</language>
                </option>
                <option value="280">
                    <language value="en-US">280 IT</language>
                </option>
                <option value="1144">
                    <language value="en-US">1144 IT</language>
                </option>
                <option value="930">
                    <language value="en-US">939 JP</language>
```

```
                </option>
                <option value="930E">
                    <language value="en-US">939 JP</language>
                </option>
                <option value="939">
                    <language value="en-US">939 JP</language>
                </option>
                <option value="1399">
                    <language value="en-US">1399 JP</language>
                </option>
                <option value="933">
                    <language value="en-US">933 KR</language>
                </option>
                <option value="1364">
                    <language value="en-US">1364 KR</language>
                </option>
                <option value="870">
                    <language value="en-US">870 Latin 2</language>
                </option>
                <option value="284">
                    <language value="en-US">284 ES, Latin Amer-
ica</language>
                </option>
                <option value="1145">
                    <language value="en-US">1145 ES, Latin Amer-
ica</language>
                </option>
                <option value="285">
                    <language value="en-US">285 GB</language>
                </option>
                <option value="1146">
                    <language value="en-US">1146 GB</language>
                </option>
                <option value="297">
                    <language value="en-US">297 FR</language>
                </option>
                <option value="1147">
                    <language value="en-US">1147 FR</language>
                </option>
                <option selected="true" value="500">
                    <language value="en-US">500 International</lan-
guage>
                </option>
                <option value="1148">
                    <language value="en-
US">1148International</language>
                </option>
                <option value="1149">
                    <language value="en-US">1149 IS</language>
                </option>
                <option value="1026">
                    <language value="en-US">1026 TR</language>
                </option>
                <option value="1155">
                    <language value="en-US">1155 TR, Euro</language>
                </option>
```

```
                <option value="937">
                    <language value="en-US">937 TW</language>
                </option>
                <option value="1371">
                    <language value="en-US">1371 TW</language>
                </option>
            </options>
        </field>
  <field keyName="1_emu.anyCmdResets" type="checkbox">
          <label>
            <language value="en-US">Any command key resets error</lan-
guage>
          </label>
          <description>
            <language value="en-US">If an error occurred, normally the
keyboard is unlocked with the Reset command key only. If this option
is checked, any command key reset the error state and unlock the key-
board</language>
          </description>
        </field>
        <field keyName="1_emu.errToStatBar" type="checkbox">
          <label>
            <language value="en-US">Display error on status bar</lan-
guage>
          </label>
          <description>
            <language value="en-US">Display error on status bar in
stead of last line of emulation</language>
          </description>
        </field>
        <field keyName="1_emu.anywhereOk" type="checkbox">
          <label>
            <language value="en-US">Allow cursor in protected
area</language>
          </label>
          <description>
            <language value="en-US">Normally you cannot put the cursor
outside an input field. With this option checked, the cursor is moved
to the pointed position in the protected area</language>
          </description>
        </field>
</presentation>
</managedAppConfiguration>
```

MDM Parameter list

General parameters			
Version number for the configuration	config.version	number	Integer
Web Address where Glink can download config file	config.url	http/https address to config file	String
Name of new or existing host session	config.name	Define name for a session or GeneralOptions	String
Remove a session, General options or everything	config.remove	Name of session to remove or GeneralOptions / all	String
Send activation key to the devices	config.actkey	Product activation key with hyphens ('-') removed	String
Remove all toolbar definitions	toolbar.remove	true, false	Boolean
Send license	config.lic	License info with \n as line-separator	String
General options			
Screen orientation - Android only	screen.orientation	**0=Any**, 1=Portrait, 2=Landscape	Integer
Auto-connect session at start up	screen.autoConnect	true, **false**	Boolean
Auto-reconnect if connection lost - Android only	screen.autoReconnect	true, **false**	String
Disconnect at lock screen - Android only	screen.discntAtLock	true, **false**	Boolean
Never Auto-Lock when connected	screen.noAutoLock	true, **false**	Boolean
Ignoring battery optimizations - Android only	screen.ignoreBattery	true, **false**	Boolean
Keyboard up	screen.showKeyboard	**0=Default**, 1=On, 2=Off	Integer
Toolbar - click on keypress	screen.toolbarClicks	**0=Off**, 1=Sound 1, 2=Sound 2	Integer
Toolbar - vibrate on keypress in millisec - Android only	screen.toolbarVibr	**0=Off**, 20, 50, 100, 150, 200, 300	Integer
Toolbar - popup on keypress - Android only	screen.toolbarPopup	**0=Default**, 1=On, 2=Off	Integer
Send notification sound	screen.sndSound	**-1 (Off)=Default,** 0-98	Integer
Receive notification sound	screen.rcvSound	**-1 (Off)=Default,** 0-98	Integer

Show Sessions view when disconnected - Android only	screen.showSess	true, **false**	Boolean
Alert sound - Android only	screen.alertSound	0=Off, 1=**Android notification**, 2=Android alarm	Integer
Language	screen.language	Default, **us=US English**, de=DE German, pt=PT Portuguese, fr=FR French, no=NO Norwegian	String
Password	screen.cfgPassword		String
Key repeat – iOS Only	Screen.keyRepeat	true, **false**	Boolean
Show IOS status bar - iOS Only	screen.iosStatusBar	**0=Always**, 1=Portrait only, 2=Never	Integer
Show Menu/Action bar items - Android only			
On Menu (by default)			
Sessions	screen.mitem8	0= **Menu**, 1=Action bar, 2=Hide	Integer
Settings	screen.mitem10	0= **Menu**, 1=Action bar, 2=Hide	Integer
Scrollback	screen.mitem11	0= **Menu**, 1=Action bar, 2=Hide	Integer
Print screen	screen.mitem12	0= **Menu**, 2=Hide	Integer
Record macro	screen.mitem13	0= **Menu**, 2=Hide	Integer
Debug mode	screen.mitem14	0= **Menu**, 2=Hide	Integer
Print logging	screen.mitem15	0= **Menu**, 2=Hide	Integer
New Glink Window	screen.mitem21	0= **Menu**, 1=Action bar, 2=Hide	Integer
Remove Glink Window	screen.mitem22	0= **Menu**, 1=Action bar, 2=Hide	Integer
General options	screen.mitem16	0= **Menu**, 1=Action bar, 2=Hide	Integer
Export configurations	screen.mitem23	0= **Menu**, 2=Hide	Integer
Help	screen.mitem18	0= **Menu**, 1=Action bar, 2=Hide	Integer
About	screen.mitem19	0= **Menu**, 2=Hide	Integer
Exit	screen.mitem25	0= **Menu**, 2=Hide	Integer
On Action bar (by default)			

Toggle toolbar	screen.mitem24	1=**Action bar**, 2=Hide	Integer
Toggle keyboard	screen.mitem1	1=**Action bar**, 2=Hide	Integer
Connect	screen.mitem6	0= Menu, 1=**Action bar**, 2=Hide	Integer
Disconnect	screen.mitem9	0= Menu, 1=**Action bar**, 2=Hide	Integer
Enter	screen.mitem7	1=**Action bar**, 2=Hide	Integer
Pop up on Action bar			
Scan barcode	screen.mitem2	0= Menu, 1=**Action bar**	Integer
Print data	screen.mitem3	0= Menu, 1=**Action bar**	Integer
Debug data	screen.mitem4	0= Menu, 1=**Action bar**	Integer
SSL/SSH info	screen.mitem17	1=**Action bar**, 2=Hide	Integer
Select Glink	screen.mitem20	0= Menu, 1=**Action bar**	Integer
Pause	screen.mitem26	0= Menu, 1=**Action bar**	Integer
Communication			
Comms interface	com.type	Telnet, TN5250, TN3270, SSH, Ggate, TNVIP, Raw	String
Telnet options			
Server address	com.serverName		String
Terminal type	com.telnetType	**vt220**	String
Line terminator	com.telnetCRNUL	**0=CR+LF**, 1=CR+NULL, 2=CR	Integer
Use IP for BRK	com.telnetUseIP	true, **false**	Boolean
Binary mode	com.telnetBinary	true, **false**	Boolean
Simulate parity	com.telnetSimulateParity	true, **false**	Boolean
Keep alive type	com.keepAtype	**0=TCP**, 1=Telnet	Integer
Keep alive interval	com.keepAlive		String
Wait for login prompt	com.tnWaitUsr		String
Login with	com.tnUser		String
Wait for password prompt	com.tnWaitPsw		String

Password	com.tnPassword		String
Wait for command	com.waitprompt		String
Do command	com.docommand		String
Use secure sockets - SSL	com.useSSL	true, **false**	Boolean
Authenticate server certificate	com.valServerCert	true, **false**	Boolean
File name client certificate:	com.clientCert		String
Password client certificate:	com.clientCertPW		String
Use SSH connection	com.useSSH	true, **false**	Boolean
Server address:	com.sshHost		String
User name:	com.sshUser		String
Password:	com.sshPassword		String
Private key file:	com.sshKeyFile		String
Keep alive interval in seconds	com.sshKeepA	**0**	Integer
SSH options			
Server address	com.serverName		String
Use SSH connection	com.useSSH	**true**	Boolean
User name:	com.sshUser		String
Password:	com.sshPassword		String
Private key file:	com.sshKeyFile		String
Terminal type:	com.sshTerminal	**vt220**	String
Number of cols:	com.sshCols	**80**	Integer
Number of rows:	com.sshRows	**24**	Integer
Keep alive interval in seconds	com.sshKeepA	**0**	Integer
Wait for command	com.waitprompt		String
Do command	com.docommand		String
TN3270 options			
Server address	com.serverName		String

3270 model	com.ibm3270Model	**0=3279-2**, 1=3279-3, 2=3278-1, 3=3278-2, 4=3278-3, 5=3278-4, 6=3278-5, 7=3287-1, 8=3279-2E, 9=3279-3E, 10=3278-1E, 11=3278-2E, 12=3278-3E, 13=3278-4E, 14=3278-5E	Integer
LU name	com.tn3270LuName		String
Use Extended TN3270	com.tn3270Extended	**true**, false	Boolean
Send Associated LU	com.tn3270AssociateLU	true, **false**	Boolean
Keep alive type	com.keepAtype	**0=TCP**, 1=Telnet	Integer
Keep alive interval	com.keepAlive		String
Use secure sockets - SSL	com.useSSL	true, **false**	Boolean
Authenticate server certificate	com.valServerCert	true, **false**	Boolean
File name client certificate:	com.clientCert		String
Password client certificate:	com.clientCertPW		String
Login with	com.tnUser		String
Password	com.tnPassword		String
Use external validation app - Android only	com.validateApp	true, **false**	Boolean
TN5250 options			
Server address	com.serverName		String
5250 model	com.ibm5250Model	**0=3179-2**, 1=3180-2, 2=3196-A1, 3=3477-FC, 4=3477-FG, 5=5251-11, 6=5291-1, 7=5292-2, 8=5555-C01, 9=5555-B01, 10=3812-1, 11=5553-B01	Integer
Device Name	com.tn5250MainDevice		String
Keep alive type	com.keepAtype	**0=TCP**, 1=Telnet	Integer
Keep alive interval	com.keepAlive		String
User ID	com.ibm5250User		String
Password	com.ibm5250SUBSPW		String
Use alternate auto login	com.ibm5250UseAltLogin	true, **false**	Boolean

Use secure sockets - SSL	com.useSSL	true, **false**	Boolean
Authenticate server certificate	com.valServerCert	true, **false**	Boolean
File name client certificate:	com.clientCert		String
Password client certificate:	com.clientCertPW		String
Message queue	com.ibm5250IBMMSGQNAME	**QSYSOPR**	String
Message library	com.ibm5250IBMMSGQLIB	***LIBL**	String
Font ID	com.ibm5250IBMFONT	**11**	Integer
Form feed type	com.ibm5250IBMFORMFEED	**A=Auto feed sheets**, C=Continuous paper, U=Manual feed sheets	String
TNVIP options			
Server address	com.serverName		String
CoName or Resource	com.serverTarget		String
Terminal type	com.telnetType		String
Initial turn	com.initialTurn	**0=Default**, 1=Glink, 2=Host	Integer
Keep alive type	com.keepAtype	**0=TCP**, 1=Telnet	Integer
Keep alive interval	com.keepAlive		String
Use secure sockets - SSL	com.useSSL	true, **false**	Boolean
Authenticate server certificate	com.valServerCert	true, **false**	Boolean
Ggate options			
Server address	com.serverName		String
Alternate server address	com.altServerName		String
Random connect	com.tcpConnectRandom	true, **false**	Boolean
Use secure sockets - SSL	com.useSSL	true, **false**	Boolean
Authenticate server certificate	com.valServerCert	true, **false**	Boolean
CoName or Resource	com.serverTarget		String
Ggate protocol	com.ggateType	**DSA**, DIWS	String
Remote mailbox name	com.ggateDa		String

Remote mailbox extension	com.ggateDx		String
Remote node name	com.ggateDn		String
Local mailbox name	com.ggateMn		String
User ID	com.ggateDu		String
Password	com.ggatePw		String
Project	com.ggateDp		String
Billing	com.ggateDb		String
Host mode	com.ggateHm	**CXI**, DN, DPS7, DPS8, IBM, ROUTER, UNIX	String
Terminal mode	com.ggateTm	See Glink	String
GRTS/LID user string	com.ggateUr		String
IBM log mode	com.ggateLm		String
Additional parameters	com.ggateExtra		String
Keep alive (secs)	com.ggateKeepAliveInt	**0**	Integer
Initial turn	com.initialTurn	**0=Default**, 1=Glink, 2=Host	Integer
Send commands as data	com.ggateCommandsAsData	true, **false**	Boolean
Raw TCP/IP options			
Server address	com.serverName		String
Use SSH connection	com.useSSH	true, **false**	Boolean
User name:	com.sshUser		String
Password:	com.sshPassword		String
Terminal type:	com.sshTerminal	**vt220**	String
Number of cols:	com.sshCols	**80**	Integer
Number of rows:	com.sshRows	**24**	Integer
Wait for command	com.waitprompt		String
Do command	com.docommand		String
Proxy server options			
Use server	com.useProxy	true, **false**	Boolean
Address	com.proxyN		String
Port	com.proxyP	**30855**	Integer

Secure communication	com.proxyEncrypt	true, **false**	Boolean
User disconnect	com.proxyDC	**0**	Integer
Connection lost	com.proxyDH	**300**	Integer
Emulation			
Emulation Mode	emu.type	3270, 5250, VT, ANSI, VIP, DKU, TTY, 7102, 7700	String
VT options			
ECHO mode	emu.vtInitEcho	**true**, false	Boolean
ROLL mode	emu.vtInitRoll	**true**, false	Boolean
Line mode	emu.vtLineMode	**0=Off**, 1=Basic, 2=Extended	Integer
Add LFs to CRs	emu.vtAddLFs	true, **false**	Boolean
No column 81	emu.vtNo81	true, **false**	Boolean
Backspace key action	emu.vtDelToBs	**0=BS**, 1=DEL, 2=BS+DEL	Integer
Answerback string	emu.vtAnswerB		String
VT DA Alias	emu.vtAliasDA	0=Glink,1=VT100,2=VT101,3=VT102,4=VT125,5=VT131,6=VT220,7=VT240,8=VT320,9=VT340,10=VT420,**11=VT440**	Integer
F5 send PuTTY sequence	emu.vtAltF5	true, **false**	Boolean
Mute host alarm	emu.muteHAlarm	true, **false**	Boolean
ANSI options			
ECHO mode	emu.vtInitEcho	**true**, false	Boolean
ROLL mode	emu.vtInitRoll	**true**, false	Boolean
Line mode	emu.vtLineMode	**0=Off**, 1=Basic, 2=Extended	Integer
Add LFs to CRs	emu.vtAddLFs	true, **false**	Boolean
No column 81	emu.vtNo81	true, **false**	Boolean
Backspace key action	emu.vtDelToBs	**0=BS**, 1=DEL, 2=BS+DEL	Boolean
Answerback string	emu.vtAnswerB	ansi	String

VT / ANSI / VIP 7800 / VIP 7700 / DKU 7107 / DKU 7102 Transliteration			
UTF-8 encoding	emu.UTF8Encoding	true, **false**	Boolean
8-bit Host	emu.host8bit	**true**, false	Boolean
Allow lowercase to host	emu.allowLcase	**true**, false	Boolean
Host character set	emu.charset	**Default (Latin 1)**, ISO-8859-2 Latin 2, ISO-8859-5 Latin/Cyrillic, IBM-437, IBM-850, Windows-1251, Windows-1253, Windows-1257, koi8-r	String
National transliteration (7-bit host)	emu.xlitFile8	**Default (No transliteration)**, CYR Cyrillic, FIN Finnish, FRA French, FRC French-Canadian, GER German, GR Greek, ITA Italian, LT2 Latin 2, NOR Norwegian, SF Swedish/Finnish, SPA Spanish, SWE Swedish, SWI Swiss, UK United Kingdom, US United States	String
Use SISO encodoing	emu.useSISO	true, **false**	Boolean
VT / ANSI / VIP 7800 / VIP 7700 / DKU 7107 / DKU 7102 General			
Destructive BS	emu.destructBS	**true**, false	Boolean
Capture on CR	emu.captureOnCR	**0=LF**, 1=CR, 2=CRLF	Integer
Scrollback length (in pages)	emu.sbackMaxPages	**32**	Integer
Initial screen width	emu.initColumns	40, **80**, 132	Integer
Initial screen height (rows)	emu.initRows	**24**	Integer
5250 options			
Any command key resets error	emu.anyCmdResets	**true**, false	Boolean

Display errors on status bar	emu.errToStatBar	**true**, false	Boolean
Treat line as error message line	emu.ibmErrLine	**0=OFF**, 1 -> 27	Integer
- If error message line contains	emu.ibmErrMsg		String
Mute host alarm	emu.muteHAlarm	true, **false**	Boolean
Mute key input alarm	emu.muteKAlarm	true, **false**	Boolean
Show SO/SI characters	emu.ibmShowSoSi	true, **false**	Boolean
Allow cursor in protected area	emu.anywhereOk	true, **false**	Boolean
Alternate arrow keys mode	emu.altArrowMode	true, **false**	Boolean
Show light pen fields in blue	emu.ibmLightPen	true, **false**	Boolean
Auto tab when input field is filled	emu.autoTabL	**true**, false	Boolean
Auto tab when field is filled with scanned data	emu.autoTabScan	**true**, false	Boolean
Continuous backspace	emu.continuousBS	true, **false**	Boolean
Bypass Right Adjust field check	emu.bypassRAcheck	true, **false**	Boolean
Only scanner input allowed in selector pen field	emu.onlyScanData	true, **false**	Boolean
Unicode data stream	emu.ibmUnicode	true, **false**	Boolean
3270 options			
Numeric checking	emu.numCheck3270	**0=None**, 1=Strict, 2=Emulator, 3=Relaxed	Integer
Treat line as error message line	emu.ibmErrLine	**0=OFF**, 1 -> 43	Integer
Mute host alarm	emu.muteHAlarm	true, **false**	Boolean
Mute key input alarm	emu.muteKAlarm	true, **false**	Boolean
Allow cursor in protected area	emu.anywhereOk	true, **false**	Boolean
IBM 5250 / IBM 3270 Host code page			
Host code page	emu.ibmCodePage	**500 International**, See list in Glink	String
IBM 5250 / IBM 3270 General			

Auto tab when input field is filled	emu.autoTabL	**true**, false	Boolean
Auto Tab host	emu.autoTabH	true, **false**	Boolean
Destructive BS	emu.destructBS	**true**, false	Boolean
Auto scroll to cursor if not visible	emu.aScrollToCu	**true**, false	Boolean
Scrollback length (in pages)	emu.sbackMaxPages	32	Integer
VIP 7800 options			
Auto tab when input field is filled	emu.autoTabL	**true**, false	Boolean
Auto Tab host	emu.autoTabH	true, **false**	Boolean
Start in TEXT mode	emu.vipInitText	**true**, false	Boolean
Extended status	emu.vipExtStatus	true, **false**	Boolean
Non-linear forms	emu.vipScrewyForms	true, **false**	Boolean
Preserve roll mode	emu.vipStickyRoll	**true**, false	Boolean
Suppress status line	emu.vipNoStatusLine	true, **false**	Boolean
TX on return	emu.vipTxRetMode	true, **false**	Boolean
ECHO mode	emu.vipInitEcho	true, **false**	Boolean
ROLL mode	emu.vipInitRoll	**true**, false	Boolean
Block mode	emu.vipInitBlock	true, **false**	Boolean
Disallow status line lock	emu.vipSuppressLock	true, **false**	Boolean
Space suppression	emu.vipSpaceSuppress	**true**, false	Boolean
Add CRLF to transmit	emu.vipAddCRLFs	true, **false**	Boolean
Add LFs to CRs	emu.vipAddLFs	true, **false**	Boolean
Send NL after XMIT	emu.vipNLAfterXmit	true, **false**	Boolean
Send ETX for end of transmission	emu.etxSend	**true**, false	Boolean
Enquiry reply string	emu.vipEnqString		String
7200 attributes	emu.vipV7200A	**0=No**, 1=Yes, 2=Extended	Integer
VIP 7700 options			
Auto tab when input field is filled	emu.autoTabL	**true**, false	Boolean
Auto Tab host	emu.autoTabH	true, **false**	Boolean

Start in TEXT mode	emu.vipInitText	**true**, false	Boolean
Wraparound tabbing	emu.dkuWrapTab	**true**, false	Boolean
Add LFs to CRs	emu.vipAddLFs	true, **false**	Boolean
Space suppression	emu.vipSpaceSuppress	**true**, false	Boolean
Suppress status line	emu.vipNoStatusLine	true, **false**	Boolean
ROLL mode	emu.vipInitRoll	true, **false**	Boolean
Show 7700 spaces	emu.vip77SpaceReplace	true, **false**	Boolean
VIP compatibility	emu.vipCompat	**0=Normal**, 1=ITTCourier, 2=ThomasBox	Integer
DKU 71707 options			
Auto tab when input field is filled	emu.autoTabL	**true**, false	Boolean
Blink/blank with ^/~	emu.dkuBlinkAv	**true**, false	Boolean
Show ^/~ in blink/blank	emu.dkuBlinkShow	**true**, false	Boolean
Cursor straight up/down	emu.dkucud	true, **false**	Boolean
Allow cursor out of field	emu.dkucuf	**true**, false	Boolean
New line after Xmit	emu.dkuNewLine	**true**, false	Boolean
SDP attributes	emu.dkuSDPAtt	true, **false**	Boolean
Wrap on page overflow	emu.dkuWrap	true, **false**	Boolean
Wraparound tabbing	emu.dkuWrapTab	**true**, false	Boolean
ROLL mode	emu.dkuInitRoll	true, **false**	Boolean
Use SS2 for 8bit chars	emu.dkuExtend	true, **false**	Boolean
Send ETX for end of transmission	emu.etxSend	**true**, false	Boolean
Wincom compatibility	emu.dkuWincom	true, **false**	Boolean
Fix DKU attributes	emu.dkuFixAttr	**true**, false	Boolean
DKU model	emu.dkuTermID	**0=7107**, 1=7211	Integer
Right justify with	emu.dkuRjfChar	**32=Space**, 48=Zero, 42= Asterisk, 36=Dollar, 164=Euro, 250=Pound	Integer
DKU parameters not configurable in Glink			

Printer lines per page	emu.dkuPrtNbl		Integer
Printer columns	emu.dkuPrtNbc		Integer
Printer cps	emu.dkuPrtCps		Integer
Enable local forms	emu.formsEnable		Boolean
DKU 7102 options			
Add LFs to CRs	emu.vipAddLFs	true, **false**	Boolean
ECHO mode	emu.dkuInitEcho	true, **false**	Boolean
ROLL mode	emu.dkuInitRoll	**true**, false	Boolean
Tab key sends HT	emu.dkuTabSendsHT	true, **false**	Boolean
No column 81	emu.vtNo81	true, **false**	Boolean
Screen			
Toolbar options			
Button width with scaling factor	toolbar.buttonScaleX	**1.0**	String
Button height with scaling factor	toolbar.buttonScaleY	**1.0**	String
Button font scaling factor	toolbar.buttonScaleF	**1.0**	String
Max vertical toolbar columns	toolbar.vtbNum	**Default**, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	String
Max visual toolbar columns	toolbar.vtbVis	**Default**, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	String
Max visual buttons per row	toolbar.htbVisCol	**Default**, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	String
Max visual toolbar rows	toolbar.htbNumRow	**Default**, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16	String
Toolbar buttons			
Toolbar button on row L position N	toolbarL.cmdN	Create Toolbar config in Glink, export and copy	String
Remove all toolbar definitions	toolbar.remove	true, false	Boolean

Screen options			
Font size	screen.fontSize	-1=Auto, -2=Fit screen, 6-36	Integer
Font name	screen.fontName	**Android: Default**, Courier-New, Courier-NewBold, Cousine-Regular, Cousine-Bold, DroidSansMono, Menlo-Regular, Menlo-Bold, Source-CodePro-Regular, SourceCodePro-Semi Bold, SourceCodePro-Bold **iOS: CourierNew**, Courier, Menlo-Regular	String
Font style - iOS Only	screen.fontStyle	0=Plain, **1=Bold**, 2=Italic, 3=Bold & Italic	Integer
Cursor type	screen.cursortype	0=Block, **1=Bar**, 2=Line	Integer
Cursor color	screen.usecursorcolor	**0=Default**, 1=User defined (white ch), 2= User defined (black ch)	Integer
Cursor color	screen.cursorColor	Change color in Glink and export config	String
3D variable fields	screen.variable3Ds	**0=Off (5250/3270)**, **1=On without attribute(VT/ANSI/VIP/DKU/7700/7102)**, 2=On with attribute, 3=On without underline, 4=Show as underline	Integer
Blinking cursor	screen.cursorBlink	true, **false**	Boolean
White backgroud 3D fields	screen.whiteBg3D	true, **false**	Boolean
Show toolbar	screen.multiLineTB	**0=Auto,** 1=Multiline, 2=Single-line, 3=Off, 4=Vertical	Integer
Limit screen view (x,y)	screen.limitXY	col,row	String
Use double tap to	screen.dblTapEnt	**0=Reset screen size**, 1=Perform Enter, 2=Toggle Action bar On/Off (On), 3=Toggle Action bar On/Off (Off), 4=Enable/Disable touchscreen (Enabled) **Android only**, 5==Enable/Disable touchscreen (Disabled) **Android only**	Integer

Double tap again to confirm - Android only	screen.dbltapcfirm	true, **false**	Boolean
Extra line spacing	screen.extraPixelsY	From -4 to +8 **Default: 0**	Integer
Force fixed character width	screen.variableFont	true, **false**	Boolean
Disable zoom	screen.noZoom	true, **false**	Boolean
Show key input on status line	screen.showkeyinput	true, **false**	Boolean
Function keys	screen.hotspotFn	**true**, false	Boolean
Option numbers ("nn." or "nn=")	screen.hotspotNn	0=Off, 1=On, **2=On with Enter**	Integer
Option numbers (" nn ")	screen.hotspotN2	**0=Off**, 1= On, 2=On with Enter	Integer
Option characters ("aa=")	screen.hotspotAa	**0=Off**, 1= On, 2=On with Enter	Integer
URL address	screen.hotspotUrl	0=Off, 1=Open in browser, **2=Open in Glink**	Integer
Screen colors			
Color selection			
Screen color	screen.scrColor	Make Color selection in Glink and export config	Integer
Status line color	screen.stsColor	Make Color selection in Glink and export config	Integer
Color Adjustment			
Dark forground			
Black	screen.foreground_BlackLo	Make Color adjustment in Glink and export config	String
Blue	screen.foregroundBlueLo	Make Color adjustment in Glink and export config	String
Green	screen.foregroundGreenLo	Make Color adjustment in Glink and export config	String
Cyan	screen.foregroundCyanLo	Make Color adjustment in Glink and export config	String
Red	screen.foregroundRedLo	Make Color adjustment in Glink and export config	String

Magenta	screen.foregroundMagentaLo	Make Color adjustment in Glink and export config	String
Yellow	screen.foregroundYellowLo	Make Color adjustment in Glink and export config	String
White	screen.foregroundWhiteLo	Make Color adjustment in Glink and export config	String
Bright forground			
Black	screen.foreground_BlackHi	Make Color adjustment in Glink and export config	String
Blue	screen.foregroundBlueHi	Make Color adjustment in Glink and export config	String
Green	screen.foregroundGreenHi	Make Color adjustment in Glink and export config	String
Cyan	screen.foregroundCyanHi	Make Color adjustment in Glink and export config	String
Red	screen.foregroundRedHi	Make Color adjustment in Glink and export config	String
Magenta	screen.foregroundMagentaHi	Make Color adjustment in Glink and export config	String
Yellow	screen.foregroundYellowHi	Make Color adjustment in Glink and export config	String
White	screen.foregroundWhiteHi	Make Color adjustment in Glink and export config	String
Background			
Black	screen.backgroundBlack	Make Color adjustment in Glink and export config	String
Blue	screen.backgroundBlue	Make Color adjustment in Glink and export config	String
Green	screen.backgroundGreen	Make Color adjustment in Glink and export config	String
Cyan	screen.backgroundCyan	Make Color adjustment in Glink and export config	String

Red	screen.backgroundRed	Make Color adjustment in Glink and export config	String
Magenta	screen.backgroundMagenta	Make Color adjustment in Glink and export config	String
Yellow	screen.backgroundYellow	Make Color adjustment in Glink and export config	String
White	screen.backgroundWhite	Make Color adjustment in Glink and export config	String
VT / ANSI / DKU / 7102 attribute mapping			
Color scheme	screen.sgrColor	**0=Mono**,1= 4-color A, 2=4-color B, 3=7-color	Integer
Use underline	screen.sgrUseUnderline	**true**, false	Boolean
Use blink	screen.sgrUseBlink	**true**, false	Boolean
Attributes to map	screen.sgrusermap	Create mapping in Glink and export config	String
VIP attribute mapping			
Parameter only needed when default is changed	screen.orattss	Create mapping in Glink and export config	
Parameter only needed when default is changed	screen.andattss	Create mapping in Glink and export config	
Devices			
Print setup			
Printer type - Android only	print.type	**File=Default**, LPD=LPD server, BT=Bluetooth printer	String
Font size - iOS only		**14**	
Page Orientation - iOS only		**Portrait**	
Printer timeout (secs)	print.timeout	**5**	Integer
LPD server address - Android only	print.lpdServerName		String
LPD queue name - Android only	print.lpdQueueName		String
Pre-print character - Android only	print.pccBefore	**0=None**, 1=CR, 2=CR+LF, 3=CR+FF, 4=CR+VT	Integer

Post-print character - Android only	print.pccAfter	**0=None**, 1=CR, 2=CR+LF, 3=CR+FF, 4=CR+VT	Integer
Transparent print - Android only	print.transparent	true, **false**	Boolean
Use print ctl for host data - Android only	print.pCtlHostData	true, **false**	Boolean
Bluetooth device - Android only	print.btDevice		String
Init string - Android only	print.btInit		String
Character encoding - Android only	print.btEncoding	**IBM437**	String
DKU option			
Use 0x19 as SS2	print.ss2X19	true, **false**	Boolean
Use Esc E as SS2	print.ss2EscE	true, **false**	Boolean
Combine double escapes	print.ss2EscEsc	true, **false**	Boolean
Barcode reader setup			
Barcode reader device type	print.bcEnable	**Android:** 0=Keyboard Wedge, 7=Keyboard Wedge A, 1=Camera, 8=AML Scanner, 16=Chainway, 10=Cipherlab, 9= Datalogic, 4=Denso Scanner, 5=Honeywell Scanner, 11=M3 Mobile, 17=Movfast, 15=Newland, 12=Point Mobile, 14=Seuic, 6=Socket Mobile, 3=Unitech Scanner, 13=Urovo scanner, 2=Zebra skanner **iOS: 0=Keyboard Wedge**, 7=Keyboard Wedge A	Integer
Action after scan	print.bcDoAfter	**0=None**, 1=Tab, 2=Enter, 3=FldExit (5250)	Integer
Remove char(s) at start	print.bcRemFirst	**0**	Integer
Remove char(s) at end	print.bcRemLast	**0**	Integer
Add text before	print.bcAddFirst		String

Add text after	print.bcAddLast		String
Use keyboard mapping	print.bcUseKeyMap	**true**, false	Boolean
Show on status line - Android only	print.bcShow	**true**, false	Boolean
Profile name - Android only	print.dwProfile	**Glink**	String
Intent action - Android only	print.dwIntent	**no.gar.glink.data**	String
Intent string extra - Android only	print.dwIntentEx		String
Glink sets Output Mode (M3 Mobile only)	print.m3glinkmode	**true**, false	Boolean
Card data format string Linea/Infinea - iOS only	print.bcCardFmt	**{0}\\t{1}\\t{2}\\t{3}\\t{4}**	String
Keyboard			
Key input handling - Android only	keyboard.altInput	0=Auto, 1=Standard, 2=Extended, 3=Basic	Boolean
Map shift/F1.. to F13..	keyboard.F13F24	**true**, false	Boolean
Mappable modifier keys - Android only	keyboard.mapModifier	true, **false**	Boolean
Detect long press keys - Android only	keyboard.useLongPress	true, **false**	Boolean
Macro 1	keyboard.macroNN	Create macro in Glink, export config and copy	String
Mapped keys	keyboard.kc.NN_C	Create mapping in Glink, export config and copy	String

How to install SSL/TLS client certificates and SSH private key files

SSL/TLS Client certificates

How to import a PSKC #12 certificate (.p12 file)

If you have specified a file name for the client certificate in the Glink settings, Glink will check if a file with that name exists internally in the Glink file structure. If the file does not exist, Glink for iOS will display an error message and you must import it, see below. On Android, Glink will look for the file in the Glink auto import folder and import it if it exists. If not found, Glink gives the user the option to select a client certificate. If a file is selected, Glink will import the file and save it with the name specified in the Glink Settings regardless of the name of the file selected.

Distribute the p12 client certificate file to the auto-import folder (Android only)

Use MDM to distribute client certificates to the Glink auto import folder and Glink will pick it up as described above.

Use AppConfig parameter in MDM to download p12 client certificate (Android and iOS)

When configuring Glink from a MDM, you can use the config.url parameter to specify the URL to a p12 certificate file. If the file name is my_cert.p12 the certificate will be saved with that name and can be used from any session in the File name client certificate option.

Send p12 client certificate as e-mail attachment (iOS)

Another way to import the client certificate file (with extension *.glinki*) is to send an e-mail to your device with the file as an attachment.

Glink is set up to accept files with **.glinki** as the file name extension. So if your certificate is named *my_cert.p12*, rename it to *my_cert_p12.glinki*.

On your device, open your mail client, select the mail, and click on the attachment. Glink will then be launched and ask if you want to import the file as a new configuration (your configuration will not be overwritten in this case). The file will be stored internally in Glink as *my_cert_p12*. Use this name when you configure the certificate in Glink.

SSH private key file

How to import a private key file

Glink will handle files with *.glinki* as the file name extension, i.e *myfile.glinki*. One way to import the SSH private key file, is to send it as an e-mail to your device with *myfile.glinki* as an attachment. Click on the attachment and Glink will ask if you want to import it as a new configuration (your configuration will not be overwritten in this case).

The *myfile.glinki* must have the following format:

```
[file:my_pk_file]
Add the content of the private key here...
```

You can also append this at the end of your *config.glinki* file:

```
[file:my_pk_file]
Add the content of the private key here...
```

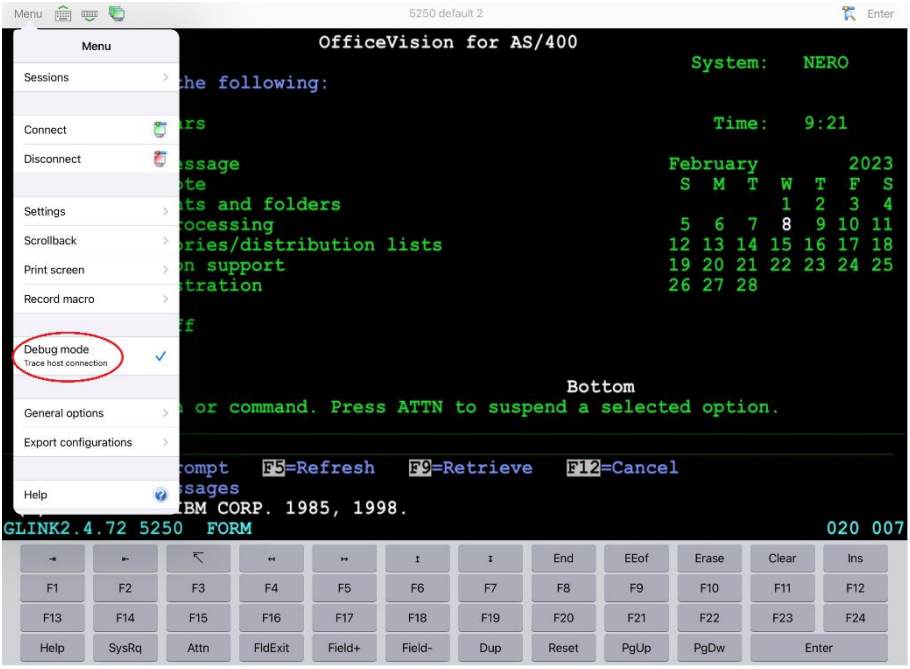
Glink will create a file with the file name *my_pk_file* with the content supplied.

In the Telnet or SSH configuration dialog box, enter *my_pk_file* in the *Private key file* field.

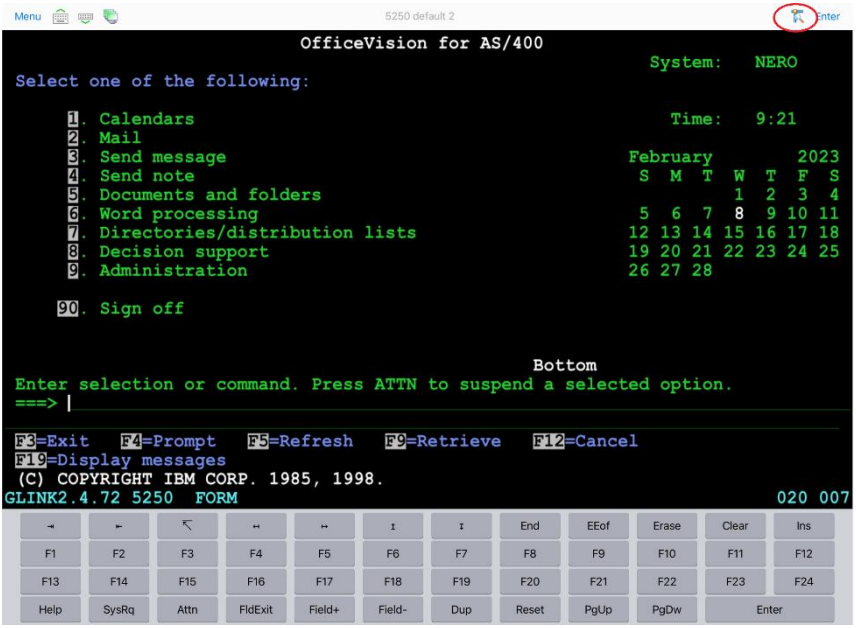
How to export/send a debug trace and configuration file

Enable, capture and export debug file

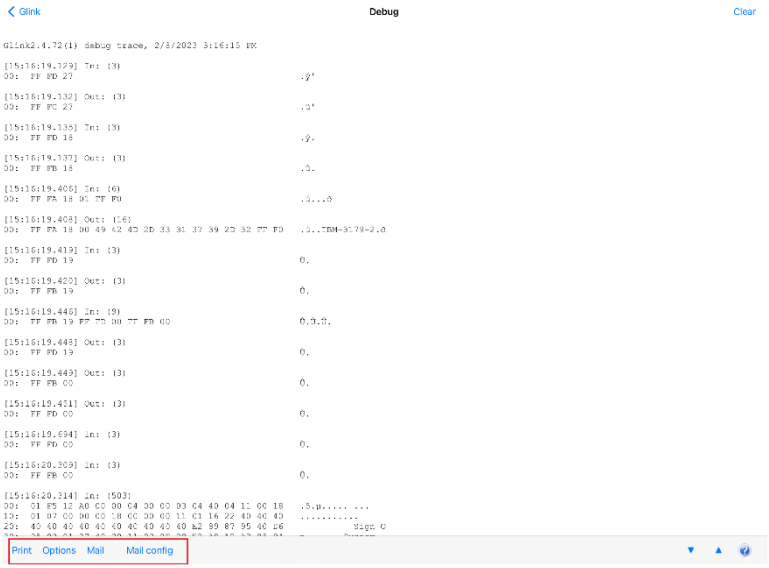
1. Enable debug mode: Tap **Menu -> Debug Mode**



2. Return to emulation screen and tap Disconnect + Connect
3. Interact with the host application until you have collected the request information



4. Send debug trace file: tap **Debug icon -> Menu -> Mail** to send debug file as file attachment.



5. An alternative might be to print the debug file on an AirPrint printer: **Debug icon -> Menu -> Print**. Tap **Options** to set Print options like *Font size* and *Page orientation*.
6. From this menu you can also send the configuration file as an e-mail attachement: **Debug icon -> Menu -> Mail config**

Export configuration file

The config file (config.glinki) you can you send by e-mail from the device (**Menu -> Export configuration**) or from the Debug window (as described in the previous section).

The GlinkProxy Session Persistence Server

GlinkProxy runs on a Windows server, can be located close to the host computer, and is designed to extend the life of sessions between Glink terminal emulation clients and hosts. A device running Glink might go idle, enter power-saving mode or move out of WiFi range and prematurely terminate the session between Glink and the host. The *GlinkProxy* software maintains the session with the host, even if the device goes to sleep or the connection is temporarily lost. This enables Glink to seamlessly resume the session without loss of productivity when it reconnects to *GlinkProxy*.

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 or lose WiFi connection. This is how it works:

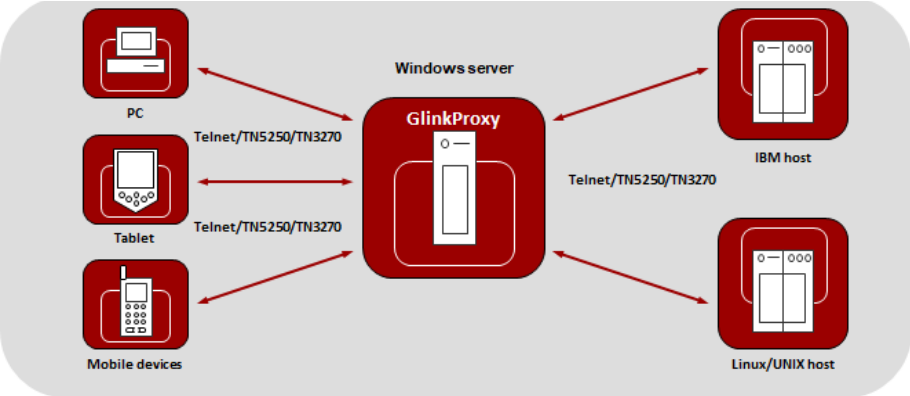
1. Glink connects to the GlinkProxy application server.

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.

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.

Delivery

The GlinkProxy application is delivered as a zip-file containing the GlinkProxy executable file and the product documentation.

Install and setup

Copy the file to the Windows server on which you want to run the GlinkProxy software.
Create a folder for GlinkProxy, for example C:\GlinkProxy, and unzip the GlinkProxy package here.
Start *glinkproxy.exe* without parameters by double-clicking the icon or typing in *glinkproxy.exe* at a command prompt. You will now be requested to enter your license information. Either type it in or copy-and-paste it into the text box. Click "OK" twice and "Allow access" to the network for GlinkProxy when Windows Defender Firewall or other firewall prompts for it.
You now have a running instance of GlinkProxy with default parameters.
With default parameters, GlinkProxy will

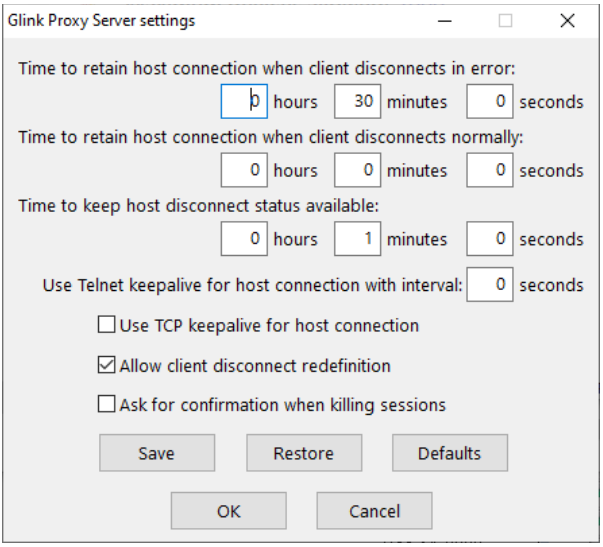
Keep the host connection for 30 minutes if the Glink device goes idle, enters power-saving mode or moves out of WiFi range and prematurely terminates the session to GlinkProxy. If Glink reconnects within 30 minutes, the session is resumed as if it never was disconnected from GlinkProxy.
Disconnect the host connection immediately if the Glink user disconnects the session.
Allow Glink to change the disconnect timeout values.
Not send any keepalive packets unless specified by Glink.
Open the Settings menu if you want to change some of these values and Save the changes.
Below 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 iOS and Glink for Android.

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.

Settings

Click "Settings" on the menu bar to open the 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 that you are 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.

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.
/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.
/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.
/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.

/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 iOS/Android Proxy Server Settings

Glink 5250, Glink 3270, Glink VT and Glink for iOS/Android 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)
Port	nn	Configure the port number GlinkProxy is listening to. The default is 30855
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 WiFi 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.