



Glink VT for iOS User Guide



Apple, iOS, iPad, iPhone and Mac are registered trademarks of Apple Inc. Android, Chrome, Google, Google Play are trademarks of Google LLC. Microsoft, Windows, MS, are registered trademarks of Microsoft Corp. IBM and PC are registered trademarks of IBM Corp.

Any other product names are trademarks of their respective owners.

Glink VT for iOS, version 2.4.8 © Gallagher & Robertson AS, 2023 All Rights Reserved

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

| Contents | i |
|---|---|
| Warranty | 1 |
| Privacy policy | 2 |
| Introduction | 3 |
| Features | 3 |
| Support | 4 |
| How to purchase/order a Glink license | |
| Delivery and Installation | |
| Setup | |
| The Glink emulator screen | |
| Action bar | 5 |
| Emulation screen | |
| Toolbars | |
| Soft/on-screen keyboard | |
| Physical keys and keyboards | |
| Getting started | 8 |
| Create a new session | |
| Start a session | |
| Switching session | |
| Zoom and font size | |
| Text size | |
| Keyboard | |
| External keyboard | |
| Keyboard shortcuts | |
| Shortcuts for keyboards with function keys | |
| Shortcuts for keyboards without function keys | |
| Other shortcuts | |
| VT shortcuts | |
| Keyboard mapping | |
| Toolbar | |
| Hotspots | |
| * | |

| Copy/Paste | |
|----------------------------------|--|
| Hyperlinks and mail addresses | |
| Export and Import configurations | |
| MDM configuration support | |
| Proxy server | |
| Gestures | |

| Menu | 15 |
|---------------------------------|------|
| Sessions | . 16 |
| Connect | . 16 |
| Disconnect | . 16 |
| Settings | . 17 |
| Scrollback | . 17 |
| Print screen | . 18 |
| Record macro | . 18 |
| Pause the macro | . 18 |
| Wait for user input | . 19 |
| Wait for a time interval | |
| Debug mode | . 19 |
| Debug | . 19 |
| Print logging | . 20 |
| General options | . 20 |
| Never Auto-Lock when connected | . 21 |
| Toolbar - Click on keypress | . 21 |
| Show iOS status bar | . 21 |
| Keyboard up | . 21 |
| Auto-connect session at startup | . 21 |
| Password - Protect Settings | . 22 |
| Export configurations | . 23 |
| Help | . 23 |
| Connect icon (Green monitor) | . 23 |
| Keyboard icon | . 23 |
| Toolbar icon | . 23 |
| | |

| Settings - Communication | |
|--|--|
| Telnet options | |
| Server address | |
| IPv6 address | |
| Terminal type | |
| Line terminator | |
| Use IP (Interrupt Process) command for break | |
| Binary mode | |
| Keep alive | |

| Keep alive type | . 26 |
|----------------------------------|------|
| Simulate parity | . 27 |
| Telnet login | . 27 |
| Wait for login prompt | . 27 |
| Login with | |
| Wait for password prompt | . 28 |
| Password | |
| Secure sockets | . 28 |
| Use secure sockets - SSL | . 28 |
| Authenticate server certificate | |
| File name client certificate | |
| Password client certificate | . 29 |
| How to import a private key file | |
| SSH Connection | |
| Use SSH connection | . 30 |
| Server address | |
| User name | . 30 |
| Password | . 31 |
| Private key file | . 31 |
| Keep alive interval | |
| SSH options | . 32 |
| Server address | |
| User name | |
| Password | . 32 |
| Private key file | |
| Terminal type | |
| Number of cols | . 33 |
| Number of rows | . 33 |
| Keep alive interval | |
| 1 | |
| Settings – Emulation | 34 |
| VT / ANSI options | .34 |
| ECHO mode | |
| ROLL mode | |
| Line mode | |
| Line mode options | |
| Add LFs to CRs | |
| No column 81 | |
| Backspace key action | |
| Answerback string | |
| VT DA Alias | |
| F5 send PuTTY sequence | |
| VT / ANSI - Transliteration | |
| UTF-8 encoding | |
| | |

| Allow lowercase to host 38 Host character set 38 National transliteration (7-bit host) 38 Use SI/SO for printing 38 VT / ANSI - General 39 Destructive backspace 39 Capture on CR (Capture delimiter) 39 Scrollback length 40 Initial screen width 40 Initial screen height (rows) 40 Settings - Screen 41 Toolbar setup 41 Add toolbar 42 Add toolbar 42 Toolbar options 42 Toolbar options 42 Toolbar options 43 Macro string 43 Screen Options 45 Font size 46 Font size 46 Font size 46 Blinking cursor 47 White background 3D fields 47 White background 3D fields 47 Limit screen view (x,y) 47 Use double tap to 48 Force fixed character width 48 Foreen co | Eight bit host | 38 |
|---|----------------------------|----|
| National transliteration (7-bit host)38Use SL/SO for printing38VT / ANSI - General.39Destructive backspace39Capture on CR (Capture delimiter)39Scrollback length.40Initial screen width.40Initial screen height (rows)40Settings - Screen41Toolbar setup41Edit41Add buttons42Add toolbar42Options42Toolbar options.42Toolbar options43Button size43Macro string43Screen Options45Font size46Font size46Font size46Blinking cursor47White background 3D fields47Mow toolbar47Limit screen view (x,y)47Use double tap to.48Extra line spacing48Force fixed character width.48Koreen Colors49 | | |
| National transliteration (7-bit host)38Use SL/SO for printing38VT / ANSI - General.39Destructive backspace39Capture on CR (Capture delimiter)39Scrollback length.40Initial screen width.40Initial screen height (rows)40Settings - Screen41Toolbar setup41Edit41Add buttons42Add toolbar42Options42Toolbar options.42Toolbar options43Button size43Macro string43Screen Options45Font size46Font size46Font size46Blinking cursor47White background 3D fields47Mow toolbar47Limit screen view (x,y)47Use double tap to.48Extra line spacing48Force fixed character width.48Koreen Colors49 | Host character set | 38 |
| Use SI/SO for printing 38 VT / ANSI – General. 39 Destructive backspace 39 Capture on CR (Capture delimiter) 39 Scrollback length. 40 Initial screen width 40 Initial screen height (rows) 40 Settings – Screen 41 Toolbar setup 41 Add buttons 42 Add toolbar 42 Options 42 Toolbar options 42 Toolbar options 42 Toolbar options 42 Toolbar options 43 Button size 43 Macro string 43 Screen Options 46 Font size 46 Font size 46 Font size 46 Blinking cursor 47 White background 3D fields 47 Show toolbar 47 Limit screen view (x,y) 47 Use double tap to 48 Force fixed character width 48 Hotspots 48 Scree | | |
| VT / ANSI - General. 39 Destructive backspace. 39 Capture on CR (Capture delimiter) 39 Scrollback length. 40 Initial screen width. 40 Initial screen width. 40 Settings - Screen 41 Toolbar setup. 41 Edit. 41 Add buttons 42 Add toolbar 42 Options. 42 Toolbar options. 42 Toolbar options. 42 Toolbar string 43 Button size. 43 Macro string 43 Screen Options. 45 Font size 46 Font size. 46 Font size. 46 Font size. 46 Font size. 46 Screen Options. 47 White background 3D fields 47 White background 3D fields 47 Show toolbar 47 Limit screen view (x,y) 47 Use double tap to. 48 Force fixed character w | Use SI/SO for printing | 38 |
| Capture on CR (Capture delimiter)39Scrollback length40Initial screen width40Initial screen height (rows)40Settings – Screen41Toolbar setup41Edit41Add buttons42Add toolbar42Options42Toolbar options42Toolbar options43Button size43Button size43Screen Options45Font size46Font size46Font style46Gursor type463D variable fields47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Screen Colors49 | | |
| Capture on CR (Capture delimiter)39Scrollback length40Initial screen width40Initial screen height (rows)40Settings – Screen41Toolbar setup41Edit41Add buttons42Add toolbar42Options42Toolbar options42Toolbar options43Button size43Button size43Screen Options45Font size46Font size46Font style46Gursor type463D variable fields47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Screen Colors49 | Destructive backspace | 39 |
| Scrollback length | | |
| Initial screen width40Initial screen height (rows)40Settings - Screen41Toolbar setup41Edit41Add buttons42Add toolbar42Options42Toolbar options42Toolbar options43Button size43Macro string43Screen Options45Font size46Font size46Font style46Blinking cursor47White background 3D fields47Use double tap to48Extra line spacing48Koreen Colors48Screen Colors48 | | |
| Initial screen height (rows) 40 Settings – Screen 41 Toolbar setup 41 Edit 41 Add buttons 42 Add toolbar 42 Options 42 Toolbar options 42 Toolbar options 42 Toolbar options 43 Button size 43 Macro string 43 Screen Options 45 Font size 46 Font style 46 Gursor type 46 3D variable fields 46 Blinking cursor. 47 White background 3D fields 47 Show toolbar 47 Use double tap to. 48 Extra line spacing 48 Force fixed character width 48 Hotspots 48 Screen Colors 49 | | |
| Toolbar setup. 41 Edit 41 Add buttons 42 Add toolbar 42 Options 42 Toolbar options 42 Toolbar options 42 Toolbar 1-n buttons 43 Button size 43 Macro string 43 Screen Options 45 Font size 46 Font size 46 Font size 46 Screen Options 45 Font size 46 Streen options 47 Macro string 43 Screen isize 46 Font size 46 Font size 46 Streen options 47 White background 3D fields 47 Show toolbar 47 Limit screen view (x,y) 47 Use double tap to 48 Extra line spacing 48 Force fixed character width 48 Hotspots 48 Screen Colors 49 | | |
| Toolbar setup. 41 Edit 41 Add buttons 42 Add toolbar 42 Options 42 Toolbar options 42 Toolbar options 42 Toolbar 1-n buttons 43 Button size 43 Macro string 43 Screen Options 45 Font size 46 Font size 46 Font size 46 Screen Options 45 Font size 46 Streen options 47 Macro string 43 Screen isize 46 Font size 46 Font size 46 Streen options 47 White background 3D fields 47 Show toolbar 47 Limit screen view (x,y) 47 Use double tap to 48 Extra line spacing 48 Force fixed character width 48 Hotspots 48 Screen Colors 49 | | |
| Edit41Add buttons42Add toolbar42Options42Toolbar options42Toolbar 1-n buttons43Button size43Macro string43Screen Options45Font size46Font size46Font style46SD variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Hotspots48Screen Colors49 | | |
| Add buttons42Add toolbar42Options42Toolbar options42Toolbar 1-n buttons43Button size43Macro string43Screen Options45Font size46Font size46Font style46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Mospots48Screen Colors49 | | |
| Add toolbar42Options42Toolbar options.42Toolbar 1-n buttons43Button size.43Macro string43Screen Options45Font size46Font size46Font style46Sor variable fields46Blinking cursor.47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Mospots48Screen Colors49 | | |
| Options42Toolbar options42Toolbar 1-n buttons43Button size43Macro string43Screen Options45Font size46Font name46Font style46Cursor type463D variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Hotspots48Screen Colors49 | | |
| Toolbar options.42Toolbar 1-n buttons43Button size.43Macro string43Screen Options45Font size46Font size46Font style.46Cursor type463D variable fields46Blinking cursor.47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to.48Extra line spacing48Force fixed character width48Macroson49 | | |
| Toolbar 1-n buttons43Button size43Macro string43Screen Options45Font size46Font size46Font style46Cursor type463D variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Motspots48Screen Colors49 | | |
| Button size43Macro string43Screen Options45Font size46Font name46Font style46Cursor type463D variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Motspots48Screen Colors49 | 1 | |
| Macro string43Screen Options45Font size46Font name46Font style46Cursor type463D variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Screen Colors49 | | |
| Screen Options45Font size46Font name46Font style46Cursor type463D variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Motspots48Screen Colors49 | | |
| Font size46Font name.46Font style | | |
| Font name46Font style46Cursor type463D variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Motspots48Screen Colors49 | Screen Options | 45 |
| Font style | Font size | 46 |
| Cursor type463D variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Hotspots48Screen Colors49 | Font name | 46 |
| 3D variable fields46Blinking cursor47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Hotspots48Screen Colors49 | Font style | 46 |
| Blinking cursor.47White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Hotspots48Screen Colors49 | Cursor type | 46 |
| White background 3D fields47Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Hotspots48Screen Colors49 | 3D variable fields | 46 |
| Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Hotspots48Screen Colors49 | Blinking cursor | 47 |
| Show toolbar47Limit screen view (x,y)47Use double tap to48Extra line spacing48Force fixed character width48Hotspots48Screen Colors49 | White background 3D fields | 47 |
| Use double tap to | Show toolbar | 47 |
| Extra line spacing | Limit screen view (x,y) | 47 |
| Extra line spacing | Use double tap to | 48 |
| Force fixed character width | | |
| Hotspots | | |
| Screen Colors | | |
| | | |
| | Color selection | |
| Color adjustment | | |
| ANSI / VT / DKU / 7700 / 7102 attribute mapping | | |
| | | |
| Settings – Devices | Settings – Devices | 52 |
| Print options | 0 | |

| Barcode reader options | . 53 |
|---|------|
| Barcode reader device type | |
| More options | |
| Action after scan | |
| Remove char(s) at start | |
| Remove char(s) at end | |
| Add text before | |
| Add text after | . 55 |
| Card data format string | . 55 |
| Use keyboard mapping | |
| Application Mode (SPP) for Apple iOS devices | |
| Keyboard options | |
| External keyboard | |
| Keyboard mapping | |
| Define macro | |
| | |
| Distributing Glink configurations from an EMM/MDM | 61 |
| Download the Glink configuration from a web server | |
| Set Glink parameters from the MDM | |
| General options | |
| Passwords | |
| Toolbar | |
| Remove a session configuration | |
| XML Schema | |
| MDM Parameter list | |
| | |
| How to install SSL/TLS client certificates and SSH private key | |
| files | 87 |
| SSL/TLS Client certificates | |
| How to import a PSKC #12 certificate (.p12 file) | |
| Distribute the p12 client certificate file to the auto-import folder (Android | . 07 |
| only) | 87 |
| Use AppConfig parameter in MDM to download p12 client certificate | . 07 |
| (Android and iOS) | 87 |
| Send p12 client certificate as e-mail attachment (Android and iOS) | |
| SSH private key file | |
| How to import a private key file | |
| | . 00 |
| How to avaort/cond a dahug trace and configuration file | 80 |
| How to export/send a debug trace and configuration file | |
| Enable, capture and export debug file | |
| Export configuration file | . 91 |
| | |

| The GlinkProxy Session Persistence Server | 92 |
|---|----|
| How it works | 92 |
| Delivery | 93 |
| Install and setup | |
| Startup | |
| Settings | 94 |
| Command line parameters | 96 |
| Glink for iOS/Android Proxy Server Settings | |

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 VT 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 VT is used to access applications running on Bull, IBM, DEC, UNIX and Linux host systems. Glink VT has emulations for the DEC VT420, VT320, VT340, VT220 and VT102 terminals and ANSI 3.64 terminals.

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

Features

- VT420, VT320, VT340, VT220, VT102, ANSI 3.64 terminal emulation, all screen sizes
- Telnet and SSH communication to host
- SSL/TLS support for secure communication
- SSH for direct communication with the SSH Daemon
- SSH tunneling for Telnet protocol
- Multiple concurrent host sessions
- 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
- 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
- Configurable scrollback buffer contains history of your host session

Introduction

- 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 email to <u>support@gar.no</u> 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 <u>gar@gar.no</u> 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.

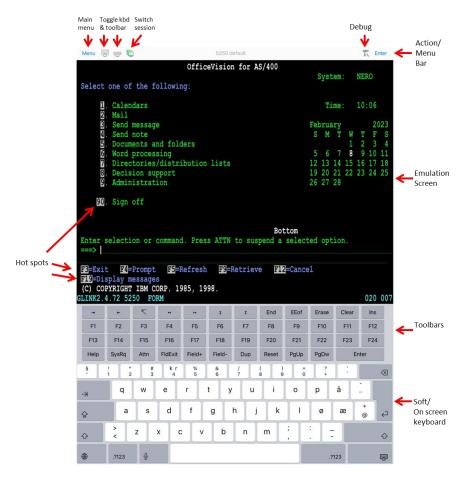
You will also find a description of all available options in this document.

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.

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, Multiline, Single-line and Off. 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*.

Getting started

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 VT emulation: F11 to F20 : shift+F1 to shift+F10 or alt+F1 to alt+F10

Shortcuts for keyboards without function keys

For VT 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 |

VT shortcuts

| Find | : | Alt+ F | |
|----------|---|-----------------|---|
| Select | : | Alt+ S | |
| Remove | : | Alt+ R | |
| PageUp | : | Ctrl+Cursor Up | |
| PageDown | : | Ctrl+Cursor Dow | n |

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.

Getting started

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

| lenu 💼 👳 | 1 | | | | 5250 del | ault 2 | | | | | | | 2 | Ente |
|--|--------------------------------------|--|----------------------------|------------------|---------------------|---------|--------|----------------|-------|-----|-------|-----|------------|------|
| Me | enu | | | Office | Vision | for A | s/400 | | | | | | | |
| Sessions | | he fo | ollowin | a: | | | | | Sys | tem | | NEI | २० | |
| | | | | 9. | | | | | | | | | | |
| Connect | 6 | ITS | | | | | | | Т | ime | | 9:2 | 21 | |
| Disconnect | Ę | ssage | 9 | | | | | F | ebru | ary | | | 20 | 023 |
| | | ote | 1 6 1 1 | | | | | | S M | Т | W | T | F 0 | - |
| Settings | | ocess | nd fold | ers | | | | | 5 6 | 7 | 1 8 | 2 | 3 10 | 11 |
| Scrollback | | | /distri | bution | lists | | | 1 | 2 13 | 14 | 15 | 16 | 17 | 18 |
| Print screen | | | pport | | | | | 1 | 9 20 | 21 | 22 | 23 | 24 | 25 |
| Record macro | | strati | lon | | | | | 2 | 6 27 | 28 | | | | |
| in the second made to | | | | | | | | | | | | | | |
| The set of Hildero | | f | | | | | | | | | | | | |
| Debug mode | tion | ff / | | | | | | | | | | | | |
| Debug mode | tion | :f | | | | | Bot | tom | | | | | | |
| Debug mode | lion | | command | . Pres | s ATTN | to susj | | tom selecte | d op | tio | n. | | | |
| Debug mode Trace host connecti | 1S | | command | . Pres | s ATTN | to susj | | | d op | tio | n. | | | |
| Debug mode Trace host connecti General option | 1S | > 1 or (| | . Press | | to susj | pend a | | | tio | n. | | | |
| Debug mode Trace host connecti General option | 1S | > or of or of of of other sectors of the sectors of | F5=R | efresh | F9 <mark>=</mark> R | | pend a | selecte | | tio | n. | | | |
| Debug mode Trace host connecti General option Export configu | ion IS Jrations | compt sages | F5=R S ORP. 19 | efresh | F9 <mark>=</mark> R | | pend a | selecte | | tio | n. | | 020 | 00 |
| Debug mode Trace host connecti General option Export configu Help | ion IS Jrations | compt sages | F5=R S ORP. 19 | efresh | F9 <mark>=</mark> R | | pend a | selecte | | | Clear | - | 020 Ins | |
| Debug mode Trace host connecti General option Export configu Help LINK2 . 4 | ion IS Jrations | or o | F5=R S ORP. 19 RM | efresh 85, 19 | F9=R 98. | etrievo | pend a | selecte | | | | - | 785 | 2 |
| Debug mode Trace host connecti General option Export configu Help LINK2 . 4 | ion is urations .72 52 - | compt sages IBM CC 50 FOI | F5=R S DRP. 19 RM | efresh 85, 19 | F9= R 98. | etriev | e F12 | =Cancel | Erase | | Clear | - | Ins | |

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

Menu

Sessions

| 22 Wed 8 Feb | | 🗢 100 % 🖿 |
|-----------------------------|----------|-----------|
| Glink | Sessions | Edit |
| CONNECT TO | | |
| aladdinAansi | | (i) > |
| Nero | | (1) > |
| /t default | | (1) > |
| 5250 default | | (i) > |
| 3270 default | | (1) > |
| vip7804 ggate default | | (1) > |
| dku7107 tnvip default | | (i) > |
| 7700 ggate default | | (i) > |
| 7102 telnet default | | (j) > |
| vt ssh default | | (i) > |
| vt raw tcp/ip default | | (I) > |
| SESSIONS STARTED | | |
| 🏐 aladdinAansi | | |
| 5250 default | | ✓ |
| New session | | |
| | | |
| New configuration Templates | | 0 |

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.

| 09:23 Wed 8 Feb | | 중 100 % |
|----------------------|----------|---------|
| < Glink | Settings | |
| 5250 default | | |
| TN5250 options | | Ś |
| Proxy server | | × |
| EMULATION | | |
| 5250 options | | > |
| Host code page | | > |
| General | | > |
| SCREEN | | |
| Toolbar setup | | > |
| Screen options | | > |
| Screen colors | | 5 |
| DEVICES | | |
| Print setup | | > |
| Barcode reader setup | | > |
| Keyboard mapping | | > |

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 *OK* 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. 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* 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*. The macro will now be saved to the current toolbar. 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. 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 record-ing* button. If you don't tap *Remove 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.

Menu

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.

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

Telnet options

| Settings | Telnet options | 0 |
|---------------------------------|----------------|------------|
| Server address | | xxx.gar.no |
| Required | | |
| Terminal type | | vt220 |
| Line terminator | | CR+LF > |
| Use IP for BRK | | |
| Binary mode | | |
| Simulate parity | | |
| Keep alive type | | TCP > |
| Keep alive interval | | |
| TELNET LOGIN | | |
| Wait for login prompt | | |
| Login with | | |
| Wait for password prompt | | |
| Password | | |
| SECURE SOCKETS | | |
| Use secure sockets - SSL | | |
| Authenticate server certificate | | |
| File name client certificate: | | |
| Password client certificate: | | |

| SSH CONNECTION | |
|--------------------------------|----|
| Use SSH connection | |
| Server address: | |
| User name: | |
| Password: | |
| Private key file: | |
| Keep alive interval in seconds | NB |

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 protocol30841Telnet, TNVIP, TN3270, TN525023Note 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 must specify a port number, use the following syntax:

[IPv6 address]:port

for example

Settings – Communication

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

Terminal type

This option specifies the string that should be returned by Glink when a Telnet terminal type enquiry is made by the host at connect time.

Line terminator

Normally in ASCII sessions input lines are delimited with CR+LF. Some hosts may demand that you use CR+NUL and others just CR; this option allows you to talk to such hosts.

Use IP (Interrupt Process) command for break

Normally Glink will send a break to the host as a standard Telnet break. Some applications are coded in such a way as to require an Interrupt Process command. If 'break' is not behaving in the way you expect then enable this option to see if this helps.

Binary mode

When this option is set, new sessions will be opened as binary sessions rather than ASCII sessions. This will possibly give 'strange' results that will require stty commands to give acceptable screen output.

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.

Simulate parity

The parameter should normally not be used, but if the host needs 7 bits characters with parity, check this option.

Telnet login

If one or more of the parameters below is specified, Glink will try to login to the host. If the login string or the password is not specified, the login parameters will be asked for at connect time.

Please note if a connect macro is defined it will be ignored.

Wait for login prompt

Instructs Glink to wait for the login prompt string before sending the login string, this may for example be login. Please note that the string is case sensitive.

Settings – Communication

If no string is specified, Glink will wait for the first string received from host.

Login with

Specify the login string. If not specified, the login string will be asked for at connect time.

Wait for password prompt

Instructs Glink to wait for the password prompt string before sending the password, this may for example be Password. Please note that the string is case sensitive.

If no string is specified, Glink will wait for the next string received from host.

Password

Specify the password. If not specified, the password will be asked for at connect time. If a password is not needed, supply a * to avoid that the password is asked for at connect time.

Note

An *Enter* is performed after the Login string and after the password. If the parameter includes a function string at the end, the default *Enter* function will be ignored. In some cases, a *Tab* is needed after the Login string. The syntax for the Tab function is $^{"f58"}$

The example shows how to do a auto-login to an AS/400 host using VT emulation

| Wait for login prompt: | 1998 |
|---------------------------|--------------|
| Login with: | MyName^"f58" |
| Wait for password prompt: | [|
| Password: | MyPassword |

where [is part of an invisible cursor control sequence.

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 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 attach-

Settings – Communication

ment. 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.

SSH Connection

Use SSH connection

If this option is enabled, you will be able to configure that the host communication will be routed through the SSH server specified addressed.

Please note that if Use SSL Connection and Use SSH Connection both are selected, SSL will be used.

Server address

Specify the address to the SSH server. The default port number for a SSH server is 22 and will be used if not specified. Another port number may be specified after the host name or IP address, using a colon (:) to separate it from the rest of the 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

User name

Specify the SSH user name. If not specified, the user name will be asked for at connect time.

Password

Specify the password (passphrase) for client authentication. If not specified, the password will be asked for at connect time. If a password is not needed, supply a * to avoid that the password is asked for at connect time.

Private key file

If a private key is needed for client authentication, specify the file name to a private key file. If the private key is passphrase protected, supply the passphrase in the Password field.

Keep alive interval

Specify the interval in seconds for the keep alive messages sent to host. Default value is 0, which means no keep alive messages are sent.

See also:

How to import a private key file

SSH options

| 9:45 Wed 8 Feb | | ♀ 99 % ■ |
|--------------------------------|-------------|----------------------------|
| Settings | SSH options | 0 |
| SSH - SECURE SHELL | | |
| Server address | | xxx gar.no |
| User name: | | |
| Password: | | |
| Private key file: | | |
| Ferminal type: | | vt220 |
| Number of cols: | | 80 |
| Number of rows: | | 24 |
| Keep alive interval in seconds | | 0 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | (HB) |

Server address

Specify the address to the SSH server. The default port number for a SSH server is 22 and will be used if not specified. Another port number may be specified after the host name or IP address, using a colon (:) to separate it from the rest of the address.

User name

Specify the SSH user name. If not specified, the user name will be asked for at connect time.

Password

Specify the password (passphrase) for client authentication. If not specified, the password will be asked for at connect time. If a password is not needed, supply a * to avoid that the password is asked for at connect time.

Private key file

If a private key is needed for client authentication, specify the file name to a private key file. If the private key is passphrase protected, supply the passphrase in the Password field. See also how to import a private key file.

Terminal type

Specify the pseudo terminal, for example vt220. A pseudo terminal is required if you want to log on to the SSH server and run Secure Shell using Raw TCP/IP with no port forwarding.

Number of cols

Specify the number of columns for the pseudo terminal, for example 80.

Number of rows

Specify the number of rows for the pseudo terminal, for example 24.

Keep alive interval

Specify the interval in seconds for the keep alive messages sent to host. Default value is 0, which means no keep alive messages are sent.

Settings – Emulation

VT / ANSI options

| 9:37 Wed 8 Feb | | ╤ 100 % 🗰 |
|------------------------|------------|-----------|
| Settings | VT Options | 0 |
| ECHO mode | | |
| ROLL mode | | |
| Line mode | | Off > |
| Add LFs to CRs | | 0 |
| No column 81 | | |
| Backspace key action | | BS > |
| Answerback string | | |
| VT DA Alias | | VT440 > |
| F5 send PuTTY sequence | | |
| Mute host alarm | | |

ECHO mode

Echo mode is a mode in which characters you type are not displayed locally, but just sent to the host machine. Usually, the host will send these back to you ('echo' them) as you type. If you are not seeing what you are typing, then possibly you need to turn off Echo mode (in which case Glink will display the characters locally). If you see every character, you type twice, on the other hand, that's a sure sign that Echo mode needs to be turned on.

ROLL mode

Roll mode is the normal method of operation. When a new line is received and the emulator is already positioned on the last line of the screen, all lines of the screen are moved up one position. The original top line of the screen is lost (but will be saved into your scrollback buffer if you have configured one). Reception of a new line in the bottom line of the screen is an error and will result in the DATA OVERFLOW error message.

Line mode

When a character is typed, it is first sent to the host application, then returned (echoed) back from the host application and finally displayed on the screen. The host application has full control of what is displayed on the screen. This is the default behavior for VT and ANSI emulations.

However, some host applications expect to receive the characters line by line instead (Line mode). In this mode the characters are displayed on the screen when typed, but the characters are not sent to the host until the *Enter* key has triggered a *Line mode* send. In fact, most control keys will trigger a Line send to the host application.

Line mode options

| Off | Default, Line mode is not used |
|----------|---|
| Basic | Line mode is on, every control character ex- |
| | cept the Backspace key will trigger a line |
| | mode send |
| Extended | Line mode is on, every control character ex- |
| | cept the Backspace, Delete, Home, End, Cursor |
| | forward and Cursor back keys will trigger a |
| | Line mode send. |

Please note that the *Echo mode* option should be checked even when *Line mode* is selected.

In Extended Line mode the listed keys will perform a local operation on the typed characters not yet sent. In the VT emulation, the *Home* function is on the *Find* toolbar button and *Home* key, the End function is on the *Select* toolbar button and *End* key, the *Delete* function is on the *Remove* toolbar button and *Delete* key.

Add LFs to CRs

If this option is turned on, then GLINK will automatically add a 'line feed' character to all 'carriage return' characters received from the host. This option may be used in cases where all the data from the host is written on the same line of your screen.

No column 81

This option decides exactly how the emulator treats the right-hand column of the screen. This option should only be needed in exceptional circumstances.

Backspace key action

The backspace key can either send to the host BS (0x08), DEL (0x7f) or BS plus DEL (0x08+0x7f). Normally the Backspace key sends hex 08 character to the host.

Answerback string

This option allows you to configure an 'answerback' string to be used when the host machine sends an ENQuiry character to the emulator. Any string may be entered here. If control characters are required inside the answerback string use the '^' prefix notation, for example ^M for CR.

Mac address (Android version only)

To insert the mac address of the device, use the following key word i n the answerback string:

Adds the 6 octets mac address as a 12-character hex string
 Short mac address, adds the last three octets of the mac address as a 6-character hex string

VT DA Alias

Specifies the Device Attributes (DA) response.

F5 send PuTTY sequence

Sends the PuTTY sequence, ESC OT (1B 4F 54), for the F5 function. The default sequence for F5 function is ESC [15~ (1B 5B 31 35 7E)

VT / ANSI - Transliteration

| 09:37 Wed 8 Feb | | ÷ 100 % 🛲 |
|---------------------------------------|-----------------|------------------------------|
| < Settings | Transliteration | 0 |
| | | |
| GLINK <=> HOST CHAR TRANSLITERATION* | | |
| 16 BITS CHARACTERS | | |
| UTF-8 encoding | | |
| If set, options below not in use | | |
| 8 BITS CHARACTERS | | |
| 8-bit Host | | |
| Allow lowercase to host | | |
| Host character set | | Default (Latin 1) > |
| National transliteration (7-bit host) | Def | fault (no transliteration) > |
| | | |
| Use SISO encodoing | | |

The following options deals with translation/encoding of characters to and from the host. Internally Glink uses Unicode. Most host applications use an 8-bit character set.

UTF-8 encoding

Set this option if the host uses UTF-8 encoding to send/receive Unicode characters. Glink uses Unicode internally, so no further transliterations are needed, and the transliteration options become redundant.

Settings – Emulation

Eight bit host

Most host application uses an 8-bit character set, and this option is on by default.

Allow lowercase to host

When this option is set, lower case data from the keyboard will be sent to the host as is. If the option is unchecked, then any lower-case data will be converted to upper case before being sent to the host.

Host character set

Normally the host is set up to use an 8-bit character set. Glink needs to know which character set is used by the host to convert 8-bit characters to Unicode characters used internally by Glink. The default character set is ISO 8859-1, which is normally used in Western Europe and USA.

National transliteration (7-bit host)

Some host supports 7-bit character set only. The transliteration tables listed are used to convert from 7-bit national characters to 8-bit characters. Then Glink converts the 8-bit character to Unicode.

Use SI/SO for printing

Normally the SI/SO control characters are used to indicate line graphics from the host. Some special-purpose applications use them for print control, however, and for such applications this option must be enabled.

VT / ANSI – General

| 19:38 Wed 8 Feb | ••• | 🗢 100 % 🖿 |
|------------------------------|---------|-----------|
| Settings | General | 0 |
| Destructive BS | | |
| AVAILABLE | | |
| Capture on CR | | LF > |
| Scrollback length (in pages) | | 32 |
| Initial screen width | | 80 > |
| Initial screen height (rows) | | 24 |

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.

Capture on CR (Capture delimiter)

This option decides how CR and LF characters should be treated when capturing or logging to print. When set to CR or LF then a new line will be started when that character is received, and the other will be ignored. When set to CRLF, CR and LF characters will be passed transparently to the capture file (or printer). Normally this option should be set to LF but for certain special applications you may need to change the option to get correct output on the capture file. This option is not acted

Settings – Emulation

upon in VT100 modes, which support data capture compatibly with the built in print functionality on the actual terminals.

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.

Initial screen width

This option lets you choose between screen widths of 40, 80 and 132 columns (normally the choice of emulation mode will set this correctly for you).

Initial screen height (rows)

This option lets you choose the number of rows. The default value is 24 rows.

This option is only relevant for VIP7800 and VT emulation modes.

Settings – Screen

Toolbar setup

| 9:25 Wed 8 Feb | | 후 100 % 🔳 |
|-------------------------|---------------|------------------------------|
| Settings | Toolbar setup | Edit |
| 5 | | (i) > |
| н | | (i) > |
| | | (j) > |
| 1 | | (j) > |
| I | | (i) > |
| End | | (i) > |
| EEof | | (j) > |
| Erase | | (I) > |
| Clear | | (i) > |
| ins | | () > |
| TOOLBAR 2 | | |
| F1 | | (i) > |
| F2 | | (1) > |
| F3 | | (i) > |
| F4 | | (i) > |
| F5 | | (i) > |
| F6 | | (i) > |
| Add buttons Add toolbar | | Options 🥝 |

Edit

The Edit button allow 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.

Settings – Screen

Add buttons

This option allow 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 allow 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 adjust 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 adjust 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.

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

Settings – Screen

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

| 226 Wed 8 Feb | Screen options | ₱ 100 % ■ |
|---------------------------------|----------------|-------------------|
| Font size | | Fit screen > |
| Font name | | Courier New > |
| Font style | | Bold |
| Cursor type | | Bar |
| 3D variable fields | | Off > |
| Blinking cursor | | 0 |
| White backgroud 3D fields | | 0 |
| Show toolbar | | Auto 3 |
| Limit screen view (x,y) | | |
| Use double tap to | | Reset screen size |
| Extra line spacing | | 0 : |
| Force fixed character width | | 0 |
| Disable zoom | | 0 |
| HOTSPOTS | | |
| Function keys | | |
| Option numbers ("nn." or "nn=") | | On with Enter |
| Option numbers (" nn ") | | Off > |
| Option characters ("aa=") | | Off : |
| URL address | | Open in Glink |

Show screen text like F1, 1. or 1= as hotspots

Settings - Screen

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 single-line toolbar with a toggle button to switch between the toolbars defined or as a multiline toolbar where all the toolbars defined are shown. If the multiline toolbar option is selected, Glink will still use the singleline toolbar to save space when the keyboard is up.

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.

Please note that you can change the number of buttons and the number of toolbar lines with the Toolbar setup function.

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.

Settings – Screen

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.

| 26 Wed 8 Feb | | ÷ 100 % ■ |
|-------------------|---------------|-----------|
| Settings | Screen Colors | 0 |
| COLOR SELECTION | | |
| Foreground | | > |
| Background | | > |
| Status foreground | | > |
| Status background | | > |
| COLOR ADJUSTMENT | | |
| Dark foreground | | > |
| Bright foreground | | > |
| Background | | > |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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.

ANSI / VT / DKU / 7700 / 7102 attribute mapping

| 9:38 Wed 8 Feb | | ÷ 100 % |
|----------------------|----------------------|-----------|
| Settings | VT attribute mapping | 0 |
| OPTIONS | | |
| Select color scheme | | 7-color > |
| Use underline | | |
| Attributes to map | | |
| NORMAL | | |
| AaBbZz Fixed | | > |
| Ag9bZ2 Blink | | > |
| AaBbZz Fixed Inverse | | 2 |
| AaBbZz Blink Inverse | | > |
| LOW | | |
| AaBbZz Fixed | | > |
| AaBbZz Blink | | > |
| AaBbZz Fixed Inverse | | > |
| AaBbZz Blink Inverse | | > |
| HIGH | | |
| AaBbZz Fixed | | 5 |
| AgBhZz: Blink | | > |
| AaBbZz Fixed Inverse | | > |

This configuration table allows you to select which attributes should be used in practice for various combinations of attributes sent by the host application.

There are four different color schemes available. In addition, a Custom color is available if you have modified one of the default ones.

Normally Glink will preserve the state of the underline as it is sent by the host, but if you have mapped underline to a specific color then you may find that to be enough. In that case uncheck the Use underline option.

You may modify the color scheme selected to create your own one. Click on the attribute field to remap. Then choose the desired foreground and background colors from the list boxes. Repeat these operations for the other attribute fields to be remapped.

If you have modified one of the existing colors schemes, it will be saved as Custom colors scheme. If custom colors scheme already exists, it will be overwritten.

Print options

| 09:26 Wed 8 Feb | Print options | হু 100 % 🚥 |
|------------------------|---------------|------------|
| Font size | | 14 > |
| Page orientation | | Portrait > |
| Printer timeout (secs) | | 5 |

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 options

| r27 Wed 8 Feb | Barcode reader | \$ 100 % • (?) |
|----------------------------|--------------------|--------------------------|
| Barcode reader device type | | Linea/Infinea > |
| Action after scan | | None > |
| Remove char(s) at start | | 0 > |
| Remove char(s) at end | | 0 > |
| Add text before | | |
| Add text after | | |
| Use keyboard mapping | | |
| Card data format string | | {0}\t{1}\t{2}\t{3}\t |
| Show on status line | | |
| | | |

Barcode reader device type

Barcode reader device Either HID mode scanner, camera, Socket Mobile Bluetooth scanner or Linea Pro/Infinea Tab (Linea/Infinea may also have a magnetic stripe card reader). The barcode data is inserted as normal input data at the current cursor location of the Glink display.

If the scanner is used as a HID keyboard input device, Glink will not know if the data is coming from the actual keyboard or from the scanner. The options below is not in use for scanners operating in HID mode. Instead, use the configuration options available for the scanner itself.

A bar code icon is added to the toolbar at the top of the Glink display if the Camera option is selected. It is only visible when Glink is connected to the host application. Tap the bar code reader icon to use the camera to scan a barcode.

If the Linea/Infinea option is selected, Glink will accept barcode and magnetic card data as soon as Glink is connected to the host application.

If a Socket Mobile bluetooth barcode Scanner is selected, make sure the scanner is set up to use Application Mode (SPP) for Apple iOS devices.

Select the proper barcode reader device type:

| Keyboard Wedge | Default. Scanned data is received as keyboard input. Glink cannot separate scanned data from keyboard input. |
|-------------------|--|
| Camera | Enables scanning using the camera. An icon is added to the action bar at the top of the Glink display. Tap the icon to use the camera for barcode scanning. |
| Linea/Infinea | Use with <i>IPCMobile</i> (Infinite Peripherals) Linea and Infinea barcode scanner products. Glink will accept both scanned barcodes and Magnetic card data |
| Socket Mobile | Use with <i>Socket Mobile Scanner</i> . Use the Socket Mobile Companion App to pair and set up the scanner to use Application Mode (SPP) for Apple iOS devices. |

More options

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

Card data format string

The Card data format string option formats the data read from the Linea/Infinea magnetic stripe card reader. The option is only visible if Linea/Infinea is selected.

The card reader delivers card data to Glink unformatted. Glink splits the data into an array of fields and uses the *Card data format string* to select and format one or more fields. This means that just a part of the magnetic card may be delivered to a host application. An empty *Card data format string* means deliver all the card data unformatted.

{n} is used as syntax to select field n. A format string like
{0} {1} {2}

will select the first three fields.

Financial card data will be split into eight fields:

| Field | Length | Туре |
|-------|--------|--------------------|
| {0} | 19 | PAN |
| {1} | 26 | NAME |
| {2} | 2 | YY |
| {3} | 2 | MM |
| {4} | 3 | Service code |
| {5} | 8 | Discretionary data |

| {6} | 19 | PAN (track 2) |
|-----|----|--------------------|
| {7} | 15 | Additional track 2 |

The format string $\{0\}\{1\}\{2\}$ will select the PAN,NAME and YY fields and present them as a combined string.

A TAB character (\t) may be added to separate the fields: $0 \ge t \ge 1 \ge t \le 2$

The fields may also be separated with spaces or text: {0} expire: 20{2}/{3}

will present the PAN field together with the expire date fields:

1234567890123456789 expire: 2019/07

Use keyboard mapping

Check this option if keyboard mapping should apply 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 text 1234:5678; will be interpreted as key input 1234**Tab**5678**Enter**

Show on status line

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

Application Mode (SPP) for Apple iOS devices

The Socket Mobile device is by default setup in HID-Keyboard mode. In this mode the scanner acts as an external Bluetooth keyboard and scanned data is received in Glink as keyboard input.

A better solution is to download from App Store the **Socket Mobile Companion App** and follow the instructions to pair the scanner with the iOS device and set the scanner to use *Application Mode (SPP) for Apple iOS devices*. Then select Socket Mobile as the Barcode reader device type in Glink.

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

| 09:33 Wed 8 Feb | *** | 중 100 % ■ |
|------------------|------------------|--------------|
| < Settings 💼 | Keyboard mapping | Options Edit |
| Press key to map | | |
| MAPPED KEYS | | |
| Ctrl+H | | Home > |
| Ctrl+E | | Erase EOF > |
| Mapped keys | | |

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 keys mapped if any.

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.

| 09:33 Wed 8 Feb | | Ŷ | 100 % 🔳 |
|------------------|------------------|--------------|---------|
| < Settings 💼 | Keyboard mapping | Options Done | 0 |
| | | | |
| Press key to map | | | |
| MAPPED KEYS | | | |
| Ctrl+H | | Hor | ne |
| Ctrl+E | | Erase E | DF 📰 |
| Mapped keys | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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
- ^&000 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 config- |

Distributing Glink configurations from an EMM/MDM

uration 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):

| Microsoft Endpoint Manager | admin center | | | B; C, © ? © | ٢ |
|---|--|---|--|---------------------|---|
| Home Dashboard All services All services All services | Home > Glink 5250 Enterprise Glink 5250 Enterpri Search (Ctrl+/) « | ise Properties Basics Edit | | | × |
| Devices Apps Endpoint security | Manage 11 Properties | Name Description | Glink 5250 Enterprise Glink URL App Configuration | | |
| Peports Users Groups Tenant administration Troubleshooting + support | Monitor Device install status User install status | Device enrollment type Platform Profile Type Targeted app Settings Edit | Android Enterprise All Profile Types Glink 5250 Enterprise | | |
| | | Permissions Not configured Configuration Settings Configuration key | Value type | Configuration value | |
| | | URL to the Glink configuration file Configuration version number | string string | https:// 1 | |
| | | Scope tags Edit Default Assignments Edit | | | |

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.

Distributing Glink configurations from an EMM/MDM

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 configu- ration. |
| 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 keyvalue pairs (Google Admin, Intune).

Here are some examples:

Distributing Glink configurations from an EMM/MDM

MobileIron (Android):

| Gallagher & Robertson Delegation Status: App is dele | | | |
|--|-----------------------|---|---|
| KDD DASKUPPOR | | | |
| Details Distribution App Configurations Review | s App Config Feedback | | |
| p Configurations Summary > Managed Configurations for And | roid | | |
| Concel Update retailing the app | | | |
| Managed Configurations ① | | | |
| onfiguration Name | Value | | |
| onfiguration version number ew version number signals an updated configuration file | 2 | 8 | |
| RL to the Glink configuration file anion number must differ from current one | | 8 | |
| onfiguration name reate or modify a session configuration | AS400 | 8 | |
| lost address ddress to host application | myhost.mydomain.com | 8 | |
| Additional parameters | | | |
| ∧ Add parameter | | | |
| Parameter key See exported configuration file | com.ibm5250user | 8 | |
| Parameter value See exported configuration file | myusername | 8 | |
| ∧ Add parameter | | | Ŵ |
| Parameter key See experted configuration file | com.ibm5250subspw | 8 | |
| Parameter value See exported configuration file | ##mypassword | 8 | |
| Add parameter | | | 1 |
| Paramotor key See exported configuration file | 1_config.name | 8 | |
| Parameter value See expected configuration file | A5400-2 | 8 | |
| Add parameter | | | Ĩ |
| Personal and the second s | | 7 | |
| Parameter key See exported configuration file | 1_com.servemame | 8 | |
| Parameter value See exported configuration file | myhost2.mydomain.com | 8 | |
| | | | |

MobileIron (iOS):

| CLOUD | Dashboard | | ices Apps | Content | Configurations | | Admin |
|---|---------------------|---------------------|---------------------|-----------------------|--------------------|---------|----------------------|
| Back to list | App Catalog | Categories | Reviews | Catalog Settings | Distribution | Filters | Apple Apps and Books |
| Glink VT Gallagher & Ri | obertson AS Deleg | ation Status: App | is delegated | | | | |
| Details Distributio | App Configu | rations Revi | iews | | | | |
| App Configurations Summ | nary⇒ iOS Managed | App Configurati | on | | | | |
| Cancel Update | | | | | | | |
| | | | | | | | |
| Configuration S | etup | | | | | | |
| Name | | | | | | | |
| My Linux host | | | | | | | |
| + Add Description | | | | | | | |
| Configuration Sou | | | | | | | |
| Source Type | ice | | | | | | |
| None | ~ | | | | | | |
| iOS Managed App | Cottings | | | | | | |
| Key | Value | | Туре | | | | |
| config.version | 1 | | STR | ING | × 0 | | |
| config name | myhost | | STR | | ✓ ⊖ | | |
| comgname | | | | | | | |
| com.servername | myhost | mydomain.com | STR | ING | ✓ ⊖ | | |
| + Add Use .plist Array type values should be s | | | | - In - Westernete for | | | |
| | | ampre: 2,33,44) and | date value should b | e în miliseconos (e) | ample: 143/4901/00 | 100). | |
| Distribute this App Choose one of these op | | | | | | | |
| | | | | | _ | | |
| | | | | | | | |
| (22 | | . 2 | | (* | r) | | |
| | Ŷ | \sim | | | | | |
| Everyone with / | App | No One | | Cue | tom | | |

Meraki (Android):

| esce Meraki | Q Search Dashboard | | | # 3 A | nourcements • 8 Help • | michael@gar.ro + |
|-----------------------------|---|--|--------------------------------------|--|------------------------|--------------------|
| | Profiles. Int / Olink \$250 Android / Manager | App Config | | | +1 | Add profile 0 Help |
| a - | Glink 5250 Android | | | | | |
| ptens Manager genitation | Prote configuration One 5250 Enterprise settings x Add settings | Managed App Config Pattern 0 App 0 | Andhsid * | | | 0 Help |
| | | Settings Key configuencian | Show supported settings | Configuration version number | on Ne | * * |
| | | tigger | | Value | | |
| | | Text | | v 8 | | |
| | | Key config.rame | | Configuration name Create or motify a session configuration | | * * * |
| | | Tgpe Text | | Value A5400 | | |
| | | | | | | |
| | | Key comservemente | | Host address Address to host application | | * * * |
| | | Type | | Value muhast.mutamain.com | | |
| | | Jaat | | myneat mysemain com | | |
| | | Key parameters | | Additional parameters Parameters list | | • = |
| | | Add parameter | | | | 1 |
| | | Key parameter_iey | Parameter key See exported co | nfguration file | × | |
| | | com.bm5250user | | | | |
| | | Key poratwise_volue Volue | Parameter value V See exported co | | × | |
| | | Table Table | | | | |
| | | | | | • | |

Meraki (iOS):

| "listo" Meraki | Q Search Dashboard | | ¶ ⁰ Announcements ∞ | Help • | michael@gar.no = |
|-----------------|---|--|--------------------------------|--------|------------------|
| NETWORK | Changes saved. | | | | ж |
| GAR + | Profiles list / Glink 5250 iOS / Manage | d Ann Confin | | + 40 | d profile 🛛 Help |
| | Glink 5250 iOS | | | | |
| Systems Manager | GIINK 5250 IUS | | | | |
| Organization | Profile configuration Gink 5350 settings X Add settings | Managed App Config Platom 0 xos • App 0 @ Olink 5250 • Settings | | | O Help |
| | | Key | Туре | | v x |
| | | config.version | Text | ~ | |
| | | Value | | | |
| | | 2 | | | |
| | | Key | Type | | × ^ × |
| | | config.name | Text | ~ | ¥ ^ A |
| | | Value | | | |
| | | AS400 | | | |
| | | Key | Type | | |
| | | com.serveraddress | Text | ~ | ~ × |
| | | Value | | | |
| | | myhost.mydomain.com | | | |
| | | | | | |
| | | | | | + |
| | | | | | |

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_{\perp} 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

<u>The AppConfig Community</u>, supported by a collection of industry leading EMM solution providers, 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:

```
<value>MyServerAddress</value>
</defaultValue>
</string>
</dict>
</managedAppConfiguration>
```

Please note that the **bundleId** must match the Glink version you are using; either no.gar.glink5250, no.gar.glink3270, no.gar.glinkvt or no.gar

MDM Parameter list

| General parame- | | | |
|--|----------------------|---|---------|
| ters | | | |
| 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 | |
| Remove all toolbar definitions | toolbar.remove | true, false | Boolean |
| 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/Receive notifica- tion sound - Android only | screen.sndRcvSound | 0=Off , 1=On, 2=Send only, 3=Recv only | Integer |
| Show Sessions view when disconnected - | screen.showSess | true, false | Boolean |

| Android only | | | |
|--|---------------------|---|---------|
| Password | screen.cfgPassword | | String |
| 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 |
| 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 |
| 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 | com.clientCert | | String |

| certificate: | | | |
|---|----------------------------|---|---------|
| 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.ibm5250IBMMSGQNA ME | QSYSOPR | String |
| Message library | com.ibm5250IBMMSGQLIB | *LIBL | String |
| Font ID | com.ibm5250IBMFONT | 11 | Integer |
| Form feed type | com.ibm5250IBMFORMFEE D | 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 |
| | | | |
| 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=V T101,3=VT102,4=VT12 5,5=VT131,6=VT220,7 =VT240,8=VT320,9=V T340,10=VT420, 11=VT 440 | 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 Translitera- tion | | | |
| 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 | String |
| National transliteration (7-bit host) | emu.xlitFile8 | Default (No translitera- tion), CYR Cyrillic, FIN Finnish, FRA French, FRC French-Canadian, GER German, GR Greek, ITA Italian, LT2 Latin 2, NOR Norwe- gian, SF Swe- dish/Finnish, SPA Spanish, SWE Swedish, SWI Swiss, UK United | String |

| | | Kingdom, US United States | |
|---|-------------------|------------------------------|---------|
| 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 protect- ed 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 protect- ed 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 |
| 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 |
| DVII 71707 | | | |
| DKU 71707 options | anna anta Tabl | f.1 | D 1 |
| 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 |
| | | | |

| 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, SourceCodePro-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 attrib- ute(VT/ANSI/VIP/DK U/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 | 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) | Integer |

| | | Android only, | |
|------------------------------------|---------------------------|--|---------|
| | | 5==Enable/Disable | |
| | | touchscreen (Disabled) | |
| | | Android only | |
| | | | |
| 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 |
| 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 | Integer |
| Option characters | screen.hotspotAa | with Enter 0=Off , 1= On, 2=On | Integer |
| ("aa=") | затенлюзройта | with Enter | meger |
| URL address | screen.hotspotUrl | 0=Off, 1=Open in | Integer |
| | | browser, 2=Open in Glink | |
| | | Gillik | |
| Screen colors | | | |
| Color selection | | | |
| Screen color | screen.scrColor | Make Color selection in | Integer |
| | | Glink and export config | |
| Status line color | screen.stsColor | Make Color selection in | Integer |
| | | Glink and export config | - |
| Color Adjustment | | | |
| Dark forground | | | |
| Black | screen.foreground_BlackLo | Make Color adjustment | String |
| | - | in Glink and export | - |
| | | config | |
| Blue | screen.foregroundBlueLo | Make Color adjustment in Glink and export | String |
| | | config | |
| Green | screen.foregroundGreenLo | Make Color adjustment | String |
| | - | in Glink and export | Ũ |
| | | config | |
| Cyan | screen.foregroundCyanLo | Make Color adjustment | String |
| | | in Glink and export | |
| | | config | |
| Red | screen.foregroundRedLo | Make Color adjustment in Glink and export | String |

| | | config | |
|------------------|----------------------------|--|--------|
| 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, 10=Cipherlab, 9= Datalogic, 4=Denso Scanner, 5=Honeywell Scanner, 11=M3 Mobile, 12=Point Mobile, 6=Socket Mobile, 3=Unitech Scanner, 13=Urovo scanner, 2=Zebra skanner iOS: 0=Keyboard Wedge , 1=Camera, 2=Linea/infinea, 3=Socket Mobile | 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 |
| 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 autoimport 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 (Android and 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

| | | | | | 5250 de | fault 2 | | | | | | | A | Ent |
|---|---|--|----------------------------------|-----------------------------|------------------------|-------------------|--------------------|---------------|------|---------|--------------|-----|------------|-----|
| N | Menu | | | Offic | eVision | for A | s/400 | | c | ator | | NEI | 0 | |
| Sessions | | he f | ollowin | q: | | | | | зу | stem | | NEI | KU | |
| | | | | | | | | | | | | | | |
| Connect | | j irs | | | | | | | | Time | | 9:2 | 21 | |
| Disconnect | | ssag | e | | | | | | Tebr | uary | | | 20 | 02 |
| | | te | | | | | | | S | M T | | T | F | |
| Settings | | oces | nd fold | ers | | | | | | 6 7 | 1 8 | 2 9 | 3 10 | 1 |
| Scrollback | | | /distri | bution | lists | | | | 12 1 | 3 14 | 15 | 16 | 17 | 1 |
| Print screen | | > on su | | | | | | | 19 2 | | 22 | 23 | 24 | 2 |
| Record macr | ro | , strat | ion | | | | | | 26 2 | 7 28 | | | | |
| | | ÷ | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Debug mode | | ** | | | | | | | | | | | | |
| Debug mode Trace host conne | | ~ | | | | | Bot | tom | | | | | | |
| Trace host conne | ection | | command | . Pres | s ATTN | to sus | | tom select | ed o | ptio | n. | | | |
| | ons | | command | . Pres | s ATTN | to sus | | | ed o | ptio | n. | | | |
| General optic | ons | > 1 or | | | | | pend a | select | | ptio | n. | | | |
| General optic | ons gurations | > 1 or | F5=R | efresh | F9=R | to sus etriev | pend a | | | ptio | n. | | | |
| General optic Export config Help | ons gurations | or compt sage IBM C | S ORP. 19 | efresh | F9=R | | pend a | select | | ptio | n. | | 120 | 0 |
| General optic Export config Help | ons gurations 4.72 52 | > 1 or compt sage IBM C 250 FO | S ORP. 19 RM | efresh 85, 19 | F9=R 98. | etriev | penda | =Cance | L | | | | 020 | _ |
| General optic Export config Help | ons gurations 4.72 52 | > 1 or > compt > sage IBM C 250 FO | F5=R S ORP. 19 RM | efresh 85, 19 | F9=R 98. | etriev | e F12 | Select | Era | se | Clear | | Ins | |
| General optic Export config Help TINK2 4 | ection ons gurations 4.72 52 F2 | > 1 or > compt > sage IBM C 250 FO F3 | F5=R S ORP. 19 RM F4 | efresh 85, 19 + F5 | F9=R 98. | etriev I F7 | e F12 End F8 | EEof F9 | Era: | se) | Clear F11 | | Ins F12 | 2 |
| General optic Export config Help | ons gurations 4.72 52 | > 1 or > compt > sage IBM C 250 FO | F5=R S ORP. 19 RM | efresh 85, 19 | F9=R 98. | etriev | e F12 | Select | Era | se) | Clear | | Ins | 2 |

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

How to export/send a debug trace and configuration file

| Ceed.1 | | | | | 5250 de | ault 2 | | | | | | (| T. | Ente |
|---|---|------------------------------------|----------------------------|------------------|---------------------|--------------------|--------|---------------------------|---------------|----------|-------|----------|------------|------|
| | | | | Offic | eVision | for A | s/400 | | C | tom | | NEF | 0 | |
| Select | one of | the f | ollowin | g: | | | | | sys | tem | | NEF | | |
| 1 | . Calen | dars | | | | | | | т | ime | | 9:2 | 1 | |
| | | uar s | | | | | | | | Tune | | 2.2 | | |
| 201 | . Send | messag | e | | | | | F | ebru | ary | | | 20 | 23 |
| 4 | . Send | note | | | | | | | S M | T | W | т | F | 5 |
| 5 | | | nd fold | ers | | | | | _ | | 1 | 2 | 3 | 4 |
| 6 | | proces | | | 1.1.1.1.1.1 | | | | 5 6 | 7 | 8 | 9 | 10 | 11 |
| 7 | | ion su | /distri | Dution | lists | | | 1 | 2 13 9 20 | 14 21 | 15 | 16 23 | 24 | 18 |
| o 9 | | istrat | | | | | | 2 | 6 27 | | 22 | 25 | 24 | 2: |
| 2 | | | | | | | | - | | | | | | |
| 90 | . Sign | off | | | | | | | | | | | | |
| Enter ===> SE=Exi SIC=Di (C) CO | selecti t F4= splay m PYRIGHT | on or Prompt essage IBM C | E5=R s ORP. 19 | efresh | F9=R | to susp etrievo | pend a | tom selecte =Cancel | d op | tio | n. | | 020 | 00 |
| Enter ===> SE=Exi SIC=Di (C) CO | selecti t <u>F4</u> = splay m | on or Prompt essage IBM C | E5=R s ORP. 19 | efresh | F9=R | | pend a | selecte | d op Erase | | n. | |)20 Ins | 00 |
| Enter ===> SE=Exi SIC=Di (C) CO | selecti t F4= splay m PYRIGHT | on or Prompt IBM C 50 FO | S ORP. 19 RM | efresh 85, 19 | <u>F9</u> =R 98. | etrievo | penda | selecte | | | | | | 00 |
| Enter ===> =]==Di (C) CO LINK2. | selecti t E4= splay m PYRIGHT 4.72 52 | on or Prompt IBM C 50 FO | F5=R S ORP. 19 RM | efresh 85, 19 | F9=R 98. | etriev | e F12 | selecte | Erase | | Clear | | Ins | 00 |

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

| Glink | Debug | Clear |
|---|----------------|-------|
| Glink2.4.72(1) debug trace, 2/8/2023 3:16:15 PM | | |
| [15:16:19.129] In: (3) 00: FF FD 27 | -ý' | |
| [15:16:19.132] Out: (3) 00: FF FC 27 | .0' | |
| [15:16:19.135] In: (3) 00: FF FD 18 | .ý. | |
| [15:16:19.137] Out: (3) 00: FF FB 18 | .ů. | |
| [15:16:19.406] In: (6) 00: FF FA 18 01 FF F0 | .ůδ | |
| [15:16:19.408] Out: (16) 00: FF FA 18 00 49 42 4D 2D 33 31 37 39 2D 32 FF F0 | .úIBM-3179-2.ð | |
| [15:16:19.419] In: (3) 00: FF FD 19 | ΰ. | |
| [15:16:19.420] Out: (3) 00: FF FB 19 | ٥. | |
| [15:16:19.446] In: (9) 00: FF FB 19 FF FD 00 FF FB 00 | 0.0.0. | |
| [15:16:19.448] Out: (3) 00: FF FD 19 | ΰ. | |
| [15:16:19.449] Out: (3) 00: FF FB 00 | ů. | |
| [15:16:19.451] Out: (3) 00: FF FD 00 | ù. | |
| [15:16:19.694] In: (3) 00: FF FD 00 | ά. | |
| [15:16:20.309] In: (3) 00: FF FB 00 | σ. | |
| [15:16:20.314] In: (503) 00: 01 F5 12 A0 00 00 04 00 00 03 04 40 04 11 00 18 10: 01 07 00 00 00 10 00 00 11 01 16 22 40 40 40 20: 40 40 40 40 40 40 40 40 40 42 89 87 95 40 D6 | .5.µ Sign 0 | |
| Print Options Mail Mail config | т. ж. | 0 |

- 5. An alternative might be to print the debug file on an AirPrint printer: **De-bug 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

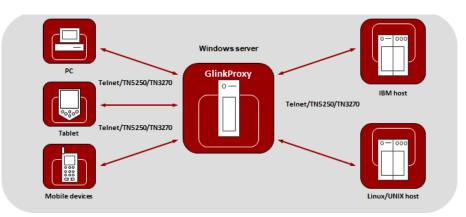
GlinkProxy runs on a Windows server, can be located close to the host computer, and is designed to extend the life of sessions between Glink terminal emulation clients and hosts. A device running Glink might go idle, enter power-saving mode or move out of WiFi range and prematurely terminate the session 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 Session Persistence 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, 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 powersaving mode or moves out of WiFi range and prematurely terminates the session to

The GlinkProxy Session Persistence Server

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

| Glink Proxy Server settings | - | | × | | | |
|---|---------|-------|------|--|--|--|
| Time to retain host connection when client disconnects in error: | | | | | | |
| þ hours 30 mi | inutes | 0 sec | onds | | | |
| Time to retain host connection when client disconnects normally: | | | | | | |
| 0 hours 0 mi | inutes | 0 sec | onds | | | |
| Time to keep host disconnect status available: | | | | | | |
| 0 hours 1 mi | inutes | 0 sec | onds | | | |
| Use Telnet keepalive for host connection with interval: 0 seconds | | | | | | |
| Use TCP keepalive for host connection | | | | | | |
| Allow client disconnect redefinition | | | | | | |
| Ask for confirmation when killing sessions | | | | | | |
| Save Restore | Default | s | | | | |
| OK Cancel | | | | | | |

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 Dis- connect 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 ter- minate 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 peri- ods and you want to avoid being disconnected |

| h | | | |
|----------|--|---|--|
| | | by the host due to inactivity. | |
| /KA | TCPThis enables use of TCP keepalives betweenGlinkProxy and the host. The default is not to use TCP keepalives. The actual keepalive in- terval 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 Dis- connect 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 re- connect 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 dis- connect | 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 lostnnshould keep the connection to the hor after the connection to Glink is dropp for example if the device goes idle, e saving mode, or move out of WiFi ra device is woken up or the network content. | | 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.