



GLINKTM

Glink
for
Android
User Guide

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



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Contents

| | |
|---|-----------|
| Contents | i |
| Warranty | 2 |
| Privacy policy | 3 |
| Introduction | 4 |
| Features | 4 |
| Support | 5 |
| How to purchase/order a license | 6 |
| Delivery and Installation | 6 |
| Activation | 6 |
| Setup | 7 |
| The Glink emulator screen | 8 |
| Action bar | 9 |
| Emulation screen | 9 |
| Toolbars | 10 |
| Soft/on-screen keyboard | 10 |
| Physical keys and keyboards | 10 |
| Getting started | 11 |
| Create a new session | 11 |
| Start a session | 11 |
| Text/font size | 12 |
| Keyboard | 14 |
| External keyboard | 14 |
| Keyboard shortcuts | 14 |
| Shortcuts for keyboards with function keys | 15 |
| Shortcuts for keyboards without function keys | 15 |
| Other shortcuts | 15 |
| IBM 5250 shortcuts | 16 |
| VT shortcuts | 16 |
| Keyboard mapping | 16 |
| Toolbar | 17 |
| Hotspots | 17 |

Contents

| | |
|---|-----------|
| Copy/Paste..... | 17 |
| Hyperlinks and mail addresses | 18 |
| Export and Import configurations..... | 18 |
| MDM configuration support..... | 19 |
| Proxy server..... | 19 |
| Menu | 20 |
| Sessions | 20 |
| Settings | 21 |
| Scrollbar..... | 22 |
| Print screen..... | 22 |
| Record macro | 22 |
| Pause the macro..... | 23 |
| Wait for user input..... | 23 |
| Wait for a time interval..... | 23 |
| Debug mode | 23 |
| New Glink window | 24 |
| Remove Glink window..... | 24 |
| Print logging..... | 24 |
| General options..... | 25 |
| Screen orientation..... | 25 |
| Auto-connect session at start up..... | 25 |
| Auto-reconnect if connection lost | 26 |
| Disconnect at lock screen..... | 26 |
| Never Auto-Lock when connected..... | 26 |
| Ignore battery optimization | 26 |
| Keyboard up..... | 26 |
| Toolbar - Click on keypress | 27 |
| Toolbar - Vibrate on keypress in millisec | 27 |
| Toolbar - Popup on keypress..... | 27 |
| Alert sound..... | 27 |
| Send/Receive notification sound..... | 27 |
| Show Sessions view when disconnected..... | 28 |
| Password protect Settings..... | 28 |
| Show Menu/Action bar items..... | 28 |
| On Menu (by default) | 28 |
| On Action bar (by default)..... | 28 |
| Pop up on Action bar..... | 29 |
| Language..... | 29 |
| Export configurations | 29 |
| Help..... | 29 |
| Connect icon (Green monitor)..... | 30 |
| Disconnect icon (Red monitor) | 30 |
| Keyboard icon | 30 |

| | |
|---------------------------------------|-----------|
| Toolbar icon | 30 |
| Settings - Communication..... | 31 |
| TN5250 options..... | 31 |
| Server address | 31 |
| IPv6 address | 32 |
| 5250 model..... | 32 |
| Device name..... | 33 |
| Keep alive | 35 |
| Keep alive type..... | 35 |
| Bypass signon using..... | 35 |
| Printer options | 36 |
| Message queue name..... | 36 |
| Message queue library..... | 36 |
| Font ID | 36 |
| Form feed type..... | 36 |
| Secure sockets | 36 |
| Use secure sockets - SSL..... | 36 |
| Authenticate server certificate..... | 37 |
| File name client certificate | 37 |
| Password client certificate | 37 |
| How to import a private key file..... | 38 |
| TN3270 options..... | 38 |
| Server address | 39 |
| IPv6 address | 39 |
| 3270 model..... | 39 |
| LU name..... | 40 |
| Use Extended TN3270 | 40 |
| Send Associated LU | 40 |
| Keep alive | 40 |
| Keep alive type..... | 40 |
| Secure sockets | 41 |
| Use secure sockets - SSL..... | 41 |
| Authenticate server certificate..... | 42 |
| File name client certificate | 42 |
| Password client certificate | 42 |
| How to import a private key file..... | 42 |
| Auto-login | 43 |
| Login with | 43 |
| Password..... | 43 |
| External validation | 43 |
| Telnet options | 44 |
| Server address | 44 |
| IPv6 address | 45 |

Contents

| | |
|--|----|
| Terminal type | 45 |
| Line terminator | 45 |
| Use IP (Interrupt Process) command for break | 46 |
| Binary mode | 46 |
| Keep alive | 46 |
| Keep alive type | 46 |
| Simulate parity | 47 |
| Telnet login | 47 |
| Wait for login prompt | 47 |
| Login with | 47 |
| Wait for password prompt | 47 |
| Password | 48 |
| Wait for command prompt | 48 |
| Do command | 48 |
| Secure sockets | 48 |
| Use secure sockets - SSL | 48 |
| Authenticate server certificate | 49 |
| File name client certificate | 49 |
| Password client certificate | 49 |
| How to import a private key file | 49 |
| SSH Connection | 50 |
| Use SSH connection | 50 |
| Server address | 50 |
| User name | 50 |
| Password | 51 |
| Private key file | 51 |
| Keep alive interval | 51 |
| SSH options | 52 |
| Server address | 52 |
| User name | 52 |
| Password | 53 |
| Private key file | 53 |
| Terminal type | 53 |
| Number of cols | 53 |
| Number of rows | 53 |
| Keep alive interval | 53 |
| Wait for command prompt | 53 |
| Do command | 54 |
| Ggate options | 54 |
| Server address | 54 |
| IPv6 address | 55 |
| Alternate server address | 55 |
| Random connect | 56 |
| Secure sockets | 56 |

| | |
|---------------------------------------|----|
| Use secure sockets - SSL..... | 56 |
| Authenticate server certificate..... | 57 |
| File name client certificate..... | 57 |
| Password client certificate..... | 57 |
| How to import a private key file..... | 57 |
| CoName or Resource..... | 58 |
| Ggate..... | 58 |
| TNVIP..... | 58 |
| Ggate protocol..... | 58 |
| Remote mailbox name..... | 58 |
| Remote Mailbox extension..... | 59 |
| Remote node name..... | 59 |
| Local mailbox name..... | 59 |
| User ID..... | 60 |
| Password..... | 60 |
| Project..... | 60 |
| Billing..... | 60 |
| Host mode..... | 60 |
| Terminal mode..... | 61 |
| GRTS/LID user string..... | 62 |
| IBM log mode..... | 62 |
| Additional parameters..... | 62 |
| Keep alive..... | 62 |
| Initial turn..... | 63 |
| Send commands as data..... | 63 |
| TNVIP options..... | 64 |
| Server address..... | 64 |
| IPv6 address..... | 65 |
| Resource name..... | 65 |
| Terminal type..... | 65 |
| Initial turn..... | 65 |
| Keep alive..... | 66 |
| Keep alive type..... | 66 |
| Secure sockets..... | 67 |
| Use secure sockets - SSL..... | 67 |
| Authenticate server certificate..... | 67 |
| File name client certificate..... | 67 |
| Password client certificate..... | 68 |
| How to import a private key file..... | 68 |
| Proxy server setup..... | 68 |
| GlinkProxy parameters..... | 68 |
| Use server..... | 69 |
| Address..... | 69 |
| Port..... | 69 |

Contents

| | |
|--|-----------|
| Secure communication | 70 |
| Proxy keeps connection to host in seconds when | 70 |
| Settings – Emulation..... | 71 |
| IBM 5250 emulation options..... | 71 |
| Any command key resets error..... | 71 |
| Display error on status bar | 72 |
| Treat line as error message line..... | 72 |
| If error message line contains..... | 72 |
| Show SO/SI characters..... | 73 |
| Allow cursor in protected area | 73 |
| Alternate arrow keys mode | 73 |
| Show light pen fields in blue..... | 73 |
| Auto tab when input field is filled..... | 73 |
| Continuous backspace..... | 74 |
| Bypass Right Adjust field check | 74 |
| 5250 Transliteration - Host code page..... | 74 |
| 5250 General Options..... | 75 |
| Auto Tab Local | 75 |
| Auto Tab host..... | 75 |
| Destructive backspace..... | 76 |
| Scrollback length..... | 76 |
| IBM 3270 emulation options..... | 76 |
| Numeric check | 77 |
| Treat line as error message line..... | 77 |
| Mute host alarm..... | 77 |
| Mute key input alarm | 78 |
| Allow cursor in protected area | 78 |
| 3270 Transliteration – Host code page..... | 78 |
| 3270 General Options..... | 79 |
| Auto Tab Local | 79 |
| Destructive backspace..... | 79 |
| Scrollback length..... | 79 |
| VT / ANSI options | 80 |
| ECHO mode..... | 80 |
| ROLL mode | 80 |
| Line mode | 81 |
| Line mode options | 81 |
| Add LFs to CRs..... | 81 |
| No column 81 | 82 |
| Backspace key action | 82 |
| Answerback string..... | 82 |
| VT DA Alias | 82 |
| F5 send PuTTY sequence..... | 83 |

| | |
|---|----|
| VT / ANSI - Transliteration | 83 |
| UTF-8 encoding | 83 |
| Eight bit host | 83 |
| Allow lowercase to host | 83 |
| Host character set | 83 |
| National transliteration (7-bit host) | 84 |
| Use SI/SO for printing | 84 |
| VT / ANSI - General | 84 |
| Auto Tab Local | 84 |
| Auto Tab host | 84 |
| Destructive backspace | 84 |
| Capture on CR (Capture delimiter) | 85 |
| Scrollback length | 85 |
| Initial screen width | 85 |
| Initial screen height (rows) | 85 |
| VIP7800 options | 86 |
| Auto tab when input field is filled | 86 |
| Auto Tab host | 86 |
| Start in TEXT mode | 87 |
| Extended status | 87 |
| Non-linear forms | 87 |
| Preserve Roll mode | 87 |
| Suppress status line | 87 |
| TX on return | 87 |
| Start in Roll mode | 88 |
| Block mode | 88 |
| Disallow status line lock | 88 |
| Space Suppression | 88 |
| Add CRLF to transmit | 88 |
| Add LFs to CRs | 88 |
| Send NL (New line) after XMT | 89 |
| Send ETX for end of transmission | 89 |
| Answer ENQ with | 89 |
| 7200 attributes | 89 |
| DKU options | 90 |
| Auto tab when input field is filled | 90 |
| Blink/blank with ^/~ | 90 |
| Show ^/~ in blink/blank | 91 |
| Cursor straight up/down | 91 |
| Allow cursor out of field | 91 |
| SDP attributes | 91 |
| Wrap on page overflow | 91 |
| Wrap around tabbing | 91 |
| Start in Roll mode | 91 |

Contents

| | |
|--|------------|
| Use SS2 for 8bit chars..... | 92 |
| Send ETX for end of transmission | 92 |
| Wincom compatibility..... | 92 |
| Fix DKU attributes | 92 |
| DKU model | 92 |
| Right justify with..... | 92 |
| Settings – Screen | 93 |
| Toolbar setup..... | 93 |
| Add..... | 93 |
| Modify..... | 94 |
| Remove | 94 |
| Paste | 94 |
| Add toolbar | 94 |
| Button size..... | 94 |
| Macro string | 95 |
| Screen Options | 96 |
| Font size | 96 |
| Font name..... | 96 |
| Cursor type | 97 |
| Cursor color..... | 97 |
| 3D variable fields | 97 |
| Blinking cursor..... | 97 |
| White background 3D fields | 97 |
| Show toolbar | 98 |
| Limit screen view (x,y) | 98 |
| Use double tap to..... | 98 |
| Double tap again to confirm..... | 99 |
| Extra line spacing..... | 99 |
| Force fixed character width..... | 99 |
| Disable zoom..... | 99 |
| Show key input on status line..... | 99 |
| Hotspots | 99 |
| Screen Colors | 100 |
| Color selection | 101 |
| Color adjustment | 101 |
| VIP attribute mapping | 101 |
| ANSI/VT/DKU attribute mapping | 102 |
| Settings – Devices..... | 103 |
| Print options | 103 |
| Printer type | 103 |
| Bluetooth printer options..... | 104 |

| | |
|--|-----|
| LPD server options | 104 |
| Timeout | 105 |
| Barcode reader options | 106 |
| Barcode reader device type | 106 |
| More options | 109 |
| Action after scan | 109 |
| Remove char(s) at start | 109 |
| Remove char(s) at end | 109 |
| Add text before | 109 |
| Add text after | 109 |
| Use keyboard mapping | 109 |
| Show on status line | 110 |
| Keyboard Wedge A | 110 |
| AML Scanner setting | 111 |
| Cipherlab ReaderConfig app | 111 |
| Intent Action configuration | 112 |
| Prefix and suffix settings | 113 |
| Specific profile for Glink | 113 |
| Datalogic scanner settings | 114 |
| Denso scanner options | 116 |
| ScanSettings profile directory | 116 |
| Honeywell scanner options | 117 |
| Profile name | 117 |
| Intent action | 117 |
| Honeywell scanner profile settings | 118 |
| Internal scanner | 118 |
| Bluetooth scanner | 118 |
| M3 Mobile options | 121 |
| Glink sets Output Mode | 121 |
| M3 Mobile ScanEmul app | 121 |
| Prefix and suffix settings | 122 |
| Specific profile for Glink | 122 |
| Point Mobile scanner settings | 124 |
| Wedge Profiler | 124 |
| Show on status line | 125 |
| Seuic scanner settings | 126 |
| Show on status line | 126 |
| Socket Mobile Companion App | 126 |
| Unitech scanner options | 127 |
| Enable Data intent mode | 127 |
| Intent action | 127 |
| Intent string extra | 127 |
| Show on status line | 127 |
| Urovo scanner options | 128 |

Contents

| | |
|-------------------------------|-----|
| ScanWedge | 128 |
| Intent action | 128 |
| Intent string extra..... | 128 |
| Show on status line | 130 |
| Zebra scanner options | 131 |
| Glink settings..... | 131 |
| DataWedge app | 132 |
| Keyboard options | 134 |
| Keyboard mapping | 134 |
| Keyboard input handling | 134 |
| External keyboard | 135 |

Distributing Glink configurations from an EMM/MDM..... 136

| | |
|--|-----|
| Auto import from file location on Android device | 136 |
| Download the Glink configuration from a web server | 137 |
| Set Glink parameters from the MDM..... | 138 |
| General options..... | 142 |
| Passwords | 142 |
| Toolbar | 143 |
| Remove a session configuration | 143 |
| Activation key | 143 |
| XML Schema | 144 |
| MDM Parameter list..... | 145 |

How to install SSL/TLS client certificates and SSH private key files 165

| | |
|---|-----|
| SSL/TLS Client certificates..... | 165 |
| How to import a PSKC #12 certificate (.p12 file)..... | 165 |
| Distribute the p12 client certificate file to the auto-import folder (Android only) | 165 |
| Use AppConfig parameter in MDM to download p12 client certificate (Android and iOS)..... | 165 |
| Send p12 client certificate as e-mail attachment (iOS) | 166 |
| SSH private key file | 166 |
| How to import a private key file | 166 |

How to export/send a debug trace and configuration file 167

| | |
|---|-----|
| Enable, capture and export debug file | 167 |
| Export configuration file | 168 |

The GlinkProxy Session Persistence Server..... 169

| | |
|--------------------|-----|
| How it works | 169 |
| Delivery | 170 |

Contents

| | |
|---|-----|
| Install and setup..... | 170 |
| Startup | 171 |
| Settings | 171 |
| Command line parameters | 173 |
| Glink for iOS/Android Proxy Server Settings | 175 |

Warranty

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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.

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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 for Android is a port of Gallagher & Robertson's best-selling terminal emulation program, Glink Professional Edition for Microsoft Windows. Glink for Android runs on devices running the Android operating system, providing access to a wide range of host systems.

Glink is used to access applications running on IBM, UNIX/Linux, DEC and Bull host systems. Glink has emulations for the IBM 5250 and 3270 terminals, DEC VT420, VT320, VT340, VT220 and VT102 terminals. ANSI 3.64 and Bull Questar DKU7102, DKU7107 and DKU7211 terminals, Bull VIP7800, VIP7760 and VIP7700 terminals.

Glink brings you a high quality and proven emulator on your Android devices.

Features

- IBM3270, IBM5250, Bull DKU7107, Bull VIP7800, Bull VIP7700, Bull DKU7102, VT420, VT320, VT340, VT220, VT102, ANSI 3.64 terminal emulation, all screen sizes
- TN3270, TN5250, TNVIP, Telnet and G&R/Ggate 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
- Support for program texts in German, French, Portuguese and Norwegian
- Configurable multiline toolbar with function keys and macros
- Configurable hotspots for function keys, option numbers and URLs
- Macro recording for auto-login and for assignment to toolbar or key
- Pop-up standard keyboard with support of international characters
- Physical keys and buttons can be mapped to macros, function keys and other keys
- 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 or to toggle Action bar
- IBM5250 emulation supports Double Byte Character Sets (DBCS) like Chinese, Japanese and Korean
- Configurable scroll-back buffer contains history of your host session
- Print or e-mail host print data
- Print or e-mail terminal emulation content or scroll-back buffer content
- Zoom and scroll
- Blinking attribute supported
- Blinking cursor supported
- 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
- Zebra barcode scanner devices supported with DataWedge interface
- Honeywell barcode scanner devices supported with Data Intent interface
- Datalogic barcode scanner devices supported with Data Intent interface
- Denso barcode scanner devices supported with Data Intent interface
- AML barcode scanner devices supported with Data Intent interface
- M3 Mobile barcode scanner devices supported with Data Intent interface
- Point Mobile barcode scanner devices supported with Data Intent interface
- Urovo barcode scanner devices supported with Data Intent interface
- CIPHERLAB barcode scanner devices supported with Data Intent interface
- Unitech barcode scanner devices supported with Data Intent interface
- Seuic barcode scanner devices supported with Data Intent interface
- Socket Mobile barcode scanners connected in SPP mode (Serial Port Profile)
- Other Bluetooth barcode scanners like Opticon OPN2002 connected as external keyboard
- Chromebook and other Chrome OS devices supported

Support

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

Please include product name, version number and information about the device you are running the product on in addition to your question or problem description. It may also be useful for us to have a debug trace of your complete host session up to

Introduction

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 license

Glink for Android can be purchased online on Google Play and in the G&R Webshop (<https://www.gar.no/webshop/glink-for-android>). For larger quantities, contact us at gar@gar.no for a quote. Glink for iOS can be purchased on the Apple App Store.

Delivery and Installation

If you purchase Glink for Android on Google Play, installation and licensing is handled by the Google Play app on your Android device. You must be logged in to Google Play with the same account as you used to purchase the Glink application.

If you purchase the Glink for Android application in G&R's Webshop, you will receive an activation code that you use to download the Glink for Android application and later to activate it on your Android devices.

If the browser on your Android device does not support direct download of the Glink for Android installation file in .APK format, do the download to a PC, connect the Android device to your PC with an USB cable and transfer the .APK file to the Android device.

Tap the installation package (.APK file) and then tap Install to install it. When it is installed, tap Open or Run to run it.

For large orders you may receive a license file, instead of an activation code, that can be distributed to all devices using an MDM.

Activation

The first time you start Glink for Android, you must activate it. Tap ACTIVATE at the top right of the display and enter the Activation code and tap ACTIVATE. The Activation code can be scanned from a barcode or prefilled by your MDM if your device is managed by a MDM system.

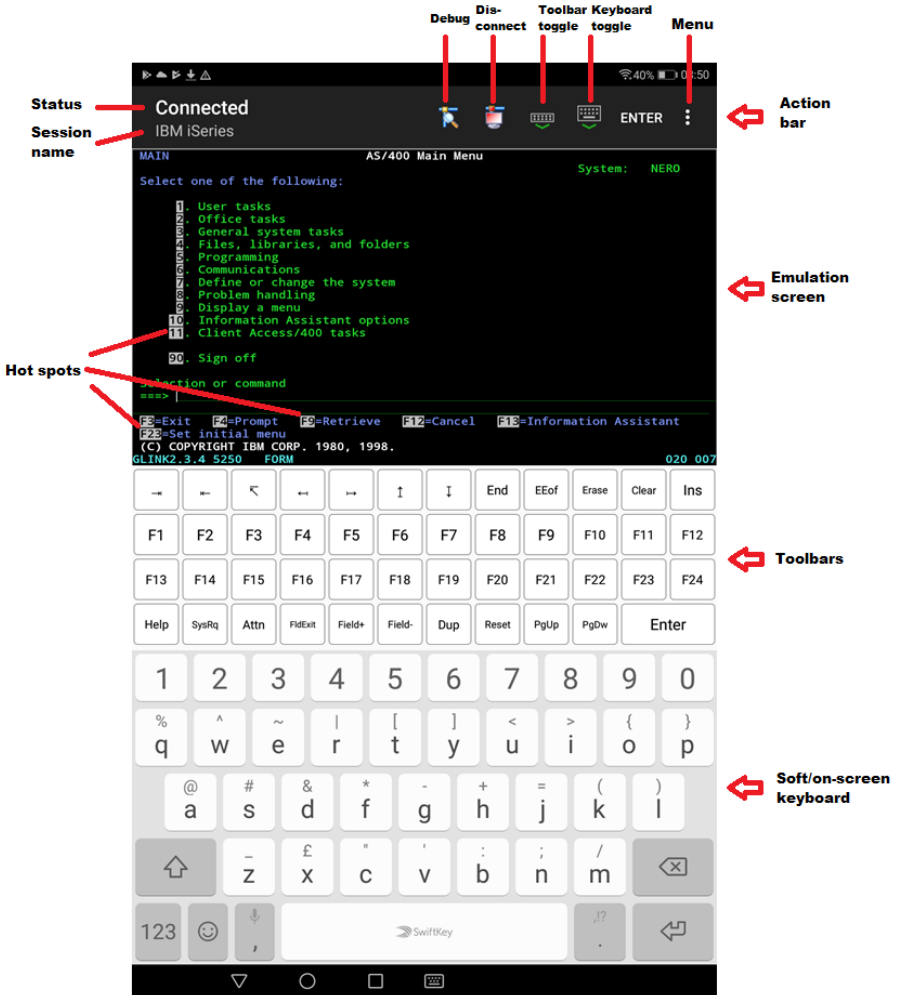
Glink for Android will now connect to the G&R license server to obtain a license.

Setup

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

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

The Glink emulator screen



Action bar

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

Emulation screen

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

The Font size can be set to a specific size between 6 and 36, but it can also be set to Auto or Fit screen. If you have a large display, you probably want to set it to Fit screen. With this setting Glink will select the best font size and stretch/squeeze it to fill the entire screen. If you select Auto, Glink will normally display all rows in portrait mode and all columns in landscape mode, the rest of the host screen can be dragged into view by tap-and-drag left/right/up/down on the screen.

Show toolbar can be set to Auto, 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.

Introduction

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 Android keyboard available on the device. This means that you can switch between keyboards for different languages, keyboards from the vendor, Google, default Android 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 then the *Connect* icon. Glink will now return to the main screen and connect to the configured host. If there is a *Connect macro* defined in this configuration, 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.

Getting started

To run multiple sessions, select *New Glink window* in the Action bar drop down menu in the main screen. If more than one session is configured, select the session to start.

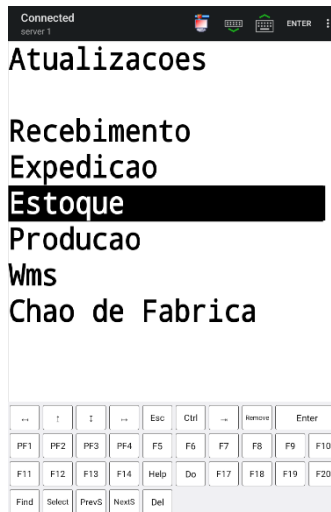
Text/font size

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.

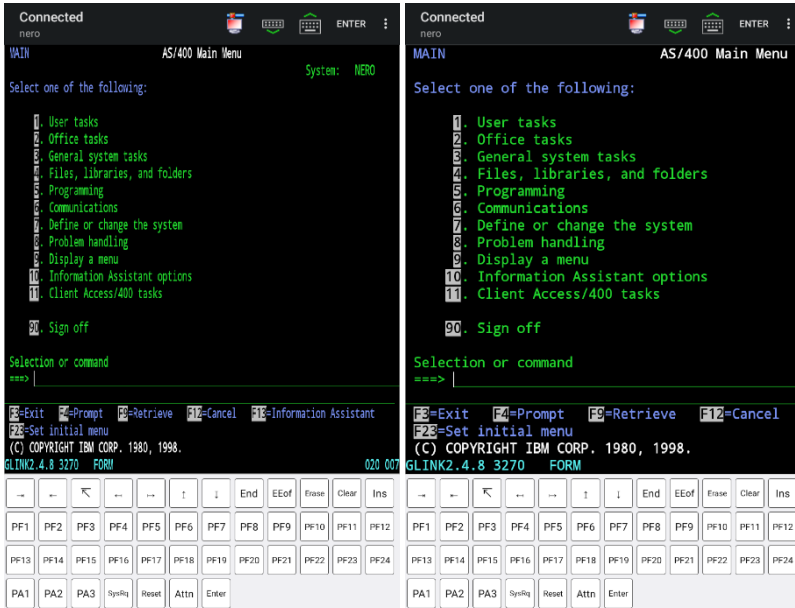
Use zoom or scroll to see hidden parts of the display. The initial text size is set in *Menu->Settings->Screen options->Font size*. The default value for the option *Menu -> Settings -> Screen options -> Use double tap to is Reset screen size*. With this setting, you can double-tap the screen to get your initial screen setting back after a zoom or scroll operation.

Here are some examples of how you can use *Font size* parameter and *Limit screen view (x,y)* parameter. If the terminal has 80 or 132 columns and 24 rows, but your application only uses 20 columns and 10 rows, it makes no sense to show columns above 20 or rows below 10 to the user. See example below:

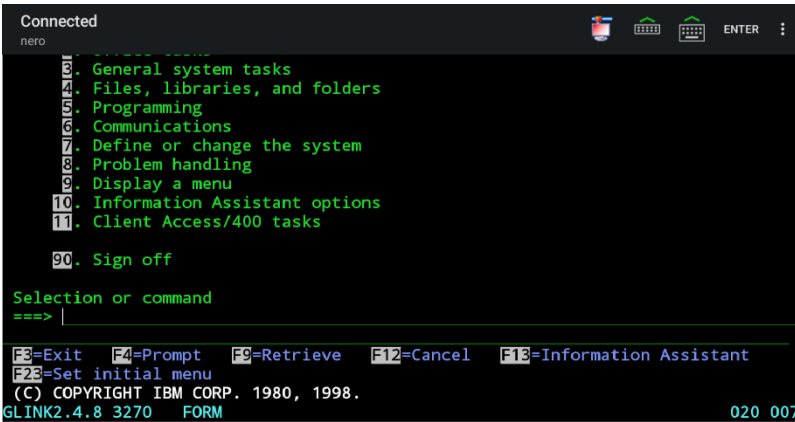


Glink to the left has *Font size = Fit screen* while Glink to the right has *Font size = Fit screen* and *Limit screen view (x,y) = 20,10*. These parameters are particularly useful on devices with a small display.

With *Font size* set to *Auto*, Glink will display all rows in portrait mode and allow you to scroll the screen horizontally, and display all columns in landscape mode and allow you to scroll vertically. Below you see screens with *Font size = Fit screen* and *Font size = Auto* in portrait and landscape mode:



Getting started



Keyboard

Glink uses the standard on-screen 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

Glink support several keyboard shortcuts for function and control keys when using an external Bluetooth keyboard, see *Keyboard shortcuts* for a list. Device buttons and external keyboard buttons can also be remapped, select *Settings - >Keyboard*, and then see *Keyboard mappings* button.

Keyboard shortcuts

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

Shortcuts for keyboards with function keys

For all emulations:

F1 to F12 : F1 to F12

For IBM emulations:

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

For VT emulation:

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

Shortcuts for keyboards without function keys

For the IBM 5250, IBM 3270 and 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

For DKU or VIP emulations the following shortcuts are defined:

F1 to F10 : Alt+1 to Alt+0
 F11 and F12 : shift+Ctrl+1 to shift+Ctrl+2
 shift/F1, shift/F10: Ctrl+1 to Ctrl+0
 Shift/F11, shift/F12: shift+Ctrl+3 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

Getting started

IBM 5250 shortcuts

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

VT shortcuts

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

Keyboard mapping

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

The list box displays the keys mapped if any.

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

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

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

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

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

Toolbar

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

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

Hotspots

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

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

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

Copy/Paste

Long-tap a word to select it. Drag the set of bounding handles to highlight the text you want to copy. Tap *Copy* on the toolbar that appears. If more than one line is selected, tap *Line/Block* to switch between line and block mode selection.

Tap *Paste* on the toolbar that appears if you long-tap an input field.

The paste function may 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.

You can also export your configuration to the *Download* folder on your device from the *Sessions* menu. Glink will give you the full path to the exported file, for example */storage/emulated/0/Download/config.glinki*. Now you can use a *File manager* to copy the file or copy the device to a personal computer and use it to copy the file from your device.

The configurations are sent as a file-attachment named *config.glinki*. 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.

From the *Sessions* menu you can also manually import a configuration file that you have downloaded to the device, using the file picker, or put on a web server, by specifying the URL to this file or use the Auto-import feature described in the *Glink MDM configuration parameters* section.

The export and import functions allow administrators to prepare and customize configurations for a large group of users and distribute the configurations.

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.

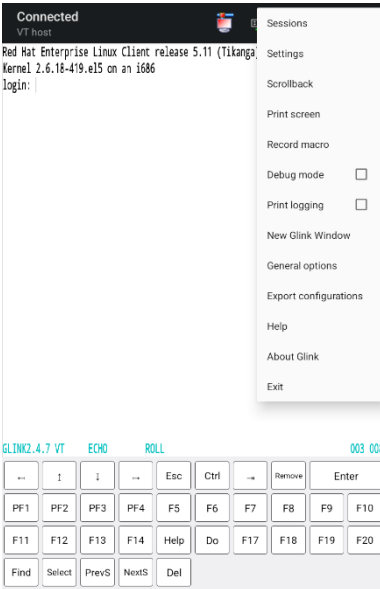
Proxy server

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*.

Menu



Sessions

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

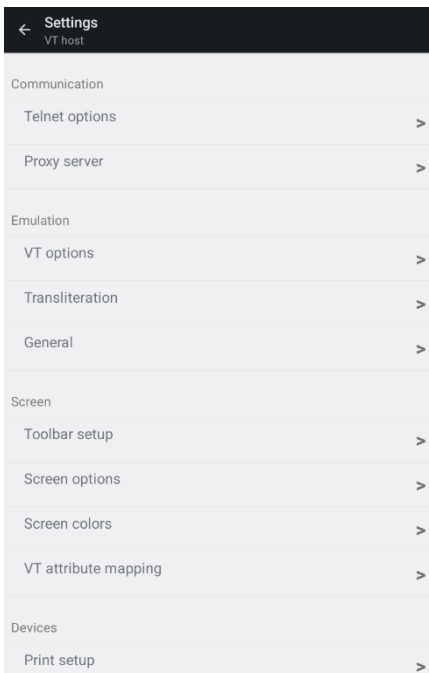
The Menu in the Sessions screen:

- **Connect** - Select a session name and tap the connect icon. Glink will now return to the main screen and connect to the configured host. If there is a Connect macro defined in this configuration, it will be executed.
- **Settings** - Change one or more of the parameters for the session selected.
- **New** - The New options lets you create a new session configuration. After a session is created, select the Settings option to change the default settings.
- **Remove** - Removes the session selected.

- **Rename** - Renames the session selected. If the new name starts with two underscores (“__”), the session becomes a template.
- **Import** - Import a Glink configuration that is downloaded to the device. The current configuration will be overwritten and replaced.
- **Export** - Export the Glink configuration to the Download folder.
- **Templates** - List and manage templates. If you intend to define several sessions with similar settings, a predefined template can simplify the process of defining a new session.
- **Reorder the session list** - The session list can be reordered by doing a long press at a session entry, and then move the entry by dragging it when a rectangle is shown around the entry (wait with the move until the rectangle shows up).

Settings

Tap here to modify configuration parameters for the current session.



Scrollback

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

Print screen

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

Record macro

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

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

When you are at the end of the macro function you wanted to record, you go to *Menu > Record Macro* and assign a button text and tap *Save recording* or press a key that you want to map the recorded macro to. The macro will now be saved to the current toolbar or to the key you pressed. You can move it to a different toolbar from *Menu > Settings Toolbar setup*. If you made a typing error during the recording, you must tap *Cancel* in *Menu > Record Macro* to delete the recorded macro and

go back to the main screen. *Toolbar macros* are removed when you remove their buttons from the toolbar. *Keyboard macros* are removed when you remove their keyboard mapping from *Menu > Settings > Keyboard setup > Keyboard mapping*. To remove a *Connect macro* you first must tap *Connect macro* in *Menu > Record Macro*, then tap *Remove connect macro*. If you want to define a completely new *Connect macro*, you now tap the *Start recording* button. If you don't tap *Remove connect macro* before you tap the *Start recording* button, you will extend the current *Connect macro*.

Pause the macro

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

Wait for user input

Header text

Specify the prompt value.

Ask user at macro start

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

Password

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

Input value

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

Wait for a time interval

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

Debug mode

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

Menu

the *Mail* or *Print* button, only the marked text will be sent/printed. Tap the *Glink* button to return to the main screen.

New Glink window

This option allows you to open another Glink window to run multiple concurrent host sessions. Use the switch session icon presented in the action bar at the top to switch between the sessions started.

Remove Glink window

This option is presented if more than one session is started.

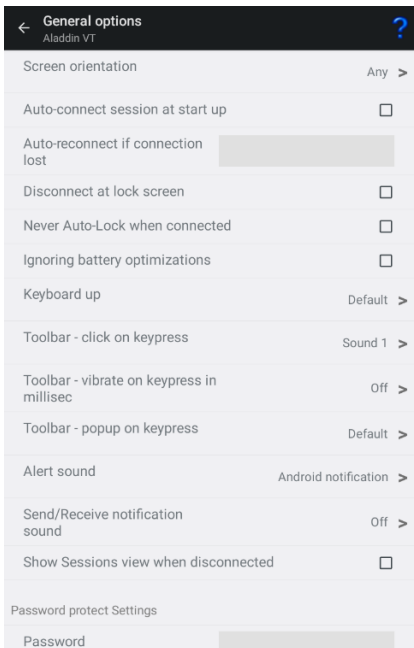
Print logging

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.



Screen orientation

This option locks the screen to the selected orientation.

Auto-connect session at start up

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.

Auto-reconnect if connection lost

If the host connect is lost for some reason, Glink can try to reconnect the session. You can specify both the number of retries and the time interval between each retry, for example:

```
4           Retry four times with a time interval of two seconds
3*4000     Retry three times with a time interval of four seconds
3*5000;2*60000  Retry three times with a time interval of five seconds, then retry two times with a time interval of one minute
```

The max value for retry is 100. The max value for timer interval is 300000 milliseconds (five minutes).

If user disconnects the session, no retry is performed.

Disconnect at lock screen

Disconnects the line if the screen is locked (turned off). Often the line is disconnected by Android even if this option is not turned on.

Never Auto-Lock when connected

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

Ignore battery optimization

When selected, Glink will ask for permission to ignore battery optimization. When the device is locked, this will allow Glink to run in the background to try to keep the connection to the host application. This option works for Android 6 Marshmallow and newer versions of Android.

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.

Toolbar - Click on keypress

Off

No click

Sound 1

Click sound 1

Sound 2

Click sound 2

Toolbar - Vibrate on keypress in millisec

Off

No vibration

20 – 300

Duration time in milliseconds

Toolbar - Popup on keypress

Default

No popup on keypress for tablets, for other type of devices show popup on keypress

On

Show popup on keypress

Off

No popup on keypress

Alert sound

Off

No sound

Android notification

The Notification sound type and volume are configured in the Android Settings app

Android alarm

The Alarm sound type and volume are configured in the Android Settings app

Send/Receive notification sound

Off

No sound

On

Play sound when sending and receiving host messages

Send only

Play sound when sending host messages

Recv only

Play sound when receiving host messages

Menu

Show Sessions view when disconnected

Glink will display the Sessions view after a one second delay when the connection with host is lost.

Password protect Settings

This option prevents users from changing or viewing the configurations.

Show Menu/Action bar items

Various Glink functions are either listed in the *drop-down Menu* or shown on the *Action bar* at the top of the Glink screen. Functions may be moved from the *drop-down Menu* to the *Action bar* or vice versa or hidden.

On Menu (by default)

By default, the following functions are available in the drop-down menu. Some of the functions can be moved or hidden, others only hidden.

- Sessions (Menu, Action bar, Hide)*
- Settings (Menu, Action bar, Hide)*
- Scrollback (Menu, Action bar, Hide)*
- Print screen (Menu, Hide)*
- Record macro (Menu, Hide)*
- Debug mode (Menu, Hide)*
- Print logging (Menu, Hide)*
- New Glink window (Menu, Action bar, Hide)*
- Remove Glink window (Menu, Action bar, Hide)*
- General options (Menu, Action bar, Hide)*
- Export configurations (Menu, Hide)*
- Help (Menu, Action bar, Hide)*
- About (Menu, Hide)*
- Exit (Menu, Hide)*

On Action bar (by default)

By default, the following functions are shown on the Action bar. Some of the functions can be moved or hidden, others only hidden.

- Toggle toolbar (Action bar, Hide)*
- Toggle keyboard (Action bar, Hide)*

Connect (Menu, Action bar, Hide)
Disconnect (Menu, Action bar, Hide)
Enter (Action bar, Hide)

Pop up on Action bar

These functions may show or pop up on the Action bar. They can be configured to be listed in the drop-down menu or hidden.

Scan barcode (Menu, Action bar)
Print data (Menu, Action bar)
Debug data (Menu, Action bar)
SSL/SSH info (Action bar, Hide)
Select Glink (Menu, Action bar)
Pause (Menu, Action bar)

Language

The default language for Glink is *US English*. The other languages that can be configured in this version are *DE German*, *PT Portuguese*, *FR French* and *NO Norwegian*. Changing this parameter will change all menus and other program texts in Glink to the configured language. The help pages will however remain in US English.

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.

Menu

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.

Disconnect icon (Red monitor)

Tap here to disconnect the current session.

Keyboard icon

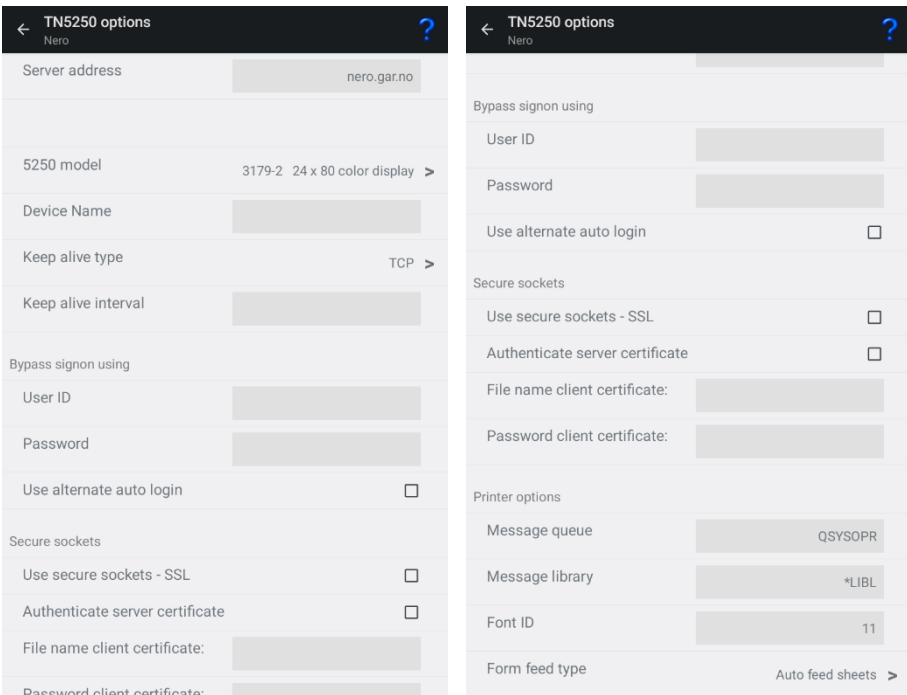
Tap here to bring the on-screen keyboard up/down.

Toolbar icon

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

Settings - Communication

TN5250 options



| TN5250 options | |
|---------------------------------|--------------------------------|
| Server address | nero.gar.no |
| 5250 model | 3179-2 24 x 80 color display > |
| Device Name | |
| Keep alive type | TCP > |
| Keep alive interval | |
| Bypass signon using | |
| User ID | |
| Password | |
| Use alternate auto login | <input type="checkbox"/> |
| Secure sockets | |
| Use secure sockets - SSL | <input type="checkbox"/> |
| Authenticate server certificate | <input type="checkbox"/> |
| File name client certificate: | |
| Password client certificate: | |
| Printer options | |
| Message queue | QSYSOPR |
| Message library | *LIBL |
| Font ID | 11 |
| Form feed type | Auto feed sheets > |

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

Server address

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

Settings – Communication

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

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

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

The default ports in Glink are:

G&R Ggate native protocol 30841
Telnet, TNVIP, TN3270, TN5250 23

Note that the Bull TNVIP servers on Unix/Linux or Windows generally use non-standard ports, normally 7323, and you must add this to the IP address.

IPv6 address

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

[IPv6 address]:port

for example

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

5250 model

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

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

```

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

```

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

Device name

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

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

```

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

```

Or use:

```
%m-%r
```

Represents the six octets of the Mac address. For example, %m%n%o%p%q%r for full Mac address (Android version)

```
%a-%d
```

Represents the four octets of the WiFi IP address. For example, %a%b%c%d for full IP address (Android version)

The Collision Avoidance ID enables the generation of a new Device name if the Telnet server rejects the previous name. The Collision Avoidance ID has a value in the range 1-9 and A-Z. For example, if ABC= is specified, ABC1, ABC2 and so on

Settings – Communication

will be generated. If ABC== is specified, a random 2-character string will replace the == characters, and so on for ABC=== and ABC====.

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

The Session Type ID replaces the character % with the character S for Screen models and P for Printer models. For example, if %ABC* is specified, the first session will get SABCA if the model is a display type and PABCA if the model is a printer type.

Android only

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

Android only

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

Android only

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

Android only

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

Android only

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

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

Keep alive

Keep alive type

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

TCP keep alive

Specifies how often TCP sends keep alive probes. TCP sends keep alive probes to verify that an idle connection is still open. By default, keep alive probes are sent after 2 hours of inactivity or not at all. It depends on the version of the operating system. The number of keep alive probes that are sent is also system specific. The keep alive parameter allows you to set both the keep alive time and the keep alive interval in seconds. The format is **time, interval**

For example:

1200, 5

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

1800

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

Telnet keep alive

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

For example:

60

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

Bypass signon using

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

Settings – Communication

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

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

Printer options

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

Message queue name

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

Message queue library

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

Font ID

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

Form feed type

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

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

Secure sockets

Use secure sockets - SSL

Check this option to use a secure connection to the host. The host side must of course support this type of connection. The default value for the port number is 992

(GGate 30851). If the host side uses another port number, specify the port number in the host address field, for example:

```
myhost.com:842
```

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

IPv6 address

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

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

for example

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

Authenticate server certificate

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

File name client certificate

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

Android version only

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

iOS version only

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

See also:

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

Password client certificate

Supply the PSKC #12 password if defined.

How to import a private key file

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

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

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

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

TN3270 options

The image displays two screenshots of the 'TN3270 options' configuration screen for an 'IBM 3270 host'. The left screenshot shows the following fields: 'Server address' (10.78.0.53), '3270 model' (3279-2 24x80 color, basic data stream), 'LU name' (empty), 'Use Extended TN3270' (checked), 'Send Associated LU' (unchecked), 'Keep alive type' (TCP), 'Keep alive interval' (empty), 'Secure sockets' section with 'Use secure sockets - SSL' (unchecked) and 'Authenticate server certificate' (unchecked), and 'File name client certificate:' (empty). The right screenshot shows: 'LU name' (empty), 'Use Extended TN3270' (checked), 'Send Associated LU' (unchecked), 'Keep alive type' (TCP), 'Keep alive interval' (empty), 'Secure sockets' section with 'Use secure sockets - SSL' (unchecked) and 'Authenticate server certificate' (unchecked), 'File name client certificate:' (empty), 'Password client certificate:' (empty), 'Auto-login' section with 'Login with' (empty) and 'Password' (empty), and 'External validation' section with 'Use external validation app' (unchecked).

TN3270 is a variation on the Telnet protocol and is used by the IBM3270 emulation to connect to IBM hosts over a TCP/IP network. You can either connect directly to the host, if it's running a Telnet server, or via a TN3270 gateway.

Server address

The Server address is normally the TCP/IP address to the server/gateway you connect through to reach the host, for example a G&R Ggate server (using native Ggate protocol, TNVIP, TN3270, TN5250 or Telnet), a Bull TNVIP server, an IBM TN3270 server, an IBM TN5250 server or the host itself.

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

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

The default ports in Glink are:

G&R Ggate native protocol 30841
Telnet, TNVIP, TN3270, TN5250 23

Note that the Bull TNVIP servers on Unix/Linux or Windows generally use non-standard ports, normally 7323, and you must add this to the IP address.

IPv6 address

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

[IPv6 address]:port

for example

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

3270 model

This option is provided so that you may select the appropriate 3270 model. This will be used to set the screen size and to provide terminal identification to the host machine where appropriate. You may need to select an extended type (one of those with an E extension) to enable use of extended attributes from the host. The base model number determines the alternate screen size the host may use, where

Settings – Communication

```
327x-1 is 16 rows of 80 columns
327x-2 is 24 rows of 80 columns
327x-3 is 32 rows of 80 columns
327x-4 is 43 rows of 80 columns
327x-5 is 27 rows of 132 columns
3287-1 is printer
```

If you select a printer type, you will probably also need to specify an LU name and select extended telnet mode in the host settings.

LU name

This option allows you to choose a specific LU name. It is only functional when you connect to a TN3270 server that has support for the option and should otherwise be left blank.

Use Extended TN3270

When this option is enabled, the program will use the extended (RFC1647) telnet protocol to talk to the TN3270 server (this will obviously only work if the server supports RFC1647). This protocol allows for more flexible configuration, selection and use of the TN3270 session.

Send Associated LU

This option should be enabled when the specified LU name for a printer (3287-1 type) is the name of a screen device which has been defined with an associated printer on the TN3270 server. The option is only available when you use extended TN3270 to talk to the server, and when an associated printer has been defined for the screen in question.

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.

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

Settings – Communication

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

IPv6 address

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

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

for example

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

Authenticate server certificate

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

File name client certificate

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

Android version only

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

iOS version only

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

See also:

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

Password client certificate

Supply the PSKC #12 password if defined.

How to import a private key file

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

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

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

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

Auto-login

If both the parameters below is specified, Glink will try to login to the host application.

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

Login with

Specify the login string.

Password

Specify the password.

Note

A *Tab* is performed after the Login string and a *Transmit* is performed after the password. If the parameter includes a function string at the end, the default function will be ignored. The syntax for the *Tab* function is `^"f58"` and for the *Transmit* function is `^"f44"`

The example shows how to do a *Transmit* after the name instead of a *Tab* function.

```
Login with:  MyName^"f44"
Password:    MyPassword
```

External validation

This option allows you to configure an external app for access validation.

In Glink at connect time:

Settings – Communication

- Start a validation app if not already started
- Send a broadcast to this app to request validation.
- Listen for Broadcast reply from the started app.

Validation app:

- It will start a Broadcast receiver at startup.
- When a request is received, do validation and reply with a positive or negative reply broadcast to Glink.

Please contact G&R for more information.

Telnet options

| Telnet options | |
|--------------------------|--------------------------|
| VT host | |
| Server address | 10.78.0.63 |
| Terminal type | vt220 |
| Line terminator | CR+LF > |
| Use IP for BRK | <input type="checkbox"/> |
| Binary mode | <input type="checkbox"/> |
| Simulate parity | <input type="checkbox"/> |
| Keep alive type | TCP > |
| Keep alive interval | |
| Telnet login | |
| Wait for login prompt | |
| Login with | |
| Wait for password prompt | |
| Password | |

| Telnet options | |
|---------------------------------|--------------------------|
| VT host | |
| Wait for password prompt | |
| Password | |
| Secure sockets | |
| Use secure sockets - SSL | <input type="checkbox"/> |
| Authenticate server certificate | <input type="checkbox"/> |
| File name client certificate: | |
| Password client certificate: | |
| SSH connection | |
| Use SSH connection | <input type="checkbox"/> |
| Server address: | |
| User name: | |
| Password: | |
| Private key file: | |
| Keep alive interval in seconds | 0 |

Server address

The Server address is normally the TCP/IP address to the server/gateway you connect through to reach the host, for example a G&R Ggate server (using native Ggate protocol, TNVIP, TN3270, TN5250 or Telnet), a Bull TNVIP server, an IBM TN3270 server, an IBM TN5250 server or the host itself.

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

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

The default ports in Glink are:

| | |
|-------------------------------|-------|
| G&R Ggate native protocol | 30841 |
| Telnet, TNVIP, TN3270, TN5250 | 23 |

Note that the Bull TNVIP servers on Unix/Linux or Windows generally use non-standard ports, normally 7323, and you must add this to the IP address.

IPv6 address

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

[IPv6 address]:port

for example

[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 sent 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.

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.

Settings – Communication

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.

Wait for command prompt

Instructs Glink to wait for the command prompt string before sending the *Do command* string.

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

Do command

Specify the command to run after the login. (Optional)

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

Settings – Communication

attachment. Click on the attachment and Glink will ask if you want to import it as a new configuration (your configuration will not be overwritten in this case). The *myfile.glinki* must have the following format:

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

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

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

| SSH - Secure shell | |
|--------------------------------|------------|
| Server address | 10.78.0.22 |
| User name: | |
| Password: | |
| Private key file: | |
| Terminal type: | vt220 |
| Number of cols: | 80 |
| Number of rows: | 24 |
| Keep alive interval in seconds | 0 |

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.

Wait for command prompt

Instructs Glink to wait for the command prompt string before sending the *Do command* string.

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

Settings – Communication

Do command

Specify the command to run after the login. (Optional)

Ggate options

| Ggate options | |
|---------------------------------|--------------------------|
| VIP7800 Ggate | |
| Server address | ggate.gar.no |
| Alternate server address | |
| Random connect | <input type="checkbox"/> |
| Secure sockets | |
| Use secure sockets - SSL | <input type="checkbox"/> |
| Authenticate server certificate | <input type="checkbox"/> |
| CoName or Resource | |
| Ggate protocol | DSA > |
| Remote mailbox name | |
| Remote mailbox extension | |
| Remote node name | |
| Local mailbox name | |
| User ID | |
| Password | |

| Ggate options | |
|-----------------------|--------------------------|
| VIP7800 Ggate | |
| Local mailbox name | |
| User ID | |
| Password | |
| Project | |
| Billing | |
| Host mode | CXI > |
| Terminal mode | VIP7804 > |
| GRTS/LID user string | |
| IBM log mode | |
| Additional parameters | |
| Keep alive (secs) | 0 |
| Initial turn | Default > |
| Send commands as data | <input type="checkbox"/> |

Ggate is a gateway product available from G&R for UNIX and Windows platforms. It allows Glink to connect over TCP/IP to Bull and IBM hosts which use the ISO/DSA protocol for network communications.

Server address

The Server address is normally the TCP/IP address to the server/gateway you connect through to reach the host, for example a G&R Ggate server (using native Ggate protocol, TNVIP, TN3270, TN5250 or Telnet), a Bull TNVIP server, an IBM TN3270 server, an IBM TN5250 server or the host itself.

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

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

The default ports in Glink are:

| | |
|-------------------------------|-------|
| G&R Ggate native protocol | 30841 |
| Telnet, TNVIP, TN3270, TN5250 | 23 |

Note that the Bull TNVIP servers on Unix/Linux or Windows generally use non-standard ports, normally 7323, and you must add this to the IP address.

IPv6 address

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

[IPv6 address]:port

for example

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

Alternate server address

The Alternate server address specifies an additional IP address as an alternative to the primary server address. When a connection is to be made to a Ggate gateway, the connection will first be made to the primary address (however, see the Random connect option). If the connection is refused, or after a delay the connection has timed out, then a connection will be attempted to the alternate address. This may be used to provide backup connectivity in the case where one of several Ggate servers may be down, and to provide a form of load balancing.

A more extensive backup and load balancing capability may be achieved by connecting via the G&R Host Links network management product, Gproxy. In this case the primary server address would be the address of Gproxy, and the alternate, if used, would be the address of a backup copy of Gproxy. Gproxy returns the address of the Ggate gateway with the least load of those currently operational, and Glink connects to that address.

Settings – Communication

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*.

IPv6 address

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

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

for example

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

Random connect

The Random connect option is used in connection with the alternate IP address. It may be checked to force a random choice of either the primary server address or the alternate address as the first address to try for when connecting to the Ggate server. This may be found useful in spreading the total load between multiple Ggate servers.

Secure sockets

Use secure sockets - SSL

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

```
myhost.com:842
```

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

IPv6 address

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

[IPv6 address]:port

for example

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

Authenticate server certificate

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

File name client certificate

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

Android version only

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

iOS version only

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

See also:

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

Password client certificate

Supply the PSKC #12 password if defined.

How to import a private key file

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

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

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

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

Settings – Communication

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

CoName or Resource

This field is used in two different protocols:

Ggate

Entering a CoName will cause your Ggate session to select a specific CoName (Connection Name) entry in the Ggate DSA configuration file on the Ggate gateway. The CoName entry can define all configuration parameters that otherwise would have to be entered in the Ggate options, including your terminal device type, and associate a printer session with your terminal device. Your Ggate administrator will supply you with a CoName if appropriate. Note that the Ggate options that follow in the host configuration menu allow you to supply the whole range of DSA and terminal parameters. If you have the required permissions these are used to complete or override the CoName entry. If you do not supply a CoName you must supply enough Ggate options to make the connection. The host application mailbox and the host node will always be needed.

TNVIP

Entering a resource name will select a specific configuration in the TNVIP server. The configuration can define all configuration parameters that otherwise would have to be entered manually, and can also define your terminal device type, and associate a printer session with your terminal device. Your TNVIP administrator will supply you with the name of a resource if appropriate.

Ggate protocol

The Ggate protocol may either be DSA (default) or DIWS. This parameter tells the addressed Ggate which protocol to use for the host-communication. DSA is the preferred protocol. For more information, please check the Host Links Ggate manual or Host Links Line Handler manual.

Remote mailbox name

Specifies the name of the application mailbox for the host subsystem to which you are connecting. This parameter corresponds with the **-DMB** parameter used when connecting using the MainWay Terminal manager. Typical values would be:

GCOS8: **TSS**

GCOS7: **IOF**, **MML**

Remote Mailbox extension

Specifies the mailbox extension of the application to which you are connecting. This parameter corresponds with the **-EXT** parameter used when connecting using the MainWay Terminal manager. The mailbox extension is only used when connecting to CXI (GCOS8) subsystems and will normally contain the LID (Logical ID). The mailbox extension string can contain up to 4 characters. Login to GCOS8 via CXI requires that the host mode be set to CXI. When you define a LID in TP8, one of the parameters is mailbox extension, usually set to be equal to the LID.

Remote node name

For DSA configuration this parameter specifies the actual DSA session control name for the remote system.

For Ggate configuration this parameter is used to identify a host entry in the Ggate configuration file; this entry is a logical name only which can provide you with one of several different ways to access the same host. The equivalent parameter, which would be provided as a **-SCID** parameter if you were connecting through the MainWay Terminal Manager (or as the **TSAP** in the OSI world) will be found as one of several OSI/DIWS/DSA parameters in the configuration file on the Ggate server.

Local mailbox name

This parameter specifies the local mailbox name to be used for the connection and is equivalent to the **-LMB** parameter you would specify if you were connecting using the MainWay Terminal Manager.

This can be used as an additional user identification for host security. On GCOS8 systems it may also be used to generate a *LID*, while for IBM (OSF/Janus) connections it can be used to select a specific LU or LU pool.

User ID

Specifies the user ID to be supplied to the host subsystem to which you are connecting and is equivalent to the **-PID** or **-USR** parameter you would specify if you were connecting using the MainWay Terminal manager.

This parameter is usually specified when you connect to GCOS8 and GCOS7 systems but is not used for connections to GCOS6 and IBM systems.

Password

Specifies the password for the host subsystem to which you are connecting and is equivalent to the **-PIC** or **-PW** parameter you would specify if you were connecting using the MainWay Terminal Manager.

This parameter is always specified when you connect to GCOS7 systems, sometimes on GCOS8 systems, but seldom for connections to GCOS6 and IBM systems.

Project

Specifies the project identification to be supplied to the host subsystem to which you are connecting and is equivalent to the **-PJ** parameter you would specify if you were connecting using the MainWay Terminal Manager.

This parameter is sometimes specified when you connect to GCOS7 and GCOS8 systems but is not used for connections to GCOS6 and IBM systems.

Billing

Specifies the billing for the host subsystem to which you are connecting and is equivalent to the **-BA** parameter you would specify if you were connecting via the MainWay Terminal manager.

This parameter is most often used when connecting to GCOS7 systems.

Host mode

This parameter is used to select the target host mode. Through the selection of host mode, a set of internal parameters that control the connection with the remote host application is chosen.

The following host modes are available:

- DPS8** This mode is used when communicating with DPS8 TSS and DMIV/TP applications.
- CXI** This mode is used when communicating with TP8 and other DPS8 applications that use CXI.
- DN** This mode is used when communicating with the NOI on a front-end machine.
- DPS7** This mode is always used when communicating with GCOS7 systems.
- DPS6** This mode is always used when communicating with GCOS6 systems through SNM.
- ROUTER** This mode is used with GCOS6 NTM. May also be used to connect to MainWay applications.
- UNIX** This mode is always used when communicating with another Unix system. Gmailer and GUFT can make such connections.
- IBM** This mode is always used when communicating with IBM hosts through the Janus/OSF gateway (MainWay SNA gateway) in the MainWay.

Terminal mode

This parameter specifies the terminal mode to be used for the connection and is supplied to the host application to indicate what type of presentation should be used for the session.

The following terminal modes are accepted as valid terminal types:

Questar:

DKU7001, DKU7002, DKU7005, DKU7007, DKU7007D, DKU7102, DKU7105, DKU7107, DKU7107D, DKU7211, DKU7211D, DKU722X, DKU9107

VIP7800:

HDS5, HDS5T, HDS7, VIP7801, VIP7801C, VIP7801T, VIP7801X, VIP7802, VIP7804, VIP7804V, VIP7805, VIP7805V, VIP7814, VIP8800, VIP9800, TXT7801, TXT7802, TXT2255, TWS2255, TWS2255V

VIP7700:

VIP7700, VIP7760

IBM3270:

IBM3270, IBM3278, IBM3279, IBM3287, IBM3270A, IBM3278A, IBM3279A

TTY:

TTY33, TN300, TTU8126, NVT

PRINTER:

Settings – Communication

PRT722X, A2, PRT9220, TTU8124, TTU8126, TTU8221, TTU8223

OTHER:

DSAIP, G8TP, HL64, HL66, HX0000, BROWSER

If you need to use some other model, and know its hexadecimal identification (see the DNS V4 - Terminal Management Manual, 39 A2 24), then you may configure this using **-TM Hxxxx** as an additional parameter.

See the Host Links Gline documentation for more details about the terminal types recognized by Ggate.

GRTS/LID user string

This parameter is used to define the user record for the host subsystem to which you are connecting. The user record is required when the target GCOS8 site has a "Secure Workstation Environment" or is using the ID-CHECK package developed by Bull Norway for securing networks.

In some situations, the LID is generated by combining the value of this parameter with the local mailbox name. The method being used for generating the LID is determined by the **-GRID** and **-NGRID** parameters in the MainWay configuration.

When communicating with GCOS7 hosts the string **!NEW** may be used, which will force GCOS7 to start the dialogue by presenting the top level menu. Normally it would have tried to reconnect at the level you aborted in the previous host session.

IBM log mode

Defines log mode; used for IBM connections only.

Additional parameters

Additional parameters that apply to the DSA or DIWS line handler may be specified here. See the Host Links Gline documentation for more details.

Keep alive

This option allows you to set a 'keep alive' interval for the gateway. When set to a non-zero value, it tells the program to send dummy packets to the gateway with an interval of the specified number of seconds. The gateway will monitor these and will

assume that Glink has terminated abnormally or that the PC has been turned off if these packets stop arriving.

Initial turn

This option tells Glink which side has the initial turn to send after the connection is established.

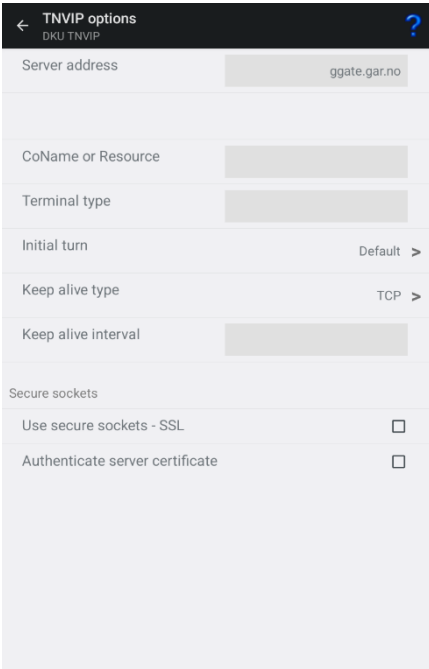
For most cases use the default value. In some cases, for example with the use of connect macro, the initial turn must be specifically set for Glink to work correctly during the connecting phase.

Send commands as data

Normally Ggate will check for and intercept data strings that start with **\$\$** and interpret these strings as special service commands. For example, the **\$\$dis** will cause Ggate to disconnect the host session.

If you don't want Ggate to look for these strings, check this parameter and strings starting with **\$\$** will be sent to host as normal data.

TNVIP options



TNVIP is a variation on the Telnet protocol and is used by Bull synchronous emulations to connect to Bull hosts via a TNVIP gateway over a TCP/IP network.

Server address

The Server address is normally the TCP/IP address to the server/gateway you connect through to reach the host, for example a G&R Ggate server (using native Ggate protocol, TNVIP, TN3270, TN5250 or Telnet), a Bull TNVIP server, an IBM TN3270 server, an IBM TN5250 server or the host itself.

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

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

The default ports in Glink are:

G&R Ggate native protocol 30841

Telnet, TNVIP, TN3270, TN5250 23

Note that the Bull TNVIP servers on Unix/Linux or Windows generally use non-standard ports, normally 7323, and you must add this to the IP address.

IPv6 address

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

[IPv6 address]:port

for example

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

Resource name

This option specifies the resource name (mailbox name) that Glink will supply to the TNVIP server when logging in. The resource name will correspond to a particular terminal profile defined in the server. If you do not specify a resource name, then the default profile will be used.

Please note the check box to the right of the input field for the Resource name. If you check this, the user will be asked for the Resource name when connecting to the host. If you also supply a Resource name, it will be suggested to the user.

Terminal type

This option specifies the terminal type that Glink will identify itself with when logging on to the TNVIP server.

Initial turn

This option tells Glink which side has the initial turn to send after the connection is established.

Settings – Communication

For most cases use the default value. In some cases, for example with the use of connect macro, the initial turn must be specifically set for Glink to work correctly during the connecting phase.

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.

Secure sockets

Use secure sockets - SSL

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

```
myhost.com:842
```

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

IPv6 address

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

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

for example

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

Authenticate server certificate

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

File name client certificate

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

Android version only

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

iOS version only

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

Settings – Communication

See also:

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

Password client certificate

Supply the PSKC #12 password if defined.

How to import a private key file

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

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

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

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

Proxy server setup

If the network connection is unstable and there is a risk of losing the connection to the host, you should consider running our GlinkProxy server. The GlinkProxy server runs on a Windows server that can be located near the host computer and supports large numbers of client sessions.

GlinkProxy is designed to provide persistent host connections for Glink clients where the connection from the client device is unreliable. This may be because the device enters sleep mode or goes out of Wi-Fi range. If the client connection to the proxy server is lost for some reason, the server will retain the connection to the host. This allows the client to reconnect to the server again and continue seamlessly from the point at which the connection was lost.

GlinkProxy parameters

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

| Proxy server | |
|--|-------------------------------------|
| myhost | |
| Glink Proxy server | |
| Use server | <input checked="" type="checkbox"/> |
| Address | glinkproxy.mydomain.com |
| Port | 30855 |
| Secure communication | <input checked="" type="checkbox"/> |
| Proxy keeps connection to host in seconds when | |
| User disconnect | 0 |
| Connection lost | 300 |

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

Use server

Must be checked to use the GlinkProxy server

Address

The address of the proxy server (not the host application)

Port

The default port number is 30855

Settings – Communication

Secure communication

Specifies to encrypt the data flow between the Glink client and the Glink Proxy server.

Proxy keeps connection to host in seconds when

User disconnect

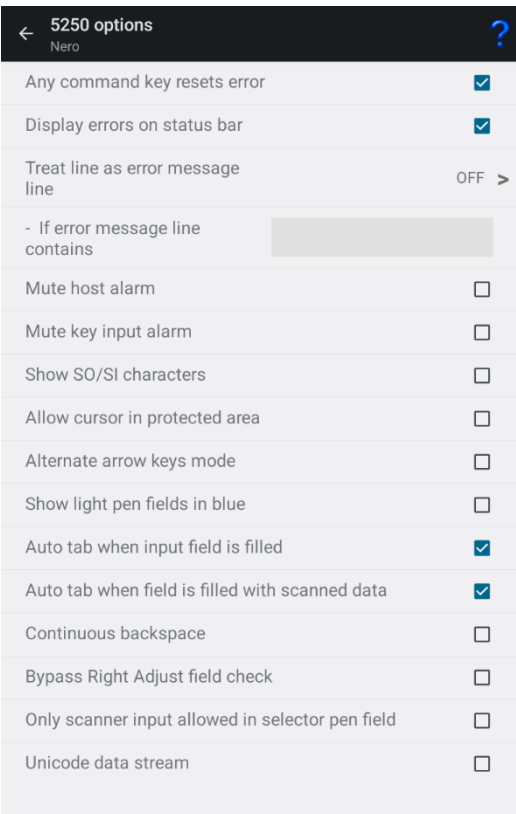
Specifies the number of seconds the proxy server should keep the connection to the host application after a user initiated disconnect. The default value is 0 which means that the connection to the host is disconnected immediately. This is what happens without a proxy server.

Connection lost

Specifies the number of seconds the proxy server should keep the connection to the host application after the connection to Glink is dropped, for example due to bad Wi-Fi signals. When the network connection is reestablished, the user can then reconnect and resume the session with the host application.

Settings – Emulation

IBM 5250 emulation options



Any command key resets error

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

Display error on status bar

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

Treat line as error message line

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

If error message line contains

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

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

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

The parameter supports the following syntax:

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

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

| | |
|----------------------|--|
| MAIN | The line must contain <i>MAIN</i> |
| MAIN;msg=false | The line must contain <i>MAIN</i> . No message, only notification sound |
| MAIN;col=2,msg=false | The line must contain <i>MAIN</i> at column 2. No message, only notification sound |

| | |
|-------------------|---|
| MAIN:OFCTSK;col=2 | The line must contain <i>MAIN</i> or <i>OFCTSK</i> at column 2. |
|-------------------|---|

Show SO/SI characters

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

Allow cursor in protected area

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

Alternate arrow keys mode

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

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

Show light pen fields in blue

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

Auto tab when input field is filled

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

Continuous backspace

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

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

Bypass Right Adjust field check

Input fields that are defined as Right Adjust should be right adjusted with FieldExit, Field+ or Field- and give an error if not. Some emulators bypass this check and send the field without right adjusting. With this option checked, Glink will do the same.

5250 Transliteration - Host code page

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

| Code page | Euro | Countries |
|------------------|-------------|---|
| 037 | 1140 | Australia, Brazil, Canada, New Zealand, Portugal, South Africa, USA |
| 273 | 1141 | Austria, Germany |
| 1388 | | China |
| 1025 | | Cyrillic |
| 277 | 1142 | Denmark, Norway |
| 278 | 1143 | Finland, Sweden |
| 280 | 1144 | Italy |
| 930 | | Japan |

| | | |
|------|------|-------------------------|
| 930E | | Japan (930 Extended) |
| 939 | | Japan |
| 1399 | | Japan |
| 933 | | Korea |
| 1364 | | Korea |
| 870 | | Latin 2 |
| 284 | 1145 | Latin America, Spain |
| 285 | 1146 | Ireland, United Kingdom |
| 297 | 1147 | France |
| 500 | 1148 | International |
| | 1149 | Iceland |
| 937 | | Taiwan |
| 1371 | | Taiwan |

5250 General Options

Auto Tab Local

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

Auto Tab host

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

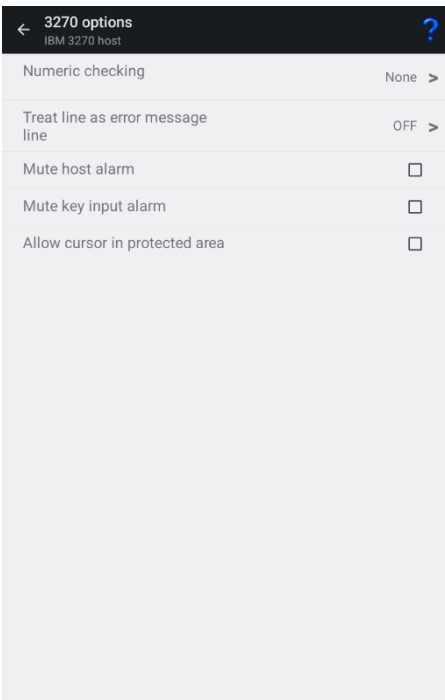
Destructive backspace

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

Scrollbar length

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

IBM 3270 emulation options



Numeric check

This option specifies what type of numeric checking should be done by the emulator when the host defines an unprotected field as being numeric. There are four possible values that can be set:

| | |
|----------|---|
| None | No numeric checking is done. This is equivalent to a Type-writer keyboard selection in some emulators. |
| Strict | Numeric checking is enforced, and only numeric digits, decimal point, comma, and minus sign may be entered in the unprotected field. |
| Emulator | Same as above but also allows plus sign (this is the numeric checking that is implemented in several other emulators). |
| Relaxed | Allows all the above, also uppercase letters and shifted numerics (for example "!" and "#"). This is equivalent to a Data Entry keyboard selection in some other emulators. |

The default setting is None, i.e., numeric checking is not performed.

Treat line as error message line

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

Mute host alarm

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

Mute key input alarm

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

Allow cursor in protected area

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

3270 Transliteration – Host code page

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

| Code page | Euro | Countries |
|------------------|-------------|---|
| 037 | 1140 | Australia, Brazil, Canada, New Zealand, Portugal, South Africa, USA |
| 273 | 1141 | Austria, Germany |
| 1025 | | Cyrillic |
| 277 | 1142 | Denmark, Norway |
| 278 | 1143 | Finland, Sweden |
| 280 | 1144 | Italy |
| 870 | | Latin 2 |
| 284 | 1145 | Latin America, Spain |
| 285 | 1146 | Ireland, United Kingdom |
| 297 | 1147 | France |
| 500 | 1148 | International |
| | 1149 | Iceland |

3270 General Options

Auto Tab Local

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

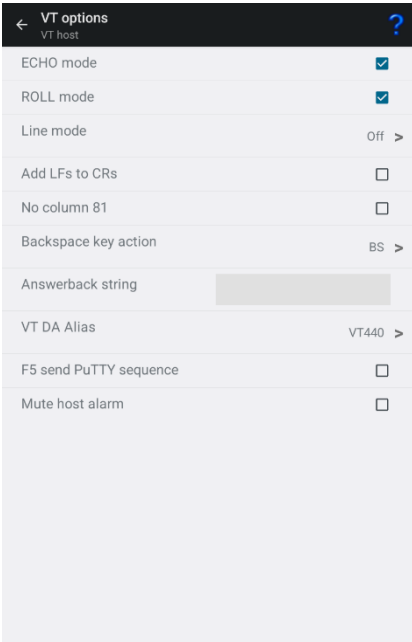
Destructive backspace

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.

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.

VT / ANSI options



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 scrollbar 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 except the *Backspace* key will trigger a line mode send
- Extended** Line mode is on, every control character except 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:

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

Or use:

- %m-
%r Represents the six octets of the Mac address. For example,
%m%n%o%p%q%r for full Mac address
- %a-
%d Represents the four octets of the WiFi IP address. For example,
%a%b%c%d for full IP address

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

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.

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

Auto Tab Local

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

Auto Tab host

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

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 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

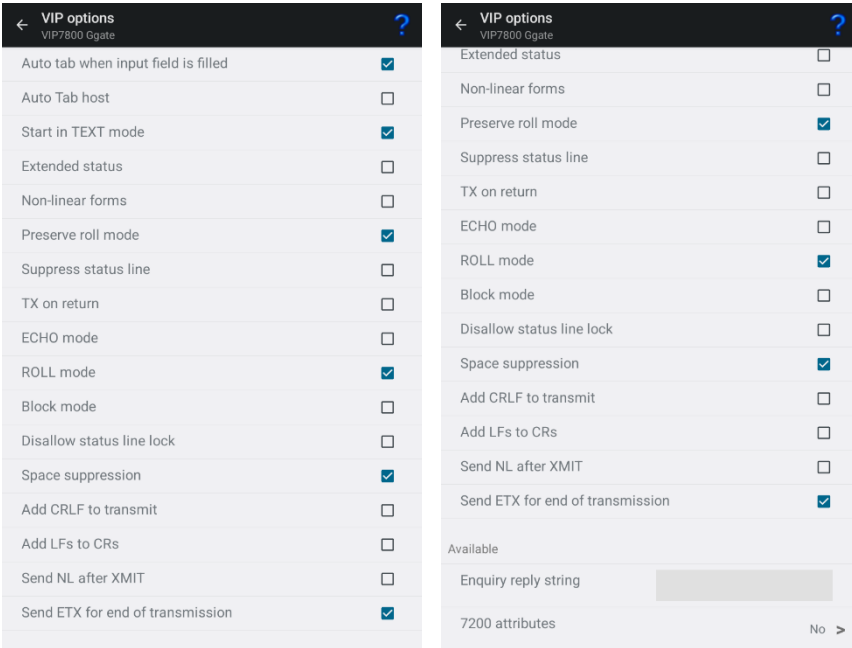
This option lets you choose between screen widths of 40, 80 and 132 columns (normally the choice of emulation mode will set this correctly for you).

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.

VIP7800 options



The following options are available in Menu > Settings > VIP options when the emulation mode is set to VIP7801/VIP7804.

Auto tab when input field is filled

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

Auto Tab host

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

Start in TEXT mode

This option determines whether the emulator should start up in character or text mode. The host applications normally set the mode required.

Extended status

This option enables 'extended status' mode where the emulator will send additional bytes when a remote enquiry is received.

Non-linear forms

This is a special option that tells the VIP emulation mode to use fields in the order they are defined rather than in the order they appear on the screen. Don't use this unless you have an application that has this need, in that the application must be written specifically for this type of form (the main use of this option is for defining forms that allow the user to tab through variable fields in an application-specified order).

Preserve Roll mode

This option tells the VIP emulation that the roll mode setting should be preserved while forms are being shown on the screen. A standard terminal resets roll mode when entering forms mode and will not be in roll mode when going back to text mode unless this is set specifically by the host application. Setting this option will allow you to stay in roll mode when returning to text mode.

Suppress status line

This option tells GLINK not to display data in the status line other than when instructed to do so by the host machine.

TX on return

This option only has an effect when the emulator is started in Text mode. If set on, then the CR key may be used to transmit messages to the host. In addition to

Settings – Emulation

transmitting the data, the key will also perform its normal CR function, with an added LF if the Auto LF option is on.

Start in Roll mode

This specifies whether the emulator should initialize itself in roll mode, 'scrolling' the screen when receiving data past the end of the screen. This parameter will often be set for you by the host machine when you log on.

Block mode

This option determines whether the terminal should use block mode when transmitting messages to the host or not. It only has an effect if the emulator is started in text mode and will normally be set by the host at connect time. **DO NOT** turn on this option unless you are sure you need it - you will otherwise experience apparent 'hangs' when transmitting large blocks of data to the host in text or forms mode.

Disallow status line lock

This option stops the application you are using from locking the status line. Messages presented in the status line will be left there but removed on the first keypress you use after the message is shown.

Space Suppression

This determines whether trailing spaces at the end of lines and/or fields should be removed before the data is sent to the host. This option should normally be turned on.

Add CRLF to transmit

This determines whether messages sent when Space Suppression is not active should have CRLF delimiters sent between each line of the message or not.

Add LFs to CRs

When it's selected, Glink will append a linefeed character to each incoming CR character; this should be used in situations where you see data coming from the host being written repeatedly in the same line of the screen. The opposite also applies; if

output from the host is displayed with double spacing this may well be because this option has been selected when it should not have been.

Send NL (New line) after XMT

When this option is set, then a new line operation will be performed when the transmit key is pressed. This is the standard mode, but it may be convenient to suppress it when working with some editors that generate a new line themselves and which would otherwise force you to work with double-spaced lines.

Send ETX for end of transmission

This determines whether messages should be delimited with an ETX or EOT character (this applies to all messages in Forms or Text mode, and to status messages in Character mode).

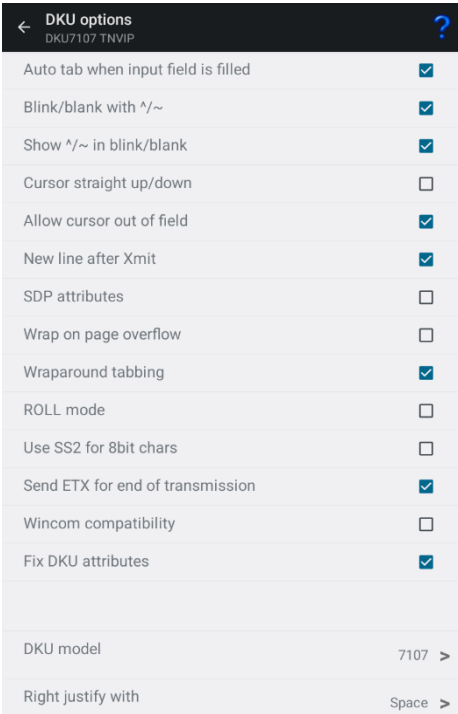
Answer ENQ with

This specifies the character string that the emulator will identify itself with when answering an enquiry from the host.

7200 attributes

This option specifies whether the emulator should accept the 7200 set high intensity and set low intensity commands. This should not be necessary unless you are using an application written specifically for the 7200 terminals. Note that you may not mix 7200-type and 7800-type attributes on the same screen under any circumstances. An additional setting, 'Extended', allows use of two extra commands for invisible and blinking fields that were supplied with some 7200 hardware emulations.

DKU options



The following options are available from Menu > Settings > DKU options when the emulation mode is set to DKU7107.

Auto tab when input field is filled

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

Blink/blank with ^/~

This option tells the emulator that the blink and blank attributes are to be set on reception of the caret (^) and tilde (~) characters respectively.

Show ^/~ in blink/blank

Specifies whether the caret (^) and tilde (~) characters should be shown on-screen when using them to indicate blink/blank screen attributes.

Cursor straight up/down

Setting this option will allow you to use the arrow up/down keys to move to the nearest field in the previous/next lines rather than to the leftmost or rightmost field.

Allow cursor out of field

Setting this option will allow you to move the cursor forwards and backwards out of variable fields when typing into a form.

SDP attributes

SDP attribute rendition, normally set by the host if needed. In this mode, attributes do not take space on the screen, and they are character rather than field oriented.

Wrap on page overflow

Handle host data overflow by wrapping around to the top of the screen rather than waiting for the user to press the Enter key.

Wrap around tabbing

When this option is set (the default) use of tab, back tab, cursor up and down keys will wrap around from the end of the form to the beginning and vice versa. If the option is not set, then use of these keys at the start or end of the form will produce an error message and no cursor movement.

Start in Roll mode

This specifies whether the emulator should initialize itself in roll mode, 'scrolling' the screen when receiving data past the end of the screen. This parameter will often be set for you by the host machine when you log on.

Use SS2 for 8bit chars

If this option is turned ON, Glink will accept sending and receiving extended characters such as accented letters, euros etc. as SS2 encoded sequences.

Send ETX for end of transmission

This determines whether messages should be delimited with an ETX or EOT character (this applies to all messages in Forms or Text mode, and to status messages in Character mode).

Wincom compatibility

This option affects the way input in VIP numeric fields (defined with GS4 rather than with DAQ) is checked. For compatibility with Wincom only the characters + , - . / and 0-9 are allowed. If the option is not checked then normal VIP numeric checking is applied and all characters in columns 2 and 3 of the ASCII table are allowed.

Fix DKU attributes

Some applications try to mark variable fields with attributes to highlight them on the screen. If this is done on the DKU emulation running in non-SDP attribute mode, then the attribute must be defined and reset outside of the actual variable field, and this results in extra marked characters outside of the variable. This option suppresses definition of attributes that overlap variables, for a cleaner look to the emulation screen.

DKU model

Allows you to select the Questar model type that the emulator will return in the reply to a device attribute enquiry.

Right justify with

Allows you to specify which character should be used when doing right justification of fields in the form.

Settings – Screen

Toolbar setup



Add

This option allows you to add new buttons to the current position in the current toolbar, so before tapping Add select the toolbar and toolbar-position where you want to add the new button(s). From the Add button screen you can select one or more buttons to be added. The button can either be used to activate a predefined function (key) or a Macro. Tap Save when you have completed your selection. If you decided to add a Macro, use the Modify menu function to set the button name and the macro string to be executed. See Macro string section below on how to define a macro string.

Settings – Screen

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.

Modify

Each button in a toolbar can be modified by Modify menu function. You can modify the text displayed on the button for this function by editing the Button text field. If the Button selected is a Macro, you must define the Macro string to be executed when the button is tapped.

Remove

Use the Remove menu function to remove a button from the toolbar. The last button removed can be added again using the Paste menu function. Select a new position to paste the button at a new location.

Paste

See Remove menu function above.

Add toolbar

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

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
```

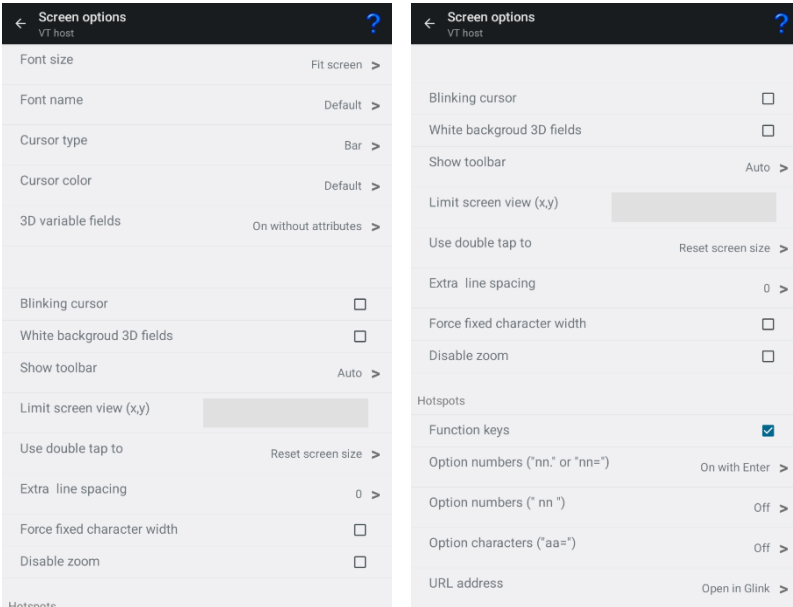
Note that decimal and octal codes must be 3 digits and prefixed with 0 if it is 2-digit codes.

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

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

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

Screen Options



Font size

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

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

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

Font name

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

Font style

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

Cursor type

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

Cursor color

This option is used to change the cursor color if the default value is not optimal. The cursor color has most effect for the block cursor type. For block cursor the underlying character will either have a white or black color.

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.

Settings – Screen

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 single-line 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.

Use double tap to

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

The Reset screen size sets the initial screen size, the Perform Enter does an Enter (Send) command.

The Toggle Action bar On/Off (On) and Toggle Action bar On/Off (Off) toggles the Action bar On or Off. In the latter case, the Action bar is initially hidden. When the Action 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).

The Enable/Disable touchscreen (Enable) and Enable/Disable touchscreen (Disable) enables/disables the touch screen. In the latter case the touchscreen is initially

disabled. When the touchscreen is disabled, both the Action bar and the Toolbar is hidden. External keyboard (keys) or scanner is not disabled.

Double tap again to confirm

If this option is set, a message informs the user to double tap again to perform the selected double tap action. The second double tap must follow within a short period not to be ignored.

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).

Disable zoom

Disable the zoom function for the main Glink screen.

Show key input on status line

The key input is shown on the status line before it is handled by Glink. Please note that hidden input, like passwords, will also be shown on the status line when this option is enabled (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.

Settings – Screen

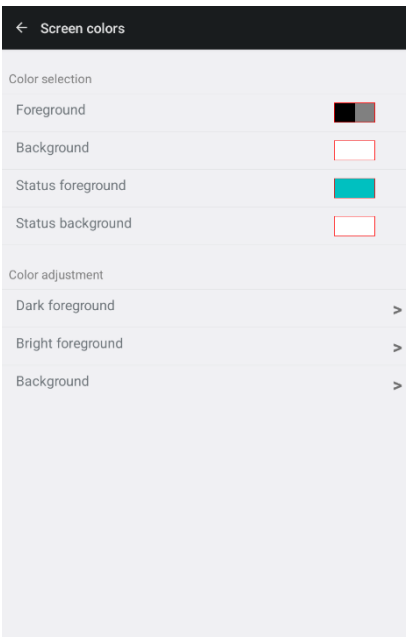
If Option numbers is enabled, text like 2. or 2= will be searched for and highlighted (the number only). If this hotspot is tapped, the number is added at the current cursor position. Optionally it can be followed by the Enter function to transmit it. Numbers larger than 99 is not converted to hotspots.

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

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

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

Screen Colors



Color selection

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

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

Color adjustment

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

VIP attribute mapping

This menu allows you to select which visual attributes are to be associated with every type of field setting from the host. Each attribute defined by the host has a specific letter associated with it.

For each of the attributes that may be set by the host, you can specify which of the visual attributes should be associated with it. Each of the visual attributes may be left **as is** (leave blank), turned **ON**, or turned **OFF**. As an example: you wish all unprotected fields to be presented in red inverse video. You would first select the VIP attribute Unprotected at the top, then set Red ON, Green and Blue Off and last Inverse On. Note that colors are mixed, so to produce yellow for example, you would turn red and green ON, while turning blue OFF.

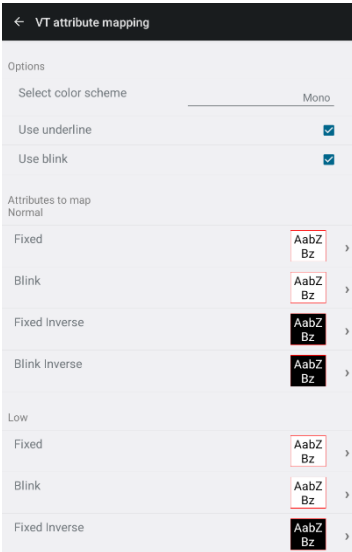
One additional VIP attribute is available and is listed as user input. This attribute will be applied to all user input typed at the keyboard so long as no attribute has been set at the current position by the host computer. This may be used to provide easy differentiation of text you yourself have typed and text that came from the host. (Note: this does not apply to ECHO mode - in ECHO mode all characters displayed come from the host). This specific attribute is not part of the standard VIP attribute set, but may be accessed by the host using the sequence <esc>s[.

Obviously, some of the attributes will already be set for you, for example the VIP attribute Inverse will be set by default to turn on inverse while leaving the other

Settings – Screen

attributes alone. In the example above, if you wanted to ensure that the **ONLY** inverse video fields to be shown were the unprotected ones, then you should reset (clear) the settings for the VIP attribute Inverse.

ANSI/VT/DKU attribute mapping



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.

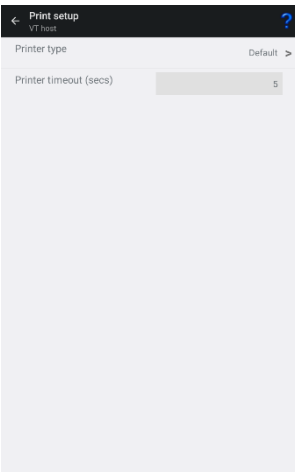
Normally Glink will preserve the state of the underline as it is sent by the host, but if you have mapped underline to a specific color then you may find that to be enough. In that case uncheck the Use underline option.

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.

Settings – Devices

Print options



Printer type

This option allows you to select where to print the data.

The Default option directs the print to a Print screen window for further processing. A print icon will be displayed at the action bar when print is available. Tap the icon to see the print data and the options available.

The LPD server option directs the print to a LPD print server. Tap the config icon to specify the LPD print parameters.

The Bluetooth printer option directs the print to a Bluetooth connected printer. Tap the config icon to select a paired Bluetooth printer.

The None option will ignore the print data.

Bluetooth printer options

Bluetooth device

Tap the **SELECT** button to select a Bluetooth printer device. The printer must already be paired to show up in the list. This is done from the Android Settings app (*Settings->Bluetooth*).

Alternative, type the Bluetooth address of the printer using the following format *xx:xx:xx:xx:xx:xx*

Init string

Some printer requires that an Init string is sent before the actual print data. Some Init strings contain low ascii character. Use the following syntax to specify the hex value for a character.

^\$nn

where **nn** is the hex value for the character. For example, the Esc character (0x1b) is specified with the syntax **^\$1b**.

Some Intermec printers requires a Query to be sent in ESC/P mode and Fingerprint (FP) mode to "wake up" the printer, for example **^\$1b{QST:HW}** (ESC/P mode) or **\$\$SYSHEALTH\$*n*** (FP mode).

Character encoding

The character encoding must match the encoding used by the printer.

LPD server options

The **LPD server address** option specifies the host name or IP address of the LPD server handling print.

The **LPD queue name** option specifies to which printer queue print data should be directed for LPD servers which service more than one printer.

The **Pre-print character** option specifies which characters, if any should be sent to the LPD printer before output is printed.

The Pre-print control characters are added only if the *Print screen* function is used or the *Use print ctl for host data* option is checked.

The **Post-print character** option specifies which characters, if any should be sent to the LPD printer after the output has been printed.

The Post-print control characters are added only if the *Print screen* function is used or the *Use print ctl for host data* option is checked.

The **Transparent** option requests the LPR server to send the print data directly to the printer with no formatting. This may be needed if the data coming from the host is already set up for printing on a 'real' printer or contains control sequences specific to the lpd printer you are using.

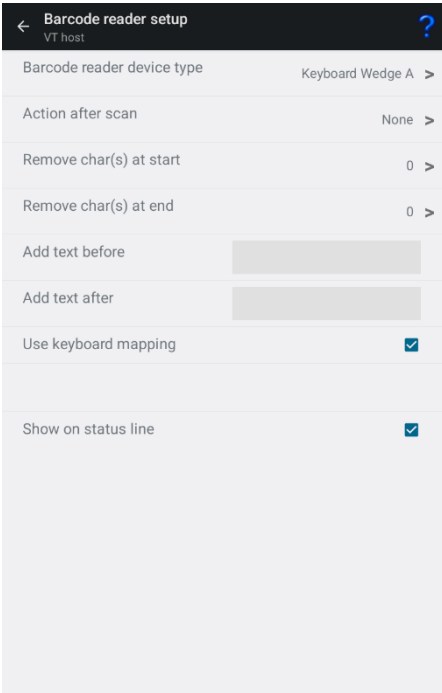
This option may be used in combination with the *Use print ctl for host data*, the *Pre-print character* and the *Post-print character* options.

Use print ctrls for host data option. Glink will only supply any configured pre- and post-print control characters when doing the *Print screen* function. If you want these also to be applied to host data then check this option. Note that this is only useful when the host sends complete data blocks.

Timeout

This option specifies how long Glink should wait before emptying print output from the host to the printer.

Barcode reader options



Glink can either receive scanner data as simulated keyboard input (Keyboard Wedge) or receive scanner data through device specific configuration. Most scanners are using Keyboard Wedge by default.

It is however recommended to use device specific configuration if available (or Keyboard Wedge A) since that gives better performance and more control of how scanned data is handled.

When device specific configuration is selected, scanned data is also displayed on the status line. If scanned data is received, but not displayed on the status line, you should check your settings, since scanned data is still received as keyboard input.

Barcode reader device type

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. |
| Keyboard Wedge A | Scanned data is still received as keyboard input, but if a special prefix and suffix character is configured, Keyboard Wedge Advanced is used. |
| 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. |
| AML scanner | Use with AML devices. Use the AML Barcode Scanning app supplied with the device to set scanner parameters. |
| Cipherlab scanner | Use with Cipherlab devices. Use the ReaderConfig application supplied with the device to set scanner parameters. |
| Datalogic scanner | Use with Datalogic devices. Use the standard Android Settings app to set the Datalogic scanner parameters. |
| Denso scanner | Use with Denso devices. Tap the settings icon on the action bar to set Denso scanner options. |
| Honeywell scanner | Use with Honeywell devices. Tap the settings icon on the action bar to set Honeywell scanner options. |

Settings – Devices

M3 Mo-
bile

Use with M3 Mobile devices. Use the ScanEmul application supplied with the device to set scanner parameters.

Point
Mobile

Use with Point Mobile devices. Use the standard **Android Settings** app and select the Scan-Settings option to configure the scanner.

Seuic
Scanner

Use with Seuic scanner devices. Use the **Scan tool** app supplied with the device to set scanner parameters.

Socket
Mobile

Use with *Socket Mobile Scanner (CHS)*. Use the Socket Mobile Companion App to pair and set up the scanner to use Application Mode (SPP) for Android.

Unitech
scanner

Use with Unitech devices. Tap the settings icon on the action bar to set Unitech scanner options.

Urovo
scanner

Use with Urovo devices. Use the standard **Android Settings** app and select Scanner Settings option to configure the scanner. Glink will by default use the Intent Output mode of the scanner setting to receive scanned data. If the scanner is set up with Keyboard output mode, Glink will just switch to the Intent mode when Glink is active and back to whatever is configured in the Scanner settings when Glink becomes inactive. Tap the settings icon on the action bar to set Urovo scanner Intent options.

Zebra
scanner

Use with Zebra devices. Tap the settings icon on the action bar to set Zebra scanner options.

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).

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 **1234Tab5678Enter**

Show on status line

Display the scanned data as a status message at the bottom of the screen as well.

Keyboard Wedge A

The Keyboard Wedge Advanced mode requires that the device specific settings for the scanner (not Glink) is set up with hex 0E (SO) as prefix character and hex 0F (SI) as suffix character. Some devices let you select SO (shift out) as the prefix and SI (shift in) as the suffix, others let you just type the hex value. For others it is not possible to specify these low ascii characters or low ascii characters is stripped off. In this case, specify the prefix as ^\$0E and the suffix as ^\$0F.

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

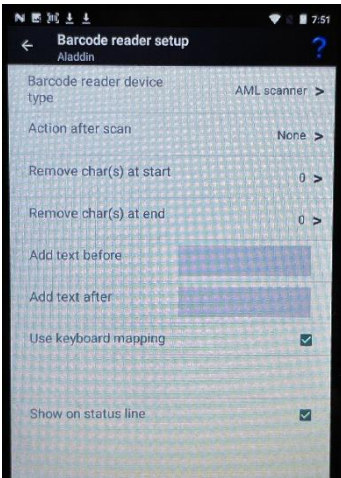
When the Keyboard Wedge Advanced mode is selected, the options described under More options in Glink are available.

To check that Keyboard Wedge Advanced is configured correctly, the scanned data should be shown on the status line at the bottom of the Glink screen.

AML Scanner setting

Use the AML Barcode Scanning app supplied with the device to set various scanning parameters.

Please note that the prefix and suffix parameters set in the AML Barcode Scanning app will be ignored if the *Add text before* and the *Add text after* parameters are specified in Glink. The AML Barcode Scanning suffix parameter will also be ignored if the *Action after scan* parameter is specified in Glink.



Cipherlab ReaderConfig app

The ReaderConfig app is used for the configuration of the scanner. A Default profile is defined, and this profile is set up to deliver scanned data as simulated keyboard input. Glink can therefore not distinguish scanned data from keyboard data. A better solution is to configure the scanner to send data with Intent Action to Glink.

To check that data is received with Intent Actions, the scanned data should also be displayed on the status line at the bottom of the Glink screen.

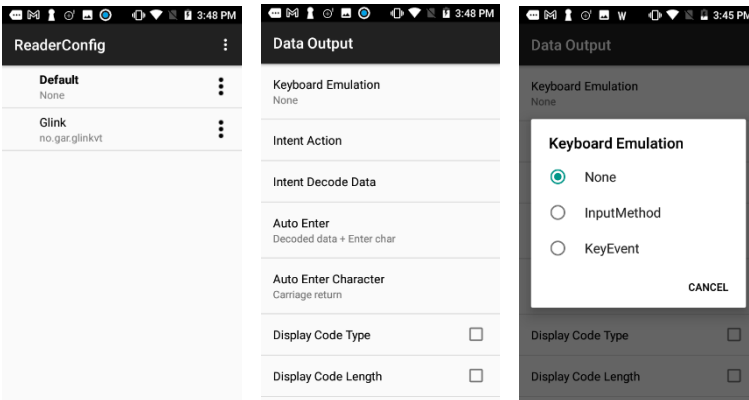
Settings – Devices



Intent Action configuration

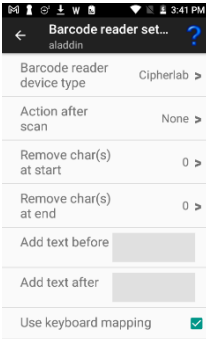
To set up the scanner software to use intent action, set the following parameter in the ReaderConfig app:

Default->Data Output->Keyboard Emulation->None



In Glink, if not already done, select the parameter:

Settings->Barcode reader setup->Barcode reader device type->Cipherlab



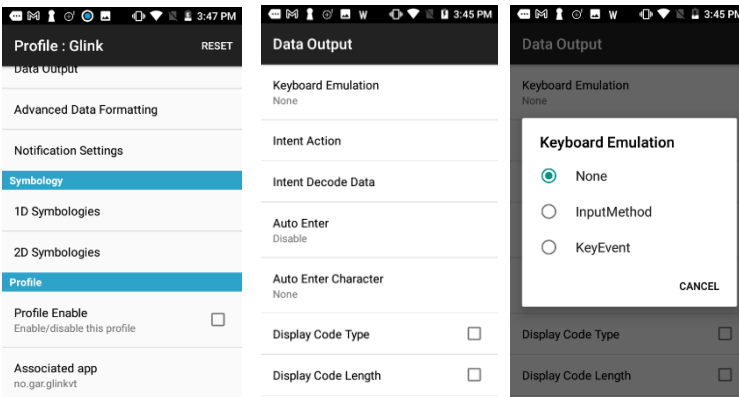
Prefix and suffix settings

When the scanner is set up to use Intent Action, Prefix, Suffix and Action after scan can be configured both in the ReaderConfig app and in Glink. Make sure to set these parameters in one place only.

Specific profile for Glink

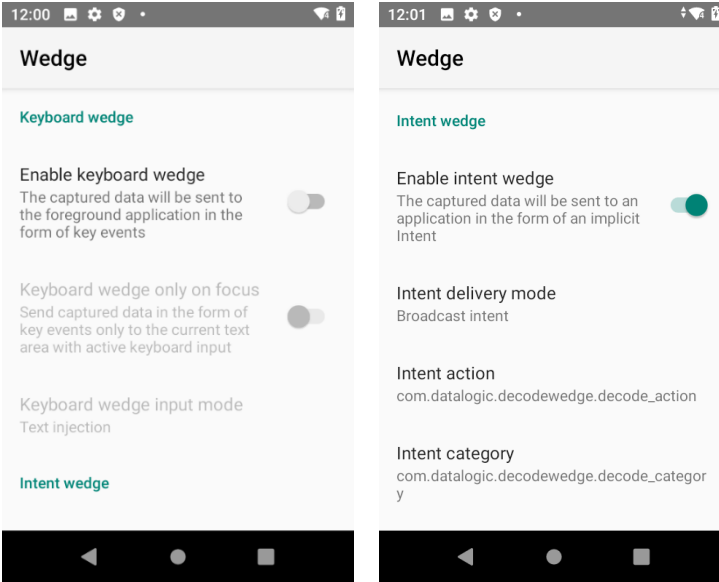
In the ReaderConfig app a new profile can be defined and associated with a given app, for example Glink.

In the main screen for the ReaderConfig app select the Drop-down menu->New. Enter a name. Then select Associated App->Glink (VT/5250/3270) and then check Profile Enabled parameter. Finally set the parameter Data output->Keyboard Emulation->None



Datalogic scanner settings

Go to Android Settings->Datalogic Settings->Scanner settings->Wedge or for Android 9 or older Settings->System->Scanner settings->Wedge and disable Enable Keyboard Wedge and enable Enable Intent Wedge.

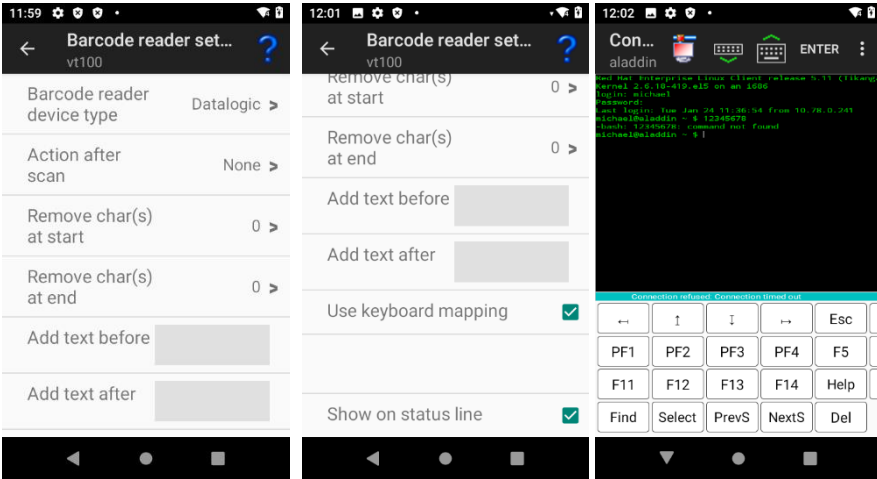


In addition, please check/set the following parameters:

Intent delivery mode: **Broadcast intent**
Intent action: **com.datalogic.decodedwedge.decode_action**
Intent category: **com.datalogic.decodedwedge.decode_category**

If scanned data is received twice, Enable Keyboard Wedge might still be on.

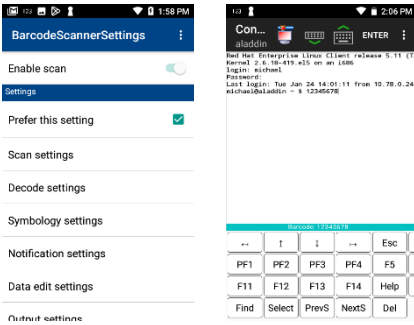
To check that scanned data is received with Data intent, the scanned data should also be displayed on the status line at the bottom of the Glink screen. If scanned data is received without data displayed on the status line, check that the parameter Show on status line is enabled and Enable Keyboard Wedge is disabled.



Please note that similar parameters in Glink, like prefix and suffix, will not override the parameters specified in Android settings. They will be added to the parameters specified in Android settings.

Denso scanner options

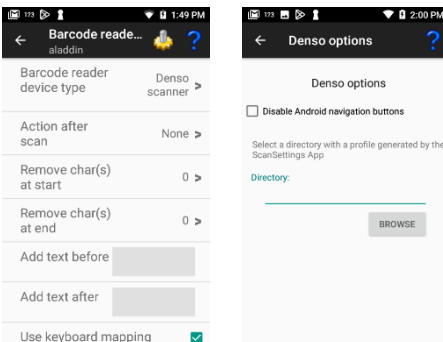
The configuration of the barcode scanner software is done with the ScanSettings app that is delivered with the Denso device. If the parameter Prefer this setting is checked in the ScanSettings app, the scanner software will always use this setting. If the parameter Prefer this setting is NOT checked, the scanner software will use a default setting provided by Glink that will work in most cases.



ScanSettings profile directory

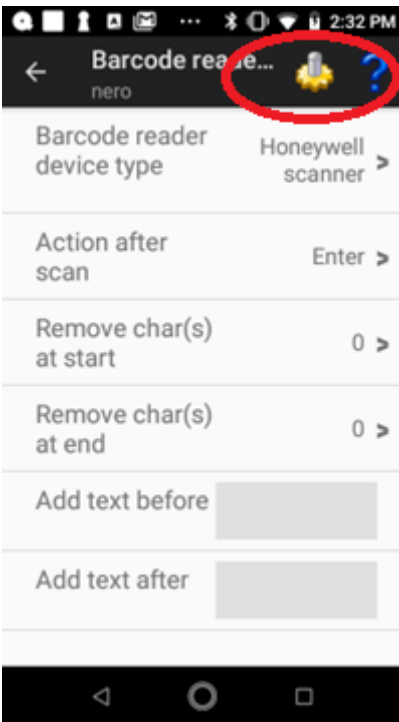
Customized scanner profiles can be prepared for use by Glink and exported from the ScanSettings app. Before the profile is exported, make sure that the parameter Prefer this setting is checked. If more than one profile is needed, export the profiles to different directories.

In Glink you can specify a profile directory that will be used when the Glink session is active. If specified, Glink will instruct the scanner software to load the profile found in this directory. Use the BROWSE button to locate the directory that contains the scanner profile. If more than one scanner profile exists in the selected directory, the result is unpredictable.



Honeywell scanner options

Glink can either receive scanner data as simulated keyboard input or receive scanner data with Data intent. In the latter case, a Honeywell scanner profile must match the Glink settings.



Profile name

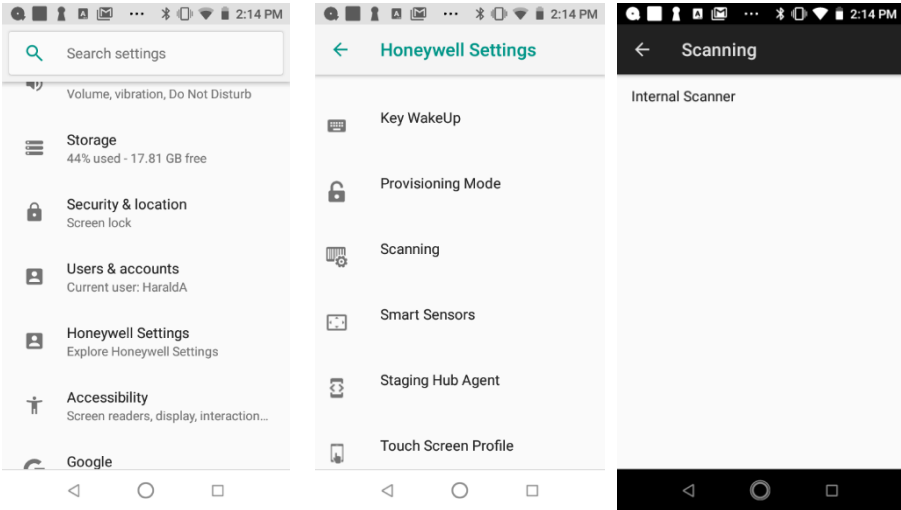
Specify the name of the Honeywell scanner profile to be used with this Glink session configuration. The default value is *Glink*

Intent action

Glink will listen for an Intent action (default value is *no.gar.glink.data*) sent by the Honeywell scanner. The scanner profile must be configured with a matching Intent action, see Honeywell scanner profile settings below:

Honeywell scanner profile settings

For Glink to receive scanned data, a Scanner profile must be configured. Select the standard Android **Settings** app, scroll down to the *Honeywell Settings* section, select *Scanning*->*Internal Scanner* to setup the internal scanner or *Scanning*->*Bluetooth Scanner* to setup an external Bluetooth scanner.



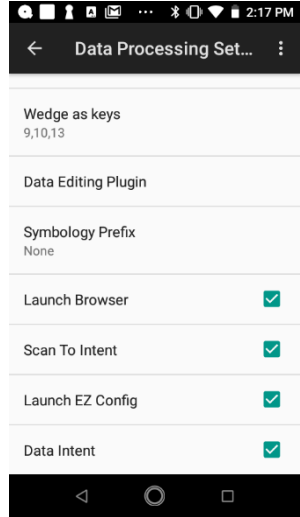
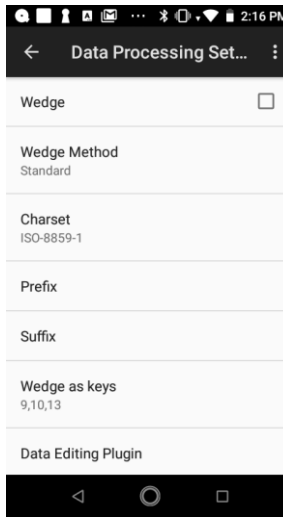
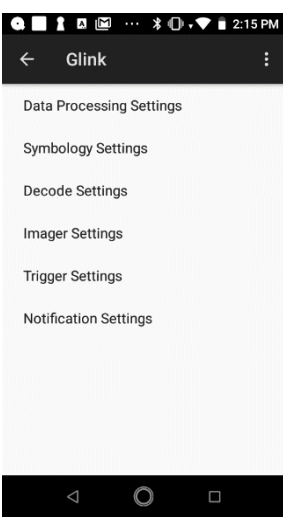
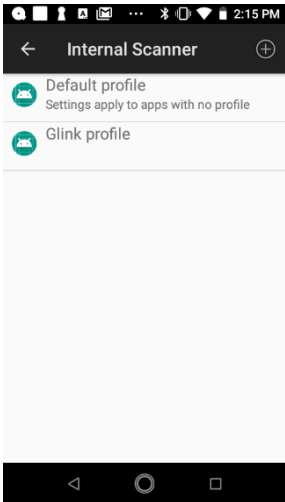
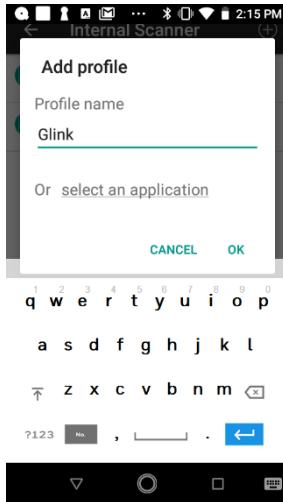
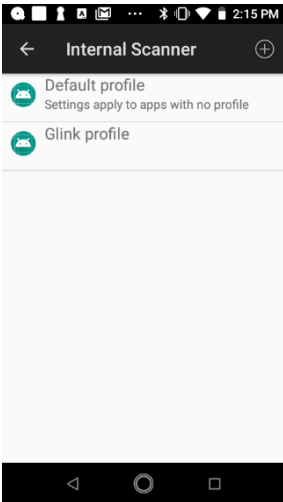
Internal scanner

In the upper right corner, select the + symbol to create a new Scanner Profile. Use *Glink* as the profile name. Select the new *Glink* profile and then select *Data Processing Settings*. Scroll down to *Data intent*, select it and set Action field to *no.gar.glink.data*.

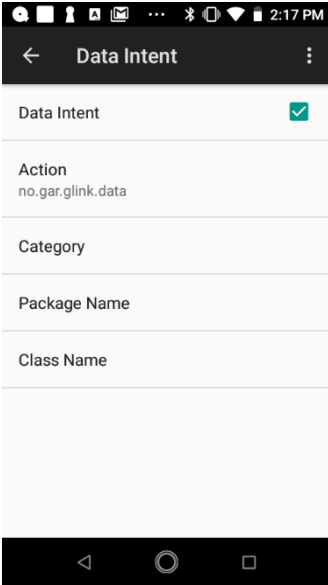
Bluetooth scanner

Select the Default profile and then select *Data Processing Settings*. Scroll down to *Data intent*, select it and set Action field to *no.gar.glink.data*.

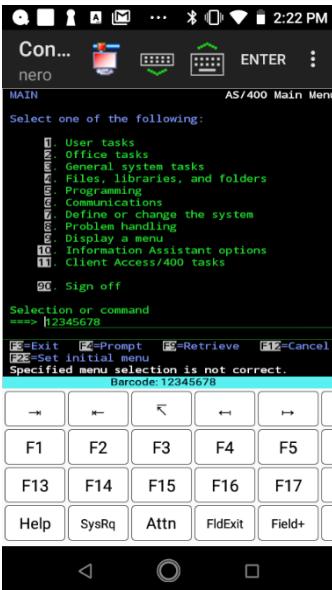
To check that scanned data is received through this interface, the scanned data should also be displayed on the status line at the bottom of the Glink screen. If scanned data is received without data displayed on the status line, the scanned data is received as keyboard input data (Wedge mode).



Settings – Devices



When you scan a barcode with this setting, the scanned barcode is shown on the status line. In the image below, we have scanned the barcode “12345678” with Enter as the action after scan. AS400 responds that the “*Specified menu selection (12345678) is not correct.*”.



M3 Mobile options

Glink sets Output Mode

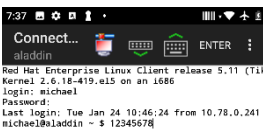
When the **Glink sets Output Mode** option is enabled, Glink will set **ScanEmul Output Mode** to *None* while in the main emulator screen and set it to *Copy and Paste* when this screen is exited. When this option is disabled, Glink will not make any changes to the **ScanEmul Output Mode**.

Disable this option when you do not want Glink to set the Default option to *Copy and Paste* when Glink exit, for example because other applications using the Default profile depend on a different setting.

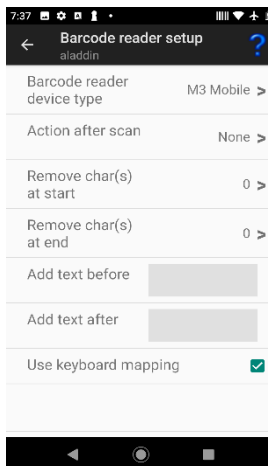
When using an associated profile with Glink you should also disable the **Glink sets Output Mode** option in Glink and set **ScanEmul Output Mode** to *None* (Copy to clipboard).

M3 Mobile ScanEmul app

The **M3 ScanEmul** app is used for the configuration of the scanner. A **DEFAULT** profile is defined, and this profile is set up to deliver scanned data with *Intent Actions* which is the preferred method to deliver scanned data to Glink. In Glink, the scanned data should be displayed both in the current input field and on the status line of Glink.

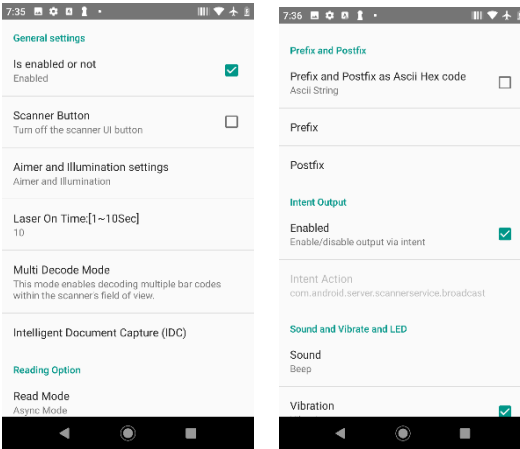


| Barcode: 12345678 | | | | | |
|-------------------|--------|-------|-------|------|------|
| -- | ↑ | ↓ | -- | Esc | Ctrl |
| PF1 | PF2 | PF3 | PF4 | F5 | F6 |
| F11 | F12 | F13 | F14 | Help | Do |
| Find | Select | PrevS | NextS | Del | |



Settings – Devices

If scanned data is not displayed on the status line at the bottom of the Glink screen, check in the Barcode reader setup in Glink that **M3 Mobile** is selected as the device type. In the ScanEmul app check that *Intent Output* is enabled for the Default profile.



Prefix and suffix settings

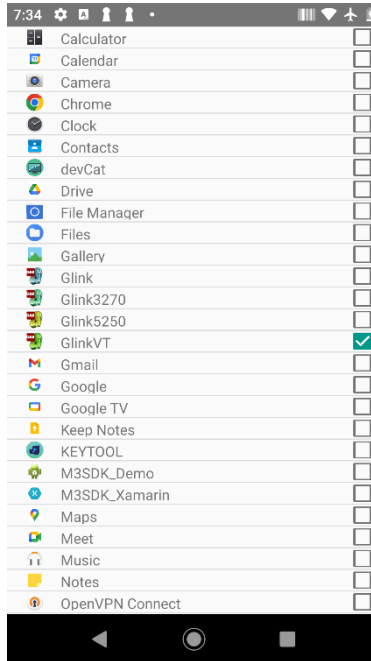
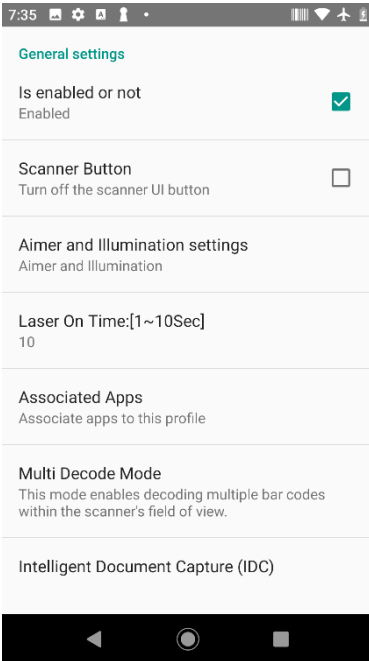
When the scanner is set up to use Intent Action, *Prefix*, *Suffix* and *Action after scan* can be configured both in the ScanEmul app and in Glink. Make sure to set these parameters in one place only.

Specific profile for Glink

In the ScanEmul app a new profile can be defined and associated with a given app, for example Glink.

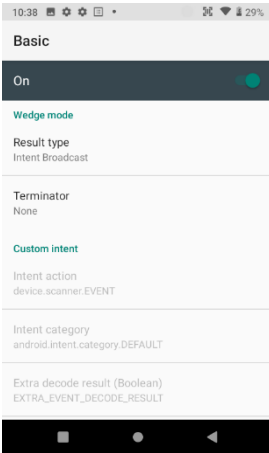
In the main screen for the ScanEmul app select the *Drop-down menu*->*Add Profile*. Enter a name. Then select *Associated Apps* -> *GlinkVT / Glink5250 / Glink3270 / Glink* .

Please note that an app can only be associated with one profile at a time.



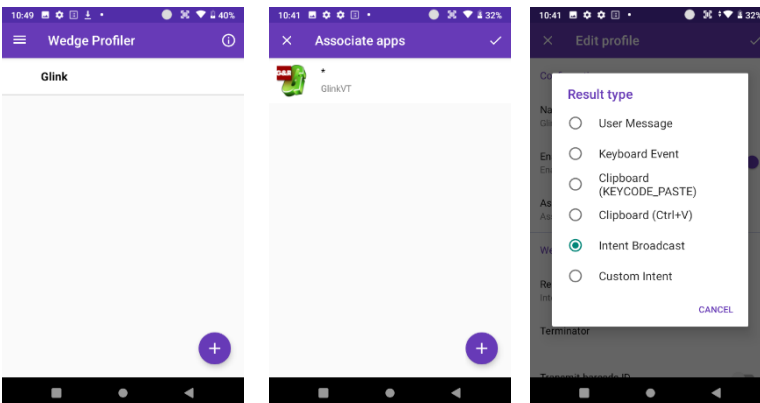
Point Mobile scanner settings

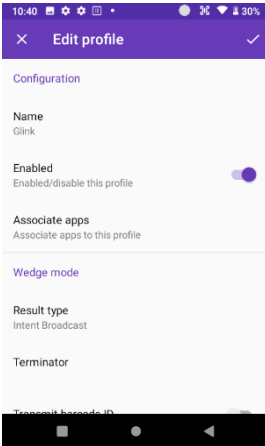
Go to Android **Settings->ScanSettings->Basic**. Scroll down to Wedge mode and select **Result type** and enable **Intent Broadcast**.



Wedge Profiler

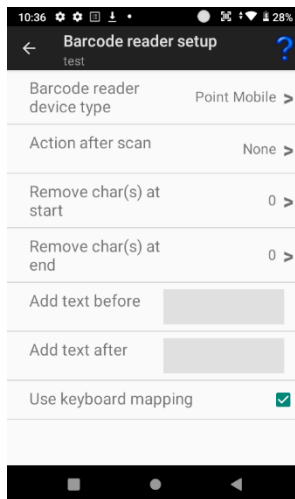
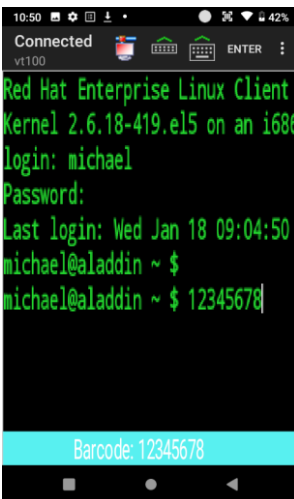
If you have multiple apps on your device, where each app requires different data capture rules, you should use the **Wedge Profiler** app from Point Mobile to define and assign a unique scanner profile for each app instead of using the global Scanner settings. Use **Wedge Profiler** to create a new profile for Glink, name it for example **Glink**, enable the profile, tap **Associate apps**, select **Glink** and select **all activities** by selecting the **Glink *** item. Tap the Check icon to save the changes. Finally, under **Wedge mode** select **Result type** and enable **Intent Broadcast**.





Show on status line

To check that scanned data is received with Data intent, the scanned data should also be displayed on the status line at the bottom of the Glink screen. If scanned data is received without data displayed on the status line, check that the parameter **Show on status line** is enabled in **Glink -> Settings -> Barcode reader setup**.

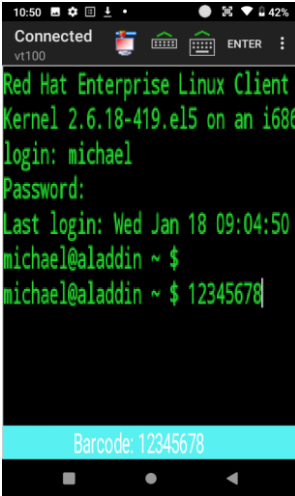


Please note that similar parameters in Glink, like prefix and suffix, will not override the parameters specified in Android settings. They will be added to the parameters specified in Android settings.

Seuic scanner settings

Show on status line

To check that scanned data is received with Data intent, the scanned data should also be displayed on the status line at the bottom of the Glink screen. If scanned data is received without data displayed on the status line, check that the parameter **Show on status line** is enabled in **Glink -> Settings -> Barcode reader setup**.



Please note that similar parameters in Glink, like prefix and suffix, will not override the parameters specified in Android settings. They will be added to the parameters specified in Android settings.

Socket Mobile Companion App

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 Google Play the **Socket Mobile Companion App** and use it to pair the scanner with the Android device and set the scanner to use Application Mode (SPP) for Android. Then select Socket Mobile as the Barcode reader device type in Glink.

Unitech scanner options

Glink can either receive scanner data as simulated keyboard input or receive scanner data with Data intent. In the latter case, the *Intent action* and *Intent string extra* must match the settings in the **Scanner settings** app.

Enable Data intent mode

Android 9 or older versions

To enable Data intent mode on the unitech device, start the **Scanner settings** app from the Android settings. Check the Scanner Settings option and uncheck **Key-board output mode**. Then make sure the two parameters *Intent action* and *Intent string extra* is the same in both the Glink barcode settings and the **Scanner settings** app.

Android 10 or newer versions

Glink will by default use Data intent and additional settings is normally not required. Start the **USS** (unitech Scanner Service) app from the Android settings to set various scanner parameters.

Intent action

Glink will listen for an Intent action sent by the unitech scanner. This parameter must match the value set in the **Scanner settings** app. If nothing is specified in Glink, Glink will use the default value *android.intent.ACTION_DECODE_DATA* for Android 9 and *unitech.scanservice.data* for Android 10 or newer.

Intent string extra

This parameter must match the value set in the **Scanner settings** app. If nothing is specified in Glink, Glink will use the default value **barcode_string** for Android 9 and **text** for Android 10 or newer.

Show on status line

Make sure the parameter *Show on status line* is enabled to see scanned data received with Data intent on the status line at the bottom of the Glink screen. When this parameter is not enabled or scanned data is received as simulated keyboard input, you will only see the scanned barcode in the emulator screen.

Urovo scanner options

Glink will by default use Data intent and additional settings is normally not required. Select **Scanner Settings** from the Android settings to set various scanner parameters.

ScanWedge

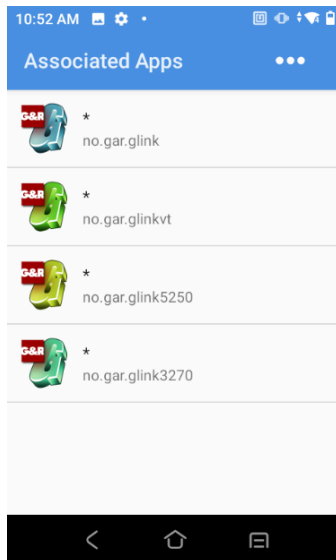
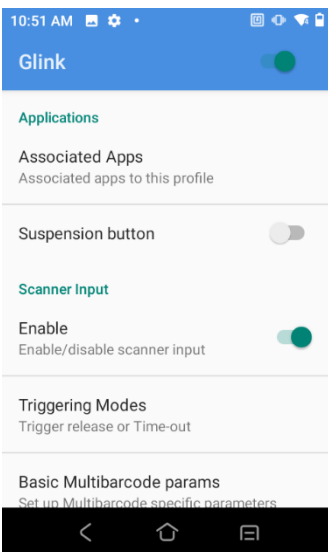
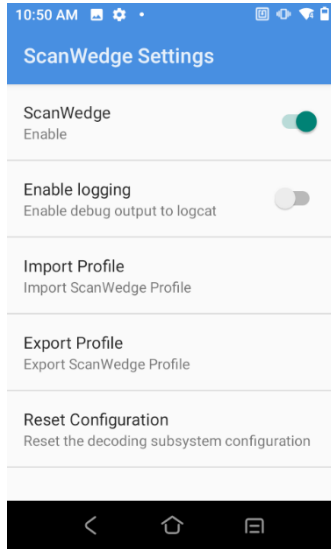
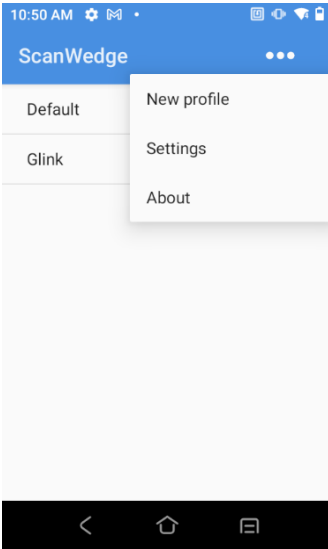
If you are using multiple apps for barcode scanning on your device, and each app requires different data capture rules, you should use the **ScanWedge Profiles** app to define and assign a unique scanner profile for each app instead of using the Default Scanner Settings. You will find **ScanWedge Profiles** in Android settings. Use **ScanWedge** to create a new profile for Glink, name it for example *Glink*, enable the profile, tap **Associated Apps -> Menu -> Associate more app**, select **Glink** and select **all activities** by selecting the **Glink *** item.

Intent action

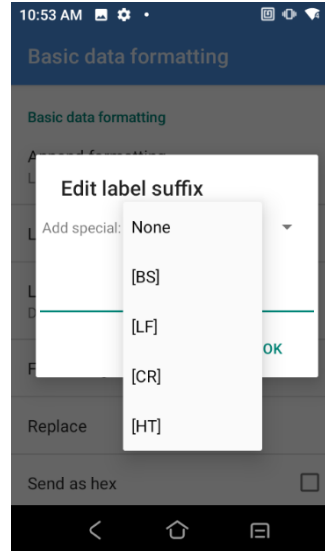
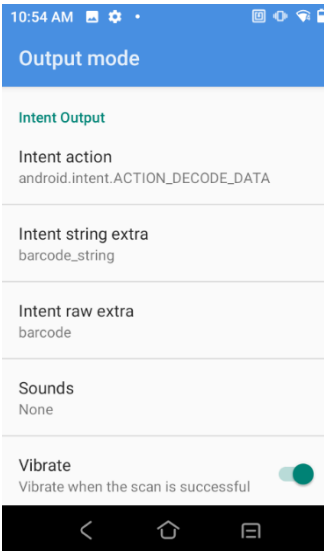
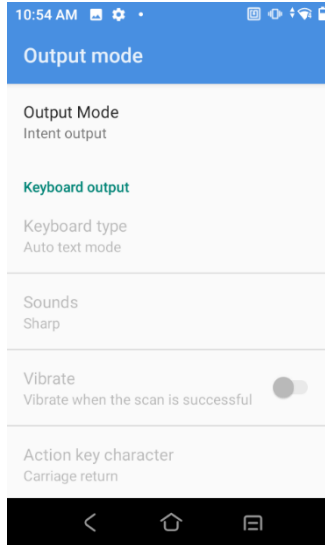
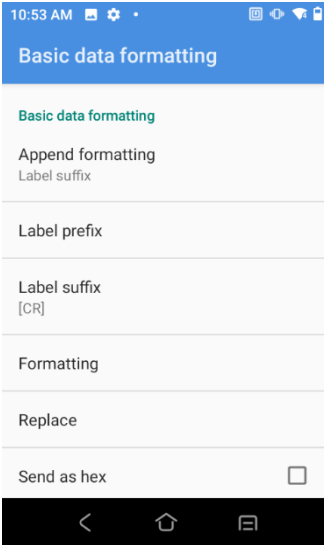
Glink will listen for an Intent action sent by the Urovo scanner. This parameter must match the value set in the **Scanner settings / ScanWedge** app. If nothing is specified, Glink will use the default value **android.intent.ACTION_DECODE_DATA**.

Intent string extra

This parameter must match the value set in the **Scanner settings / ScanWedge** app. If nothing is specified in Glink, Glink will use the default value **barcode_string**.



Settings – Devices



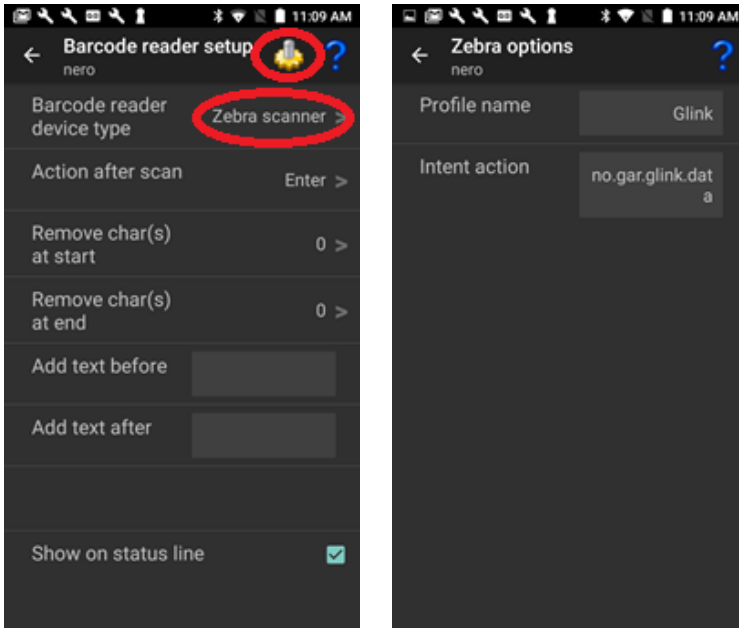
Show on status line

Make sure the parameter *Show on status line* is enabled to see scanned data received with Data intent on the status line at the bottom of the Glink screen. When this parameter is not enabled or scanned data is received as simulated keyboard input, you will only see the scanned barcode in the emulator screen.

Zebra scanner options

Glink can either receive scanner data as simulated keyboard input or receive scanner data with Data intents.

The text below describes how to use Data intents. If set up correctly, scanned data will be displayed in the input field and in the Glink status line.



Glink settings

To receive scanner data with Data intents, the Zebra DataWedge profile must match the Glink settings.

Profile name

Specify the name of the Zebra DataWedge profile to be used with this Glink session configuration. The default value is *Glink*

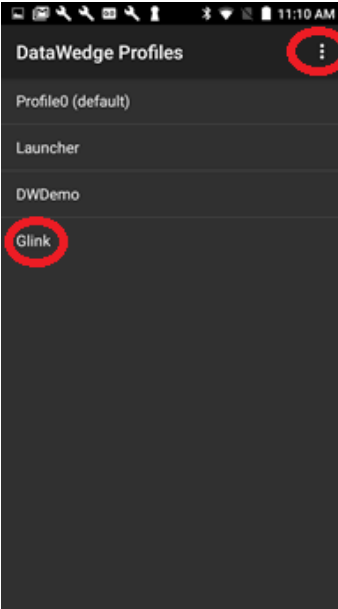
Intent action

Glink will listen for an Intent action (default value is *no.gar.glink.data*) sent by the Zebra scanner. The Zebra DataWedge profile must be configured with a matching Intent action, see Zebra DataWedge profile settings below.

DataWedge app

The DataWedge app is delivered by Zebra and it used to configure new DataWedge profiles or modify existing ones.

Create a new profile and name it *Glink* (if that is specified as the Profile name above).



Zebra DataWedge profile settings

For Glink to receive scanner data from Zebra DataWedge, the Glink profile must include the settings:

Applications

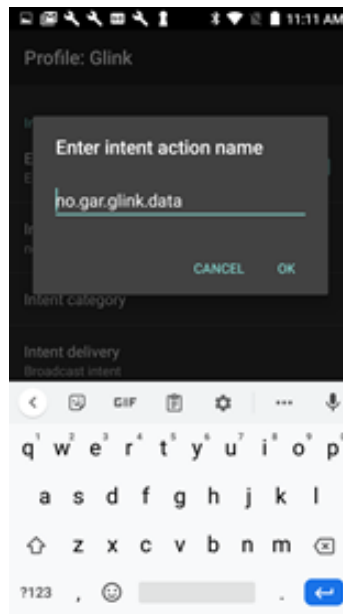
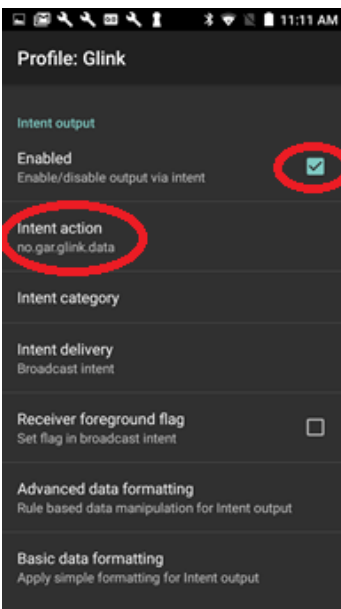
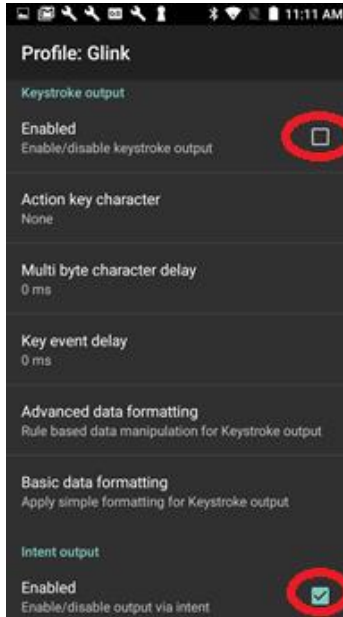
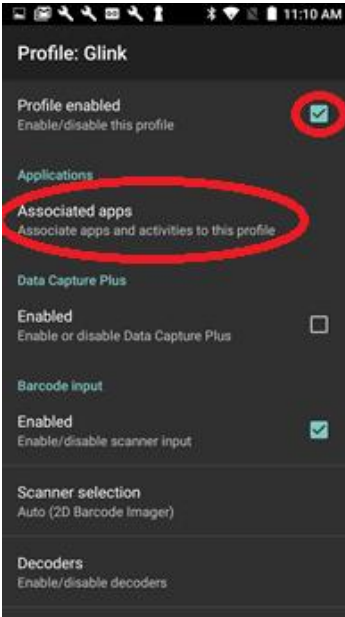
Associated Apps -> No supported apps should be shown.

Keystroke Output

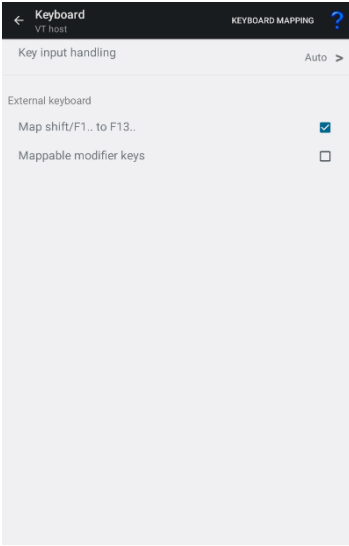
Enabled -> Unchecked.

Intent Output

Enabled -> Checked
Intent action -> *no.gar.glink.data*
Intent category ->
Intent delivery -> Broadcast Intent



Keyboard options



Keyboard mapping

Select the Keyboard mapping icon on the Action bar for 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.

Keyboard input handling

There are several Input Methods available for Android with slightly different behavior. The Auto option normally handles these differences, but in some cases, it might be necessary to select another Key input handling option.

Auto

This is the default value and uses either the Standard or the Advanced implementation depending of the device.

Standard

Use this option if you experience an extra toolbar line at the top of the soft keyboard.

Extended

Use this option if you are using a soft keyboard that requires an extra toolbar line (like Chinese or Japanese) and this is not working properly.

Basic

This implementation might work better for some devices or special device setup.

External keyboard

Map shift/F1.. to F13..

If you have an external keyboard with 12 function keys, check this option if you want the shift/F1 to shift/F12 keys mapped to the functions F13 to F24. The default value is that the shift/F1 to shift/F10 keys is mapped to function F11 to F20 and the alt/F1 to alt/F4 is mapped to the functions F21 to F24.

This option is only valid for Glink3270 and Glink5250.

Mappable modifier keys

Normally modifier keys (Ctrl, Alt, Shift..) are used in combination with other keys.

If you need to map a specific modifier key, enable this option, and go to the Keyboard mapping dialog box and press the modifier key to map.

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.

Auto import from file location on Android device

Some MDM servers can distribute files to the MDM controlled Android devices. You can use this feature to distribute exported Glink configuration files to the devices. Glink for Android will check the following path for a new Glink configuration file at start-up and when the user enters the *Sessions* menu:

```
/SD Card/.GlinkXX/import/config.glinki
```

(Where XX is either VT,5250, 3270 or omitted for the full version)

The "SD Card" folder (sometimes also referred as Phone Storage or Internal Storage) is often addressed like "/storage/emulated/0". For example:

```
/storage/emulated/0/.GlinkVT/import/config.glinki  
/storage/emulated/0/.Glink5250/import/config.glinki
```

Distributing Glink configurations from an EMM/MDM

```
/storage/emulated/0/.Glink3270/import/config.glinki  
/storage/emulated/0/.Glink/import/config.glinki
```

If/when Glink finds a *config.glinki* file in the import folder, the file will be imported and renamed to *config-*nn*.glinki* in the import folder. This is to make sure it is only imported once. *nn* is the next available number. The current configuration will be overwritten by the imported configuration file and lost.

If you have many devices and have received a Glink license file (*licenses.glinki*) from G&R, you can also use the auto-import feature in Glink to distribute the license file to your devices. Set up your MDM to distribute the Glink license file to:

```
/SD Card/.GlinkXX/import/licenses.glinki
```

(Where XX is either VT,5250, 3270 or omitted for the full version)

SOTI and AirWatch are examples of MDMs that allow you to distribute Glink configuration and license files this way.

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:

| | |
|--------------------------|---|
| con- fig.ver- sion | 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. |
| con- fig.url | This parameter (key-name) provides the URL of the Glink configuration file. Please note that this parameter is ignored if the <i>con-fig.version</i> 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 <i>config.version</i> parameter |

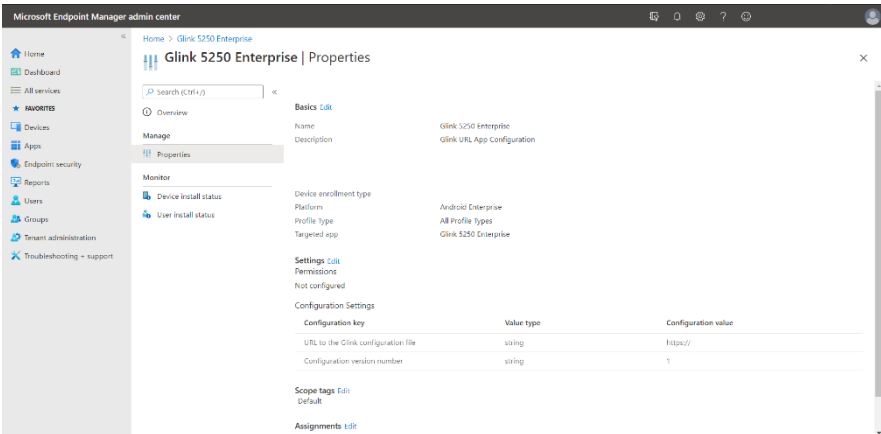
Here is an example:

Distributing Glink configurations from an EMM/MDM

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

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

Here is an example from Microsoft Intune (Android):



Set Glink parameters from the MDM

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

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

config.ver-
sion

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.

Distributing Glink configurations from an EMM/MDM

| | |
|-----------------------------|---|
| <code>config.name</code> | This is the name of the configuration (session) and must be provided. The configuration is created if it does not already exist. Additional parameters will be set for this selected configuration. |
| <code>com.servername</code> | This specifies the IP address of your host |

Here is an example:

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

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

For example:

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

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

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

Here are some examples:

Distributing Glink configurations from an EMM/MDM

MobileIron (Android):

The screenshot shows the configuration page for 'Glink 5250 Enterprise' in the MobileIron console. The page is titled 'Managed Configurations for Android' and includes a 'Cancel' button and an 'Update' button. The configuration is organized into sections: 'Managed Configurations', 'Additional parameters', and 'Add parameter'.

| Configuration Name | Value |
|--|----------------------|
| Configuration version number <small>New version number requires an updated configuration file</small> | 2 |
| URL to the Glink configuration file <small>Version number must differ from current one</small> | |
| Configuration name <small>Create or modify a session configuration</small> | AG400 |
| Host address <small>Address to host application</small> | myhost.mydomain.com |
| Additional parameters | |
| Add parameter | |
| Parameter key <small>See exported configuration file</small> | com.firmi220user |
| Parameter value <small>See exported configuration file</small> | myusername |
| Add parameter | |
| Parameter key <small>See exported configuration file</small> | com.firmi220subapp |
| Parameter value <small>See exported configuration file</small> | #mypassword |
| Add parameter | |
| Parameter key <small>See exported configuration file</small> | _config_name |
| Parameter value <small>See exported configuration file</small> | AG400-2 |
| Add parameter | |
| Parameter key <small>See exported configuration file</small> | _com.mydomain |
| Parameter value <small>See exported configuration file</small> | myhost2.mydomain.com |

MobileIron (iOS):

Distributing Glink configurations from an EMM/MDM

The screenshot shows the MobileIron Cloud interface for configuring an app. The top navigation bar includes Dashboard, Users, Devices, Apps, Content, Configurations, Policies, and Admin. The main content area is titled "Glink VT" and shows the app is delegated to Gallagher & Robertson AS. Below this, there are tabs for Details, Distribution, App Configurations, and Reviews. The "App Configurations Summary" section shows "iOS Managed App Configuration" with "Cancel" and "Update" buttons. The "Configuration Setup" section has a "Name" field with the value "My Linux host" and an "+ Add Description" link. The "Configuration Source" section has a "Source Type" dropdown set to "None". The "iOS Managed App Settings" section contains a table with three rows:

| Key | Value | Type |
|----------------|---------------------|--------|
| config.version | 1 | STRING |
| config.name | myhost | STRING |
| com.servername | myhost.mydomain.com | STRING |

Below the table are links for "+ Add" and "Use .plist". A note states: "Array type values should be separated by comma (example: 2,3,4) and date value should be in milliseconds (example: 1437496170000)". The "Distribute this App Config" section offers three options: "Everyone with App", "No One", and "Custom".

Meraki (Android):

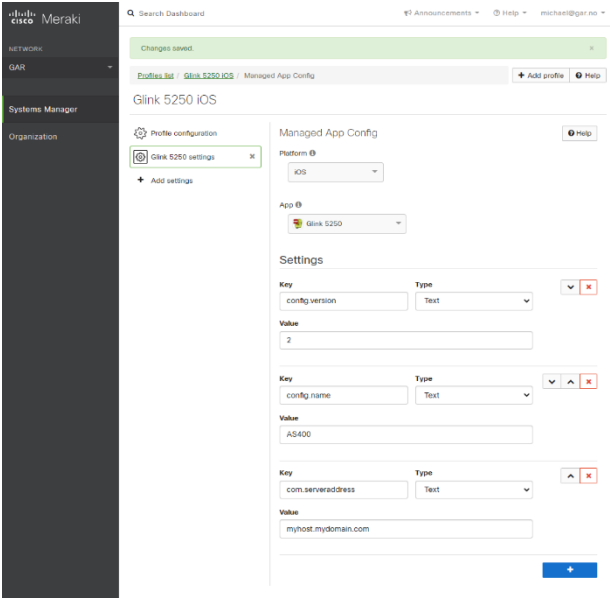
The screenshot shows the Meraki dashboard interface for configuring an app. The left sidebar includes links for Home, Reports, Alerts, Settings, and Organization. The main content area is titled "Glink for Android" and shows the app is managed by Gallagher & Robertson AS. Below this, there are tabs for Details, Distribution, App Configurations, and Reviews. The "App Configurations Summary" section shows "Android Managed App Configuration" with "Cancel" and "Update" buttons. The "Configuration Setup" section has a "Name" field with the value "My Linux host" and an "+ Add Description" link. The "Configuration Source" section has a "Source Type" dropdown set to "None". The "Android Managed App Settings" section contains a table with three rows:

| Key | Value | Type |
|----------------|---------------------|--------|
| config.version | 1 | STRING |
| config.name | myhost | STRING |
| com.servername | myhost.mydomain.com | STRING |

Below the table are links for "+ Add" and "Use .plist". A note states: "Array type values should be separated by comma (example: 2,3,4) and date value should be in milliseconds (example: 1437496170000)". The "Distribute this App Config" section offers three options: "Everyone with App", "No One", and "Custom".

Meraki (iOS):

Distributing Glink configurations from an EMM/MDM



General options

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

For example:

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

Passwords

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

Parameter key *config.name* / **Parameter value** *GeneralOptions*
Parameter key *screen.cfpasswd* / **Parameter value** *##settingpassword*

or the password for an auto-logout 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
```

Type the characters in the Parameter value with the same case as the session name is configured in Glink. You can also use *config.remove* to remove “all” session configurations or to reset “GeneralOptions”.

Activation key

You can send the activation key to your devices with the parameter *config.actkey*, for example:

```
Parameter key config.actkey / Parameter value ABCD1234EFGH5678
```

When you have sent the activation key to the devices, the user does not have to enter it when activating Glink on the device. When they tap **ACTIVATE**, they will see that the activation key has been prefilled and all they have to do, is to tap the **ACTIVATE** button.

XML Schema

[The AppConfig Community](#), 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:

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

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

MDM Parameter list

| | | | |
|---|----------------------|---|---------|
| General parameters | | | |
| Version number for the configuration | config.version | number | Integer |
| Web Address where Glink can download config file | config.url | http/https address to config file | String |
| Name of new or existing host session | config.name | Define name for a session or GeneralOptions | String |
| Remove a session, General options or everything | config.remove | Name of session to remove or GeneralOptions / all | String |
| Send activation key to the devices | config.actkey | Product activation key with hyphens ('-') removed | |
| 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 millisecc - 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 notification sound - Android only | screen.sndRcvSound | 0=Off , 1=On, 2=Send only, 3=Recv only | Integer |

Distributing Glink configurations from an EMM/MDM

| | | | |
|---|---------------------|--|---------|
| Show Sessions view when disconnected - Android only | screen.showSess | true, false | Boolean |
| Alert sound - Android only | screen.alertSound | 0=Off, 1= Android notification , 2=Android alarm | Integer |
| Language | screen.language | Default, us= US English , de=DE German, pt=PT Portuguese, fr=FR French, no=NO Norwegian | String |
| Password | screen.cfgPassword | | String |
| Key repeat – iOS Only | Screen.keyRepeat | true, false | Boolean |
| Show IOS status bar - iOS Only | screen.iosStatusBar | 0=Always , 1=Portrait only, 2=Never | Integer |
| | | | |
| Show Menu/Action bar items - Android only | | | |
| On Menu (by default) | | | |
| Sessions | screen.mitem8 | 0= Menu , 1=Action bar, 2=Hide | Integer |
| Settings | screen.mitem10 | 0= Menu , 1=Action bar, 2=Hide | Integer |
| Scrollback | screen.mitem11 | 0= Menu , 1=Action bar, 2=Hide | Integer |
| Print screen | screen.mitem12 | 0= Menu , 2=Hide | Integer |
| Record macro | screen.mitem13 | 0= Menu , 2=Hide | Integer |
| Debug mode | screen.mitem14 | 0= Menu , 2=Hide | Integer |
| Print logging | screen.mitem15 | 0= Menu , 2=Hide | Integer |
| New Glink Window | screen.mitem21 | 0= Menu , 1=Action bar, 2=Hide | Integer |
| Remove Glink Window | screen.mitem22 | 0= Menu , 1=Action bar, 2=Hide | Integer |
| General options | screen.mitem16 | 0= Menu , 1=Action bar, 2=Hide | Integer |
| Export configurations | screen.mitem23 | 0= Menu , 2=Hide | Integer |
| Help | screen.mitem18 | 0= Menu , 1=Action bar, 2=Hide | Integer |
| About | screen.mitem19 | 0= Menu , 2=Hide | Integer |
| Exit | screen.mitem25 | 0= Menu , 2=Hide | Integer |
| | | | |
| On Action bar (by default) | | | |
| Toggle toolbar | screen.mitem24 | 1= Action bar , 2=Hide | Integer |

Distributing Glink configurations from an EMM/MDM

| | | | |
|-----------------------------|--------------------------|--|---------|
| 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 |

Distributing Glink configurations from an EMM/MDM

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

Distributing Glink configurations from an EMM/MDM

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

Distributing Glink configurations from an EMM/MDM

| | | | |
|---------------------------------|-------------------------|---|---------|
| 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.ibm5250IBMMMSGQNAME | QSYSOPR | String |
| Message library | com.ibm5250IBMMMSGQLIB | *LIBL | String |
| Font ID | com.ibm5250IBMFONT | 11 | Integer |
| Form feed type | com.ibm5250IBMFORMFEED | A=Auto feed sheets, C=Continuous paper, U=Manual feed sheets | String |
| | | | |
| TNVIP options | | | |
| Server address | com.serverName | | String |
| CoName or Resource | com.serverTarget | | String |
| Terminal type | com.telnetType | | String |
| Initial turn | com.initialTurn | 0=Default, 1=Glink, 2=Host | Integer |
| Keep alive type | com.keepAtype | 0=TCP, 1=Telnet | Integer |
| Keep alive interval | com.keepAlive | | String |
| Use secure sockets - SSL | com.useSSL | true, false | Boolean |
| Authenticate server certificate | com.valServerCert | true, false | Boolean |
| | | | |
| Ggate options | | | |
| Server address | com.serverName | | String |
| Alternate server address | com.altServerName | | String |
| Random connect | com.tcpConnectRandom | true, false | Boolean |
| Use secure sockets - SSL | com.useSSL | true, false | Boolean |
| Authenticate server certificate | com.valServerCert | true, false | Boolean |
| CoName or Resource | com.serverTarget | | String |
| Ggate protocol | com.ggateType | DSA, DIWS | String |
| Remote mailbox name | com.ggateDa | | String |
| Remote mailbox extension | com.ggateDx | | String |

Distributing Glink configurations from an EMM/MDM

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

Distributing Glink configurations from an EMM/MDM

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

Distributing Glink configurations from an EMM/MDM

| | | | |
|--|-------------------|---|---------|
| VT / ANSI / VIP 7800 / VIP 7700 / DKU 7107 / DKU 7102 Transliteration | | | |
| UTF-8 encoding | emu.UTF8Encoding | true, false | Boolean |
| 8-bit Host | emu.host8bit | true , false | Boolean |
| Allow lowercase to host | emu.allowLcase | true , false | Boolean |
| Host character set | emu.charset | Default (Latin 1) , ISO-8859-2 Latin 2, ISO-8859-5 Latin/Cyrillic, IBM-437, IBM-850, Windows-1251, Windows-1253, koi8-r | String |
| National transliteration (7-bit host) | emu.xlitFile8 | Default (No transliteration) , CYR Cyrillic, FIN Finnish, FRA French, FRC French-Canadian, GER German, GR Greek, ITA Italian, LT2 Latin 2, NOR Norwegian, SF Swedish/Finnish, SPA Spanish, SWE Swedish, SWI Swiss, UK United Kingdom, US United States | String |
| Use SISO encoding | 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 |

Distributing Glink configurations from an EMM/MDM

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

Distributing Glink configurations from an EMM/MDM

| | | | |
|-------------------------------------|----------------------|---------------------------------|---------|
| 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 |

Distributing Glink configurations from an EMM/MDM

| | | | |
|---|-----------------------|--|---------|
| Space suppression | emu.vipSpaceSuppress | true , false | Boolean |
| Suppress status line | emu.vipNoStatusLine | true, false | Boolean |
| ROLL mode | emu.vipInitRoll | true, false | Boolean |
| Show 7700 spaces | emu.vip77SpaceReplace | true, false | Boolean |
| VIP compatibility | emu.vipCompat | 0=Normal , 1=ITTCourier, 2=ThomasBox | Integer |
| | | | |
| DKU 71707 options | | | |
| Auto tab when input field is filled | emu.autoTabL | true , false | Boolean |
| Blink/blank with ^/~ | emu.dkuBlinkAv | true , false | Boolean |
| Show ^/~ in blink/blank | emu.dkuBlinkShow | true , false | Boolean |
| Cursor straight up/down | emu.dkucud | true, false | Boolean |
| Allow cursor out of field | emu.dkucuf | true , false | Boolean |
| New line after Xmit | emu.dkuNewLine | true , false | Boolean |
| SDP attributes | emu.dkuSDPAtt | true, false | Boolean |
| Wrap on page overflow | emu.dkuWrap | true, false | Boolean |
| Wraparound tabbing | emu.dkuWrapTab | true , false | Boolean |
| ROLL mode | emu.dkuInitRoll | true, false | Boolean |
| Use SS2 for 8bit chars | emu.dkuExtend | true, false | Boolean |
| Send ETX for end of transmission | emu.etxSend | true , false | Boolean |
| Wincom compatibility | emu.dkuWincom | true, false | Boolean |
| Fix DKU attributes | emu.dkuFixAttr | true , false | Boolean |
| DKU model | emu.dkuTermID | 0=7107 , 1=7211 | Integer |
| Right justify with | emu.dkuRjfChar | 32=Space , 48=Zero, 42= Asterisk, 36=Dol- lar, 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 |

Distributing Glink configurations from an EMM/MDM

| | | | |
|------------------------------------|----------------------|---|---------|
| | | | |
| 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 |

Distributing Glink configurations from an EMM/MDM

| | | | |
|--|-----------------------|--|---------|
| Font style - iOS Only | screen.fontStyle | 0=Plain, 1=Bold , 2=Italic, 3=Bold & Italic | Integer |
| Cursor type | screen.cursortype | 0=Block, 1=Bar , 2=Line | Integer |
| Cursor color | screen.usecursorcolor | 0=Default , 1=User defined (white ch), 2=User defined (black ch) | Integer |
| Cursor color | screen.cursorColor | Change color in Glink and export config | String |
| 3D variable fields | screen.variable3Ds | 0=Off (5250/3270) , 1=On without attribute(VT/ANSI/VIP/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 background 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) Android only , 5==Enable/Disable touchscreen (Disabled) Android only | Integer |
| Double tap again to confirm - Android only | screen.dbltapcfirm | true, false | Boolean |
| Extra line spacing | screen.extraPixelsY | From -4 to +8 Default: 0 | Integer |
| Force fixed character width | screen.variableFont | true, false | Boolean |
| Disable zoom | screen.noZoom | true, false | Boolean |
| Show key input on status line | screen.showkeyinput | true, false | Boolean |
| Function keys | screen.hotspotFn | true , false | Boolean |
| Option numbers ("nn." or "nn=") | screen.hotspotNn | 0=Off, 1=On, 2=On with Enter | Integer |
| Option numbers (" nn ") | screen.hotspotN2 | 0=Off , 1= On, 2=On with Enter | Integer |
| Option characters ("aa=") | screen.hotspotAa | 0=Off , 1= On, 2=On with Enter | Integer |

Distributing Glink configurations from an EMM/MDM

| | | | |
|--------------------------|----------------------------|--|---------|
| URL address | screen.hotspotUrl | 0=Off, 1=Open in browser, 2=Open in Glink | Integer |
| | | | |
| Screen colors | | | |
| | | | |
| Color selection | | | |
| Screen color | screen.scrColor | Make Color selection in Glink and export config | Integer |
| Status line color | screen.stsColor | Make Color selection in Glink and export config | Integer |
| | | | |
| Color Adjustment | | | |
| Dark foreground | | | |
| Black | screen.foreground_BlackLo | Make Color adjustment in Glink and export config | String |
| Blue | screen.foregroundBlueLo | Make Color adjustment in Glink and export config | String |
| Green | screen.foregroundGreenLo | Make Color adjustment in Glink and export config | String |
| Cyan | screen.foregroundCyanLo | Make Color adjustment in Glink and export config | String |
| Red | screen.foregroundRedLo | Make Color adjustment in Glink and export config | String |
| Magenta | screen.foregroundMagentaLo | Make Color adjustment in Glink and export config | String |
| Yellow | screen.foregroundYellowLo | Make Color adjustment in Glink and export config | String |
| White | screen.foregroundWhiteLo | Make Color adjustment in Glink and export config | String |
| | | | |
| Bright foreground | | | |
| 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 |

Distributing Glink configurations from an EMM/MDM

| | | | |
|---|----------------------------|--|---------|
| 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 |

Distributing Glink configurations from an EMM/MDM

| | | | |
|---|---------------------|--|---------|
| 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 | | | |

Distributing Glink configurations from an EMM/MDM

| | | | |
|--|-------------------|--|---------|
| 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= Data-logic, 4=Denso Scanner, 5=Honeywell Scanner, 11=M3 Mobile, 12=Point Mobile, 6=Socket Mobile, 3=Unitech Scanner, 13=Urovo Scanner, 2=Zebra Scanner iOS: 0=Keyboard Wedge , 1=Camera, 2=Linea/in-finea, 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 |
| Glink sets Output Mode (M3 Mobile only) | print.m3glinkmode | true , false | Boolean |
| | | | |
| Card data format string Linea/Infinea - iOS only | print.bcCardFmt | {0}\t{1}\t{2}\t{3}\t{4} } | String |
| | | | |
| Keyboard | | | |

Distributing Glink configurations from an EMM/MDM

| | | | |
|---------------------------------------|-----------------------|---|---------|
| 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 |

Distributing Glink configurations from an EMM/MDM

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

SSL/TLS Client certificates

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

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

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

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

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

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

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

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

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

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

SSH private key file

How to import a private key file

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

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

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

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

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

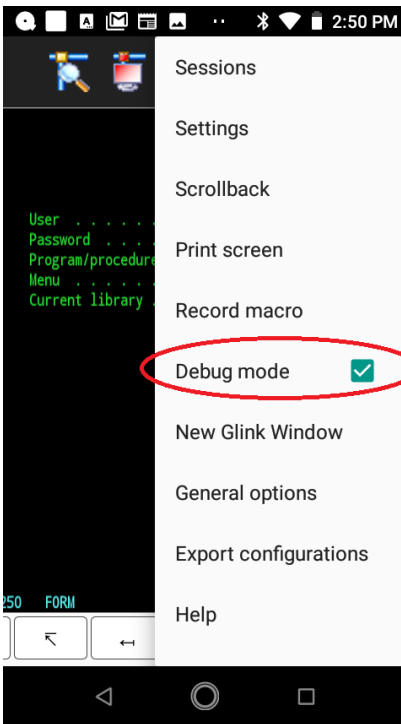
Glink will create a file with the file name *my_pk_file* with the content supplied.

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

How to export/send a debug trace and configuration file

Enable, capture and export debug file

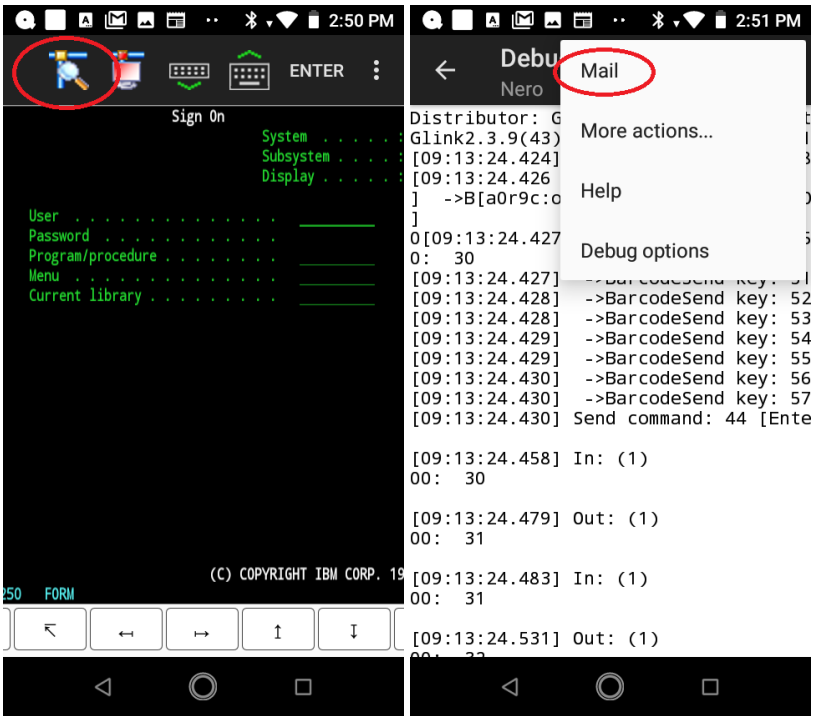
1. Enable debug mode: Tap **Menu** -> **Debug Mode** (image 1 below)



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

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



An alternative is to connect the device to a PC with an USB cable and copy the debug file

<Internal storage> /Android/Data/no.gar.glinkXXX/files/debug.txt

from the mobile to the PC.

Export configuration file

The config file (config.glinki) you can either send directly by e-mail from the device (**Menu** -> **Export configuration**) or first export to file system and then copy to PC (**Menu** -> **Sessions** -> **Menu** -> **Export**).

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*.

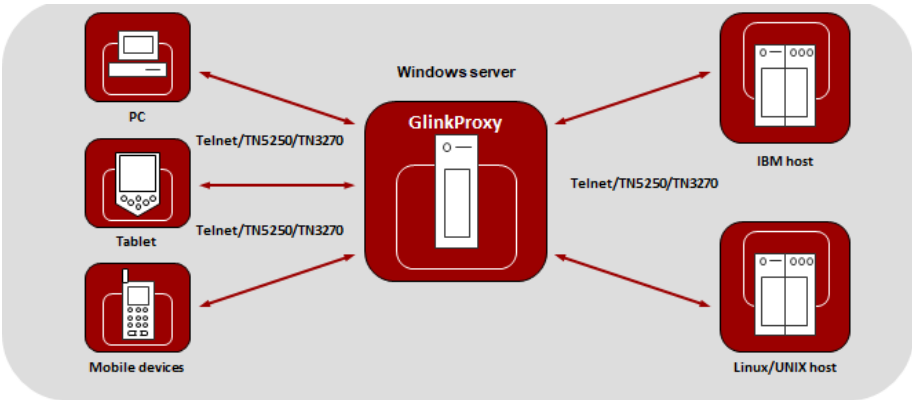
How it works

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 power-saving mode or moves out of WiFi range and prematurely terminates the session to

GlinkProxy. If Glink reconnects within 30 minutes, the session is resumed as if it never was disconnected from GlinkProxy.

Disconnect the host connection immediately if the Glink user disconnects the session.

Allow Glink to change the disconnect timeout values.

Not send any keepalive packets unless specified by Glink.

Open the Settings menu if you want to change some of these values and Save the changes.

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

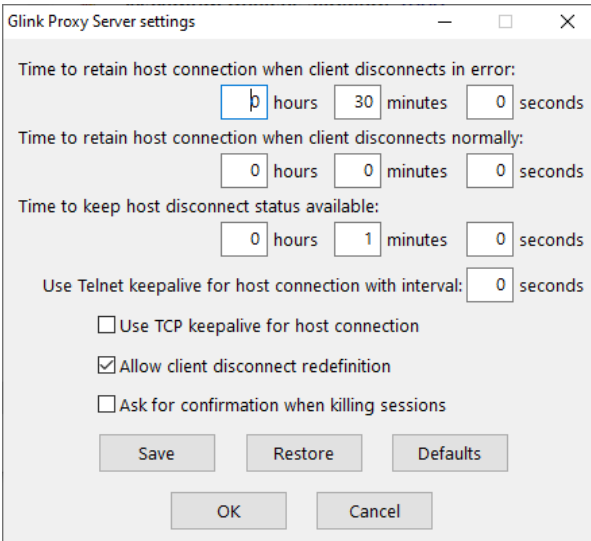
Startup

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

Settings

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

The GlinkProxy Session Persistence Server



The screenshot shows a dialog box titled "Glink Proxy Server settings". It contains several configuration options:

- Time to retain host connection when client disconnects in error:** 0 hours, 30 minutes, 0 seconds.
- Time to retain host connection when client disconnects normally:** 0 hours, 0 minutes, 0 seconds.
- Time to keep host disconnect status available:** 0 hours, 1 minutes, 0 seconds.
- 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

At the bottom, there are buttons for "Save", "Restore", "Defaults", "OK", and "Cancel".

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. |

The GlinkProxy Session Persistence Server

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|----------|---------------------------|--|
| /ED nn | Error Disconnect timeout | The server will preserve sessions to the host when the connection is terminated abnormally or when the /ND parameter has kept the session in hold. The /ED parameter may be used to specify a timeout (in seconds) after which the host connection will be closed. Note that the Glink client may redefine this timeout if this has not been disabled by the /NCR command line parameter. |
| /EK | Enter Key | When this option is specified, the licensing form will be displayed to let you inspect or modify the licensing data. The server will terminate immediately after exiting the dialog |
| /KT nn | Telnet KeepAlive | This parameter enables sending of Telnet keepalive packets every nn seconds from GlinkProxy to the host. The default is not to send Telnet keepalive packets, but it can be very useful if the session is idle for long periods and you want to avoid being disconnected by the host due to inactivity. |
| /KA | TCP KeepAlive | This enables use of TCP keepalives between GlinkProxy and the host. The default is not to use TCP keepalives. The actual keepalive interval is a Windows system parameter. |
| /NCR | No Client Redefine | This parameter prevents redefinition of the /ND and /ED timeouts by the Glink client. |
| /ND nn | Normal Disconnect timeout | This specifies how a normal disconnect from the client should be processed. The default is zero, i.e., simply terminate the host connection immediately. Otherwise, the parameter tells the server to keep the connection active for that number of seconds, allowing the client to reconnect until the timer expires. Note that the Glink client may redefine this timeout if this has not been blocked by the /NCR command line parameter. |
| /PORT nn | Port number | The server listens by default on port number 30855 (0x7887). This parameter may be used |

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| | | to override this with a port number of your choice. |
| <code>/VERBOSE</code> | Verbose debug | Supplied as well as the <code>/DEBUG</code> parameter this tells the server to display all data sent and received (default is to display only the first 16 bytes of each block). |

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

Glink for iOS/Android Proxy Server Settings

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

| Parameter | Value | Description |
|-----------------|---------|--|
| Use server | on/OFF | Check this option to enable communication thru a GlinkProxy server |
| Address | ip-addr | Configure the address of the server running GlinkProxy (not the application host) |
| Port | nn | Configure the port number GlinkProxy is listening to. The default is 30855 |
| User disconnect | nn | Specifies the number of seconds the proxy server should keep the connection to the host application after a user initiated disconnect. The default value is 0, which means that the connection to the host is disconnected immediately. This is what happens without a proxy server. Set this parameter to a non-zero value if you |

The GlinkProxy Session Persistence Server

| | | |
|------------------------------|----|---|
| | | want that the proxy server should keep the session to the host the configured number of seconds after a user initiated disconnect |
| Con- nec- tion lost | nn | Specifies the number of seconds the proxy server should keep the connection to the host application after the connection to Glink is dropped with an error, for example if the device goes idle, enter power-saving mode, or move out of WiFi range. When the device is woken up or the network connection is reestablished, the user can reconnect and resume the session with the host application. |

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