Terminal Emulation

Wavelink's TE Client for Android

User Guide

Version 1.1

Revised 23/03/2012

wavelink.

Wavelink Corporation
10808 South River Front Parkway, Suite 200
South Jordan, Utah 84095
Telephone: (801) 316-9000
Fax: (801) 316-9099
Email: customerservice@wavelink.com
Web site: www.wavelink.com

Chapter 1: Installing and Licensing

The TE Client is an application installed on a mobile device or tablet that connects to IBM 5250/3270 and VT100/220 hosts. The Client uses Telnet to connect to applications on the remote host and emulates the terminal.

The TE Client for Android has been optimized for an Android OS, and includes the capability to configure the Client from the device. Client menus and keyboards have been tailored for Android. The Client screen zooms, pans, and reorients based on device orientation. This manual introduces the options and tasks available with a TE Client for Android.

NOTE: The TE Client for Android does not have the same options as TE Clients for Windows.

The TE Client uses host profiles to configure the host information. Emulation parameters define how the Client acts during the emulation session, such as the beep volume or what to do if the scanned data is larger than the entry field. The TE Client can be licensed manually or by using a Wavelink license server.

This section has instructions for installing and licensing the TE Client:

- Installing the TE Client

- Licensing the TE Client

Installing the TE Client

In order to install the TE Client for Android on a device, the device must be configured to allow installation of non-Market applications. Use the QR code below or the URL to download and install the app. The TE Client for Android is configured only after it is installed.

To install the TE Client for Android:

1 Configure the device to allow installation of non-Market applications. (This option is often under **Settings > Applications**.)

2 Using the device, scan the QR code or open a browser and navigate to the URL below.

https://www.wavelink.com/orders/files/WLTE_UNIVERSAL_ANDROID_1_1_00.apk

The device downloads the Client.

3 View the Notifications by pulling down the status bar. The download status of the Client file is displayed. When the Client download is complete, tap the notification to install the Client.

4 The installation screen appears. Tap **Install**.

5 The app is installed. Tap **Open** to launch the TE Client, or tap **Done**.

Licensing the TE Client

The TE Client requires a license for full functionality. Emulation licenses are specific to an emulation type (e.g., a license can be issued for VT emulation or IBM emulation).

There are two types of TE Client licenses: platform licenses and maintenance licenses.

- **Platform licenses**. A platform (or base) license authorizes you to use a version of the TE Client and any builds associated with that version. For example, if you purchased a 1.0 TE Client license, then you are entitled to use 1.00-xx builds. If you want to upgrade beyond a version 1.0 TE Client, then you must either buy a new platform license or purchase a maintenance license. Platform licenses do not expire, but they do not allow you to upgrade to a newer version of the TE Client.

- **Maintenance licenses**. A maintenance license allows you to upgrade your TE Client when new major versions of the TE Client become available. For example, a maintenance license would allow you to upgrade from TE Client 1.x to TE Client 2.x. You must have a base license for each maintenance license in use.

  Maintenance licenses are valid only through a specific date. After the expiration date, if you upgrade the TE Client, it will revert to operating in demo mode.

You can use the Client without a license, but you will be limited to the demo mode without full functionality. When you attempt to initiate a terminal emulation session, the TE Client will begin broadcasting in an attempt to locate a license server. At that point, you are prompted to either enter a license or to initiate the session in demo mode. While in demo mode, you may initiate terminal emulation sessions with hosts. However, each terminal emulation session that you initiate will automatically disconnect after one hour.

There are two ways to license the TE Client for Android:

- **Manual licensing**. You may use the TE Client interface on the mobile device to manually input licensing information.

- **License Server**. You may use a License Server to automatically provide TE Client licenses to the mobile devices on your network.

NOTE: To obtain Terminal Emulation licenses, please contact Wavelink customer service.

This section provides the following information:

- Manually Licensing the TE Client

- Using the License Server to License the TE Client

Manually Licensing the TE Client

You may key in your authorization information manually through the TE Client interface on the mobile device. When you manually assign licenses, each license is associated with a unique User Number. For example, to license 50 devices, Wavelink would issue a license with a user limit of 50. Each of the 50 devices would have a different User Number, from 1 to 50.

To manually license a TE Client:

1 On the device, launch the TE Client.

2 Add a license by tapping **Menu > More > Authorization**.

3 Tap **Add New License**.

4 In the **Platform** text box, type the platform for the license.

5 In the **Licensee Name** text box, type the name of the person or company for which the Client is licensed.

6 In the **Serial Number** text box, type the serial number for the license.

7 In the **Expiration Date** text box, type the expiration date of the license, in the format of MMDDYYYY.

8 In the **Authorization Code** text box, type the authorization code for the license.

9 In the **User Number** text box, enter a user number.

NOTE: Each TE Client should have a unique user number. The user number can be any number between 1 and the maximum number of users for which the license provides.

10 In the **User Limit** text box, enter the maximum number of users for the license.

11 Tap **Authorize**.

Using the License Server to License the TE Client

The client license server is a Wavelink application that is responsible for supplying licenses to mobile devices that are using the TE Client.

NOTE: The client license server should not be confused with the Avalanche license server. They are separate Wavelink applications.

For information about installing and configuring the client license server, see the *Terminal Emulation License Server Reference Guide* on the Wavelink Web site.

When you attempt to initiate an emulation session with a host, if the TE Client is not already licensed, it will automatically attempt to obtain a license from a license server.

To use the license server to obtain a license:

1   When you attempt to connect to a host using the TE Client, it broadcasts a request for a license on the local IP network. Or, if you have configured the license server address, the Client sends a request to the specified license server.

2   License servers with an available license respond by offering a license.

3   The TE Client accepts the first license that it receives and sends a reply to the license server.

Chapter 2: Using the TE Client

Once the TE Client has been installed, the Terminal Emulation app will appear in the list of installed apps. To launch the Client, tap the Terminal Emulation icon. The TE Client works with either a paired bluetooth scanner or a camera in the device. When you scan data, it appears in the currently selected field.

To exit the Client, tap **Menu > Exit**.

To connect to a host, tap the main screen or tap **Menu > Connect**. You will be able to select the host profile from the list that appears.

To disconnect an emulation session, tap **Menu > Disconnect**.

To use the camera scanner, tap **Menu > Scan**. When you have scanned the barcode, the camera interface closes and the emulation screen reappears.

Chapter 3: Configuring Host Profiles

A host profile defines the parameters that the TE Client should use when it attempts to initiate a connection with a specific host. The host profile may include the emulation type, IP address of the host, or other settings. You may configure an unlimited number of host profiles.

When a device user attempts to initiate a session with a host, the TE Client displays a list of available host profiles. The user selects the host he wants to connect to, and the TE Client uses the host profile settings to connect to the host.

Depending on the emulation type, there are different options available when configuring a host profile. The following options may be available when you configure a host profile:

Profile Name	
Profile name	The name of the host profile.

Basic Settings	
Type	The type of emulation that the mobile device uses when connected to the host system.
Address	The IP address or host name of the host system to which the mobile device will connect.
Port	The TCP port number on which the host system is listening for emulation requests from Clients.

IBM Settings	
Workstation ID (5250) -Or- LU or Pool Name (3270)	A workstation ID for mobile devices connecting to an IBM host. The workstation ID includes static characters and the following switches, which are used to capture dynamic data specific to each mobile device: • **%a - %d.** Captures specific octets of the IP address of the mobile device. For example, use `%a%b%c%d` to capture all four IP octets of the address of the mobile device, or use %d to capture only the last octet of the IP address of the mobile device. • **%m - %r.** Captures specific octets of the MAC address of the mobile device. For example, use `%p%q%r` to capture the last three octets of the MAC address of the mobile device. • **%s.** Captures the session number.

IBM Settings
• **%t.** Captures the Avalanche terminal ID of the mobile device. (If the mobile device does not have an Avalanche Enabler, then this parameter is not valid.) A workstation ID can be 1-20 alphanumeric characters plus switches, but IBM hosts usually truncate workstation IDs that are more than 10 characters. The workstation ID should not begin with a numeric character.

VT Settings	
Telnet Negotiation String	A Telnet negotiation string for the host connection. A Telnet negotiation string is used to identify a mobile device to a host system and to present a Client with the appropriate emulation options. The host system can then supply information to the mobile device based on Telnet negotiation string (for example, menus or display options). The string can be 1-20 alpha-numeric characters.

Autologin with VT/HP			
	Prompts	CFG in Terminal	Responses
Name	The user name prompt that the host system uses. **Possible Values:** 0 - 60 alpha-numeric characters	If users should configure the response to the login prompt at the mobile device. **Possible Values:** <Enabled> <Disabled>	The response that the mobile device should send to the login prompt. **Possible Values:** 0 - 30 alpha-numeric characters
Password	The password prompt that the host system uses. **Possible Values:** 0 - 60 alpha-numeric characters	If users should configure the response to the password prompt at the mobile device. **Possible Values:** <Enabled> <Disabled>	The password that the mobile device should send to the host system at the password prompt. **Possible Values:** 0 - 30 alpha-numeric characters

Autologin with VT/HP			
Command	The command prompt that the host system sends to the TE Client after the login is complete. **Possible Values:** 0 - 60 alpha-numeric characters	If users should configure the response to the command line prompt at the mobile device. **Possible Values:** <Enabled> <Disabled>	The command that the mobile device should send the host system at the command prompt. **Possible Values:** 0 - 30 alpha-numeric characters

Autologin with IBMHOST	
User Name	The user name the Client should use when connecting to the host.
Password	The password the Client should use when connecting to the host.
Program/Procedure	A program/procedure that should run when the Client connects.
Menu	The name of the menu you want displayed when the Client connects.
Current Library	The name of a library the Client should navigate to when it connects.

Autolaunch	
AutoLaunch Session	A host profile that automatically launches when the TE Client starts. The host profile is automatically launched only once each time the Client runs.

To configure a host profile:

1   From the TE Client, tap **Menu > Host Profiles**.

2   If the password is required, type the password in the text box and tap **OK**. (The default password is system.)

3   Click **Add New** to create a new host profile, or tap the name of the existing host profile that you want to edit.

4   Configure the options as desired and tap **Save**.

5   Press the **Back** button to return to the main Client screen.

Chapter 4: Configuring Emulation Parameters

Emulation parameters define how the TE Client behaves while it is connected to a host. This includes sounds and special key functions, as well as the passwords for configuring the Client.

Depending on the emulation type, there are different options available when configuring emulation parameters. The following options may be available:

5250 and 3270 Options	
Enter Key Swapped	Uses the Enter key as Send instead of Field Exit. This option does not affect the keys on the TE virtual keyboards.
Enabler Free Cursor	Allows the user to move the cursor into protected areas of the screen.
Oversized Scanning	Determines what to do if scanned data is too large for the entry field.
Retry Workstation ID	Allows the TE Client to retry the workstation ID with a letter appended to it.
Use Enter as Reset	Uses the Enter key as a Reset key if the terminal is in an error state.
Initial Caps Lock state	Set the keyboard to open with Caps lock on.

VT Options	
Backspace Key Sends Delete	Sends a delete <7F> instead of a backspace <08> when the backspace key is pressed.
Ignore 8-bit Received Control Codes	Treats 8-bit control codes as extended characters.
New Answer Back	Displays a string on the mobile device when it receives an ENQ from the host. It supports the following variables: • %m - %r representing the six octets of the MAC address. • %a - %d representing the four octets of the IP address. • %s representing the session number. • %t representing the terminal ID (Avalanche only). For example, if you want the response to an ENQ to be the full MAC address, use: %m%n%o%p%q%r

VT Options	
VT Line Mode	Simulates line mode behavior for hosts that do not support it.
Initial Caps Lock State	Set the keyboard to open with Caps lock on.

Authorization Settings	
License Server Port	The port the License Server will be using to provide licenses.
License Server Site Id	The Site ID to use when requesting licenses from the License Server.

Network Setting	
Use Timing Mark Heartbeat	Sends timing marks to the host to determine if the session is still alive.

Passwords Settings	
Advanced Password	Sets the password for configuring host profiles.
Configuration Password	Sets the password for configuring emulation parameters.

Scanner Setting	
Auto Send Scans	Automatically sends to the host after a barcode is scanned. This option is for 5250 and 3270 emulation only.

Screen Setting	
Lock Screen Orientation	Locks screen to default orientation for device.

Sounds Settings	
Beep Volume	Sets the volume of the beeper.
Incoming Screen Beep	Beeps when a new screen is sent from the host. This option is for 5250 and 3270 emulation only.
Silent Mode	Disables all TE Client beeping.

1 From the TE Client, tap **Menu > Emulation Parameters**.

2 If the password is required, type the password in the text box and tap **OK**. (The default password is `config`.)

3 Configure the options as desired and tap **Save**.

4 Press the **Back** button to return to the main Client screen.

Wavelink Contact Information

If you have comments or questions regarding this product, please contact Wavelink Customer Service.

E-mail Wavelink Customer Support at: CustomerService@wavelink.com

For customers within North America and Canada, call the Wavelink Technical Support line at 801-316-9000 (option 2) or 888-699-9283.

For international customers, call the international Wavelink Technical Support line at +800 9283 5465.

For Europe, Middle East, and Africa, hours are 9 AM - 5 PM GMT.

For all other customers, hours are 7 AM - 7 PM MST.