

Honeywell

BasicTE

Basic Terminal Emulation

For Honeywell computers powered by Android 6.0 and higher

User Guide

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Customer Support

Technical Assistance

To search our knowledge base for a solution or to log in to the Technical Support portal and report a problem, go to www.hsmcontactsupport.com.

For our latest contact information, see www.honeywellaidc.com/locations.

Product Service and Repair

Honeywell International Inc. provides service for all of its products through service centers throughout the world.

To obtain warranty or non-warranty service, you must first obtain a Return Material Authorization number (RMA #), and then return your product to Honeywell (post-age paid) with a copy of the dated purchase record.

To learn more, go to www.honeywellaidc.com and select **Service & Repair** at the bottom of the page.

Limited Warranty

For warranty information, go to www.honeywellaidc.com and click **Resources > Product Warranty**.

Send Feedback

Your feedback is crucial to the continual improvement of our documentation. To provide feedback about this manual, contact the Honeywell Technical Communications department at ACSHSMTechnicalCommunications@honeywell.com.

GET STARTED

This chapter introduces the Basic Terminal Emulator application and includes these sections:

- [About Basic Terminal Emulator](#)
- [Install BasicTE on Your Mobile Device](#)
- [Launch BasicTE](#)
- [Close BasicTE](#)
- [About Status Indicators](#)
- [About BasicTE Applications](#)

About Basic Terminal Emulator

The Basic Terminal Emulator (TE) application emulates VT/ANSI and 5250 terminals on your Honeywell mobile device. For all supported Honeywell-branded mobile devices, the BasicTE program name is “Basic Terminal Emulator”.

The BasicTE application uses Transmission Control Protocol/Internet Protocol (TCP/IP), telnet and SSH network protocols to provide reliable data transfers between the host mobile device and terminal. Implementation of VT/ANSI mobile device emulation supports both 7-bit and 8-bit communication environments. An 8-bit asynchronous character encoding scheme and a 7-bit code extension technique ensures the mobile device is compatible with ANSI and ISO standards.

To facilitate data transfers, the Honeywell mobile device processes characters received from the host mobile device as standard ANSI character codes and functions. When the keys on the terminal are used, the application generates and transmits keyboard codes back to the host mobile device. The terminal supports VT/ANSI mobile device top-row functions, main keypad, editing and auxiliary key emulation. Character codes supported include 7-bit and 8-bit types.

Supported Mobile Devices

These mobile devices support BasicTE:

- Dolphin 75e Handheld mobile devices powered by Android 6.0
- Dolphin CT50 Handheld mobile devices powered by Android 6.0
- CN75/CN75e Handheld mobile devices powered by Android 6.0
- CN51 Handheld mobile devices powered by Android 6.0
- CT60/CN80/CT40 Handheld mobile devices powered by Android 7.0 and higher
- CK65 Handheld mobile devices powered by Android 8.0 and higher
- Thor VM1A powered by Android 8.0 and higher
- Thor VM3A powered by Android 9.0
- EDA50/EDA50K/EDA60K/EDA70 powered by Android 7.0 and higher
- EDA51/EDA61K/EDA71 powered by Android 8.0 and higher

Note: *BasicTE will be supported on all the Android devices from CT50 to D75E , Phoenix (CX75), Mobility edge, and EDA devices.*

Client Pack

The Client Pack contains the following packages:

Enterprise Client pack (ECP): This package contains the Honeywell Launcher, Enterprise Browser and Terminal Emulator applications. The package name starts with "ClientAppsInstall".

Note: *The ECP package is currently deprecated and replaced with SCP and DCP.*

Software Client Pack (SCP): This package contains the Honeywell Launcher, Enterprise Browser and SmartTE applications. The package name starts with "SoftwareClientPack".

Device Client Pack (DCP): This package contains Honeywell Launcher and Enterprise Browser. The package name starts with "DeviceClientPack".

Note: *DCP for CN80G device contains Launcher and Enterprise Browser only.*

About BasicTE Licensing

Using BasicTE requires an application license. There are two license types for embedded software.

- **Perpetual License-** Perpetual licenses operate without expiration and require additional purchase of maintenance to receive version upgrades and tech support.
- **Term License-** Term licenses operate for a fixed period and include maintenance and tech support.

Select the suitable license depending on your requirement:

- Perpetual licenses have the potential of deploying fewer licenses; however, typically the addition of maintenance license is required at least once in the life cycle of a device.
- Term licenses provide the most functionality. They require license deployment at least once every three years. If deploying licenses over time works with your business model, then Term license is likely the best solution for you.

Starting from Q3 2020, Honeywell began pre-licensing Client Pack software on most devices with either a Perpetual or Term license.

License Types

The different types of licenses available are:

- **Demo Licenses** provide software operation for a short period of time, typically 60 days.
- **Perpetual Licenses** operate without expiration for the software version that is authorized and include one year of maintenance. Perpetual license SKUs typically end with -001 (example: DCP-001).

- **Maintenance licenses** provide software version upgrades and tech support for a defined period. SKUs typically end with -SFTx, where x indicates the number of years (example: DCP-SFT3). Maintenance Licenses are to be used in conjunction with Perpetual licenses.
- **Term Licenses** provide software operation, software version upgrades, and tech support for a defined period. SKUs typically end with -SFTx, where x indicates the number of years (example: DCP-SFT3). Term and Maintenance licenses are delivered via the same SKU.
- **Subscription or Software As A Service** does not require deployment of a license. The customer receives access to a connection for a defined period. Access is typically controlled through username and password. Example of Subscription service: Operational Intelligence

If a demo version of the BasicTE application was preinstalled on your Honeywell mobile device, you need to purchase an application license to use BasicTE once the demo period (60 days) has expired.

Some devices are pre-licensed with one year term. When the term ends, you must purchase a new license for the software to work.

If BasicTE was not preinstalled on the mobile device, you need to install the application and purchase an application license to use BasicTE, once the demo period (60 days) has expired. See [Purchasing Licenses](#) for details.

If you are upgrading your mobile device from Android 4.4 to Android 6.0, you do not need to reinstall the license. The license installed for Android 4.4 will work for Android 6.0.

About Upgrades

To upgrade the BasicTE application on the mobile device, you must have a valid application license and an active maintenance license installed. Application licenses include one year of maintenance upgrades starting from the time the license is activated. Maintenance must be renewed before the end of the first year or before the current maintenance license expires, failing which a new application license must be purchased for utilizing any application upgrades.

About Demo Licenses

After you install BasicTE, the application runs in demo mode for 60 days or until you purchase an application license. During the 60-day demo period, a demo mode message box appears when you launch BasicTE. The message displays the days remaining on the demo license. Select **OK** to dismiss the demo message and use the application.

After 60 days, a license expired message box appears informing you the free trial period has come to an end. Select **OK** to dismiss the message and close the application.

For information on purchasing and installing licenses, contact your Honeywell representative.

How to Identify the Active License Type

If a license is active on the Honeywell mobile device, you can identify the license type from the About screen in the BasicTE application.

To View License Information

1. Open the BasicTE app.
2. Touch the three dots  in the upper right corner.
3. Select **About**. The license type is identified in the *Type* field and in the extension of the *Feature* name.
 - **Clientpack.d.demo**
The “.d.demo” extension indicates a demo license.
 - **Clientpack.d, icp.emulator.browser.d**
The “.d” extension indicates a permanent application license.
 - **Clientpack.maint.d**
The “.maint.d” extension indicates a maintenance license.

About Honeywell License Manager

You can use the Honeywell License Manager to download and distribute your BasicTE licenses.

To Download License Manager

1. Go to www.honeywellaidc.com.
2. Select **Resources > Downloads > Software**.
3. Click on the *Technical Support Downloads Portal* link, <https://hsmftp.honeywell.com>.
4. Create an account if you have not already created one. You must login to download the software.
5. Install the *Honeywell Download Manager* tool on your PC prior to trying to download any files. The link for the Honeywell Download Manager is located in the Note above the software tree.
6. Locate **License Manager** in the Software directory:
Software > Software and Tools > Emulators Browsers and Tools > License Manager > Current.
7. Select **Download**. Follow the prompts to download the application.
8. Refer to the License Manager online help for information on working with licenses.

About BasicTE and Network Protocols

BasicTE applications use the following network protocol options. For network configuration options, refer to your mobile device user manual.

Protocol	Description
TCP/IP	The mobile device running BasicTE communicates through access points directly connected to the host mobile device.

Install BasicTE on Your Mobile Device

The BasicTE application for Android devices is part of Software Client Pack (SCP) and Device Client Pack (DCP)

The DCP/SCP bundle installs three applications on the mobile device: the BasicTE application, Enterprise Browser, and Honeywell Launcher. If DCP/SCP did not come preinstalled on the mobile device, you can download the software bundle from www.honeywellaidc.com.

For a list of prerequisites for each device, refer to the software release notes.

Note: *Before attempting to download and install software, see “[Supported Mobile Devices](#)” and “[Client Pack](#)”.*

Note: *The mobile device must have power for the entire length of the installation process or it could become unstable. Do not attempt to remove the battery during the process.*

To Download DCP/SCP

1. Go to www.honeywellaidc.com.
2. Select **Resources > Downloads > Software**.
3. Click on the *Technical Support Downloads Portal* link, <https://hsmftp.honeywell.com>. Note that you will need to create an account to download any Honeywell software.
4. Create an account if you do not already have one. You must login to download the software.
5. Install the *Honeywell Download Manager* tool on your PC. The manager is required to download software.
6. **Select particular device in hsmftp to download the DCP/SCP Package.**
7. Select the **DCP/SCP** software bundle for your device.
8. Select **Download** and follow the prompts to download the application.

To Install DCP/SCP

1. Copy the .zip file from your PC to the **\Internal Storage\honeywell\autoInstall** folder on the mobile device.
2. Touch **All Apps > AutoInstall**.
 - Verify **Enable AutoInstall** has a check mark in the box.
3. Touch Verify Apps.
 - Verify **Verify Apps** has a check mark in the box.
4. Click on **Packages upgrade**.

Optional Installation Method

1. Copy the .zip file from your PC to the **\Internal Storage\honeywell\autoinstall** folder on the mobile device.
2. Touch **All Apps > AutoInstall**.
 - Verify **Enable AutoInstall** has a check mark in the box.
3. Touch **Packages upgrade**. The mobile device automatically initiates a reboot and installs the software.

Launch BasicTE

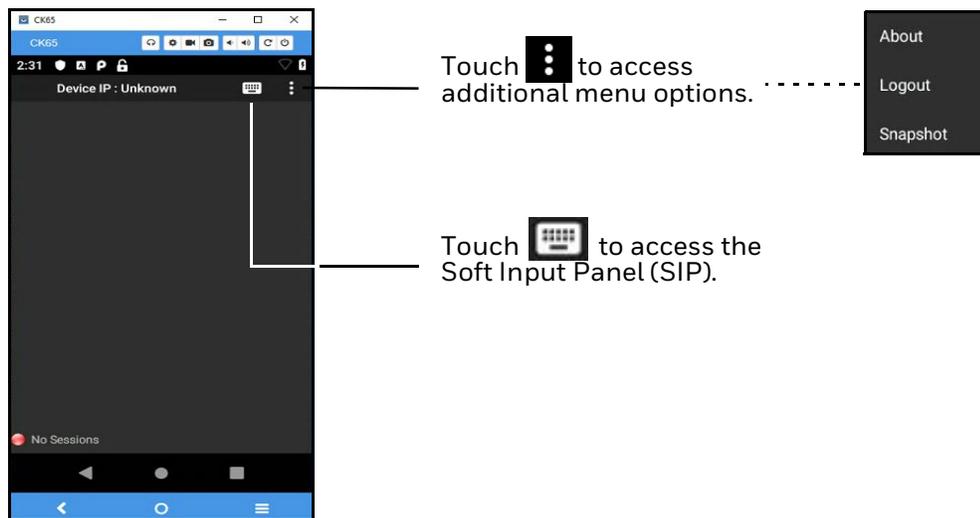
You can start BasicTE manually or you can use the Configure Autorun Power tool to set BasicTE to automatically launch when you power on the mobile device.

Note: If the BasicTE application is within a 60-day demo period, a demo mode message box appears when you launch the application. The message displays the days remaining on the demo license. Select OK to dismiss the message and use the application. To learn more about application licensing, see "[Client Pack](#)" on page 3.

To Start BasicTE Manually

- Touch **All Apps > Terminal Emulation**.

After BasicTE initializes, the main screen appears.



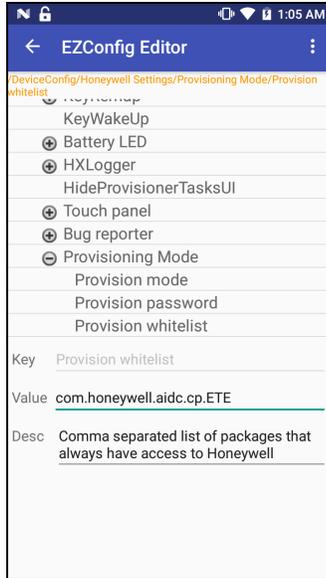
BasicTE Main Screen

During BasicTE working sessions, useful status information appears at the top and bottom of the screen. To learn more, see "[About Status Indicators](#)" on page 11.

Note: By default, BasicTE screens show white text on a black background. The content and options in each screen depend on the installed hardware options in your mobile device.

Note: Always Turn ON the Provisioning mode to allow the application to have extra privileges (Provisioning mode option is available under Honeywell Settings in Settings.)

You can also whitelist the BasicTE application providing the package name of BasicTE in DeviceConfig.xml file as mentioned below.



Provisioning Whitelist BasicTE

If you do not, the BasicTE application will close with a dialog prompt “BasicTE App is not whitelisted”.

About Configure Autorun

The Configure Autorun app is used to specify the applications you want automatically launched after a mobile device reboot. Applications that can be set to run automatically are listed on either the *Normal* screen or the *Autorun* screen. You can toggle between the two screens by selecting the heading. The heading that the app appears under indicates if it has been set to automatically run after a reboot. If an application is set to auto-run, it is moved from the *Normal* screen to the *Autorun* screen.

To auto-start BasicTE using Configure Autorun

1. Touch **All Apps**  > **Power Tools**  > **EZConfig** .
2. Select **Configure Autorun** .
3. Select **Normal** if it is not already selected.
4. Touch and hold **Terminal Emulator**.
5. Select **OK** to confirm. The app now appears on the Autorun tab instead of the Normal tab.

Close BasicTE

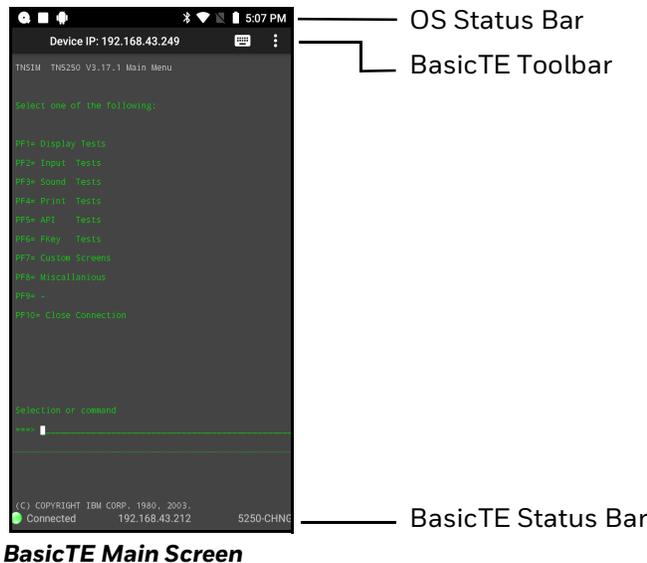
When BasicTE is running, you can touch the three dots  in the upper right corner of the screen, and then select Logout to close the application.

Note: *By default, BasicTE requires a password to exit the application. The default password is cr52401. To customize the exit password or change the application exit behavior, see "[Configure the BasicTE Exit Password](#)" on page 22.*

About Status Indicators

The status bar at the top of the screen provides information relevant to the operating system and mobile device hardware such as the battery charge level, network connection type and network signal strength. To learn more about the status icons and their meaning, see the user manual for your specific mobile device model.

When BasicTE is running, the Toolbar located at the top of the screen and the status bar located at the bottom of the screen provide real time feedback on the connection status and access to additional options.



BasicTE Main Screen

About the Toolbar

The BasicTE Toolbar provides access to the following:

- **Terminal IP Address or Device IP Address**
If no session is in process, “No Session” shows.
- **SIP Icon** 
Select to show / hide the onscreen keyboard. To learn more, see ["About the Default Soft Input Panels" on page 66](#).
- **Menu Icon** 
Select to access additional options and information about the software (e.g., About, SIP Options, Logout, Session Name Running). The content of the menu changes depending on if a session is active and if the BasicTE application is being managed through the Honeywell Launcher.



BasicTE Toolbar Sample

Access the About Screen

You may need to know the BasicTE version if you are upgrading or if you need to contact Product Support.

- Touch  on the BasicTE application screen, and then select **About**.

The BasicTE version is shown just below the program name. License information also appears on the About screen (i.e., Feature, Status, Type, Version and Expiration Date). To return to the main screen, touch the arrow next to the TE icon.

About the Connection Status Bar

At the bottom of the BasicTE screen, the connection status of the current session appears. When a session is running the following information is shown:

- **Connection Status**
This indicates the status of the connection between the mobile device and host or server (i.e., Connected, Re-connecting, or No Sessions).
- **IP Address**
This is the IP Address of the host or server that the mobile device is trying to connect to for the session.



BasicTE Connection Status Bar Sample

Note: When trying to reconnect, the connection icon flashes red and yellow.

About BasicTE Applications

This section describes how to use the Basic Terminal Emulator application for your particular mobile device.

For the BasicTE VT/ANSI application, BasicTE emulates VT100, VT220, VT320, VT340, or ANSI terminals.

For the BasicTE 5250 application, BasicTE emulates the IBM-5291-1 and IBM-5292-2 mobile devices.

VT/ANSI Alert Sounds

In VT/ANSI emulation, alerts occur when the host sends down a bell character (\x07). The default error sound is the critical.wav file located in **/Internal Storage/honeywell/ETE/Media**. You can replace this file if you want to play a different sound.

About 5250 Applications

This section describes several features of the BasicTE 5250 emulation mode.

Special Function Keys

This section describes the special function keys.

AID-Generating Keys

AID-generating keys generate AID codes that go in the display data stream to the host system. They alert the host system that the application server or controller requires some action. BasicTE emulates all of the AID-generating keys on a 5250 Display Station.

AID-Generating Keys

Key	Description
Clear	The system environment determines the results of this key. If the mobile device is in session, [CLEAR] issues the AID code hex BD, which requests the host system issue a Clear Unit command to the mobile device to clear the display. If not in session, [CLEAR] clears the entire display regeneration buffer.
Enter/Rec Adv	Enters information.
F1-F24	User-defined command functions. Refer to your application's user manual for details on the functions.
Help (non-error state)	Issues a hex F3 AID byte to the host system.
Roll Up and Roll Down	Roll display up or down one page. Roll Up issues AID code hex F5. Roll Down issues AID code hex F4.

Editing Keys

Editing keys have functions assigned to them by the application software in use. Editing keys are Find, Insert, Next Screen, Previous Screen, Remove, and Select. See [Appendix B](#).

Field Exit Key

Field Exit exits an input field and moves the cursor to the beginning of the next input field. If you press this key while the cursor is between characters, all characters in the field to the right of the cursor are erased.

Signal Keys

Signal keys cause a Signal command to go from the controller to the host system.

Signal Keys

Key	Description
Attention	Press this key to alert the host system that the function request is not honored. Attention is valid when the keyboard is locked or unlocked. It does not change the keyboard state or the cursor location.

Special Control Keys

Use special control keys to change operator-generated information in the display. These keys do not work when the keyboard is locked.

Special Control Keys

Key	Description
Clear	The system environment determines the results of this key. If the mobile device is in session, [CLEAR] issues the AID code hex BD, which requests the host system issue a Clear Unit command to the mobile device to clear the display. If not in session, [CLEAR] clears the entire display regeneration buffer.
Delete	Deletes the character in the position where the cursor was located.
Erase Input	Clears all fields to nulls, and cursor moves to the first input position on screen. This command does not erase protected fields. If you press this key when the screen shows only protected fields, the cursor returns to the home position.
Error Reset	Restores the original data on the error line of the display and resets the state.
Hex	Enters hexadecimal codes from the keypad to generate EBCDIC characters needed for input or display.
Home	Moves the cursor to the position specified by the insert cursor (IC) address.
Insert	Sets or turns off the insert mode for the input field the operator has the cursor in. The operator must reset the insert state before exiting it by either pressing Reset or Insert again.

Special Host Key

The special 5250 host key is System Request.

Special Host Keys

Key	Description
System Request	Data on the error line is saved, the error line is cleared, a column separator and underscore field attribute are supplied to column 1 of the error line, and the cursor is located under column 2 to begin polling keystrokes.

Additional Functions

This table lists additional operations you can perform on your mobile device. About

5250 Additional Functions

Key	Description
↵ (New Line)	Moves the cursor to the first unprotected character position of the first line in the screen. If the screen is a protected field, the cursor returns to the home position.
Dup (duplicate enabled fields only)	Controller repeats hex "1C" from the cursor position to the end of the field (appears as an overstruck asterisk).
Field-	Advances cursor to the previous input field. For numeric fields, makes the input a negative number.
Field+	Advances cursor to the next input field. For numeric fields, makes the input a positive number.
Field Mark	This is valid within any unprotected entry input field in which the Dup or Field Mark key is allowed (FFW bit 3 set to on). The Field Mark character (X' 1E') is displayed as an overscore on IBM 5251 Display Stations and as a space on all other supported workstations. If an operator presses the Field Mark key in an entry field that does not allow the Dup or Field Mark key, operator error 0019 is posted. The Field Mark code point is allowed in an outbound data stream.
Forward Tab	Moves the cursor to the first position in the next input field.

VT/ANSI Applications

This section describes several features of VT/ANSI mode.

Main Keypad

The VT/ANSI main keypad consists of standard keys and function keys. Standard keys generate letters, numbers, and symbols. Function keys generate special function codes. The following table describes the keys.

VT/ANSI Main Keyboard

Key	Description
Delete	Operation depends on how the DEL to BS option is set in the TE configuration menus. The key either sends a delete (DEL, 7F hexadecimal) or a backspace (BS, 08 hexadecimal).
Enter	Sends either a CR character (0D hexadecimal) or a CR character (0D hexadecimal) and an LF character (0A hexadecimal), depending on the set or reset state of line feed or new line mode (LNM).
Shift	Used with other standard keys to send uppercase characters.
Space bar	Sends an SP character (20 hexadecimal).
Tab	Sends a horizontal tab (HT) character (09 hexadecimal).
Compose character	Not supported.

VT/ANSI Editing Keypad

The editing keypad has editing keys and cursor (arrow) keys.

Editing Keys

Editing keys have functions assigned to them by the application software in use. Editing keys are Find, Insert, Next Screen, Previous Screen, Remove, and Select. See [Appendix B](#).

VT/ANSI Function Keys

VT220/320/340 mobile devices support function keys [F1] to [F20]. Keys [F1] to [F4] are used for hold screen, print screen, set-up, data/talk, and break. For VT220/320/340, [F1] to [F4] are PF1 to PF4.

Function Key Mapping

Function Keys [F1] to [F20] can be remapped. See [Key Mapping Functionality in TE](#) on page 28.

Transmission Mode

You can toggle from Character mode to Block mode by sending the 10h command from the server to the device. For more information see [Block Mode](#) on page 44.

Local Edit Mode

If your application software program supports local editing, you can use the mobile device in Local Edit Mode, a feature of the VT330/ VT340 mobile device.

CONFIGURE AND MANAGE BASICTE

This chapter explains how to configure the Basic Terminal Emulator application by editing the `te_settings.xml` configuration file on the mobile device.

The chapter includes these sections:

- [Configure BasicTE with EZConfig](#)
- [Configure General Application Settings](#)
- [Configure Options for Each Session](#)
- [Block Mode](#)
- [Use the SnapShot Feature](#)

Configure BasicTE with EZConfig

Configure the BasicTE application for your handheld mobile device by modifying the te_settings.xml file that resides in the **\InternalStorage\Honeywell\EZconfig\generated** folder on the device. The xml file will be generated only when user clicks on generate option in the device EZConfig.

You can customize the settings in the file using one of the following methods:

- Open and edit the file directly on the mobile device using the standard editor that is part of the EZConfig Power Tool application.
- Copy the .xml file to a desktop mobile device, modify it with the optional advanced EZConfig Editor, and then transfer the file back to the device.
- Configure BasicTE using Enterprise Provisioner tool (EP). Refer to [Enterprise Provisioner \(EP\)](#) section for more information.

Note: *The standard editor is a feature of the EZConfig Power Tool application included on the mobile device. The advanced EZConfig editor is part of the optional EZConfig for Mobility software suite that is available for download from www.honeywellaidc.com. This manual explains editing the .xml file using the standard editor provided on the mobile device. To learn more about the advanced EZConfig editor, see the Dolphin Power Tools Versions 4.x User Guide for devices powered by Android, available for download at www.honeywellaidc.com.*

Enterprise Provisioner (EP)

Enterprise Provisioner (EP) is a Windows software application to create provisioning tasks for Honeywell Android devices.

The Provisioning includes:

- Device settings
- OS updates
- Installing files (APK, Licenses etc)
- Run an application
- File operations on the device
 - Create file/directory
 - Rename file/directory
 - Copy file/directory
 - Delete file/directory
 - Delete directory content
- Wait for network, reboot, intent
- Reboot the device
- Delay provisioning for X number of milliseconds

Once the settings have been changed and provisioning tasks have been defined, you can generate 2D barcodes that a device can scan to be provisioned. The application has a built-in HTTP server for transferring files to devices. The application barcode also supports remote file servers such as Staging Hub.

Download Enterprise Provisioner

To download Enterprise Provisioner

1. Go to the Honeywell software download website at <https://hsmftp.honeywell.com>.
2. Sign in or create an account if you don't already have one.

Note: You need to download and install the Download Manager. Click on the link and follow the screen prompts.

3. Locate the Enterprise Provisioner software in the directory and download.

Install Enterprise Provisioner

To install the software, run the EP_installer.msi file that was downloaded.

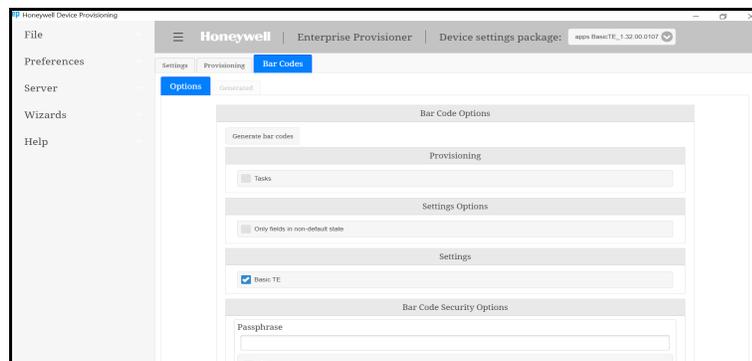
Start Enterprise Provisioner

Start Enterprise Provisioner by clicking the desktop shortcut that was created during installation or from the Start menu:

- Click on **Start > Honeywell > Enterprise Provisioner**.
- If you are using the Staging Hub Foundation, you can start Enterprise Provisioner directly from the Staging Hub Console: Click on **Tools > Start Enterprise Provisioner**.

Honeywell Device Provisioning Using Enterprise Provisioner

Select the Settings/Provisioning/Barcodes package on the top of the screen, then use the tabs on the screen to change menus and create tasks for the device selected.



Enterprise Provisioner Interface

To configure TE from EP, the user should generate barcode with default values, which should be a complete file.

Note: Use the zoom option to make everything on a page larger or smaller. To make everything on the page larger, hold Ctrl and push the mouse wheel up (forward). To make everything on the page smaller, hold Ctrl and push the mouse wheel down (backward).

How to Edit the XML File

You only need to open and edit the te_settings.xml file in EZConfig if you want to change the BasicTE application default configuration.

Open the XML File

1. Touch **All Apps**  > **Power Tools**  > **EZConfig** .
2. Touch  next to “EZConfig”.
3. Select **Editor**.
4. Touch **OPEN XML** > **ezconfig** > **generated**.
5. Touch **te_settings.xml** to open the file for editing.

Edit the XML File

1. Touch the + icon to expand the sections and locate the key you want to edit.
2. Select the key from the section tree, and then touch inside one of the fields (e.g., Key, Value, or Desc) to edit the information. A selected field is underlined in green. If a field is shaded in gray, the text cannot be edited.
3. Edit the text. If you want to close the onscreen keyboard and edit another field, press the **Back** button, and then select the other field.
4. Press  and then select **Save**. Saving does not apply the changes to the application.
5. Touch  again and then select **Update Configure**. If prompted, reboot the mobile device to apply the changes.

Generate a XML File

Generate a new copy with the Generator feature in the EZConfig Power Tool app.

To Generate a Copy

1. Open **EZConfig**.
2. Touch  next to “EZConfig”.

3. Select **Generator**. A new te_settings.xml file is automatically created and saved in the **\Internal Storage\honeywell\EZConfig\generated** folder.

Note: Once user modifies the Default settings, TE will always generate xml file with modified values, and not the default values.

Configure Multiple Devices Using Configuration Barcodes

Once your first device is configured, you can generate configuration barcodes and use them to configure other devices with the same settings.

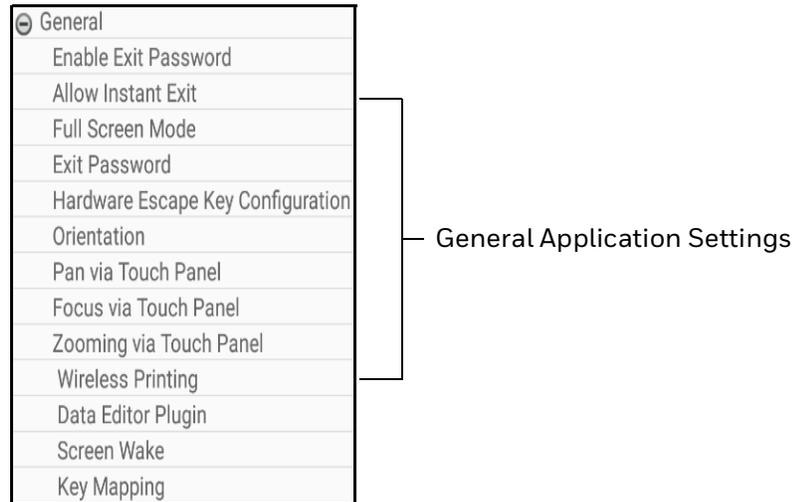
To Create a Configuration Barcode

1. Modify te_settings.xml file using EZConfig Editor (as described above) in the first device and save the file.
2. Copy .xml file from **/device/Internal Storage/honeywell/EZConfig/generated** folder to a local PC.
3. Open the file with EZConfig Editor and generate the barcodes by clicking on the Generate Barcode  icon.
4. Print the barcodes and scan them with the other devices to apply the same configuration.

When the barcode is scanned, EZConfig creates the te_settings.XML file located at the **/Internal Storage/honeywell/persist** folder in the device. When the application restarts, BasicTE will read the configuration file from persist folder.

Configure General Application Settings

Once the `te_settings.xml` is open in the Editor, expand the General section by selecting the plus sign (+) to view the application settings.



BasicTE General Settings

Configure the BasicTE Exit Password

By default, you must use a password (cr52401) to exit the BasicTE application, but you can set the exit behavior to one of the following options:

- Require a custom password to exit.
- Request confirmation to exit with no password required.
- Exit without requiring a password or a request to confirm exit.

Note: *If both the Exit Password and Instant Exit settings are enabled, the Exit Password value takes priority. If both the Exit Password and Instant Exit settings are disabled, the application prompts to confirm exit.*

To Enable an Exit Password or Request to Confirm Exit

1. Open `te_settings.xml` configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **TerminalEmulator** and then **General** to expand the sections.
3. Select **Enable Exit Password**.
4. Edit the *Value* field:
 - If the value is set to **False**, the application requests confirmation before exiting the application. No password is required.
 - If the value is set to **True**, the application prompts the user for a password before exiting the application.

5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

To Change the Default Exit Password

1. Open te_settings.xml configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **TerminalEmulator** and then **General** to expand the sections.
3. Select **Exit Password**.
4. Enter a string of up to 10 characters for the exit password. The default is cr52401.
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

To Enable an Instant Exit with No Password or Confirmation Request

1. Open te_settings.xml configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **TerminalEmulator** and then **General** to expand the sections.
3. Select **Allow Instant Exit**.
4. Type **False** in the *Value* field.
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Configure Hardware Escape Key

If you press the 'Esc' hardware key, Escape keycode (1b) followed by the Navigation bar on any physical hardware keypad supported devices, the back key functionality will be triggered on the application.

You can modify the Hardware Escape Key functionality as mentioned below:

- **0 = Escape followed by Back as per OS functionality**
- **1 = Only Escape**

Configure the Orientation

By default the screen orientation automatically switches between landscape and portrait mode if the mobile device is physically rotated. You can change the default screen orientation behavior by editing the `te_settings.xml` file.

To Change the Default Screen Mode (Orientation) in BasicTE

1. Open `te_settings.xml` configuration file in the standard editor. For help, see "[Open the XML File](#)" on page 20.
2. Touch **TerminalEmulator** and then **General** to expand the sections.
3. Select **Orientation**.
4. Type **0, 1, 2, 3,** or **4** in the *Value* field.
5. When you are finished making changes, touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

For more information on these values, see the next table.

Orientation Values

Value	Descriptions
0	Default value. Automatically switches between Landscape mode and Portrait mode depending on how the mobile device is rotated. Any other value excluding 1, 2, 3, or 4 is considered to be the same as the default value.
1	Landscape Left When the key value is set to 1, BasicTE opens in Landscape Left mode. Rotating the mobile device does not change the orientation.
2	Landscape Right When the key value is set to 2, BasicTE opens in Landscape Right mode. Rotating the device does not change the orientation.
3	Portrait When the key value is set to 3, BasicTE opens in Portrait mode. Rotating the device does not change the orientation.
4	Landscape Sensor Automatically switches between Landscape Right and Landscape Left depending on how the mobile device is rotated.

Pan the BasicTE Viewport by Touching the Screen

Depending on the number of rows and columns configured in `te_settings.xml` file, you may need to pan the screen to scroll through all the information. Simply drag your finger across the screen or use a vertical or horizontal swiping motion.

Pan via Touch Panel is enabled by default and applies to all sessions when enabled. You can enable or disable this feature by modifying the `te_settings.xml` file.

To Disable Pan via Touch Panel

1. Open `te_settings.xml` configuration file in the standard editor. For help, see "[Open the XML File](#)" on page 20.
2. Touch **General**.
3. Touch **Pan via Touch Panel**.
4. Edit the value to set the mode:
 - **0 = Disabled**.
 - **1 = Viewport Mode** (default). The screen moves in the same direction you drag or swipe on the touch panel.
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Move the Cursor Location by Touching the Screen

You can enable the Focus via Touch Panel feature, which moves the cursor to any entry field when you touch the mobile device screen at the field location.

Focus via Touch Panel is disabled by default and applies to all sessions when enabled. You can enable or disable this feature by modifying the `te_settings.xml` file.

Note: *If you enable this feature when using VT-ANSI emulation, the entire screen is defined as a field.*

To Enable Focus via Touch Panel

1. Open `te_settings.xml` configuration file in the standard editor. For help, see "[Open the XML File](#)" on page 20.
2. Touch **General**.
3. Touch **Focus via Touch Panel**.
4. Edit the value to set the mode:
 - **0 = Disabled** (default). Screen taps are ignored.
 - **1 = Enabled**. The entire screen is treated as a field and the cursor should move in response to a tap.
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Zoom In or Out on the Screen with a Pinching Gesture

You can zoom in or out on the BasicTE screen by making a pinching gesture. Place two fingers close together on the screen, drag them apart to zoom in, and then drag them back together to zoom out. Zooming in decreases the total number of rows and columns displayed on the screen but increases the font size for easier viewing.

Zooming via Touch Panel is enabled by default and applies to all sessions. You can enable or disable this feature by modifying the `te_settings.xml` file.

To Disable Zooming via Touch Panel

1. Open `te_settings.xml` configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **General**.
3. Touch **Zooming via Touch Panel**.
4. Edit the value to set the mode:
 - **0 = Disabled**. Screen taps are ignored.
 - **1 = Enabled** (default). The entire screen is treated as a field and the cursor should move in response to a tap.
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Configure Full Screen Mode

This setting enables or disables the Full Screen Mode.

To Configure Full Screen Mode

1. Open `te_settings.xml` configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **General**.
3. Touch **Configure Full Screen Mode**.
4. Edit the value to set the mode:
 - **True = Enable**. When enabled, application will launch in Full Screen Mode and OS status bar will hide automatically.
 - **False = Disable** (default).
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Wireless Printing

You can enable Bluetooth (Wireless) Printing in BasicTE application.

To Configure Wireless Printing

1. Open `te_settings.xml` configuration file in the standard editor. For help, see "[Open the XML File](#)" on page 20.
2. Touch **General**.
3. Touch **Configure Wireless Printing**.
4. Edit the value to set the mode:
 - **True = Enable**. Allows to send printing commands via Bluetooth.
 - **False = Disable** (default).
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Note: Currently, printing support is available only in ANSI emulation, both Line mode and Screen mode.

Enable Barcode Data Editor Plugin in TE

Data Editor Plugin option will allow user to add the plugin in order to modify the barcode scan data. Data Editor Plugin is a configurable option. If the user wants to configure Data Editor Plugin, the user should define 'AppPackageName/PluginClassName' in the value field.

Example: AppName: ScanResultReceiver

PackageName: com.sample.scanresultreceiver

Classname: DataEditingPlugin

You need to enter **com.sample.scanresultreceiver/DataEditingPlugin** in the value field provided under the setting.

Screen Wake

When the user enables this option, the device screen will always wakeup when TE is opened.

To Enable Screen Wake

1. Open `te_settings.xml` configuration file in the standard editor. For help, see "[Open the XML File](#)" on page 20.
2. Touch **General**.

3. Touch **Screen Wake**
4. Edit the value to set the mode:
 - **True = Enable** (default)
 - **False = Disable**
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Key Mapping Functionality in TE

If you enable Key Mapping functionality in TE, it will read CustomKeyboard.xml file from **\Internal Storage\honeywell\ETE\KB** folder, so that mapped key values will be sent from TE.

To Enable Key Mapping Functionality

1. Open te_settings.xml configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **General**.
3. Touch **Key Mapping**.
4. Edit the value to set the mode:
 - **True = Enable**
 - **False = Disable** (default)
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Redefine Function Key Mapping

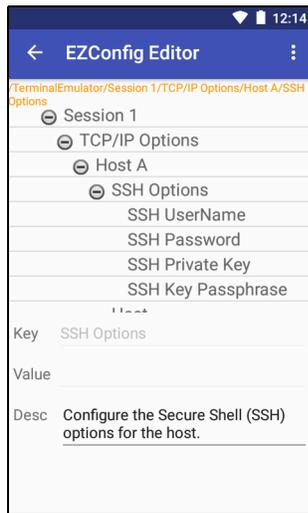
Keys can be remapped using the name (i.e. Escape) with ASCII Code (i.e. 27) or with Hex Code (i.e. \x1b). When using Hex Code, the value should be entered inside curly brackets (**{\x1b}**). For multiple key events, the value should be in square brackets separated by a comma (**[F1, Enter]**).

Configure Options for Each Session

You can configure a set of options for each of the four sessions by modifying the key values in the session section. For example, you can assign each session a custom host name or friendly name.

To Configure Options for Each Session

1. Open `te_settings.xml` configuration file in the standard editor. For help, see "[Open the XML File](#)" on page 20.
2. Select **Session 1**, **Session 2**, **Session 3**, or **Session 4**.
3. Continue to expand the sections under the session until you find the Key you want to modify.



Expanded Session Section in EZConfig

4. Touch a key to select it and change the value as needed.
5. When you are finished making changes, touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

For more information on these settings, see the next table.

TCP/IP Configuration Section Descriptions

Sections	Description	Values
TCP/IP Options	Sets network options for TCP/IP connections. For more information, see "Configure a TCP/IP Connection" on page 15.	
Protocol Options	Sets options for VT/ANSI or 5250 protocols. For more information, see "Configure Protocol Options" on page 17.	

TCP/IP Configuration Section Descriptions

Sections	Description	Values
LCD Parameters	Sets BasicTE screen sizes and the screen cursor behavior. For more information, see "Configure BasicTE Screen Sizes and Cursor Behavior" on page 22.	
Display Options	Sets BasicTE screen behavior (i.e., Prompt on Reconnect). For more information, see "Set BasicTE to Display a Prompt to Reconnect" on page 21.	
Session Name	Sets the customizable host name (or friendly name) for the session.	String of up to 11 characters.

Configure a TCP/IP Connection

You can configure TCP/IP settings for a single host (Host A) for each of up to four different sessions.

1. Open `te_settings.xml` configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Select **Session 1**, **Session 2**, **Session 3**, or **Session 4**.
3. Touch **TCP/IP Options**.
4. Touch **Host A**. The list of configuration items for Host A appears.
 - Host
 - Emulation
 - Port Number
 - Protocol
5. Touch a key to select it and change the value as needed. You may need to expand a section further to view all the relevant keys.
6. When you are finished making changes, touch  and then select **Save**.
7. Touch  again and then select **Update Configure**.

For more information on these settings, see the next table.

TCP/IP Configuration Options for Sessions

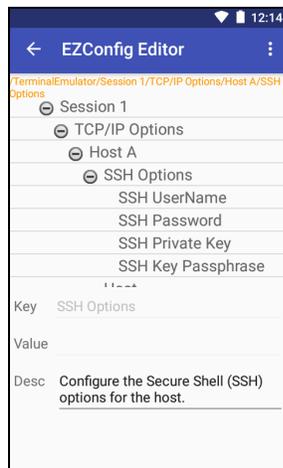
Section/Key	Description	Values
Host	IP address of the application server.	None
Emulation	Select the type of terminal emulation: VT/ANSI or 5250.	VT/ANSI (Default)=1 5250=2
Port Number	Selects the port number you want to use to make a connection to the host mobile device.	0 to 65535. Default is 23.
Protocol	Defines the security protocol to use for data communication.	Telnet (Default)=0 SSH=1

Configure BasicTE for SSH

When using an SSH connection, you can edit the `te_settings.xml` file to include the necessary user name and security inputs (e.g., password, private key) required by the host for the connection.

Note: If you do not configure a user name and password in the `te_settings.xml` file, an SSH Login Page screen appears requiring you to manually enter a user name and password. If you configure a user name but not a password, only the password field on the SSH Login Page that appears is editable.

1. Open `te_settings.xml` configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Select **Session 1**, **Session 2**, **Session 3**, or **Session 4**.
3. Touch **TCP/IP Options**.
4. Touch **Host A**.
5. Touch **SSH Options**.



SSH Options Expanded in EZConfig

6. Touch a key to select it and change the value as needed. You may need to expand a section further to view all the relevant keys.

7. When you are finished making changes, touch  and then select **Save**.

8. Touch  again and then select **Update Configure**.

For more information on these settings, see the next table.

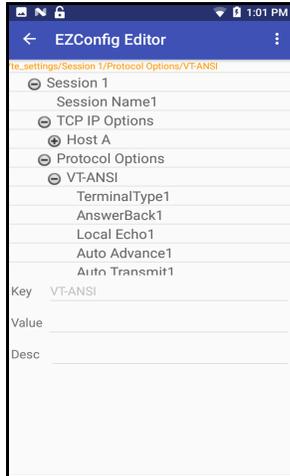
SSH Option Descriptions

Key	Description	Values
SSH UserName	Stored username you are prompted to enter when you choose to connect to Port 22 (SSH) instead of Port 23 (Telnet).	0 to 80 characters. Default is a null string.
SSH Password	Stored password you are prompted to enter when you choose to connect to Port 22 (SSH) instead of Port 23 (Telnet).	0 to 80 characters. Default is a null string.
SSH Private Key	Key file SSH uses for private key authentication. Specify the relative path from \Internal Storage\honeywell\ETE\SSH\, or prefix the absolute path with \.	0 to 80 characters. Default is a null string.
SSH Key Passphrase	Passphrase required to access the SSH Private Key file. If blank, BasicTE assumes no passphrase was configured.	0 to 80 characters. Default is a null string.

Configure Protocol Options

You can set protocol options for each of up to four different sessions.

1. Open `te_settings.xml` configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **Session 1**, **Session 2**, **Session 3**, or **Session 4**.
3. Touch **Protocol Options**.
4. Select **VT-ANSI** or **5250**. See protocol options below.



Protocol Options Expanded in EZConfig

5. Change the values as needed.
6. When you are finished making changes, touch  and then select **Save**.
7. Touch  again and then select **Update Configure**.

VT-ANSI Protocol Options

Option	Description	Values
Term Type	Enables user to enter a character string that will be sent to the Host as a part of TermType Host Parameter. This is the client type string that determines the specific client to emulate. The user can configure VT200, VT52, VT100, VT340, and ANSI as terminal types. Each host emulation type has its own default type. If nothing is configured, xterm will be sent.	Default value will be empty.
AnswerBack	When enabled, the mobile device sends the specified character string to the host in response to an inquiry (hexadecimal 05). When ENQ is sent, only the first thirty characters of the name are transmitted back to the host. For more information, see About the Answerback Character String .	Range is 0 to 30 characters. Default is the Mobile device model + Serial number.

VT-ANSI Protocol Options

Option	Description	Values
Local Echo	When enabled, local echo displays characters from terminal memory but not from host memory.	On or Off. Default is Off.
Auto Advance	When scanning barcodes, the cursor moves automatically to the next unprotected field, even if the first input field is not completely filled. If the cursor is on the last input field and a barcode is scanned, it is filled and the cursor moves to the next unprotected field. Note: Block mode must also be enabled to use this option.	1= Enable 0= Disable (default)
Auto Transmit	When scanning barcodes, the entire screen is sent to the host after the user exits the last field on the screen. If the final cursor movement was a backspace or back tab, the data is not sent to the host. If the final cursor movement was pressing a key or scanning a barcode, then it will be sent to the host. The data sent depends on GATM, MATM, and SATM settings. Note: Block mode must also be enabled to use this option.	1= Enable 0= Disable (default)
Backspace Configuration	In Interactive mode (Character mode), Backspace/Delete will be sent to the server. In Edit mode (Block mode), it will be handled locally.	0= Backspace 1= Delete

5250 Protocol Options

Option	Description	Values
Enable Colors	Enable or disable colors in 5250 Emulation.	Enable=1 Disable=0 (default)
Lock Error Message	When enabled, a 5250 Write Error Code command error message is visible by placing the cursor on the error message line. When the RESET key is pressed, the cursor is restored to where it would have been if this option was not enabled (the location specified by a 5250 Insert Cursor command) and the cursor mode option then causes that area of the screen to be visible. When disabled, behavior for the 5250 Write Error Code command error message is normal.	Enable=1 Disable=0 (default)
Destructive BS	Enable or disable Destructive BS.	Enable=1 Disable=0 (default)
Device Name	Enables user to get configured Device Name string in response to the host. Range is 1 to 30 characters.	None
Field Exit on Scan	Enables to perform Field Exit automatically if field is being exited due to barcode scan.	True= Enable False= Disable (default)

5250 Protocol Options

Option	Description	Values
Auto Enter on Scan	Enables to perform Enter automatically when barcode scanned in last field.	True= Enable False= Disable (default)
Auto Tab on Scan	Enables to perform a Tab automatically when barcode scanned in field.	True= Enable False= Disable (default)
Stream on Scan	Enables to scan Stream Scan to multiple field.	True= Enable False= Disable (default)
Scan Length Error	Enables sound and error message in Scan Length Error.	True= Enable False= Disable (default)

About the Answerback Character String

Enable Answerback to send a character string to the host in response to an inquiry (hexadecimal 05). The string can be 0 to 30 characters long and possibly longer if you use wildcards as described in this section. Default is the mobile device serial number.

Note: *Although the string can be longer than 30 characters, only the first thirty characters of the name are transmitted back to the host when ENQ is sent.*

Use the SIP to enter the character string. If you enter any of the following control characters, it is sent out. Control strings count as one character.

7-Bit Commands

Use	To Get
<BS>	Backspace When received by the mobile device from the host, the cursor position moves to the left of the current cursor position. When received by the Host from the mobile device, the character in front of the cursor is deleted and the cursor is moved into the vacant position.
<HT>	Horizontal Tab Moves the cursor to the next predetermined position (tab stop) to the right.
<LF>	Line Feed Moves the cursor down one line.
<VT>	Vertical Tab Moves the cursor down one line unless the cursor is outside the scrolling region when the Vertical Tab character is received. The cursor does not move past the bottom of the virtual screen.
<FF>	Form Feed This control character is processed as a line feed in the TE client and advances the cursor down one line.
<CR>	Carriage Return Returns the cursor to the left margin of the row where the cursor is positioned.

8-Bit Commands

Use	To Get
EPA	End Protected Area Ends the protected area in page memory that cannot be edited when forms are created from the host.
SPA	Start of Protected Area Starts the protected area in page memory that cannot be edited when forms are created from the host.

Note: The default answerback string is %Sx. If the answerback string is empty in the te_settings.xml file, the mobile device should respond with the serial number when the host sends an ENQ.

To configure an Answerback string that includes mobile device-specific information, use wildcard characters in the string. For more information on wildcard characters, see the next table.

Wildcard Characters for Answerback

Use	To Get
%Mx	Entire Mac address of the device in capital letters.
%mx	Entire Mac address of the device in lower case letters.
%M1-%M2-%M3-%M4-%M5-%M6	1st through 6th part of MAC address in capital letters.
%m1-%m2-%m3-%m4-%m5-%m6	1st through 6th part of MAC address in lower case letters.
%MO-%M7	Out of boundary values test. The mobile device receives the same string: %MO-%M7.
%m0-%m1:%m6-%M8	Mixed value test. The mobile device receives xx-xx:xx-%M8 where xx refers to the corresponding values of the Mac Address.
%Ix	Entire IP address.
%ix	Entire IP address.
%I1.%I2.%I3.%I4	1st through 4th octet of IP address.
%i1.%i2.%i3.%i4	1st through 4th octet of IP address.
%IO:%i7	Out of boundary values test. The mobile device receives the same string: %IO:%i7.
%i0-%i1:%I3-%I5	Mixed value test. The mobile device receives %i0-xx:xx-%I5, where xx refers to the corresponding values of the IP Address.
%I4.	4th octet of IP address.
%Sx	Entire serial number of the mobile device in capital letters.
%sx	Entire serial number of the mobile device in lower case letters.

Wildcard Characters for Answerback

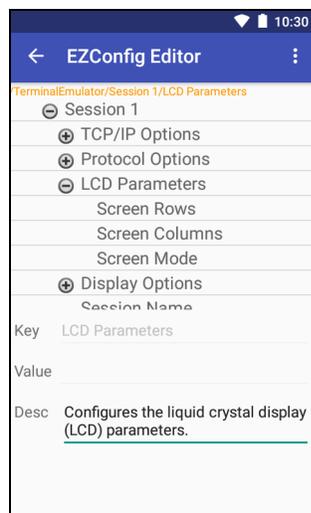
Use	To Get
%s1%s2%s3%s4%s5%s6%s7%s8%s9% sa%sb%sc%sd%se	Entire Mac address of the device in lower case letters.
%S1%S2%S3%S4%S5%S6%S7%S8%S9% Sa%Sb%Sc%Sd%Se	Entire serial number of the device in capital letters.
%SA%SB%SC%SD%SE	Out of boundary values test. The mobile device receives the same string: %Ss:%sS.
%Serial ID:%s7%S8%s9%Sa	Mixed value test. The mobile device receives %Serial ID:XXXXXXXX, where xx refers to the serial number.
ID:%s0%s1%s2%s3%s4%s5%s6%s7%s8%s9 MAC:%m1-%m2-%m3-%m4-%m5-%m6 IP:%i1.%i2.%i3.%i4	The mobile device receives the entire serial number, MAC Address, and IP Address. ID:xxxxMAC:xxxxIP:xxxx
%Wildcard%s	Invalid string test. The mobile device receives the same value: %Wildcard%s.

Configure BasicTE Screen Sizes and Cursor Behavior

You can set the BasicTE screen size and cursor behavior for each of the four available sessions.

To Configure Screen Size and Cursor Behavior

1. Open te_settings.xml configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **Session 1**, **Session 2**, **Session 3**, or **Session 4**. The list of configuration items for that session appears.
3. Touch **LCD Parameters**.



LCD Parameters Expanded in EZConfig

4. Touch a key to select it and change the value as needed.
5. When you are finished making changes, touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

For more information on these settings, see next table.

LCD Parameters Settings

Key	Description	Values
Screen Rows	Number of rows that appear on the screen. The default value of 10 is used if the value configured is less than 1 or exceeds 24.	1 to 24 Default Value is 10.
Screen Columns	Number of columns that appear on the screen. The default value is used if the value configured is less than 1 or exceeds 80.	1 to 80 Default Value is 20.
Screen Mode	Configures how the cursor positions itself on the display. The default value is used if the value configured exceeds 3. For more information, see "About Screen Mode" on page 38 .	Center Cursor = 0 Corner Mode (default) = 1 Page Mode = 2 Lazy Mode = 3
Key Uppercase	When enabled, letters will display on CAPS LOCK (Uppercase).	True= Enable False= Disable (default)

About Screen Mode

Screen Mode defines the cursor position and movement as you scroll through data in the display buffer, which stores data in a standard CRT format as sent from the host mobile device. Use Screen Mode options to optimize your view.

Screen Mode Option Descriptions

Option	Description
Center Cursor	Cursor remains in the center of the screen as you scroll through data. On reaching a boundary of the full CRT screen, the cursor moves past the center of the screen. When the cursor reaches the boundary of the CRT screen, the cursor does not wrap to the next line in the display.
Corner Mode (default)	Cursor remains in the lower-right corner of the screen as you scroll through data, beginning at the upper-left corner of the full CRT screen. Cursor remains there as data advances in the scrolled direction (up, down, right, or left). On reaching a boundary of the full CRT screen, the display and cursor move in the scrolled direction. Cursor stops moving when it reaches the CRT screen boundary and does not wrap to the next line in the display. Use this option when your application uses only the upper-left corner of the full CRT screen.

Screen Mode Option Descriptions

Option	Description
Page Mode	Divides the full CRT screen into predefined “pages” and starts the mobile device display on page 1. Cursor first appears in the upper right corner. As you scroll, only the cursor moves and the data on the screen does not appear to move. When you scroll off the edge of the displayed page, the display snaps to the next (or previous) page. On reaching a boundary of the CRT screen, the cursor stops moving. Because the 24-row by 80-column CRT screen cannot be divided equally, some pages in Page Mode overlap each other and the same information is shown on both pages.
Lazy Mode	Cursor starts in the upper left corner of the screen and moves across the display in the scrolled direction. When the cursor goes beyond the edge of the display, the data moves in the opposite direction to the cursor, which remains at the edge of the display.

Set BasicTE to Display a Prompt to Reconnect

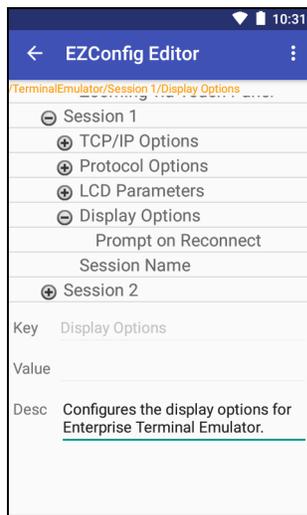
You can configure BasicTE to display a “Connection Failed” message on the screen if the connection between the host and application has been lost or the mobile device goes out of Wi-Fi network range. BasicTE does not try to reconnect until you manually initiate the action by touching RECONNECT in the message window. Enabling this feature reduces network traffic.

When the feature is disabled, no reconnect prompt is initiated and the mobile device continuously tries to reconnect with the host. A “Reconnecting” message appears in the lower left corner of the screen.

The Prompt on Reconnect feature is disabled by default.

To Enable a Prompt Before Reconnecting to the Host

1. Open `te_settings.xml` configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **Session 1**, **Session 2**, **Session 3**, or **Session 4**. The list of configuration items for that session appears.
3. Touch **Display Options**.
4. Touch **Prompt on Reconnect**.



Display Options Expanded in EZConfig

5. Edit the value to change the setting:
 - **0 = Disable** (default).
 - **1 = Enable.** A message appears notifying you of a connection failure between the mobile device and host. BasicTE does not try to reestablish a connection with the host until you touch Reconnect on the screen.
6. Touch  and then select **Save**.
7. Touch  again and then select **Update Configure**.

Barcode Settings

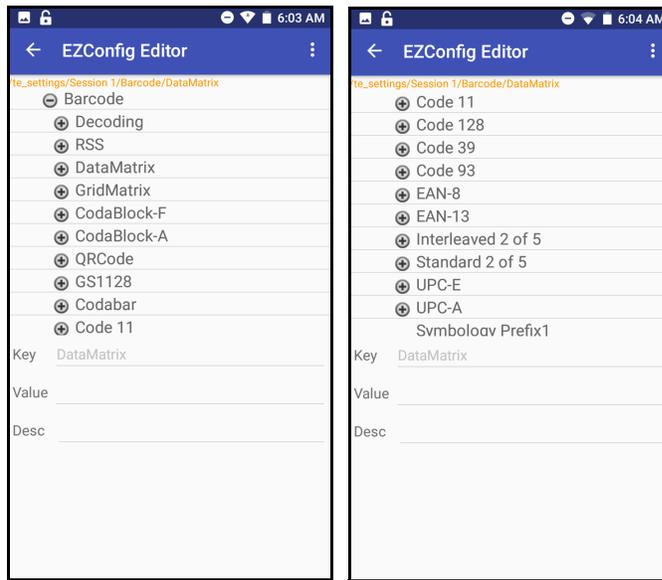
The mapping between messages and barcodes is called Symbology. There are 19 different barcode symbologies available in the EZConfig Editor, which includes:

- UPC-A
- UPC-E
- Standard 2 of 5
- Interleaved 2 of 5
- EAN-13
- EAN-8
- Code 93
- Code 39
- Code 128
- Code 11
- Codabar
- GS1128
- QRCode
- CodaBlock-A
- CodaBlock-F
- GridMatrix
- DataMatrix
- RSS
- Decoding

To Configure Barcode Symbology

1. Open te_settings.xml configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **Session 1**, **Session 2**, **Session 3**, or **Session 4**. The list of configuration items for that session appears.
3. Touch **Barcode**.

4. Select the barcode symbology from the list available and change the setting as desired.



Barcode Expanded in EZConfig

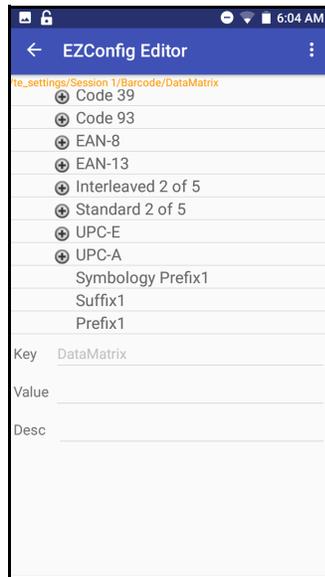
5. Touch  and then select **Save**.
6. Touch  again and then select **Update Configure**.

Prefix and Suffix

A prefix or suffix can be appended to the scanned barcode data. By default, there is no prefix or suffix (value is empty).

To set a Prefix and/or Suffix for a barcode

1. Open te_settings.xml configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **Session 1**, **Session 2**, **Session 3**, or **Session 4**. The list of configuration items for that session appears.
3. Touch **Barcode**.



Barcode Expanded in EZConfig

4. Select **Prefix** or **Suffix** and set the value. Range of characters is 00 to FF.

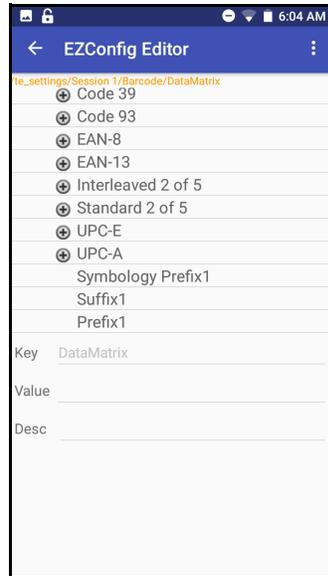
Symbology Prefix

The Symbology Prefix or AIM ID of barcode symbology.

To set a Prefix and/or Suffix for a barcode

1. Open te_settings.xml configuration file in the standard editor. For help, see ["Open the XML File" on page 20](#).
2. Touch **Session 1**, **Session 2**, **Session 3**, or **Session 4**. The list of configuration items for that session appears.

3. Touch **Barcode**.



Barcode Expanded in EZConfig

4. Select **Symbology Prefix** and set the value.
 - **True = Enable**
 - **False = Disable (default)**

Block Mode

Block Mode enables the device to send an entire block of data to the host at one time instead of sending each character. To enable Block Mode the server must send the 10h command to the device (Block Mode is not configured in te_settings.xml file) and the device automatically switches to Block Mode.

Use the SnapShot Feature

You can use the SnapShot feature to take high-resolution pictures. For example, you might use SnapShot to take a picture of damaged goods in a warehouse.

To Access the SnapShot Feature

1. Open the BasicTE app.
2. Touch the three dots  in the upper right corner.
3. Select **SnapShot**.

Once the SnapShot interface is opened, the camera turns on and the screen shows streaming video. From this screen you can:

- Touch  to go back to the main TE screen.

- Take a picture by touching  or pressing **Enter**.
- Upload a picture from your device to the host by touching . See [Upload a SnapShot File](#) for more info.
- Adjust the flash mode by touching :
 -  Flash ON
 -  Flash AUTO
 -  Flash OFF

Once you have taken a picture, you can:

- Discard the image by touching .
- Save the image by touching .
- Add text by touching . Text is limited to 40 characters. After typing your text, touch **OK**. The text is added to the bottom of the image. To edit the text, touch  again, edit the text, then click **OK**.

Upload a SnapShot File

To Send a SnapShot to the Host

1. Open the BasicTE app.
2. Touch the three dots  in the upper right corner and select **SnapShot**.
3. Touch  and select the check box for each image you want to send to the host.
4. Touch  to send the images.

On this screen you can also delete images from your device by touching .

Note: Images uploaded to the host will be automatically deleted from your device.

At any time touch  to return to the previous screen.

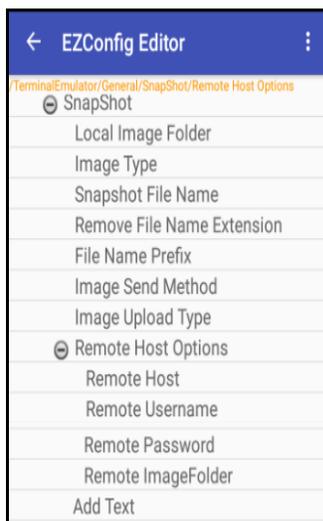
Configure SnapShot Settings

You can configure the following SnapShot settings:

- Local storage folder
- Image type
- File name
- Remove file name extension
- File name prefix
- Image upload method
- Image upload type
- Remote host options
- Add text options

To Configure SnapShot Settings

1. Open and edit the te_settings.xml file with EZConfig, see [To configure TE from EP, the user should generate barcode with default values, which should be a complete file.](#) on page 20.
2. Select **SnapShot** under **General**.



SnapShot Expanded in EZConfig

3. Change the settings as needed. When you are finished, touch  and then select **Save**.
4. Touch  again, and then select **Update Configure**.

Setting	Description
Local Image Folder	Define the folder where you want to store images on your local device. Default = Internal/Storage/honeywell/ETE/Pictures You can change the name of the storage folder in te_settings.xml. When you take pictures, the folder will be automatically created (Internal/Storage/honeywell/ETE/XXXX).
Image Type	Select JPEG or PNG . Default = JPEG
SnapShot File Name	Create a file name for SnapShot pictures. Value is a string of 0 to 100 characters. Default = P_Serial Number_IP address_Timestamp The following wildcards can be used:
	%S First 11 characters of the serial number of the device.
	%Sx Full serial number of the device.
	%M Mac address of the device where the period (.) is changed to a dash (-).
	%I IP address of the device, where the period (.) is change to an underscore (_).
	%C Counter
	%T Timestamp The Timestamp is also part of the default file name. If it is not included in the file name, it will be automatically added at the end of the file name.
Remove File Name Extension	Enable or disable the ability to see the file extension. 0 = Extension on, 1 = Extension off. Default = 0
File Name Prefix	Define the file name prefix that will be appended as a prefix to the file name. The prefix can be letter, numbers or special characters. Default = Empty (no prefix)
Image Send Method	0 = Automatic: Image is directly uploaded to the host when you take the picture. 1 = Manual: Image is saved on the device and you must manually upload the file(s) to the host. Default = 0
Image Upload Type	The image can be uploaded to an FTP site or a shared network. 0 = FTP network address. 1 = Shared Network. Default = 0
Remote Host Options	For a remote host, add the following information: Remote Host: FTP or Remote Host IP. Remote Username: Remote Host User name. Remote Password: Remote Host Password. Remote Image Folder: Remote folder path where user wants to save data. If the server path is not valid an error will show.
Add Text	Define if Add Text is mandatory or not. If mandatory, you must add text before you can save an image. 0 = Optional, 1 = Mandatory. Default = 0

CUSTOMIZATION AND SECURITY

This chapter describes how you can initiate auto-login or use Honeywell Launcher to manage BasicTE access. The chapter includes these sections:

- [Use the Auto-Login Feature](#)
- [About Honeywell Launcher](#)
- [Honeywell Guidelines for BasicTE Security](#)

Use the Auto-Login Feature

Use the auto-login feature to send the same login information each time you log into the host. When you start BasicTE, the computer checks for an auto-login script file. If a script file exists, the computer runs the login commands from the auto-login script file before BasicTE starts.

To use this feature, develop an auto-login script file and load it on the computer. This section explains how to develop a script and includes a list of control characters and the procedure for disabling auto-login.

Develop Auto-Login Script Files

A typical auto-login script file consists of a series of “WaitFor” and “Send” commands.

Note: *The auto-login script must be an ASCII text file. The file name is session specific and should be in format: autolog1.scr for Session 1, autolog2.scr for Session 2, autolog3.scr for Session 3 and autolog4.scr for Session 4. You can also keep a single file for all sessions with the name autolog.scr. If a session specific file is not found for a single or multiple sessions, the autolog.scr file is used.*

Commands for Auto-Login Script Files

You can use several commands to create auto-login script files. All commands are case-sensitive. For example, WaitFor is a command, but Waitfor is not a valid command. For examples of script files, see ["Sample Auto-Login Script Files" on page 50](#).

WaitFor

Wait for a list of up to ten strings. Strings must be enclosed in quotes and separated by a comma.

Send

Sends a character string enclosed in quotes or a string variable to the host. The character string enclosed in quotes can have an embedded control key in the BasicTE application.

Use Auto-Login Search Strings

Conditions for auto-login search strings are as follows:

- Searches are case-sensitive.
- Each WaitFor command searches the entire screen from the top.

Use line wrapping to look for unique strings. If a screen from the host has multiples of the word you are looking for, use the preceding spaces to identify a unique string.

Example: If the screen sent to the computer is:

```
Linux rlogin 2.4.6
```

```
Login:
```

```
Password:
```

The autologin script would be:

```
WaitFor "Login:"#Wait for the login prompt.  
Send "XXXXX"#Send the user name.  
Send "<TAB>"#Send Tab to Host.  
WaitFor "Password:"#Wait for the password prompt.  
Send "XXXXX"#Send the password.  
Send "<ENTER>"#Send Enter to Host.
```

Use Control Characters

To include control characters in your auto-login script file, all control characters must be enclosed by < > (angle brackets).

VT/ANSI Control Characters for Auto-Login Script File

Control Character	Definition
<ENTER>	Enter
<SPACE>	Space
<TAB>	Tab

Load the Auto-Login Script File

After you create an auto-login script, copy the file to your computer. For more information on copying files, see the user manual for your computer.

To ensure that your customized files (autolog.scr) are executed, you need to copy the files to the directory where the BasicTE executable is stored.

Path: \Internal Storage\Honeywell\ETE\Scripts\

Note: *Auto-Login Scripts can be used in both Telnet and SSH connections.*

Disable the Auto-Login Feature

To disable auto-login, rename or delete the autolog.scr file. Renaming the file ensures that you can use the same auto-login script file later by changing the name back to autolog.scr. To enable a new script file, rename a different script file to autolog.scr.

Note: Do not rename the file by adding a number to the end (e.g., autolog1.scr or autolog2.scr). The file name is session specific. The number defines the session. To learn more, see ["Develop Auto-Login Script Files" on page 48](#).

Follow this procedure to rename or delete the auto-login script file.

To Rename or Delete the Auto-login File

1. Establish a USB file transfer (MPT) connection between the computer and your PC.
2. Browse to the auto-login file.
3. Right-click the file and select **Delete** from the popup menu. The file is deleted. Or select **Rename** from the popup menu and rename the file to disable the feature.

Sample Auto-Login Script Files

You can use this sample script file as is or as the starting point for creating your own auto-login script files.

Example: Auto-Login With All Computers Using the Same Account

```
WaitFor "Login:"#Wait for the login prompt
Send "username"#Send the user name
Send "<TAB>"#Send a tab
WaitFor "Password:"#Wait for the password prompt
Send "letmein"#Send the password
Send "<ENTER>"#Send a carriage return
```

- The WaitFor command waits for a string to be displayed by the host.
- The first Send command sends a fixed user name. The second Send sends a fixed password.

About Honeywell Launcher

With Honeywell Launcher active on a computer, you can limit each end user's access to applications - whether that is a single application or a limited set of applications. You approve the level of access you want for each of your workers. This keeps your workers focused on line of business applications. It also prevents them from accessing applications that might distract them and lead to

unproductive activity. And by restricting configuration to admin users, Honeywell Launcher prevents production workers from initiating configuration changes that could lead to downtime and help desk calls. To learn more about the Honeywell Launcher, see the user guide available for download at www.honeywellaidc.com.

Configure Access to BasicTE

If you want to keep the BasicTE application in Lockdown mode, you can control access to the application through the Honeywell Launcher. Four configuration modes are available using the Launcher software:

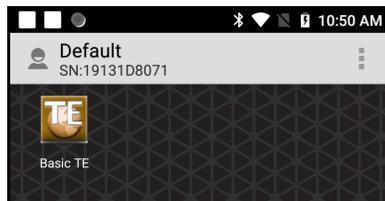
- **Single-User and Single-Application Mode**
Does not require login credentials to open BasicTE.
Requires login credentials to switch user.
- **Multi-User and Multi-Application Mode**
Requires login credentials to open BasicTE.
Requires BasicTE be closed before opening other applications.
- **Single-User and Multi-Application Mode**
Requires login credentials to open BasicTE.
Requires BasicTE be closed before opening other applications.
- **Multi-User and Single-Application Mode**
Does not require login credentials to open BasicTE.
Requires login credentials to switch user.

Note: When in Single-Application modes, once you launch BasicTE you cannot use the Back key to exit the application.

Use Single-User and Single-Application Mode

Use the Single-User and Single-Application mode if you want to manage who uses the BasicTE software but not restrict who can open the application.

When this mode is used, login credentials are required to switch from one user to another in the BasicTE application but not to open the application.



Honeywell Launcher Screen

To Switch Users in BasicTE

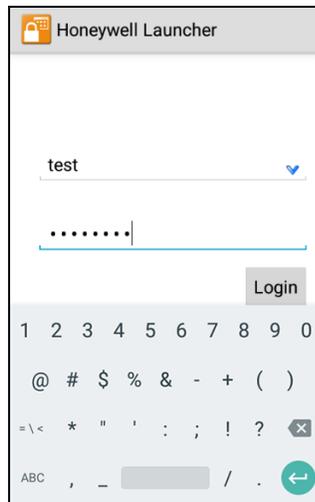
1. Touch  to access the options menu in the open BasicTE application.
2. Select **SwitchUser**.
3. Input the required security credentials (e.g., User Name and Password).

4. Select **Login**.

Use Multi-User and Multi-Application Mode

Use the Multi-User and Multi-Application mode if you want to restrict access to the BasicTE application and prevent the user from opening other applications during BasicTE use.

When this mode is enabled, the user must first log into the Launcher software using secure credentials, and then open the BasicTE application. Once the application is open, the user cannot open another application without first closing the BasicTE application.



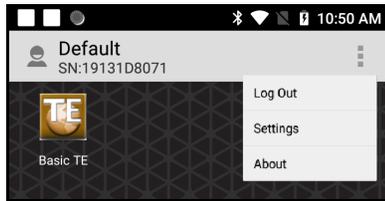
Honeywell Launcher Login Screen

To Exit BasicTE

1. Press the **Back** button.
2. If prompted, enter an exit password.
This step is only required if the “Enable Exit Password” key value is set to enabled in the te_settings.xml file. To learn more, see ["Configure the BasicTE Exit Password" on page 22](#).
3. Select **Yes** to confirm exit and break the connection.

To Exit the Launcher

1. Touch .
2. Select **Log Out**.

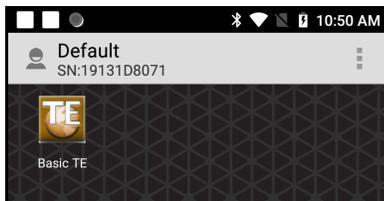


Honeywell Launcher Menu

Use Multi-User and Single-Application Mode

Use the Multi-User and Single-Application mode if you want to manage who uses the BasicTE software but not restrict who can open the application.

When this mode is used, login credentials are required to switch from one user to another in the BasicTE application but not to open the application.



Honeywell Launcher Screen

To Switch Users in BasicTE

1. Touch  to access the options menu in the open BasicTE application.
2. Select **SwitchUser**.
3. Input the required security credentials (e.g., User Name and Password).
4. Select **Login**.

Honeywell Guidelines for BasicTE Security

Follow the recommended actions below to improve security when using BasicTE on the computer. To learn more about network and security guidelines for Android devices, go to www.honeywellaidc.com and download the *Android Network and Security Guide* from the product page for your computer.

- Change the TE password to a non-default value. Apply standard password security measures (e.g., do not use words; use a mix of letters and numbers). Change account and password defaults and remove any unused accounts from the computer.
- Create regular backups of the data present on the computer. Keep all software on the computer updated to the latest release.
- Limit access to modify, delete and update the data on the device to an Admin or trusted user.

- Install only signed and trusted applications on the computer.
- Use the lockdown functionality of Honeywell Launcher to limit the number of users able to access the BasicTE application.
- Use the Generate option in EZConfig to restore the default settings of the te_settings.xml file if possible corruption occurs. To learn more about EZConfig, see the *Dolphin Power Tools for Devices Powered by Android* user guide at www.honeywellaidc.com.
- Allow only admin access to the computer root level of the file system to reduce computer vulnerability to hackers gaining control of the file system.
- Data transmitted through Telnet is not secure and can be seen by anyone on the same network. If an unsecured wireless connection is used, anyone nearby can detect and read the transmissions. Proper network encryption is necessary when working with potentially sensitive data. Honeywell recommends using an SSH connection to prevent unauthorized access to the data.

SCAN BARCODES

This appendix includes a list of barcode symbologies supported when using BasicTE and either the internal scanner in the computer or a Honeywell wearable solution. This appendix includes these sections:

- [Scan Barcodes While Using BasicTE](#)
- [Symbology Prefix](#)

Scan Barcodes While Using BasicTE

Note: *BasicTE cannot control the scanned data in VM1A and VM3A because user should configure external scanners separately.*

Use BasicTE and either the integrated scanner in the computer or a Honeywell wearable solution ring scanner (i.e., model 8620) to scan barcodes.

Supported Barcode Symbologies

Barcode Symbology
UPC-A
UPC-E
Standard 2 of 5
Interleaved 2 of 5
EAN-13
EAN-8
Code 93
Code 39
Code 128
Code 11
Codabar
GS1128
QRCode
CodaBlock-A
CodaBlock-F
GridMatrix
DataMatrix
RSS
Decoding

Prefix

This option will automatically insert the requested data at the head of the incoming data stream before it is displayed. Control characters and characters not accessible from the keyboard can be represented using the Hat Encoding table.

Suffix

This option will automatically insert the requested data at the tail of the incoming data stream before it is displayed. Control characters and characters not accessible from the keyboard can be represented using the Hat Encoding table.

HAT Encoding Characters Hex 00 through AD

Desired ASCII	Hex Value	Hat Encoded	Desired ASCII	Hex Value	Hat Encoded
NUL	00	^@	ESA	87	~^G
SOH	01	^A	HTS	88	~^H
STX	02	^B	HTJ	89	~^I
ETX	03	^C	VTS	8A	~^J
EOT	04	^D	PLD	8B	~^K
ENQ	05	^E	PLU	8C	~^L
ACK	06	^F	RI	8D	~^M
BEL	07	^G	SS2	8E	~^N
BS	08	^H	SS3	8F	~^O
HT	09	^I	DCS	90	~^P
LF	0A	^J	PU1	91	~^Q
VT	0B	^K	PU2	92	~^R
FF	0C	^L	STS	93	~^S
CR	0D	^M	CCH	94	~^T
SO	0E	^N	MW	95	~^U
SI	0F	^O	SPA	96	~^V
DLE	10	^P	EPA	97	~^W
DC1 (XON)	11	^Q		98	~^X
DC2	12	^R		99	~^Y
DC3 (XOFF)	13	^S		9A	~^Z
DC4	14	^T	CSI	9B	~^[
NAK	15	^U	ST	9C	~^\\
SYN	16	^V	OSC	9D	~^]
ETB	17	^W	PM	9E	~^^
CAN	18	^X	APC	9F	~^_(Underscore)
EM	19	^Y	(no-break space)	A0	~ (Tilde and Space)
SUB	1A	^Z	i	A1	~!
ESC	1B	^[¢	A2	~"
FS	1C	^\\	£	A3	~#
GS	1D	^]	?	A4	~\$
RS	1E	^^	¥	A5	~%
US	1F	^_(Underscore)		A6	~&
	80	~^@	§	A7	~'

Desired ASCII	Hex Value	Hat Encoded	Desired ASCII	Hex Value	Hat Encoded
	81	~^A	"	A8	~(
	82	~^B	©	A9	~)
	83	~^C	a	AA	~*
IND	84	~^D	«	AB	~+
NEL	85	~^E	?	AC	~,
SSA	86	~^F	(soft hyphen)	AD	~- (Dash)

HAT Encoding Characters Hex AE through FF

Desired ASCII	Hex Value	Hat Encoded	Desired ASCII	Hex Value	Hat Encoded
®	AE	~. (Period)	×	D7	~W
-	AF	~/	∅	D8	~X
°	B0	~0 (Zero)	Ù	D9	~Y
±	B1	~1	Ú	DA	~Z
²	B2	~2	Û	DB	~[
³	B3	~3	Ü	DC	~\
´	B4	~4	Ý	DD	~]
?	B5	~5	þ	DE	~\^
¶	B6	~6	β	DF	~_(Underscore)
·	B7	~7	à	E0	~`
¸	B8	~8	á	E1	~a
¹	B9	~9	â	E2	~b
º	BA	~:	ã	E3	~c
»	BB	~;	ä	E4	~d
¼	BC	~<	å	E5	~e
½	BD	~=	æ	E6	~f
¾	BE	~>	ç	E7	~g
¿	BF	~?	è	E8	~h
À	C0	~@	é	E9	~i
Á	C1	~A	ê	EA	~j
Â	C2	~B	ë	EB	~k
Ã	C3	~C	ì	EC	~l
Ä	C4	~D	í	ED	~m
Å	C5	~E	î	EE	~n
Æ	C6	~F	ï	EF	~o
Ç	C7	~G	ð	F0	~p
È	C8	~H	ñ	F1	~q
É	C9	~I	ò	F2	~r

Desired ASCII	Hex Value	Hat Encoded	Desired ASCII	Hex Value	Hat Encoded
Ê	CA	~J	ó	F3	~s
Ë	CB	~K	ô	F4	~t
Ì	CC	~L	õ	F5	~u
Í	CD	~M	ö	F6	~v
Î	CE	~N	÷	F7	~w
Ï	CF	~O	ø	F8	~x
Ð	D0	~P	ù	F9	~y
Ñ	D1	~Q	ú	FA	~z
Ò	D2	~R	û	FB	~{
Ó	D3	~S	ü	FC	~
Ô	D4	~T	ý	FD	~}
Õ	D5	~U	þ	FE	~~
Ö	D6	~V	ÿ	FF	~^?

Symbology Prefix

The AIM Code ID is a 3 character ISO/IEC identifier (originally created by AIM) generated by the decoder of a scanner, and gives information about the symbology of the barcode which was scanned.

Format:]cm

where:

] = flag character (ASCII 93)

c = code character (defined by AIM for that symbology)

m = modifier character

The AIM Code ID is not part of a barcode. It is generated by the decoder of a scan engine to represent the barcode symbology which was scanned.

Based on the AIM Code ID, wedge software or terminal emulation software might be set up to process scanned data in a user-defined way.

Note that barcode scanners may also generate 1-character barcode identifiers instead of the 3-character AIM Code ID. The actual characters used are defined by the manufacturer of that scan engine and might be different, depending on that manufacturer.

Decoding

With area imagers there can be multiple barcodes in the field of view, and sometimes the imager does not decode the barcode that was meant to be decoded, especially with so called pick-list where just a specific barcode in a column of barcodes should be read.

Centering can be used for linear products but only for the horizontal plane to avoid adjacent barcodes to the left or right from accidentally being read.

The centering feature is used to narrow the imager's field of view so that the imager only reads the barcode which is intended to be read by the user. When Centering is turned on, the imager only reads barcodes that intersect or that are contained within a predefined Decode Window. At least part of the barcode must be within the defined Decode Window to be decoded by the imager.

How to enable the Decoding feature

In the BasicTE, the following decoding values can be configured:

- Enable Center decoding
- Enable Decode Window Bottom
- Enable Decode Window Left
- Enable Decode Window Right
- Enable Decode Window Top

Editing Keys

Editing Keys

To Enter	ANSI	5250
F+	N/A	Field Plus
F-	N/A	Field Minus
FE	N/A	Field Exit
Eln	N/A	Erase Line
EOF	N/A	Erase End of the Line
Clr	N/A	Clear
DUP	N/A	Duplicate
Hlp	N/A	Help
Rst	N/A	Reset
Rup	N/A	Roll Up
RDn	N/A	Roll Down
Hm	N/A	Home
Srq	N/A	System Request
Attn		Attention

Use a Ring Scanner with BasicTE

Note: The Honeywell wearable solution ring scanner (model 8620) works with the Dolphin 75e only if the Dolphin 75e is attached to a docking station.

When the Honeywell 8620 ring scanner is inserted into the sled of Dolphin 75e, the computer emits an audible sound and the green LED on the computer and on the ring scanner illuminate. The ring scanner can be connected to the Dolphin 75e at any time. BasicTE does not need to be running to scan barcodes through the ring scanner.

Note: *If no audible or visual feedback is received when the ring scanner is connected to the sled, communication between the devices has not been established. Check to make sure the scanner is properly inserted.*

SOFT INPUT PANEL USE

This appendix provides information on the SIP for BasicTE functionality on computers that support BasicTE. The chapter includes these topics:

- [About BasicTE and Soft Input Panels](#)
- [About the Default Soft Input Panels](#)
- [SIP Options in Portrait Mode](#)
- [SIP Options in Landscape Mode](#)
- [Custom Keyboard and Landscape KB Creation](#)

About BasicTE and Soft Input Panels

This section includes information on using and configuring the soft input methods specific to BasicTE. For information on using the hardware buttons on your Honeywell computer, see the computer user manual.

About the Default Soft Input Panels

While BasicTE is running, touch  in the Toolbar to access the Soft Input Panel (SIP). By default, one of two configurations appear depending on the orientation of the screen.

- TE specific KB layout with Alpha, Numeric, AID, and Function keys.



Portrait Mode

- Custom U Shaped Keyboard appears in landscape mode.



Landscape Mode

Touch  to toggle between showing and hiding the SIP.

You can change the default screen mode behaviors by editing `te_settings.xml`. To learn more, see ["Configure the Orientation" on page 24](#).

Note: If you change the screen orientation, the SIP automatically closes. Press the  to show the SIP in the new orientation.

SIP Options in Portrait Mode

BasicTE supports four types of SIP in portrait mode:

- Alphanumeric Keyboard
- Function Key Keyboard

- AID Keyboard
- Numeric Keyboard

Alphanumeric SIP

Touch  in the Toolbar to access the Soft Input Panel (SIP).



Android OS Keyboard

When the SIP is displayed, you can use it for entering characters or accessing options.

Function SIP

When the screen is in portrait mode, you can use the Function Key SIP to access function keys from F1 to F24.

Note: Function keys F22, F23, and F24 are not currently supported for VT-ANSI emulation.

To Access the Function Key SIP

1. Touch  in the Toolbar.
2. Select Function SIP.



Function SIP

When the SIP is displayed, you can use it for function key access and toggling between the AID and Numeric keyboards.

- Touch  to switch to the AID keyboard.
- Touch  to switch to the Numeric keyboard.

AID SIP

When the screen is in portrait mode, you can use the AID SIP to access keys specific to VT-ANSI emulation.

To access the AID SIP:

1. Touch  in the Toolbar.
2. Select **Function SIP**.
3. Touch .



AID SIP

When the SIP is displayed, you can use it for cursor or page navigation and editing relevant to VT-ANSI emulation.

- Touch  to switch to the Function keyboard.
- Touch  to switch to the Numeric keyboard.
- Touch  to enter Home.

Numeric SIP

When the screen is in portrait mode, you can use the Numeric SIP to access numeric keys 0-9.

To access the Numeric SIP

1. Touch  in the Toolbar.
2. Select **Function SIP**.
3. Touch .



Numeric SIP

SIP Options in Landscape Mode

When the screen is in landscape mode, the default SIP for BasicTE is the Honeywell custom U shaped keyboard.

The Function SIP option under menu  does not appear when landscape mode is active. Switch to Portrait mode to use Function SIP.

Touch  in the Toolbar to access the Soft Input Panel (SIP). Five custom landscape configurations are available:

- Lowercase Alphabet Keyboard
- Uppercase Alphabet Keyboard
- Function Keys Keyboard
- Numeric Keyboard
- Special Character Keyboard

To cycle through the five keyboard modes, touch  or .



Lowercase Alphabet Keyboard



Uppercase Alphabet Keyboard



Function Keys Keyboard



Numeric Keyboard



Special Characters Keyboard

About the SIP Keys

This section describes how to use the SIPs when running BasicTE. The SIPs function the same way for all computers.

Editing Keys

Editing keys have functions assigned to them by the application software in use. See your application documentation for information about editing key functions. Editing keys are Find, Insert, Next Screen, Previous Screen, Remove, and Select.

To Enter an Editing Key

Press the keys listed below in the section for the computer

Editing Keys

To Enter	VT/ANSI	5250
Erase Input	N/A	ERL
Del	Shift - Del	Shift - Del
Enter	Enter	Enter
Home	N/A	Hm
Insert	Insert	Ins
New Line (Return	N/A	N.L.
Reset	N/A	Res
Find	Find	N/A
Insert here	Insert	
Next screen	NextSc	N/A
Prev screen	PrevSc	N/A
Remove	Remove	N/A
Select	Select	

Custom Keyboard and Landscape KB Creation

You can customize keyboard layout in landscape mode and also use the same file to remap the keys in BasicTE by creating and saving a CustomKeyboard.xml file in the **\Internal storage\honeywell\ETE\KB** folder on the computer.

Landscape KB Guidelines.

The CustomKeyboard.xml is implemented during BasicTE startup. The file can be modified while the application is running.

Make sure to follow these guidelines, when you create a CustomKeyboard.xml configuration file.

- File name must be CustomKeyboard.xml.
- Save the CustomKeyboard.xml file in the \Internal storage\honeywell\ETE\KB folder on the computer.
- The mode, key, value, and keyIndex names should not be empty.
- The mode name should be unique.
- At least one key should be present in a mode.
- The maximum number of modes that can be defined is 6.
- Total number of keys is 32.
- Keys 1-30 are configurable.
- Keys 31 and 32 are fixed for the << and >> buttons and cannot be custom configured.
- KeyIndex values should be ≥ 1 and ≤ 30 .
- In the tag <key>
- "text" is the value shown on the button
- "value" is the value sent to the host
- "keyIndex" is the button to enable (on keyboard layout)
- Keys that are not defined in the xml file do not show on the layout.
- Text length on keys 1-20 and 29-32 should not exceed 3 characters.
- Text length on keys 21-28 should not exceed 2 characters.
- The value that is sent to the host is in plain text.

A sample of the default BasicTE keyboard XML file is provided on [page 70](#) to use as a reference. See [page 70](#) for keyIndex layout information.

Troubleshooting

If you have trouble getting the custom SIP configuration to appear instead of the default SIP, check these items.

Verify the custom SIP configuration file is:

- Saved as “CustomKeyboard.xml”.
- Located in \Internal storage\honeywell\ETE\KB folder on the computer.

Verify the CustomKeyboard.xml file **does not** include:

- More than 6 modes.
- Any modes without keys.
- Duplicate mode names.
- A blank or unassigned mode name.
- A blank or unassigned key text, value, or keyIndex.
- A keyIndex with a value that is <1 or >30.

Sample of Default Keyboard XML File

```
<?xml version="1.0" encoding="UTF-8" ?>
<!--Copyright 2017 Honeywell International Inc. All rights reserved.-->
<Layout>
<Mode Name="abc">
  <key text="Spc" value=" " keyIndex="1"></key>
  <key text="Tab" value="Tab" keyIndex="2"></key>
  <key text="a" value="a" keyIndex="3"></key>
  <key text="b" value="b" keyIndex="4"></key>
  <key text="c" value="c" keyIndex="5"></key>
  <key text="d" value="d" keyIndex="6"></key>
  <key text="e" value="e" keyIndex="7"></key>
  <key text="f" value="f" keyIndex="8"></key>
  <key text="g" value="g" keyIndex="9"></key>
  <key text="h" value="h" keyIndex="10"></key>
  <key text="i" value="i" keyIndex="11"></key>
  <key text="j" value="j" keyIndex="12"></key>
  <key text="k" value="k" keyIndex="13"></key>
  <key text="l" value="l" keyIndex="14"></key>
  <key text="m" value="m" keyIndex="15"></key>
  <key text="n" value="n" keyIndex="16"></key>
  <key text="o" value="o" keyIndex="17"></key>
  <key text="p" value="p" keyIndex="18"></key>
  <key text="q" value="q" keyIndex="19"></key>
  <key text="r" value="r" keyIndex="20"></key>
  <key text="s" value="s" keyIndex="21"></key>
  <key text="t" value="t" keyIndex="22"></key>
  <key text="u" value="u" keyIndex="23"></key>
  <key text="v" value="v" keyIndex="24"></key>
  <key text="w" value="w" keyIndex="25"></key>
  <key text="x" value="x" keyIndex="26"></key>
  <key text="y" value="y" keyIndex="27"></key>
  <key text="z" value="z" keyIndex="28"></key>
  <key text="←" value="Backspace" keyIndex="29"></key>
  <key text="↵" value="\n" keyIndex="30"></key>
</Mode>
```

```

<Mode Name="ABC">
  <key text="SpC" value=" " keyIndex="1"></key>
  <key text="Tab" value="Tab" keyIndex="2"></key>
  <key text="A" value="A" keyIndex="3"></key>
  <key text="B" value="B" keyIndex="4"></key>
  <key text="C" value="C" keyIndex="5"></key>
  <key text="D" value="D" keyIndex="6"></key>
  <key text="E" value="E" keyIndex="7"></key>
  <key text="F" value="F" keyIndex="8"></key>
  <key text="G" value="G" keyIndex="9"></key>
  <key text="H" value="H" keyIndex="10"></key>
  <key text="I" value="I" keyIndex="11"></key>
  <key text="J" value="J" keyIndex="12"></key>
  <key text="K" value="K" keyIndex="13"></key>
  <key text="L" value="L" keyIndex="14"></key>
  <key text="M" value="M" keyIndex="15"></key>
  <key text="N" value="N" keyIndex="16"></key>
  <key text="O" value="O" keyIndex="17"></key>
  <key text="P" value="P" keyIndex="18"></key>
  <key text="Q" value="Q" keyIndex="19"></key>
  <key text="R" value="R" keyIndex="20"></key>
  <key text="S" value="S" keyIndex="21"></key>
  <key text="T" value="T" keyIndex="22"></key>
  <key text="U" value="U" keyIndex="23"></key>
  <key text="V" value="V" keyIndex="24"></key>
  <key text="W" value="W" keyIndex="25"></key>
  <key text="X" value="X" keyIndex="26"></key>
  <key text="Y" value="Y" keyIndex="27"></key>
  <key text="Z" value="Z" keyIndex="28"></key>
  <key text="←" value="Backspace" keyIndex="29"></key>
  <key text="↵" value="\n" keyIndex="30"></key>
</Mode>
<Mode Name="FUN">
  <key text="F17" value="F17" keyIndex="9"></key>
  <key text="F18" value="F18" keyIndex="10"></key>
  <key text="F19" value="F19" keyIndex="11"></key>
  <key text="F20" value="F20" keyIndex="12"></key>
  <key text="F13" value="F13" keyIndex="13"></key>
  <key text="F14" value="F14" keyIndex="14"></key>
  <key text="F15" value="F15" keyIndex="15"></key>
  <key text="F16" value="F16" keyIndex="16"></key>
  <key text="F9" value="F9" keyIndex="17"></key>
  <key text="F10" value="F10" keyIndex="18"></key>
  <key text="F11" value="F11" keyIndex="19"></key>
  <key text="F12" value="F12" keyIndex="20"></key>
  <key text="F1" value="F1" keyIndex="21"></key>
  <key text="F2" value="F2" keyIndex="22"></key>
  <key text="F3" value="F3" keyIndex="23"></key>
  <key text="F4" value="F4" keyIndex="24"></key>
  <key text="F5" value="F5" keyIndex="25"></key>
  <key text="F6" value="F6" keyIndex="26"></key>
  <key text="F7" value="F7" keyIndex="27"></key>
  <key text="F8" value="F8" keyIndex="28"></key>
  <key text="←" value="Backspace" keyIndex="29"></key>

```

```

    <key text="d" value="\n" keyIndex="30"></key>
</Mode>
<Mode Name="AID/NUM">
    <key text="Esc" value="Escape" keyIndex="5"></key>
    <key text="PUp" value="PageUp" keyIndex="7"></key>
    <key text="PDn" value="PageDown" keyIndex="8"></key>
    <key text="SpC" value=" " keyIndex="9"></key>
    <key text="Tab" value="Tab" keyIndex="10"></key>
    <key text="↑" value="UpArrow" keyIndex="11"></key>
    <key text="↓" value="DownArrow" keyIndex="12"></key>
    <key text="Hm" value="Home" keyIndex="13"></key>
    <key text="End" value="End" keyIndex="14"></key>
    <key text="←" value="LeftArrow" keyIndex="15"></key>
    <key text="→" value="RightArrow" keyIndex="16"></key>
    <key text="Ins" value="Insert" keyIndex="17"></key>
    <key text="Sel" value="Select" keyIndex="18"></key>
    <key text="←" value="Backspace" keyIndex="19"></key>
    <key text="d" value="\n" keyIndex="20"></key>
    <key text="1" value="1" keyIndex="21"></key>
    <key text="2" value="2" keyIndex="22"></key>
    <key text="3" value="3" keyIndex="23"></key>
    <key text="4" value="4" keyIndex="24"></key>
    <key text="5" value="5" keyIndex="25"></key>
    <key text="6" value="6" keyIndex="26"></key>
    <key text="7" value="7" keyIndex="27"></key>
    <key text="8" value="8" keyIndex="28"></key>
    <key text="9" value="9" keyIndex="29"></key>
    <key text="0" value="0" keyIndex="30"></key>
</Mode>
<Mode Name="SYM">
    <key text="SpC" value=" " keyIndex="1"></key>
    <key text="Tab" value="Tab" keyIndex="2"></key>
    <key text="_" value="_" keyIndex="3"></key>
    <key text="!" value="!" keyIndex="4"></key>
    <key text="@" value="@" keyIndex="5"></key>
    <key text="#" value="#" keyIndex="6"></key>
    <key text="$" value="$" keyIndex="7"></key>
    <key text="%" value="%" keyIndex="8"></key>
    <key text="&amp;" value="&amp;" keyIndex="9"></key>
    <key text="*" value="*" keyIndex="10"></key>
    <key text="(" value="(" keyIndex="11"></key>
    <key text=")" value=")" keyIndex="12"></key>
    <key text="+" value="+" keyIndex="13"></key>
    <key text="=" value="=" keyIndex="14"></key>
    <key text="[" value="[" keyIndex="15"></key>
    <key text="]" value="]" keyIndex="16"></key>
    <key text=":" value=":" keyIndex="17"></key>
    <key text=";" value=";" keyIndex="18"></key>
    <key text="&quot;" value="&quot;" keyIndex="19"></key>
    <key text="'" value="'" keyIndex="20"></key>
    <key text="," value="," keyIndex="21"></key>
    <key text="." value="." keyIndex="22"></key>
    <key text="&lt;" value="&lt;" keyIndex="23"></key>
    <key text="&gt;" value="&gt;" keyIndex="24"></key>

```

```
<key text="/" value="/" keyIndex="25"></key>
<key text="\ " value="\ " keyIndex="26"></key>
<key text="?" value="?" keyIndex="27"></key>
<key text="-" value="-" keyIndex="28"></key>
<key text="←" value="Backspace" keyIndex="29"></key>
<key text="↵" value="\n" keyIndex="30"></key>
</Mode>
</Layout>
```

Default Key Index

Use the images below as a reference when assigning keyIndex values in your CustomKeyboard.xml file.

1	2									3	4
5	6									7	8
9	10									11	12
13	14									15	16
17	18									19	20
31	32	21	22	23	24	25	26	27	28	29	30

Default keyIndex for Modes “abc”, “ABC”, and “SYM”

5										7	8
9	10									11	12
13	14									15	16
17	18									19	20
31	32	21	22	23	24	25	26	27	28	29	30

Default keyIndex for Mode “AID/NUM”

9	10									11	12
13	14									15	16
17	18									19	20
31	32	21	22	23	24	25	26	27	28	29	30

Default keyIndex for Mode “FUN”

Keyboard Remapping Functionality

You can use the same CustomKeyboard.xml file to remap the keys as well as in landscape mode without enabling any option in TE settings. If you want to enable keymapping in portrait mode, you need to enable Key Mapping option in general settings in the te_setting.xml file. If you enable the following values, the same keys mapped in custom KB will be reflected in portrait mode.

Below are the rules to map the keys.

1. Mode/key/value/keyIndex name should not be empty.
2. Mode name should be unique.
3. At least one key should be present in the mode.
4. Max number of modes that can be defined are 6.
5. keyIndex values should be ≥ 1 and ≤ 30 .

6. In the tag <key>

"text" is the value shown on button

"value" is the value sent to host

"macro" is the value sent to host when macros are activated. Macros will be activated by adding "KeyToActivateMacro" attribute in Layout tag.

Example: <Layout KeyToActivateMacro="*"> // this activates macros when * is pressed.

"keyIndex" is the button to enable.

7. Keys not defined in xml will not be shown on layout.

8. Text on keys 1-20 and 29-32 length should not exceed 3 characters.

9. Text on keys 21-28 length should not exceed 2 characters.

10. For multiple key events, value should be inside square bracket [] separated by comma.

Example: [F1,"Enter"] where F1 will be followed by Enter.

Maximum 3 key events can be mapped to single key.

11. Value should be inside curly bracket {}, if escaped hexadecimal sequence is used.

Example: Value = "{\x1b}" for \x1b i.e., ESC

12. Emulation SpecificLayout: User can make a layout specific for an Emulation by mentioning <Emulation="5250"> property in Mode.

Example: <Mode Name="abc" Emulation="5250"> // for showing layout only in 5250 mode

<Mode Name="abc" Emulation="VT-ANSI"> // for showing layout only in VT-ANSI mode

<Mode Name="abc"> // For showing a layout in both modes, the emulation value can be anything else or can be removed completely.

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