Honeywell

Dolphin™ Power Tools

with Windows® Embedded Handheld 6.5

User's Guide

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1 Accessing Power Tools

Dolphin Power Tools Overview

Note: Screen captures/icons in this user's guide may differ from what appears on your device.

Dolphin Power Tools are installed in every Dolphin terminal. Different versions of Power Tools apply to different Dolphin terminals depending on their model or operating system.

Software Requirements

Dolphin Terminals

Dolphin Power Tools are designed to work with Windows® Embedded Handheld 6.5.

Desktop

The Power Tools installer and the workstation version of EZConfig Editor are designed to work with the following operating systems:

- Microsoft® Windows® XP
- Microsoft® Windows® 2000
- Microsoft® Windows® NT
- Microsoft® Windows® Vista
- Microsoft® .NET Framework 2.0
- Microsoft® ActiveSync® (version 4.5 or higher)

Power Tools Main Window

Tap > **Power Tools** and the Power Tools main window opens.

Icon	Name	Description	Page
BattMon	**BattMon**	Programs the LEDs on the top panel to monitor battery power.	6-1
EZConfig Utilities	**EZConfig Utilities**	Opens a window that displays the EZConfig utilities on the terminal.	2-1
HotKeys	**HotKeys**	Activates button assignments in the Buttons setting.	6-3
Keyboard Status	**Keyboard Status**	Puts an icon on the Navigation bar that indicates the alpha-numeric status of the keyboard.	6-4
NoSIP	**NoSIP**	Turns off the Soft Input Panel (SIP) in every application window.	6-6
Network Utilities	**Network Utilities**	Opens a window that displays the Network utilities.	9-1

Icon	Name	Description	Page
	**Reboot**	Performs a warm or cold boot from the touch screen, as opposed to the keyboard commands.	6-10
	**RegBackup**	Backs up the registry.	8-4
	**RegEdit**	Allows you to edit the registry and import and export registry keys.	8-1
	**RegRestore**	Loads the RegBackup file.	8-5
	**ScanWedge**	Enables the Dolphin terminal to interpret as keystrokes data received via the decoder, serial port, or IrDA interface.	5-1
	**Suspend**	Manually puts the terminal into Suspend mode from the touch screen, as opposed to the keyboard commands or time-out settings.	6-10
	**SysInfo**	Displays system information.	6-11

Exiting the Power Tools Main Window

- Scroll down and tap the **Exit** icon  .
- Tap **File > Exit (ESC)**.
- Press ESC on the keyboard.

Additional Dolphin Power Tools

These Power Tools are in the Dolphin terminal, but do not appear on the Power Tools main window.

Name	Function	Permanent Storage Location	Active Location	Page
AutoInstall	Installs CAB files after a hard reset.	\IPSM\Honeywell	\Honeywell	4-6
AutoRun	Programs which applications launch at startup.	\IPSM\Honeywell	\Honeywell	4-1
BTPrint	Prints to a Bluetooth device.	\Program Files\Power Tools	\Program Files\Power Tools	11-1
DeviceConfig	Configures the terminal	\IPSM\Honeywell	\Honeywell	3-1
EZMenu	Programs custom application windows.	\Program Files\Power Tools	\Honeywell	10-1
IrDAPrintCE	Prints to an IrDA device.	\Program Files\Power Tools	\Program Files\Power Tools	11-1

Storage Locations

Two folders or paths are used to denote where your files are stored. One path is for permanent storage and one is for active files.

Permanent

The **IPSM\Honeywell** folder is permanent storage on a 99EX. Files in this folder stay the same through any type of reset.

Active

The **\Honeywell** folder is active storage. Files in this folder are active and currently used on your device. Any time your device is upgraded or factory reset, the files in this location are replaced with a copy of the files that are in permanent storage (**IPSM\Honeywell**).

Upgrading Power Tools

Upgrades for the Power Tools on the Dolphin come in the form of an executable file that installs the upgrade files onto the workstation. Upgrades are available from Customer Support (see page 12-1) or www.honeywellaidc.com. Once the workstation installation is complete, transfer the appropriate upgrade files to the Dolphin terminal to upgrade the terminal's Power Tools.

Note: An active Microsoft ActiveSync or Windows Mobile Device Center connection between a host workstation and the Dolphin terminal is required to upgrade your Power Tools.

2 EZConfig

Overview

EZConfig is a suite of products that configures Dolphin terminals quickly and efficiently. With the tools in the EZConfig suite, you can package data on the workstation, then deploy and unpackage that data on the Dolphin terminal.

There are two main components to EZConfig: EZConfig Editor and EZConfig Client.

EZConfig Editor

Edits and creates configuration and registry documents in the EXM file format for Dolphin terminals. There are two versions of EZConfig Editor: one for the terminal and one for the workstation.

For details about the workstation editor, see EZConfig Editor on page 2-1.
For details about the terminal editor, see EZConfig Editor on the Terminal on page 2-22.

Workstation EZ Config Editor capabilities include:

- Create and modify EXM files–Working with Open EXM Files (see page 2-5)
- Generate bar codes from EXM files–Creating Bar Codes (see page 2-17)

Terminal EZ Config Editor capabilities include:

- Create and modify EXM files–Working with Open EXM Files (see page 2-5)

EZConfig Client

Decodes the bar codes generated by EZConfig Editor on the workstation. For details, see EZConfig Client on page 2-26.

Upgrades

Install the EZConfig Editor on the workstation separately from the Power Tools upgrade. Upgrades are available from Customer Support (see page 12-1) or www.honeywellaidc.com.

EZConfig Editor

EZConfig Editor creates, edits, and manages EXM files for Dolphin terminals. There is an EZConfig Editor on the workstation and an EZConfig Editor on the terminal. In the workstation editor, EXM files are edited, saved, then transferred to the terminal. In the terminal editor, EXM files are edited and saved right on the terminal; see EZConfig Editor on the Terminal (page 2-22).

Installing EZConfig on the Workstation

The EZConfig Editor on the terminal installs automatically as part of the Power Tools CAB file. You must install EZConfig Editor on the workstation separately. Go to www.honeywellaidc.com to download and install **Honeywell EZConfig Editor Setup.exe** on the workstation.

EXM Files

The EXM file format is an XML format customized for Dolphin terminals that is comprised of sections that sometimes contain child sections and keys. Keys contain the values that configure the terminal.

The EXM file format supports a multi-level, hierarchical, tree structure. The terminal reads the highest level section first and then reads the key values in each section.

EXM files replace INI files for Power Tools and terminal configuration settings. If both an INI file and an EXM file are present for the same application, the terminal defaults to the EXM file and a warning message appears at startup. Remove the INI file from the terminal to avoid this warning message.

Types of Configuration Files

There are two types of configuration files in the EXM file format:

Configuration Documents - Program and configure the terminal; see Opening EXM Files on page 2-4.

Registry Documents - Update and modify the registry; see Registry Documents on page 2-14.

Sample EXM Files

After you install the editor on the workstation, default EXM files are stored in the **`C:\Program Files\Honeywell\Power Tools and Demos for <product name>\EZConfig EXM Files`** folder. Use these files as templates to create new EXM files.

Opening EZConfig Editor on the Workstation

After you complete installation, EZConfig Editor is available on the workstation from the Start menu.

Click **Start** > **Programs** > **Honeywell** > **EZConfig Editor** > **EZConfig Editor**.

Menus and Toolbar Options

File Menu

Menu Item	Toolbar Item	Description
New		Creates a new document. There are two options: • **Configuration Document** - Creates a configuration file. See Creating New Configuration Documents (page 2-13). • **Registry Document** - Creates a registry file in the EXM file format. See Registry Documents (page 2-14).
Open		Opens an EXM file located on the workstation.
Open from Device		Opens an EXM file located on the terminal. The location of the file appears in the title bar with the word "[Remote]" to identify that the open file is located on the terminal. *Note: Requires an ActiveSync connection between the workstation and the terminal.*
Save		Saves the open file to the location you select on the workstation. This option is disabled for new and imported files; use Save As instead.
Save As		Saves the open file with a new name to the location you select on the workstation.

File Menu

Menu Item	Toolbar Item	Description
Save to Device As		Saves an open file to the terminal. See Saving to the Device on page 2-12. *Note: Requires an ActiveSync connection between the workstation and the terminal.*
Properties		Associates the EXM file with an application on the terminal. See Associating Applications on page 2-14.
Create EZConfig Bar Code		Embeds the open EXM file in an Aztec bar code. See Generating Bar Codes on page 2-18.
Exit		Closes EZConfig Editor.

Edit Menu

For Section Edit menu options, see Working with Sections on page 2-6. For Key Edit menu options, see Working with Keys on page 2-9.

View Menu

Menu Item	Description
Show Locks 	Shows or hides the icons indicating if a subsection or key is locked. The key icon means that the section's keys are locked. →  ← The lock icon means the section's subsections are locked. For additional information on locks on subsections and keys, see Status Bar on page 2-5.

Tools Menu

Menu Item	Description
Simplify Document *Note: You cannot undo this action!*	Simplifies the EXM file, which makes it smaller. Simplifying permanently removes • Disabled sections and keys • Descriptions • Bar code settings When you create a bar code, you can simplify the file embedded in the bar code without affecting the open EXM file. This reduces the size of the bar code package yet keeps the disabled sections, descriptions, and bar code settings in the open EXM file for future reference. See Simplified (page 2-19) on the Advanced Tab (see page 2-20).
Because the following menu items execute commands on the terminal, there must be an Active-Sync connection between the workstation and the terminal.	
Launch Associated Application	If the open EXM file is associated with an application on the terminal, this item is active and launches the associated application on the terminal. *Note: You would use this option after saving the EXM file to the terminal; see Save to Device As on page 2-3.*
***Warm Boot**	Warm boots the terminal.
***Cold Boot**	Cold boots the terminal.
* Some settings affect the boot process and these menu items can help you run a test without switching to the terminal.	

Opening EXM Files

EZConfig Editor opens EXM files stored on the workstation or the terminal (if an ActiveSync connection is established).

Opening EXM Files on the Workstation

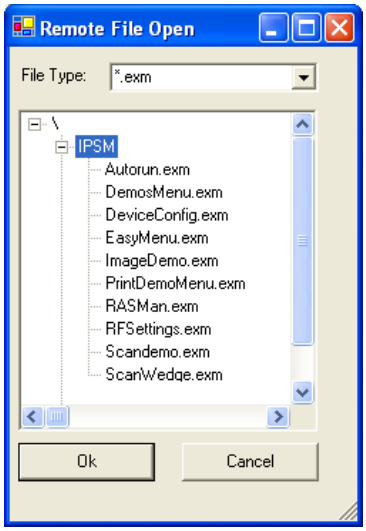
Click **File** > **Open** or the **Open** toolbar button  and select the EXM file.

Opening Remote EXM Files

The workstation and the terminal must be connected via ActiveSync!

EZConfig Editor can open EXM files located on the terminal so that you can make edits to the terminal's configuration real-time.

When the terminal and workstation are connected by ActiveSync, click **File** > **Open From Device** and the remote open window opens.

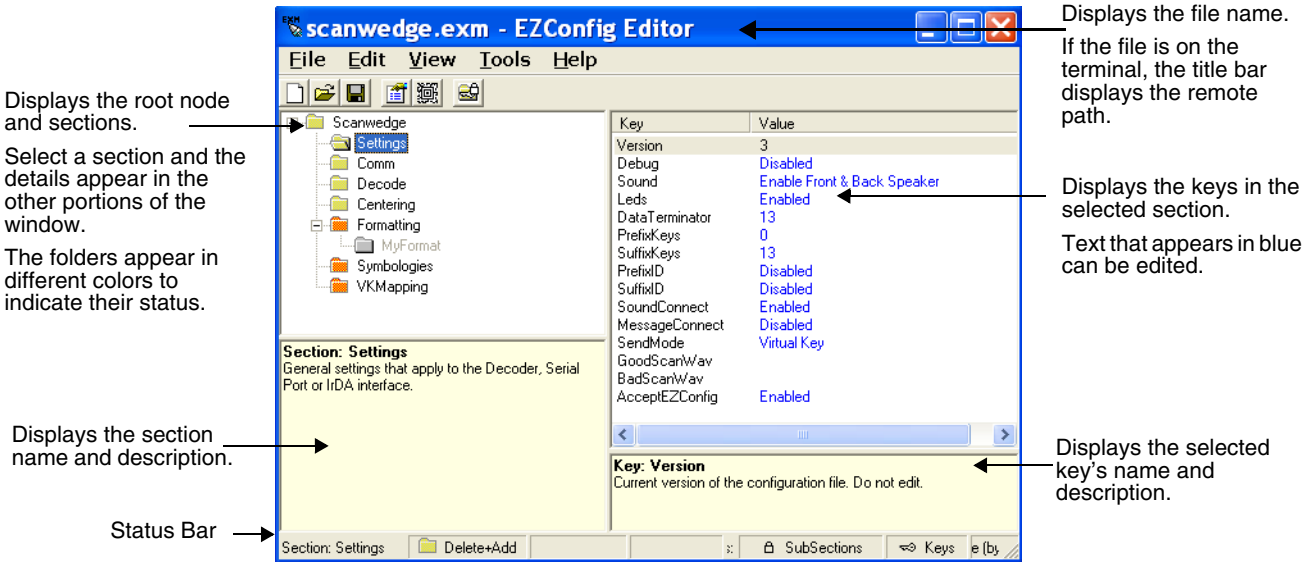


To open, double-tap on a file or select it and click **OK**.

Note: You can also open EXM files in the editor on the terminal; see EZConfig Editor on the Terminal (page 2-22).

Working with Open EXM Files

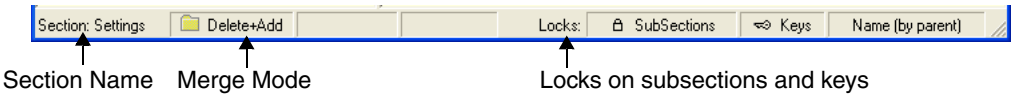
Whether you open an EXM or INI file, EZConfig Editor displays the content in four different sections of the window.



Status Bar

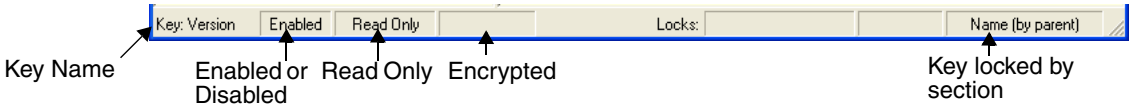
The Status Bar appears at the bottom of the window and displays information about selected sections and keys.

Selected Section



See Section Locks on page 2-8.

Selected Key



See Key Types on page 2-12.

Working with Sections

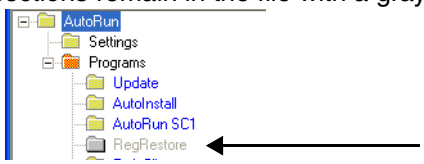
The EXM file format supports a multi-level tree structure. The section tree appears in the top left quadrant of the window. The root node identifies the EXM file and “Root” appears in the description.

Sections have a Name and Description and contain keys that appear in the upper right quadrant when you select the section name. Select a section by clicking on it. You can select only one section at a time.

Edit Menu Options

Select a section click **Edit** to see the available options.

Menu Item	Description
Rename	Activates the section name so that you can rename the section. *Note: You cannot modify the name if the section is locked; see Section Locks (page 2-8).*
Cut	Cuts a selected section.
Copy	Copies a selected section.
Paste	Pastes the section that was just cut or copied at the same level as the selected section.
Paste as Child	Pastes the section that was just cut or copied as a child of the selected section. *Note: You can cut, copy and paste sections within an EXM file or across EXM files.*
Delete	Deletes a selected section. *Note: Because you cannot undo a delete, consider disabling rather than deleting.*
Enable	Sections are enabled by default. This menu item enables sections that were previously disabled. You can enable a section only if its parent section is enabled. To enable all the keys inside a section you are enabling, SHIFT + right-click and select **Enable All**.

Menu Item	Description
Disable All	Sections are enabled by default. This menu item disables sections and all of its keys. Disabled sections remain in the file with a gray folder .  If you disable a section that has child sections, all of its child sections (and the child section keys) are disabled automatically. The child section folders are also in gray. When reading the EXM file, the terminal behaves as though disabled sections are not there and moves on to read the next enabled section. Disabled sections can be removed from the EXM file permanently using the Simplify Document (see page 2-4) option. If you want to keep disabled sections in the EXM file on the workstation but not in the file deployed to the terminal, use the Simplified option (see page 2-19) when creating the bar code.
Insert Section	This menu item inserts a new section. You can also press the Insert key (INS).
Append Child Section	This menu item adds a new child section to a selected section. The new child section is inserted below the previous section.

Modifying Section Names

To change a section name, double-click on the folder and type in the new name or select **Rename** on the Edit menu. Type in the new name and press ENTER.

Note: You cannot modify the name if the section is locked or disabled; see Section Locks (page 2-8).

Modifying Section Descriptions

Descriptions are not required to process key values but do help document the EXM file and often contain valuable information. If you want to modify a section description, select the section, click inside the section description, and begin typing. You cannot modify descriptions of locked sections.

Moving Sections

To move sections within an EXM file, use the drag and drop method. By default, sections are dropped at the same level in the tree.

For additional functionality when dragging and dropping, press and hold:

- ALT to drop a section as a child section.
- CTRL to copy a section and drop the copy at the same level in the tree.
- CTRL + ALT to copy a section and drop the copy as a child section.

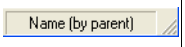
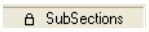
Note: You can select only one section at a time; you cannot use SHIFT+Click or CTRL+Click to select more than one section.

To move sections between EXM files, open **two instances** of EZConfig Editor and drag and drop sections between them. When dragging, a copy of the section is dragged to the new file. When dropping, drop the section directly on top of the section you want it to be a child section of.

Note: To drop the first section into a new file, press and hold the ALT key and drop the section on the root node. (All sections must be child sections of the root node.)

Section Locks

There are different types of locks on sections. The status bar indicates what type of lock is applied to a selected section.

Lock Type	Status Bar Indicator	Description	Effect
Name Lock		The section name is locked.	Section Name and Description cannot be modified.
Key Lock		All keys are locked.	Key Names and Descriptions cannot be modified. Keys cannot be added, moved, or deleted within the section.
Subsection Lock		All immediate subsections are locked.	Immediate subsection Names and Descriptions cannot be modified. Immediate subsections cannot be added, moved, or deleted.

Note: All locks are applied to each individual section and are not recursive. Only text that appears in blue can be modified.

Section-Level Merge Modes

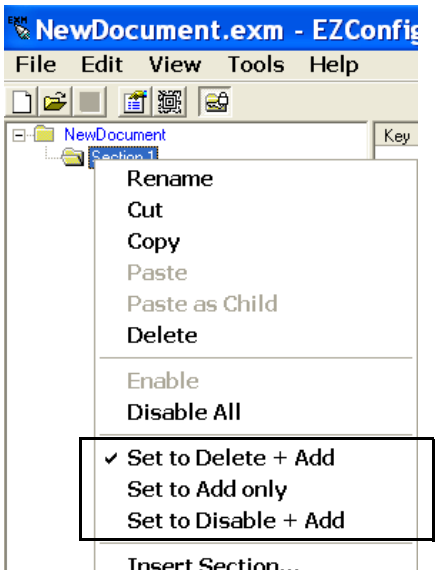
EXM files ship with section-level merge modes already defined according to section content. Merge modes determine how section information is handled when an updated EXM file is deployed to the terminal where an existing version of that EXM file is stored.

Merge modes are indicated by folder icons and in the Status bar.

Mode	Description	Merge Effect
Delete + Add	Deletes non-common children elements (i.e., subsections, and keys) in the target file, then adds the new information from the bar code. Basically, the new section replaces the old section. This is the default merge mode for new sections.	Exclusive
Disable + Add	Disables non-common children elements (i.e., subsections, and keys) in the target file, then adds the new information from the bar code. *Note: Disabled sections and keys removed from the simplified bar code end up as disabled in the target file.*	

Mode	Description	Merge Effect
Add Only	Adds new information (sections and keys) to the existing section. If this is a brand new section, the new section is added to the existing EXM file. *Note: Disabled sections removed from the simplified bar code are not modified in the target file.*	Inclusive

To change section-level merge modes, select a section and right click.



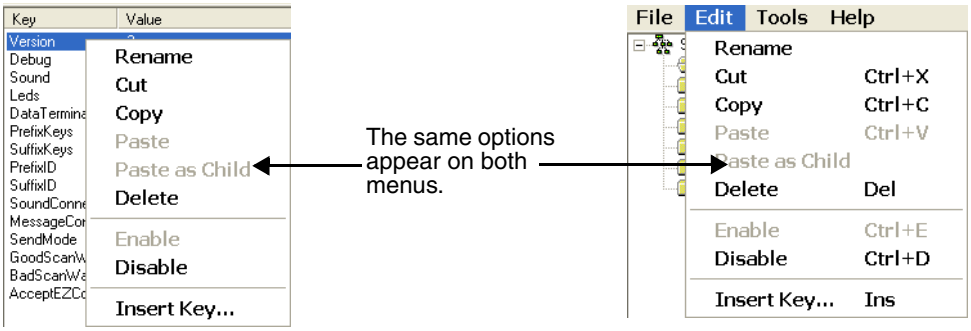
The folder colors change immediately after selection.

Working with Keys

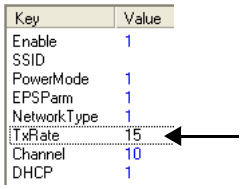
Keys have a Name, a Description, and a Value and reside inside sections. For specific key values, consult the chapters of this user's guide that describe the EXM file you're attempting to edit.

Edit Menu Options

Select a key and right-click or click **Edit** to see the available options.



Menu Item	Description
Rename	Activates the key name so that you can rename the key. Rename is disabled if the key is locked or disabled; see Key Types (page 2-12).
Cut	Cuts a selected key.
Copy	Copies a selected key.
Paste	Disabled; keys can be pasted only as children of a section.
Paste as Child	Pastes the key just cut or copied in the selected section. Keys are not multi-level; all keys paste at the same level within a section. You can cut, copy and paste keys within an EXM file or across EXM files.
Delete	Deletes a selected key. You cannot undo a delete; you might want to consider disabling rather than deleting.
Enable	Enables keys that were disabled. When a key is enabled, the client application can read and apply its value. When you enable a key, make sure to specify a value for that key; do not leave it blank. To enable a key, its parent section must be enabled.

Menu Item	Description
Disable	Disables keys. Disabled keys have key values in black. Enabled keys have key values in blue.  The terminal does not read disabled keys and disabled keys are removed if the file is simplified; see Simplify Document (page 2-4). Because many key values are 1 for enable and 0 for disable, remember that disabling a key means that the terminal behaves as if the key is not there when reading the file, NOT that the key's value is set to disabled. The terminal simply moves on to read the next enabled key.
Insert New Key	This menu item inserts a new key above the selected key. *Note: You can also press the Insert key (INS).*

Modifying Key Names

To modify key names, double-click on the key name or select **Rename** on the Edit menu. Type in the new name and press ENTER or TAB.

Note: You cannot modify the description if the key is locked; see Key Types (page 2-12). Only text that appears in blue can be modified.

Modifying Key Values

You can modify a key value only if its text appears in blue. In that case, double-click on the value or select the key and press ENTER. Type in the new value and press ENTER or TAB to save.

Modifying Key Descriptions

Descriptions are not required to process key values but do help document the EXM file and often contain valuable information. To modify a key's description, click on the key, then click in the key description area. When the cursor is active, you can type in the text.

Note: You cannot modify the description if the key is locked; see Key Types (page 2-12).

Moving Keys

To move keys within an EXM file, use the drag and drop method. Press and hold the CTRL key to drag and drop a copy of the key to the new location.

Note: You cannot move a key if it is locked by its section.

To move keys between EXM files, open **two instances** of EZConfig Editor and drag and drop keys between them. When you select the key and drag, a copy of the key is dragged to the new file. In the new file, drop the key in the key area of a selected section; keys are always dropped at the same level within a section.

Key Types

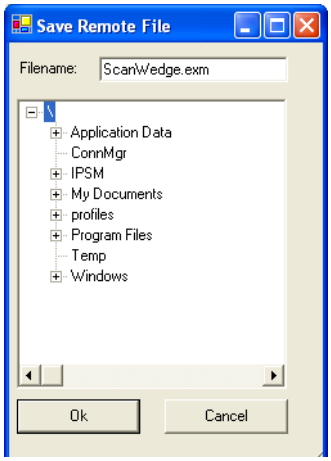
When a key is selected, its properties display in the Status bar.

Lock Type	Status Bar Indicator	Description	Effect
Name Lock	Name (by parent)	Keys are locked by the section.	• Name and Description cannot be modified. • Keys cannot be added, moved, or deleted within the section.
	Name	The key name is locked individually.	• Name and Description cannot be modified. • These keys can be moved.
Read Only	Read Only	Read-only keys cannot be modified in any way. They appear in red.	• Name, Description, and Value cannot be modified. • Keys cannot be added, moved, or deleted within the section.
Encrypted	Encrypted	Key's value appears as asterisks (*) for added security.	*Note: Encrypted keys are also stored encrypted in the EXM file. If you open the EXM file in a text editor, you won't see the data as clear text.*

Note: Locked and Read Only properties are not recursive. Properties are applied to each individual key. Only text that appears in blue can be modified.

Saving to the Device

You can save EXM files directly to the terminal when there is an ActiveSync connection between the terminal and the workstation. Select **File** > **Save to the Device As** and the Save Remote File window opens.



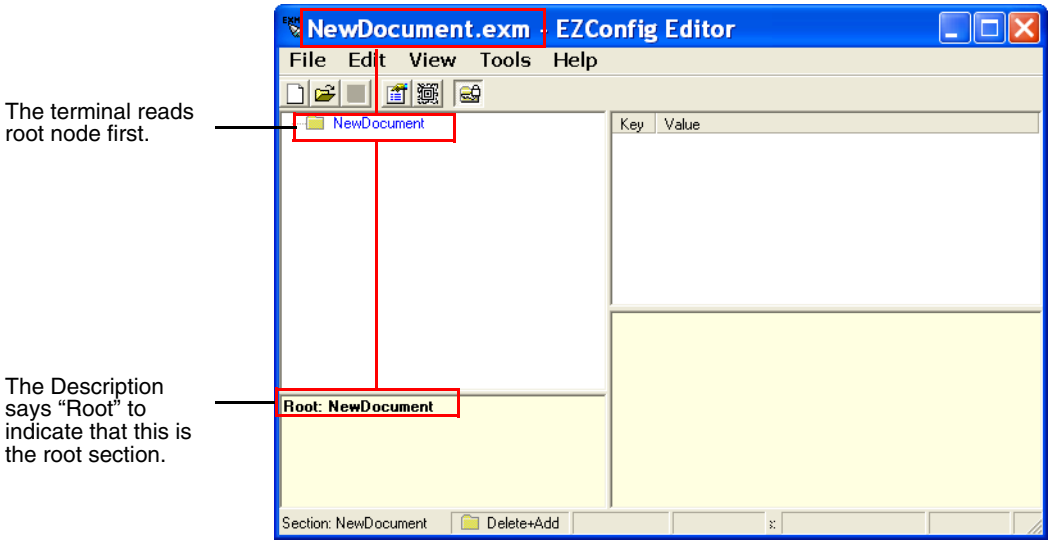
Select the location on the terminal where you want to store the file and click **OK**. The file is downloaded directly to the terminal via ActiveSync.

Note: EXM files for Power Tools must be stored in the active storage folder. If you want them to persist through a reset on the terminal, put a copy into permanent storage as well. See Storage Locations (page 1-3).

Creating New Configuration Documents

To create new EXM files that are configuration documents, you can open an existing EXM file and save it with a new name or create an EXM file from scratch.

1. Click **File** > **New** > **Configuration Document**. The root node is created and appears as the top level section. All sections must be at least one level down from the root node. The name of the root node is always the same as the filename.



Note: You can also create registry documents in the EXM file format. For details, see Registry Documents on page 2-14.

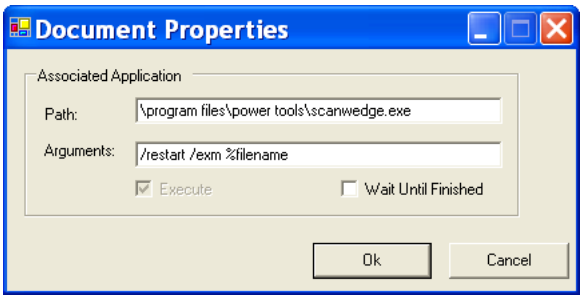
2. To create the first subsection, select the root node, right-click, and select **Append Child Section**. Insert Section is disabled because you cannot insert sections at the same level as the root node.
3. Enter a **Name** and a **Desc**ription and click **OK**.
   The name is required, the description is optional.
4. To add a new section at the same level, right-click and select **Insert Section**.
   To add a new section one level down, right-click and select **Append Child Section**.
5. To add keys, select a section, right-click in the key value section, and select **Append Key**.
6. Enter the **Name**, **Value**, and **Desc**ription and click **OK**.
   The name is required, the description is optional.
7. Continue adding sections and keys.
8. If necessary, associate this EXM file with an application; see Associating Applications (page 2-14).
9. Click **File** > **Save As** to save the file.
   Save is disabled so that you save the document with a name other than "NewDocument.exm."

Associating Applications

The Properties function associates an EXM file with an application on the terminal. The associated application launches after EZConfig Client decodes the bar code containing the EXM file.

For more information, see Creating Bar Codes on page 2-17.

While the EXM file is open, click **File** > **Properties** or the **Document Properties** toolbar button  .



Field	Description
Path	Enter the location of the EXE on the terminal.
Arguments	Enter the command line argument you want applied when the application launches. When an application is entered in the Path field, the following command line appears as the argument: **`/exm %filename.`** Enter additional command line arguments (see Command Line Arguments on page 2-28) next to **/exm %filename** in this field. "%filename" means that the value immediately after the "%" is variable and the file name will be replaced with the remote path entered on the Bar Codes tab; for more information, see Remote Path on page 2-19.
Execute	Tells EZConfig Client to launch the application after decoding the bar code. Execute selects automatically when an application is entered in the Path field. You cannot de-select Execute for configuration documents. You can de-select Execute for registry documents; however, EZConfig Client cannot update the registry unless Execute is selected. For more information, see Default Application Association (page 2-15).
Wait Until Finished	Tells EZConfig Client to wait until the associated application is finished processing before finalizing.

Registry Documents

EZConfig Editor creates registry documents in the EXM file format and also opens existing REG files and converts them to the EXM file format. EZConfig Editor cannot save registry documents in the REG file format.

Updating the Registry on the Terminal

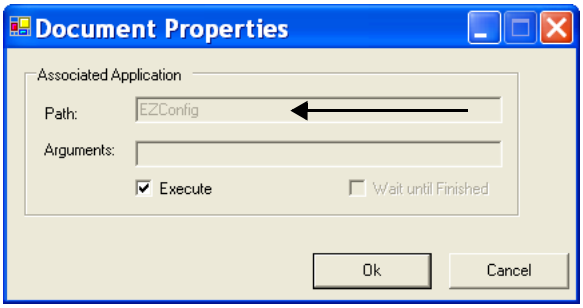
To update the terminal's registry, you must

- Create an EXM file that is a registry document–Creating Registry Documents (page 2-15),
- Create a bar code package from that EXM file–Creating Bar Codes (page 2-17), and
- Scan the bar code with the terminal

By default, EZConfig Client on the terminal updates the Windows registry immediately after decoding the bar code.

Default Application Association

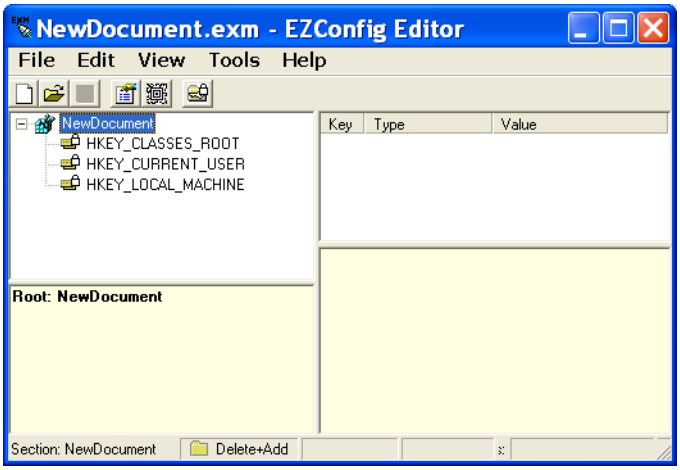
By default, registry documents are associated with EZConfig Client. While a registry document is open, click **File** > **Properties**.



Execute must remain selected for EZConfig Client to update the registry after decoding the bar code. If **Execute** is not selected, the registry document is deployed after decoding but the registry is not updated.

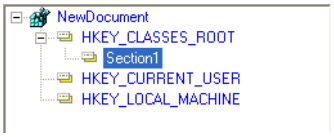
Creating Registry Documents

1. In EZConfig Editor, click **File** > **New** > **Registry Document**.



   The new document contains the three top-level sections in a registry. These sections are locked and cannot be changed. You can add subsections to each section and then add keys to those subsections.
2. Click **File** > **Save As**.

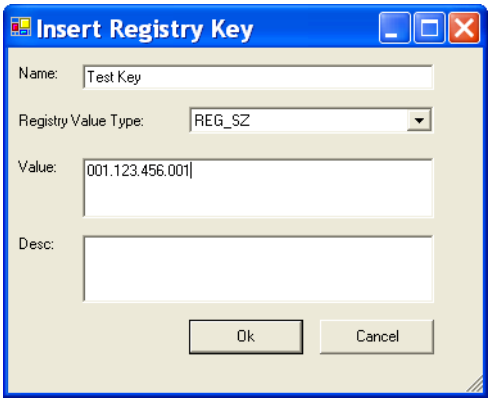
3. Choose the name and location and click **Save**.
   You cannot save the document as a .reg file; you must save it as an EXM file.
4. To add sections, select one of the registry levels, right-click, and select **Append Child Section**. Enter the section information, and click **OK**.



   For more information about adding sections, see Working with Sections on page 2-6.
5. To add keys to the new section, select the section, and right-click in the key value area. For details, see Adding Registry Keys on page 2-16.
6. Continue adding sections and keys.
7. Save the file.

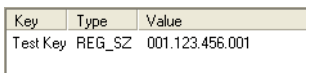
Adding Registry Keys

To add a key, select a section, and right-click in the key area of the EZConfig Editor window.



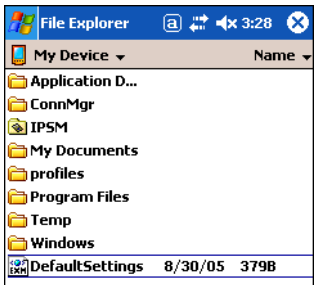
Field	Description
Name	Enter the key's name.
Registry Value Type	Select the registry type from the drop down list. This value appears in the Type column.
Value	Enter the key's value.
Desc	Enter a description for the key; descriptions appear in the lower half of the EZConfig Editor window when the key is selected.

When you click **OK** to save the key, the data appears in columns in the key area of the EZConfig Editor window.



Processing Registry Documents on the Terminal

After EZConfig Client updates the registry, the EXM file itself is deployed to the location entered in the Remote Path (page 2-19) field on the Bar Codes Tab (page 2-19).



Note: EXM files appear with an  *icon on terminal windows.*

If you do not want to store the registry EXM file on the terminal after updating the registry, select the Temporary (page 2-21) option on the Bar Codes Tab (page 2-19).

Persistent Registry Documents

If you want to update the registry during every cold boot, create a registry document in the EXM format, save it to the terminal in the active storage folder, and cold boot. (See Storage Locations (page 1-3) for further information.) The registry settings in the EXM file will load during startup.

Note: If you want to save a registry file but not load it every startup, store the registry EXM file in the permanent storage folder.

Creating Bar Codes

EZConfig Editor embeds EXM files in bar codes. The EZConfig Client on the terminal decodes the bar code and deploys the data. Using bar codes quickly and easily configures Dolphin terminals without an IrDA, ActiveSync, or network connection to a workstation.

Document Types

EZConfig Editor produces two kinds of EXM files: configuration documents and registry documents. Both can be embedded in bar codes and processed by EZConfig Client on the terminal.

Configuration Documents

EZConfig Client deploys the EXM file in the terminal. If an EXM file is associated with an application, EZConfig Client deploys the data to that application for processing; see Associating Applications on page 2-14.

Note: The DeviceConfig.exm file must be associated with DeviceConfig.exe to be processed appropriately on the terminal.

Registry Documents

EZConfig Client updates the registry immediately without launching another application.

Bar Code Type

EZConfig Editor creates an Aztec bar code.

Time and Date Stamp

EXM files are stamped with the time and date the moment EZConfig Editor creates the barcode.

Bar Code Size and Number

The amount of data in the EXM file determines how many bar codes are generated and the physical size of each bar code. More data means more bar codes and larger bar codes.

EZConfig Editor offers four ways to control how many bar codes are produced and adjust the size of each bar code:

1. Set byte size limits on how much data each bar code can contain—see Max Barcode Size on page 2-20.
2. Split the data across a specified number of bar codes—see # Bar codes to generate on page 2-19.
3. Simplify the EXM file in the bar code—see Simplified on page 2-19.
4. Scale the bar codes on the bar code sheet—see Bar Code Scaling Factor on page 2-22.

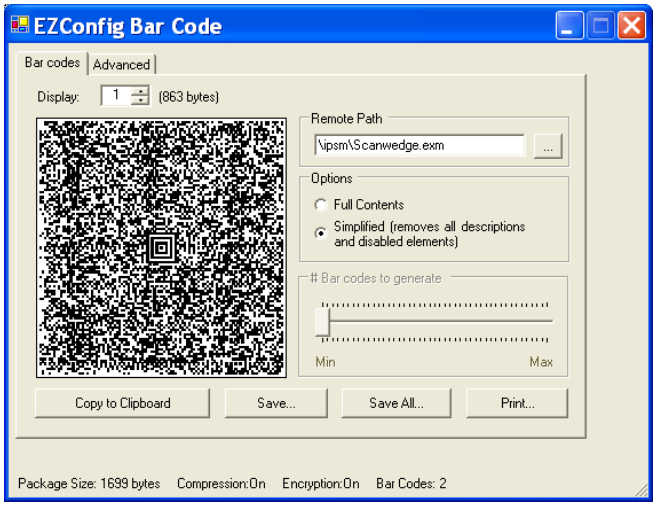
Bar Code Sheet

EZConfig Editor produces a bar code sheet that contains the generated bar codes. Bar code sheets can be printed from a laser printer, copied to the clipboard, and saved as an HTML file; see Printing and Saving Options on page 2-22.

In addition, individual bar codes can be saved as TIF or PNG graphic files that can then be emailed and printed; see Bar Codes Tab on page 2-19.

Generating Bar Codes

When creating a bar code, EZConfig Editor automatically encrypts and compresses the data in the EXM file. To generate a bar code, click **File** > **Create EZConfig Bar Code** OR the **Create Bar Code** toolbar button  while the EXM file is open. EZConfig Editor generates a bar code or codes. The Bar Codes tab window opens displaying the details of the bar code package generated.



The Bar Codes and Advanced tabs offers several processing options.

Note: The number of bar codes produced depends on the amount of data present in the EXM file. The more data present, the more bar codes generated. You must scan all bar codes to deploy the package!

Bar Codes Tab

The Bar Codes tab previews and customizes generated bar code(s).

Field/Option	Description
Display	Indicates which bar code is displayed in the preview area; the default is "1," the first bar code in the package. If more than one bar code was generated, you can use the up and down arrows to scroll through the bar codes.
(___ bytes)	Displays the exact byte size of the bar code displayed in the preview area. Total Package Size (page 2-22) is displayed at the bottom of the window. *Note: The sum of bar code size is typically larger than the package size.*
Remote Path	Type in the active storage location and filename where the EXM file should be deployed on the terminal. For example: **`\Honeywell\deviceconfig.exm`** Tap the browse button ... to navigate to the location on the terminal. Your ActiveSync connection must be active. *Note: You may want to copy this file into permanent storage as well if you want it to persist after a reset. See Storage Locations (page 1-3) for further information.*
Full Contents	Includes the full content of the EXM file in the bar code, without simplifying.
Simplified	Simplifies the EXM file in the bar code, which removes disabled sections, description information, and bar code settings (if any), which decreases the size of the bar code. The open EXM file is **not** simplified. Simplified is selected by default. The differences in total package size are displayed in the Package Size (page 2-22) field. Individual bar code size can be seen in the Display (page 2-19) field.
# Bar codes to generate	This is active only if the Always use minimum # bar codes (see page 2-20) is **not** selected. When this slider is active, you can move the slider toward minimum or maximum to change the number of bar codes generated. As you move the slider, you'll see the number of bar codes in the counter at the bottom of the window Bar Codes: 5 and you'll notice the graphic of the bar code in the preview area change.
Copy to Clipboard	Copies the bar code displayed in the preview area to the clipboard. Use this option to paste the bar code into another application.

Field/Option	Description
Save	Saves the bar code displayed in the preview area as a graphic file as a .png or .tiff. By default, the name of the graphic file is the same as the name of the open EXM file. You can enter a different name when saving.
Save All	Saves all bar codes in the package as individual graphic files. By default, the graphic files are saved with the same name as the open EXM file with a number at the end to distinguish the individual graphic files from each other.
Print	Opens the printing window where you can select print options and print the bar code package. For details, see Printing and Saving Options on page 2-22.

Advanced Tab

The Options tab contains settings that tell EZConfig Client how to process the EXM file on the terminal.

Field	Description
Bar Code Options–This section determines some of the basic bar code parameters.	
Max Barcode Size	Set the maximum amount of data (in bytes) one bar code can contain. The lower the number of bytes, the smaller the bar code. • On the Bar Codes tab, bar code size appears in the Display field (see page 2-19). • The total number of bar codes the are created as a result of the max bar code size limit appears at the bottom of the Advanced window; see Bar Codes (page 2-22).
Always use minimum # bar codes	This option is selected by default. It calibrates the data so that the minimum number of bar codes are used. When this option is selected, the number of bar codes slider on the Bar Codes tab is disabled.
Use custom password	This option enables you to password-protect the bar code you're creating. Select this option, then enter the password in the field provided. You will be able to see the password when you enter it; however, you will not be able to see the password again once you close the window because the password will be encrypted. If you password-protect the bar code, EZConfig Client on the terminal will prompt you to enter that same password on decoding.
Full screen progress dialog	This option runs the deployment progress dialog box on the terminal in full screen mode so that the user cannot open another application while the bar codes are being deployed on the terminal.
Warm boot after finished	This option automatically launches a warm boot on the terminal after the bar code is deployed. Use this options with EXM files that contain application information requiring a warm boot to take effect, such as registry settings.
Deployment Options–These options determine how to deploy the EXM file on the terminal.	

Field	Description
Merge each section… (Default selection)	Deploys information according to the section-level merge mode settings; see Section-Level Merge Modes on page 2-8. If already exists, deploy: • **Always**–Select to always use the section-level merge mode settings. • **Only if newer**–Select to use the section-level merge mode settings only if the sections are newer than the existing file.
Temporary	Deploys the EXM file temporarily. The settings in the EXM file are applied, but the file does not remain in the system after EZConfig Client is done. If the terminal contains a previous EXM file with the same name, the previous EXM file is preserved.
If already exists, deploy–This section determines how the EXM file will be deployed if there exists on the terminal an EXM file of the same name in the same location.	
Replace remote file	Replaces the existing file; no section-level merge modes are applied. If already exists, deploy: • **Always**–Select to always replace the existing file. • **Only if newer**–Select to replace the existing file only if the file in the bar code is newer than the existing. • **Never**—Do not deploy the new file; this preserves the existing file. • **Prompt**—EZConfig Client asks the user if they want to overwrite the existing file during deployment.
Persist Bar Code Settings	
Stores the settings from the Options, Bar Codes, and Web Page tabs within the EXM file so that the same bar code settings are applied the next time a bar code is created. This increases the size of both the EXM file and the bar code(s). If the **Simplify** option is selected, bar code setting information is not included in the bar code but remains in the open EXM file.	

Information at the Bottom of Tab Windows

Field	Description
Package Size	Displays the total size of the bar code package. This number changes with simplifying.
Compression On	Notifies you that compression and encryption are both on. Compression and encryption are always on by default. EZConfig Editor uses 128-bit encryption automatically.
Encryption On	
Bar Codes	Displays the total number of bar codes generated. This number changes as you move the slider on the Bar Codes tab.

Printing and Saving Options

On the Bar Codes tab, when you click **Print**, a bar code printing window opens offering you a number of printing options.

Field/Option	Description
Preview Area	This is the largest section of the tab window and displays a preview of the bar code sheet. Use the scroll bars to see all the bar codes.
Header	Type in a custom header for the page.
Footer	Type in a custom footer for the page.
Bar Code Scaling Factor	Adjusts the size of each bar code by scaling all of them up or down, which determines how many bar codes can fit on each page. This does not change the amount of data in each bar code, just the size of the bar code on the page.
Save	Saves the bar code sheet as an HTML file.
Preview	Click to see a print preview. Click **Print** on this window to print your bar codes.

EZConfig Editor on the Terminal

EZConfig Editor on the terminal edits and creates EXM files in the terminal and contains the same basic functionality as the editor on the workstation.

Accessing EZConfig Editor

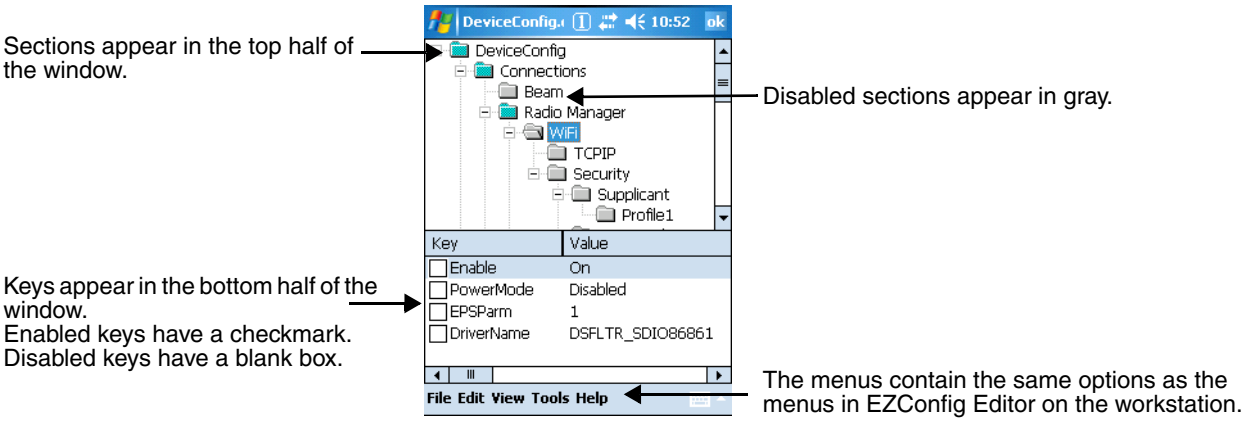
Tap **Start** > **Power Tools** > **EZConfig Utilities** 

.

The EZConfig Utilities window provides access to both the EZConfig Editor and the EZConfig Client (see page 2-26) as well as the EXM files on the terminal.

Opening EXM Files

- Tap directly on an EXM file to open it in EZConfig Editor.
- Tap the EZConfig Editor icon to open EZConfig Editor. (Then tap **File** > **Open** to open an EXM file.)
- In File Explorer, navigate to an EXM file and tap once on the file to open it in EZConfig Editor.



Available Menus

The menus in the Command bar contain the same items as the menus in the EZConfig Editor on the workstation.

File Menu — For details, see File Menu on page 2-2.

Note: The one difference in the file menus is that you cannot generate bar codes from EXM files on the terminal.

Edit Menu — The Edit menu pops up when you tap and hold on a section or key. For details, see Edit Menu on page 2-3.

View Menu — This menu enables you to view the locked icon over locked section folders.

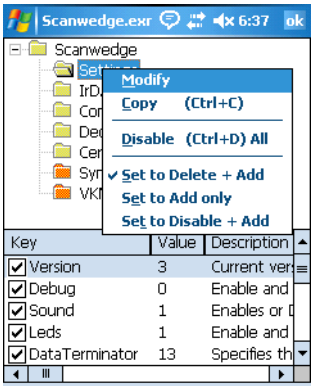
Tools Menu — For details, see Tools Menu on page 2-4.

Editing Sections

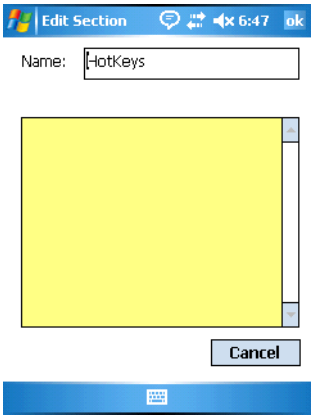
Modifying Text

There are several options to edit a section name or description:

1. Select the section and tap **Edit** > **Modify**.
   Select an item and press the ENTER key.
   Tap and hold on the section name, then select **Modify** on the Edit menu that pops up.



2. All three options open the Edit Section window.



3. Tap inside the **Name** or **Description** fields and edit the text.
4. Tap **OK** to save changes. (You can also press the ENTER key.)
   Tap **Cancel** to close the window without changes.

Moving Sections

You cannot drag and drop to move sections in the tree. Use the **Cut**, **Copy**, **Paste**, and **Paste as Child** items on the Edit menu to move sections.

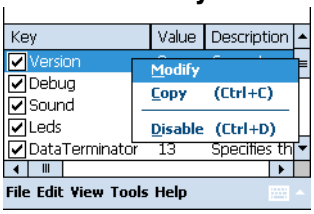
Note: The Paste function pastes sections at the same level they were cut by default.

Editing Keys

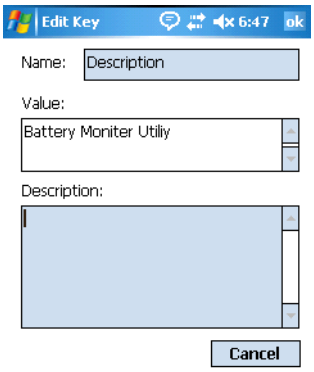
Modifying Text

There are severl options to edit a key's name, value, or description:

1. Select the key and tap **Edit** > **Modify,**
   Select the key and press the ENTER key, OR
   Tap and hold on the key's name, then select **Modify** on the Edit menu that pops up.



   All three edit options open the Edit Key window.



2. Tap inside the **Name, Value** or **Description** fields and edit the text.
3. Tap **OK** to save changes. (You can also press the ENTER key.)
   Tap **Cancel** to close the window without changes.

Moving Keys

You cannot drag and drop to move keys. Use the **Cut**, **Copy**, and **Paste as Child** items on the Edit menu to move keys.

Launching Associated Applications

The Tools menu contains an item named **Launch Associated App**. **Launch Associated App** is enabled only when there is an application associated with the EXM file. Selecting this item automatically saves the open EXM file and launches the associated application while the EXM file remains open.

To see the associated application, tap **File** > **Properties**.

The **Path** field contains the launch location of the application.
The **Args** field contains any command line arguments to execute when the application launches.

For more information about associating applications, see Associating Applications on page 2-14.

Example 1: You've saved changes to an open DeviceConfig.exm file.

To apply those changes immediately, tap **Tools** > **Launch Associated App**. Because the DeviceConfig.exm file is associated with DeviceConfig.exe by default, DeviceConfig launches and applies the settings in the DeviceConfig.exm file.

Example 2: You've saved changes to an open registry document.

Because registry documents are always associated with EZConfig Client, tapping **Tools** > **Launch Associated App** updates the registry. EZConfig Client always updates the registry when launched from an EXM file that is a registry document.

Example 3: You've saved changes to an open ScanWedge.exm file.

And that ScanWedge.exm file has the following parameters as the associated application:

```
Path:        \program files\power tools\scanwedge.exe
Args:        /restart
```

Tapping **Tools** > **Launch Associated App** refreshes ScanWedge with the new settings.

EZConfig Client

EZConfig Client decodes bar codes created in EZConfig Editor and deploys the data in the terminal. In addition, if the EXM file in the bar code is associated with an application, EZConfig Client launches that application, which then processes the decoded data.

EZConfig Client decodes bar codes with 40-bit and 128-bit encryption.

Storage Location

The EZConfig Client executable is ocated in both the permanent and active storage folders (see Storage Locations on page 1-3.).

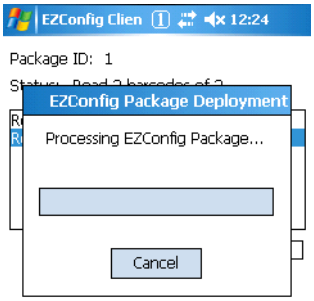
Using EZConfig Client

1. On the Dolphin terminal, tap **Start** > **Power Tools**. The Power Tools Main Window (see page 1-1) opens.

   You can scan the first bar code from the Power Tools main window by pressing the SCAN key; see page 2-28 for details.
   EZConfig Client can also be launched with a HotKey from any window; see page 2-28 for details.

2. Tap **EZConfig Utilities** EZConfig Utilities > **EZConfig Editor** EZConfig Editor. The EZConfig Client window opens.
3. Point the terminal at the first EZConfig Editor bar code, then press the SCAN key.
4. EZConfig Client decodes the bar code.

   If there is only one bar code in the package, EZConfig Client deploys the package.
   If there is more than one bar code in the package, EZConfig Client decodes the bar code, records that one bar code has been read, and waits for the next scan.
5. Scan all the bar codes in the package. Bar codes can be scanned in any order.
6. When all bar codes in the package have been scanned, the EZConfig client deploys the data.



Note: If the EXM file is programmed to launch an application such as ScanWedge, a window pops up informing you of initialization.

EXM File Processing

After decoding, EZConfig Client saves EXM files to the location in the terminal selected in the Remote Path (page 2-19) field on the Bar Codes Tab (page 2-19). (If the Temporary, page 2-21, option is selected in the bar code, EZConfig Client does not save the EXM file.)

There are two types of EXM files: configuration documents and registry documents. EZConfig Client processes each type of file differently.

Configuration Documents

If the EXM file was associated with an application, EZConfig Client launches and deploys the data to that application for processing.

*Note: DeviceConfig.exm **must** be associated with DeviceConfig.exe to be processed on the terminal appropriately. After decoding the bar code, EZConfig Client deploys the data to DeviceConfig.exe, which applies the settings to the terminal.*

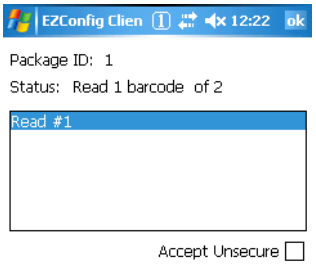
Registry Documents

Registry documents are always associated with EZConfig Client. The **Execute** option (Execute, page 2-14) determines whether the registry is updated or not. If Execute is selected, EZConfig Client updates the registry immediately after decoding the bar code.

Multiple Bar Codes

Some EXM files generate more than one bar code. If multiple bar codes were generated, EZConfig Client recognizes that there is more than one bar code in the package and tracks each bar code scanned and decoded. Bar codes can be scanned in any order, but EZConfig Client does not deploy the data until **all** the bar codes in the package have been scanned.

EZConfig Client Window



Field	Description
Package ID	This is the ID of the entire package. EZConfig Editor assigns an ID to bar code packages when creating the bar code.
Status	This field displays the decode status of the bar codes scanned so far. If there is more than one bar code in the package, this field acts as a decode counter. The Status field displays: • How many bar codes have been scanned and • How many bar codes are in the package
Read # box	This box displays the list of bar codes scanned and decoded.
Accept Unsecure	This option allows EZConfig Client to scan bar codes that are not encrypted. *Note: By default, all bar codes created in EZConfig Editor are encrypted.*

Scanning Bar Codes Directly from the Power Tools Main Window

When the Power Tools or Demos main windows are open, press the SCAN key and:

- If there is only one bar code in the package, EZConfig Client decodes and deploys the bar code without opening the EZConfig Client window.
- If there are multiple bar codes in the package, EZConfig Client decodes the first bar code and opens the EZConfig Client window showing that one bar code in the package has been scanned.

Launching EZConfig Client with a HotKey

Pressing ALT + SCAN launches EZConfig Client from any application window after you activate the HotKeys Power Tool; see HotKeys on page 6-3.

ScanWedge

Bar code decoding in EZConfig Client is compatible with ScanWedge. You can set ScanWedge to pass bar code information to EZConfig Client for further processing.

For details, see Accept EZConfig on page 5-4.

Command Line Arguments

`/%filename` Executes the EXM file; this is the default entry.

/q	Quiet mode
/s	Full screen
/o	No menu
/e	Exit if first scan fails to deliver a valid bar code
/u	Accept (decode) unsecure bar codes

3 DeviceConfig

Overview

DeviceConfig consists of the DeviceConfig.exe and the DeviceConfig.exm file located in both the permanent and active storage folders (see Storage Locations on page 1-3). DeviceConfig.exe looks for and applies the settings in the DeviceConfig.exm file.

DeviceConfig.exm File

The DeviceConfig.exm file contains terminal configuration settings. Because this file is stored in the permanent storage folder, its configuration settings persist through cold boots and should be considered system defaults. (See Storage Locations on page 1-3.)

Enabling DeviceConfig Functionality

By default, all sections except the About Section (see page 3-9) are disabled, which means that the key values are not applied to the terminal. To use the DeviceConfig.exm file to configure the terminal, enable the sections and keys required by your configuration in EZConfig Editor (page 2-1) on the workstation or EZConfig Editor on the Terminal (page 2-22).

Autorun

Autorun (see page 4-1) launches DeviceConfig.exe, which applies the DeviceConfig.exm settings, then launches a cold boot followed by a warm boot.

Bar Code Delivery

When the DeviceConfig.exm file is delivered to the terminal via bar code, EZConfig Client launches DeviceConfig.exe automatically after decoding. DeviceConfig.exe then applies the settings in theDeviceConfig.exm file in the terminal. For more information, see Creating Bar Codes (page 2-17) and EZConfig Client (page 2-26).

The DeviceConfig.exm file **must** be associated with DeviceConfig.exe for EZConfig Client to launch DeviceConfig.exe after decoding the bar code. In EZConfig Editor, the associated application path must be

```
\Honeywell\deviceconfig.exe
```

For more information, see Associating Applications, page 2-14.

Settings in the WLAN Supplicant

Many settings in the DeviceConfig.exm file match the settings in the WLAN Supplicant on the terminal that allow the user to enter and save the same values. If a user changes a setting in the WLAN Supplicant, that setting is applied but stored in RAM memory and erased during the next cold boot. During the next cold boot, Autorun launches DeviceConfig, which then re-applies the settings in the DeviceConfig.exm file.

DeviceConfig.exm Sections and Keys

The sections and keys in the DeviceConfig.exm file are locked, which means that you can change values but not names or descriptions.

Section Name	Description	See Page
Connections	Configures communication parameters. There are child sections that configure the IrDA port, the on-board radios, and the ActiveSync connection.	3-2
System	Configures basic system settings.	3-8
Applications	Configures software applications.	3-10

Connections Section

The Connections section contains child sections that set communication parameters on the terminal.

Beam Section

The Beam section enables and disables the IrDA port.

Radio Manager Section

In the Radio Manager, typically, you would enable the radio in the **WiFi** section, enable DHCP in the **TCPIP** section, then configure the radio settings in the **Security\Supplicant\ProfileX** or **Security\NonSupplicant** section.

WiFi Section

The keys in the WiFi section control the settings of the WLAN radio.

Key	Description	Default Value	Available Values
Enable	Enables and disables the WLAN radio.	1	0=Disabled 1=Enabled; if enabled, the GSM radio section is disabled automatically
PowerMode	Specifies the power save mode.	1	1=Disable; radio is powered constantly (power save mode is not used) 2=Always Enable; power save mode is used 3=Auto Enable; EPSParm key defines radio vs. battery performance

Key	Description	Default Value	Available Values
EPSParm	When PowerMode is set to 3 (Auto Enable), this parameter specifies radio vs. battery performance.	N/A	X=A value between 1 and 10, where: 1=Best Radio Performance (Minimum) 10=Best Battery Life (Maximum)
DriverName	Specifies the name of the radio driver. This string must match the name of the driver for the current device.	N/A	X=A value in the drop-down list; radio driver names are terminal-specific. Different Dolphins have different radio drivers.

TCPIP Section

The keys in the TCPIP section determine how the radio handles IP addresses.

Key	Description	Default Value	Available Values
DHCP	Enables and disables DHCP (Dynamic Host Configuration Protocol).	1	0=Disabled; the static IP address in the IPAddress key is used for the radio interface. 1=Enabled; the IP address for the radio interface is requested from a DHCP server.
The remaining keys need to be set when DHCP is disabled. When DHCP is enabled, these numbers are dynamically requested from a DHCP server.			
IPAddress	Static IP address for the radio interface.	N/A	Static IP address
SubnetMask	SubNet mask for the static IP address.	N/A	Subnet mask address
DefaultGateway	Default gateway for the static IP address.	N/A	Gateway address
DNS	Domain name server for the static IP address.	N/A	Domain name server address
Domain	Domain name for the terminal	N/A	Terminal's domain name
WINS	Windows name server.	N/A	Windows name server address

Security Section

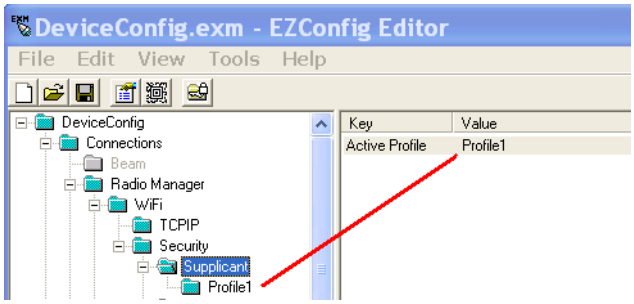
The Security section has no keys and one child section named "Supplicant," which contains several profile subsections.

Supplicant Section

The Supplicant section consists of a number of child sections. The default child section is named **Profile1** and contains all the keys necessary to create a configuration profile for the WLAN radio.

To create multiple radio configurations, copy the **Profile1** section and paste it at the root level of the Supplicant section. Then, rename that profile and configure the keys according the desired network configuration. Each child section name is arbitrary, but each name must be different.

The Supplicant section contains one key named **ActiveProfile**. Type in the Value equal to name of one of the desired profile child sections.



When DeviceConfig is activated on the terminal, the terminal will apply the settings in the profile specified in the ActiveProfile key. If the ActiveProfile key does not have a matching profile, the radio will be enabled by DeviceConfig but no specific radio configuration will be activated, which means that the radio will not connect to your network.

Profile Subsections

Each Profile subsection contains the keys that configure the radio connection from the terminal to the network.

Key	Description	Available Values
Name		
SSID	The service set identifier used to connect to network; usually the network name of the access point or peer station.	X=Your network's SSID Any=Connect to any network
Assoc. Mode	The general association mode (sometimes called "authentication") of the radio.	• None (no authentication or encryption) • WEP • IEEE 802.1X • WPA-Personal (PSK) • WPA-Enterprise (EAP) • WPA(2)-Personal (PSK) • WPA(2)-Enterprise (EAP)
Encryption	The encryption mode available for the association mode.	Open & Shared (WEP) TKIP, AES-CCMP, TKIP & CCMP (WPA)

Key	Description	Available Values
EAP Method	Available EAP methods for IEEE 802.1X and WPA(2)-Enterprise (EAP) association modes.	• LEAP • PEAPv0-MSCHAPV2 • PEAPv1-MSCHAPV2 • PEAPv1-GTC • PEAPv1-TLS • FAST-MSCHAPV2 • FAST-GTC • FAST-TLS • TLS • TTLS-MD5 • TTLS-MSCHAPV2 • TTLS-GTC
PSK	Enter the private share key for the WEP association mode.	User-defined
Identity	This is the 802.1X identity supplied to the authenticator. The identity value can be up to 63 ASCII characters and is case-sensitive.	User-defined
Password	This is the password used for MD5-Challenge or EAP authentication. It may contain up to 63 ASCII characters and is case-sensitive. Asterisks appear instead of characters for enhanced security.	User-defined
Anonymous ID	Enter the anonymous ID. This ID creates a tunnel through which the real ID (as entered in the Identity field) can pass. For additional security, make this ID different than the one entered in the Identity field.	User-defined
Tunnel PAC Machine PAC	For EAP-FAST, a one-time provisioning exchange establishes a shared secret, called a Protected Access Credential (PAC) Key. That PAC Key is used for all subsequent authentications.	Enter the address on the Dolphin terminal of either PAC (tunnel or machine). *Note: The PACs **must** be located on the Dolphin terminal!*
Provisioning	Provisioning refers to service activation and involves programming various network databases with the customer's information.	• No Provisioning • Anonymous • Authenticated • Anonymous + Authenticated
CA and/or Client Certificate	CA certificates are any certificates created by a certified authority (CA). Client certificates contain information that identifies the user, as well as information about the organization that issued the certificate. This ensures that you can encrypt data end-to-end.	Enter the address on the Dolphin terminal of either certificate (CA or Client). The certificates **must** be located on the Dolphin terminal!

Key	Description	Available Values
Private Key	Private keys are used with certain types of EAP authentication.	Enter the address on the Dolphin terminal of the private key. The private key **must** be located on the Dolphin terminal!
Priv Key Password	Private keys can be locked by passwords.	Enter the password that unlocks the private key.
WEP Key Mode	Mode being used by the WEP keys (in Key1–Key4 keys). Key validation occurs when DeviceConfig is loaded on the terminal (often during AutoInstall), not when you save the DeviceConfig.exm file.	ASCII uses all alpha numeric characters. HEX uses only numerics and A-F. Valid lengths are as follows: • 64-bit ASCII=5 • 128-bit ASCII=13 • 64-bit HEX=10 • 128-bit HEX=26
WEP Key1–Key4	In fields Key 1—Key 4, enter the specific key. The format of each key must match the key length type selected in the WEP Key Mode key. To use dynamic keys in your configuration, leave all the key fields blank.	User-defined
Active Key	Enter the number of the key that you want to be active in this configuration.	1, 2, 3, or 4

Bluetooth Section

The keys in this section enable the Bluetooth radio and configure a Bluetooth printer as a Favorite. If there is no Bluetooth radio installed in the terminal, disable this section.

Key	Description	Default Value	Available Values
Address	Bluetooth MAC Address of the printer; see Obtaining the MAC Address on page 3-7.	N/A	MAC Address
COMPort	Number to assign to the virtual COM Port. *Note: It's best to leave this value as 0.*	0	Min=0 Max=9

Key	Description	Default Value	Available Values
Default Printer	This is a child section that configures a Bluetooth printer as a Favorite Bluetooth Device. By entering the necessary information from the Bluetooth printer in the DeviceConfig.exm file, and then distributing that file to a group of terminals, you can bypass the manual process of setting up a printer as a Bluetooth Favorite on each terminal.		
DeviceName	Friendly name of the printer.	N/A	Printer name
Enable	Enable and disable the Bluetooth radio. This is the top level of the tree; printer settings are in a child section.	1	0=Disable 1=Enable; the GSM radio is disabled automatically

Bluetooth Default Printer Values

In general, to establish a printer as a Bluetooth Favorite Device, you must establish the printer as a Bluetooth Favorite on the terminal. The problem is that Bluetooth Favorite settings are stored in RAM memory and therefore erased during each cold boot. The Default Printer section stores these settings permanently in the DeviceConfig.exm file so the printer remains a Favorite after a hard reset.

Furthermore, you can distribute a DeviceConfig.exm file with the printer settings to multiple terminals. After DeviceConfig.exe applies the settings in the DeviceConfig.exm file (launched manually or after a hard reset), the printer is set up as a Favorite automatically, without any special configuration to each terminal.

After you have established a printer as a Bluetooth Favorite Device on an individual terminal, obtain the values for the **Address** and **Service** keys from the registry in RegEdit.

Obtaining the MAC Address

After you have set up the Bluetooth printer on the terminal, use RegEdit to find the printer values.

1. Tap **Start** > **Power Tools** > **RegEdit**  .
2. Navigate to **HKEY_LOCAL_MACHINE** > **SOFTWARE** > **Microsoft** > **Bluetooth** > **Device > [MAC Address]** .
3. Copy the name of the subsection; this is the MAC address of the printer.
4. Enter this address in the **Address** key in the **Bluetooth** > **DefaultPrinter** section of the DeviceConfig.exm file.

GSM Section

If there is no GSM radio installed in the terminal, disable this section.

Key	Description	Default Value	Available Value
APN	Enter the Access Point Name (APN) for the GPRS network.	Empty	APN value

Key	Description	Default Value	Available Value
Enable	Enables and disables the GSM radio.	0	0=Disable 1=Enable; when enabled, the WLAN radio turns off automatically.
IPAddress	Enter the IP Address.	Empty	Empty=GSM uses DHCP (server-assigned IP address) X=IP address
Password	Enter the password associated with the username for the GPRS connection. *Note: This key is encrypted; see Encrypted on page 2-12.*	Variable	Empty=Disabled 0=Disabled X=The password for the GPRS connection.
Protocol	Enter the protocol to use.	IP	Protocol type
Username	Enter the username for the GPRS connection.	Variable	Empty=Disabled 0=Disabled X=The username for the GPRS connection.

ActiveSync Section

The ActiveSync Section configures the terminal's ActiveSync connection parameters.

Key	Description	Default Value	Available Values
AutoConnect	Enables and disables the ActiveSync connection when the terminal first connects to the communication peripheral.	1	0=Disable ActiveSync connection 1=Enable ActiveSync connection
Connection	Specifies the connection type and baud rate.	'USB Connection	`USB Connection `115200 Default `19200 Default `38400 Default `57600 Default *Note: These values must be typed in exactly as they appear here.*

System Section

The System section contains child sections that configure various system settings. For specifics on each sections and their keys, refer to the Description sections in the DeviceConfig.exm file itself.

About Section

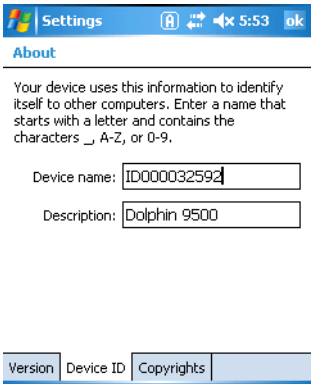
The About section sets a unique device name and description for the terminal. By default, this section is enabled and applied to the terminal after each cold boot.

Key Name	Description	Default Value	Available Values
DeviceDescription	Sets the device description.	N/A	User-defined; however, the description cannot exceed 15 characters in length.
DeviceName	Sets the name of the device.	ID [Serial-Number]	See DeviceName Restrictions on page 3-9.

Device ID Tab

The values of the **DeviceName** and **DeviceDescription** keys appear in the **Device name** and **Description** fields on the Device ID tab on the terminal.

On the Dolphin terminal, tap **Start** > **Settings** > **About** > **Device ID** tab.



Note: ActiveSync recognizes the Device name and Description from this applet.

DeviceName Restrictions

- The DeviceName must begin with a letter.
- The DeviceName cannot exceed 15 characters in length.
- Any text outside brackets (“[xxxx]”) will appear as text in the **Device name** field.

Content	What appears in the Device name field…
[SERIALNUMBER]	The terminal’s serial number pulled dynamically from the kernel. This is the serial number that appears in SysInfo (see page 6-11) as the Terminal Serial Number (see page 6-12).
[MODELNUMBER]	The terminal’s model number pulled dynamically from the kernel. This is the serial number that appears in SysInfo (see page 6-11) as the Model Number (see page 6-12).

Sensor Section

Sensor section entries are displayed in EZConfig Editor when you open the DeviceConfig.exm. Click on an entry to see its description and range.

Applications Section

The Applications section configures specific software applications installed on the terminal.

Internet Explorer Section

The Internet Explorer section defines the home page for Pocket® Internet Explorer.

MobiConrol Section

If the terminal includes the MobiControl Bootstrap Agent (MCBootstrapAgent.exe), then DeviceConfig can be used to configure the terminal to connect to a MobiControl Server and download the appropriate agent to the device.

This section is disabled by default and should only be enabled when configuring the device to connect to the MobiControl Server for the first time.

The root level of the MobiControl section contains the main ConfigPath.

Key	Description	Default Value	Available Value
Device Subsection			
NameType	Mandatory The name the device will register as on the server.	1	1=Use Device ID as the device name 2=Use custom name
DeviceName	Mandatory when NameType is set to 2. This is the custom name of the device.	N/A	X=Custom name can contain customized macros; e.g., "%AUTONUM%"
DeviceClass	Optional The rule tag of the **Add devices rule**. When the rule tag is not specificed here, the device will use an Open, Add devices rule.	N/A	X=The specific rule tag. Please refer to MobiControl Help on how to create an open rule.
DeviceIDType	Optional Specifies what is used for the device ID.	3	1=HAL Old Device ID 2=HAL New Device ID 3=HAL UUID 4=User Defined 5=Server specified 6=MAC
Info Subsection			
SiteName	Mandatory This is the site name of the MobiControl Server	N/A	X=MobiControl Server name

Key	Description	Default Value	Available Value
Method	Mandatory The installation method.	1	1 (Honeywell standard)
Comm Subsection			
Broadcast	Optional Enable broadcasting for discovering server addresses.	0	0=Disable 1=Enable
RetryDelay	Optional Retry delay time when connection to the server fails.	30000	X=Milliseconds
Connection Subsection			
DeploySvr1	Mandatory when Broadcast key is disabled. This is the MobiControl Server IP address and port.	N/A	X=IP address:port e.g., 192.168.1.238:5494

Command Line Arguments

`/q`	Quits the program; this command line in the Args field of the Associated Application window stops the confirmation message from appearing after DeviceConfig.exe finishes processing.
`/boot`	Reboots DeviceConfig.exe

Launching DeviceConfig.exe Manually

DeviceConfig.exe launches automatically after each cold boot. However, if you make changes to the DeviceConfig.exm file that you want applied in the terminal immediately, manually launch DeviceConfig.exe.

1. Tap **Start** > **Power Tools** > **EZConfig Utilities** > **DeviceConfig.exm**.
2. Tap **Tools** > **Launch Associated App**.
3. The settings in the DeviceConfig.exm file are saved and applied to the terminal configuration by DeviceConfig.exe.

Temporary Option for Bar Code Deployment

The Bar Codes Tab (see page 2-19) in EZConfig Editor contains a Temporary option (see page 2-21) that, when selected during bar code creation, applies the settings in the DeviceConfig.exm file temporarily, which means until the next cold boot.

In the terminal, EZConfig Client deploys the DeviceConfig.exm file and launches DeviceConfig.exe, which applies the settings in the DeviceConfig.exm file as usual. However, when the Temporary option is selected, the DeviceConfig.exm file is not saved after processing is finished. The original file is preserved instead, and its settings will be restored during the next cold boot.

Select this option when you want establish a temporary configuration in the Dolphin (such as access to a specific network in a facility) without changing the default configuration.

4 Autorun and AutoInstall

Overview

Startup is the launch sequence when a Dolphin terminal is booted.
There are two startup Power Tools:

1. Autorun (see page 4-1)
2. AutoInstall (see page 4-6)

Autorun

Autorun specifies the software applications to launch after each hard reset. Autorun is located in the permanent storage folder (see Storage Locations on page 1-3) and consists of an Autorun.exe that is programmed by the Autorun.exm File (page 4-1).

During startup, after a soft or hard reset, the operating system looks for and launches \Autorun.exe. If the Autorun.exe is configured (by Autorun.exm) to launch an application, that application launches when Autorun.exe launches. Autorun can launch up to 32 applications or utility programs after each hard reset.

Note: The Autorun.exm file allows applications to be launched based on conditional situations, including the return code of another application launched previously and specific characteristics of the Dolphin terminal itself.

Autorun.exm File

The Autorun.exm file has a multi-level tree structure. There are two top level sections: Settings and Programs.

Settings Section

The Settings section stores general Autorun settings; see Settings Section Keys on page 4-2.

Programs Section

The Programs section contains many child sections and determines the sequence of events at startup, including which programs launch and when.

Program Sections and Launch Sequence

Each section is a program to launch at startup. The sequence of sections determines the launch sequence on the terminal; the terminal reads this file consecutively. To change the launch sequence, move the section up or down in the list; see Working with Sections (page 2-6).

Enabling and Disabling Sections

If you don't want to the application to launch at startup, you can delete the section. However, program sections contain settings you'll want to keep when adding that same application back to startup. To keep the program section in the file for future reference, disable the program section instead of deleting it. Disabled sections appear in gray.

When processing files, the terminal behaves as though disabled sections are not there and moves on to the next enabled section.

Settings Section Keys

Note: This section and most of its keys are locked, which means that you can change the value but not the name or description.

Key	Function	Default	Available Values
Version	Stores the EXM file version.	22	You cannot modify this value!
ByPassKey	Defines the key that can be pressed to bypass Autorun	42=SCAN key	
StartMenu	Enables and disables the Start menu during Autorun	1	0=Disable; the Start menu is disabled during Autorun. 1=Enable; the Start menu is enabled.
Debug	Controls the debug function at AutoInstall.	0	0=Disable 1=Enable, an autorun.log file is created in the **\IPSM** folder.
TestMode	Runs the terminal in test mode and tests the functionality of AutoInstall. This is a diagnostic tool. When enabled, applications stored in the AutoInstall folder, including the radio drivers, are not loaded during startup.	0	0=Disable 1=Enable
EZConfigKey	Specifies a key that launches EZConfig Client before Autorun starts processing the Programs section; i.e., before Autorun starts launching programs.	9=Tab key	Empty=You must launch EZConfig Client to scan bar codes from EZConfig Editor

Programs' Subsections

Here are a few of the standard child sections of the Programs section:

Section	Description
Update	Attempts to launch an Update.exe application from the SD (Secure Digital) card, if one exists.
AutoRun SC1 & SC2	Attempts to process an Autorun configuration file from the SD card (if one exists); for example, to install CAB files from the AutoInstall folder in the SD card. One section applies to cold boots and the other to warm boots.
Reset	Initiates a warm boot after the cold boot during startup. Do **NOT** disable the Reset section!

Note: Other subsections launch the executable entered in the Program (see page 4-3) key.

Keys in Each Programs' Subsection

Each Programs' subsection contains or can contain the following keys:

Key	Function
Required Keys—These keys must be present in each Program subsection.	
Program	Specifies the command line to execute. This is the location of the program's executable. If you want a Power Tool to launch at startup, enter the location of that tool's EXE here.
Args	Specifies the command line arguments to execute at startup.
Wait	Determines if Autorun should wait for the program to complete and close before continuing to the next program in the sequence. • **0**=Continue to the next program immediately • **1**=Wait enabled
StartOption	Specifies the startup options for the program. Autorun launches the program **only** if the startup options entered here are met. • **Blank**= Always run the program. • **X**=See Start Options on page 4-4.
Optional Keys—These are keys you can add but don't appear in the default file.	
PNPID	Specifies a card description. This option needs to be entered only when PNPID or NONPNPID values are specified in the **StartOption** key.
DependIndex	Specifies the index of a dependent program.
DependExitCode	Specifies the required result of the dependent program. If the result of the dependent program does not equal the DependExitCode entered here, the current program will not be executed at startup.

Editing the Autorun.exm File

Edit Autorun.exm in EZConfig Editor. For details, see Working with Open EXM Files on page 2-5.

Adding a Program Subsection

To launch at startup, a new program **must** be a child section of the Programs section.

1. In EZConfig Editor, right click on the **Programs** section and select **Append Child Section**.
2. On the Add New Section window, enter the **Name** and **Description** and click **OK**.
3. The new section is added to the bottom of the list.
4. Use the click and drag method to move the section to the desired launch sequence. Press and hold the ALT key to make sure that you move the section at the same level. Do **not** append the section to an existing section!
5. Right-click in the key area and select **Append Key**. You must add all the required Autorun keys; see Keys in Each Programs' Subsection on page 4-3.
6. Save the file and transport it to the terminal.

Copying a File

If you want to copy a file and move it to another location, use AutoInstall and the **`/copy`** command line argument. For details, see Command Line Arguments on page 4-7.

Sample Autorun Configuration File

A sample Autorun.exm file installs on the workstation to **`C:\Program Files\Honeywell\Power Tools and Demos for <product name>\EZConfig EXM Files`**.

For more information, see Sample EXM Files on page 2-2.

Start Options

Start Options define the required system parameters for a software application to launch. The following values can be entered for the StartOption key, wherever it appears:

Option Name	The program launches if …	Category
DISABLED	Never, regardless of other startup options specified.	**None**
COLDBOOT	The terminal has performed a cold boot.	**Boot type**
WARMBOOT	The terminal has performed a warm boot.	
TOUCH	The terminal has a touch screen display installed.	**Touch Screen**
NONTOUCH	The terminal doesn't have a touch screen display installed.	

Option Name	The program launches if …	Category
BATCH	The terminal is a batch unit (no RF or internal modem cards installed).	**Mobility**
RF	The terminal has an RF card installed (e.g., Cisco 802.11b).	
GSM	The terminal has a GSM radio.	
BT	The terminal has a Bluetooth radio.	
MODEM	The terminal has an internal modem card installed.	
IMAGER	The terminal has an imager installed.	**Scanner**
LASER	The terminal has a laser scanner installed.	
BLIND	The terminal has no laser or imager installed.	
ANYSCAN	The terminal has either an imager or a laser scanner installed.	
RFON	The RF radio is Enabled.	**Radio**
GSMON	The GSM radio is enabled.	
BTON	The Bluetooth radio is enabled.	
RFGSMBTOFF	The RF, GSM, & Bluetooth radios are disabled.	
29KEY	The terminal has a 29-key keyboard.	**Keyboard**
35KEY	The terminal has a 35-key keyboard.	
38KEY	The terminal has a 38-key keyboard.	
43KEY	The terminal has a 43-key keyboard.	
56KEY	The terminal has a 56-key keyboard.	
NO_KEY	The terminal has a 56-key keyboard.	
99XX	A Dolphin terminal beginning with 99.	**Model**
PNPID	The terminal has a card installed whose identification contains ALL of the strings specified in the PNPID setting.	**Expansion Card**
NONPNPID	The terminal doesn't have a card installed whose identification contains ALL of the strings specified in the PNPID setting.	

Multiple options can be specified for each category. For example, you can specify both 35KEY and 43KEY options to request that the program run in either a 35- or 43-key keyboard terminal. Seperate multiple options with commas.

To ignore a category, don't specify any of its options.

Applying Startup Options to the Autorun Configuration File

For each category, Autorun validates each startup option specified in the StartOption key. If no specified option is valid in a category, Autorun does not execute the program. If at least one of the specified options is valid in each category evaluated, the program is executed.

To always execute a program, specify no options in the StartOption key.

AutoInstall

AutoInstall consists of an AutoInstall.exe that, when launched, installs the cab files in the AutoInstall folder. The AutoInstall folder is where you store cab files for software applications if you want them to persist through hard resets.

The AutoInstall program runs according to the settings in the AutoInstall.exm file.

Program Install Locations

When triggered by a reset, the CAB file installs the applications to the directories established in the CAB file. For most applications, this means that an EXE for the software application is placed in the **`\Program Files`** folder.

AutoInstall.exm

The AutoInstall.exm file controls the behavior and appearance of the AutoInstall window and install process.

Key	Function	Default Value	Available Values
Version	This is the current version of the AutoInstall.exm file. This key is read-only and cannot be modified.	3	N/A
Debug	Enable and disables logging of debug information to **\AUTOINSTALL.LOG**.	0	0=Disabled 1=Enabled
Cancel	Enable and disables the **Cancel** button on the AutoInstall window.	0	0=Disabled 1=Enabled
FullScreen	Determines if the AutoInstall window runs in full screen mode (barring access to other windows).	1	0=Disabled 1=Enabled 2=Autoselects based on the operating platform.
HaltOnError	Sets the behavior of AutoInstall when an error is encountered.	1	0=Log the error and continue AutoInstall 1=Halt AutoInstall and prompt the user to continue or cancel
MaskPassword	If a password is entered in the **Password** key, this key determines if that password is masked when entered on the screen.	1	0=Disabled 1=Enabled
Password	Establishes a password required to halt AutoInstall.	Blank	Blank=User can halt and exit AutoInstall without entering a password X=Password

*Note: The Auto**run**.exm file determines the programs and install sequence, not Auto**Install**.exm.*

Command Line Arguments

/copy

Add **/copy** to the Autorun.exm file to automatically move a file from one location to another.

Usage: autoinstall /copy <sourcefilename> <destination>

Example: autoinstall /copy "/windows/data.mdf" "/storage card/data.mdf"

5 ScanWedge

Overview

ScanWedge sends data from the decoder, serial port, or IrDA interface to the foreground application as keystrokes (as if the data were entered via the keyboard). The foreground application is the open software application whose window is currently active on the display.

As a result, you can review input data in Windows Mobile applications such as Pocket Word, Pocket Excel, and Inbox without having to load third-party applications.

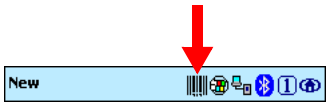
Enabling ScanWedge

Tap the ScanWedge icon **once** 

. ScanWedge initializes and enables.

Command Bar Menu

When ScanWedge is enabled, a smaller ScanWedge icon appears in the command bar at the bottom of the Today screen.



Tap this icon to open the command bar menu.

Menu Item	This item …
Enable	Enables and disables ScanWedge without exiting ScanWedge.
Settings	Opens the ScanWedge.exm file in EZConfig Editor.
About	Opens the About screen for ScanWedge.
Exit	Exits ScanWedge. The icon no longer appears in the Command bar.

Enabling ScanWedge at Startup

To run ScanWedge automatically when the Dolphin terminal boots up,

Add a link to the Scanwedge.exe in the **`\WINDOWS\STARTUP`** folder

OR

Enable the ScanWedge section of the Autorun.exm File (see page 4-1).

Disabling ScanWedge

Navigate to the Power Tools Main Window (see page 1-1) and tap the **ScanWedge** icon again.

OR

Select **Exit** on the Command Bar Menu (page 5-1).

Modifying the ScanWedge Configuration File

When ScanWedge is installed, a ScanWedge.exm file is inserted in permanent storage (see Storage Locations on page 1-3). This file specifies configuration parameters for ScanWedge and must not be moved.

Use EZConfig Editor on the workstation to modify ScanWedge.exm. For more information, see Working with Open EXM Files on page 2-5.

ScanWedge.exm Sections

Section	Description	See Page
Settings	Programs general settings for ScanWedge.	5-2
Comm	Specifies how the serial (RS-232) port interfaces with ScanWedge.	5-6
Decode	Specifies how the decoder/scanner interfaces with ScanWedge.	5-7
Centering	Defines the centering window for scanning bar codes when ScanWedge is interfacing with the decoder.	5-10
Formatting	Defines data formatting functionality.	5-10
Symbologies	Defines the symbologies that the scanner can decode and send to ScanWedge.	5-18
VK Mapping	Defines the virtual key sent to ScanWedge for any decoded ASCII character.	5-21

Basic Values

In each section, the following values apply (unless otherwise specified in the tables below):

0 = Disable

1 = Enable

Settings Section

The Settings section determines how ScanWedge interprets data from the decoder, serial port, and IrDA interface.

0 = Disable 1 = Enable

Settings Section Key	Description	Default Value	Available Values
Version	ScanWedge version	3	You cannot modify this value.
Debug	Enables and disables logging of debug information to a SCANWEDGE.TXT file.	0	1=Enable. Debug data is logged in a Scanwedge.txt file stored in the **\IPSM** folder.
Sound	Enables and disables audio notification for decode/data reception. There is one sound for success and another sound for an error.	1	0=Disable; no sound on decoding. 1=Enable; sound on decoding.
Leds	Enables and disables LED notification for decode/data reception.	1	0=Disable; no LEDs on decoding. 1=Enable; LEDs on decoding.
DataTerminator Specifies the character to recognize as the data terminator when receiving data from the **IrDA** interface or **serial** port.	When the data terminator character is received, ScanWedge considers the data received as successful, and sends the **specified prefix key** + **data received** + **specified suffix key** to the foreground application. *Note: The data terminator character itself will not be transmitted. If required, put this character in the suffix.*	13	Set to the desired character. This parameter is ignored for the decoder. The decoder knows when the data ends by itself.
PrefixKeys	Defines the ASCII keys to be sent prior to the decoded/received data. The ASCII keys are converted to virtual keys; for conversion parameters, see Virtual Key Codes Table on page 5-21. This field supports up to 16 ASCII keys; data is comma-delimited.	0 Empty, No prefix sent	For example: PrefixKeys=80,82,69,70,73,88 The example listed above would cause “PREFIX” to be sent prior to any decoded data.
SuffixKeys	Defines the ASCII keys to be sent after the decoded/received data. The ASCII keys are converted to virtual keys; for conversion parameters, see Virtual Key Codes Table on page 5-21. This field supports up to 16 ASCII keys; data is comma-delimited.	13 ENTER key	For example: SuffixKeys=83,85,70,70,73,88,13 The example listed above would cause “SUFFIX” and the ENTER key to be sent after any decoded data.
PrefixID	Specifies the symbology identifier sent prior to the decoded/received data.	0	0=No symbology identifier is sent. 1=The Code ID is sent. 2=The AIM ID is sent. 3=The SymModifier is sent.

Settings Section Key	Description	Default Value	Available Values
SuffixID	Specifies the symbology identifier sent after the decoded/received data.	0	0=No symbology identifier is sent. 1=The Code ID is sent. 2=The AIM ID is sent. 3=The SymModifier is sent.
SoundConnect	Enables and disables • The sound that ScanWedge makes when starting up, shutting down, or restarting. • The audio notification when an IrDA session is established and closed and the serial port is opened and closed.	1	0=Disabled 1=Enabled *Note: Audio notifications for errors can't be disabled.*
MessageConnect This key applies only to the **IrDA** and **serial** ports.	Enable and disables a notification message when an IrDA session is established and closed and the serial port is opened and closed.	0	0=Disabled 1=Enabled
Accept EZConfig This key applies only to the **decoder**.	Enables and disables ScanWedge's compatibility with EZConfig Client when decoding bar codes.	1	0=Disabled; ScanWedge processes EZConfig bar codes as it would any other bar code. 1=Enabled; ScanWedge recognizes EZConfig bar codes and passes them on to the EZConfig Client for further processing.

Settings Section Key	Description	Default Value	Available Values
SendMode	Specifies the method to use when sending the decoded message to the foreground application. *Note: This setting affects only the decoded message; the prefix and suffix are always sent using the virtual key method to allow navigational functionality.*	0	0=Virtual key method: each character is sent as a virtual keystroke. This method works well with almost any Windows Mobile application. 1=Direct Text method: the decoded message is sent as text directly to the window that has the keyboard focus in the foreground application. This method is faster than the virtual key and supports bar codes with ASCII characters between 1 and 255 but works **only** if the foreground application uses standard Window's Edit controls for user input. 2=Virtual Key (safe) method: each character is sent as a virtual keystroke using PostKeybdMessage(). This method only support bar codes containing ASCII characters and does not support VKMapping. This method only generates WM_CHAR messages, it does not generate WM_KEYDOWN and WM_KEYUP messages.
GoodScanWav	Specifies a .wav file played on the completion of a successful decode/data reception.	Empty	Empty=No .wav file is specified. The default beep or sound is played. Use the Sound (page 5-3) key to enable and disable all audio notification. X=The path to the specific .wav file you want played for either option. The .wav files should be 8-bit, 11KHz, mono, and PCM.
BadScanWav	Specifies a .wav file played for an unsuccessful decode/data reception.	Empty	

Comm Section

The serial port settings in the Comm section determine the interaction between ScanWedge and the serial port.

Comm Section Key	Description	Default Value	Available Values
Enable	Enables (or disables) ScanWedge to receive and interpret data from the serial port.	0	0=Disabled; no data is received 1=Enabled; ScanWedge receives data from the serial port (specified in the Port key) as keystrokes to the foreground application.
AutoConnect	Enables or disables the auto-connection between ScanWedge and the serial port.	0	0=Disabled; ScanWedge opens the serial port immediately at startup and doesn't close until ScanWedge is closed. This is the recommended setting when the serial port is port 2 or 3. 1=Enabled; ScanWedge connects to the serial port when a power source is detected and disconnects when the power source is removed/not detected.
Port	Specifies the serial port to use to connect to ScanWedge. *Note: This setting is ignored for Port 4.*		The use of port 4/6 is not encouraged.
FlowControl	Specifies the flow control method to use–software only, hardware only, or software and hardware. *Note: This setting is ignored for Port 4.*	4	1=Software (Xon-Xoff) 2=Hardware 3=Hardware and software 4=No flow control
BaudRate	Specifies the baud rate for the serial port. *Note: This setting is ignored for Port 4.*	38400	X=The appropriate baud rate.
Parity	Specified the parity for the connection. *Note: This setting is ignored for Port 4.*	0	0=No parity 1=Odd parity 2=Even parity 3=Mark parity 4=Space parity
DataBits	Specifies the number of bits per byte to use. *Note: This setting is ignored for Port 4.*	8	X=Number of bits per byte

Comm Section Key	Description	Default Value	Available Values
StopBits	Specified the number of stop bits to use. *Note: This setting is ignored for Port 4.*	0	0=1 stop bit 1=1.5 stop bits 2=2 stop bits
Powerout	Enables and disables power out of the serial port for ScanWedge specifically. General power out settings are established in the registry. The serial port powers out 5V at 500mA.	0	0=Disabled; do not power out when scanning with ScanWedge 1=Enabled; power out when scanning with ScanWedge. 2=No change for ScanWedge. This means that ScanWedge is not altering the default power out setting in the registry. The terminal defaults to the power-out setting in the registry.
EnablePrefixData	Enables or disables all prefix data received via COM port after a successful scan. All prefix data is defined in the Settings Section (see page 5-2).	0	0=Disabled 1=Enabled
EnableSuffixData	Enables or disables all suffix data received via COM port after a successful scan. All suffix data is defined in the Settings Section (see page 5-2).	0	0=Disabled 1=Enabled

Decode Section

The Decode section specifies decoder settings when using the decoder with ScanWedge.

ScanWedge Decode Entry	Description	Default Value	Available Values
Enable	Enables and disables the decoder for ScanWedge.	1	0=Disabled; decoder is not used. 1=Enabled; decoder sends bar code data as keystrokes to the active window.
Trigger	Sets the key used by ScanWedge to initiate a scan/decode. The key is registered as a system hotkey and cannot be registered as a hot key by any other applications.	42	42=OnScan or Scan key

ScanWedge Decode Entry	Description	Default Value	Available Values
ContScan	Enables and disables continuous scan.	0	0=Disabled; trigger key must be released between scans. 1=Enabled; data is continuously decoded and sent to the application while the trigger key is depressed.
PowerSave	Enables and disables power saving mode.	1	1=Enabled; the decoder automatically initializes and un-initializes as needed. A slight delay occurs when the trigger is activated. 0=Disabled; the decoder initializes when the utility starts and un-initializes when the utility terminates.
ScanTimeout	Specifies the decode time out in 1/1000th seconds. If a bar code is not decoded within the specified timeout an audio and visual notification indicates that an error occurred.	5000	X=Time in 1/1000th of a second.
ScanMode	Specifies the decode mode.	1	1=Full Omni/Normal 2=ALD (Aggressive Linear Decode) mode 4=Quick Omni
LinearRange	Specifies the linear search range to be used while in ALD mode.	3	X=Range from 1 to 6. 1 indicates a tight vertical range near the aimer. 6 indicates a vertical range of the entire height of the imager.
AimerDuration	The number of milliseconds the scanner aimer is displayed, after the trigger key has been pressed down, before attempting to decode a bar code.	0 [Decode begins instantly.]	Enter times in 1/1000th of a second.
AimerDelay	The amount of time between scans before the aimer turns on again.	500	
AimerDurationALR	The amount of time the aimer stays on. This setting is for an ALR decoder.	2000	
AimerDelayALR	The amount of time between scans before the aimer turns on again. This setting is for an ALR decoder.	500	

ScanWedge Decode Entry	Description	Default Value	Available Values
DefaultEnabledSymbologies	Specifies which symbologies should be enabled before processing the Symbologies section. See Symbologies Section on page 5-18.	0	0=Use internal list 1=All symbologies are disabled initially. Enable specific symbologies in the Symbologies section. 2=All symbologies are enabled initially. Disable specific symbologies in the Symbologies section.
EnablePrefixData	Enables or disables all prefix data received from the decoder after a successful scan. All prefix data is defined in the Settings Section (see page 5-2).	1	0=Disabled 1=Enabled
EnableSuffixData	Enables or disables all suffix data received via decoder after a successful scan. All suffix data is defined in the Settings Section (see page 5-2).	1	0=Disabled 1=Enabled
GoodScanFreq	Sound frequency used for play a custom good scan beep. *Note: The Window's "Good Decode" sound (if defined in the control panel) takes precedence over this option.*	2749	Variable Use the up and down arrows to change the number OR Type in the code for the sound you want.
GoodScanLen	Number of milliseconds to play the sound as specified in GoodScanFreq key.	50	
BadScanFreq	Sound frequency used for play a custom bad scan beep. *Note: The Window's "Bad Decode" sound (if defined in the control panel) takes precedence over this option.*	523	
BadScanLen	Number of milliseconds to play the sound as specified in BadScanFreq key.	25	

Centering Section

The Centering section determines the centering window for bar code scanning.

ScanWedge Centering Entry	Description	Default Value	Available Values
CenteringEnable=	Enable and disables the decode centering window for the decoder.	0	0=Disabled; centering is disabled for ScanWedge. 1=Enabled; bar codes are decoded only if they are within the centering window specified by the rest of the keys in this section.
CenteringTop=	Specifies the top coordinate of the centering window.	210	Enter the coordinates in pixels.
CenteringBottom=	Specifies the bottom coordinate of the centering window.	270	
CenteringLeft=	Specifies the left coordinate of the centering window.	346	
CenteringRight=	Specifies the right coordinate of the centering window.	406	

Formatting Section

ScanWedge supports data formatting. The Formatting section contains subsections and each subsection supports one data format.

Subsection Key	Description	Default Value	Available Values
Format	Specifies data formatting parameters	Empty	See Data Formatting Commands on page 5-11.
CodeID	Identifies the Code ID that the bar code's symbology must have for the format to be applied. The Code ID is a single character that is case-sensitive; e.g., set CodeID=j to apply the format to Code 128 only.	Empty	Empty=No Code ID X=See Symbologies Section on page 5-18.
Length	Determines the length the bar code data must have for the format to be applied.	Empty	Empty=Format applies to any length 0=Format applies to any length X=The length

Data Formatting Commands

These are the data formatting operations applied to the bar code data. The entire command string is entered into the Format key.

Command	Description
Send Commands	
F1	**Send all characters** Include in the output message all of the characters from the input message, starting from current cursor position, followed by an insert character. *Syntax = F1xx* where xx stands for the insert character's hex value for its ASCII code. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
F2	**Send a number of characters** Include in the output message a number of characters followed by an insert character. Start from the current cursor position and continue for "nn" characters or through the last character in the input message, followed by character "xx." *Syntax = F2nnxx* where nn stands for the numeric value (00-99) for the number of characters, and xx stands for the the insert character's hex value for its ASCII code. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
F3	**Send all characters up to a particular character** Include in the output message all characters from the input message, starting with the character at the current cursor position and continuing to, but not including, the search character "ss," followed by an insert character. The cursor is moved forward to the "ss" character. *Syntax = F3ssxx* where ss stands for the search character's hex value for its ASCII code, and xx stands for the insert character's hex value for its ASCII code. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
E9	**Send all but the last characters** Include in the output message all but the last "nn" characters, starting from the current cursor position. The cursor is moved forward to one position past the last input message character included. *Syntax = E9nn* where nn stands for the numeric value (00-99) for the number of characters that will not be sent at the end of the message.
F4	**Insert a character multiple times** Send "xx" character "nn" times in the output message, leaving the cursor in the current position. *Syntax = F4xxnn* where xx stands for the insert character's hex value for its ASCII code, and nn is the numeric value (00-99) for the number of times it should be sent. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes..
B3	**Insert a symbology name** Insert the name of the bar code's symbology in the output message, without moving the cursor. Only symbologies with a Honeywell ID are included (see Symbology Chart on page 5-17). Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.

Command	Description
B4	**Insert bar code length** Insert the bar code's length in the output message, without moving the cursor. The length is expressed as a numeric string and does not include leading zeroes.
Move Commands	
F5	**Move the cursor forward a number of characters** Move the cursor ahead "nn" characters from current cursor position. *Syntax = F5nn* where nn is the numeric value (00-99) for the number of characters the cursor should be moved ahead.
F6	**Move the cursor backward a number of characters** Move the cursor back "nn" characters from current cursor position. *Syntax = F6nn* where nn is the numeric value (00-99) for the number of characters the cursor should be moved back.
F7	**Move the cursor to the beginning** Move the cursor to the first character in the input message. *Syntax = F7.*
EA	**Move the cursor to the end** Move the cursor to the last character in the input message. *Syntax = EA.*
Search Commands	
F8	**Search forward for a character** Search the input message forward for "xx" character from the current cursor position, leaving the cursor pointing to the "xx" character. *Syntax = F8xx* where xx stands for the search character's hex value for its ASCII code. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
F9	**Search backward for a character** Search the input message backward for "xx" character from the current cursor position, leaving the cursor pointing to the "xx" character. *Syntax = F9xx* where xx stands for the search character's hex value for its ASCII code. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
B0	**Search forward for a string** Search forward for "s" string from the current cursor position, leaving cursor pointing to "s" string. Syntax = B0nnnnS where nnnn is the string length (up to 9999), and S consists of the ASCII hex value of each character in the match string. For example, B0000454657374 will search forward for the first occurrence of the 4 character string "Test." Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
B1	**Search backward for a string** Search backward for "s" string from the current cursor position, leaving cursor pointing to "s" string. Syntax = B1nnnnS where nnnn is the string length (up to 9999), and S consists of the ASCII hex value of each character in the match string. For example, B1000454657374 will search backward for the first occurrence of the 4 character string "Test." Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.

Command	Description
E6	**Search forward for a non-matching character** Search the input message forward for the first non-“xx” character from the current cursor position, leaving the cursor pointing to the non-“xx” character. *Syntax = E6xx* where xx stands for the search character’s hex value for its ASCII code. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
E7	**Search backward for a non-matching character** Search the input message backward for the first non-“xx” character from the current cursor position, leaving the cursor pointing to the non-“xx” character. *Syntax = E7xx* where xx stands for the search character’s hex value for its ASCII code. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
Miscellaneous Commands	
FB	**Suppress characters** Suppress all occurrences of up to 15 different characters, starting at the current cursor position, as the cursor is advanced by other commands. When the FC command is encountered, the suppress function is terminated. The cursor is not moved by the FB command. Syntax = FBnnxxyy . .zz where nn is a count of the number of suppressed characters in the list, and xxyy .. zz is the list of characters to be suppressed.
FC	**Stop suppressing characters** Disables suppress filter and clear all suppressed characters. *Syntax = FC.*
E4	**Replace characters** Replaces up to 15 characters in the output message, without moving the cursor. Replacement continues until the E5 command is encountered. *Syntax = E4nnxx$_1$xx$_2$yy$_1$yy$_2$...zz$_1$zz$_2$* where nn is the total count of of the number of characters in the list (characters to be replaced plus replacement characters); xx$_1$ defines characters to be replaced and xx$_2$ defines replacement characters, continuing through zz$_1$ and zz$_2$.
E5	**Stop replacing characters** Terminates character replacement. *Syntax = E5.*
FE	**Compare characters** Compare the character in the current cursor position to the character “xx.” If characters are equal, move the cursor forward one position. *Syntax = FExx* where xx stands for the comparison character’s hex value for its ASCII code. Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
B2	**Compare string** Compare the string in the input message to the string “s.” If the strings are equal, move the cursor forward past the end of the string. *Syntax = B2nnnnS* where nnnn is the string length (up to 9999), and S consists of the ASCII hex value of each character in the match string. For example, B2000454657374 will compare the string at the current cursor position with the 4 character string “Test.” Refer to the ASCII Conversion Chart (Code Page 1252), page 5-14 for decimal, hex and character codes.
EC	**Check for a number** Check to make sure there is an ASCII number at the current cursor position. The format is aborted if the character is not numeric.

Command	Description
ED	**Check for non-numeric character** Check to make sure there is a non-numeric ASCII character at the current cursor position. The format is aborted if the character is numeric.
EF	**Insert a delay** Inserts a delay of up to 49,995 milliseconds (in multiples of 5), starting from the current cursor position. *Syntax = EFnnnn* where nnnn stands for the delay in 5ms increments, up to 9999. This command can only be used with keyboard wedge interfaces.

ASCII Conversion Chart (Code Page 1252)

Note: This table applies to U.S. style keyboards. Certain characters may differ depending on your Country Code/PC regional settings.

Non-Printable Characters					
DEC	**HEX**	**Character (Code)**	**DEC**	**HEX**	**Character (Code)**
0	0	NULL	16	10	DATA LINK ESCAPE (DLE)
1	1	START OF HEADING (SOH)	17	11	DEVICE CONTROL 1 (DC1)
2	2	START OF TEXT (STX)	18	12	DEVICE CONTROL 2 (DC2)
3	3	END OF TEXT (ETX)	19	13	DEVICE CONTROL 3 (DC3)
4	4	END OF TRANSMISSION (EOT)	20	14	DEVICE CONTROL 4 (DC4)
5	5	END OF QUERY (ENQ)	21	15	NEGATIVE ACKNOWLEDGEMENT (NAK)
6	6	ACKNOWLEDGE (ACK)	22	16	SYNCHRONIZE (SYN)
7	7	BEEP (BEL)	23	17	END OF TRANSMISSION BLOCK (ETB)
8	8	BACKSPACE (BS)	24	18	CANCEL (CAN)
9	9	HORIZONTAL TAB (HT)	25	19	END OF MEDIUM (EM)
10	A	LINE FEED (LF)	26	1A	SUBSTITUTE (SUB)
11	B	VERTICAL TAB (VT)	27	1B	ESCAPE (ESC)
12	C	FF (FORM FEED)	28	1C	FILE SEPARATOR (FS) RIGHT ARROW
13	D	CR (CARRIAGE RETURN)	29	1D	GROUP SEPARATOR (GS) LEFT ARROW
14	E	SO (SHIFT OUT)	30	1E	RECORD SEPARATOR (RS) UP ARROW
15	F	SI (SHIFT IN)	31	1F	UNIT SEPARATOR (US) DOWN ARROW

Printable Characters								
DEC	**HEX**	**Character**	**DEC**	**HEX**	**Character**	**DEC**	**HEX**	**Character**
32	20	<SPACE>	64	40	@	96	60	`
33	21	!	65	41	A	97	61	a
34	22	"	66	42	B	98	62	b
35	23	#	67	43	C	99	63	c
36	24	$	68	44	D	100	64	d
37	25	%	69	45	E	101	65	e
38	26	&	70	46	F	102	66	f

Printable Characters (Continued)								
DEC	HEX	Character	DEC	HEX	Character	DEC	HEX	Character
39	27	'	71	47	G	103	67	g
40	28	(	72	48	H	104	68	h
41	29	)	73	49	I	105	69	i
42	2A	*	74	4A	J	106	6A	j
43	2B	+	75	4B	K	107	6B	k
44	2C	,	76	4C	L	108	6C	l
45	2D	-	77	4D	M	109	6D	m
46	2E	.	78	4E	N	110	6E	n
47	2F	/	79	4F	O	111	6F	o
48	30	0	80	50	P	112	70	p
49	31	1	81	51	Q	113	71	q
50	32	2	82	52	R	114	72	r
51	33	3	83	53	S	115	73	s
52	34	4	84	54	T	116	74	t
53	35	5	85	55	U	117	75	u
54	36	6	86	56	V	118	76	v
55	37	7	87	57	W	119	77	w
56	38	8	88	58	X	120	78	x
57	39	9	89	59	Y	121	79	y
58	3A	:	90	5A	Z	122	7A	z
59	3B	;	91	5B	[	123	7B	{
60	3C	<	92	5C	\	124	7C	|
61	3D	=	93	5D	]	125	7D	}
62	3E	>	94	5E	^	126	7E	~
63	3F	?	95	5F	_	127	7F	<DEL>

Extended ASCII Characters								
DEC	HEX	Character	DEC	HEX	Character	DEC	HEX	Character
128	80	€	171	AB	«	214	D6	Ö
129	81		172	AC	¬	215	D7	×
130	82	‚	173	AD		216	D8	Ø
131	83	ƒ	174	AE	®	217	D9	Ù
132	84	„	175	AF	¯	218	DA	Ú
133	85	…	176	B0	°	219	DB	Û
134	86	†	177	B1	±	220	DC	Ü
135	87	‡	178	B2	²	221	DD	Ý
136	88	ˆ	179	B3	³	222	DE	Þ
137	89	‰	180	B4	´	223	DF	ß
138	8A	Š	181	B5	µ	224	E0	à
139	8B	‹	182	B6	¶	225	E1	á
140	8C	Œ	183	B7	·	226	E2	â
141	8D		184	B8	¸	227	E3	ã
142	8E	Ž	185	B9	¹	228	E4	ä
143	8F		186	BA	º	229	E5	å
144	90		187	BB	»	230	E6	æ
145	91	‘	188	BC	¼	231	E7	ç
146	92	’	189	BD	½	232	E8	è
147	93	“	190	BE	¾	233	E9	é
148	94	”	191	BF	¿	234	EA	ê
149	95	•	192	C0	À	235	EB	ë
150	96	–	193	C1	Á	236	EC	ì
151	97	—	194	C2	Â	237	ED	í

Extended ASCII Characters (Continued)								
DEC	HEX	Character	DEC	HEX	Character	DEC	HEX	Character
152	98	˜	195	C3	Ã	238	EE	î
153	99	™	196	C4	Ä	239	EF	ï
154	9A	š	197	C5	Å	240	F0	ð
155	9B	›	198	C6	Æ	241	F1	ñ
156	9C	œ	199	C7	Ç	242	F2	ò
157	9D		200	C8	È	243	F3	ó
158	9E	ž	201	C9	É	244	F4	ô
159	9F	Ÿ	202	CA	Ê	245	F5	õ
160	A0		203	CB	Ë	246	F6	ö
161	A1	¡	204	CC	Ì	247	F7	÷
162	A2	¢	205	CD	Í	248	F8	ø
163	A3	£	206	CE	Î	249	F9	ù
164	A4	¤	207	CF	Ï	250	FA	ú
165	A5	¥	208	D0	Ð	251	FB	û
166	A6	¦	209	D1	Ñ	252	FC	ü
167	A7	§	210	D2	Ò	253	FD	ý
168	A8	¨	211	D3	Ó	254	FE	þ
169	A9	©	212	D4	Ô	255	FF	ÿ
170	AA	ª	213	D5	Õ			

Symbology Chart

Symbology	Code ID (hex)
All Symbologies	(0x99)
Australian Post	A (0x41)
Aztec Code	z (0x7A)
British Post	B (0x42)
Canadian Post	C (0x43)
China Post	Q (0x51)
Chinese Sensible Code (Han Xin Code)	H (0x48)
Codabar	a (0x61)
Codablock A	V (0x56)
Codablock F	q (0x71)
Code 11	h (0x68)
Code 128	j (0x6A)
GS1-128	I (0x49)
Code 32 Pharmaceutical (PARAF)	< (0x3C)
Code 39 (supports Full ASCII mode)	b (0x62)
Code 49	l (0x6C)
Code 93 and 93i	i (0x69)
Data Matrix	w (0x77)
EAN-13 (including Bookland EAN)	d (0x64)
EAN-13 with Add-On	d (0x64)
EAN-13 with Extended Coupon Code	d (0x64)
EAN-8	D (0x44)
EAN-8 with Add-On	D (0x44)
GS1 Composite	y (0x79)
GS1 DataBar	y (0x79)
GS1 DataBar Limited	{ (0x7B)
GS1 DataBar Omnidirectional	y (0x79)
GS1 DataBar Expanded	} (0x7D)
InfoMail	, (0x2c)
Intelligent Mail Bar Code	M (0x4D)
Interleaved 2 of 5	e (0x65)
Japanese Post	J (0x4A)
KIX (Netherlands) Post	K (0x4B)
Korea Post	? (0x3F)
Matrix 2 of 5	m (0x6D)
MaxiCode	x (0x7 8)

Symbology	Code ID (hex)
MicroPDF417	R (0x52)
MSI	g (0x67)
NEC 2 of 5	Y (0x59)
OCR MICR (E 13 B)	O (0x4F)
OCR SEMI Font	O (0x4F)
OCR-A	O (0x4F)
OCR-B	O (0x4F)
PDF417	r (0x72)
Planet Code	L (0x4C)
Postal-4i	N (0x4E)
Postnet	P (0x50)
QR Code and Micro QR Code	s (0x73)
Straight 2 of 5 IATA	f (0x66)
Straight 2 of 5 Industrial	f (0x66)
TCIF Linked Code 39 (TLC39)	T (0x54)
Telepen	t (0x54)
UPC-A	c (0x63)
UPC-A with Add-On	c (0x63)
UPC-A with Extended Coupon Code	c (0x63)
UPC-E	E (0x45)
UPC-E with Add-On	E (0x45)
UPC-E1	E (0x45)

Symbologies Section

The Symbologies section specifies the settings for each of the symbologies supported by the decoder.

The settings are in the form:

```
Symbology Name=Enable(1 or 0), Parm1, Parm2, Parm3, Parm4, Parm5, Parm6, Parm7, Parm8
```

Where

- Enable specifies that the symbology is enabled or disabled.
- Parms1–8 specify the settings for the symbology.

For more information regarding the individual settings for each of the symbologies, refer to the Honeywell Decode API documentation in the SDK documentation.

Symbologies Settings

0=Disabled 1=Enabled

ScanWedge Entry	Default Enabled/ Disabled Value	Default Value
Australian Post	0=Disabled	0,0,0,0,0,0,0,0,0
Aztec Code	1=Enabled	1,1,3750,0,0,0,0,0,0
Aztec Mesas	0=Disabled	0,0,0,0,0,0,0,0,0
British Post	0=Disabled	0,0,0,0,0,0,0,0,0
Canadian Post	0=Disabled	0,0,0,0,0,0,0,0,0
China Post	0=Disabled	0,4,80,0,0,0,0,0,0
Codabar	1=Enabled	1,0,0,0,4,60,0,0,0
Codablock	0=Disabled	0,1,2048,0,0,0,0,0,0
Code 11	0=Disabled	0,1,4,80,0,0,0,0,0
Code 128/EAN 128	1=Enabled	1,0,80,0,0,0,0,0,0
Code 16K	0=Disabled	0,1,160,0,0,0,0,0,0
Code 32	0=Disabled	0,0,0,0,0,0,0,0,0
Code 39	1=Enabled	1,0,0,0,0,0,0,48,0
Code 49	0=Disabled	0,1,81,0,0,0,0,0,0
Code 93	0=Disabled	0,0,80,0,0,0,0,0,0
Coupon Code	0=Disabled	0,0,0,0,0,0,0,0,0
Data Matrix	0=Disabled	0,1,1500,0,0,0,0,0,0
Dutch Post	0=Disabled	0,0,0,0,0,0,0,0,0
EAN-8	0=Disabled	0,1,0,0,0,1,0,0,0
EAN-13	1=Enabled	1,1,0,0,0,1,0,0,0
EAN.UCC Composites	0=Disabled	0,1,300,0,0,0,0,0,0

ScanWedge Entry	Default Enabled/ Disabled Value	Default Value
Interleaved 2 of 5	1=Enabled	1,0,0,4,80,0,0,0,0
ISBT	0=Disabled	0,0,0,0,0,0,0,0,0
Japanense Post	0=Disabled	0,0,0,0,0,0,0,0,0
Korea Post	0=Disabled	0,4,48,0,0,0,0,0,0
Matrix 2 of 5	0=Disabled	0,4,80,0,0,0,0,0,0
MaxiCode	0=Disabled	0,0,1,150,0,0,0,0,0
MicroPDF417	1=Enabled	1,1,366,0,0,0,0,0,0
MSI	0=Disabled	0,4,48,0,0,0,0,0,0
OCR	0=Disabled	0,2,dddddddd,,,,0
PDF417	1=Enabled	1,1,2750,0,0,0,0,0,0
Planet Code	0=Disabled	0,0,0,0,0,0,0,0,0
Plessey	0=Disabled	0,4,48,0,0,0,0,0,0
PosiCode	0=Disabled	0,4,48,2,0,0,0,0,0
Postnet	0=Disabled	0,0,0,0,0,0,0,0,0
QR Code	0=Disabled	0,1,3500,0,0,0,0,0,0
Reduced Space Symbology (RSS)	0=Disabled	0,4,74,0,0,0,0,0,0
Straight 2 of 5 IATA	0=Disabled	0,4,48,0,0,0,0,0,0
Straight 2 of 5 Industrial	0=Disabled	0,4,48,0,0,0,0,0,0
TCIF Linked Code 39 (TLC39)	0=Disabled	0,0,0,0,0,0,0,0,0
Telepen	0=Disabled	0,1,60,0,0,0,0,0,0
Trioptic Code	0=Disabled	0,0,0,0,0,0,0,0,0
UPC-A	1=Enabled	1,1,1,0,0,0,1,0,0

ScanWedge Entry	Default Enabled/ Disabled Value	Default Value
UPC-E0	0=Disabled	0,1,1,0,0,0,0,1,0
UPC-E1	0=Disabled	0,1,1,0,0,0,0,1,0

OCR

For comprehensive information about using OCR, refer to the *OCR Programming User's Guide* available on our website at www.honeywellaidc.com.

VK (Virtual Key) Mapping Section

The virtual key map settings are located in the VKMapping section in the ScanWedge configuration file. The virtual key map settings define the virtual key that will be sent to ScanWedge for any decoded ASCII character.

The settings are in the form: **`ASCII Key = Virtual Key, ShiftMode`**

Where

- ASCII Key is an ASCII value between 0 an 255 (decimal)
- Virtual Key is the virtual key to be sent when the specified ASCII key is decoded
- ShiftMode can have the following values:
    - 0=the virtual key is never shifted
    - 1=the virtual key must be shifted
    - 2=the virtual key needs to be shifted if Caps Lock is off
    - 3=the virtual key needs to be shifted if Caps Lock is on

Virtual Key Codes Table

The following table shows the symbolic constant names, hexadecimal values, and keyboard equivalents for the virtual-key codes used by Windows Embedded Handheld 6.5. The codes are listed in numeric order.

Note: To use these codes in the VKMapping section, the hexadecimal values need to be converted to decimals.

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
VK_LBUTTON	1	01	Touch screen
VK_CANCEL	3	03	Control-break processing
——	5-7	05-07	Undefined
VK_BACK	8	08	BACKSPACE key
VK_TAB	9	09	TAB key
——	10-11	0A-0B	Undefined

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
VK_CLEAR	12	0C	CLEAR key
VK_RETURN	13	0D	ENTER key
——	14-15	0E-0F	Undefined
VK_SHIFT	16	10	SHIFT key
VK_CONTROL	17	11	CTRL key
VK_MENU	18	12	ALT key
VK_CAPITAL	20	14	CAPS LOCK key
——	21-25	15-19	Reserved for Kanji systems
——	26	1A	Undefined
VK_CLEAR	12	0C	CLEAR key
VK_RETURN	13	0D	ENTER key
——	14-15	0E-0F	Undefined
VK_SHIFT	16	10	SHIFT key
VK_CONTROL	17	11	CTRL key
VK_MENU	18	12	ALT key
VK_CAPITAL	20	14	CAPS LOCK key
——	21-25	15-19	Reserved for Kanji systems
——	26	1A	Undefined
VK_ESCAPE	27	1B	ESC key
——	28-31	1C-1F	Reserved for Kanji systems
VK_SPACE	32	20	SPACEBAR key
VK_PRIOR	33	21	PAGE UP key
VK_NEXT	34	22	PAGE DOWN key
VK_END	35	23	END key
VK_HOME	36	24	HOME key
VK_LEFT	37	25	LEFT ARROW key
VK_UP	38	26	UP ARROW key
VK_RIGHT	39	27	RIGHT ARROW key
VK_DOWN	40	28	DOWN ARROW key

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
VK_SELECT	41	29	SELECT key
——	42	2A	Original equipment manufacturer (OEM)– specific
VK_EXECUTE	43	2B	EXECUTE key
VK_SNAPSHOT	44	2C	PRINT SCREEN key for Windows 3.0 and later
VK_HELP	47	2F	HELP key
VK_0	48	30	0 key
VK_1	49	31	1 key
VK_2	50	32	2 key
VK_3	51	33	3 key
VK_4	52	34	4 key
VK_5	53	35	5 key
VK_6	54	36	6 key
VK_7	55	37	7 key
VK_8	56	38	8 key
VK_9	57	39	9 key
——	58-64	3A-40	Undefined
VK_A	65	41	A key
VK_B	66	42	B key
VK_C	67	43	C key
VK_D	68	44	D key
VK_E	69	45	E key
VK_F	70	46	F key
VK_G	71	47	G key
VK_H	72	48	H key
VK_I	73	49	I key
VK_J	74	4A	J key
VK_K	75	4B	K key
VK_L	76	4C	L key

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
VK_M	77	4D	M key
VK_N	78	4E	N key
VK_O	79	4F	O key
VK_P	80	50	P key
VK_Q	81	51	Q key
VK_R	82	52	R key
VK_S	83	53	S key
VK_T	84	54	T key
VK_U	85	55	U key
VK_V	86	56	V key
VK_W	87	57	W key
VK_X	88	58	X key
VK_Y	89	59	Y key
VK_Z	90	5A	Z key
——	91-95	5B-5F	Undefined
VK_NUMPAD0	96	60	Numeric keypad 0 key
VK_NUMPAD1	97	61	Numeric keypad 1 key
VK_NUMPAD2	98	62	Numeric keypad 2 key
VK_NUMPAD3	99	63	Numeric keypad 3 key
VK_NUMPAD4	100	64	Numeric keypad 4 key
VK_NUMPAD5	101	65	Numeric keypad 5 key
VK_NUMPAD6	102	66	Numeric keypad 6 key
VK_NUMPAD7	103	67	Numeric keypad 7 key
VK_NUMPAD8	104	68	Numeric keypad 8 key
VK_NUMPAD9	105	69	Numeric keypad 9 key
VK_MULTIPLY	106	6A	Asterisk (*) key
VK_ADD	107	6B	Plus sign (+) key
VK_SEPARATOR	108	6C	Separator key
VK_SUBTRACT	109	6D	Minus sign (–) key

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
VK_DECIMAL	110	6E	Period (.) key
VK_DIVIDE	111	6F	Slash mark (/) key
——	88	88-8F	Unassigned
——	146-185	92-B9	Unassigned
——	186-192	BA-C0	OEM-specific
——	193-218	C1-DA	Unassigned
——	219-228	DB-E4	OEM-specific
——	229	E5	Unassigned
——	230	E6	OEM-specific
——	231-232	E7-E8	Unassigned
——	233-245	E9-F5	OEM-specific
VK_ATTN	246	F6	
VK_CRSEL	247	F7	
VK_EXSEL	248	F8	
VK_EREOF	249	F9	
VK_PLAY	250	FA	
VK_ZOOM	251	FB	
VK_NONAME	252	FC	
VK_PA1	253	FD	
VK_EM_CLEAR	254	FE	
VK_LWIN	91	5B	
VK_RWIN	92	5C	
VK_APPS	93	5D	
VK_LSHIFT	160	A0	
VK_RSHIFT	161	A1	
VK_LCONTROL	162	A2	
VK_RCONTROL	163	A3	
VK_LMENU	164	A4	
VK_RMENU	165	A5	

Command Line Arguments

`/restart`	Forces ScanWedge to process its configuration file (Scanwedge.exm) again, which applies changes immediately. If the SoundConnect (see page 5-4) is set to 1 (enabled), an ascending connect sound is played on restart.
`/quit`	Shuts down ScanWedge.

6 Additional Power Tools

Overview

This chapter describes the following Power Tools:

Power Tool	Icon	See Page
BattMon	 BattMon	6-1
InstallerCE	No icon	6-3
Hotkeys	 HotKeys	6-3
Keyboard Status	 Keyboard Status	6-4
NoSIP	 NoSIP	6-6
RASMan	 RASMan	6-7
Reboot	 Reboot	6-10
Suspend	 Suspend	6-10
SysInfo	 SysInfo	6-11

BattMon

BattMon programs the terminal's LEDs to monitor the charge status of the battery.The LEDs are located on the top, front panel of Dolphin terminals.

To Enable BattMon

Tap the **BattMon** icon **once** . After activation, BattMon monitors the battery's charge status.

When the battery is at 100%, the LED lights solid green.
When the battery is charging the LED flashes orange.

Note: To start BattMon automatically after each hard reset, enable the BattMon Program section of the Autorun.exm File (see page 4-1).

To Disable BattMon

Navigate to the Power Tools Main Window (see page 1-1) and tap the **BattMon** icon again.

OR

Select **Exit** on the Command Bar Menu (page 6-2).

Command Bar Menu

When BattMon is enabled, a smaller BattMon icon appears in the Command bar at the bottom of the Today screen.

Tap this icon to open the Command bar menu.

Menu Item	This item …
Status	Displays the battery charge status in percentage.
Enable	Enables and disables BattMon without exiting BattMon.
About	Provides version and copyright information for BattMon.
Exit	Closes BattMon. The icon no longer appears in the Command bar.

Command Line Arguments

`/quit`	Shut down BattMon.
`/noicon`	Run BattMon with no icon.
`/nosplash`	Hide the BattMon splash screen.

To Check Battery Power Manually

Tap the **BattMon** icon in the Command bar on the Today screen. The Status (page 6-2) menu item displays the charge percentage.

OR

Tap **Start** > **Settings** > **System** tab > **Power**. The Power window opens displaying the current charge status of the terminal's batteries.

InstallerCE

InstallerCE is a utility that saves CAB files after a manual install initiated by double-tapping on CAB. Normally, when you install a program by double-tapping on its CAB, the CAB file is deleted after installation is complete. InstallerCE preserves the original CAB file in its original location.

Location InstallerCE is located in the **`\Program Files\Power Tools`** folder.

To Manually Install a CAB File

1. On the Dolphin terminal, open **File Explorer**.
2. Navigate to the desired folder.
3. Double-tap on a CAB file. The program begins installing.
4. If the program is already installed, the system will ask you if you want to re-install it. Click **Yes**.
5. After installation is complete, notice that the CAB file remains in the AutoInstall folder.

HotKeys

The HotKeys Power Tool activates the hardware button assignments in the Buttons setting. To start HotKeys automatically after each hard reset, enable the HotKeys Program section of the Autorun.exm File (see page 4-1).

To Enable HotKeys

Tap the HotKeys icon **once** . HotKeys is enabled and the button assignments in the Buttons setting are active.

Verify the assignment by tapping the button on the keyboard. To see button assignments, see Buttons Setting on page 6-3.

Buttons Setting

The Buttons System setting programs hardware buttons to launch applications or execute commands. To see the hardware button assignments that HotKeys activates, open the Buttons setting.

1. After HotKeys is enabled, tap **Start** > **Settings** > **Personal** tab > **Buttons**.

Note: The buttons that appear on this window are the only buttons that can be programmed in the Buttons setting. You cannot add hardware buttons to this window.

2. To change button assignment, tap on the name of the application in the **Assignment** column and select a program or command in the **Assign a program** drop down list.

3. Tap **OK** to save.

To Disable HotKeys

Navigate to the Power Tools Main Window (see page 1-1) and tap the **HotKeys** icon again.

OR

Select **Exit** on the Command Bar Menu (page 6-4).

Command Bar Menu

When HotKeys is enabled, a small HotKeys icon appears in the Command bar at the bottom of the screen.

Tap this icon to open the Command bar menu for HotKeys.

Menu Item	Selecting this item …
Settings	Opens the Buttons setting.
Enable	Enables and disables HotKeys
About	Displays version and description information for HotKeys.
Exit	Closes HotKeys. The icon no longer appears in the Command bar.

Command Line Arguments

`/quit`	Shut down HotKeys.
`/noicon`	Run HotKeys with no icon.
`/nosplash`	Hide the HotKeys splash screen.

Keyboard Status

Keyboard Status indicates whether the keyboard is in alpha, caps lock alpha, or numeric modes.

Each Dolphin terminal series has keyboards that switch between alpha and numeric modes, often by way of a keyboard combination. Keyboard Status displays an alpha-numeric indicator in the Navigation bar that tells you if the keyboard is in alpha or numeric mode so that you don't have to test type in your application to find out.

Navigation Bar Indicator

Indicator	Keyboard is in …
	Alpha mode, lower case (CAPS lock off).
	Alpha mode, upper case (CAPS lock on).

Indicator	Keyboard is in …
1	Numeric mode.

Keyboard Status is enabled automatically after each hard reset by default. This setting is programmed Autorun.exm File (see page 4-1).

Keyboard Status Menu

When Keyboard Status is enabled, the indicator icon appears in the Command bar at the bottom of the screen.

Tap this icon to open the Keyboard Status menu.

Menu Item	Selecting this item …
About	Displays version and description information for Keyboard Status.
Settings	Opens the Sounds & Notifications setting.
Enable	Enables and disables Keyboard Status.
Exit	Closes Keyboard Status. The icon no longer appears in the Command bar.

Notification Menu

When Keyboard Status is enabled, a Notification menu appears in the command bar on the Today screen that displays the keyboard status when tapped.

Note: You can also tap the icon in the Navigation bar to make this pop-up window appear.

Tap **Hide** to remove the keyboard status icon from the navigation bar. (The Keyboard Status Power Tool will continue to run in the background, and appear in the task tray on the Today screen.) The next time you switch keyboard modes

Tap **Dismiss** to remove the notification menu from the command bar. (If the terminal uses the phone, then the Phone menu appears in the command bar instead.)

Accessing the Keyboard Status Power Tool

Keyboard Status is enabled after each hard reset by default.

Keyboard Status

Tap the **Keyboard Status** icon **once** and Keyboard Status is enabled. To disable Keyboard Status, tap icon again.

Command Line Arguments

`/debug`	Log debug output to **`\Honeywell\keyboardstatus.log`**
`/quit`	Shut down Keyboard Status.
`/noicon`	Run Keyboard Status with no icon.
`/nosplash`	Hide the Keyboard Status splash screen.

NoSIP

NoSIP toggles the Soft Input Panel (SIP) between enabled and disabled. When disabled, the SIP does not pop up over application windows automatically. In addition, the SIP icon  does not appear in the Command bar on application windows.

To Enable NoSIP

NoSIP

Tap the NoSIP icon **once** . The SIP should not pop up on application screens.

Note: To disable the SIP automatically after each hard reset, enable the NoSIP Program section of the Autorun.exm File (see page 4-1).

To Disable NoSIP

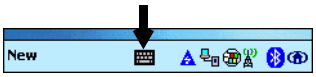
Navigate to the Power Tools Main Window (see page 1-1) and tap the **NoSIP** icon again.

OR

Select **Exit** on the Command Bar Menu (page 6-7).

Command Bar Menu

When NoSIP is enabled, a smaller NoSIP icon appears in the Command bar at the bottom of the Today screen  . Tap this icon to open the Command bar menu.

Menu Item	Selecting this item …
Enable SIP	Enables the SIP without stopping NoSIP. When this item is selected, the indicator in the Command bar changes to  to indicate that the SIP is now active, even though the NoSIP is still running.
About	Displays version and description information for NoSIP.
Exit	Disables NoSIP; the icon no longer appears in the Command bar.

Command Line Arguments

`/noicon`	Run NoSIP with no icon
`/nosound`	Turn off the sound
`/nohotkey`	Disable the NoSIP hotkey
`/enable`	Enable the SIP
`/disable`	Disable the SIP

RASMan

RASMan establishes a PPP (Point-to-Point Protocol) connection with a RAS server.

To Enable RASMan

1. Tap **Start** > **Power Tools**. The Power Tools Main Window (see page 1-1) appears.
2. Click the RASMan icon **once**  . The PPP connection is established according to the settings in the See RASMan Configuration File on page 6-8..

Note: To start RASMan automatically after each hard reset, enable the RASMan Program section of the Autorun.exm File (see page 4-1).

To Disable RASMan

Navigate to the Power Tools Main Window (see page 1-1) and tap the **RASMan** icon again.

OR

Select **Exit** on the Command Bar Menu (page 6-8).

Command Bar Menu

When RASMan is enabled, the RASMan icon appears in the Command bar at the bottom of the Today screen  . Tap this icon to open the Command bar menu.

Menu Item	Selecting this item …
Auto Connect	This item is selected by default; it means that the terminal is connected to the RAS server via PPP.
Connect	Re-establishes the PPP connection if it was disconnected.
Disconnect	Disconnects the PPP connection.
About	Displays version and description information about RASMan.
Exit	Disables RASMan; the icon no longer appears in the Command bar.

RASMan Configuration File

RASMan application settings are stored in the Settings section of **`\Honeywell\RASMan.exm`**. Use EZConfig Editor (see page 2-1) to change the values in the RASMan.exm file.

Key	Description	Default Value	Available Values
AudioNotification	Enable and disable audio notifications on connecting and disconnecting.	1	0=Disable 1=Enable
AutoConnectOnDock	Connects and disconnects RASMan when the terminal is docked and removed from the communication peripheral.	1	0=Disabled; RASMan connection must be launched manually when the terminal is docked. 1=RASMan connects on an AC power event. 2=RASMan connects on RS-232/USB connection.
AutoConnectOnStartup	Controls the automatic connection when RASMan is started. *Note: RASMan attempts to connect only if the device is docked and AC power is detected.*	1	0=Disabled; the PPP connection is not established when RASMan is started. 1=Enabled; the PPP connection is established when RASMAN is started.
Connectoid	Indicates the connection RASMan should use.	USB Connection	`USB Connection `115200 Default `19200 Default `38400 Default `57600 Default *Note: These values must be typed in exactly as they appear here.*

Key	Description	Default Value	Available Values
CommandLine	Command to execute on a successful connection.	Empty	Leave empty if no action is required.
CommandArgs	Command arguments for the CommandLine setting.	Empty	Leave empty if no action is required.
ConnectDelay	Specifies the amount of time to wait before establishing the PPP connection after RASMan is started.	2000	Enter values in milliseconds.
Debug	Enables and disables the creation of a debug log file.	0	0=Disabled; no log file 1=Enabled; Creates a log file of RASMan activity in the **\Honeywell** folder.
DisableActiveSync	Disables the ActiveSync connection when RASMan is running.	1	0=Disabled; ActiveSync runs while RASMan is running. 1=Enabled; the ActiveSync connection is disabled while RASMan is running.
Retry	Specifies the retry count.	10	
RetryDelay	Specifies the retry delay.	1000	Enter values in milliseconds.
ShowError	Enables and disables error messages on connecting.	1	0=Disable 1=Enable
ShowStatus	Enables and disables the appearance of status dialog boxes.	1	0=Disabled; status dialogs do not appear. 1=Enabled; status dialogs do appear.
StatusMessageDelay	Specifies a delay in milliseconds (i.e 1000 is 1 second) to apply after status and error messages are displayed.	25	X=Number of milliseconds.
StopOnCriticalError	Forces RASMan to stop running when a critical error occurs.	1	0=Disabled; RASMan continues to run when a critical error occurs. 1=Enabled; RASMan stops running when a critical error occurs.
TrayIcon	Enables or disables the RASMan tray icon.	1	0=Disable 1=Enable

Reboot

Reboot performs a warm or cold boot from the touch screen. All Dolphin terminals reboot with keyboard commands. Reboot offers you the option of using the touch screen instead.

Warm Boot

A warm boot is a soft reset. A soft reset re-boots the device without losing RAM data.

You would perform a soft reset when

- the terminal fails to respond.
- after installing software applications that require a re-boot.
- after making changes to certain system settings, such as network cards.

Cold Boot

A cold boot is a hard reset. A hard reset resets the operating system, restores the terminal back to factory defaults, and resets the terminal.

A hard reset erases all of the data stored in RAM memory and all RAM installed applications! Only data and applications stored in **`\IPSM`** memory persist.

Rebooting the Dolphin terminal

Tap the **Reboot** icon . The Reboot screen appears.

To perform a warm boot, tap the **Warm Boot** button. To perform a cold boot, tap the **Cold Boot** button.

The Dolphin terminal begins booting immediately.

Command Line Arguments

`/r` Warm Reset

`/c` Cold Reset

Suspend

Suspend puts the terminal in Suspend mode. All Dolphin terminals have keyboard commands that put the terminal in Suspend mode; Suspend offers you the option of using the touch screen instead.

To Suspend the Dolphin Terminal

Tap the Suspend **icon** once . The terminal goes into Suspend mode.

To wake the Dolphin Terminal from Suspend Mode, press the SCAN key.

SysInfo

SysInfo provides a read-out of important system information including firmware versions, DLL versions, system parameters, as well as network and radio information.

To See System Information

Tap the **SysInfo** icon once. SysInfo queries the system, compiles the data and displays it on the SysInfo screen.

You cannot edit information in SysInfo. This information is gathered from the Dolphin terminal and changes only when the terminal's configuration has changed.

To refresh the system information, go to **File** > **Refresh**. The system re-compiles system information.

To Save the System Information to a Text File

Tap **File** > **Save to File**. A file named "SYSINFO.txt" is generated and saved to the **My Device** folder.

To open the file, tap **Start** > **Programs** > **File Explorer**. Navigate to the My Device folder. The SYSINFO.txt file appears in the list.

Viewing Options

If you tap on the SYSINFO.txt file in the My Device folder, the file opens in Pocket Word. You cannot change system information by editing the text.

To Upload SYSINFO.txt to a Workstation

You can upload the SYSINFO.txt file to a workstation via ActiveSync.

1. On the workstation, open Windows Explorer.
2. Navigate to the **Mobile Device** folder.
3. Select **My Windows Mobile-Based Device**. The SYSINFO.txt file appears here.
4. Copy and paste this file to a folder on your workstation.

Sample SysInfo File

Field	Sample Data	Description
SYSTEM DATE/TIME		
Date	03/08/2010	Date.

Field	Sample Data	Description
Time	05:38:10	Time.
SYSTEM INFO		
Hardware Revision	6	Specifies the hardware revision.
OS Version	WM65 (5.2.23152)	Specifies the Operating System version.
Kernel	25.03 (JAN 19, 2011)	Specifies the Kernel version.
Service Pack	NONE	Specifies the Service Pack level.
IPL	25.03 (JAN 19, 2011)	Specifies the Boot Loader version.
Keyboard Firmware	25.03	Specifies the Keyboard firmware version.
GPS Firmware	6.02 (36023)	Specifies the GPS firmware version.
Manufacture Date	20101226	Specifies the manufacture date.
Model Number	99EX	Specifies the model number.
Part Number	99EXLW3-GC211XE	Specifies main board part number.
Terminal Serial Number	10360D013B	Specifies the terminal serial number.
Configuration Number	99EXLW3-GC211XE	Specifies the unit configuration number.
Keyboard Type	55-key	Specifies the Keyboard type.
Scanner Type	N5603	Specifies the scanner type.
Touch Panel Type	Installed	Specifies the touch panel type.
Display Type	Casio	Specifies the display type.
CPU INFO		
ProcessorName	OMAP37XX	Specifies the name of the CPU
Architecture	ARM	Specifies the systems processor architecture.
ProcessorLevel	4	Specifies the systems architecture-dependent processor level.
Processor Frequency	1000 Mhz	Specifies the systems processor operating frequency.
DLL VERSION INFO		

Field	Sample Data	Description
Decoder.dll	3.9	Current Decoder.dll api build revision.
Matrix Engine	1.8.9	Current Matrix engine build revision.
Decoder Secondary Revision	1.16.1.4	Current Secondary Decoder revision
Decoder Control Logic Version	1.49.1.4	Current Decoder Control Logic revision
DecThreads Version	1.29.1.12	Current DecThreads revision
HHPScanInterface.dll	1.35	Current HHPScanInterface.dll api build revision.
Scan Driver	1.264	Current scan driver build revision.
HHPJADEHW.dll	2.02.03	Current HHPJADEHW.dll api build revision.
ImgApi.dll	3.00.01	Current ImgApi.dll api build revision.
DibCE.dll	2.04.00	Current DibCE.dll api build revision.
SYSTEM PARAMETERS		
BatteryIdleTimeout	60	
ExternalIdleTimeout	0	
OEMInfo	99EX. Honeywell	
PlatformType	PocketPC	
NETWORK INFO		
Hostname	ID10360D013B	
NumberOfAdapters	3	
1: Mac Address	00102055FC75	
1: IP Address	0.0.0.0	
2: Mac Address	00102055A755	
2: IP Address	0.0.0.0	
3: Mac Address	022406020020	
3: IP Address	169.254.2.1	

Field	Sample Data	Description
RADIO INFO		
WiFi Hardware:	TI 1273 802.11a/b/g/n radio	Type of WiFi hardware
WiFi State:	Off	WiFi hardware power state
Bluetooth Hardware:	Murata BT ver.2.1 + EDR	Type of Bluetooth hardware
Bluetooth State:	Off	Bluetooth hardware power state
GSM Hardware:	Cinterion PH8 module	Type of GSM hardware
GSM State:	Off	GSM hardware power state
Power Tools And Demos		
Power Tools Version	5.03	Power Tools Cab Version
Demos Version	5.03	Demos Cab Version
\Program Files\Power Tools		
Reboot.exe	1.00.00.2	
HotKeys.exe	1.01.06	
EZConfig Editor PPC.exe	1.00.07.7	
RegEdit.exe	1.01.00	
EZMenu.exe	2.03.08	
NoSIP.exe	1.03.09	
IPConfig.exe	1.00.00.1	
ImageProfiler.exe	3.07.30001	
BattMon.exe	1.04.09	
KeyboardStatus.exe	1.00.04	
IrDAPrintCE.exe	1.01.03	
BatteryAnalyzer.exe	1.01.04	
Ping.exe	1.00.00.1	
WiFiStatus.exe	1.00.00.1	
Route.exe	1.00.00.1	
XMLMerger.exe	1.00.00.1	
ScanWedge.exe	2.09.03	
SysInfo.exe	1.04.00	

Field	Sample Data	Description
BTPrint.exe	1.01.00	
Suspend.exe	1.00.03	
\IPSM\Honeywell		
Autorun.exe	2.06.03	
AutoInstall.exe	2.02.12	
EZConfigPPC.exe	1.00.04.1	
DeviceConfig.exe	1.00.03.7	
DeviceConfig.exm	6	
Autorun.exm	23	
AutoInstall.exm	3	
\IPSM\Honeywell\AutoInstall		
File(1):	SDKNC_307.wm.armv4i.CAB	
File(2):	Demos_503.wm.armv4i.CAB	
File(3):	DefaultSettings.reg	
File(4):	PowerTools_503.wm.armv4i.CAB	
POWER STATUS		
ACLineStatus	AC online	AC power status.
BatteryFlag	Charging	Battery charge status.
BatteryLifePercent	10 %	Percentage of full battery charge remaining.
BackupBatteryFlag	High	Backup battery charge status.
BackupBatteryLifePercent	100 %	Percentage of full backup battery charge remaining.
STORE INFO		
StoreSize	758022144	Specifies the size in bytes of the object store.
FreeSize	744921088	Specifies the amount of free space in bytes in the object store.
SYSTEM VERSION		
MajorVersion	5	

Field	Sample Data	Description
MinorVersion	2	
BuildNumber	23152	
PlatformId	3	
CSDVersion		Indicates the latest Service Pack installed on the system.
GLOBAL MEMORY STATUS		
MemoryLoad	40	Specifies a number between 0 and 100 that gives a general idea of current memory utilization in which 0 indicates no memory use and 100 indicates full memory use.
TotalPhysical	241238016	Indicates the total number of bytes of physical memory.
TotalPageFile	0	Indicates the number of bytes of physical memory available.
AvailPageFile	0	Indicates the total number of bytes that can be stored in the paging file.
TotalVirtual	33554432	Indicates the total number of bytes that can be described in the user mode portion of the virtual address space of the calling process.
AvailVirtual	29360128	Indicates the number of bytes of unreserved and uncommitted memory in the user mode portion of the virtual address space of the calling process.
IMAGER INFO		
PSOC Version	6.5	Current PSOC revision.
AimerXoffset	5900	Indicates the imagers AimerXoffset
AimerYoffset	5126	Indicates the imagers AimerYoffset
BitsPerPixel	8	Indicates the imagers BitsPerPixel
EngineID	12	Indicates the imagers EngineID
ImagerCols	832	Indicates the imagers ImagerCols
ImagerRows	640	Indicates the imagers ImagerRows
Rotation	0	Indicates the imagers Rotation

Field	Sample Data	Description
YDepth	0	Indicates the imagers YDepth

7 Using the Battery Analyzer

Overview

The Battery Analyzer Power Tool helps you manage the battery installed on some Dolphin terminals.

Requirements

For the Battery Analyzer to work, you must have the following items installed on the Dolphin terminal:

- **BatteryAnalyzer.exe**
- **BatteryAnalyzer.exm**
- **Battalyzer.dll**

When all of these items are installed, the **Battery Analyzer** icon 

appears on the Power Tools Main Window (see page 1-1).

Operating Temperature= 0°-50°C

The operating temperature of the battery must be between 0°C and 50°C. If you attempt to analyze a battery when the operating temperature is outside this range, the analyze cycle stops. You will be notified that the analyze cycle was aborted due to temperatures below 0°C or above 50°C. If this happens, recharge the battery.

AC Power Supply

You must have a continuous supply of AC power to the terminal and installed battery prior to analyzing. If you attempt to analyze a battery and AC power is interrupted, the analyze process stops. You will be notified that the analyze cycle was aborted due to AC power interruptions. If this happens, recharge the battery.

Recommendation

Batteries should be analyzed only **once** every three months.

Analyzing a Battery

During the analyze cycle, the installed battery charges to 100%, then drains it to 0%, then charges it back up to 100%.

When the operating temperature of the battery is between 0°C and 50°C and there is a constant AC supply to the terminal and battery, tap **Start** > **Power Tools** > **Battery Analyzer**. The Battery Analyzer main window displays specific battery information for your review, including the operating temperature.

*Note: The **Charge Status** field indicates if the installed battery is charging or fully charged.*

The **Estimated Time** field displays the amount of time it will take to complete a full cycle.

Analyze Cycle Steps

There are three steps to the analyze cycle:

Step 1:	The battery charges to 100%.
Step 2:	The battery discharges to 0%.
Step 3:	The battery re-charges to 100%.

Automatic Shut Down

The analyze cycle aborts if:

- The operating temperature drops below 0°C or above 50°C.
- AC power is lost.

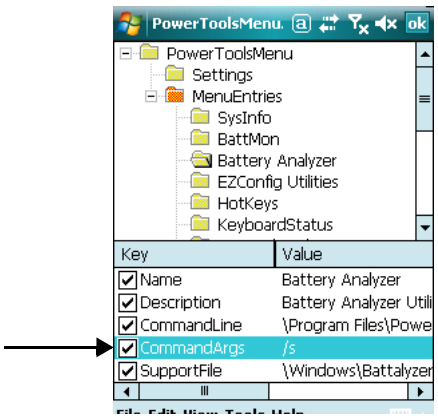
The text box at the bottom of the window displays the details about why the process aborted.

Stopping an Analyze Cycle

You can stop the analyze cycle manually any time by tapping the **File** menu in the command bar. Tap **Stop Analyzing** or **Start Analyzing**.

Command Line Arguments

The following command line arguments can be used in the **CommandArgs** key of the Battery Analyzer section of the PowerToolsMenu.exm file.

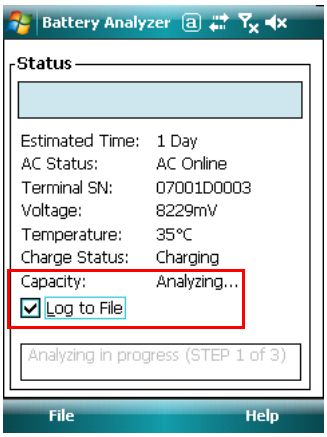


/a	Indicates “admin” and launches Battery Analyzer in Advanced Mode (see page 7-2).
/d	Indicates “debug” and creates a log file that tracks the activity of Battery Analyzer from the moment the application is launched. The log file is: **`\Honeywell\BatteryAnalyzer.log`**.
/s	Indicates “autostart” and launches the analyze cycle the moment you launch Battery Analyzer from the main window.
/q	Indicates “quit” and stops the analyze process if it’s running.

Advanced Mode

You run Battery Analyzer in advanced mode when you enter “/a” in the **CommandArgs** key of the Battery Analyzer section of the PowerToolsMenu.exm. The next time you open the Battery Analyzer Power Tool, it will be running in Advanced Mode.

When you do run the Battery Analyzer in advanced mode, additional fields appear on the Battery Analyzer window.



Capacity Displays the capacity of the installed battery.

Log to File Option to create a log file after the analyze cycle is complete.

Log File

The log file records data in the following order:

- Date
- Time
- Conditioning Flag
- Battery Temperature
- Battery Voltage
- Capacity Percentage
- Charge Percentage
- Charge State
- Charge Status
- Analyzing Start Time
- Elapsed Time
- Estimated Completion Time
- Formatted Estimated Completion Time
- Estimated Progress

The log file is stored as “BatteryAnalyzer.log” in the **`\Honeywell`** folder. Open this file with Pocket Word.

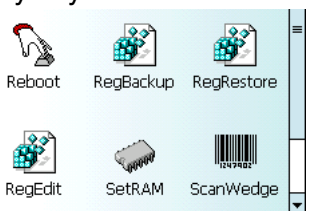
Should the analyze cycle abort automatically for some reason, check the log file for details.

8 Registry Power Tools

Overview

The registry is the configuration database in all 32-bit versions of Windows that contains settings for the hardware and software, consisting of the SYSTEM.DAT and USER.DAT files. Many settings previously stored in the WIN.ini and SYSTEM.ini files in 16-bit Windows (Windows 3.x) are in the registry.

The RegEdit Power Tool enables you to edit the registry through an easy-to-use application window. You can also import and export specific registry keys.



Editing the Registry

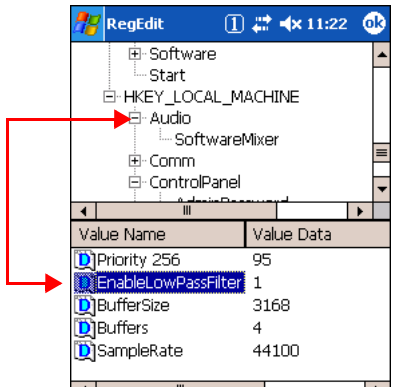
1. On the Power Tools Main Window (see page 1-1), tap the RegEdit icon **once** 

. RegEdit opens to a split-pane window with a collapsible menu in top half.

   This is the top level of the registry; it cannot be edited, copied, pasted, or renamed.

2. Click the **+** sign to expand the menu options.
3. RegEdit offers the following registry categories:
   - HKEY_CLASSES_ROOT
   - HKEY_CURRENT_USER
   - HKEY_LOCAL_MACHINE
4. Expand the appropriate menu by clicking on the **+** sign.

5. Drill-down to the appropriate registry entry. When you click on registry entry in the top half of the screen, the data appears in the lower half of the screen.



The two columns in the bottom half of the window show the Value Name and the Value Data of the selected entry.

6. Double-click on the **Value Name**. The Edit Value window pops up.

   In the **Value Data** field, type the new value.

7. Press the ENT(ER) key or tap **OK**. The new data appears in the list.

8. After all your edits are complete, Warm Boot (see page 6-10) the terminal to save your changes to the registry.

Note: If you want your edits to persist through the next cold boot, run RegBackup after saving your changes; see Backing Up the Registry on page 8-4.

Menus

The menus on the RegEdit window offer you many editing options.

File Menu

The File menu allows you to create registry entries as well as import and export registry settings.

Menu Item	Description
New	Creates a new Key, String, or DWORD Value.
Import	Imports a registry file; see Importing Registry Files on page 8-3.
Export	Exports the current registry; see Backing Up the Registry on page 8-4.
Exit	Closes RegEdit.

Edit Menu

The Edit menu helps you work with existing registry entries.

Menu Item	Description
Copy	Copies a selected item.
Paste	Pastes a copied item within RegEdit.
Rename	Renames a registry entry. Enter the new name and press the ENTER or **OK** key.
Delete	Deletes a selected registry entry.
Find	Searches for registry entries within a selected section. (Select an item in the top half of the window before tapping **Edit** > **Find**.) Enter the search criteria and tap **OK**. RegEdit notifies you if the selected section contains data matching the entered criteria.
Find Next	Launches another search for the criteria entered in Find.

View Menu

These menu items shift focus between the **Keys Panel** and the **Values Panel**.

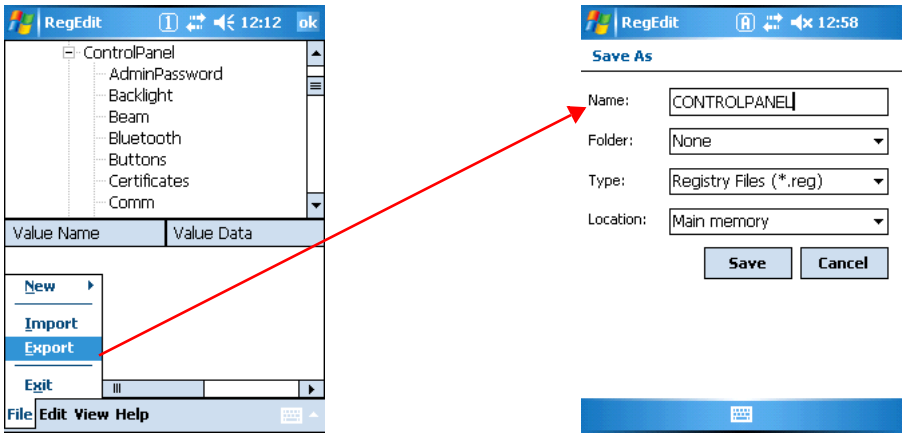
Importing Registry Files

The file must be loaded on the terminal and have a REG extension.

1. Tap **File** > **Import**. By default, the import function searches for REG files and displays the search results in the lower half of the window.
2. Tap once on the REG file and it loads automatically.

Exporting Specific Registry Settings

You can export specific registry settings. In RegEdit, navigate to the section you would like to export and select it.



Tap **File** > **Export** and select the parameters of the REG file that would contains these settings.

If you want these REG setting to load during AutoInstall, select **AutoInstall** in the **Folder** drop-down list and **IPSM** in the **Location** drop-down list.

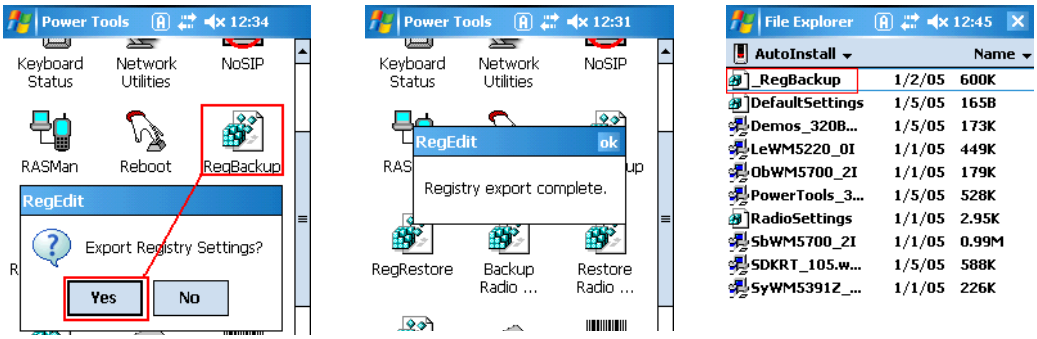
Other Export Options

You can export

- The entire registry–see Backing Up the Registry on page 8-4.
- Radio settings–see Backup Radio Settings on page 9-6.

Backing Up the Registry

You can export the current registry by tapping the **RegBackup** icon on the Power Tools Main Window (see page 1-1)  RegBackup. A _RegBackup.reg file containing the entire registry is created and stored in the **`\IPSM\AutoInstall`** folder.



Because this REG file is stored in the **`\IPSM\AutoInstall`** folder, AutoInstall will launch and install this REG file during the next cold boot.

Restoring the Registry

After you have backed up the registry, a _RegBackup.reg file of the entire registry is stored in the **`\IPSM\AutoInstall`** folder.

You have a number of options to restore the registry by loading the _RegBackup.reg file.

RegRestore

On the Power Tools Main Window (see page 1-1), tap the **RegRestore** icon 

.

Tap on the REG File:

Tapping on a REG file in any folder immediately tries to add the information in that file to the registry.

Cold Boot

Because this REG file is stored in the **`\IPSM\AutoInstall`** folder, AutoInstall will launch and install this REG file during the next cold boot.

RegBackup.exm

The RegBackup.exm file is located in the **`\IPSM`** folder and determines the content of the _RegBackup.reg file.

The RegBackup.exm file does NOT contain registry settings! Only REG files contain registry settings.

Sections

TEMPLATE Section The _TEMPLATE_ section is a template of the basic registry sections. This section is not used when creating the _RegBackup.reg file. Use these subsections as a basis for modifications and additions to the file.

Backup Section When you backup the registry (see Backing Up the Registry on page 8-4), the include/exclude settings in this section indicate what content to backup.

This default section should never be removed as it contains default excludes specified by Honeywell. It can, however be added to. **Do NOT change the Mode** (page 8-6)**!**

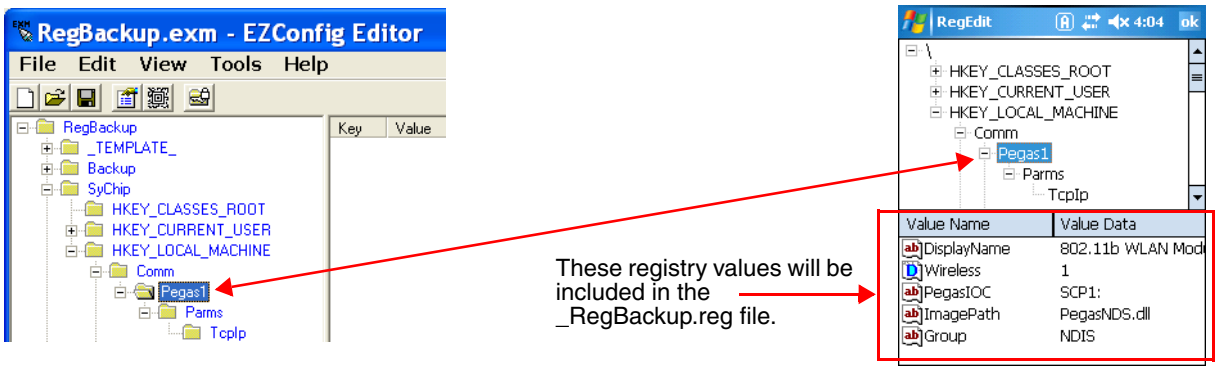
SyChip & Philips Sections

When you backup radio settings (see Backup Radio Settings on page 9-6), the include/exclude settings in this section indicate what content to backup.

Modifying

Modifying the RegBackup.exm file allows you to include or exclude registry key sections and values during an export. Multiple subsections can be created below. All should be copied from the Template section which, itself, should not be modified.

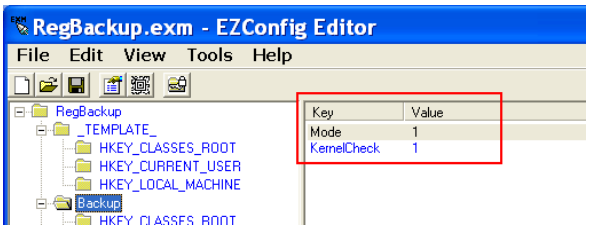
To specify keys and values in the RegBackup.exm file, re-create the registry keys as sections and subsections in the tree structure just as they appear in the registry. The same rules that apply to copying directories apply here in that if you re-create a key from the registry, all the key's values and subkey's values will be copied unless there are values in the top-level key.



Only the key or value name is needed in the EXM file and not the associated value data. The EXM file is a structure used to define the backup file and not the actual registry data.

Mode and Kernel Check

In each Subsection root in the tree, there should be two key-value pairs: Mode and KernelCheck.



If these keys are not present, the defaults will be applied:

Mode = Exclude

KernelCheck = Enabled

Mode

The Mode key specifies export behavior of the values in the section.

1=Include	Only the values that follow will be included.
0=Exclude	Everything but the values that follow will be included.

KernelCheck

KernelCheck forces kernel version and service pack validation when a previously exported REG file is imported on a Dolphin terminal. This means that if you attempt to load a _RegBackup.reg file (during AutoInstall, for example), RegBackup.exm verifies that the REG file matches the kernel installed on the terminal. If yes, then the REG file loads. If not, you'll receive a warning message and the REG file will not load.

0=Disabled	No kernel validation occurs on importing. In general (especially for radio settings), KernelCheck should be enabled. if the registry does not match the kernel, the terminal will not function properly.
1=Enabled	Kernel validation occurs on importing.

Command Line Arguments

Argument	Description
/export <filename>	Export registry to <filename>. The <filename> part is optional. If no filename is entered, the file will default to \IPSM\AutoInstall_RegBackup.reg.
/import <filename>	Import <filename> to registry. The <filename> part is optional. If no filename is entered, the file will default to \IPSM\AutoInstall_RegBackup.reg.
/exm <filename>	Specify the non-default backup EXM file <filename>. Filenames with spaces must be wrapped in quotes. If omitted, the filename defaults to \IPSM\RegBackup.exm. This argument is only valid when used with /export.
/section <SectionName>	Specify the non-default section in the EXM file for exclude or include export, depending on the mode setting in that section. If omitted, this defaults to the Backup section of whatever EXM file is specified. This argument is only valid when used with /export.
/key <key>	Specify the top level of the registry key structure to export. This argument is not valid when using /export or /import.
/silent	Displays no dialogs.

Registry Edit Options in EZConfig

You can also use EZConfig Editor to create registry documents on the workstation, create a bar code, then use EZConfig Client to decode the bar code and update the registry on the terminal. See EZConfig beginning on page 2-1.

9 Network Utilities

Accessing Network Utilities

Tap **Start** > **Power Tools > Network Utilities** . The Network Utilities window opens.

Standard Network Utilities

There are three Network Utilities that mirror DOS-prompt functions of your workstation:

- IP Config (see page 9-1)
- Ping (see page 9-2)
- Route (see page 9-3)

WiFi Status

WiFi Status helps you monitor the on-board 802.11b radio:

- WiFi Status (see page 9-5)

Radio Settings

There are two Power Tools on the Network Utilities window that enable you to backup and restore radio settings in the registry.

- Backup Radio Settings (page 9-6)
- Restore Radio Settings (page 9-7)

Note: WiFi Status and the Radio Settings Power Tools appear on this window only if an RF radio is installed in the terminal.

IP Config

IPConfig is a kernel utility that displays, releases, and renews IP parameters for on-board network adapters. On the Network Menu window, click the **IPConfig** icon 

. The IPConfig screen opens displaying the Input tab.

Field	Description
Adapter	This drop-down list contains the network adapters currently installed in the Dolphin terminal. Every field and button on this screen pertains to the adapter selected in this drop-down list.
MAC Addr	Displays the MAC (Media Access Control) address of the selected Adapter. This is the serial number burned into the adapter that uniquely identifies it.
Subnet Mask	Displays the adapter's subnet mask. The subnet mask determines the subnet upon which the adapter resides.
Gateway	Displays the adapter's gateway information.

Field	Description
Release the IP address	Click this button to release the IP address.
Renew the IP address	Click this button to renew the IP address.
Display full configuration	Click this button to retrieve and review the full configuration of the terminal's IP setup. For more information, see Displaying the Terminal's IP Configuration (see page 9-2).

Displaying the Terminal's IP Configuration

On the Input tab, tap the **Display full configuration** button. The Dolphin terminal retrieves and displays the IP configuration for the entire terminal.

About Tab

The About tab displays information about this Power Tool.

Ping

Ping provides a GUI-based version of the traditional command line ping utility. Pinging sends out an echo request to a specific computer on the network. Use Ping to verify communication links or that a specific IP address is working.

Ping contains three tab windows: Input, Output, and About. On the Input tab, you enter and send packet information to a specified remote host and see the result on the Output tab.

On the Network Menu window, tap the **Ping** icon 

. The Pings screen opens to the Input tab.

Using the Input Tab

Note: You do not need to complete all the fields on the Ping window to successfully execute. Just enter the Destination IP address.

Field	Description
Destination	Enter the IP address. This field is required.
Timeout (milliseconds)	Enter the timeout time in millisecond intervals; 1000 is the default.
Send buffer size	Indicate the buffer size for sending; 32 is the default.
Send count	Indicate the count for sending; 4 is the default. Check **Infinite** to make the send count infinite.

Field	Description
TTL	Short for Time To Live, this is the maximum amount of time a packet is allowed to travel through the network before it is discarded.
TOS	Enter the Type of Service (TOS); it should be eight bits broken into five subfields.
Rec route for count hops	Enter the number of hops to record in the IP header; 1–9. This field traces the route of the packets for each hop.The hop count is the number of network devices between the starting node and the destination node that an IP packet hits while traveling over a network. The number of hops is recorded in the IP header.
Timestamp route	Enter the number of timestamps to record for each hop; 1–4 The timestamp is the packet's arrival time at each hop.
Don't fragment	Check this box if you don't want the packet to fragment during routing.
DNS address required	Check this if you want the domain name server to be part of the route path.
Execute	Click **Execute** to send the ping. The Output tab displays the response.

Reading the Output Tab

After you enter the IP information on the Input tab and click **Execute**, the Output tab appears and begins displaying the ping results.

You can click the **Stop** button at any time to stop the ping. Any errors encountered display on the screen.

About Tab

The About tab displays description and version information about Ping.

Route

Route is a kernel utility that allows the user to view and edit the rules that govern how packets destined for various subnets are routed. These rules tell the device which gateways on a given interface's subnet may be used to route packets to hosts on other subnets.

Route contains three tab windows: Input, Output, and About. You enter and execute the command on the Input tab and review the results on the Output tab.

On the Network Menu window, tap the Route icon **once** 

.The Route screen opens to the Input tab.

Using the Input Tab

Field	Description
Command	This drop-down list contains the available routing commands. Select from: • PRINT - Prints the network routing tables to the Output tab; see page 9-4. • ADD - Adds a route; see page 9-4. • DELETE - Deletes a route with a specified destination; see page 9-4. • CLEAR - Clears routing tables of all gateway entries; see page 9-5.
Text under Command	The text describes each command. The content changes automatically when a command is selected from the Command drop-down list.
Execute	Click this button to execute the selected command. The Output tab displays the results.

Output tab

The Output tab displays the information that results from executing a command on the Input tab; it displays no information on its own. See the individual tasks below to see the Output tab for each command.

To Print Network Routing Tables

1. On the Input tab, select **PRINT** in the **Command** drop-down list.
2. Click the **Execute** button. The Output tab appears displaying the network routing table.
3. This table displays Destination, Netmask, Gateway, Metric, and Interface columns. Scroll right to see all the columns.

To Add a Route

You can add a custom route with the Add command.

1. On the Input tab, select **ADD** in the **Command** drop-down list. Fields appear on the Input tab.
2. Specify the range of IP address to which this rule will apply using the **Destination** and **Netmask** fields. For example, the settings below specify an address range from 300.300.0.1 to 300.300.255.254.
3. Enter the **Gateway**.
4. Enter the **Metric** (not required).
5. Enter the **Interface** (not required).
6. Tap **Execute**. The system verifies your results and the Output tab lets you know if your entry was added successfully.

To Delete a Route

You can delete active routes.

1. On the Input tab, select **DELETE** from the Command drop-down list. The Destination field appears.
2. Enter the IP address in the **Destination** field.
3. Click the **Execute** button.The system processes the request and displays how many routes were deleted.

To Clear Gateway Entries

Executing this command clears routing tables of all gateway entries.

1. On the Input tab, select **CLEAR** in the Command drop-down list.
2. Click the **Execute** button. The system processes your request and the number of entries deleted appears on the Output tab.

WiFi Status

The WiFi Status Power Tool displays information from the 802.11 adapter installed in the terminal and enables you to configure certain operating parameters.

Tap **Start** > **Power Tools** > **Network Utilities** > **WiFiStatus** or tap the WiFi Status icon: 

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Setup Tab

The Setup tab enables you to change specific parameters of the 802.11 adapter.

Field	Description
Adapter	Name of the radio module installed on the terminal.
Update inv	This is the update interval used to poll the 802.11 adapter for status information.
SSID	Displays the SSID value presently configured in the 802.11 adapter.
Power mode	Choose between the following power modes:
CAM	Continuous access mode (CAM); the device is always on.
Max PSP*	Maximum power saving; provides the greatest power savings for the 802.11 NIC radio.
Fast PSP*	Fast power saving mode; provides the best combination of network performance and power usage.
*PSP=Power Save Polling	

Field	Description
BSS Mode	Choose between the following modes: **Automatic**=Switches between Ad hoc and infrastructure modes as required. **IBSS (Ad hoc)**=Specifies independent basic service set (IBSS). **Infrastructure (ESS)**=Specifies infrastructure.
Enable & Disable	Tap these buttons to enable and disable the 802.11 radio
Apply	Tap this button to apply changes to the Update interval, SSID, Power mode, and BSS mode.

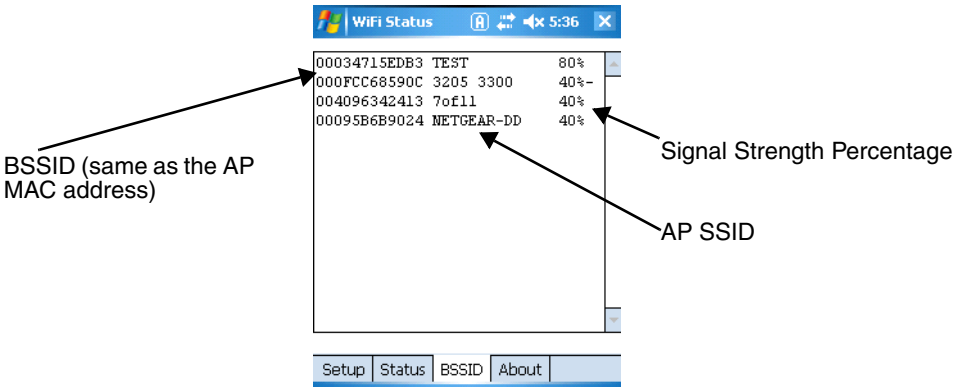
Status Tab

The Status tab displays statistics for the 802.11 radio.

The **Release IP** and **Renew IP** buttons enable you to release and renew the terminal's IP address.

BSSID Tab

When accessed, the BSSID tab causes the radio to scan for all APs in range and displays the results.



Backup Radio Settings

When the terminal's radios are configured, entries are made in the registry that contain those settings. However, those entries are removed during the next cold boot. Backup Radio Settings exports those radio settings into a RadioSettings.reg file and places it in the permanent storage folder. (See Storage Locations on page 1-3.) By default, the settings in the RadioSettings.reg file will be added to the registry during the next cold boot and your radios will be configured automatically when the boot process is complete.

On the Network Utilities main window, tap the **Backup Radio Settings** icon 

. The RadioSettings.reg file is created and placed in the permanent storage folder. See Storage Locations on page 1-3.

Restore Radio Settings

You have a number of options to restore the registry by loading the RadioSettings.reg file.

Restore Radio Settings

On the Network Utilities window, tap the **Restore Radio Settings** icon . A message appears asking if you want to load the RadioSettings.reg file. Tap **Yes** and RegEdit imports the radio registry entries to the current registry.

Tap on the REG File:

Tapping on a REG file in any folder immediately tries to add the information in that file to the registry. A message appears asking if you want to add the information to the registry. Tap **Yes** to add the information.

Cold Boot

Because this REG file is stored in the permanent storage folder, AutoInstall will launch and install this REG file during the next cold boot. See Storage Locations on page 1-3.

10 EZMenu

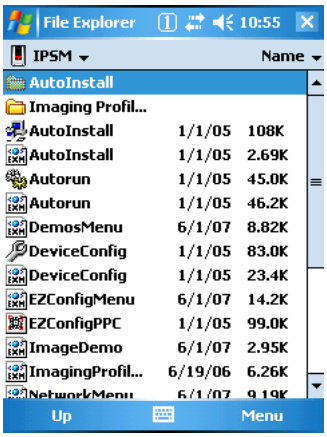
Overview

EZMenu formats application windows to display and launch software programs on the terminal. For example, the Power Tools Main Window (see page 1-1) is managed by EZMenu.

EZMenu consists of

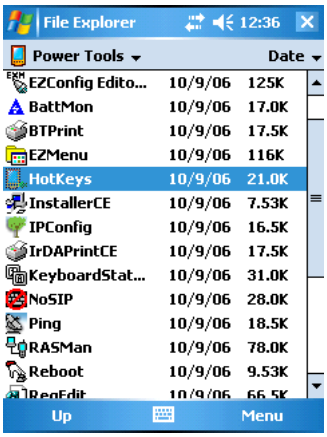
- Menu configuration files (i.e., EXM files that end in "*Menu.exm") in the permanent storage folder that contain the settings for application windows. See Storage Locations on page 1-3.
- The EZMenu.exe in the **`\Program Files\Power Tools`** folder that applies those settings in the terminal. EZMenu.exe is launched during AutoInstall by default.

***Menu.exm Files**



EXM files have an icon.

EasyMenu.exe



Executables have an icon.

Running Easy Menu

EZMenu runs when you access an application window that has a menu configuration file. EZMenu.exe calls that menu configuration file to format the window.

Default EZMenu Configuration Files

Dolphin terminals ship with a number of menu configuration files in the permanent storage folder:

DemosMenu.exm	Programs the Demos main window (**Start** > **Demos**).
EZConfigMenu.exm	Programs the EZConfig Utilities window; see EZConfig Editor on the Terminal on page 2-22.
NetworkMenu.exm	Programs the Network Utilities window; see Accessing Network Utilities on page 9-1.
PrintDemoMenu.exm	Programs the Print Demo window (**Start** > **Demos** > **Print Demo**).
PowerToolsMenu.exm	Programs the Power Tools main window; see Power Tools Main Window on page 1-1.

Default menu configuration files must be located in the permanent storage folder.

Sample Menu Configuration Files

Samples of these default menu configuration files install to the workstation in the following folder: **`C:\Program Files\Honeywell\Power Tools and Demos for <product name>\EZConfig EXM Files`**.

Modifying Menu Configuration Files

Menu configuration files can be modified in EZConfig Editor on the workstation or the terminal, If modified on the workstation, the *Menu.exm file must be deployed to the terminal.

For details about modifying EXM files in EZConfig Editor:

- See EZConfig Editor on page 2-1.
- See EZConfig Editor on the Terminal on page 2-22.

Creating Menu Configuration Files

Save as the Default EZMenu Configuration Files (see page 10-1) to create new menu configuration files.

1. On the workstation, navigate to the following folder: **`C:\Program Files\Honeywell\Power Tools and Demos for <product name>\EZConfig EXM Files`**.
2. Open a sample menu configuration file in EZConfig Editor.
3. Tap **File** > **Save As** and save the file with a new name ending in “Menu.exm.”
4. Modify the file; to see the available values, see Menu Configuration File Sections on page 10-2.
5. Save or transfer the file to the permanent storage folder on the terminal. (See Storage Locations on page 1-3.)

Menu Configuration File Sections

Menu configuration files contain of two basic sections: **Settings** and **MenuEntries**. Both sections are locked, which means only their Values can be changed, not their section names.

Settings Section

The Settings section defines general EZMenu settings. The keys in this section are locked, which means that only their Values can be changed.

Key	Description	Default Value	Available Values
Sig	Identifies this file as a menu file.	EZMenu	These keys are read-only and cannot be changed.
Version	This is the EZMenu version number.	1	
EnableDebug	Enables system debugging.	0	0=Disable 1=Enable; an Easy-menu.log file is created in the permanent storage folder.

Key	Description	Default Value	Available Values
ListViewMode	Determines the default view mode for the window. For details, see View Options on page 1-3.	3	0=Detail 1=List 2=Small Icon 3=Large Icon
Caption	Defines the caption or title displayed in the title bar of the application window.	Variable	User-defined
StartMenu	Enables and disables access to the Start menu from the application window.	Variable	0=Disable Start Menu 1=Enable Start Menu
OK	Enables and disables the OK button in the upper right corner of the application window.	Variable	0=Disable OK Button 1=Enable OK Button
Menu	Determines which menus appear in the Command bar. There are three menus: File, View, Help. **Exit**=File menu **View**=View menu **Default**=File, View & Help menus	3	0=No Menus 1=Default Menu + No Exit + No View 2=Default Menu + No Exit 3=Default Menu
The following three parameters determine the icon spacing in all view modes:			
ListViewIconSpacingY	Sets vertical icon spacing.	80	Spacing is measured in pixels.
ListViewIconSpacingX	Sets horizontal icon spacing.	75	Spacing is measured in pixels.
ListViewGradient	Determines whether the gradient background (horizontal blue and white lines) appears on the window.	1	0=Disable gradient background 1=Enable gradient background
MaskPassword	Determines if password entries on dialog boxes should be masked.	1	0=Disabled; passwords are not masked. 1=Enabled; passwords are masked.
TodayScreenSessionTimeout	When the device is left in suspend mode, this key specifies the number of hours that need to pass before the device returns to the Today screen.	0	0=Disabled; the terminal does not return to the Today screen while in suspend mode. X=Number of hours.

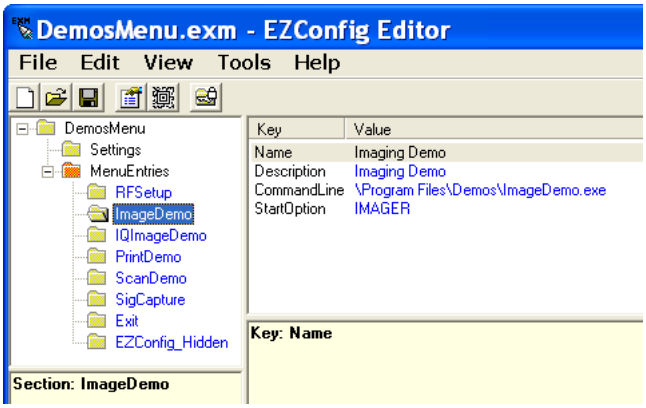
MenuEntries Subsections

The MenuEntries section determines which programs appear on the application window.

The MenuEntries section is locked, which means that you cannot change its Name or Description; however, its child sections are not locked and can have any name and description.

Each child section is a program that launches from the application window and must be at the same level underneath the MenuEntries section. The order of child sections from top to bottom determines the order that the programs appear on the application window.

Child Section Keys



The keys in the child sections are locked, which means only their Values can be changed.

Key	Description	Required	Available Values
Name	Name to display on the window. The name appears under the icon (if there is an icon).	Required	User-defined
Description	Description to display on the window in Detail view.	Required	User-defined
CommandLine	Command line to execute when the item is selected on the window. This is the location of the EXE file for the program to launch.	Required	Location of the EXE file. Also available: [ADMIN]=Toggles into Administrative mode [EXIT]=Exit menu
CommandArgs	Command line arguments used with the CommandLine parameter.	*Optional	Program-specific
Password	Use this key to password-protect access to the window. If no value is entered, the window is not password-protected.	Optional	Enter a password.
HotKey	Hotkey that can be used to launch the menu entry.	Optional	HotKey number

Key	Description	Required	Available Values
HotKeyModifier	Modifier for the hotkey.	Optional	Global: 16=No Modifier 17=ALT 18=CONTROL 20=SHIFT EZMenu only: 0=No Modifier 1=ALT 2=CONTROL 4=SHIFT
IconFile	Filename of the icon resource file.	Optional	The filename of the icon must be an EXE or DLL, an ICO file will not work.
Icon ID	Icon resource identifier contained in the file specified in the IconFile key.	Optional	X=Icon resource identifier
SupportFile	The key dependencies.	Optional	X=Variable
StartOption	Specifies startup options that must be met for the menu entry to appear on the window.	Optional	See Start Options on page 10-5.

Exit Icon

Default EZMenu Configuration Files (see page 10-1) contain a section named **Exit** as a child section of the MenuEntries section.

Enabling the Exit section places this icon Exit on the application window, which allows users to exit. If you want users to be able to exit the application window, make sure the Exit section is a child of the MenuEntries section. If you want users to be unable to exit the application window, disable or delete the Exit section.

Start Options

Start Options define the required system parameters for a software application to launch. The following values can be entered for the StartOption key, wherever it appears:

Option Name	The program launches if …	Category
DISABLED	Never, regardless of other startup options specified.	**None**
COLDBOOT	The terminal has performed a cold boot.	**Boot type**
WARMBOOT	The terminal has performed a warm boot.	

Option Name	The program launches if …	Category
TOUCH	The terminal has a touch screen display installed.	**Touch Screen**
NONTOUCH	The terminal doesn't have a touch screen display installed.	
BATCH	The terminal is a batch unit (no RF or internal modem cards installed).	**Mobility**
RF	The terminal has an RF card installed (e.g., Cisco 802.11b).	
GSM	The terminal has a GSM radio.	
BT	The terminal has a Bluetooth radio.	
MODEM	The terminal has an internal modem card installed.	
IMAGER	The terminal has an imager installed.	**Scanner**
LASER	The terminal has a laser scanner installed.	
BLIND	The terminal has no laser or imager installed.	
ANYSCAN	The terminal has either an imager or a laser scanner installed.	
RFON	The RF radio is Enabled.	**Radio**
GSMON	The GSM radio is enabled.	
BTON	The Bluetooth radio is enabled.	
RFGSMBTOFF	The RF, GSM, & Bluetooth radios are disabled.	
29KEY	The terminal has a 29-key keyboard.	**Keyboard**
35KEY	The terminal has a 35-key keyboard.	
38KEY	The terminal has a 38-key keyboard.	
43KEY	The terminal has a 43-key keyboard.	
56KEY	The terminal has a 56-key keyboard.	
NO_KEY	The terminal has a 56-key keyboard.	

Option Name	The program launches if …	Category
7300	It's a Dolphin 7300 terminal.	**Model**
7400	It's a Dolphin 7400 terminal.	
7450	It's a Dolphin 7450 terminal.	
74XX	It's any Dolphin terminal beginning with "74".	
7600	It's a Dolphin 7600 terminal.	
76XX	It's any Dolphin terminal beginning with "76".	
7850	It's a Dolphin 7850 terminal.	
78XX	It's any Dolphin terminal beginning with "78".	
7900	It's a Dolphin 7900 terminal.	
79XX	It's any Dolphin terminal beginning with "79".	
9500	It's a Dolphin 9500 terminal.	
9501	It's a Dolphin 9501 terminal.	
9550	It's a Dolphin 9550 terminal.	
9551	It's a Dolphin 9551 terminal.	
95XX	It's any Dolphin terminal beginning with "95".	
9700	It's a Dolphin 9700 terminal.	
9900	It's a Dolphin 9900 terminal.	
99XX	It's any Dolphin terminal beginning with "99".	
PNPID	The terminal has a card installed whose identification contains ALL of the strings specified in the PNPID setting.	**Expansion Card**
NONPNPID	The terminal doesn't have a card installed whose identification contains ALL of the strings specified in the PNPID setting.	

Multiple options can be specified for each category. For example, you can specify both 35KEY and 43KEY options to request that the program run in either a 35- or 43-key keyboard terminal. Seperate multiple options with commas.

To ignore a category, don't specify any of its options.

Locking Down the Application Window

You can program a menu configuration file to block access to the Start menu, OK button, and Command bar menus on the application window. When all of these items are blocked, the user must navigate the terminal from the application window.

EZMenu carries these settings forward to all windows opened from the application window. This way, access to the Start menu, **OK** button, and Command bar menus can be blocked globally.

1. Open the menu configuration file in EZConfig Editor.
   For more information, see Working with Open EXM Files on page 2-8.
2. In the Settings Section (page 10-2), modify the following keys:
   a. **StartMenu=0** (The Start menu won't appear on the application window.)
   b. **OK=0** (The OK button won't appear on the application window.)
   c. **Menu=0** (No menus appear in the Command bar.)
3. In the MenuEntries section, delete, disable, or password protect (see Password on page 10-4) the Exit subsection to remove the Exit icon.
4. If you are modifying the file in EZConfig Editor on the terminal, tap **Tools** > **Launch Associated App**. The application window opens displaying your changes.

   If you are modifying the file in EZConfig Editor on the workstation, save, then transfer the file to the terminal. On the terminal, navigate to the application window to verify your changes.

Booting the Terminal to the Application Window

You can program the terminal to boot to the application window by modifying the Autorun.exm File (see page 4-1).

1. In EZConfig Editor, open Autorun.exm.
2. Open the Programs section and enable the EasyMenu section.
3. In the EasyMenu section, modify the **Args** key to call the EXM file of the application window. This is the path to the menu configuration file; i.e., "/***menu.exm."
   By default, the **Args** key calls **`/demosmenu.exm`**.
4. Warm boot the terminal and verify that startup finishes on the application window.

11 Print Power Tools

Overview

Dolphin terminals contain two print utilities:

BTPrint.exe BTPrint prints to a Bluetooth device via the Bluetooth wireless radio; see page 11-1.

IrDAPrintCE.exe IrDAPrint prints to an IrDA device via the IrDA port; see page 11-1.

Both .exes are located in the **`\Program Files\Power Tools`** folder.

Print Demo

All Dolphin terminals contain a Print Demo (**Start** > **Demos** > **Print Demo**) that prints a sample receipt or bar code to a Bluetooth or IrDA printer. The Print Demo calls the BTPrint.exe when printing to a Bluetooth device and the IrDAPrintCE.exe when printing to an IrDA device.

For more information about the Print Demo, please refer to the Print Demo chapter of the Demos User's Guide, which is available for download from the web site: www.honeywell.com/aidc.

Note: You can also call either EXE to print to a Bluetooth or IrDA printer via command line.

BTPrint

BTPrint allows you to print to a Bluetooth printer via the command line, provided that the Bluetooth printer is set up as a Bluetooth Favorite on the Dolphin terminal.

For more information about setting up Bluetooth Favorite devices, please see the Bluetooth section of the Print Demo chapter in the Demos User's Guide, which is available on the User CD or from the Partners area of www.honeywell.com/aidc.

Calling a Bluetooth Printer

Call BTPrint.exe from the command line **`\Program Files\Power Tools\BTPrint.exe`** – with the path of the document as the command line argument.

IrDAPrintCE

IrDAPrintCE allows you to print to an IrDA printer via the command line.

Calling an IrDA Printer

Call the IrDAPrintCE.exe from the command line **`\Program Files\Power Tools\IrDAPrintCE.exe`** with the path of the document as the command line argument.

12 Customer Support

Technical Assistance

If you need assistance installing or troubleshooting your device, please call your distributor or the nearest technical support office:

North America/Canada

Telephone: (800) 782-4263
E-mail: hsmnasupport@honeywell.com

Latin America

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E-mail: hsmlasupport@honeywell.com

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E-mail: brsuporte@honeywell.com

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E-mail: soporte.hsm@honeywell.com

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