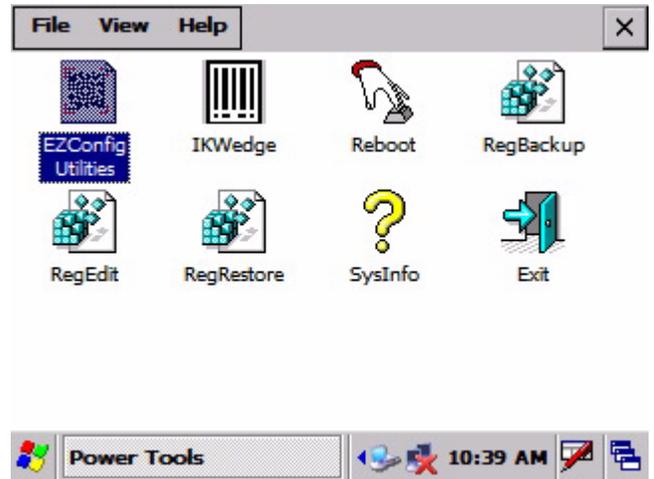# Image Kiosk™/WinCE 5.0 Power Tools

User's Guide

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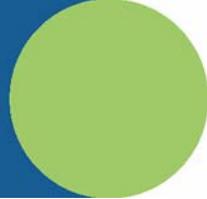
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1

Installing and Accessing Image Kiosk Power Tools

Image Kiosk Power Tools

Image Kiosk Power Tools are installed in every IK8560 and IK8570. Power Tools simplify system tasks such as retrieving device information, customizing user interfaces, and working with the registry.

Image Kiosk Power Tools consist of a CAB file and network utilities in the system kernel.

CAB File Power Tools (in the .cab file)
• AutoInstall
• Autorun
• DeviceConfig
• EasyMenu
• EZConfig Editor CE
• EZConfigWinCE
• FrameworkLoaderApp
• IKWedge
• InstallerCE
• Reboot
• RegBackup
• RegEdit
• RegRestore
• SetDeviceInfo
• SysInfo
• EXM configuration files

Software Requirements

IK8560/8570 Kiosks

The CE-based Power Tools are designed to work with the following operating systems:

• Microsoft® Windows® CE 5.0

Desktop

The PC-based Power Tools are designed to work with the following operating systems:

• Microsoft® Windows® XP
• Microsoft® Windows® 2000
• Microsoft® Windows® NT

Note: For communication between a PC and an IK8560/8570, you must have Microsoft® ActiveSync® version 4.2 or later installed on the PC.

Upgrading Power Tools

Image Kiosk Power Tools come loaded in every IK8560/8570 and are included in system upgrades.

CAB File Power Tools   The Power Tools .cab file is part of a Demos and Power Tools upgrade.

Acquiring Upgrades

Upgrades are available from Customer Support (see page 9-1) or www.handheld.com.

Installing an Upgrade to the PC

Image Kiosk Power Tools upgrades install to the PC via an upgrade executable. The upgrade files are then transferred to the IK8560/8570.

Requirements   An active Microsoft® ActiveSync® connection between a host PC and the IK8560/8570.

1. Download the new **Hand Held Products Image Kiosk Power Tools and Demos.exe** to the **Program Files** folder on the PC.

2. Click the **Hand Held Products Image Kiosk Power Tools and Demos.exe** to install.
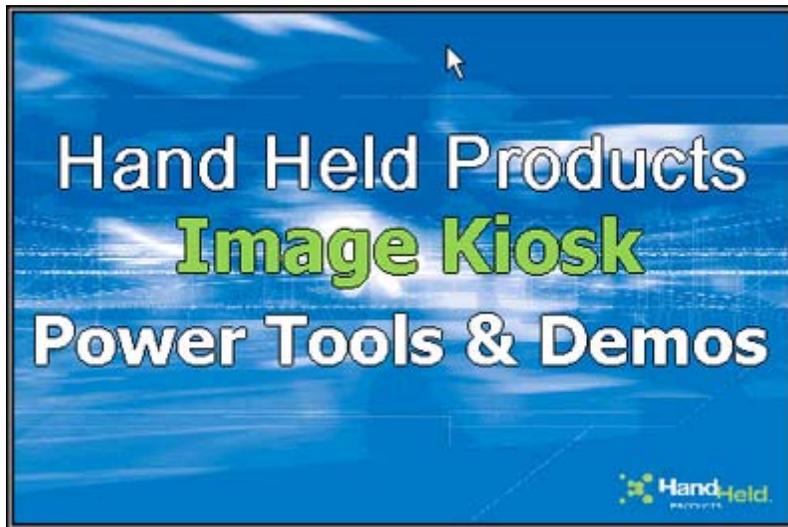
3. Click **Next**.
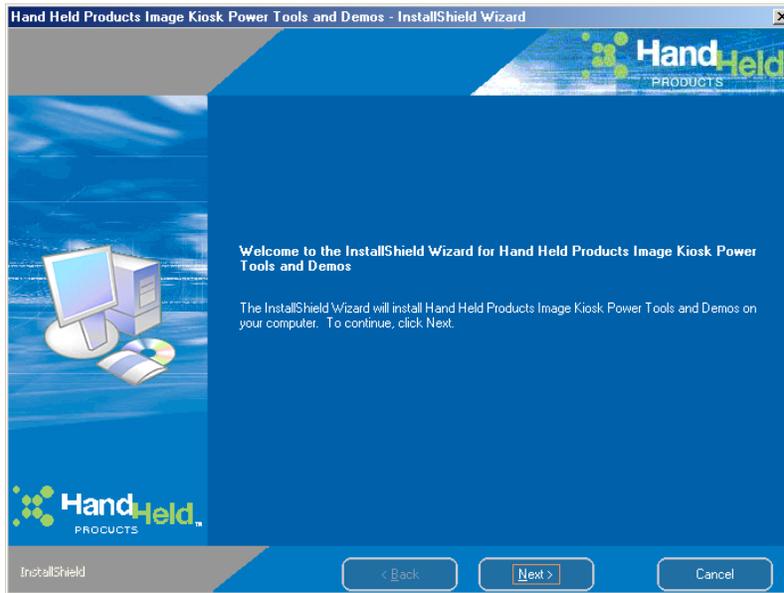
4. If you agree to the terms of the license agreement, click "I accept the terms of the license agreement." and **Next**.
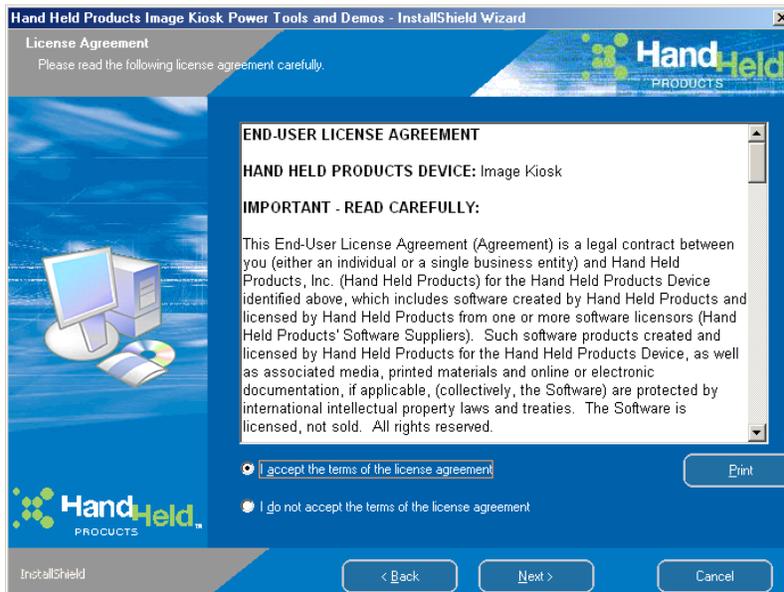
5. Enter Your Name and Company Name.
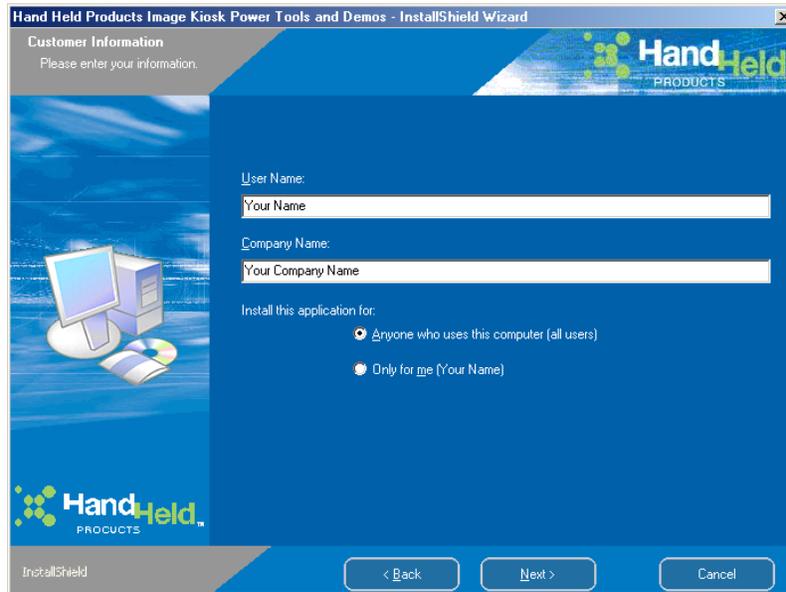
6. Read the description on the screen and click **Next**.

7. Choose a **Complete** install and click **Next**.
   Custom enables you to choose between Power Tools and Demos.
   Complete installs both Power Tools and Demos.

8. Verify the information and select **Next** to start copying files.
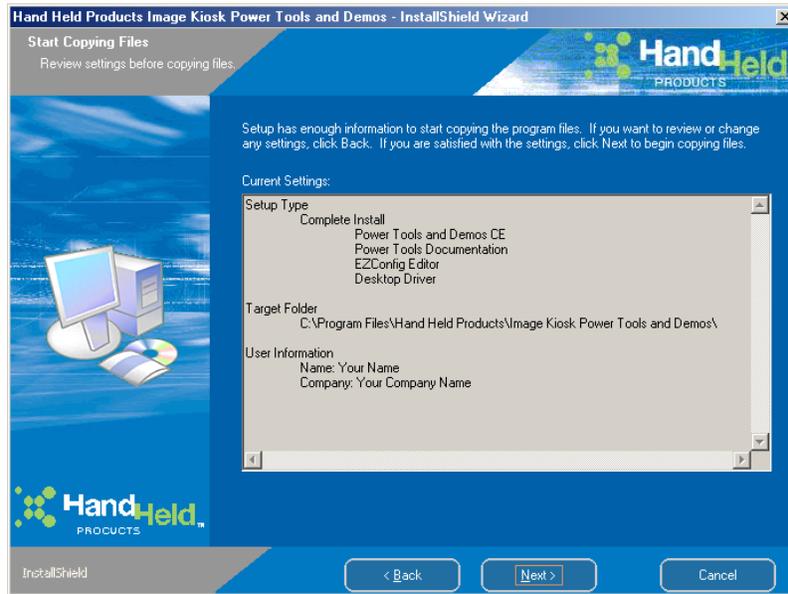
9. On the next screen, click **Install** and program begins installing. During the installation process, you are offered the opportunity to have the device cab files copied to the unit.
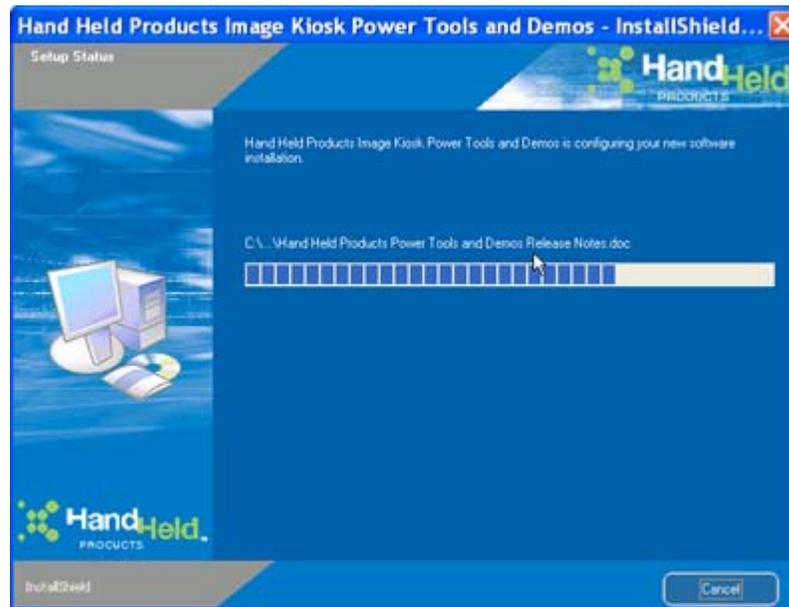
When the installation is complete, click **Finish**.
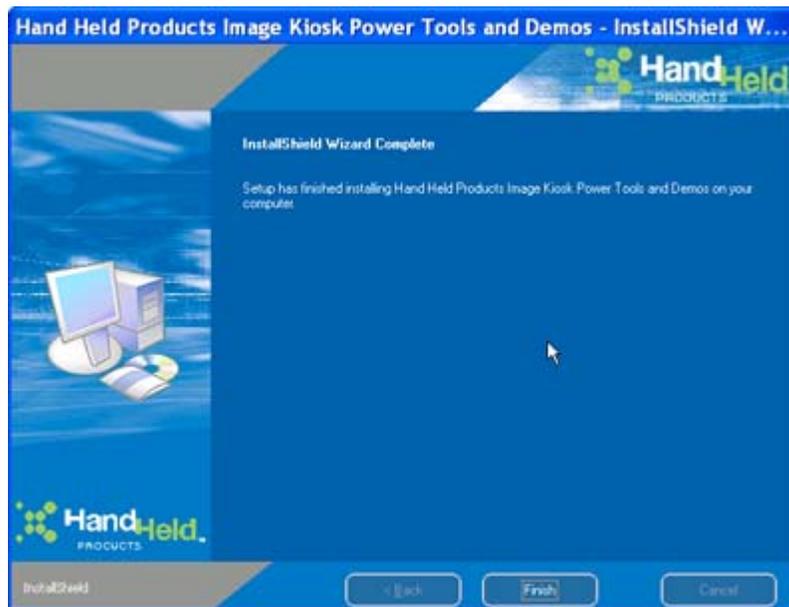
Image Kiosk Power Tools and Demos Folder on the PC

After installation is complete, an **Image Kiosk Power Tools and Demos** folder is installed in the **Program Files > Hand Held Products > Image Kiosk Power Tools and Demos** folder. (If a Hand Held Products folder does not already exist in the Program Files folder, the installation creates one.)
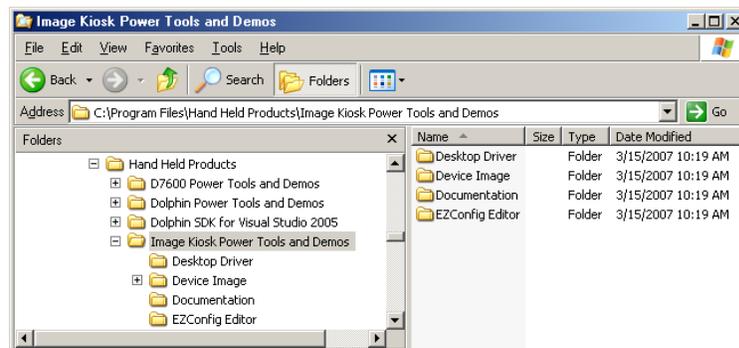
The Image Kiosk Demos and Power Tools has five folders:

Documentation	User guides for the Image Kiosk Power Tools (including this guide).
EZConfig Editor	EZConfig Editor program.
Power Tools and Demos CE	Image Kiosk Power Tools cab file and the utility (CopyPowerToolsCab.exe) to copy the cab file to the IK8560/8570.
Desktop Driver	Contains the IK8560/8570 USB Driver.
Device Image	Default IPSM image.

Installing an Upgrade on the IK8560/8570

1. Connect the Image Kiosk to the PC and ensure that the ActiveSync connection is running.

2. On the PC, open Windows Explorer and navigate to the Installing an Upgrade on the Terminal

3. Connect the Image Kiosk to the PC and ensure that the ActiveSync connection is running.

4. On the PC, open Windows Explorer and navigate to the \IPSM folder on the Dolphin terminal.

5. Back up your current \IPSM folder to the PC.

6. Delete the entire contents of the \IPSM folder.

7. Navigate to C:\Program Files\Hand Held Products\Image Kiosk Power Tools and Demos\Device Image.

8. Copy all items (including the Autoinstall folder).

9. Navigate to the \IPSM folder on the Dolphin terminal and paste.

10. Copy and paste radio CABs, application CAB files, and programs to the \IPSM and \IPSM\Autoinstall folders.

11. When all the files are pasted, cold boot the terminal.

12. The Power Tools upgrade installs during startup.

Power Tools Main Window

Tap **Start** > **Programs** > **Power Tools** folder.

Icon	Name	Description	See Page
	EZConfig Utilities	Opens a window that displays the EZConfig utilities on the IK8560/8570.	2-22
	Reboot	Performs a warm or cold boot from the touch screen.	6-2
	RegBackup	Backs up the registry.	7-2
	RegEdit	Allows you to edit the registry.	7-3
	RegRestore	Restores a backup of the registry.	7-8
	SysInfo	Displays system information.	6-5

Exiting the Power Tools Main Window

- Tap the **Exit** icon .
- Tap **File** > **Exit (ESC)**.

View Options

The View menu in the command bar at the top of the screen changes the organization of the Power Tools main window. A checkmark appears next to the selected view.
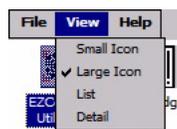
This menu enables you to choose between:

- Small Icon View
- Large Icon View (Default view)
- List View
- Detail View (This view displays a description of the Power Tool in a column to the right of the name.)

Additional Power Tools

These Power Tools are not accessed from the main window.

Name	Function	Storage Location	Access Location	Page
AutoInstall	Installs CAB files after a hard reset.	`\IPSM`	`\IPSM\AutoInstall`	4-5
AutoRun	Programs that applications launch at startup.	`\IPSM`	`\IPSM`	4-1
EasyMenu	Programs custom application windows.	`\Program Files\Power Tools`	`\IPSM\*`.exm files	8-1
InstallerCE	Stores CAB files after they install instead of deleting them.	`\Program Files\Power Tools`	You do not launch InstallerCE.	4-1
SetDeviceInfo	Sets a unique name and device for each IK8560/8570.	`\Program Files\Power Tools`	**Start** > **Settings** > **Control Panel** > **System** > **Device Name** tab.	6-3

2

EZConfig Utilities

Overview

EZConfig is a suite of products that configures IK8560/8570s quickly and efficiently. With the tools in the EZConfig suite, you can package data on the PC, then deploy and unpackage that data on the IK8560/8570.

Components

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

EZConfig Editor

Edits and creates configuration files in the .exm file format for the IK8560/8570. There are two versions of EZConfig Editor: one for the PC and one for the IK8560/8570.

Both editors:

• Create and modify configuration files–Working with Open Configuration Files (see page 2-6)

In addition, EZConfig Editor on the PC

• Generates bar codes from configuration files–Creating Bar Codes (see page 2-16)

For details about the PC editor, see EZConfig Editor on page 2-2.
For details about the IK8560/8570 editor, see EZConfig Editor on the IK8560/8570 on page 2-22.

EZConfig Client

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

EZConfig Editor

EZConfig Editor creates, edits, and manages configuration files for IK8560/8570 devices. There is an EZConfig Editor on the PC and an EZConfig Editor on the terminal. In the PC editor, configuration files are edited, saved, then transferred to the terminal. In the terminal editor, configuration files are edited and saved right on the terminal; see EZConfig Editor on the IK8560/8570 (page 2-22).

EXM Files

Configuration files are in the EXM file format, which is an XML format customized for IK8560/8570 devices. EXM files are comprised of sections that 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.

Configuration Documents

There are two kinds of documents in the .exm file format: configuration documents and registry documents. Configuration documents program and configure the terminal. Registration documents update and modify the registry; see Registry Documents (page 2-14).

Sample EXM Files

After you install the new build on the PC, default configuration files are stored in the \Program Files\Hand Held Products\Image KioskPower Tools and Demos\EZConfig Editor folder.
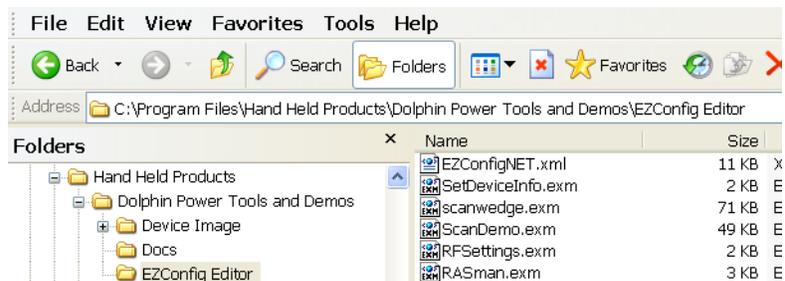
Use these configuration files as templates to create new configuration files.

Opening EZConfig Editor on the PC

After you complete installation, EZConfig Editor is available on the PC from the Start menu.
Click **Start** > **Programs** > **Hand Held Products** > **Image Kiosk Power Tools** > **EZConfig Editor**.

Menus
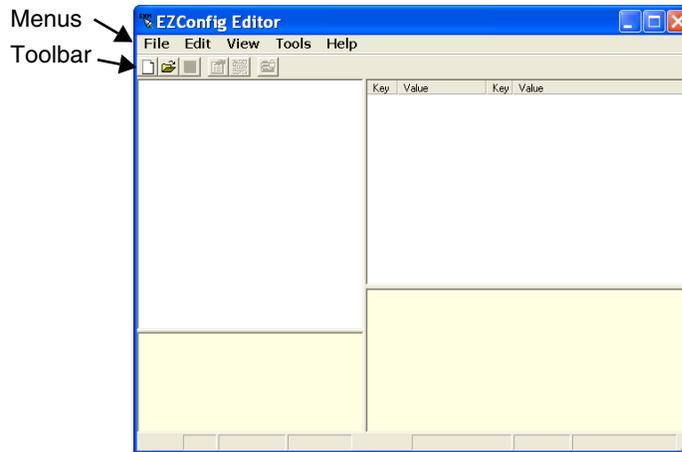
Toolbar

Menu and Toolbar Options

File Menu

Menu Item	Description
New	Creates a new document. There are two options: • **Configuration Document** - Creates a configuration file; Creating New Configuration Files (page 2-12). • **Registry Document** - Creates a registry file in the .exm file format; Registry Documents (page 2-14).
Open	Opens a configuration file located on the PC.
Open from Device	Opens a configuration 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 PC and the terminal.*
Save	Saves the open file to the location you select on the PC. 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 PC.
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 PC and the terminal.*
Properties	Associates the configuration file with an application on the terminal; see Associating Applications on page 2-13.
Create EZConfig Bar Code	Embeds the open configuration file in an Aztec bar code; see Generating Bar Codes on page 2-17.
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 2-10.

View Menu

Menu Item	Description
View Locks	Displays an icon over locked sections. For example, The key icon means that the section's keys are locked. The lock icon means the section's subsections are locked. Information about locks on subsections and keys also appears in the Status Bar (see page 2-6).
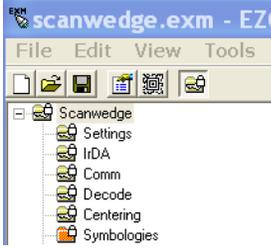
Tools Menu

Menu Item	Description
Simplify Document *Note: You cannot undo this action!*	Simplifies the configuration 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 configuration file. This reduces the size of the bar code package yet keeps the disabled sections, descriptions, and bar code settings in the open configuration file for future reference. For more information, see Simplified (page 2-18) on the Advanced Tab (see page 2-19).
Because the following menu items execute commands on the terminal, there must be an ActiveSync connection between the PC and the terminal.	
Launch Associated Application	If the open configuration 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 configuration file to the terminal; Save to Device As, page 2-3.*
Warm Boot	*Warm boots the terminal.
Cold Boot	*Cold boots the terminal.
*Some settings affect the boot process and these items can help you run a test without switching to the terminal.	

Menu Item	Description
Upgrade Remote INI Files	Not applicable

Opening Configuration Files

EZConfig Editor opens configuration files located on either the PC or the remote terminal.

Opening Configuration Files on the PC

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

Opening Remote Configuration Files

Requirements   The PC and the terminal must be connected via ActiveSync!

EZConfig Editor can open configuration files located on the remote terminal.

Click **File** > **Open From Device** and the remote open window opens.
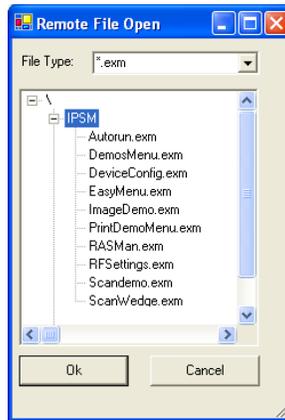
To open, double-tap on a file or select it and click **OK**.

Note: You can also open configuration files in the editor on the terminal; see EZConfig Editor on the IK8560/8570 (page 2-22).

Working with Open Configuration Files

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

Displays the root node and sections.

Select a section and the details appear in the other portions of the window.

The folders appear in different colors to indicate their status.

Displays the section name and description.

Status Bar

Displays the file name.

If the file is on the terminal, the title bar displays the remote path.

Displays the keys in the selected section.

Text that appears in blue can be edited.

Displays the selected key's name and description.

Status Bar

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

Selected Section

Section Name   Merge Mode   Locks on subsections and keys
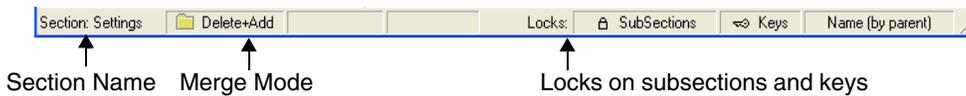
See Section Locks on page 2-8.

Selected Key

Key Name   Enabled or   Read Only   Encrypted   Key locked by
                Disabled   section
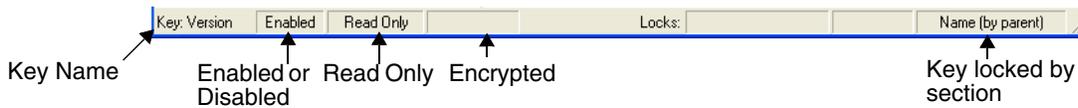
See Key Types on page 2-11.

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 configuration 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.
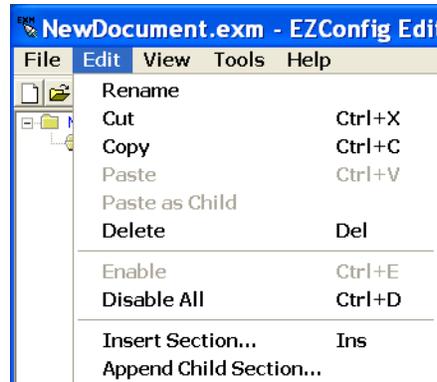
Rename
Activates the section name so that you can rename the section.

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 a configuration file or across configuration 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 disabled. To enable a section, its parent section must be enabled.

To enable all the keys inside a section you are enabling, SHIFT + right-click and select **Enable All**.

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 📁.
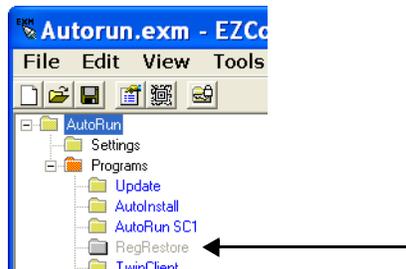
If you disable a section that has child sections, all of its child sections (and the child section keys) are disabled automatically. The child section folders are also in gray.

When reading the configuration 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 configuration file permanently using the Simplify Document (see page 2-4) option. If you want to keep disabled sections in the configuration file on the PC but not the file deployed to the terminal, select the Simplified radio button (page 2-18) when creating the bar code.

Insert Section
This menu item inserts a new section.

Note: 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 child 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; see Section Locks (page 2-8).

Modifying Section Descriptions

Descriptions are not required to process key values but document the configuration file. 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 a configuration 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 configuration 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.

Type of Locks	Status Bar Indicator	Description	Effect
Name Lock	Name (by parent)	The section name is locked.	• Section Name and Description cannot be modified.
Key Lock	⇔ Keys	All keys are locked.	• Key Names and Descriptions cannot be modified. • Keys cannot be added, moved, or deleted within the section.
Subsection Lock	🔒 SubSections	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

Configuration files ship with section-level merge modes already defined according to section content. Merge modes determine how section information is handled when an updated configuration file is deployed to the terminal where an existing version of that configuration 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.*	
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 configuration 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.
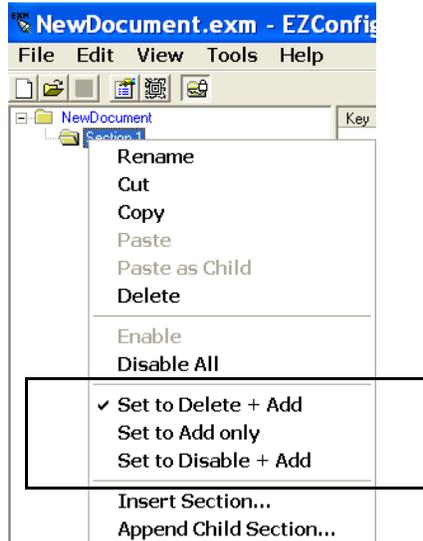
The folder colors change immediately after selection.

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 configuration file you're attempting to edit.

Edit Menu Options

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

The same options appear on both menus.
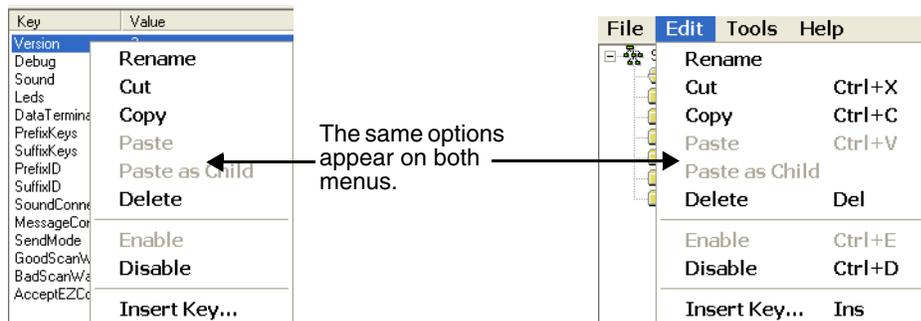
Rename	Activates the key name so that you can rename the key.
	Note: Rename is disabled if the key is locked; see Key Types (page 2-11).
Cut	Cuts a selected key.
Copy	Copies a selected key.
Paste	Disabled; keys can be pasted only as children of a section.
Paste as Child	Pastes the key just cut or copied in the selected section. Keys are not multi-level; all keys paste at the same level within a section.
	Note: You can cut, copy and paste keys within a configuration file or across configuration files.
Delete	Deletes a selected key.
	Note: 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.
	Note: To enable a key, its parent section must be enabled.
Disable	Disables keys. Enabled keys have key values in blue. Disabled keys have key values in black.

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 2-11). 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 document the configuration file for future reference. 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 2-11).

Moving Keys

To move keys within a configuration 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 configuration 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.

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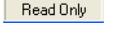
Note: Locked and Read Only properties are not recursive. Properties are applied to each individual key. Only text that appears in blue can be modified.

Saving to the Device

You can save configuration files directly to the terminal when there is an ActiveSync connection between the terminal and the PC. Select **File** > **Save to the Device As** and the Save Remote File window opens.
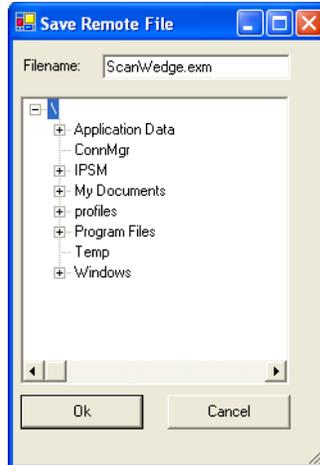
Select the location on the terminal where you want to store the configuration file and click **OK**. The configuration file is downloaded directly to the terminal via ActiveSync.

Note: Configuration files for Image Kiosk Power Tools must be stored in the `\IPSM` *folder.*

Creating New Configuration Files

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

The terminal reads root node first.

The Description says "Root" to indicate that this is the root section.
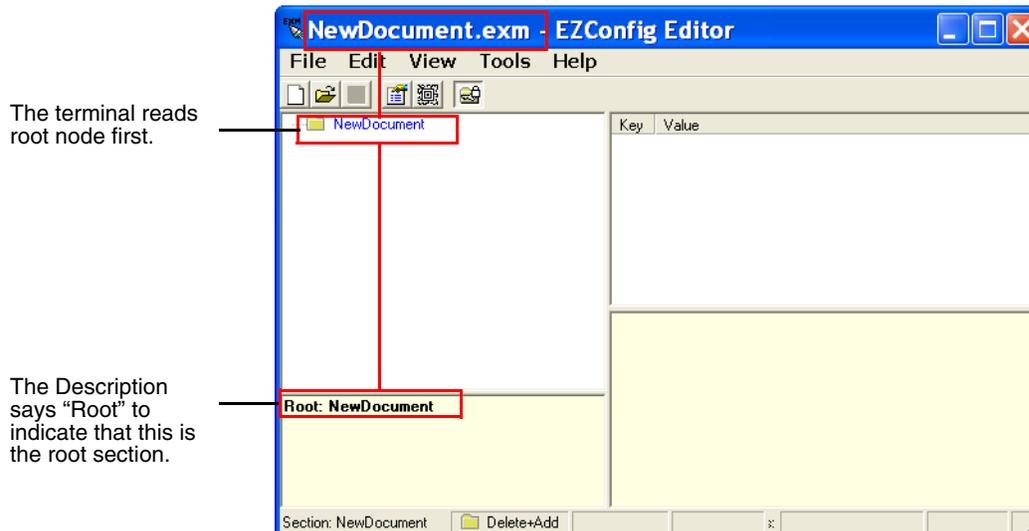
Note: You can also create registry documents in the configuration file format. For details, see Registry Documents *on page 2-14.*

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**.

7. Continue adding sections and keys.

8. If necessary, associate this configuration file with an application; see Associating Applications (page 2-13).

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 a configuration file with an application on the terminal. The associated application launches after EZConfig Client decodes the bar code containing the configuration file. For more information, see Creating Bar Codes on page 2-16.

While the configuration 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 2-18.
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 2-14).
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 a configuration file that is a registry document–Creating Registry Documents (page 2-14),
- Create a bar code package from that configuration file–Creating Bar Codes (page 2-16), 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**.
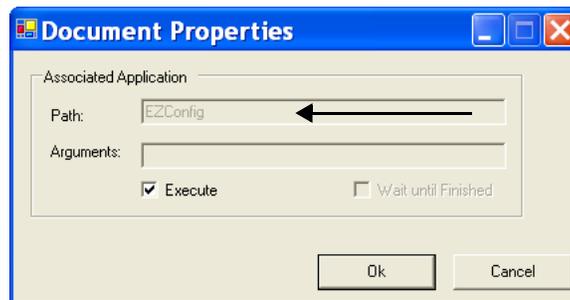
Execute must remain selected for EZConfig Client to update the registry after decoding the bar code. If **Execute** is not selected, the registry document is deployed after decoding but the registry is not updated.

Creating Registry Documents

1. In EZConfig Editor, click **File** > **New** > **Registry Document**.
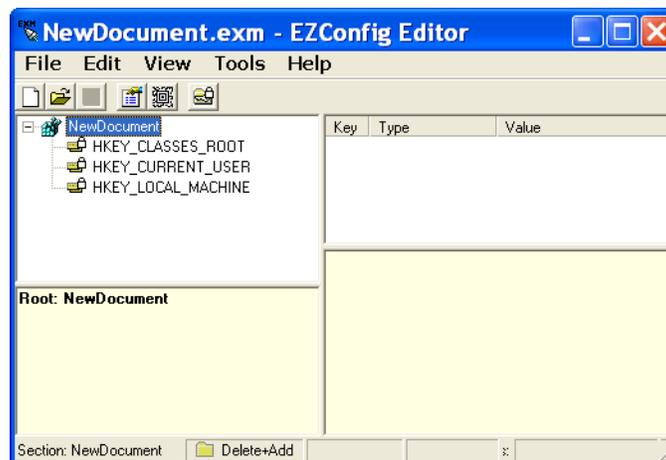
The new document contains the three top-level sections in a registry. These sections are locked and cannot be changed. You can add subsections to each section and then add keys to those subsections.

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**.
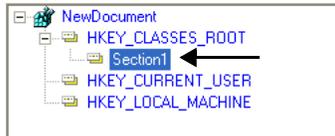
For more information about adding sections, see Working with Sections on page 2-6.

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 2-15.

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. A list box with Append Key displays. Select the Append Key, and a key will be created with the key name = New Key, key type = REG_SZ, and Value field blank. The key name field will be open for edit. The other fields can be opened into edit mode by double clicking in the field area.

Descriptions can be entered into the lower half of the EZConfig window.
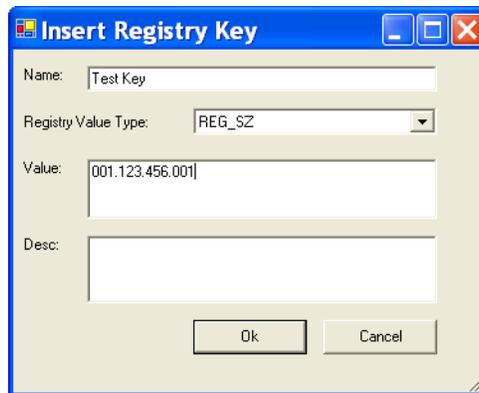
Field	Description
Name	Enter the key's name.
Registry Value Type	Select the registry type from the drop down list. This value appears in the Type column.
Value	Enter the key's value.
Desc	Enter a description for the key; descriptions appear in the lower half of the EZConfig Editor window when the key 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 configuration file itself is deployed to the location entered in the Remote Path (page 2-18) field on the Bar Codes Tab (page 2-18).

Note: EXM files appear with an ![icon] icon on terminal windows.

If you do not want to store the registry document on the terminal after updating the registry, select the Temporary (page 2-20) option on the Bar Codes Tab (page 2-18).

Creating Bar Codes

EZConfig Editor embeds configuration files in bar codes. The EZConfig Client on the terminal decodes the bar code and deploys the data in the terminal.

Using bar codes quickly and easily configures IK8560/8570 devices without a direct connection to a PC.

Configuration File Types

EZConfig Editor produces two kinds of configuration 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 configuration file in the terminal. If a configuration file is associated with an application, EZConfig Client deploys the data to that application for processing; see Associating Applications on page 2-13.

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; for example, ![aztec barcode].

Time and Date Stamp

Configuration 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 configuration 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 2-19.

2. Split the data across a specified number of bar codes—see # Bar codes to generate on page 2-18.

3. Simplify the configuration file in the bar code—see Simplified on page 2-18.

4. Scale the bar codes on the bar code sheet—see Bar Code Scaling Factor on page 2-21.

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 2-21.

In addition, individual bar codes can be saved as .tiff or .png graphic files that can then be emailed and printed; see Bar Codes Tab on page 2-18.

Generating Bar Codes

When creating a bar code, EZConfig Editor automatically encrypts and compresses the data in the configuration file. To generate a bar code, click **File** > **Create EZConfig Bar Code** OR the **Create Bar Code** toolbar button ⊞ while the configuration 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 configuration 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 2-21) 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 location and filename where the configuration file should be deployed on the terminal. For instance, **\ipsm\deviceconfig.exm** Tap the browse button [...] to navigate to the location on the terminal. Your ActiveSync connection must be active.
Full Contents	Includes the full contents of the configuration file in the bar code, without simplifying.
Simplified	Simplifies the configuration 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 configuration file is **not** simplified. Simplified is selected by default. The differences in total package size are displayed in the Package Size (page 2-21) field. Individual bar code size can be seen in the Display (page 2-18) field.
# Bar codes to generate	This is active only if the Always use minimum # bar codes (see page 2-19) 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.

Field/Option	Description
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.
Save	Saves the bar code displayed in the preview area as a .png or .tiff image file. By default, the name of the graphic file is the same as the name of the open configuration 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 configuration 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 2-21.

Advanced Tab

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

Field	Description
Bar Code Options	
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. Bar code size is displayed to the right of the Display (page 2-18) field. The total number of bar codes created is displayed at the bottom of the window; see Bar Codes (page 2-21).
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.
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 is being deployed on the terminal.

Field	Description
Warm boot after finished	This option automatically launches a warm boot on the terminal after the bar code is deployed. Use this option with configuration 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 configuration file embedded in the bar code. For each deployment option selected, there are corresponding overwrite options under **If already exists, deploy:**.	
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.
Merge each section… (Default selection)	Deploys information according to the section-level merge mode settings; see Section-Level Merge Modes on page 2-9. **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 configuration file temporarily. The configuration file is deployed and its settings applied, but the file does not remain in the system after EZConfig Client is done. If the terminal contains a previous configuration file with the same name, the previous configuration file is preserved.
Persist Bar Code Settings	Stores the settings from the Options, Bar Codes, and Web Page tabs within the configuration file so that the same bar code settings are applied the next time a bar code is created from the configuration file. This increases the size of both the configuration 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 configuration 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.
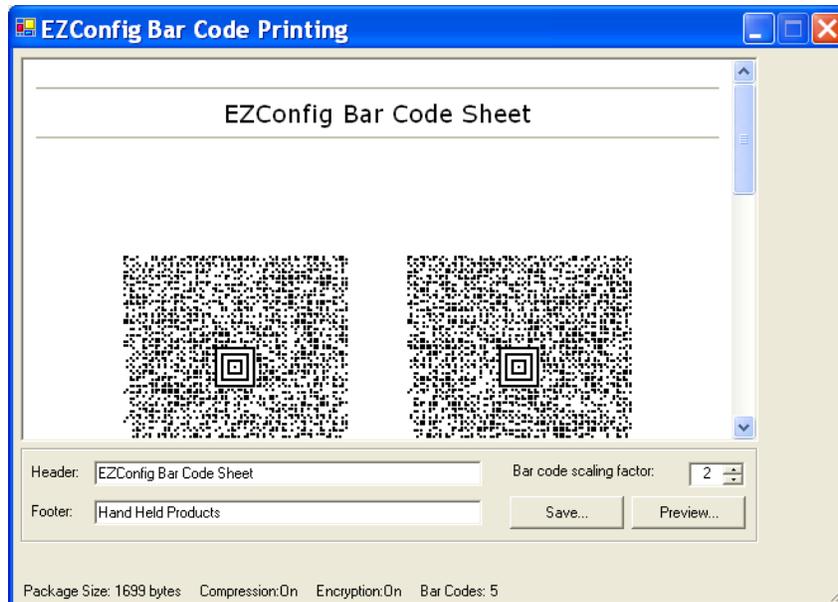
Field/Option	Description
Preview Area	This is the largest section of the tab window and displays a preview of the bar code sheet. Use the scroll bars to see all the bar codes.
Header	Type in a custom header for the page. "EZConfig Bar Code Sheet" is the default header.
Footer	Type in a custom footer for the page. "Hand Held Products" is the default footer.
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.

Field/Option	Description
Save	Saves the bar code sheet as an HTML file.
Preview	Click to see a print preview.
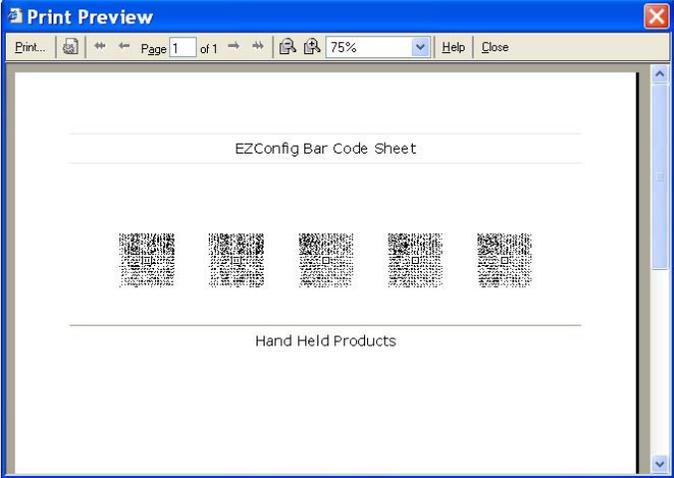
Click **Print** on this window to print your bar codes.

EZConfig Editor on the IK8560/8570

EZConfig Editor on the IK8560/8570 edits and creates configuration files in the IK8560/8570 and contains the same basic functionality as the editor on the PC.

Accessing EZConfig Editor

Tap **Start** > **Programs** > **Power Tools** > **EZConfig Utilities** .
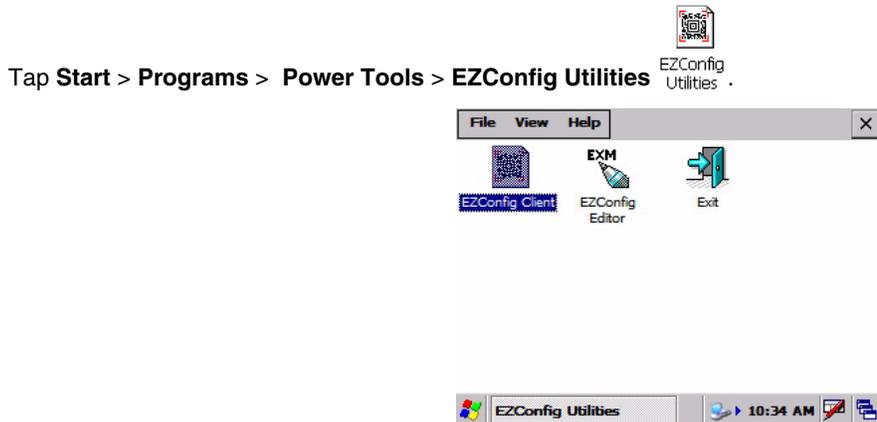
The EZConfig Utilities window provides access to both the EZConfig Editor and the EZConfig Client (see EZConfig Client on page 2-26) as well as the configuration files on the IK8560/8570.

- To open EZConfig Editor without opening a configuration file, tap the EZConfig Editor icon . (You would then tap **File** > **Open** to open a configuration file.)
- Tap directly on a configuration file to open it in EZConfig Editor.

The EZConfig Editor window opens displaying the contents of the selected configuration file.
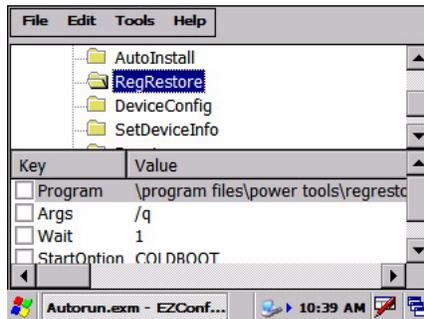
Note: EXM files have an .exm file extension on IK8560/8570 windows.

Available Menus

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

File Menu	For details about each menu item, see File Menu on page 2-3.
	Note: You cannot generate bar codes from configuration files on the IK8560/8570.
Edit Menu	For details about each menu item, see Edit Menu on page 2-4.
Tools Menu	For details about each menu item, see Tools Menu on page 2-4.

Editing Sections

Modifying Text

To edit a section name or description, you have two options:

1. Select the section and tap **Edit** > **Modify**, OR

2. Select the section and press the ENTER key.
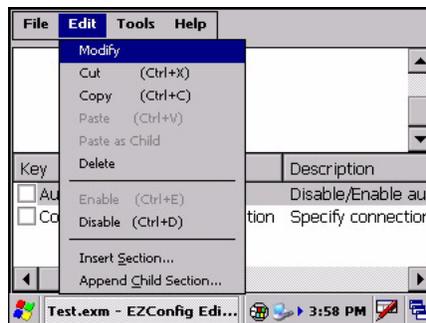
Both options open the Edit Section window.
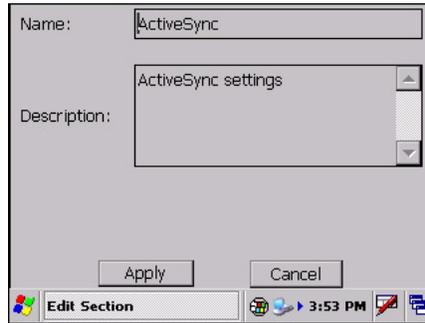
Tap inside the **Name** or **Description** fields and edit the text.

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

To edit a key's name, value, or description, you have three options:

1. Select the key and tap **Edit** > **Modify**, OR

2. Select the key and press the ENTER key.
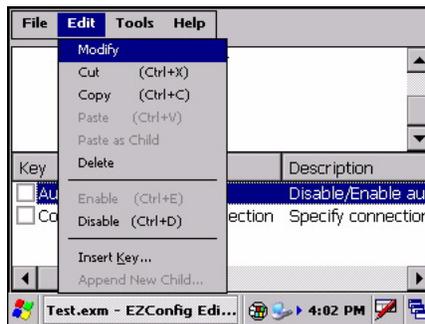
Both edit options open the Edit Key window.
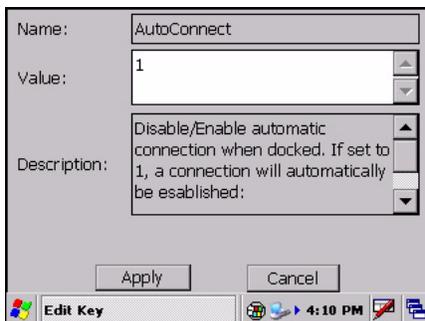
Tap inside the **Name, Value** or **Description** fields and edit the text.

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**.
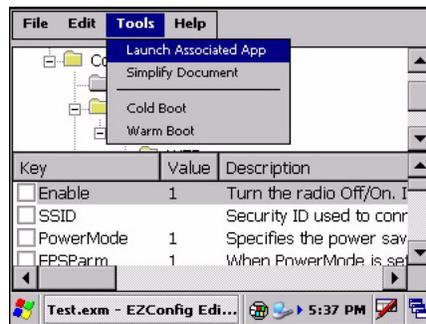
Selecting this item automatically saves the open configuration file and launches the associated application while the configuration file remains open.

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 2-13.

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 a configuration file that is a registry document.

Example 3 - You've saved changes to an open IKWedge.exm file.

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

`Path:    \program files\power tools\IKWedge.exe`

`Args:    /restart`

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

EZConfig Client

EZConfig Client decodes bar codes created in EZConfig Editor and deploys the data in the IK8560/8570. In addition, if the configuration file in the bar code is associated with an application, EZConfig Client launches that application, which then processes the decoded data.

Storage Location

The EZConfig Client executable is stored in the `\IPSM` folder.
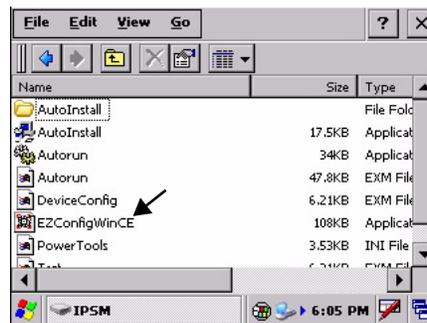
For upgrades, EZConfig Client is located in the IPSM image installed on the PC. This .exe **must** be copied and pasted into the `\IPSM` folder on the IK8560/8570. For more information, see Installing an Upgrade on the IK8560/8570 on page 1-6.

Using EZConfig Client

1. On the IK8560/8570, tap **Start** > **Programs** > **Power Tools**. The Power Tools Main Window (see page 1-8) 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 Client . The EZConfig Client window opens.
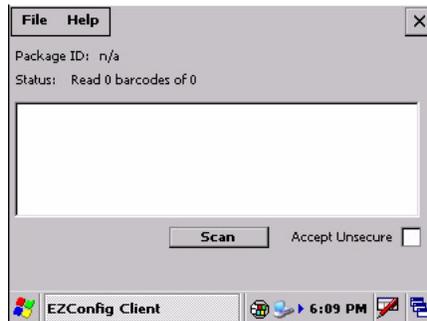
3. Point the IK8560/8570 at the first EZConfig Editor bar code and press the SCAN key.

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.
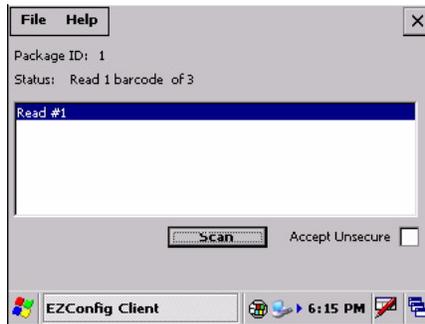
5. Scan all the bar codes in the package. Bar codes can be scanned in any order.

6. When all bar codes in the package have been scanned, the EZConfig Client deploys the data.

Configuration File Processing

After decoding, EZConfig Client saves all configuration files to the location on the IK8560/8570 selected in the Remote Path (page 2-18) field on the Bar Codes Tab (page 2-18). (If the Temporary, page 2-20, option is selected in the bar code, EZConfig Client does not save the configuration file.)

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

Configuration Documents

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

*Note: DeviceConfig.exm file is a configuration document that **must** be associated with DeviceConfig.exe to be processed appropriately. After decoding the bar code, EZConfig Client deploys the data to DeviceConfig.exe, which applies the settings to the IK8560/8570.*

Registry Documents   Registry documents are always associated with EZConfig Client. The **Execute** option (Execute, page 2-13) 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 configuration 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.*

Command Line Arguments

/%filename	Executes the configuration 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 executable file located in the **\Program Files\Power Tools** folder, and the
• The DeviceConfig.exm file located in the **\IPSM** folder.
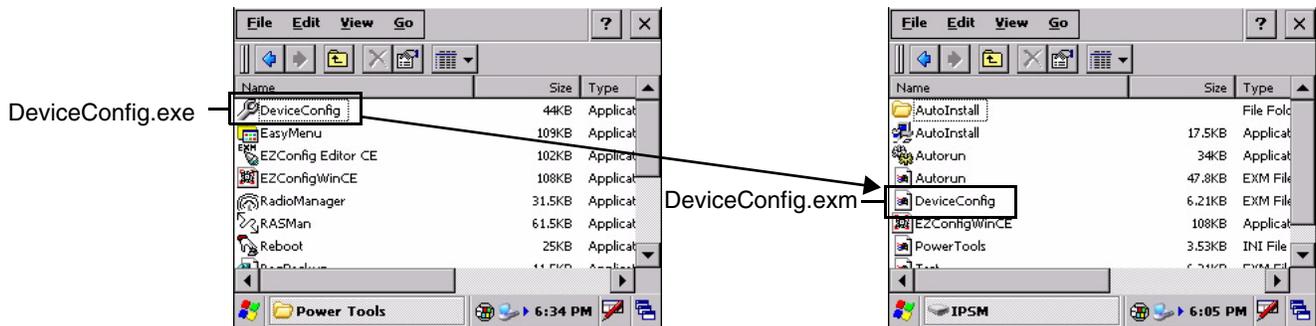
DeviceConfig.exe looks for and applies the settings in the DeviceConfig.exm file.

DeviceConfig.exm

The DeviceConfig.exm file contains terminal configuration settings and is stored in the **\IPSM** folder. As such, the configuration settings in this file persist through cold boots and should be considered system defaults. For example, if you use the DeviceConfig.exm file to set up a radio, those settings remain in the IK8560/8570 after the next cold boot.

Autorun

The Autorun Configuration File (see page 4-1) launches DeviceConfig.exe during startup, which means that DeviceConfig.exe applies the (enabled) settings in the **\IPSM\DeviceConfig.exm file** after each cold boot.

Control Panel Applets

Many settings in the DeviceConfig.exm file, such as Connection settings, have Control Panel applets with GUIs on which the user can enter and save new values. If a user changes a setting in the Control Panel applet, that setting is applied but stored in RAM memory and erased during the next cold boot. Then, as part of startup after the next cold boot, Autorun launches DeviceConfig.exe, which then re-applies the settings in the DeviceConfig.exm file.

Bar Code Delivery

When the DeviceConfig.exm file is delivered to the IK8560/8570 via bar code, EZConfig Client launches DeviceConfig.exe automatically after decoding. DeviceConfig.exe then applies the settings in theDeviceConfig.exm file in the IK8560/8570. For more information, see Creating Bar Codes (page 2-16) and EZConfig Client (page 2-26).

Requirements

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

\Program files\Power Tools\deviceconfig.exe

For more information, see Associating Applications, page 2-13.

DeviceConfig Sections and Keys

The sections and keys in the DeviceConfig.exm file are locked, which means that you can change the value but not the name or description. The description of locked keys contains "[Locked]" next to the name.

Section Name	Description	See Page
Connections	Configures ActiveSync settings.	3-2
System	Configures basic system settings.	3-2
Applications	Configures software applications.	3-2

Connections Section

The Connections section contains child sections that set communication parameters on the IK8560/8570.

Key	Description	Default Value	Available Values
ActiveSync	Enable/Disable automatic connection when the device is connected via USB to a PC. If set to 1, a connection will automatically be established.	1	0=Disabled 1=Enabled

System Section

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

Applications Section

The Applications section configures specific software applications installed on the IK8560/8570.

Internet Explorer Section

The Internet Explorer section defines the home page for Internet Explorer 6.0 for Microsoft Windows CE.

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.

Launching DeviceConfig.exe Manually

DeviceConfig.exe does launch automatically after each cold boot. However, if you make changes to the DeviceConfig.exm file that you want applied in the IK8560/8570 immediately, manually launch DeviceConfig.exe.

1. Tap **Start** > **Run**, browse to **\Program Files\Power Tools** and double tap **DeviceConfig.exe**, then tap **OK**. Device Config executes and any changes the user might have made to DeviceConfig.exm are applied.

2. Tap **Tools** > **Launch Associated App**.
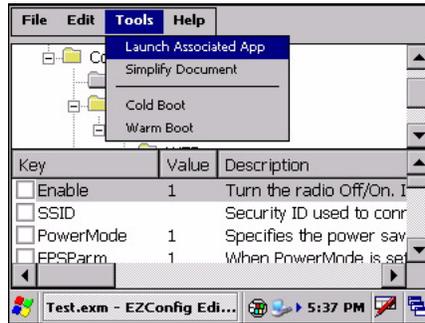
3. The settings in the DeviceConfig.exm file are saved and applied to the IK8560/8570 configuration by DeviceConfig.exe.

Temporary Option for Bar Code Deployment

The Bar Codes Tab (see page 2-18) in EZConfig Editor contains a Temporary option (see page 2-20) 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 IK8560/8570, 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/upon the next cold boot.

Select this option when you want a temporary configuration in the IK8560/8570 (such as access to a specific network in a facility) without changing the default configuration.

4

Startup Power Tools

Overview

Startup is the launch sequence when an IK8560/8570 is booted.
There are two startup Power Tools:

1. Autorun, page 4-1

2. AutoInstall, page 4-5

Autorun

Autorun specifies the software applications to launch after each hard reset. Autorun is located in the `\IPSM` folder and consists of an Autorun.exe ⚙Autorun that is programmed by the Autorun Configuration File (page 4-1) 📄Autorun .
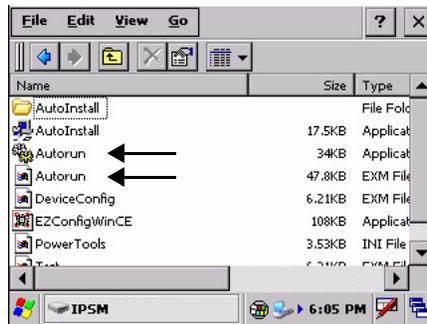
During startup, after a soft or hard reset, the IK8560/8570 operating system looks for and launches `\IPSM\Autorun.exe`. If the Autorun.exe is configured (by Autorun.exm) to launch an application, that application launches when Autorun.exe launches. Autorun can launch up to 32 applications or utility 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 IK8560/8570 itself.

Autorun Configuration File

The Autorun.exm file has a multi-level tree structure. There are two top levels:

Section Name	Description	See Page
Settings	Stores general Autorun settings	4-2
Programs	Determines which programs to launch; this section has multiple child sections	4-3

Settings Section
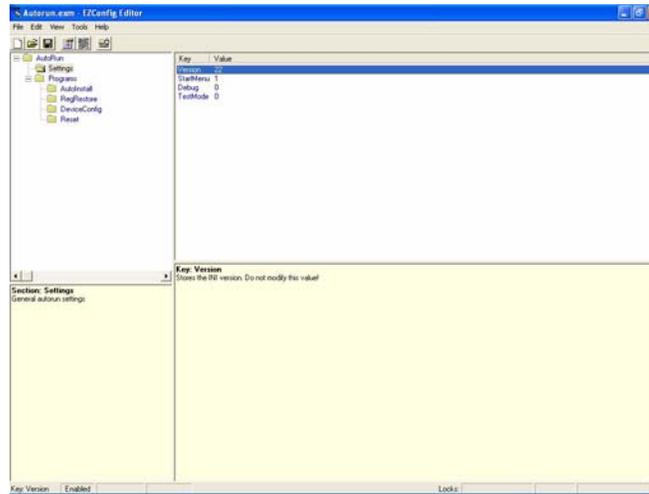
Key	Function	Default	Available Values
Version	Stores the .exm file version.	22	You cannot modify this value!
StartMenu	Enables and Disables the StartMenu during the Autorun execution.	1	0=Disables 1=Enable
Debug	Controls the debug function at AutoInstall.	0	0=Disable 1=Enable, an autorun.log file is created in the **\IPSM** folder.
TestMode	Runs the IK8560/8570 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

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

Programs Section

The Programs section determines which programs launch at startup.
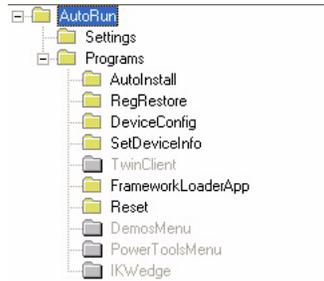
Program Sections and Launch Sequence

Each section is a program to launch at startup. The sequence of sections determines the launch sequence on the IK8560/8570; the IK8560/8570 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 red.

When processing files, the IK8560/8570 behaves as though disabled sections are not there and moves on to the next enabled section.

Program Child Sections

The following section is required and must be enabled.

Section	Description
Reset	Initiates a warm boot after the cold boot during startup. Do **NOT** disable the Reset section!

The other sections launch the executable entered in the Program key.

Program Section Keys

Each program section should contain the following keys:

Key	Function
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

Key	Function
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. For a complete list of values, see Startup Options on page 4-5.
Optional Keys—These are keys you can add as necessary.	
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 (top to bottom) 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 Configuration File

Edit Autorun.exm in EZConfig Editor. For details, see Working with Open Configuration Files on page 2-6.

Adding a Program Section

1. In EZConfig Editor, right click on the **Programs** section and select **Append Child Section**.
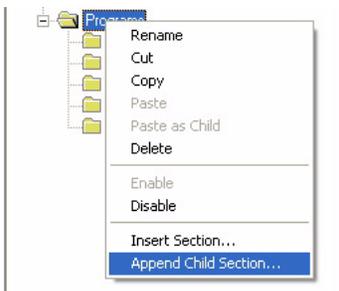
A new program **must** be a child section of the Programs section to launch at startup.

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 Program Section Keys on page 4-3.

6. Save the file and transport it to the IK8560/8570.

Sample Autorun Configuration File

A sample Autorun.exm file installs on the PC to C:\Program Files\Hand Held Products\Image Kiosk Power Tools and Demos\EZConfig Editor.
For more information, see Sample EXM Files on page 2-2.

Startup Options

Startup 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 IK8560/8570 has performed a cold boot.	Boot type
WARMBOOT	The IK8560/8570 has performed a warm boot.	

Multiple options can be specified for each category. Separate multiple options with a comma.

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 StartupOption 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 allows you to install . cab files automatically whenever the IK8560/8570 initializes from a cold boot. Stored in the **\IPSM** directory, AutoInstall consists of an AutoInstall.exe that, when launched, installs the CAB files in the AutoInstall folder.
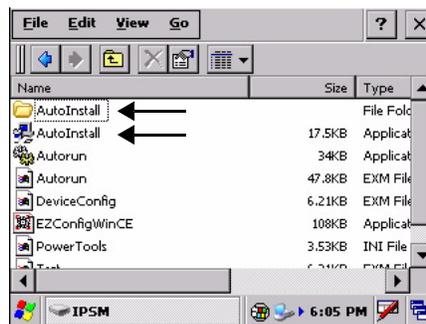
The Autorun Configuration File, page 4-1, launches the AutoInstall.exe during startup.

AutoInstall launches during a hard reset (also known as a cold boot) and installs the CAB files stored in the AutoInstall folder. Therefore, if you want to ensure that a software application persists through a hard reset, store its CAB file in the AutoInstall folder.

Program Install Locations

When triggered by a hard 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 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 **\IPSM\AUTOINSTALL.LOG**.	0	0=Disabled 1=Enabled
Cancel	Enable and disables the **Cancel** button on the AutoInstall window.	0	0=Disabled 1=Enabled
ExitPrompt	Enable and disables the AutoInstall exit confirmation	1	0=Disables 1=Enabled
FullScreen	Determines if the AutoInstall window runs in full screen mode (barring access to other windows).	1	0=Disabled 1=Enabled
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: Remember! It's the Autorun.exm file that determines the programs and install sequence, not AutoInstall.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 destinationfilename

             Example   autoinstall /copy "\windows\data.mdf " "\IPSM\data.mdf"

5

IKWedge

Overview

IKWedge sends data from the IK8560/8570 decoder 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.

Enabling IKWedge

Tap the IKWedge icon **once** [IKWedge]. IKWedge initializes and enables.

Command Bar Menu

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

Tap this icon to open the command bar menu.
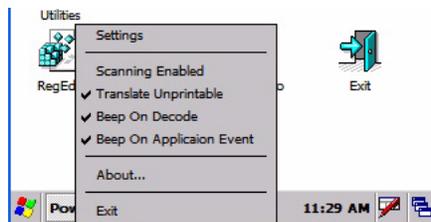
Menu Item	This item …
Settings	Edit the IKWedge.exm settings using the EZConfig Editor. The settings are reloaded when the editor is closed if the settings file has been modified.
Scanning Enabled	Enables and disables scanning without exiting IKWedge.
Translate Unprintables	Enables and disables whether unprintable ASCII characters are replaced by their terminal descriptors (values less that 32) or by their decimal value (values greater than 127).
Beep On Decode	Whether to sound the IK8560/8570 beeper on a successful decode.
Beep On Application Event	Enable/Disable device sounds for events other than decode.
About…	Opens the About screen for IKWedge
Exit	Exits the IKWedge application. The icon no longer appears in the Command bar.

Enabling IKWedge at Startup

To run IKWedge automatically when the IK8560/8570 boots up,

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

OR

Enable the IKWedge section of the Autorun Configuration File (see page 4-1).

Disabling IKWedge

Navigate to the Power Tools Main Window (see page 1-8) and tap the **IKWedge** icon again.

OR

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

Modifying the IKWedge Configuration File

When IKWedge is installed, a IKWedge.exm file is inserted in the **\IPSM** folder. This configuration file specifies configuration parameters for IKWedge and must be located in the **\IPSM** directory. **Do not move IKWedge.exm!**

Use EZConfig Editor on the PC to modify the IKWedge configuration file. For more information, see Working with Open Configuration Files on page 2-6.

IKWedge Configuration File Sections

The IKWedge.exm file is divided into the following sections:

Section	Description	See Page
Settings	Programs general settings for IKWedge.	5-3
Decode	Specifies how the decoder/scanner interfaces with IKWedge.	5-4
Centering	Defines the centering window for scanning bar codes when IKWedge is interfacing with the decoder.	5-6
Symbologies	Defines the symbologies that the scanner can decode and send to IKWedge.	5-7
VK Mapping	Defines the virtual key sent to IKWedge for any decoded ASCII character.	5-9

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 IKWedge interprets data from the decoder.

0 = Disable   1 = Enable

Settings Section Key	Description	Default Value	Available Values
Version	This is the version of IKWedge	3	You cannot modify this value.
Aimers	Enables and disables aimers while scanning.	0	0=Disable 1=Enable
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=Each character is sent as a virtual keystroke. This method works well when scanning small bar codes (20 characters or less), but becomes very slow for larger bar codes on the IK8560/8570. 1=IKWedge uses the direct text method where 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=Simulated Key method: each character is sent as an actual keystroke. This method works well for all bar codes, but does not use the VKMapping table.
Sound	Enables and disables the 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.
SoundConnect	Enables and disables • The sound that IKWedge makes when starting up, shutting down, or restarting.	1	0=Disabled 1=Enabled Note: Audio notifications for errors can't be disabled.
MessageConnect	Enables and disables the display of a notification message after a successful imager connect.	0	0=Disable 1=Enable
Append Keys	Options for Key strokes to be appended to the decoded data when sent to the active window.	3	0 - None. 1 - Append a <tab> 2 - Append a <CR> 3 - Append <CR><LF>

Settings Section

The Settings section determines how IKWedge interprets data from the decoder.

0 = Disable   1 = Enable

Settings Section Key	Description	Default Value	Available Values
Translate Unprintable	Enables/ Disables the translation (replacement) of non-printable ASCII characters. If < 32 (Space) - The character is replaced with its terminal character string. ex. The character value 09 is replaced by "<tab>". if > 127 - The character is replaced by its decimal value <ddd>. ex. The character value 220 is replaced by "<220>"	1	0=Disable 1=Enable
Accept EZConfig This key applies only to the **decoder**.	Enables and disables IKWedge's compatibility with EZConfig Client when decoding bar codes.	1	0=Disabled; IKWedge processes EZConfig bar codes as it would any other bar code. 1=Enabled; IKWedge recognizes EZConfig bar codes and passes them on to the EZConfig Client for further processing.

Decode Section

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

IKWedge Entry	Description	Default Value	Available Values
Enable	Enable and disable scanning for bar codes.	0	0=Disabled; Application still running but scanning is turned off. 1=Enabled; Scanning for bar codes is enabled**.**
ScanTimeout	Specifies the decode time out. If a symbol is not decoded in the specified timeout the scan process is restarted.	30000	Timeout is specified in milliseconds. 0=No Timeout 300000=5 minutes
ScanMode	Specifies the decode method used by the decoder.	0	0 - Full Omni decoder. 1 - Quick Omni decoder. 2 - Aggressive Linear decoder
LinearRange	Specifies the linear search range to be used while in ALD mode.	3	The range is 1 to 6. A value of 1 indicates a tight vertical range near the aimer. A value of 6 indicates a vertical range of the entire height of the imager.

Decode Section

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

IKWedge Entry	Description	Default Value	Available Values
Sound	Enable/Disable successful beep on successful decode.	1	0=No Beep (Silent Decode) 1=Beep on decode.
ScanInterval	The time to wait after a decode timeout before continuing to scan for more bar codes.	400	Time is specified in milliseconds. 0=Don't wait 300000= 5 minutes
PostDecodeInterval	The time to wait after a successful decode before continuing to scan for more bar codes.	2500	Time is specified in milliseconds. 0=Don't wait 300000= 5 minutes
PrintWeight	This is the relative contrast setting used by the decoder when scanning and decoding symbols.	4	The valid range is 1 (light) to 7 (dark).
ReverseVideo	Tells whether symbols being scanned are dark on light or light on dark.	0	0 = dark bar code on light background. 1=light bar code on dark background
SearchTimeLimitFull Omni	Maximum time in milliseconds to search a single image for a decodeable symbol when the decoder is set to Full Omni Mode.	400	The valid range is 0 (None) to 10000 (10 seconds).
DecodeAttemptLimitFull Omni	Maximum time in milliseconds that the decoder should spend trying to decode a suspected symbol in Full Omni mode.	800	The valid range is 0 (None) to 10000 (10 seconds).
SearchTimeLimitQuick Omni	Maximum time in milliseconds to search a single image for a decodeable symbol when the decoder is set to Quick Omni Mode.	400	The valid range is 0 (None) to 10000 (10 seconds).
DecodeAttemptLimit QuickOmni	Maximum time in milliseconds that the decoder should spend trying to decode a suspected symbol in Quick Omni mode.	800	The valid range is 0 (None) to 10000 (10 seconds).
SearchTimeLimitALD	Maximum time in milliseconds to search a single image for a decodeable symbol when the decoder is set to Aggressive Linear Mode.	400	The valid range is 0 (None) to 10000 (10 seconds).
DecodeAttemptLimitALD	Maximum time in milliseconds that the decoder should spend trying to decode a suspected symbol in ALD mode.	800	The valid range is 0 (None) to 10000 (10 seconds).

Centering Section

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

IKWedge Entry	Description	Default Value	Available Values
CenteringEnable=	Enable and disables the decode centering window for the decoder.	0	0=Disabled; centering is disabled for IKWedge. 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.	215	Enter the coordinates in pixels.
CenteringBottom=	Specifies the bottom coordinate of the centering window.	265	
CenteringLeft=	Specifies the left coordinate of the centering window.	335	
CenteringRight=	Specifies the right coordinate of the centering window.	385	

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 Hand Held Products Decode API documentation in the IK8560/8570 SDK documentation.

Symbologies Settings

0=Disabled 1=Enabled

IKWedge Entry	Default Enabled/ Disabled Value	Default Value
Aztec Code	1=Enabled	1,3750,0,0,0,0,0,0
Codabar	1=Enabled	0,0,0,2,60,0,0,0
Code 11	0=Disabled	1,4,80,0,0,0,0,0
Code 128/EAN 128	1=Enabled	0,80,0,0,0,0,0,0
Code 39	1=Enabled	0,0,0,0,0,2,48,0
Code 49	1=Enabled	1,81,0,0,0,0,0,0
Code 93	1=Enabled	0,80,0,0,0,0,0,0
EAN.UCC Composites	0=Disabled	0,1,300,0,0,0,0,0,
Data Matrix	1=Enabled	1,1500,0,0,0,0,0,0
EAN-8	1=Enabled	0,0,0,0,0,0,0,0
EAN-13	1=Enabled	0,0,0,0,0,0,0,0
Interleaved 2 of 5	1=Enabled	0,0,4,80,0,0,0,0
MaxiCode	0=Disabled	1,150,0,0,0,0,0,0
MicroPDF417	1=Enabled	1,366,0,0,0,0,0,0
OCR	0=Disabled	2,dddddddd,,,,0
PDF417	1=Enabled	1,2750,0,0,0,0,0,0
QR Code	0=Disabled	1,3500,0,0,0,0,0,0

Symbologies Settings

0=Disabled 1=Enabled

IKWedge Entry	Default Enabled/ Disabled Value	Default Value
Postnet	1=Enabled	0,0,0,0,0,0,0,0
Reduced Space Symbology (RSS)	1=Enabled	1,1,4,74,0,0,0
UPC-A	1=Enabled	0,0,0,0,0,0,0,0
UPC-E0	1=Enabled	0,0,0,0,0,0,1,0
UPC-E1	0=Disabled	0,0,0,0,0,0,1,0
ISBT	0=Disabled	0,0,0,0,0,0,0,0
British Post	0=Disabled	0,0,0,0,0,0,0,0
Canadian Post	0=Disabled	0,0,0,0,0,0,0,0
Australian Post	0=Disabled	0,0,0,0,0,0,0,0
Straight 2 of 5 IATA	0=Disabled	4,80,0,0,0,0,0,0
Codablock	0=Disabled	1,2048,0,0,0,0,0,0
Japanense Post	0=Disabled	0,0,0,0,0,0,0,0
Planet Code	0=Disabled	0,0,0,0,0,0,0,0
Dutch Post	0=Disabled	0,0,0,0,0,0,0,0
MSI	1=Enabled	4,48,0,0,0,0,0,0
TCIF Linked Code 39 (TLC39)	0=Disabled	0,0,0,0,0,0,0,0
Trioptic Code	0=Disabled	0,0,0,0,0,0,0,0
Code 32	0=Disabled	0,0,0,0,0,0,0,0
Straight 2 of 5 Industrial	0=Disabled	4,48,0,0,0,0,0,0
Matrix 2 of 5	0=Disabled	4,80,0,0,0,0,0,0
Plessey	0=Disabled	4,48,0,0,0,0,0,0
China Post	0=Disabled	4,80,0,0,0,0,0,0
Korea Post	0=Disabled	4,48,0,0,0,0,0,0

Symbologies Settings

0=Disabled 1=Enabled

IKWedge Entry	Default Enabled/ Disabled Value	Default Value
Telepen	0=Disabled	1,60,0,0,0,0,0,0
Code 16K	0=Disabled	1,160,0,0,0,0,0,0
PosiCode	0=Disabled	4,48,0,0,0,0,0,0
Coupon Code	0=Disabled	0,0,0,0,0,0,0,0
4-CB (4-State Customer Barcode)	1=Enabled	0,0,0,0,0,0,0,0
ID-tag (UPU 4-State)	1=Enabled	0,0,0,0,0,0,0,0

VK (Virtual Key) Mapping Section

The virtual key map settings are located in the VKMapping section in the IKWedge configuration file. The virtual key map settings define the virtual key that will be sent to IKWedge 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

For detailed information about the values in this section, see Virtual Key Codes Table on page 5-10.

Virtual Key Codes Table

The following table shows the symbolic constant names, hexadecimal values, and keyboard equivalents for the virtual-key codes used by the Microsoft Windows CE operating system. 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.

Virtual Key Codes Table

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
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

Virtual Key Codes Table

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
––––	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
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

Virtual Key Codes Table

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
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
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

Virtual Key Codes Table

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
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
VK_DECIMAL	110	6E	Period (.) key
VK_DIVIDE	111	6F	Slash mark (/) key
——	88	88-8F	Unassigned
——	146-185	92-B9	Unassigned

Virtual Key Codes Table

Symbolic Constant Name	Decimal Value	Hexadecimal Value	Touch Screen or Keyboard Equivalent
——	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 IKWedge to process its configuration file (IKWedge.exm) again, which applies changes immediately. If the SoundConnect (see page 5-3) is set to 1 (enabled), an ascending connect sound is played on restart.

`/quit`   Shuts down IKWedge.

6

Additional Power Tools

Overview

This chapter describes the following Power Tools:

InstallerCE

InstallerCE is a utility that saves CAB files after a manual install initiated by double-tapping on the 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 IK8560/8570, open **File Explorer**.

2. Navigate to the `\IPSM\AutoInstall` folder.

3. Double-tab 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.

Reboot

Reboot performs a warm or cold boot from the touch screen. Reboot offers you the option of using the touch screen instead of the hardware button to perform a cold boot.

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 IK8560/8570 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 IK8560/8570 back to factory defaults, and resets the IK8560/8570.

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 IK8560/8570

1. Tap **Start** > **Programs** > **Power Tools**. The Power Tools Main Window (see page 1-8) appears.

2. Tap the **Reboot** icon Reboot . 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 IK8560/8570 begins booting immediately.

Command Line Arguments

/r   Warm Reset

/c   Cold Reset

SetDeviceInfo

SetDeviceInfo sets a unique device name and description for the IK8560/8570.

Location   SetDeviceInfo is an executable in the **\Program Files\Power Tools** folder that creates a Device Name tab window in the "System" Control Panel applet.
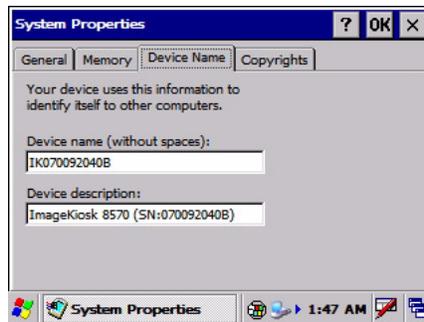
Startup   SetDeviceInfo launches automatically after each hard reset. The SetDeviceInfo Program section of the Autorun Configuration File (page 4-1) is enabled by default.

Device Name Tab

1. Tap **Start** > **Settings** > **ControlPanel**.

2. Tap the **System** icon   .

3. Tap the **Device Name** tab. The Device Name window appears displaying the default **Device name** and **Description**.

4. You can enter a unique **Device name** and **Description** in both fields.
   ActiveSync recognizes the Device name and Description entered here.

5. Tap **OK** to save.

Default Device Name

The **Device name** in the graphic above breaks down like this:

Prefix   **Data**

IK   000008216

The SetDeviceID configuration file in the **\IPSM** folder contains these settings.

Customizing the Device Name

You can make a custom device name for the IK8560/8570 by modifying the SetDeviceInfo.exm file in EZConfig Editor on the PC.

To change a value, click on the data in the Value column.

For more information, see Working with Open Configuration Files (page 2-6).

Device Name Restrictions

1. The device name must begin with a letter.

2. The entire device name (the combination of all three key values) cannot exceed 15 characters.

You can enter any values you like within these restrictions.

Key Values

Prefix   This field must begin with a letter.

Data   The default is "[SERIALNUMBER]." SetDeviceInfo dynamically obtains the IK8560/8570's serial number.
If you want the serial number in a different location in the device name, type

   `[SERIALNUMBER]`

   as the Value in either the **Prefix** or **Suffix** keys.

Suffix   The default is "[MODELNUMBER]." SetDeviceID dynamically obtains the IK8560/8570's model number.
If you want the model number in a different location in the device name, type

   `[MODELNUMBER]`

   as the Value in either the **Data** or **Prefix** keys.

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

1. Tap **Start** > **Programs** > **Power Tools**. The Power Tools Main Window (see page 1-8) appears.

2. Tap the **SysInfo** icon once SysInfo.

3. SysInfo queries the system, compiles the data and displays it on the SysInfo screen.
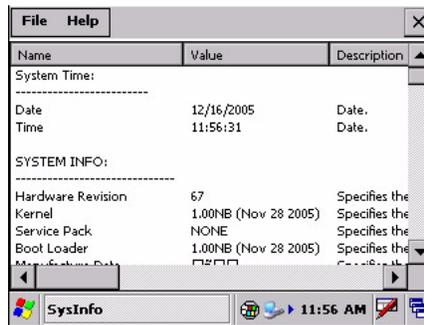

You **cannot** edit information in SysInfo. This information is gathered from the IK8560/8570 and changes only when the IK8560/8570's configuration has changed.

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 **IPSM** folder.

To open the file, tap **Start** > **Programs** > **File Explorer**. Navigate to the IPSM folder. The Sysinfo.txt file appears in the list.
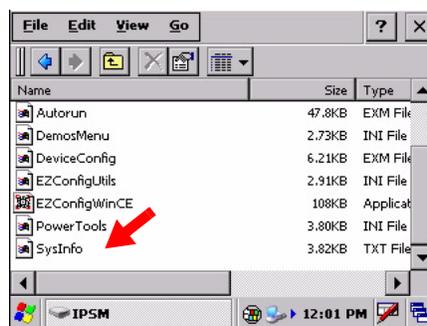
Viewing Options

You must copy the file to the host computer to view the file.

Sample SysInfo Text

Field	Sample Data	This entry specifies the …
SYSTEM TIME:		
Date	04/27/2005	Current date.
Time	16:21:29	Time the SysInfo icon was tapped.
SYSTEM INFO:		
Hardware Revision	1	Hardware revision.
Kernel	8.08 (Oct 04, 2004)	Kernel version.
Service Pack	03	Service pack level.
Boot Loader	8.08 (Oct 04, 2004)	Bootloader version.
Manufacture Date	20040720	Manufacture date.
Model Number	IK8560/8570	Model number.
Part Number	IK8560-000-000	Main board part number.
Special Part Number		Special part number, if any.
Terminal Serial Number	000008216	IK8560/8570 serial number.
CPLD Version	31205342-005	CPLD firmware version.
Scanner Type	IT4300	Scanner type.
Touch Panel Type	Installed	Type of touch panel.
Display Type	Sharp Color	Type of display.
PROCESSOR INFO:		
ProcessorName	PXA255	Name of the CPU.
Architecture	ARM	Processor architecture.
ProcessorLevel	4	Architecture-dependent processor level.
ProcessorRevision	Model A, Pass 6	Architecture-dependent processor revision.
DLL VERSION INFO:		
Decoder.dll	2.16	Current DecodeCE.dll API build revision.
MagStripe.dll	1.4	Current MagStripe.dll API build revision.

Sample SysInfo Text

Field	Sample Data	This entry specifies the …
Matrix Engine	1.97.1.2	Current Matrix engine build revision.
HHPScanInterface.dll	1.15	Current HHPScanInterface.dll API build revision.
Scan Driver	1.100	Current scan driver build revision.
HHPICMediaHW.dll	1.00.01	Current HHPICMediaHW.dll API build revision.
HHPMT9V022HW.dll	1.00.01	Current HHPMT9V022HW.dll api build revision.
ImgApi.dll	2.04.05	Current ImgApi.dll API build revision.
DibCE.dll	2.04.00	Current DibCE.dll API build revision.
SYSTEM PARAMETERS:		
OEMInfo	Hand Held Products	Name of the OEM.
PlatformType	Win CE 5.0	Type of platform (CE or PPC)
NETWORK INFO:		
Hostname	test	The logical name assigned to the IK8560/8570.
NumberOfAdapters	2	Number of network adapters installed in the IK8560/8570.
1: Mac Address	000000000000	IK8560/8570's MAC address.
1: IP Address	192.168.55.101	IK8560/8570's IP address.
RADIO INFO:		
Current Mode:	802.11b	Radio mode that is currently enabled.
Modes Supported:	802.11b	
/IPSM Contents:	AutoInstall Autorun.exe AutoRun.exm DemosMenu.exm DeviceConfig.exm EZConfigWinCE.exe SetDeviceInfo.exm AutoInstall.exe EZConfigMenu.exm IKWedge.exm PowerTools.exm RegBackup.hhp AutoInstall.exm FrameworkLoaderApp.exe NewDocument.exm	Displays the filenames of the files stored in the /IPSM folder.

Sample SysInfo Text

Field	Sample Data	This entry specifies the …
/IPSM/AutoInstall/ Contents:	IK8560 Power Tools r1.02.cab IK8560 .NET Install r1.02.CAB ceremote.8560.CAB IK8560 .NET Demos r1.02.CAB	Displays the filenames of the files stored in the /IPSM/ AutoInstall folder.
STORE INFO:		
StoreSize	65773568	Size, in bytes, of the object store.
FreeSize	61070344	Amount of free space in the object store, in bytes.
SYSTEM VERSION:		
MajorVersion	4	Microsoft's version and build numbers for the operating system.
MinorVersion	21	
BuildNumber	1088	
PlatformId	3	
CSDVersion		Most current service pack installed on the system.
GLOBAL MEMORY STATUS:		
MemoryLoad	38	Number between 0 and 100 that gives a general idea of current memory utilization. 0 indicates no memory use and 100 indicates full memory use.
TotalPhysical	65888256	Total number of bytes of physical memory.
TotalPageFile	0	Number of bytes of physical memory available.
AvailPageFile	0	Total number of bytes that can be stored in the paging file.
TotalVirtual	33554432	Total number of bytes that can be described in the user mode portion of the virtual address space of the calling process.
AvailVirtual	27721728	Number of bytes of unreserved and uncommitted memory in the user mode portion of the virtual address space of the calling process.

7

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 IK8560/8570 contains three Power Tools that enable you manage the registry on your device:

1. RegBackup (page 7-2)

2. RegEdit (page 7-3)

3. RegRestore (page 7-8)

Accessing Registry Power Tools

Registry Power Tools are accessed from the Power Tools Main Window (see page 1-8).

RegBackup

RegBackup backs up the current registry to a RegBackup file stored in the **\IPSM** folder.
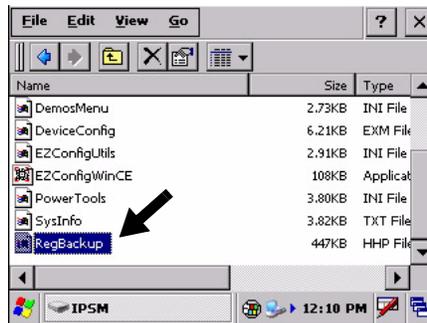
To Backup the Registry

To ensure that you are backing up the most current registry, you need to warm boot the IK8560/8570 prior to backing up the registry.

1. Warm boot the IK8560/8570; see Warm Boot on page 6-2.

2. On the Power Tools Main Window (see page 1-8), tap the RegBackup icon **once** RegBackup . The registry starts backing up and the following screen appears.

3. When the backup is complete, a **RegBackup** file is created and in the **\IPSM** folder.

Note: By default, the RegBackup.hhp file loads after a cold boot.
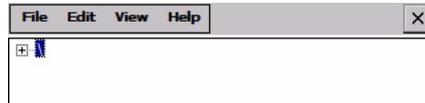
Command Line Arguments

/h   Help

RegEdit
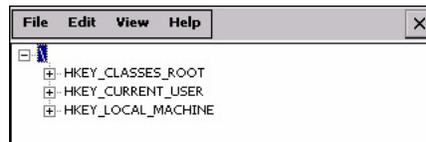
RegEdit modifies the device's registry settings.

To Edit the Registry

1. On the Power Tools Main Window (see page 1-8), tap the RegEdit icon **once** RegEdit . 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. Reg Edit offers the following registry categories:

   Category

   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 a registry entry in the top half of the screen, the data appears in the lower half of the screen.
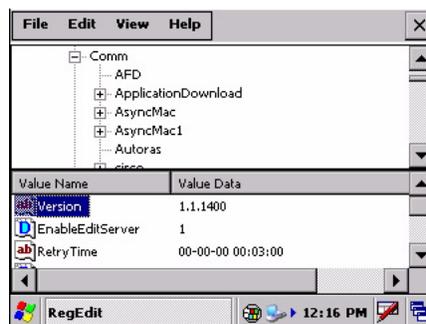
   The two columns show the Value Name and the Value Data.

6. Double-click on the Value Data. The Edit Value window pops up.
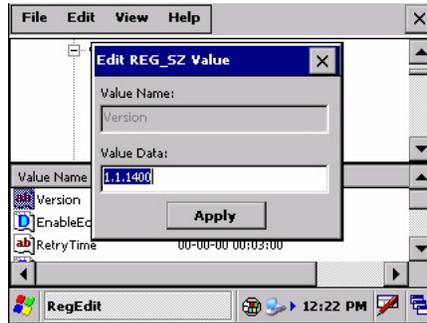
In the **Value Data** field, type the new value.

7. Press the ENTER or OK key. The new data appears in the list.

8. After all your edits are complete, Warm Boot (see page 6-2) the IK8560/8570.
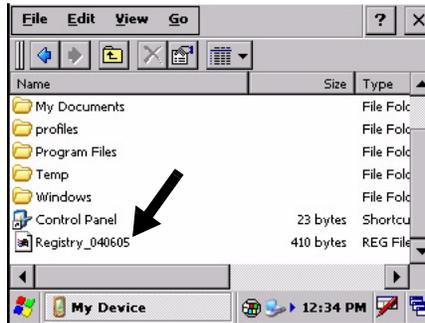
To Export the Registry

You can export the current registry.

1. Tap **File** > **Export**. The Save As window appears.

2. Enter a **Name**.

3. Select a **Folder**. Selecting None places the file in the My Documents folder.

4. You can save the exported file only as a .reg file **Type**.

5. Tap **OK**. The file is saved in the selected location.

Note: 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. Tap No to exit.

To Import Registry Files

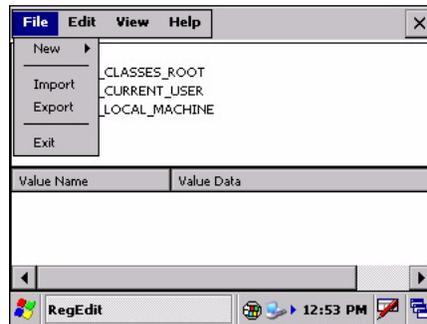The file must be loaded on the IK8560/8570 and have a .reg extension.

1. Tap **File** > **Import**.

By default, the open function searches for .reg files and displays the search results in the lower half of the window.

2. To import a file into the registry, tap on it twice. The file loads automatically and the RegEdit window appears on the screen.
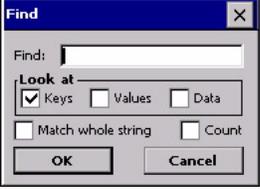
File Menu

| Menu Item	Description
New	Creates a new Key, String, or DWORD Value.
Import	Imports a registry file; see To Import Registry Files on page 7-5.
Export	Exports the current registry; see To Export the Registry on page 7-4.
Exit	Closes RegEdit.

Edit Menu
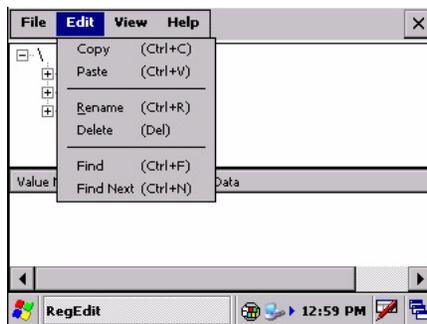
Menu Item	Description
Copy	Copies a selected item.
Paste	Pastes a copied item within RegEdit.

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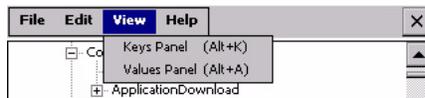
These menu items shift focus between the **Keys Panel** and the **Values Panel**.

Registry Edit Options

You can also use EZConfig Editor to create registry documents on the PC, create a bar code, then use EZConfig Client to decode the bar code and update the registry on the IK8560/8570.

For more information, see

- Registry Documents on page 2-14
- Creating Bar Codes on page 2-16
- EZConfig Client on page 2-26

RegRestore

RegRestore restores the registry to the last backed up registry. When the registry is backed up (see RegBackup on page 7-2), RegBackup creates a RegBackup file in the **\IPSM** folder.
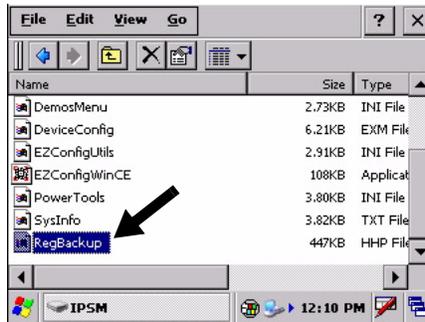
RegRestore calls, then loads the RegBackup file into the current registry.

To Restore the Registry

On the Power Tools Main Window (see page 1-8), tap the RegRestore icon **once** RegRestore . The system starts restoring the registry and the following screen appears.

When the restore is complete, this screen disappears.

Hard Reset (Cold Boot)

By default, the Autorun Configuration File (see page 4-1) launches RegRestore after a hard reset. Therefore, if you want changes made to the registry to persist through a cold boot, back up the registry after your edits are complete; see RegEdit on page 7-3.

Command Line Arguments

/r   Reboot after restore.

/q   Quiet, No dialogs

/k   Override kernel version

/s   Override service pack version

/h   Help

8

EZMenu

Overview

EZMenu formats application windows such as the Power Tools main window (see Power Tools Main Window on page 1-8).

EZMenu consists of menu configuration files (special *.exm files) in the \IPSM folder and EZMenu.exe in the \Program Files\Power Tools folder, which applies the menu settings they contain. DemosMenu.exm is an EZMenu.exm file that is included with the Power Tools and demos.
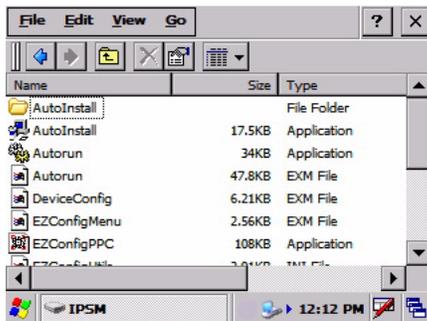
*.exm Files   **EasyMenu.exe**
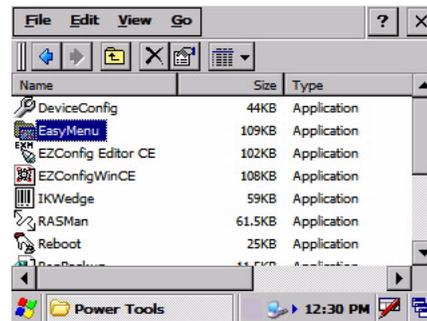
Running Easy Menu

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

The IK8560/8570 ships with a number of menu configuration files in the **\IPSM** folder:

PowerTools.exm   Programs the Power Tools main window (**Start > Programs > PowerTools**).
EZConfigMenu.exm   Programs the EZConfig Utilities window; see EZConfig Editor on the IK8560/8570 on page 2-22.
DemosMenu.exm   Programs the Demos main window (**Start > Programs > Demos**)

Default menu configuration files must be located in the **\IPSM** folder.

Modifying Menu Configuration Files

Menu configuration files can be modified in EZConfig Editor on the PC or the IK8560/8570

For details:

See EZConfig Editor on page 2-2. If modified on the PC, the *Menu.exm file must be deployed to the IK8560/8570.

See EZConfig Editor on the IK8560/8570 on page 2-22.

Creating Menu Configuration Files

Use the Default EZMenu Configuration Files (see page 8-1) to create new menu configuration files.

1. On the PC, navigate to the C:\Program Files\Hand Held Products\Image Kiosk Power Tools\EZConfig Editor folder.

2. Open a sample menu configuration file in EZConfig Editor.

3. Tap **File** > **Save As** and save the file with a new name.

4. Modify the file; to see the available values, see Menu Configuration File Sections on page 8-2.

5. Save or transfer the file to the **\IPSM** folder on the IK8560/8570.

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.

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 Easymenu.log file is created in the \IPSM folder.
ListViewMode	Determines the default view mode for the window. For details, see View Options on page 1-8.	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	Toggles the presence of an "X" in the upper, right corner of the application window.	Variable	0=Disable 1=Enable

Key	Description	Default Value	Available Values
Menu	Determines which menus appear in the Command bar at the bottom of the window. There are three menus: **File**, **View**, and **Help**. Exit=File menu View=View menu Default=File, View, and 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	Determines vertical icon spacing.	65	Spacing is measured in pixels.
ListViewIconSpacingX	Determines horizontal icon spacing.	75	Spacing is measured in pixels.
MaskPassword	Determines whether to mask the optional passwords for the menu entries	1	0=Disable 1=Enable

MenuEntries Section

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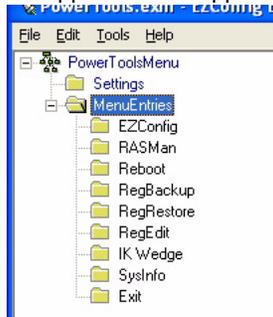
The MenuEntries section is locked, which means that you cannot change its Name or Description; however, its child sections are not locked and can have any name and description.

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

Key	Description	Required	Available Values
CommandLine	Command line to execute when the item is selected on the window. This is the location of the EXE file for the location 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
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	The filename of the icon resource file.	Optional	The filename must be an .exe or .dll, NOT an .ico file.
Icon ID	The icon resource identifier contained in the file specified in the IconFile key.	Optional	X=Icon resource identifier
StartupOption	Specifies startup options that must be met for the menu entry to appear on the window.	Optional	See Startup Options on page 8-5.

*Optional keys are not present by default, and must be created manually if desired.

Exit Icon

Default EZMenu Configuration Files (see page 8-1) contain a section named **Exit** as a child section of the MenuEntries section.

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.

Startup Options

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

Option Name	The program launches if …	Category
DISABLED	Never, regardless of other startup options specified.	None
COLDBOOT	The IK8560/8570 has performed a cold boot.	Boot type
WARMBOOT	The IK8560/8570 has performed a warm boot.	

Multiple options can be specified for each category. Separate multiple options with a comma.

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 IK8560/8570 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 Configuration Files on page 2-6.

2. In the Settings Section (page 8-2), modify the following keys:

   Menu=0   (No menus appear in the Command bar.)

3. If you are modifying the file in EZConfig Editor on the IK8560/8570, tap **Tools** > **Launch Associated App**. The application window opens displaying your changes.

   If you are modifying the file in EZConfig Editor on the PC, save, then transfer the file to the IK8560/8570. On the IK8560/8570, navigate to the application window to verify your changes.
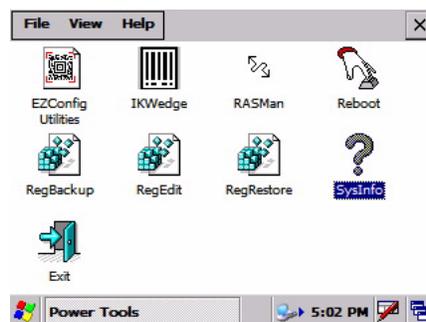
Note: To remove the Exit icon as well, delete the Exit section; see Exit Icon on page 8-4.

Booting the IK8560/8570 to the Application Window

You can program the IK8560/8570 to boot to the application window by modifying the Autorun Configuration 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., "\ipsm***menu.exm."
By default, the Args key calls `\ipsm\demosmenu.exm`.

4. Warm boot the IK8560/8570 and verify that startup finishes on the application window.

9

Customer Support

Technical Assistance

If you need assistance installing or troubleshooting, please call your Distributor or the nearest Hand Held Products technical support office:

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Online Technical Assistance

You can also access technical assistance online at www.handheld.com.

For Further Information

To download the full User's Guide for these products, visit our website at www.handheld.com.

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