

# **Honeywell WLAN Secure Wireless Client (SWC)**

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For:

Dolphin™ 6100/6500 Terminal with Windows® CE 5.0

Dolphin™ 7600 Terminal with Windows® CE 5.0

Dolphin™ 7600 Terminal with Windows Mobile® 6

Dolphin™ 7850 Terminal with Windows Mobile® 5.0

Dolphin™ 9700 Terminal with Windows Mobile® 6.5

Dolphin™ 9900 Terminal with Windows Mobile® 6.1

Dolphin™ 99EX Terminal with Windows® Embedded  
Handheld 6.5

## **User's Guide**

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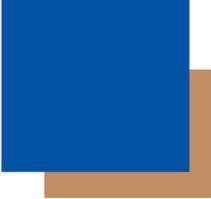
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# Configuring the WLAN Connection

## Introduction

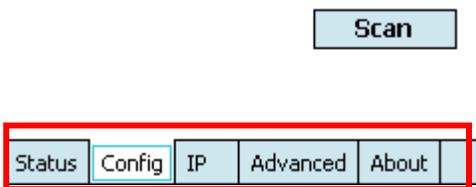
Note: Screen captures/icons in this user's guide may differ from what appears on your device.

The WLAN Secure Wireless Client (SWC) configures the wireless connection of the 802.11b/g radio for numerous Dolphin terminals.

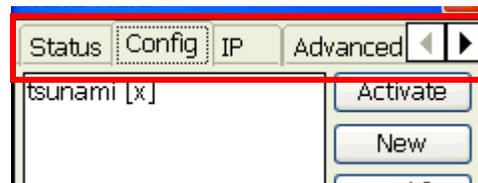
Windows Mobile 6.5	Windows Mobile 6	Windows Mobile 5.0	Windows CE 5.0	Windows Embedded Handheld 6.5
Dolphin 9700	Dolphin 7600	Dolphin 7850	Dolphin 7600	Dolphin 99EX
	Dolphin 9900		Dolphin 6100/6500	

The different operating systems format the application windows of the SWC differently. For example, on terminals running Windows CE, the tabs appear at the top of the window whereas on terminals running Windows Mobile, the tabs appear at the bottom of the window.

### Windows Mobile



### Windows CE



Despite the different formatting, the content of the application window is the same on both terminals.

## Server-Assigned IP Addresses

Please note that all server-assigned IP addresses use Dynamic Host Configuration Protocol (DHCP).

## Accessing the WLAN SWC

On the Today screen, tap the icon in the command bar .



This icon displays in different colors to indicate the status of the radio; see [Command Bar Icon Colors](#) on page 1-2.

The SWC opens displaying the Status tab, which is empty until a connection is configured. After a connection to an access point or network is configured and active, this tab displays the connection status.

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## Command Bar Icon Colors

The icon in the command bar on the Today screen  changes according to the status of the radio.

Color	Meaning	Matching Status
<b>Gray</b> 	The radio is <ul style="list-style-type: none"><li>• Disabled</li><li>• Idle</li><li>• Not connecting</li></ul>	NO RADIO RADIO OFF DISCONNECTED INACTIVE
<b>Yellow</b> 	The connection is <ul style="list-style-type: none"><li>• Associating (icon stops spinning)</li><li>• Authenticating (icon stops spinning)</li><li>• Negotiating DHCP address (icon spins clockwise)</li><li>• Out-of-Range</li></ul>	ASSOCIATING AUTHENTICATING
<b>Red</b> 	Authentication failed and the connection failed as a result.	ASSOCIATED (but not authenticated)
<b>Green</b> 	The connection is authenticated with a valid DHCP address.	COMPLETE

Note: The color of the icons matches the status displayed on the [Status Tab](#) (see page 1-16).

## Connection Status Indicator

The command bar contains a status strength indicator.



The bars indicate the strength of the signal when the radio is transmitting. If the radio is not transmitting, a small “x” appears over the bars.

---

## Enabling the WLAN Radio Driver

The radio driver must be enabled for the radio to transmit a signal at all. You cannot connect to a network unless the radio is enabled.

For this Terminal Configuration,	Do this...
Dolphin 6100/6500/7600 with Windows CE 5.0	Tap the UP arrow in the lower, right corner of the screen.
Dolphin 7600 with Windows Mobile 6 Dolphin 9900 with Windows Mobile 6.1 Dolphin 9700 with Windows Mobile 6.5 Dolphin 99EX with Windows Embedded Handheld 6.5	Tap <b>Start &gt; Settings &gt; Connections</b> tab > <b>Dolphin Wireless Manager</b> .
Dolphin 7850	Tap <b>Start &gt; Settings &gt; Connections</b> tab > <b>Radio Manager</b> .

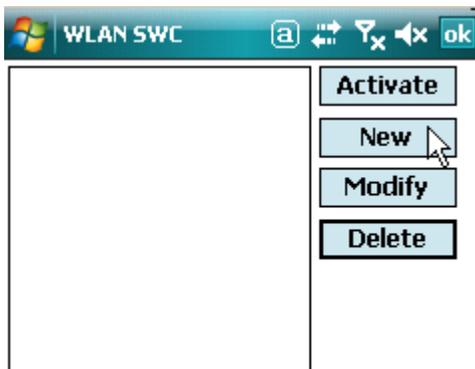
For details about enabling and disabling the radios on each terminal, refer to the User's Guide for each terminal, which are available for download from the web site: [www.honeywellaidc.com](http://www.honeywellaidc.com).

## Establishing a Connection

### Requirements

 The parameters you enter in the SWC depend entirely upon the wireless network established in your facility. If you do not know what to enter in these fields, contact your network administrator.

1. On the Today screen or Desktop, tap the icon in the command bar .
2. Tap the **Config** tab and tap **New**.



- You can create multiple profiles that use the same SSID by giving each profile a unique name in the "Profile Name" field on the Network window.

The screenshot shows a 'Network' configuration window with a title bar containing icons for network, Wi-Fi, volume, and battery, along with the time 6:58. Below the title bar are three input fields: 'Profile Name' (an empty text box), 'SSID' (an empty text box), and 'Band' (a dropdown menu currently set to 'Auto').

- Type in the **SSID**.
- Select a specific band if the connection is to be limited to b/g/n or a/n (2.4 GHz or 5.0 GHz).
- Select the **Assoc. Mode** that corresponds to your network configuration from the drop-down list.

Select	To connect with...	For more information...
<b>None</b>	No authentication or encryption.	<a href="#">None</a> (page 1-9)
<b>WEP</b>	WEP encryption.	<a href="#">WEP</a> (page 1-11)
<b>IEEE 802.1X (WEP)</b>	EAP authentication.	<a href="#">IEEE 802.1X (WEP)</a> (page 1-9)
<b>WPA-Personal (PSK) WPA2-Personal (PSK)</b>	WPA encryption and PSK authentication.	<a href="#">WPA-Personal (PSK) &amp; WPA2-Personal (PSK)</a> (page 1-11)
<b>WPA-Enterprise (EAP) WPA2-Enterprise (EAP)</b>	WPA encryption and EAP authentication.	<a href="#">WPA-Enterprise (EAP) &amp; WPA2-Enterprise (EAP)</a> (page 1-12)

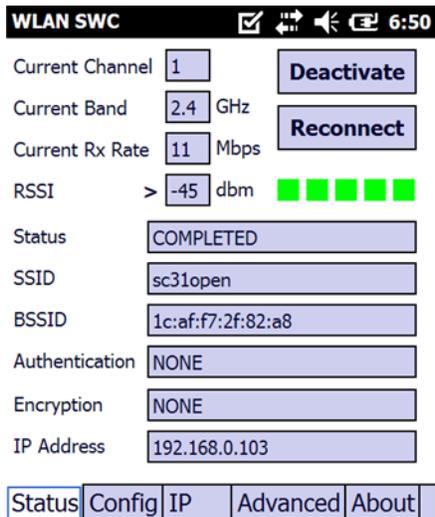
*Note: The Dolphin 7600 with Windows CE 5.0 does not support EAP methods.*

- The fields and options required by the association mode, encryption, and EAP methods appear on the [Network Window](#) (see page 1-8) after each is selected.
- If required by the association mode, select the **Encryption** method.
- If required by the association mode, select the **EAP Method**; (see page 1-9).
- If required or desired, enter keys or passwords.
- Tap **OK**. You are returned to the Config tab where the SSID now appears in the list.

- 
12. Select the device in the list and tap **Activate**. The configuration activates and the Dolphin terminal attempts to connect to the network according to the parameters you entered.



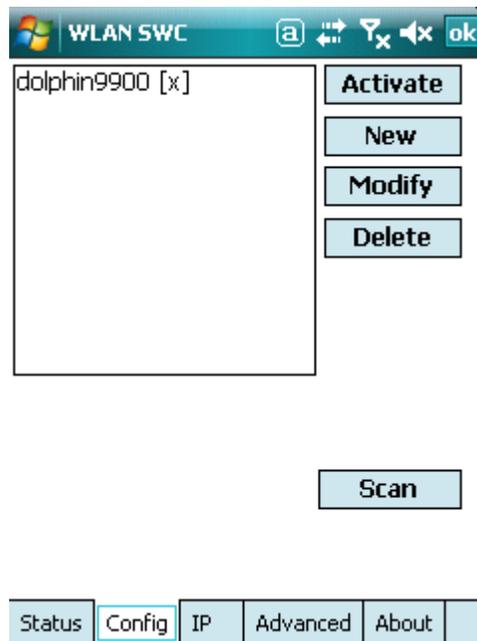
13. The Status tab appears displaying the connection status.



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## Config Tab

You manage connections and configurations on the Config tab. You also determine which configuration the terminal uses to connect.



### Activating the Configuration

To connect, you **must** select the configuration in the list and tap **Activate**. The terminal will not attempt to connect until you tap **Activate**.

The Config tab stores all the configurations you have created in the list but activates only one configuration at a time. To switch connections, simply select it on the Config tab and tap **Activate**.

On the Config tab, an “[x]” appears next to the activated configuration.

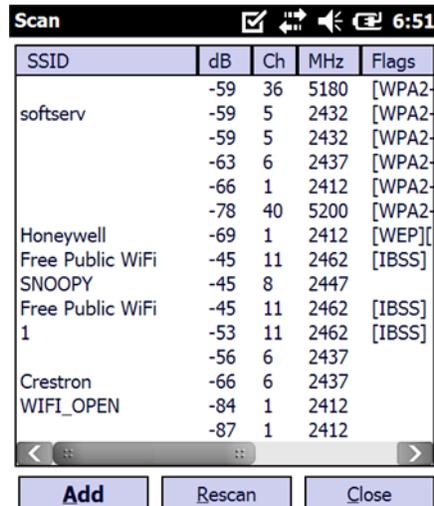
### Config Tab Buttons

- Modify** To modify an existing configuration, select it in the list and tap **Modify**. The Network window appears displaying the data for the selected configuration. Make your changes and tap **OK** to save. Then, tap **Activate** to start connecting.
- Add** To manually add a connection, tap **Add**. A blank Network window appears. Complete Steps 5–8 of [Establishing a Connection](#) (see page 1-3).
- Delete** To delete a connection, select it in the list and tap **Delete**.

---

## Using the Scan Feature

The Scan button on the Config tab queries for the local, configured, wireless network for devices in range of the terminal. when you tap **Scan** on the Config tab, the query starts, and the results appear on the Scan window appears.



SSID	dB	Ch	MHz	Flags
	-59	36	5180	[WPA2-
softserv	-59	5	2432	[WPA2-
	-59	5	2432	[WPA2-
	-63	6	2437	[WPA2-
	-66	1	2412	[WPA2-
	-78	40	5200	[WPA2-
Honeywell	-69	1	2412	[WEP][
Free Public WiFi	-45	11	2462	[IBSS]
SNOOPY	-45	8	2447	
Free Public WiFi	-45	11	2462	[IBSS]
1	-53	11	2462	[IBSS]
	-56	6	2437	
Crestron	-66	6	2437	
WIFI_OPEN	-84	1	2412	
	-87	1	2412	

### Buttons

#### Add

Tap this button after you've selected an item in the list. It opens the [Network Window](#) (see page 1-8) so that you can configure the connection.

#### Rescan

Tap this button to rescan the wireless network if you don't see the Access Point you're looking for in the list.

#### Close

Tap this button to close the Scan window and return to the Config Tab.

### Columns

#### SSID

Displays the SSID of the Access Point. (This is the name of the Access Point you are connecting to.)

#### db

Displays the signal in dBMs.

#### Ch

Displays the operating channel number.

#### MHz

Displays the operating frequency in MHz

#### Flags

Displays the association mode and encryption required to connect to the device.

#### BSSID

Displays the full BSSID. (This is the MAC address of the Access Point.)

## Network Window

The Network window contains the configuration options to configure how the terminal connects to your wireless network.

You access the Network window from the [Config Tab](#) (see page 1-6) by

- Tapping **New** on the Config tab.
- Scanning for wireless network devices and adding them to your network; see [Using the Scan Feature](#) on page 1-7.
- Selecting an existing configuration and tapping **Modify**.

The Network window prompts you to complete the fields required by the connection options you select. For example,

### No Authentication or Encryption

Network 6:58

Profile Name

SSID

Band

Assoc Mode

Network Id

### WPA (EAP)

Network 7:01

Profile Name

SSID

Band

Assoc Mode

Network Id

Encryption

EAP Method

Identity

Password

Prompt Id/Passwd When Connecting

Anony ID

Identity

Password

Prompt Id/Passwd When Connecting

Anony ID

File Store  Cert Store

CA Cert.

Tunnel PAC

Machine PAC

Provisioning

### WEP

Network 7:01

Profile Name

SSID

Band

Assoc Mode

Network Id

Encryption

Key Length  64 bits  128 bits

Key Type  ASCII  HEX

Key 1

Key 2

(Use the **Browse** button  to load files located on the terminal into this configuration.)

---

## Association Modes

The association mode you select from the Assoc. Mode drop-down list determine the fields that appear on the Network window. Different types of association modes require specific information or offer certain configuration options.

The available association modes are:

- [None](#) (see page 1-9)
- [WEP](#) (see page 1-11)
- [IEEE 802.1X \(WEP\)](#) (see page 1-9)
- [WPA-Personal \(PSK\) & WPA2-Personal \(PSK\)](#) (see page 1-11)
- [WPA-Enterprise \(EAP\) & WPA2-Enterprise \(EAP\)](#) (see page 1-12)

*Note: The Dolphin 7600 with Windows CE 5.0 does not support EAP methods.*

### None

Selecting **None** as the association mode means that there is no authentication or encryption in the connection process.

### IEEE 802.1X (WEP)

#### Available EAP Methods

[IEEE 802.1X \(WEP\)](#) (page 1-9) and [WPA-Enterprise \(EAP\) & WPA2-Enterprise \(EAP\)](#) (page 1-12) support the following EAP methods:

- LEAP
- PEAPv0-MSCHAPV2
- PEAPv1-MSCHAPV2
- PEAPv1-GTC
- PEAPv1-TLS
- FAST-MSCHAPV2
- FAST-GTC
- FAST-TLS
- TLS
- TTLS-MD5
- TTLS-MSCHAPV2
- TTLS-GTC

#### Completing the EAP Fields

Depending on the EAP method selected, the following fields (may) appear or disappear based on what the selected protocol requires or offers for its configuration:

Field	Description
<b>Identity</b>	This is the 802.1X identity supplied to the authenticator. The identity value can be up to 63 ASCII characters and is case-sensitive.
<b>Password</b>	This is the password used for MD5-Challenge or EAP authentication. It may contain up to 63 ASCII characters and is case-sensitive. Asterisks appear instead of characters for enhanced security.

Field	Description
<b>Anonymous ID</b>	Enter the anonymous ID. This ID creates a tunnel through which the real ID (as entered in the Identity field) can pass. For additional security, make this ID different than the one entered in the Identity field.
<b>File Store Cert Store</b>	Click one of these radio buttons to select the location of the certificate(s). For example, if the certificate is stored in IPSP or an SD card as a file, then use <b>File Store</b> . Or, if the certificate is installed on the device in the Windows Certificate Store, then choose <b>Cert Store</b> .
<b>CA Cert. &amp; Client Cert.</b>  CA Cert. <input type="text"/> Client Cert. <input type="text"/>	Tap the <b>Browse</b> button to load a CA or Client certificate located on the terminal <input type="text"/> . <ul style="list-style-type: none"> <li>• CA certificates are any certificates created by a certified authority (CA).</li> <li>• Client certificates contain information that identifies the user, as well as information about the organization that issued the certificate. This ensures that you can encrypt data end-to-end.</li> </ul>
<b>Private Key</b>  Private Key <input type="text"/>	Tap the <b>Browse</b> button to load a private key located on the terminal <input type="text"/> .
<b>Priv Key Pass</b>	If you have loaded a private key, enter the password that unlocks the private key.
<b>Tunnel PAC &amp;/or Machine PAC</b>	Tap the <b>Browse</b> button to load a tunnel and/or machine PAC located on the terminal <input type="text"/> . <i>Note: For EAP-FAST, a one-time provisioning exchange establishes a shared secret, called a Protected Access Credential (PAC) Key. That PAC Key is used for all subsequent authentications.</i>
<b>Provisioning</b>	Provisioning refers to service activation and involves programming various network databases with the customer's information. Select the provisioning method from the following options: <ul style="list-style-type: none"> <li>• No Provisioning</li> <li>• Anonymous</li> <li>• Authenticated</li> <li>• Anonymous + Authenticated</li> </ul>

---

## WEP

When you select WEP as the association mode, you can select Open or Shared **Encryption** and enter your keys.

The screenshot shows a 'Network' configuration dialog box. The 'Assoc Mode' is set to 'WEP'. The 'Encryption' dropdown is set to 'OPEN'. Under 'Key Length', the '64 bits' radio button is selected. Under 'Key Type', the 'ASCII' radio button is selected. There are two text input fields for 'Key 1' and 'Key 2', both of which are currently empty.

## WPA-Personal (PSK) & WPA2-Personal (PSK)

The screenshot shows a 'Network' configuration dialog box. The 'Assoc Mode' is set to 'WPA-Personal (PSK)'. The 'Encryption' dropdown is set to 'TKIP'. There is a text input field for 'PSK' which is currently empty. Below the 'PSK' field, there is a note: 'Use 8 to 63 chars for ASCII or 64 digits for HEX'. At the bottom of the dialog, there are 'OK' and 'Cancel' buttons.

## Supported Encryption Methods

- TKIP
- AES-CCMP
- TKIP+CCMP

## PSK (Pre-Shared Key)

The PSK field is where you enter the pre-shared key. This field accepts ASCII keys between 8–63 characters long. A hexadecimal PSK can also be entered instead of an ASCII key. Hexadecimal PSKs must be exactly 64 characters and can only contain hexadecimal digits (A–F, 0–9).

Characters are visible the first time you enter them in this field; however, those characters will appear as asterisks (\*) the next time this configuration is opened.

---

Secret passwords or encryption keys are entered into both sides of the message exchange ahead of time. Preshared keys (PSK) are typed into the clients and servers (authentication servers, access points, etc.).

### WPA-Enterprise (EAP) & WPA2-Enterprise (EAP)

The screenshot shows a network configuration window with the following fields and options:

- Profile Name:
- SSID:
- Band:
- Assoc Mode:
- Network Id:
- Encryption:
- EAP Method:
- Identity:
- Password:
- Prompt Id/Passwd When Connecting
- Anony ID:

*Note: The Dolphin 7600 with Windows CE 5.0 does not support EAP methods.*

### Supported Encryption Methods

- TKIP
- AES-CCMP
- TKIP+CCMP

### Available EAP Methods

The following EAP methods are supported:

- LEAP
- PEAPv0-MSCHAPV2
- PEAPv1-MSCHAPV2
- PEAPv1-GTC
- PEAPv1-TLS
- FAST-MSCHAPV2
- FAST-GTC
- FAST-TLS
- TLS
- TTLS-MD5
- TTLS-MSCHAPV2
- TTLS-GTC

For details, see [Completing the EAP Fields](#) on page 1-9.

The checkbox under the Password field prompts the user to the SSID and password every connection attempt.

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## Common Configurations

This section contains some of the most common network configurations in detail, including:

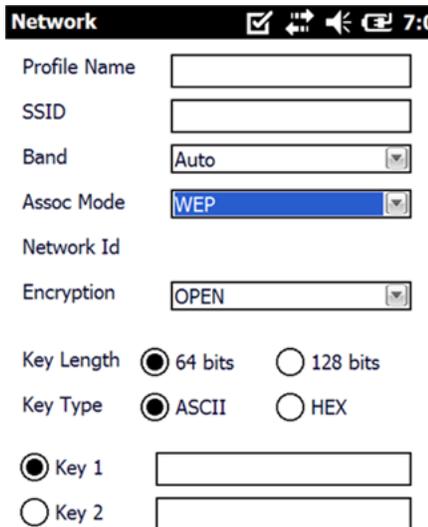
- [WEP](#) (see page 1-13)
- [PEAPv1-MSCHAPV2](#) (see page 1-14)
- [WPA-PSK](#) (see page 1-14)

### WEP

When you select WEP as the association mode, you can select Open or Shared encryption to authenticate via a specific key.

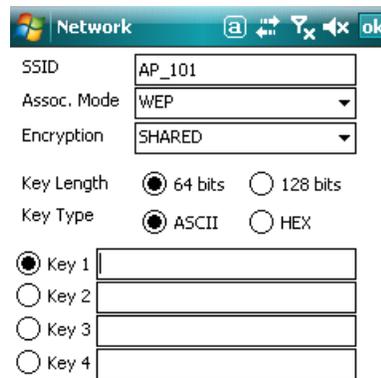
1. On the Today screen, tap the icon in the command bar .
2. Tap the **Config** tab.
3. Tap **New**.
4. On the Network window, type in the **SSID**.
5. Select **WEP** as the **Assoc. Mode**.
6. You have a choice of **Encryption** methods:

#### Encryption=OPEN



The screenshot shows the 'Network' configuration window. The 'Assoc Mode' is set to 'WEP' and 'Encryption' is set to 'OPEN'. The 'Key Length' is set to '64 bits' and 'Key Type' is set to 'ASCII'. There are two key input fields, 'Key 1' and 'Key 2', both of which are currently empty.

#### Encryption=SHARED



The screenshot shows the 'Network' configuration window. The 'SSID' is 'AP\_101', 'Assoc. Mode' is 'WEP', and 'Encryption' is 'SHARED'. The 'Key Length' is set to '64 bits' and 'Key Type' is set to 'ASCII'. There are four key input fields, 'Key 1' through 'Key 4', all of which are currently empty.

- In fields **Key 1—Key 4**, enter the key. The format of each key *must match* the Key Length and Key Type you selected in Step 6. The SWC validates the key length and will not let you save a key in the wrong format.
  - Tap **OK** and you are returned to the Config tab.
7. On the Config tab, select the network in the list and tap **Activate**.
  8. The terminal begins connecting.
  9. When connected, the [Status Tab](#) (page 1-16) appears displaying the results.

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## **PEAPv1-MSCHAPV2**

1. On the Today screen, tap the icon in the command bar .
2. Tap the **Config** tab.
3. Tap **New**.
4. On the Network window, type in the **SSID**.
5. Select **IEEE 802.1X (WEP)** as the **Assoc. Mode**.
6. Select **PEAPv1-MSCHAPV2** as the **EAP Method**.
7. Enter the **Identity** (see page 1-9) and **Password** (see page 1-9).
8. If you want to, you can enter an **Anonymous ID** (see page 1-10) or a **CA** or **Client** certificate (see page 1-10).  
(If you selected PEAPv1-TLS, you can also load a **Private Key** (page 1-10) and enter a private key password.)
9. Tap **OK** and you are returned to the Config tab.
10. On the Config tab, select the network in the list and tap **Activate**.
11. The terminal begins connecting.
12. When connected, the Status tab (see page 1-16) appears displaying the results.

## **WPA-PSK**

1. On the Today screen, tap the icon in the command bar .
2. Tap the **Config** tab.
3. Tap **New**.
4. On the Network window, type in the **SSID**.
5. Select **WPA-Personal (PSK)** as the **Assoc. Mode**.
6. Select the **Encryption** method (TKIP, AES-CCMP, or TKIP + CCMP).
7. Enter the pre-share key (see page 1-11) in the **PSK** field.
8. Tap **OK** and you are returned to the Config tab.
9. On the Config tab, select the network in the list and tap **Activate**.
10. The terminal begins connecting.
11. When connected, the **Status Tab** (page 1-16) appears displaying the results.

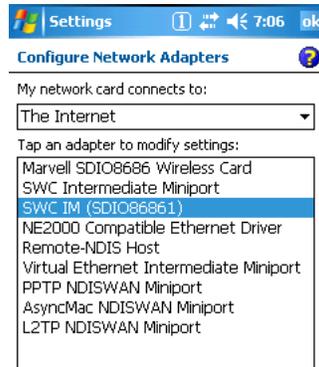
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## Static IP

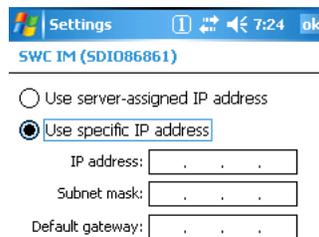
You establish a static IP through the radio driver, not the SWC. After the static IP address is established in the radio driver, you configure your wireless connection in SWC as usual.

### Setting up a Static IP on Windows Mobile-based devices (7600, 7850, 9700, 9900 and 99EX)

1. Tap **Start > Settings > Connections** tab > **Network Cards**.



2. Tap on the network adapter.  
The adapter name will begin with “SWC IM” followed by the radio driver name in parentheses.
3. The IP address tab opens. Select **Use specific IP address**.



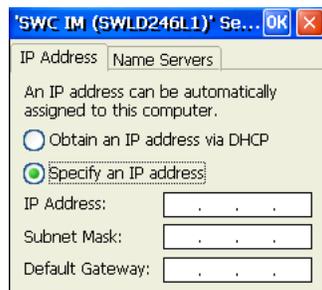
- a. Enter the **IP address**:
  - b. Enter the **Subnet mask**:
  - c. Enter the **Default gateway**:
4. Tap **OK**.
  5. Open the SWC and configure the wireless connection.

### Setting up a Static IP on Windows CE 5.0 (6100/6500/7600)

1. Tap **Start > Control Panel > Network and Dial-up Connections**.
2. Double-tab the radio driver.



- 
- The radio driver opens displaying the IP Address tab. Select **Specify an IP address**.

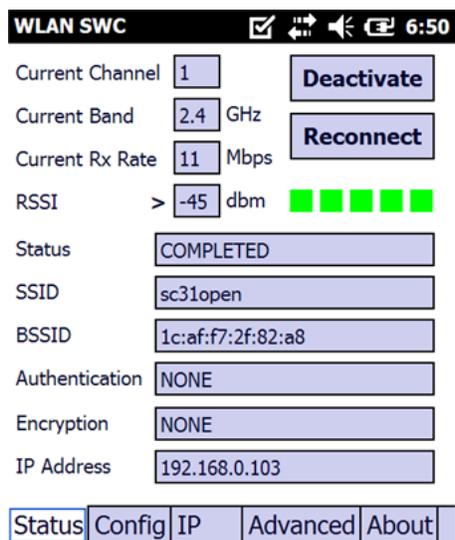


- Enter the **IP address**:
  - Enter the **Subnet mask**:
  - Enter the **Default gateway**:
- Tap **OK**.
  - Open the SWC and configure the wireless connection.

## Status Tab

The Status tab displays the connection status of the current, activated connection; see [Activating the Configuration](#) on page 1-6.

If the radio is enabled and a radio configuration is activated, the Status tab opens when you tap the icon on the Today screen  displaying the status of the current connection.



### Deactivate

The Deactivate button disconnects the device from the network and deactivates the profile.

### Reconnect

Use the Reconnect button to refresh the connection by forcing the client to disconnect first.

---

*Status*    Status    COMPLETED

- NO RADIO**                    The SWC does not recognize the WLAN radio driver.
- RADIO OFF**                    The radio is not enabled.
- DISCONNECTED**            The radio connection is disconnected.
- INACTIVE**                    There are either no profiles or there are no activated profiles on the Config tab.
- ASSOCIATING**                The terminal connection is associating.
- ASSOCIATED**                The terminal connection is associated.
- AUTHENTICATING**          Authentication is in process.
- COMPLETE**                  The connection is associated, authentication completed successfully, and active.

*BSSID*

The BSSID is the MAC address of the Access Point.



## Working in Ad Hoc Mode

### Introduction

Most installed wireless LANs today use "infrastructure" mode that requires the use of one or more access points. With this configuration, the access point provides an interface to a distribution system (e.g., Ethernet), which enables wireless users to utilize corporate servers and Internet applications.

As an optional feature, however, the 802.11 standard specifies "ad hoc" mode, which allows the radio network interface card (NIC) to operate in what the standard refers to as an independent basic service set (IBSS) network configuration. With an IBSS, there are no access points. User devices communicate directly with each other in a peer-to-peer manner.

Even though it is a peer-to-peer connection, there must still be a host and a client; a host to initiate an ad hoc connection and a client to join an existing ad hoc connection.

### Requirements

Both peer devices must have static IPs with the same Default Gateway. Therefore, you must set up a static IP on the terminal (see [Static IP](#) on page 1-15).

### Initiating an Ad Hoc Connection

You need to set up an ad hoc profile in the SWC.

1. Tap the icon in the command bar .
2. Tap the **Config** tab and tap **New**.
3. On the Network window, select **Ad Hoc** or **Ad Hoc (WEP)** as the **Assoc Mode**.
4. In the **SSID** field, enter the network name to use for the connection.
5. Tap **OK**.
6. On the Config tab, select the name of the profile (the SSID name) and tap **Activate** to launch the connection.



## Setting up the WLAN SWC with DeviceConfig

### Overview

You can use the DeviceConfig Power Tool to configure the SWC. Simply configure the DeviceConfig.exm file with the SWC's settings, save it to the \IPSM\Autoinstall folder and cold boot the Dolphin terminal. When you enable the WiFi radio, the SWC will connect according to the settings in the DeviceConfig.exm file.

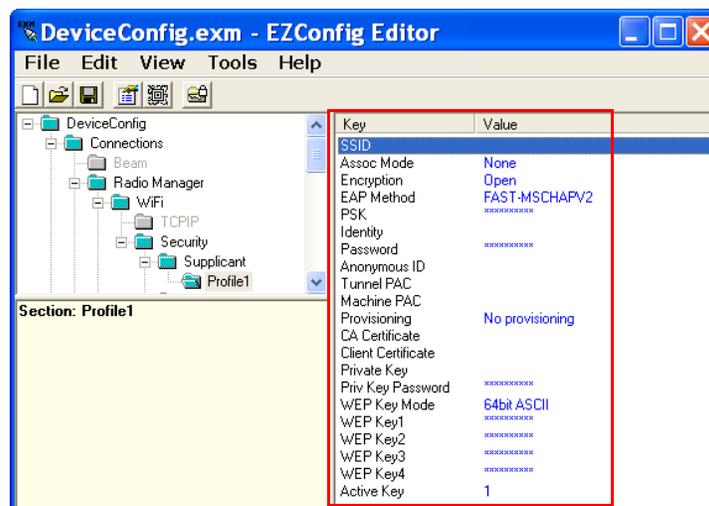
### Configuring the DeviceConfig.exm File

On your workstation or your terminal, open the DeviceConfig.exm file in EZConfig. The following instructions show the workstation method.

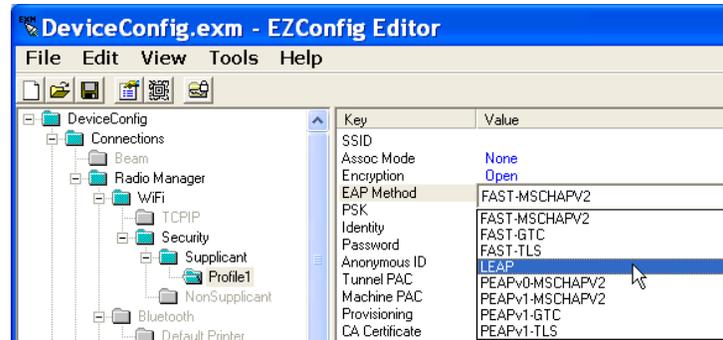
1. Click **Start > All Programs > Honeywell > Dolphin Power Tools and Demos > EZConfig Editor**.



2. Tap the **Open** icon  and select the DeviceConfig.exm file.
3. Right-click and select **Enable** on the following sections: **Radio Manager > WiFi > Security > Supplicant > Profile 1**.  
The WiFi section is disabled by default. Enabling this section turns the 802.x radio on at startup.
4. Select the **Profile 1** section.



- The keys in the Profile 1 section match the field on the [Network Window](#) (see page 1-8). Double-tap on each key value you want to configure and select the desired configurations from the drop-down list.



- The items in each drop-down list are the same as the items in the drop-down lists on the [Network Window](#) (see page 1-8).
- Select or enter all the items required by your configuration.
  - For Tunnel PAC, Machine PAC, and CA and Client Certificate keys, enter the exact path on the terminal where the PAC and certificate files are located.



The PAC and certificate files **must** be saved on the terminal first!

- If your configuration uses WEP, select the key type from the drop-down list.



Key validation does not occur when you enter the key in WEP Key1–4 but does occur when the DeviceConfig.exm file is activated on the terminal.

- Save the DeviceConfig.exm file on your workstation for future reference and close.

### Setting up the Terminal

- Move the configured DeviceConfig.exm file to the \IPSM\Autoinstall folder on the Dolphin terminal.
- Cold boot the terminal.
- The SWC should start connecting using the DeviceConfig settings during Autoinstall.
- After Autoinstall is complete, tap the SWC icon on the Today screen .
- Verify that the configuration is connected and correct.

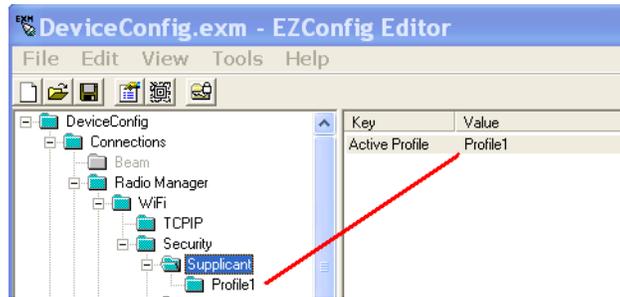
### Enabling a Profile

You can have multiple profiles in the SWC section; however, one needs to be selected as the default configuration so that the configuration connects when the terminal boots up.

To select a default configuration, enter the name of the profile as the Value in the **Active Profile** key of

---

the **SWC** section



### ***Changing Power Save Mode***

Power Save Mode is enabled in the radio by default.





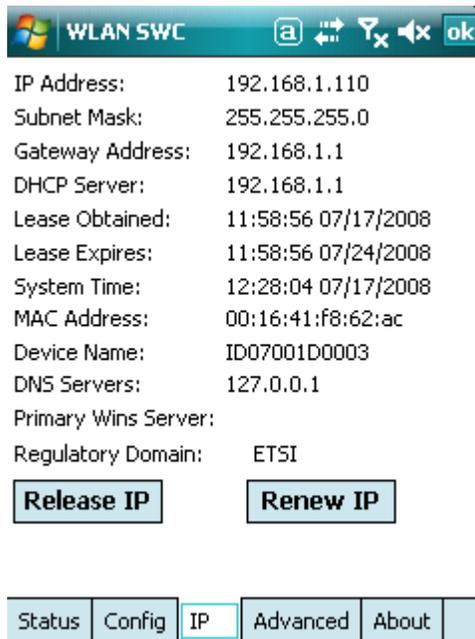
## Administrative Tools

### Overview

The SWC offers a number of tools to help you administer your network configurations.

### IP Tab

The IP tab enables you to view statistics about the terminal and active network connection.



#### Release IP

Tap this button to release the current IP address (usually assigned by DHCP).

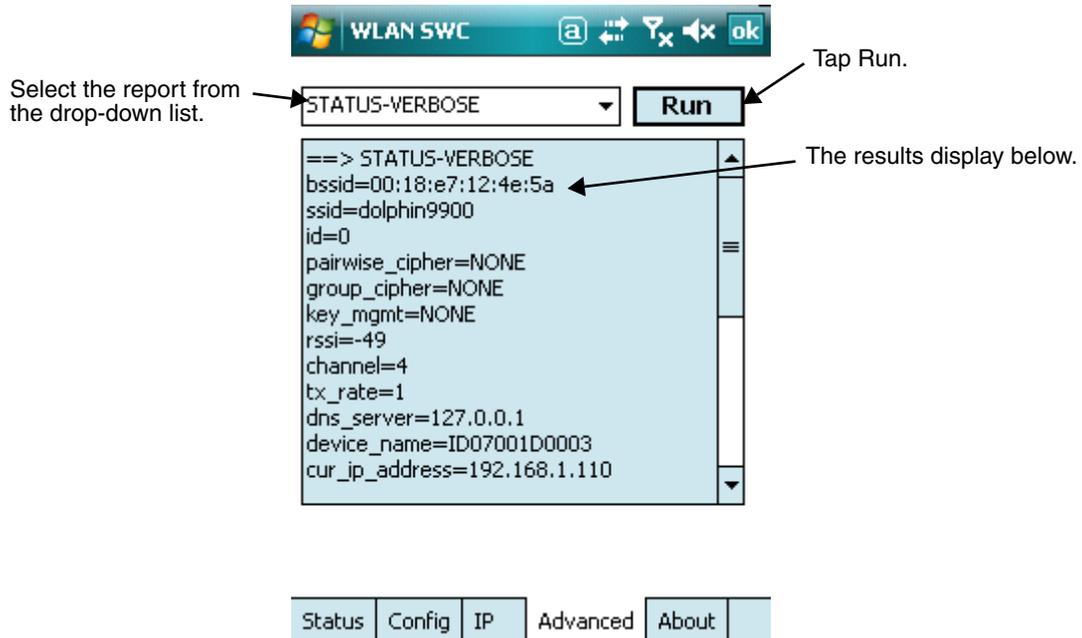
#### Renew IP

Tap this button to obtain a new IP address from the DHCP server.

---

## Advanced Tab

The Advanced tab runs several reports that allow you to monitor the background processing of the SWC. In addition, you can also execute certain commands.



The SWC supports the following reports and commands:

- [STATUS](#) (see page 4-3)
- [STATUS\\_VERBOSE](#) (see page 4-3)
- [SCAN](#) (see page 4-3)
- [SCAN\\_RESULTS](#) (see page 4-3)
- [LIST\\_NETWORKS](#) (see page 4-4)
- [SELECT\\_NETWORK](#) (see page 4-4)
- [ENABLE\\_NETWORK](#) (see page 4-4)
- [SAVE\\_CONFIG](#) (see page 4-4)
- [DISCONNECT](#) (see page 4-4)
- [REASSOCIATE](#) (see page 4-4)
- [DHCP release](#) (see page 4-4)
- [DHCP renew](#) (see page 4-4)
- [REMOVE\\_NETWORK](#) (see page 4-4)

---

## **STATUS**

STATUS queries and retrieves current WPA/EAPOL/EAP status information.

### **For example:**

```
bssid=02:00:01:02:03:04
ssid=test network
pairwise_cipher=CCMP
group_cipher=CCMP
key_mgmt=WPA-PSK
wpa_state=COMPLETED
ip_address=192.168.1.21
Supplicant PAE state=AUTHENTICATED
suppPortStatus=Authorized
EAP state=SUCCESS
```

## **STATUS\_VERBOSE**

STATUS\_VERBOSE is the same as STATUS with more verbosity (i.e., more variable=value pairs).

### **For example:**

```
bssid=02:00:01:02:03:04
ssid=test network
id=0
pairwise_cipher=CCMP
group_cipher=CCMP
key_mgmt=WPA-PSK
wpa_state=COMPLETED
ip_address=192.168.1.21
Supplicant PAE state=AUTHENTICATED
suppPortStatus=Authorized
heldPeriod=60
authPeriod=30
startPeriod=30
maxStart=3
portControl=Auto
Supplicant Backend state=IDLE
EAP state=SUCCESS
reqMethod=0
methodState=NONE
decision=COND_SUCC
ClientTimeout=60
```

## **SCAN**

Performs a new BSS scan.

## **SCAN\_RESULTS**

Displays the latest scan results. Fields are separated with by a “/” character.

### **For example:**

```
bssid / channel / signal level / flags / ssid
00:09:5b:95:e0:4e 2412 208 [WPA-PSK-CCMP] jkm private
02:55:24:33:77:a3 2462 187 [WPA-PSK-TKIP] testing
00:09:5b:95:e0:4f 2412 209 jkm guest
```

---

## ***LIST\_NETWORKS***

Lists configured networks. Fields are separated by a “/” character.

### **For example:**

```
network id / ssid / bssid / flags  
0 example network any [CURRENT]
```

## ***SELECT\_NETWORK***

Selects a network (disable others). Network ID can be received from the [LIST\\_NETWORKS](#) (page 4-4) command output.

## ***ENABLE\_NETWORK***

Enables a network. Network ID can be received from the [LIST\\_NETWORKS](#) (page 4-4) command output.

## ***REMOVE\_NETWORK***

Removes a network. Network ID can be received from the [LIST\\_NETWORKS](#) (page 4-4) command output.

## ***SAVE\_CONFIG***

Saves the current configuration.

## ***DISCONNECT***

Disconnects and wait for REASSOCIATE command before connecting.

## ***REASSOCIATE***

Forces the current connection to reassociate.

## ***DHCP release***

Releases the current IP address.

Running this command performs the same function as tapping **Release IP** on the [IP Tab](#) (page 4-1).

## ***DHCP renew***

Contacts the DHCP server to obtain a new IP address.

Running this command performs the same function as tapping **Release IP** on the [IP Tab](#) (page 4-1).

## ***DEBUG on***

Enables debug output to a file in IPSM.

## ***DEBUG off***

Disables previously enabled debug output.

---

## **Technical Assistance**

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

### **North America/Canada**

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

### **Latin America**

Telephone: (803) 835-8000  
Telephone: (800) 782-4263  
E-mail: [hsmilasupport@honeywell.com](mailto:hsmilasupport@honeywell.com)

### **Brazil**

Telephone: +55 (11) 5185-8222  
Fax: +55 (11) 5185-8225  
E-mail: [brsuporte@honeywell.com](mailto:brsuporte@honeywell.com)

### **Mexico**

Telephone: 01-800-HONEYWELL (01-800-466-3993)  
E-mail: [soporte.hsm@honeywell.com](mailto:soporte.hsm@honeywell.com)

### **Europe, Middle East, and Africa**

Telephone: +31 (0) 40 7999 393  
Fax: +31 (0) 40 2425 672  
E-mail: [hsmeurosupport@honeywell.com](mailto:hsmeurosupport@honeywell.com)

### **Hong Kong**

Telephone: +852-29536436  
Fax: +852-2511-3557  
E-mail: [aptechsupport@honeywell.com](mailto:aptechsupport@honeywell.com)

### **Singapore**

Telephone: +65-6842-7155  
Fax: +65-6842-7166  
E-mail: [aptechsupport@honeywell.com](mailto:aptechsupport@honeywell.com)

### **China**

Telephone: +86 800 828 2803  
Fax: +86-512-6762-2560  
E-mail: [aptechsupport@honeywell.com](mailto:aptechsupport@honeywell.com)

### **Japan**

Telephone: +81-3-3839-8511  
Fax: +81-3-3839-8519  
E-mail: [aptechsupport@honeywell.com](mailto:aptechsupport@honeywell.com)

## **Online Technical Assistance**

You can also access technical assistance online at [www.honeywellaidc.com](http://www.honeywellaidc.com).

**Honeywell Scanning & Mobility**  
9680 Old Bailes Road  
Fort Mill, SC 29707

[www.honeywellaidc.com](http://www.honeywellaidc.com)