About the Software Installation Package

This software installation package includes the HPC2000-capable driver and configuration utility for the Intermec **Mobile**LAN™card 11 wireless network adapter. Please note that this release is specifically for the Intermec 6651 handheld computer and that the 6651 is the only computer currently supported by this software.

For all the latest wireless product group updates, please visit either of the following web addresses:

* http://mobilelan.intermec.com/ - Click Software Downloads.

* http://www.intermec.com/ - Hover over Support, click Software Downloads, and then select MobileLAN.

MobileLAN card 11 Requirements

You will need a MobileLAN card 11. If you need to order a card, contact your local Intermec representative.

* MLcard 1103A - ETSI Radio with Integrated Radio and Utility

* MLcard 1104A - FCC Radio with Integrated Radio and Utility

Software	Version
Network Driver	1.07.29
Configuration Utility	1.07.29
Required Station Firmware	0.8.3

6651 Requirements

The **Mobile**LAN™card 11 software requires that the Intermec 6651 be running Microsoft Windows HPC 2000. There are other versions of the operating system that may be running on the 6651, but they will not support the **Mobile**LAN™card 11 radio and they will not be supported by Intermec.

If you have a 6651 with an older operating system, you can upgrade to HPC 2000 by replacing a ROM module. You can order the upgrade kit, which consists of the ROM module and detailed installation instructions. The same upgrade kit is used for both domestic and international versions of the 6651. ROM upgrade kits are currently in stock.

* Upgrade Kit Part Number: 203-615-001, U.S. List Price $150 - Discount Code 'F'

Installing the Software

1. Download the installation package for the MobileLAN card 11 driver and utility for the Intermec 6651 to your PC.

2. Copy the installation package from your PC to the Intermec 6651 by

   - connecting the PC to the 6651 and using ActiveSync.

   - using a storage card.

3. Install the MobileLAN card 11 driver and configuration utility on the 6651.

4. Insert the MobileLAN card 11 into the Intermec 6651.

5. Use the MobileLAN card 11 configuration utility to configure the MobileLAN card 11.

These steps are explained in detail in the following sections

Downloading the Installation Package

At this time, the software installation package is only available on the Intermec Web site. You need to download it to a PC that has Microsoft ActiveSync or a storage card slot.

To download the installation package

1. Go to http://mobilelan.intermec.com then click Software Downloads.

   Or, go to http://www.intermec.com, hover over Support, click Software Downloads, and then select MobileLAN.

2. Right-click on the link for the software installation package and select Save Target As.

3. In the Save As dialog box, choose where you want to save the installation package.

4. Click Save.

The installation package is saved to your PC.

Copying the Installation Package Using Microsoft ActiveSync

The PC that contains the installation package must have Microsoft ActiveSync installed on it. You can download Microsoft ActiveSync from

http://www.microsoft.com/mobile/pocketpc/downloads/activesync35.asp

Before you can copy the installation package to your Intermec 6651, you must connect your PC to the Intermec 6651 and establish a partnership between your PC and the 6651.

Connecting Your Desktop PC to the 6651

1. Use the serial cable that came with the Intermec 6651 to connect your PC to the 6651.

2. If you have already established a partnership between your PC and the 6651, go to "Copying the Installation Package" later in this section.

    If you have not established a partnership between your PC and the 6651, ActiveSync will run a Get Connected wizard to help you set up your PC to communicate with the 6651. If the Get Connected wizard does not automatically run, open ActiveSync and from the File menu, choose Get Connected.

3. Click Next. The wizard recognizes that the 6651 is connected to the PC. If this does not happen, press the ActiveSync button on the 6651 to initiate a connection. This button is immediately to the left of your On/Off button and has an icon of a desktop PC. The New Partnership screen appears.

New Partnership Screen

2. If you want to establish a partnership, choose Yes and then click Next. Continue with the next section, "Establishing a Partnership."

   If you only want to copy the installation package, choose No and then click Next. Go to "Copying the Installation Package" later in this section.

Establishing a Partnership

Partnerships let you transfer files, synchronize email, contacts, and a calendar. You do not have to set up a partnership, but if you set one up now, you will not be presented with this screen the next time you attach the 6651.

To establish a partnership

1. If you chose Yes to establish a partnership, the next screen appears.
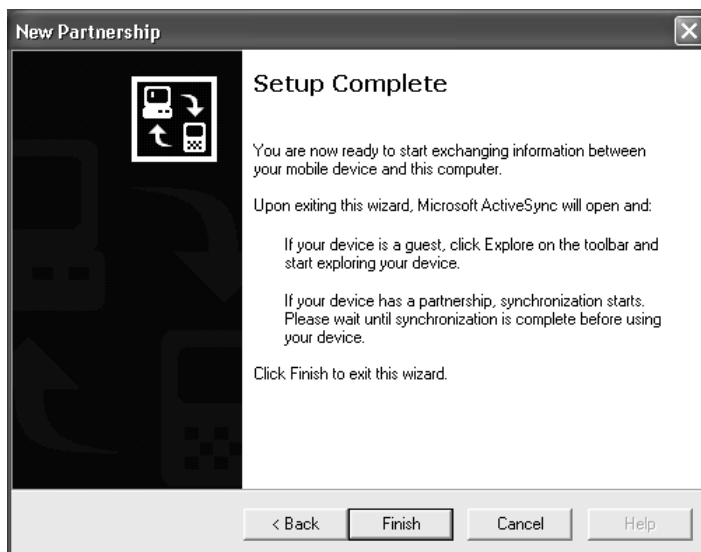
Select Number of Partnerships Screen

2. If the 6651 will connect with more than one computer, choose Yes and then click Next.

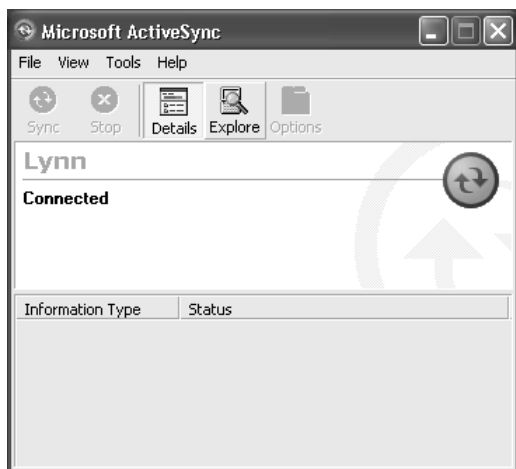   If you share the 6651 with your home PC and your work PC, choose No and then click Next.

3. Customize your Synchronization settings. Check the boxes next to the items that you want to keep current between the 6651 and your PC and then click Next.

4. Click Finish. The Microsoft ActiveSync dialog box appears.

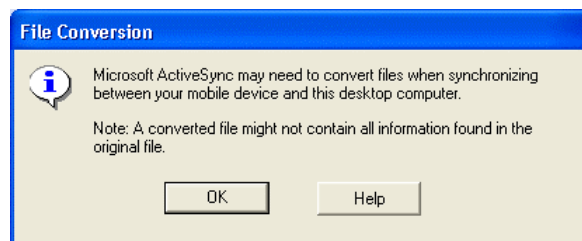You are now ready to copy the installation package to the Intermec 6651!

Copying the Installation Package

1. In the Microsoft ActiveSync screen on your PC, click the Explore button in the middle of the taskbar.

2. In the Mobile Device screen, double-click the My Handheld PC icon. This will show you the same files as if you had double clicked the "My Handheld PC" icon from the desktop of the 6651.

3. Copy the installation package to the 6651 using the window you just opened. The following message box will appear when you copy the file to your 6651.

4. Click OK. The installation package is safe to copy this way without losing any data.

Copy & Convert to mobile device format Screen

5. When the copy message box disappears, you should see the installation package that was copied in the "My Handheld PC" window. Verify that the file is on the 6651 by double clicking the "My Handheld PC" icon on the desktop of the 6651.

You are now ready to run the installation package!

Copying the Installation Package Using a Storage Card

Copying the installation package from your PC to the Intermec 6651 is quite easy using a storage card. You need a storage card with at least 2 MB of available space.

To install the software using a storage card

1. Using your desktop PC, laptop, or other device, copy the installation package you downloaded from the Intermec Web site to the storage card.

2. Insert the storage card into the 6651.

3. Double click the My Handheld PC icon on the desktop of the 6651. You should see a Storage Card folder.

4. Open the Storage Card folder and copy the installation package to the 6651.

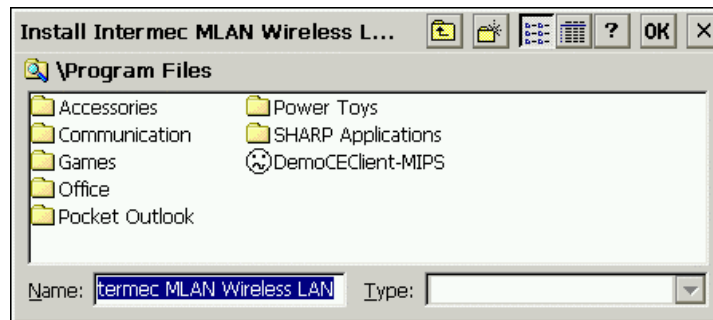5. Remove the storage card from the 6651.
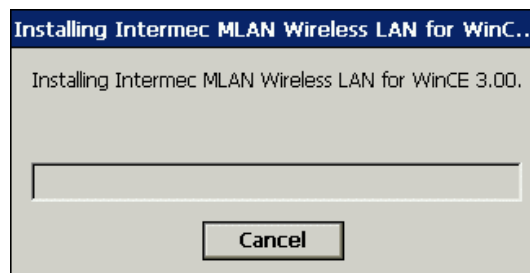
You are now ready to run the installation package!

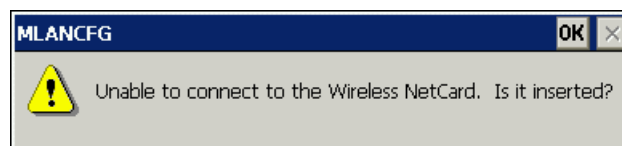## Running the Installation Package

1. Open the "My Handheld PC" icon from the desktop of the Intermec 6651.

2. Double click the installation package to begin the installation. The installer asks you where you would like to install this application.

3. Choose the default entry or you can choose an alternate location. The next message box appears to indicate that the software is being installed.
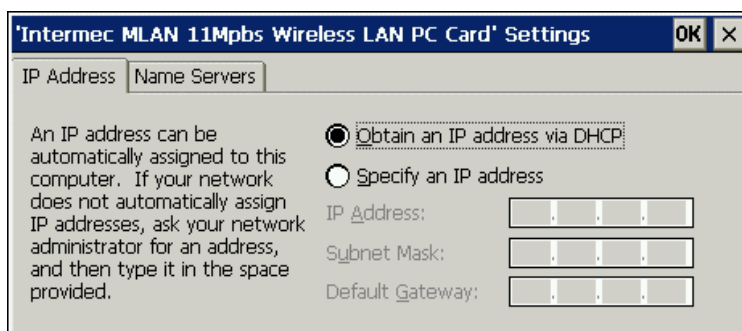

4. When you see the next message box, insert your MobileLAN card 11 into the 6651.
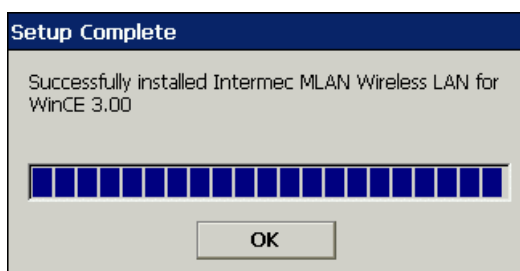
5. Click OK. The Intermec MLAN 11Mpbs Wireless LAN PC Card Settings dialog box appears.

6. Configure the MobileLAN card 11's IP address and Name servers (DNS) information and then click OK. The Setup Complete message box appears.

You have now completed the MobileLAN card 11 setup!
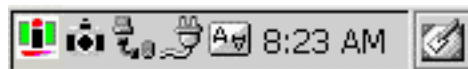
Using the Configuration Utility

You can use the configuration utility to

- configure your MobileLAN card 11.

- conduct a minimal site survey.

- ensure that you are attached to the access point or another network.

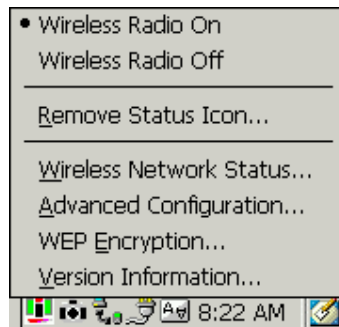- verify version numbers.

Running the Configuration Utility

The configuration utility should automatically run when you insert the MobileLAN card 11. To verify that the utility is running, check in your system tray for the following icon:

♠ Clicking this icon will bring up a launch menu!

If you do not see this icon, you can run the utility from the Start menu by clicking Start, then Programs, then MLAN Status Icon.
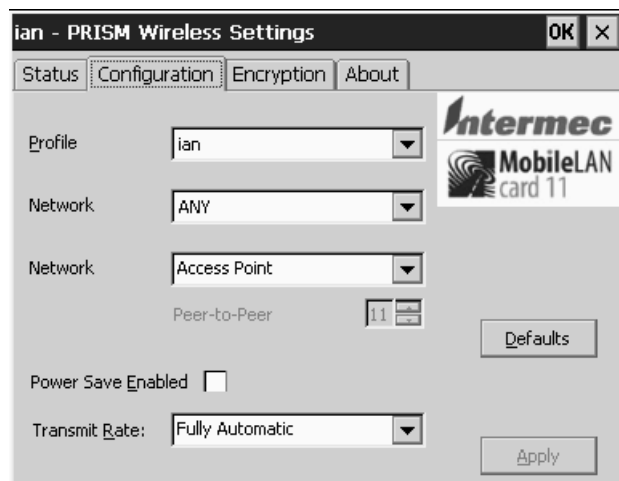
Once the utility is running, you launch the configuration screens by tapping the icon in the system tray. A single tap will launch this menu:

If you choose Wireless Network Status, Advanced Configuration, WEP Encryption, or Version Information, the configuration utility opens to the appropriate tab.

A double tap opens the utility on the Configuration tab:
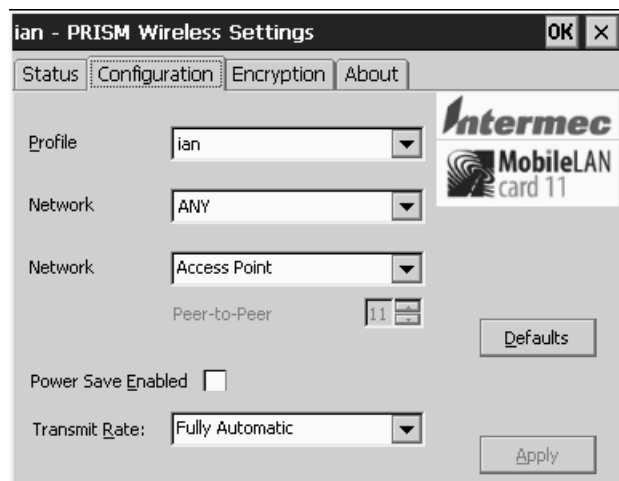

Configuring the MobileLAN card 11

1. In the Configuration utility, click the Configuration tab.

2. Configure the network and radio parameters.

3. Click Apply. The changes take effect immediately.

Note: You may also want to configure WEP encryption for a more secure wireless network. For help, see "Configuring WEP Encryption" in the next section.

Configuration Tab (continued)

Parameter	Description
Profile	Lets you create profiles to make it easier for you to switch between locations. Create new profiles by typing a different name into this field. The profile is saved when you click the Apply button.
	To switch to a different profile, click the down arrow on the right side of the field, select a profile, and click Apply.
	Note: Encryption information is also saved with each profile, so you should not need to reenter encryption information each time.
Network (1st)	Enter the SSID of the wireless network you want to connect to. You may specify ANY to connect to any wireless network in the area.
Network (2nd)	Choose the type of network. Select Access Point for wireless networks that use access points or select Peer-to-Peer for networks that are private and do not use access points.
Peer-to-Peer	If you chose Peer-to-Peer in the Network field, specify the channel to use.
Power Save Enabled	Determines if the radio will use power management. Power management will extend your battery life, however you may see slightly lower data performance.
Transmit Rate	Choose the rate at which you want your radio to transmit. Select 1&2 Auto for older networks that do not support 11 Mbps coverage or set your transmit rate to only 11, 5.5, 2 or 1 Mbps.
Defaults button	Click this button to set the profile back to the factory default settings.

Configuring WEP Encryption
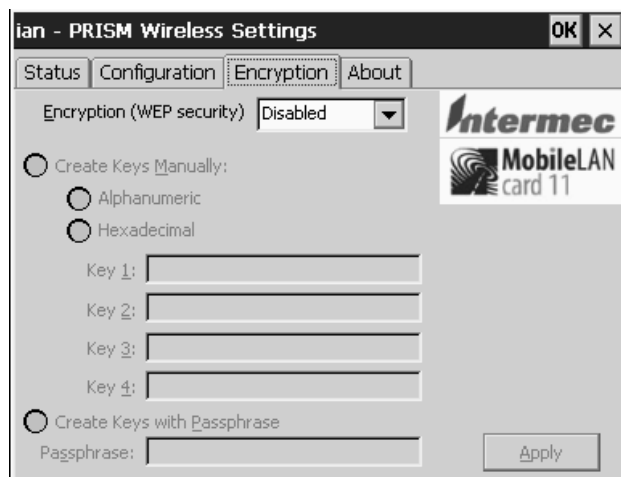
The Encryption tab lets you set up your WEP encryption mechanism. As you enter the WEP keys, the utility displays asterisks in the Key fields instead of the characters, for security reasons.

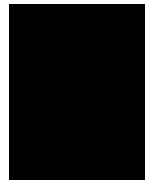### To configure WEP encryption

1. In the Configuration utility, click the Encryption tab.

2. Configure the WEP encryption parameters.

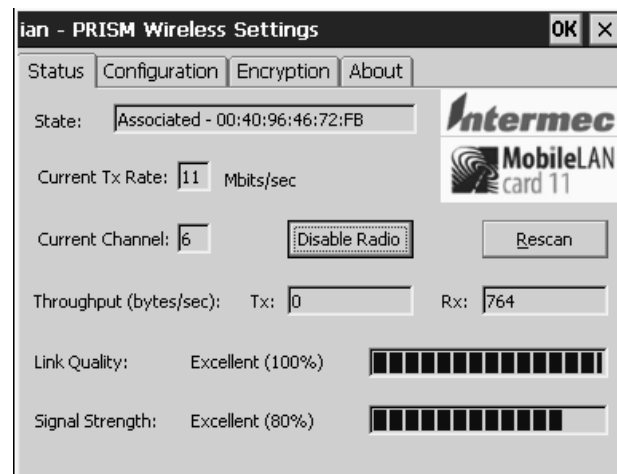3. Click Apply. The changes take effect immediately.

Encryption Tab (continued)

Parameter	Description
Encryption (WEP security)	Choose the level of security you want to configure for your network. You can choose Disabled, 64-bit, or 128-bit.
Create Keys Manually	Choose this option if you know what keys to use.
Alphanumeric	Choose this option to enter the WEP keys using alphanumeric characters. Enter five characters for WEP 64-key encryption and 13 characters for WEP 128-key encryption.
Hexadecimal	Choose this option to enter the WEP keys using hexadecimal characters. Enter ten characters for WEP 64-key encryption and 26 characters for WEP 128-key encryption.
	Note: If you are converting from ASCII to hex, make sure to use a proper conversion table. For example, an alphanumeric character of '1' is a hex value of '31,' and an alphanumeric character of lowercase 'm' is a hex value of '6D.'
Keys 1, 2, 3, 4	Enter the WEP keys exactly as they were given to you.
	Note: If you place a WEP key in the wrong position, the radio may not be able to communicate with the network.
Create Keys with Passphrase	Choose this option to enter the encryption passphrase.
Passphrase	Enter the passphrase.

Conducting a Site Survey

In the configuration utility, use the Status tab to help you perform site surveys and verify that the Intermec 6651 is connected to a network:
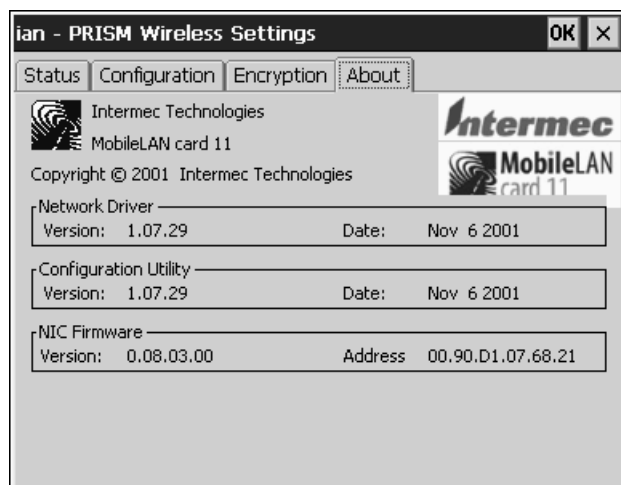

Parameter	Description
State	Indicates the state that the radio is currently in. If it is attached to a network, it shows "Associated" and lists the BSSID of the access point that it is associated with.
	Other states that may appear are Radio Disabled, Scanning, and Unavailable.
Current Tx Rate	Indicates the speed at which the radio is currently transmitting.
Current Channel	Indicates the current channel that the radio is using.
Disable Radio button	Lets you disable and enable the radio immediately. Use this button if you need to preserve battery life or you are moving out of coverage area.
Rescan button	Click this button to reinitialize the radio and make it search for a wireless network connection.
Throughput (bytes/sec)	Indicates the number of bytes per second that are being sent by (Tx) and received by (Rx) the radio.
Link Quality	Indicates when the 6651 is in an area with good coverage vs. when it is in an area with poor coverage. Link quality is determined by numerous connection statistics and is your best overall judge of connection quality.
Signal Strength	Indicates the overall strength of the signal you are receiving in relation to ideal coverage strength.

Verifying Version Numbers

In the configuration utility, use the About tab to provide useful information that you may need if you call Intermec technical support.

Parameter	Description
Network Driver	Version and build date of the MobileLAN card 11 driver for HPC 2000.
Configuration Utility	Version and build date of the configuration utility.
NIC Firmware	Version information of the firmware on your MobileLAN card 11 and its MAC (Hardware) address.

Troubleshooting

Below is a list of commonly asked questions with their answers:

I downloaded ActiveSync and connected my PC to the 6651 and ActiveSync did not open.

Open ActiveSync. From the File menu, choose Get Connected. If you are still having trouble getting connected, from the File menu, choose Connection Settings. Make sure that everything is correct and that the proper serial connection is selected.

The 6651 is connected to a network, but it cannot transmit data! I'm sure my network settings are correct. What is wrong?

This is usually caused by a mistyped WEP key or invalid placement of that key. Make sure that your WEP encryption information is entered exactly as it was given to you.

The light on my MobileLAN card 11 is blinking. What does that mean?

The light on the MobileLAN card 11 blinks when it is looking for an access point to connect with or when it is disabled.

How do I uninstall the MobileLAN card 11 from my 6651?

If you decide that you do not want to use a MobileLAN card 11 in the Intermec 6651, you can remove the software by opening the Control Panel, selecting Add/Remove Software, and then choosing the Intermec MLAN Wireless LAN for Windows CE program. Click Remove.

When I insert the MobileLAN card 11, I get a dialog box asking which driver to use. What should I type?

This usually means you have a radio that has been damaged somehow and is no longer recognized as a MobileLAN card 11. Most likely the radio will still work in the 6651, and you should type PRISMNDS **exactly**. Mistyping this string could cause your radio to not work in your 6651 again until a full reset is performed.

I didn't follow the instructions and accidentally typed in the wrong string when it asked for a driver name. Now my MobileLAN card 11 won't work at all! What do I do?

The simplest solution to this problem is to perform a full reset and reinstall the software. Remember to back up your data to a storage card before performing a full reset, as all data on the system will be lost and it will be restored to the factory default.