

## Chapter 6 – Configuring the Computer

- If you are primarily using the computer to connect to Wi-Fi hotspots, you may want to use Microsoft security. To use Microsoft security, you need to select it as your security choice. For help, see “[Selecting Microsoft as Your Security Choice](#)” on page 86.

### Selecting a Funk Security Profile

You can define up to four profiles for Funk security. Different profiles let your computer communicate in different networks without having to change all of your security settings. For example, you may want to set up one profile for the manufacturing floor and one for the warehouse. By default, the active profile is Profile 1.

### Selecting a Funk Security Profile

Use the following procedure to select a Funk security profile.

- 1 Start Intermec Settings.
- 2 Choose **Communications > 802.11 Radio > Funk Security**.
- 3 Choose a profile. A list of configurable settings appears.
- 4 (Optional) In the **Profile Label** text box, enter a meaningful name for your profile.
- 5 Configure your security settings. For help, see the next sections.
- 6 Repeat Steps 3 through 5 for each profile you want to define.
- 7 Set an active profile by choosing it in the **Active Profile** list.
- 8 Save your settings.

### Configuring WPA or WPA2 Enterprise (802.1x) Security With Funk

Use these procedures to set WPA-802.1x or WPA2-802.1x security on your computer with Funk security.

- 1 Make sure the communications and radio parameters on your 70 Series are configured.
- 2 Make sure Funk is selected as your security choice.
- 3 Start Intermec Settings.

- 4 Choose **Communications > 802.11 Radio > Funk Security**.
- 5 Select the profile you want to configure.
- 6 For **Association**, choose **WPA** or **WPA2**. Encryption automatically defaults to **TKIP** or **AES**, respectively.
- 7 For **8021x**, choose **TTLS**, **PEAP**, **EAP-FAST**, or **TLS**.
- 8 If you choose **TTLS**, **EAP-FAST**, or **PEAP**:
  - a For **Prompt for Credentials**, choose **Enter credentials now**.
  - b Enter a **User Name** and **User Password**.
  - c For **Validate Server Certificate**, choose **Yes**.



**Note:** The correct date must be set on your computer when you enable **Validate Server Certificate**.

- 9 If you choose **TLS**:
  - a Load a user and root certificate on your computer. For help, see **“Loading a Certificate” on page 90**.
  - b Enter a **User Name** and **Subject Name**.
  - c For **Validate Server Certificate**, choose **Yes**.

### **Configuring WPA or WPA2 Personal (PSK) Security With Funk**

Use the following procedure to configure WPA-PSK or WPA2-PSK with Funk security.

- 1 Make sure the communications and radio parameters on your computer are configured.
- 2 Make sure Funk is selected as your security choice.
- 3 Start Intermec Settings.
- 4 Choose **Communications > 802.11 Radio > Funk Security**.
- 5 Select the profile you want to configure.
- 6 For **Association**, choose **WPA** or **WPA2**.
- 7 For **8021x**, choose **None**.

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- 8 For **Pre-Shared Key**, enter the pre-shared key or passphrase.

The pre-shared key must be a value of 32 hex pairs preceded by 0x for a total of 66 characters. The value must match the key value on the access point. The passphrase must be from 8 to 63 characters. After you enter a passphrase, the 70 Series internally converts it to a pre-shared key. This value must match the passphrase on the authenticator.

- 9 Save your settings.

### Configuring 802.1x Security With Funk Security

Use the following procedure to configure 802.1x-WEP security with Funk security. Intermecc recommends that you use WPA2-802.1x instead of 802.1x-WEP if possible.

- 1 Make sure the communications and radio parameters on your computer are configured.
- 2 Make sure Funk is selected as your security choice.
- 3 Start Intermecc Settings.
- 4 Choose **Communications > 802.11 Radio > Funk Security**.
- 5 Select the profile you want to configure.
- 6 For **Association**, choose **Open**.
- 7 For Encryption, choose **WEP**.
- 8 For **8021x**, choose **TTLS**, **PEAP**, or **TLS**.
- 9 If you chose **TTLS** or **PEAP**:
  - a Enter a **User Name**.
  - b For **Prompt for Credentials**, choose **Enter credentials now**.
  - c Enter a **User Password**.
  - d For **Validate Server Certificate**, choose **Yes**.
- 10 If you choose **TLS**:
  - a Load a user and root certificate on your computer. For help, see **“Loading a Certificate” on page 90**.
  - b For **Validate Server Certificate**, choose **Yes**.

- c Enter a **User Name** and **Subject Name**.

- 11 Save your settings.

### **Configuring Static WEP Security With Funk Security**

Use the following procedure to configure static WEP security with Funk. Intermec recommends that you use WPA2-PSK instead of WEP if possible.

- 1 Make sure the communications and radio parameters on your computer are configured.
- 2 Make sure Funk is selected as your security choice.
- 3 Start Intermec Settings.
- 4 Choose **Communications** > **802.11 Radio** > **Funk Security**.
- 5 Select the profile you want to configure.
- 6 For **Association**, choose **Open**.
- 7 For **Encryption**, choose **WEP**.
- 8 For **8021x** choose **None**.
- 9 Define a value for the keys you want to use. You can define up to four keys (**Key 1** through **Key 4**).

Enter an ASCII key or a hex key that is either 5 bytes or 13 bytes long depending on the capability of the radio. Set a 5-byte value for 64-bit WEP or a 13-byte value for 128-bit WEP. Hex keys must be preceded by 0x and contain 5 or 13 hex pairs.

- 10 For **Transmit key**, choose the key you want to use for transmitting data.
- 11 Save your settings.

### **Using Open (No Security) Associations with Funk**

Use the following procedure to configure your mobile computer for open security using Funk.

- 1 Start Intermec Settings.
- 2 Choose **Communications** > **802.11 Radio** > **Funk Security**.
- 3 Select the active profile you are using.

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- 4 For **Association**, choose **Open**.
- 5 For **Encryption**, choose **None**.
- 6 Tap **OK**. Your settings are saved.

### Selecting Microsoft as Your Security Choice

The default security setting is Funk. If you want to use Microsoft Wireless Zero Configuration (WZC) security, you need to select it as your security choice. After you select Microsoft as your security choice, you will be prompted to save your settings and reset the computer for your change to take effect.

With Microsoft as your security choice, you can configure:

- WPA or WPA2
- 802.1x
- Static WEP

### Selecting Microsoft Security

Use the following procedure to select Microsoft security.

- 1 Start Intermec Settings. For help, see “**Configuring the Computer**” on page 63.
- 2 Choose **Communications** > **802.11 Radio** > **Security Choice**.
- 3 From the **Security Choice list**, select **Microsoft Security**. An alert box appears telling you that you must save your settings and reboot the computer for the new security choice to take effect.
- 4 Choose **Yes**. The computer resets and starts with Microsoft Security as the Security Choice.

### Configuring WPA or WPA2 Enterprise (802.1x) Security With Microsoft

Use these procedures to set WPA-802.1x security on your computer with Microsoft security.

- 1 Make sure the communications and radio parameters on your computer are configured.
- 2 Start Intermec Settings.

- 3** Choose **Communications > 802.11 Radio > Microsoft Security**.
- 4** For **Infrastructure Mode**, choose **Infrastructure**.
- 5** For **Network Authentication**, choose **WPA** or **WPA2**. Data Encryption automatically defaults to **TKIP** for WPA and **AES** for WPA2.
- 6** For **802.1x Authentication**, choose either **TLS**, or **PEAP**.
- 7** If you choose **TLS**:
  - a** Load a user and root certificate on your computer. For help, see **“Loading a Certificate” on page 90**.
  - b** Choose **Properties**. The Certificates dialog box appears.
  - c** Select the certificate you want to use from the list. The User Logon dialog box appears.
  - d** Enter a **User Name** and **Domain** and tap **OK**.
  - e** Tap **OK** to exit the Certificates dialog box.
  - f** Press **OK** to save the Microsoft Security settings.
- 8** If you choose **PEAP**:
  - a** Load a root certificate of the authentication server on your computer. For help, see **“Loading a Certificate” on page 90**.
  - b** Press **OK** to save the security settings and the User Logon dialog box appears.
  - c** Enter a **User Name**, **Password**, and **Domain**. Select **Save Password** if you want to save the password for future authentication sessions.
  - d** Press **OK** to save the Microsoft Security settings.

### **Enabling WPA or WPA2 Personal (PSK) Security With Microsoft**

Use the following procedure to enable WPA-PSK With Microsoft Security.

- 1** Make sure the communications and radio parameters on your computer are configured.
- 2** Start Intermec Settings.

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- 3** Choose **Communications > 802.11 Radio > Microsoft Security**.
- 4** For **Infrastructure Mode**, choose **Infrastructure**.
- 5** For **Network Authentication**, choose **WPA-PSK**. Data Encryption automatically defaults to **TKIP** for WPA and **AES** for WPA2.
- 6** For **Pre-Shared Key**, enter the pre-shared key or the passphrase.  
The pre-shared key must be a value of 32 hex pairs preceded by 0x for a total of 66 characters. The value must match the key value on the authenticator. The passphrase must be from 8 to 63 characters. After you enter a passphrase, the computer internally converts it to a pre-shared key.
- 7** Save your settings.

### Configuring 802.1x Security with Microsoft

Use the following procedure to configure 802.1x security with Microsoft security. Intermec recommends that you use WPA2-802.1x instead of 802.1x-WEP if possible.

- 1** Make sure the communications and radio parameters on your computer are configured.
- 2** Start Intermec Settings.
- 3** Choose **Communications > 802.11 Radio > Microsoft Security**.
- 4** For **Infrastructure Mode**, choose **Infrastructure**.
- 5** For **Network Authentication**, choose **Open**.
- 6** For **Data Encryption**, choose **WEP**.
- 7** For **802.1X Authentication**, choose **TLS** or **PEAP**.
- 8** If you choose TLS:
  - a** Load a user and root certificate on your computer. For help, see **“Loading a Certificate” on page 90**.
  - b** Choose **Properties**. The Certificates dialog box appears.
  - c** Select the certificate you want to use from the list. The User Logon dialog box appears.
  - d** Enter a **User Name** and **Domain** and tap **OK**.

- e** Tap **OK** to exit the Certificates dialog box.
  - f** Press **OK** to save the Microsoft Security settings.
- 9** If you choose PEAP:
- a** Load a root certificate of the authentication server on your computer. For help, see **“Loading a Certificate” on page 90**.
  - b** Press **OK** to save the security settings and the User Logon dialog box appears.
  - c** Enter a **User Name**, **Password**, and **Domain**. Select **Save Password** if you want to save the password for future authentication sessions.
  - d** Press **OK** to save the Microsoft Security settings.
- 10** For **Network Key Setting**, choose **Automatic**.
- 11** Save your settings.

### **Configuring Static WEP Security With Microsoft**

Use the following procedure to configure static WEP security with Microsoft security. Intermec recommends that you use WPA2-PSK instead of WEP if possible.

- 1** Make sure the communications and radio parameters on your computer are configured.
- 2** Start Intermec Settings.
- 3** Choose **Communications > 802.11 Radio > Microsoft Security**.
- 4** For **Network Authentication**, choose **Open**.
- 5** For **Data Encryption**, choose **WEP**.
- 6** For **Network Key Setting**, choose **Enter Key and Index**.
- 7** For **Network Key Value**, enter an ASCII key or a hex key that is either 5 bytes or 13 bytes long depending on the capability of the radio.  
  
Set a 5-byte value for 64-bit WEP or a 13-byte value for 128-bit WEP. Hex keys must be preceded by 0x and contain 5 or 13 hex pairs.