

Smart Card Writer/Reader

User Manual

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About This Manual

This manual describes the Smart Card Writer/Reader Application, how to install it, and how to use it to write configuration files and save the configuration onto a standard SIM card.

The manual covers the following options:

- Installing and uninstalling the Smart Card Writer/Reader Application, Section 3
- Accessing the Application, logging in and switching users, Section 5
- Introducing the Smart Card Writer/Reader Application, Section 6
- Using the application, Section 7:
 - ♦ "Creating Configuration Files (Administrator Only)" Section 7.1
 - \diamond "Loading Configuration Files" Section 7.2
 - ♦ "Saving a Configuration on a Smart Card (Sales Only)" Section 7.3
 - ♦ "Reading Information from a Smart Card" Section 7.4

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1. Introduction

The Smart Card Writer/Reader Application provides an easy to use interface for generating and editing configuration files, and enables to store the configuration data onto a standard smart card using SCM Microsystems' SCR335/355/3310 smart card reader and/or Omnikey's CardMan 3121.

2. Minimum Requirements

Before installing the application, make sure you have the following available on your computer:

- RAM: 256 MB
- Available disk space: 350 MB
- Windows 2000, XP, or 2003
- USB 1.1 or above
- Windows Installer 3.0 or higher
- Internet Explorer 5.01 or later

Installing the Smart Card Writer/Reader Application

The executable file (Setup.exe) is available in the Installation CD supplied with the application. The installation wizards will guide you through the installation. With the application, the Microsoft.NET platform and the Smart Card Writer drivers are also installed, if they are not already installed on your computer. You will be prompted to accept the terms and conditions for each of the installed components. Follow the instructions on the screen.



3.

NOTE

The installation may take several minutes, depending on the components installed.

You will be prompted to install the SCR3xx Reader driver (Figure 1).



Figure 1: Install SCM Microsystems' SCR3xx Drivers

If you are using Microsystems' smart card reader, click **Yes** to install the drivers.

If you are using Omnikey's CardMan, click No.

You will be prompted to install the CardMan drivers (Figure 2).

SCWriter - InstallShield Wi	izard	X
Do you want to Install the C	lardMan3x21 Re	ader Driver?
(<u>Y</u> es	No	

Figure 2: Install Omnikey's CardMan Drivers

If you are using the Omnieky CardMan, click **Yes**. Otherwise, click **No**.



NOTE

You can install only the drivers for the smart card reader that you use, the drivers for both smart card readers, or not install any drivers at all.

The smart card reader will not work properly unless you install the drivers on your computer.

During installation, the Customer Information window is displayed:

🔂 SCR33xx USB Smartcard Reader - In	stallShield Wia	zard	×
Customer Information			
Please enter your information.			
Liser Name:			
Organization:			
Install this application for:			
Anyone who uses this cor	nputer (all users))	
Only for <u>me</u> ()			
To the Web to ful			
Instalioneia	< Pack	Nexts	Capcal
_		Mext >	

Figure 3: Customer Information Window

Enter your User Name and the name of your organization. In the *Install this application for:* area, it is recommended to select **Anyone who uses this computer** (the default option). Alternatively, you can limit user's access to the application to the specified user.

Click **Next** to continue. The Setup Type window is displayed.



Figure 4: Setup Type Window

It is recommended to select the Complete installation. All program features will be installed.

When the installation is complete, you may be prompted to restart your computer.

The Fix PC/SC window is displayed:



Figure 5: Fix PC/SC Window

Click on **Begin** to activate problem detection. When done, click **OK** to close the report window and **Cancel** to close the Fix PC/SC Window.

4. Uninstalling the Application



To uninstall the Smart Card Writer/Reader Application:

1 When installing the Smart Card Writer/Reader Application, you will be prompted to uninstall a previously installed version.

Alternatively, from the Windows *Start* menu, select *Programs* > *Smart Card Writer* > *Uninstall Smart Card Writer*.

- Click Yes to uninstall the application and then Yes, to uninstall the drivers.You can also skip the removal of the drivers.
- **3** During the uninstall process of the SCR3xx Reader, the following window is displayed:



Figure 6: Uninstalling the SCR3xx Reader

- 4 Select **Remove**, and click **Next**. Follow the instructions on the screen.
- **5** After the uninstallation is complete, restart the computer to complete the installation.

5. Accessing the Application



To access the application:

From the Windows *Start* menu, select *Programs* > *Smart Card Writer* > *Smart Card Writer*. The Login window is displayed.

5.1 Logging In

1 Select a user name and enter the password at the login prompt (Figure 7), as follows:

User Mode	Password (Case Sensitive)	Access Rights
Administrator	admin	Write configuration, Save configuration, Load configuration, Read Smart Card
Sales	sales	Load configuration, write User Information, Read Smart Card, Write Smart Card





2 Click OK.

5.2 Switching User



To switch user:

Click on **Login** at the top left corner. The login prompt is displayed. See Section 5.1.



Introducing the Smart Card Writer/Reader Application

Following successful login, the application opens. The display depends on the user mode (see Section 5.1).

🛛 Smart Card Writer/Reader Application - Administrator Mode 🛛 🛶 🧰 Title Bar			
Login About	Menu Ba	r	
		•	Control Buttons
	SU Self Install 2.3GHz 💌	Read Smart Card	Save File Load File
	User Information Scanning ar	d Ethernet Link Settings 🛛 🛶 🛶	— Tab Selection Area
Band Selection List	Location:		
	User Name :		
	Password:		
	Confirm Password:		
	Organization:		
	Address:		
Jer - An	Country:		
J1	Sele	ected Tab Area	
R			Error Message Area

Figure 8: The Main Window

The Smart Card Writer/Reader Application comprises the following elements:

- Title Bar: Identifies the application's name and indicates entry mode (Administrator/Sales). It also includes standard icons for minimizing or closing the application.
- Menu Bar: Includes the following menus:
 - \diamond Login: Enables to switch user (see Section 5.2)
 - ♦ About: Opens the About window, displaying copyright information, the application's SW version and the release date.

About	×
All Rights Reserved	
Application Version: 4.1.0.4 Release Date: 23/4/2007	
XML Version: 2.6	
AVSM DLL Version: 2.4	
Setup Version: 4.1.0.6	
<u>o</u> ĸ	

Figure 9: About

- **Tab Selection Area: The Tab Selection Area comprises three tabs:**
 - ♦ "User Information Tab" on page 9
 - ♦ "Scanning and Ethernet Tab" on page 9
 - \diamondsuit "Link Settings" on page 10
- Selected Tab Area: The Selected Tab Area is a workspace that varies according to the selected tab, enabling to modify specific parameters, depending on user rights.
- Band Selection List: The band selection list includes pre-configurations according to the selected band. This configuration must be defined to create new configuration files.
- Control Buttons:
 - Write Smart Card: (Sales only) Writes the configuration information onto the smart card.
 - Read Smart Card: Reads the smart card. The information stored on the smart card is displayed on screen.
 - Save File: (Administrator only) Saves the configuration to file (with the extension .cfg).
 - Load File: Loads information from an external configuration file. The information is displayed on screen.

Error message area: Displays error messages on missing parameters and wrong values entered. The relevant field is highlighted in red.

6.1 User Information Tab

The User Information tab enables to enter the user information necessary for proper authentication.

SU Self Install 2.3GHz 💌	Read Smart Card Save File	Load File
User Information Scanning and Ethe	ernet Link Settings	
Location:		
User Name:		
Password:		
Confirm Password:		
Organization:		
Address:		
Country:		

Figure 10: User Information Tab

In Administrator mode, the User Name and Password are grayed. All other parameters are editable. In Sales mode, all parameters are editable except Location, which is determined by the loaded file.

For information on the parameters, refer to the CPEs Product Manual.

6.2 Scanning and Ethernet Tab

The Scanning and Ethernet tab enables the administrator to enter the frequency scanning range, the bandwidth, and specify discrete frequencies and port negotiation mode. When logged in as Sales, these parameters are grayed. For more information on these parameters, refer to the *BreezeMAX CPEs Product Manual*.

SU Self Install 2.3GHz	Read SIM Save File Load	File
User Information Scanning and Ethe	ernet Link Settings	
Scanning Start Frequency:	2301750 KHz	4
Scanning Stop Frequency:	2358250 KHz	
Scanning Main Steps:	875 • KHz	
Scanning Steps Bitmap:	▼ 0 ▼ 125 ▼ 250 ▼ 375	
	☑ 500 ☑ 625 ☑ 750 ☑ 875/1250 KHz	
Scanning Discrete Frequencies:	1 2 3	
	4 5 6	
	7 8 9	
	10 KHz	
Bandwidth:	3.5 M Hz	
		<u> </u>

Figure 11: Scanning and Ethernet Tab

6.3 Link Settings

The Link Settings tab enables the administrator to select an antenna, enable/disable the Best AU feature, and enter Base Station ID and AU ID parameters. When logged in as Sales, these parameters are grayed. For more information on these parameters, refer to the *BreezeMAX CPEs Product Manual*.

SU Self Install 2.3GHz	Read SIM Save File Load File
User Information Scanning and Ethe	ernet Link Settings
Antenna Select:	Auto
Best AU Option:	Enable
Base Station ID:	186 190 0 0 250 206
Base Station ID Mask:	255 255 255 0 0 0
Preferred AU ID:	186 190 0 0 250 206
Preferred AU Mask:	255 255 255 0 0 0

Figure 12: Link Settings Tab

7. Using the Application

Using the Smart Card Writer/Reader Application, you can perform the following operations:

- Create new configuration files, Section 7.1
- Loading existing configuration files, Section 7.2
- Write the configuration parameters onto a smart card, Section 7.3
- Read a smart card, Section 7.4.

7.1 Creating Configuration Files (Administrator Only)

Configuration files are ASCII text files that contain settings for many of the Si CPE configuration parameters. You can customize your own set of configuration files according to your specific needs (for example according to locations). These files can later be loaded to the application and saved on a standard smart card. Only the Administrator can create configuration files.

To create a new configuration file:

- 1 Select a band from the Band Selection List. This will display the default parameters and the frequency range for that band. You can edit these parameters as necessary, but you will not be able to save a frequency outside the range defined by the selected band.
- 2 Enter the parameters in all three tabs (see Section 6).



IMPORTANT

Selecting a different band will discard any changes to the parameters.



NOTE

In the User Information tab, the User Name and Password are not available to the administrator. They will be filled in by the sales person.

- **3** Click **Save File** to save the parameters as a configuration file (with a .cfg extension).
- 4 Browse to the location where you want to store the configuration files, enter a unique name for the file (extension .cfg) and click **Save**. It is recommended to give the files meaningful names that represent the coverage area (e.g., names of cities, regions, etc.). Along with the configuration file (.cfg), a signature file (.sig) is also generated. This file is used for security and needs to be saved with the configuration file.



NOTE

The default folder for the configuration files is in the Smart Card Writer folder.

5 Repeat this procedure for any number of configuration files.

7.2 Loading Configuration Files

The loading of configuration files serves the sales person when writing a smart card, and the administrator when creating a configuration file based on an existing configuration file. The parameters stored in the configuration file are displayed on screen, in the various tabs.

To load an existing configuration file:

- 1 Select a band from the Band Selection List.
- 2 Click on Load File.
- **3** The default folder for the configuration files is in the Smart Card Writer folder. If the files are not stored in the default folder, browse to the location where the configuration files are stored and select the required file.
- 4 Click **Open** to load the information to the Smart Card Writer/Reader Application.
- **5** Proceed as follows:
 - ♦ Administrator change the values of the parameters and save as a new configuration file (see Section 7.1)
 - Sales enter the user information and write to the smart card (see Section 7.3).



NOTE

If the signature file (.sig) was not saved with the configuration file (.cfg), this procedure will not work.

At the end of the process, a "Successful" operation message is displayed in the error message area.

7.3 Saving a Configuration on a Smart Card (Sales Only)



To save the configuration on a smart card:

- 1 Connect the Smart Card Writer to your computer's USB port.
- 2 Log in as Sales (password: sales)
- **3** Select a band from the Band Selection List.
- 4 Load the configuration file (see Section 7.2).
- 5 Enter the User Information (User Name, Password, and optionally Organization and Country).

- 6 Insert a smart card to the Smart Card Writer. Make sure that the smart card faces the same direction as the Smart Card Writer's LED.
- 7 Click Write Smart Card. The configuration is saved on the smart card.



CAUTION

Do not remove the smart card and do not disconnect the Smart Card Writer while writing to the smart card (while green LED is blinking). This may damage your data and may permanently damage the smart card.

8 It is recommended to check that the configuration has been saved on the smart card (see Section 7.4). It is also recommended to check the smart card by inserting it into the WiMAX modem.



NOTE

The smart card is rewritable. You can overwrite the stored information numerous times.

7.4

Reading Information from a Smart Card

You can use the Smart Card Writer/Reader Application to read the information stored on the smart card, in order to check that the information was properly saved on it.

- 1 Select a band from the Band Selection List.
- 2 Make sure that the Smart Card Writer is properly connected to your computer and insert the smart card into the designated slot, with the smart card facing the same direction as the Smart Card Writer's LED.
- 3 Click **Read Smart Card**. The information is displayed on screen. You can modify any parameter and save onto the rewritable smart card.



CAUTION

Do not remove the smart card and do not disconnect the Smart Card Writer while reading from the smart card. This may damage your data and may permanently damage the smart card.