



SUPPORT GUIDE FOR USING A NOKIA GPRS/WLAN CARD IN A WINDOWS CE DEVICE

NOKIA





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1. INTRODUCTION

The Nokia GPRS/WLAN Card driver for a Windows CE device is compatible with the following Nokia products: Nokia C110/C111 Wireless LAN Card, Nokia D211, and Nokia D311.



Note: Please refer to the User's Guide of the product for instructions on operation, care and maintenance, including important safety information.

2. INSTALLATION

Before you install the Nokia GPRS/WLAN Card driver for Windows CE you should:

- ensure that you have installed Microsoft ActiveSync on your computer
- ensure that your pocket PC is connected to the computer and recognized by ActiveSync
- download the setupce.exe file to your computer

To install:


1. Locate setupce.exe and run it. The welcome screen opens. Click **Next** to continue.
2. Read through and accept the Nokia license agreement. If you do not accept the license agreement, you cannot use the software and the installation procedure stops. Click **Yes** to accept the license agreement.
3. To install the Nokia GPRS/WLAN Card driver for Windows CE, you need to select a directory for it on the computer you are installing from. Select the directory where you wish to install the software and click **Next**.




Note: If you have the Nokia GPRS/WLAN Card driver for Windows CE installed on your Windows CE device, the installation software will remark on this and ask if you wish to re-install the driver.

4. When the installation is finished, you will be asked to check the screen of your Windows CE device to see if further steps are needed to complete the installation. Click **OK**.
5. Click **OK** at the exit screen to finish the installation.

3. USING THE USER INTERFACE

1. Insert the card into the PC card slot of your Windows CE device.
2.  is shown in the system tray in the bottom right of the screen. Tap the icon and a pop-up menu will open.

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3. Tap **Select Connection** (or **Select Profile** if you are using the Nokia C110/C111) if you want to establish a network connection. Tap **Manager Window** if you want to open the user interface of the program.

4. STATUS SCREEN

The **Status** screen gives you information on the current network connection: name of the used profile, status of the connection, network name, access point name, signal strength, and traffic load, for example.

Here you can also select profiles and connection types.


4.1 ESTABLISHING A NETWORK CONNECTION

You need to select a profile suitable for the network in which you want the card to operate.

1. Tap **Status**, then **Select**.
2. The **Select Connection** (or **Select Profile**) dialog box opens. From the list of profiles select the profile you want to use. If you select **Off**, the card is disconnected from the network. Tap **OK**.

To connect to SIM services, click **Connect** on the **Status** page.



Tip: You can also access the **Select Connection** (or **Select Profile**) dialog box by tapping  in the system tray in the bottom right of the main screen of your Windows CE device.

5. PROFILES SCREEN


A profile is a group of network-specific and Windows networking settings. Profiles enable easy transfer from one network to another without having to remember all the different settings.

You can create new profiles, modify and delete them. Profiles can be saved to and opened from a file.

One profile with pre-defined settings is automatically created during software installation. This *Easy Connection* profile enables network access without your needing to configure any settings. If you are using the Nokia C110/C111, the predefined profiles are called *Easy Infrastructure* and *Easy Adhoc*. *Off* ends any existing network connection. Note that the pre-defined profiles cannot be edited, deleted, or exported.

5.1 CREATING NEW PROFILES

1. Tap **Profiles**, then **New**.
2. Give a name for the new profile and tap **OK**.

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3. Configure the necessary settings and tap **OK**. See chapters “5.2.1. WLAN properties”, “5.2.2. GSM properties”, and “5.2.3. GPRS properties” for a detailed description of the settings.

5.2 EDITING PROFILES

1. Tap **Profiles**. Select the profile you want to modify, then tap **Edit**.
2. Make the necessary changes and tap **OK**. Profile-specific settings that can be modified are explained below.



Note: It is recommended that you do not edit a profile that is currently in use.

5.2.1 WLAN properties

General tab

Mode – Select one of the two available operating modes. In the infrastructure mode, devices can communicate with each other and with wired LAN stations through an access point. In the ad hoc mode, devices can send and receive data directly with each other. No access point is needed.

Network – You can add a new network name to the list, edit an existing one, or delete a name. Network name is defined by the system administrator. In the ad hoc operating mode, the users themselves name the WLAN. The network name can contain a maximum of 32 characters, and is case-sensitive by default.

SIM Services tab

Use SIM services – SIM service refers to a service that enables you to access the Internet via your service provider's or network operator's own public network. Your service provider may, for example, offer you the possibility of checking data from your company intranet, send and receive e-mail, and save documents. SIM services are usually available in public places such as hotels, airports, railway stations, business centers, and corporate buildings.


A SIM card is used as a means for user identification and billing. The SIM card is provided by a service provider or network operator.



Note: Before you can take advantage of SIM services, you must subscribe to these services from your service provider or network operator and obtain instructions for use.

Service provider domain – Type the domain name, as in *company.com*. You cannot connect to SIM services without specifying the domain name. You obtain the name from your service provider or network operator.

Prompt when service found – When you are connected to a WLAN and a SIM service is detected, you are asked whether you want to get connected. Once you



have confirmed that you want to get connected, you will be authenticated to the service.

Advanced connection control – Your wireless station sends keep-alive signals on a periodic basis to an access controller in order to check the validity of the connection. If the wireless station receives no response, the connection is ended automatically. If you select this check box, your wireless station and the access controller can exchange additional signals, which enables a quicker detection of lost connection.

TCP/IP tab

An IP address for the card can be obtained automatically from a DHCP (Dynamic Host Configuration Protocol) server. When using DHCP, you do not have to modify your IP settings when you change your location.

If your local area network does not have a DHCP server, which would assign an IP address for the card automatically, you need to specify the IP addresses manually. Ask your system administrator for the correct values.

Advanced tab

Channel – You need to specify a radio frequency channel on which the card is used. The selection of available channels may vary from country to country, as certain countries have a limited number of channels that can be used. Make sure that the card and the access point are using the same channel.

Security policy – With **Station security** the wireless station expects the access point to meet the security level configured in the station. With **Network security** the station will try to use the maximum level of security accepted by the access point.

Broadcast SSID – Defines the way how the wireless station searches for the access point. If the access point does not allow for broadcast SSID, it should not be used with the station either.

WEP security – You can use Wired Equivalent Privacy (WEP) keys for protecting the information transmitted in WLAN:

1. Select from the four shared keys the one you want to modify. Tap **Edit**.
2. Select the appropriate key length. Supported key lengths are 40, 128, and 152 bits. Remember that the more bits there are in the key, the higher the level of security.

Enter the WEP key data in hexadecimal format. If you want to enter the WEP key in text form, write the text in the **In text form** box.

3. Tap **OK** to save the shared WEP key.

To select which shared WEP key to use, select the key and tap **Activate**.

To empty the contents of the key, tap **Clear**.

5.2.2 GSM properties



Note: These settings are valid only with the Nokia D211 and Nokia D311.

Use GSM connection – Select this check box if you want to use the profile for making data calls. When you have an active data call, you can access the Internet and send and receive e-mail, for example.

Speed – Select the data transmission speed. The number of timeslots used is indicated in parenthesis and the receiving transmission rate is mentioned first. Note that the Nokia D311 does not support HSCSD (High Speed Circuit Switched Data) technology.

9.6 kbit/s (1+1)	The standard GSM data transmission rate. Select this option if the network you are using does not support HSCSD technology, or you have problems with making a data call.
14.4 kbit/s (1+1)	Can be used if it is supported by the network. Do not use this option unless you are sure your network supports it.
19.2 kbit/s (2+2)	Doubles the standard 9.6 kbit/s GSM data transmission rate. You can select this option if your network supports HSCSD technology and you have subscribed to GSM high-speed data services.
28.8 kbit/s (2+2)	Triplies the 9.6 kbit/s transmission rate, or doubles the 14.4 kbit/s transmission rate. This option is ideal for working with e-mail. You can select this option if your network supports HSCSD technology and you have subscribed to GSM high-speed data services.
43.2 kbit/s (3+1)	Triplies the 14.4 kbit/s transmission rate. This option is ideal for downloading Web pages since the radio card receives data faster than it sends data. You can select this option if your network supports HSCSD technology and you have subscribed to GSM high-speed data services.

You can see the receiving and sending data transmission rates on the **Status** screen.

Method – Select the appropriate data call type. Select **Analog** if you are using a modem connection. If you are using a ISDN connection, select **ISDN V.110** or **ISDN V.120**, depending on which ISDN standard your service provider supports. Contact your service provider for more information on which remote ISDN connections are supported.

5.2.3 GPRS properties



Note: These settings are valid only with the Nokia D211 and Nokia D311.

Use GPRS connection – Select this check box if you want to use the profile for sending and receiving packet data.

Specify access point name – Select this check box and type the name of the GPRS access point. You obtain the name from your service provider or network operator. An access point name is needed to establish a connection to a GPRS network.

5.3 IMPORTING AND EXPORTING PROFILES

Tap **Profiles**, then **Import**. Select the folder from which you want to import a profile. Tap **Open**.

To save a profile in a folder, tap **Export**, and select a folder. Tap **Save**.

5.4 REMOVING PROFILES

Tap **Profiles** and then select a profile from the list. Tap **Delete**.

6. SETTINGS SCREEN

You can set properties that are common for all profiles. These settings will remain unchanged even when you switch to using another profile.

1. Tap **Settings**.
2. Configure the settings. See below for a description of available settings (WLAN, security, and SMS settings).
3. For the changes to take effect, tap **Apply**. If you have made changes to the settings but have not yet tapped **Apply** and wish to restore the previous settings, tap **Restore**.

6.1 WLAN SETTINGS

Power saving – Since the card has no direct wire connection of its own, it uses power from the host device. The Nokia C110/C111 is equipped with a power saving option that allows you to control the power consumption of your computer: you can prolong the life of the battery when needed.

If you select the **Enable power saving** check box, the card is fully powered up only when sending or receiving data. The card wakes up from the power saving mode at regular intervals to check if there is any data for it at a WLAN access point, and wakes up immediately when there is any outgoing data.



Note: The speed of communication decreases when the power saving option is used.



Note: The power saving option may not be compatible with access points that are not Wi-Fi (Wireless Fidelity) approved. Do not use power saving with such access points.

Case-sensitive network names – By default, the name of the wireless LAN is case-sensitive. If you do not want the network names to be case-sensitive, clear this check box.

Show status icon – If you select this option, a small status icon will be displayed on the screen of your Windows CE device when the card is inserted. You can also access the user interface by tapping the icon. See “Using the User Interface” for details.

Country – You must always configure the country setting according to the country where you are currently using the Nokia C110/C111. Select the correct country from the list of countries and tap Apply.



Warning: Use only the country setting appropriate for the area where the card is used at the present time. Using the card in any other country not specified, or with an incorrect country setting may be illegal.

The Nokia C110/C111 operates in the license-free frequency band of 2.4 - 2.4835 GHz, but local regulations may limit the use of radio equipment. Therefore, the selection of available channels varies according to the country where the card is used.

6.2 SECURITY SETTINGS

PIN code request – The PIN (Personal Identification Number) code is usually supplied with the SIM card. It protects your SIM card against unauthorized use. If you set the PIN code request on, you are asked for the PIN code when you start the Nokia GPRS/WLAN Card for Windows CE program or insert the card, provided that you have inserted a SIM card into the PC card.

Tap **Change** to change the status.



Note: Some SIM cards do not allow turning off the PIN code request.

If you enter an incorrect PIN code three times in a row, the code is blocked and the SIM card cannot be used. To change a blocked PIN code, you need a PUK (PIN Unblocking Key) code. PUK is an 8-digit code supplied with the SIM card.

Security code – The security code protects your card against unauthorized use, and is supplied with the card. The preset code is 12345. Change the preset code and keep the new code secret and in a safe place separate from your card.

If you key in an incorrect security code five times in succession, the card will not accept the correct code for the next five minutes.

6.2.1 Changing security codes

1. Tap **Settings**, **Security**, then **Change Code**.
2. The **Change Access Code** dialog box opens. Select from the list the access code you want to change.
3. In the **Current code** box, type the code used presently.
4. In the **New code** box, type the new code.



Note: The access codes may only include numbers from 0 to 9. The PIN code length must be at least four and no more than eight digits. The length of the security code is always five digits.

5. In the **Confirm new code** box, type the new code again.
6. Tap **OK** to apply the changes.

6.3 SMS SETTINGS



Note: These settings are valid only with the Nokia D211 and Nokia D311.

Center number – You need the message center number to send text messages. You receive the number from your service provider or network operator.

Sent as – Text messages are normally sent in text format, but it is possible to convert them into an alternative format (e-mail, fax, paging). To be able to receive a converted message, the recipient must have an appropriate device available, and the network must support this feature.

Validity – If the recipient of a message cannot be reached within the set message validity period, the message is removed from the message center. If you select **Maximum**, the validity period is set to the maximum time allowed by the network.

Reply via same message center – Select this check box if you want to request the network to route the reply to your message via your own message center.

Delivery reports – Select this check box if you want to receive delivery reports on the messages you have sent.

7. SMS APPLICATION



Note: The SMS application is only available with the Nokia D211 and Nokia D311.

Make sure you have either a GSM or GPRS connection type selected. You cannot send or receive messages when connected to WLAN.



7.1 CONFIGURING MESSAGE SETTINGS

1. Tap the card icon and select **Manager Window**.
2. Tap **Settings**, then **SMS**.
3. Make the necessary changes. See chapter "6.3. SMS settings" for more information.
4. When you have configured the necessary settings, tap **Apply**.

7.2 SENDING TEXT MESSAGES

1. Open the SMS application and tap **Write**.
2. Write the message in the **Message** field. The character counter above the field shows how many characters you have typed and in how many messages the text will be sent.
3. Type the recipient's phone number in the **To** field or tap **To** and select the recipient from the list of contacts.
4. To send the message, tap **Send**.

7.3 FORWARDING AND REPLYING TO TEXT MESSAGES

1. Tap **Inbox** and select the message which you want to forward or to which you want to reply.
2. Tap **Forward** or **Reply**.
3. Write the message in the **Message** field. The character counter above the field shows how many characters you have typed and in how many messages the text will be sent.
4. When forwarding a message, type the recipients phone number in the **To** field or tap **To** and select the recipient from the list of contacts.
5. To send the message, tap **Send**.

7.4 CREATING AND EDITING CONTACTS

1. Open the SMS application and tap **Contacts**.
2. To create a new contact, tap **New**, and to edit an existing one, tap **Edit**.
3. The Contact Information dialog opens. Type the name and phone number for the contact. Tap **OK**.

