

Using the Nokia N95 with Zed-3 PBXs

Application Note, document 96-90001-01

This document is an application note for connecting the N95 made by Nokia with a Zed-3 SE30P, SE30+, SE150, or SE500 IP PBX. You can configure only one profile on the N95 for any realm. This is a limitation of the Nokia N95 and prohibits you from configuring multiple accounts for the same Zed-3 IP PBX or for different Zed-3 IP PBXs.

1 Assumptions

The connection instructions assume the following information:

1. The access point through which the N95 connects to the network is already configured. (In the examples that follow this is named [Zed-3_CA](#)).
2. The user account used by the N95 is: User name = **1001** and password = **1234**.
3. The IP address of the IP PBX is **192.168.1.101**. It uses port **5060** for SIP.

Follow these instructions but use the account details that have been assigned by the system administrator for your network.

2 Configuring a SIP account on the N95



1. Press the menu button on the N95 and access [Tools | Settings | Connection | SIP Settings](#).
2. Under the SIP Settings screen, press [Options](#), select [New SIP Profile](#), and then select [Use default profile](#). This creates a new profile for you on the phone.
3. All SIP configurations for this account are under the profile menu. The following are the mandatory fields:
 - a. **Profile Name** – This is the name for this profile. For this example, call it [Zed-3_1001](#).
 - b. **Service Profile** – The default value is [IETF](#). You do not need to change this parameter.¹
 - c. **Default Access Point** – This parameter specifies the access point used by the N95 to connect to the network. For this example, we use [Zed-3_CA](#).²
 - d. **Public user name** – This parameter specifies the user name used by the N95 to register with the PBX. The general format this parameter is [sip:<extension number>@<IP address of the PBX>](#). For this example, set this parameter to [sip:1001@192.168.1.101](#).



1. The Nokia 3GPP profile does not work with Zed-3 IP PBXs.
2. You can change this each time you want to connect to the IP network. In this case, the phone has been configured already with a Wi-Fi access point called [Zed-3_CA](#). With a SIP call to the Zed-3 PBX, you can use Wi-Fi, EDGE, or UMTS (HSPD) to hold a conversation.

- e. **Use compression** – The default value is **No**. You do not need to change this parameter.¹
- f. **Registration** – Set this parameter to **Always on**.²
- g. **Use security** – Set this parameter to **No**.³
- h. **Proxy Server** – This screen defines the SIP proxy server. Press the **Select** button when that label is highlighted. For this example, the SE PBX is the SIP proxy server.



- i. **Proxy server address** – This parameter specifies IP address of the SIP proxy server. For this example, enter **sip:192.168.1.101**⁴
 - ii. **Realm** – This parameter specifies the realm parameter in SIP used by the SIP PBX. For any SE PBX, use **ASG Switch**.⁵
 - iii. **User name** – This parameter specifies the user name used for authentication. For this example, enter **1001** as the user name.
 - iv. **Password** – This parameter specifies the password used for authentication. You should use the password that the administrator of your system has assigned for your account on the Zed-3 IP PBX. For this example, use **1234**.
 - v. **Allow loose routing** – Set this parameter to **Yes**.⁶
 - vi. **Transport type** – Set this parameter to **UDP**.
 - vii. **Port** – This parameter specifies the port number used by the PBX for SIP. For this example, enter **5060**.
 - i. **Registrar server** – This screen defines the Registrar proxy server. For this example, the SE PBX is the Registrar proxy server. The values for all the parameters under this screen should be the same as the ones in the **Proxy server**.⁷
4. Select **Back**.

-
1. Zed-3 assumes this applies to speech compression but can find no documentation on this. The phone does G.729 compression when this parameter is set to No.
 2. Although you may be able to make calls without registering, you will not be able to receive calls unless registration is turned on.
 3. Zed-3 cannot determine the effect of this parameter.
 4. You do not need to type sip:. The phone will add this for you.
 5. This is case sensitive and identifies a Zed-3 PBX.
 6. You can restrict access by selecting No, but selecting Yes provides greater flexibility.
 7. Refer to the screen shots for the Proxy Server. There is no method in the Nokia software of automatically filling these fields from the entries made under the Proxy Server.

3 Adding the SIP profile in Internet Calling



1. Press the menu button on the N95 and access [Tools | Settings | Connection | Internet tel.](#)
2. Press the [Options](#) button and select [New profile.](#)
3. Select [sip:1001@192.168.1.101](#) as the SIP URI.
4. Assign a meaningful name for this profile, such as [Zed-3 IP PBX.](#)
5. Select [Back.](#)
6. Then press the End key (the red button) to exit the settings menu.

4 Connecting to the AP

1. Press the menu button on the N95 and access [Tools | Internet tel.](#) The N95 will automatically scan for available access points. For this example, [Zed-3_CA](#) should be detected.
2. Navigate to [Zed-3_CA](#) and press the [Options](#) button.
3. Select [Connect to service](#) to connect to the AP.
4. Press the menu button on the N95 and access [Tools | Settings | Connection | SIP settings.](#) The status text under the [Zed-3_CA](#) profile should display [Registered.](#) This indicates that the N95 has been successfully registered with the SE PBX.



5 Making calls

1. To receive a call, use another SIP phone to call 1001 and verify that the N95 rings.
2. Answer the call using the N95.
3. To make a call, enter an extension number using the keypad on the N95.
4. Press the [Options](#) button and select [Internet call](#) to initiate the call.