



2N OfficeRoute



QUICK GUIDE

version 0.91



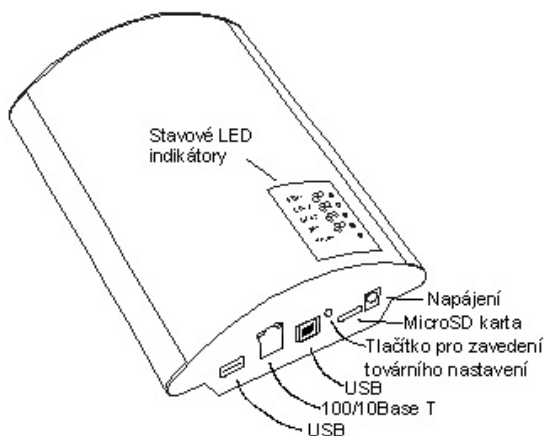
2N OfficeRoute



Basic settings

Connection of OfficeRoute

OfficeRoute has default IP address 10.0.0.1 and mask 255.0.0.0. You can reach OfficeRoute's web interface in case that you assign IP address of your PC from the same range as IP of OfficeRoute.



In case you want to change IP address of OfficeRoute as a first step, you can use supplied USB cable (it is necessary to install USB driver). Run Hyperterminal (or another terminal program enabling serial communication), select COM port assigned to installed USB driver, Set communication speed 921600 bps, flow control:none. When you press Enter, following screen appears:

```
2N OfficeRoute V1.01      Main Menu      2N OfficeRoute

  Option          Value      Description

  1 - Configuration  [ menu ] - General configuration
  2 - Set Admin password - Set administration password
  3 - Help          - Display help for serial
console settings

Enter an option number, <ESC> previous menu
>
```

Select: 1-Configuration, 1-Network settings, you can set IP address, mask and other network settings.

WARNING: Assigned IP address must not be the same as already existing IP address in your network.



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Type IP address of OfficeRoute into your web browser and you'll get login page::



Default login name is **Admin** , no password.

Settings for UMTS router functionality

SIM card settings

Before you insert SIM card into the unit, it is needed to set PIN code (or disable PIN code in your mobile phone). After login go to the section *Administration – Main configuration*, set PIN code of SIM card here.



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Main configuration

- Set timezone
- Synchronize time
- Update firmware
- Upload license
- Configuration backup
- SNMP
- Reboot

Administration

Confirm remove:

SIM card routing:

Enable SIP session progress:

Advanced config of regular expressions:

PIN for SIM cards: 0000

Disable GSM alerting detection:

DSP codec: G729

Default language: en

Max user session time: 3600 (seconds)

Simple login page:

Mobility Extension:

Outgoing ME enabled:

Incoming ME enabled:

Mobility extension SIP route: 10.0.0.1:5061

If PIN code is stored, power-off the unit, mount antenna and insert SIM card(s). Then power unit on. When LED indicators are off, it means that SIMs are logged into to a network. In case that LED indicator shines orange, there's no signal of preferred network or PIN is wrong.

Log into the web interface again. You can see SIM cards details in the section *Telephony services – Devices – SIM cards*.

Devices

- SIP lines
- SIM cards
- DRSA lines

LUK

GSM routing

SIP proxy

SIM cards

Preselect	SIM card number	Operator ID	Operator name	Last USSD message	Description
<input checked="" type="checkbox"/>	0213020030010_00000	00002	IRIDIUM		

Select data SIM card by clicking to the icon with a pencil:



Modify SIM card number "8942020320510485900"

SIM card parameters

Present:	<input checked="" type="checkbox"/>
SIM card number:	<input type="text" value="8942020320510485900"/>
Operator ID:	<input type="text" value="23002"/>
Operator name:	<input type="text" value="EUROTEL - CZ"/>
USSD code for credit:	<input type="text"/>
Last USSD message:	
Last USSD message timestamp:	
Description:	<input type="text"/>

SMS settings

Service Center Number:	<input type="text" value="+420602909909"/>
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GPRS

GPRS provider name:	<input type="text" value="Eurotel"/>
GPRS number:	<input type="text"/>
APN (GPRS access point):	<input type="text" value="internet.eurotel.cz"/>
GPRS initial AT commands:	<input type="text"/>
GPRS username (optional):	<input type="text"/>
GPRS password (optional):	<input type="text"/>

Fill *GPRS provider name* (user defined) and *APN* (you can find this information on a web page of network provider or ask his help line). Sometimes username and password is needed. Don't fill *GPRS number* and *GPRS initial AT commands* (these settings are not needed for most cases).



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Connection to Internet

Save SIM card settings. Switch on connection to Internet in the section *Network – GPRS ON/OFF* by clicking to icon with green handset „GPRS“.

GPRS	
Jméno GPRS providera	APN (přístupový bod GPRS)
Eurotel	internet.eurotel.cz

After cca 30 seconds LED indicator starts blinking by green colour – it usually means that it is connected to the network of operator. From this moment it is connected even you restart the unit or power it off and on again.

For using OfficeRoute as a router for internet connectivity you have to set IP address of OfficeRoute as Default gateway in you PC and IP addresses of DNS servers (displayed in the GPRS window). IP settings can be found in your PC in the section Start – Control panels – Network connections – Local network settings.

OfficeRoute as DHCP server

OfficeRoute may work also as DHCP server. You can set necessary settings in *Network – DHCP server*.

In case that IP of OfficeRoute is 10.0.0.1, then you can use settings from the picture bellow.

The screenshot shows a configuration menu for the DHCP server. On the left is a sidebar with options: Main configuration, Filtering, Port mapping, DHCP server (highlighted), DNS proxy, VRRP, and GPRS ON/OFF. The main area is titled 'Modify configuration' and contains the following settings:

DHCP server enabled:	<input checked="" type="checkbox"/>
Lease time:	300
Start address:	10.0.0.2
End address:	10.0.0.100
Subnet option:	255.255.255.0
Router option:	10.0.0.1
Primary DNS option:	
Secondary DNS option:	
Domain option:	

Then IP addresses 10.0.0.2-10.0.0.100 are assigned to devices in your LAN. Also it is necessary to switch on DNS proxy in the menu *Network – DNS proxy* – tick *Enable DNS proxy*.



Settings for SIP IP PBX functionality – how to add a new account and call to GSM/UMTS

User settings

User management>Users>Add user: Adding of a new user/extension

User name: SIP authentication name for SIP extension.

New password: SIP authentication password.

Rights/Rights denied: Select rights or left empty – rights are assigned by group selection except SMS rights.

Line number: Line number is UID (number of extension/SIP name)

Mobility extension: Number of mobile phone which receives dual ringing with SIP extension. It is possible to transfer call from mobile phone. In case you need to set Mobility Extension for this user, tick Outgoing/Incoming ME checkbox and fill his mobile phone number.

Voicemail: 2N OfficeRoute is equipped by internal voicemail. Each user can have own voicemail box (licensed). Set PIN for entering user's voicemail and set



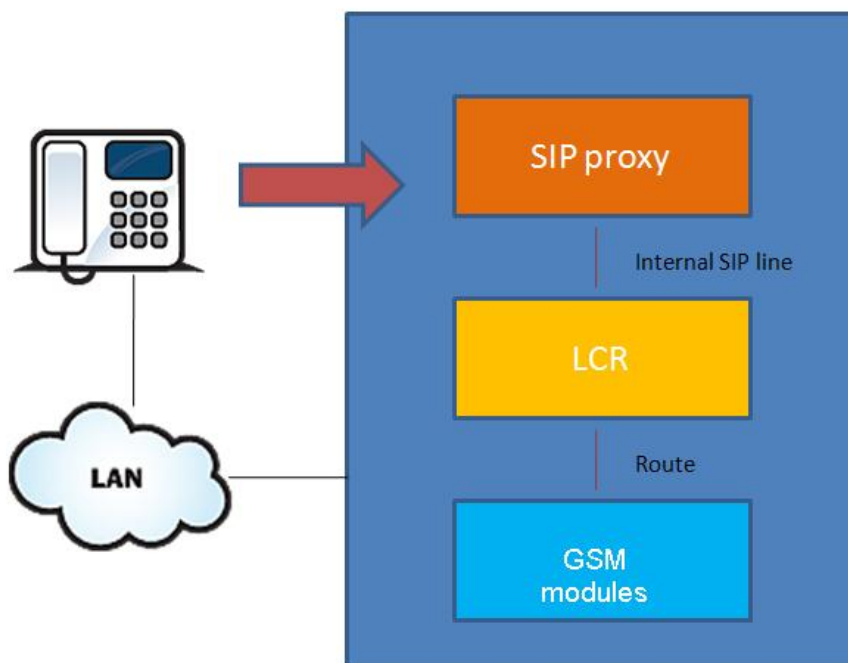
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his mobile phone number for receiving notification SMSes.

Internal SIP line

Internal SIP line connects SIP proxy to LCR. You can imagine it as such gateway to LCR – see picture bellow.



User *vbegw* is predefined as default user for internal SIP line with password '1234'. Modify internal SIP line (Telephony services>Devices>SIP lines) following way:



Modify SIP line ID "16"

SIP server address:	<input type="text" value="10.0.0.10"/>
SIP name:	<input type="text"/>
Display name:	<input type="text"/>
Listen port:	<input type="text" value="5061"/>
User name:	<input type="text" value="vbegw"/>
Password:	<input type="password" value="vbegw"/>
Codecs:	<div style="border: 1px solid #ccc; padding: 2px;"><p>G.729 8000 bps</p><p>G.711 A Law 64000 bps</p><p>G.711 u Law 64000 bps</p></div>
Add Phone context to REGISTER request:	<input type="text"/>
Register expires (seconds):	<input type="text" value="60"/>
Register with proxy:	<input type="checkbox"/>
Enable CLIP:	<input checked="" type="checkbox"/>
Allow only one call:	<input type="checkbox"/>

Where ,SIP server address' is IP adres sof OfficeRoute.

Set route

Telephony services>LCR>Routes – List of existing routes and adding and removing routes. A *Route* means outgoing trunk (bundle of SIMs, modules, SIP lines or DISA lines).

The screenshot shows the 'Add route' form in the 2N OfficeRoute software. The form is titled 'Add route' and is set against a dark background. On the left side, there is a sidebar menu with the following items: 'Devices', 'LCR', 'Time intervals', 'Normalization', 'Tariffication', 'Blacklist', 'Routes', 'LCR test', 'GSM routing', and 'SIP proxy'. The 'LCR' item is highlighted. The main form area contains the following fields: 'Route name:' with a text input field containing 'Mobile Networks'; 'Lines of route:' with a list box containing 'GSM module - 1', 'GSM module - 2', 'GSM module - 3', and 'GSM module - 4'; 'Time intervals:' with a list box containing 'weekdays', 'weekend', and 'workdays'; 'CLIP/CLIR:' with a dropdown menu set to 'Default'; and 'Description:' with an empty text input field.

Fig. 1 – 'Add route' form

There is a route named 'Mobile Networks' on the picture which contains all modules, it is being used during all defined time intervals without suppressing CLI (CLI can be suppressed for mobile networks only).

Set LCR

LCR rule – Routing of call is based on the called number. LCR rule basically defines to which Route dialed numbers are routed (according prefix).



Add LCR table item

Devices

- LCR
 - Time intervals
 - Normalization
 - Tariffication
 - Blacklist
 - Routes
 - LCR test
- GSM routing
- SIP proxy

Enabled:

Destination name:

Prefix 1:

Prefix 2:

Description:

Route name:

Priority type 1:

Priority type 2:

Priority type 3:

Priority type 4:

Description:

There is an example of a LCR rule. Destination name is user defined, the rule is applied to called numbers with prefixes 6 or 7, call is routed to the route ' Mobile networks' with unknown priority. Priority can be according free minutes, first free or cycle (for free minutes and cycle a tariff must be defined for each line of the route).

LCR test – you can test routing rules after setting all routing rules and routes. For routing test SIM cards must be placed in the unit in order to have test fully functional.