iSoftPhone 1.3 and

Swyx IP PABX

Compatibility Tests

Ver. 1.1 (2007-08-30)

Content

1. Introduction

These Application Notes describe the configuration steps for using the iSoftPhone 1.3 with Swyx PABX. General administration information can be found in the product documentation. Products WEB sites:

- iSoftPhone – http://www.call4mac.com
- SwyxWare – http://swyx.com

2. Configuration

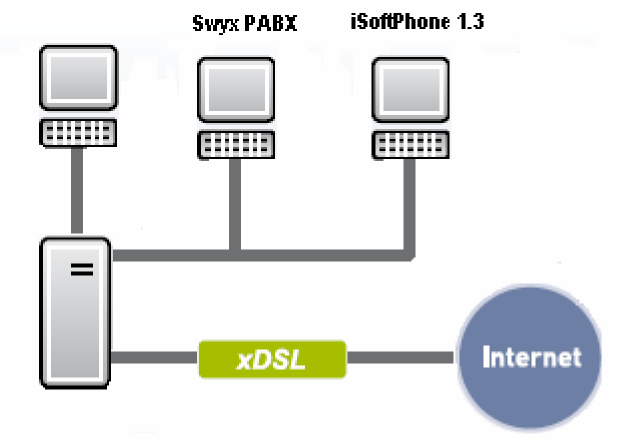
Two PC's:

- Swyx PABX host
- iSoftPhone 1.3 host

are connected to the same local network.

iSoftPhone 1.3 running on Apple operating system is configured to register as internal subscriber on the Swyx PABX.

The configuration used in the test is shown at the picture below.



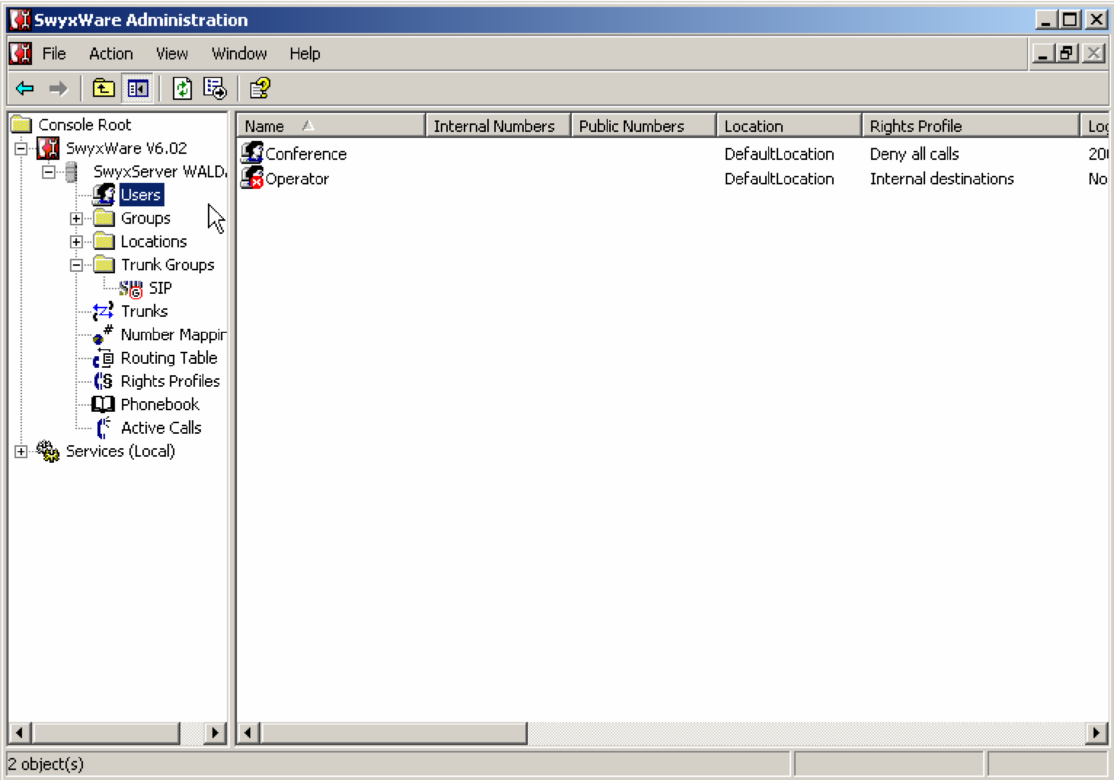
3. Equipment and Software

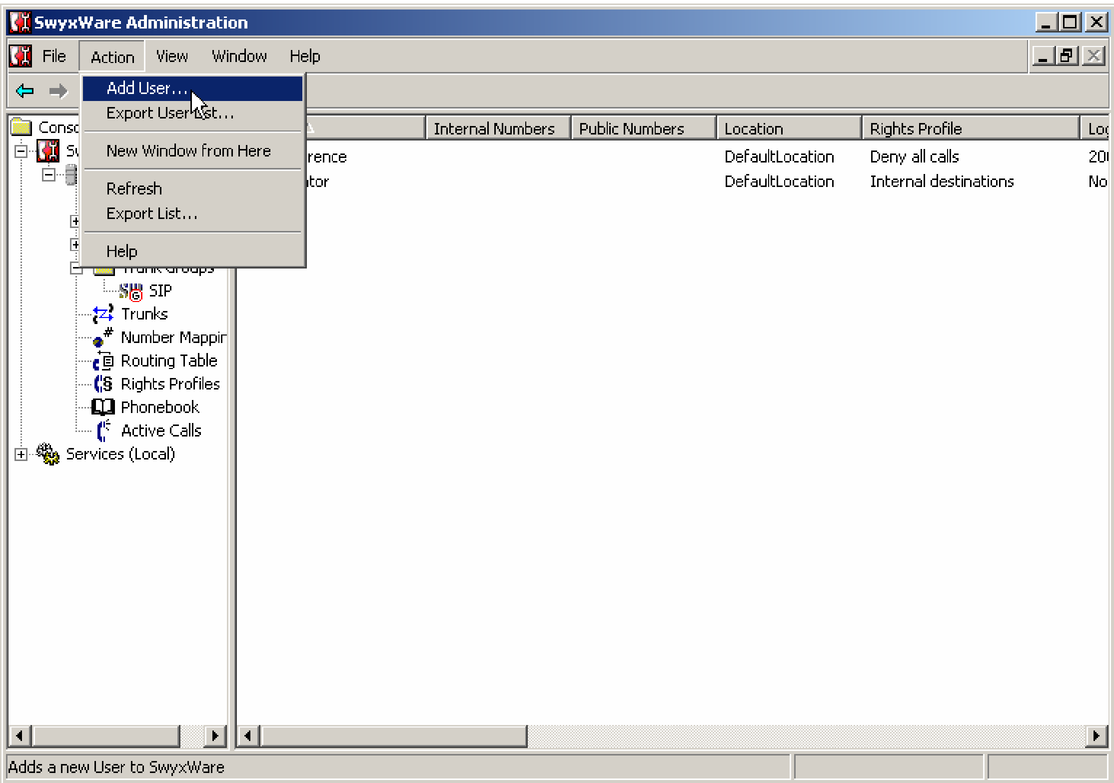
The following equipment and software were used in the configuration.

EQUIPMENT	SOFTWARE
SwyxWare Demo	6.02
Swyx Server PC	Win XP Pro SP2
iSoftPhone	1.3
Apple Macintosh	MacOS X 10.4.9

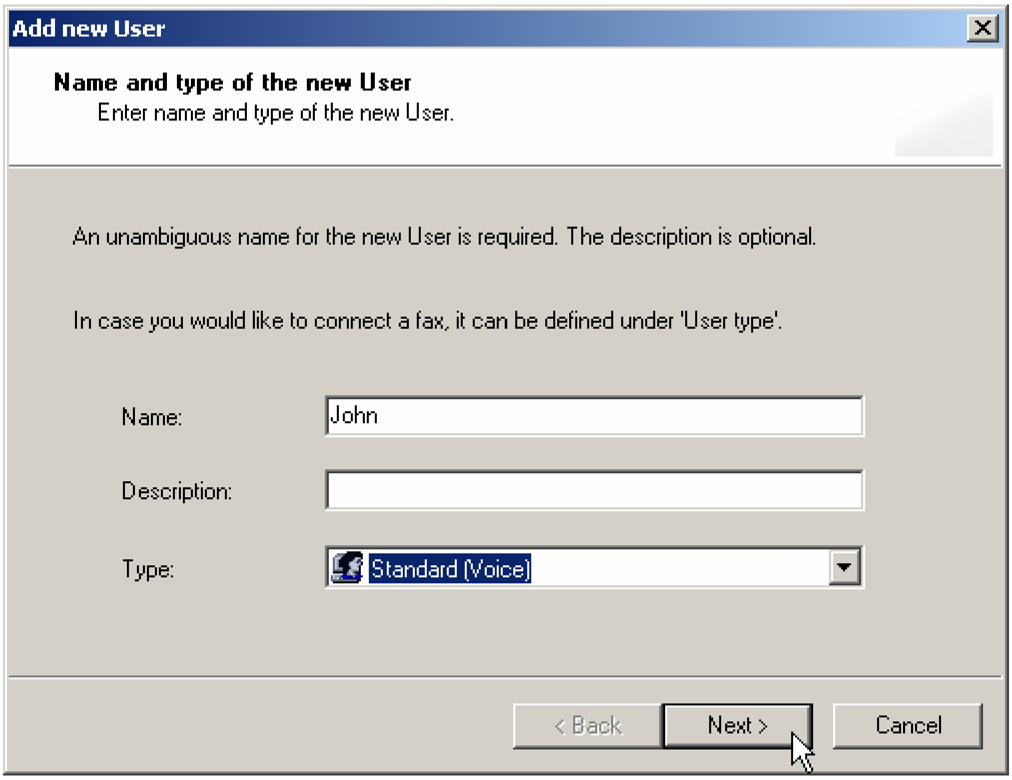
4. Creating a new internal VoIP subscriber in the SwyxWare Administration

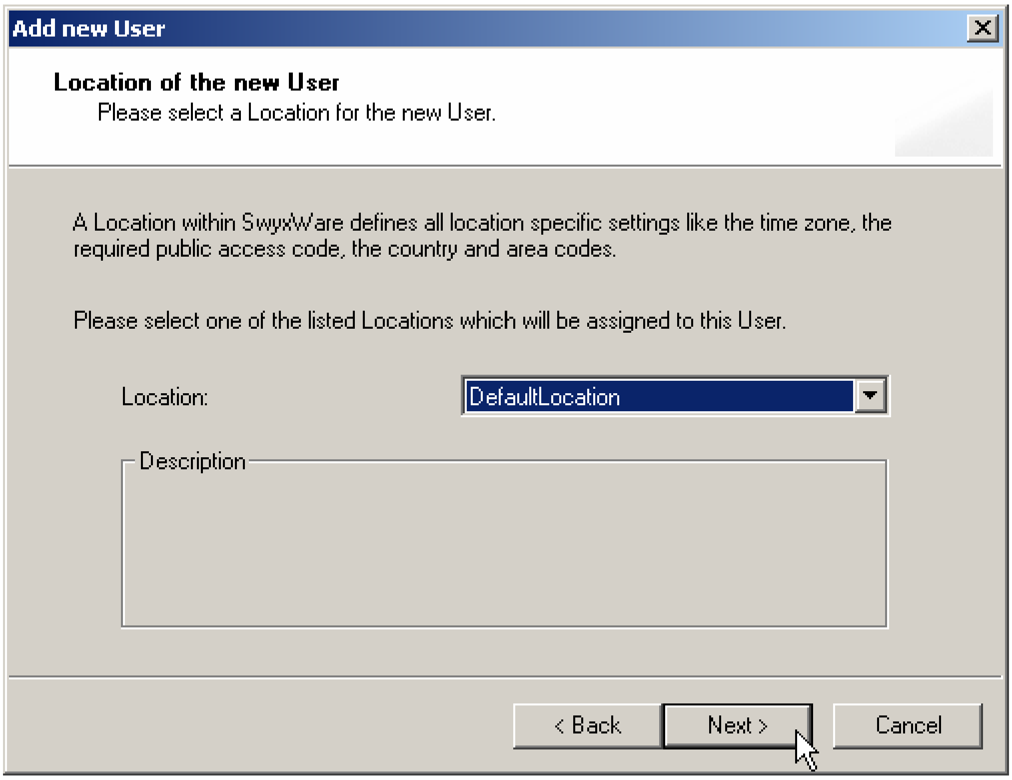
To add a new internal subscriber in the SwyxWare Administration please open the “Users” tab and select “Add user...” from “Action” menu.

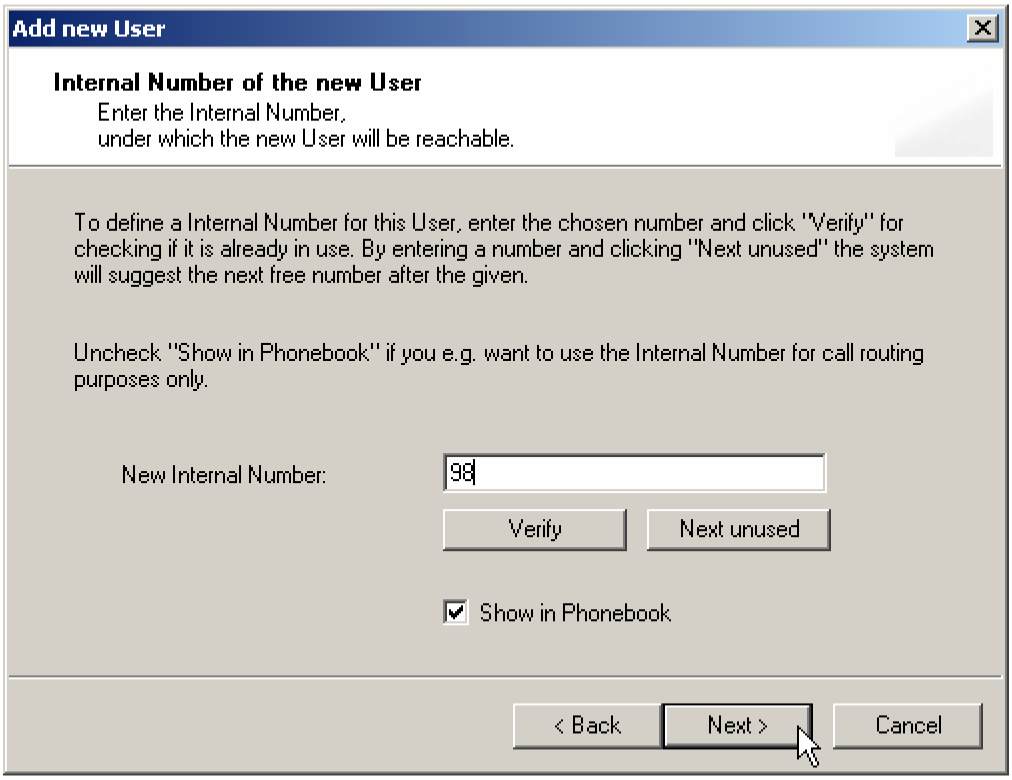

SwyxWare Administration
File
Action
View
Window
Help
Console Root
SwyxWare V6.02
Users
Groups
Locations
Trunk Groups
SIP
Trunks
Routing Table
Rights Profiles
Phonebook
Active Calls
Services (Local)
Name
Internal Numbers
Public Numbers
Location
Rights Profile
Conference
DefaultLocation
Deny all calls
Operator
DefaultLocation
Internal destinations
2 object(s)

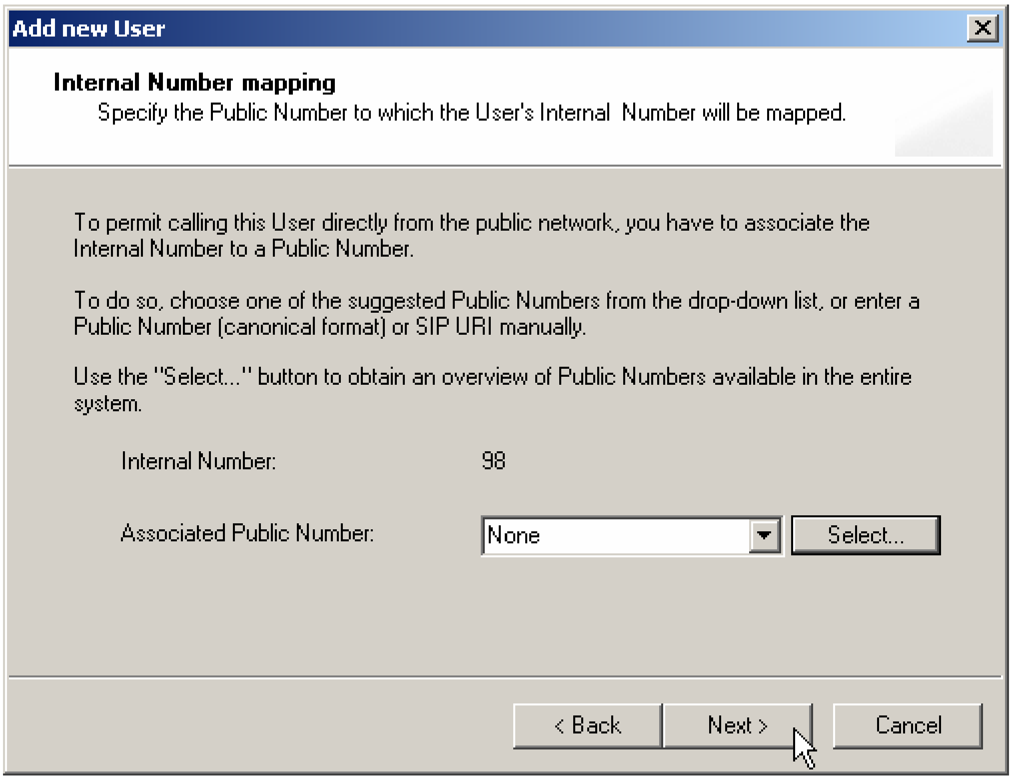

SwyxWare Administration
File
Action
View
Window
Help
Add User...
New Window from Here
Refresh
Export List...
Help
Internal Numbers
Public Numbers
Location
Rights Profile
DefaultLocation
Deny all calls
DefaultLocation
Internal destinations
SIP
Trunks
Routing Table
Rights Profiles
Phonebook
Active Calls
Services (Local)
Adds a new User to SwyxWare

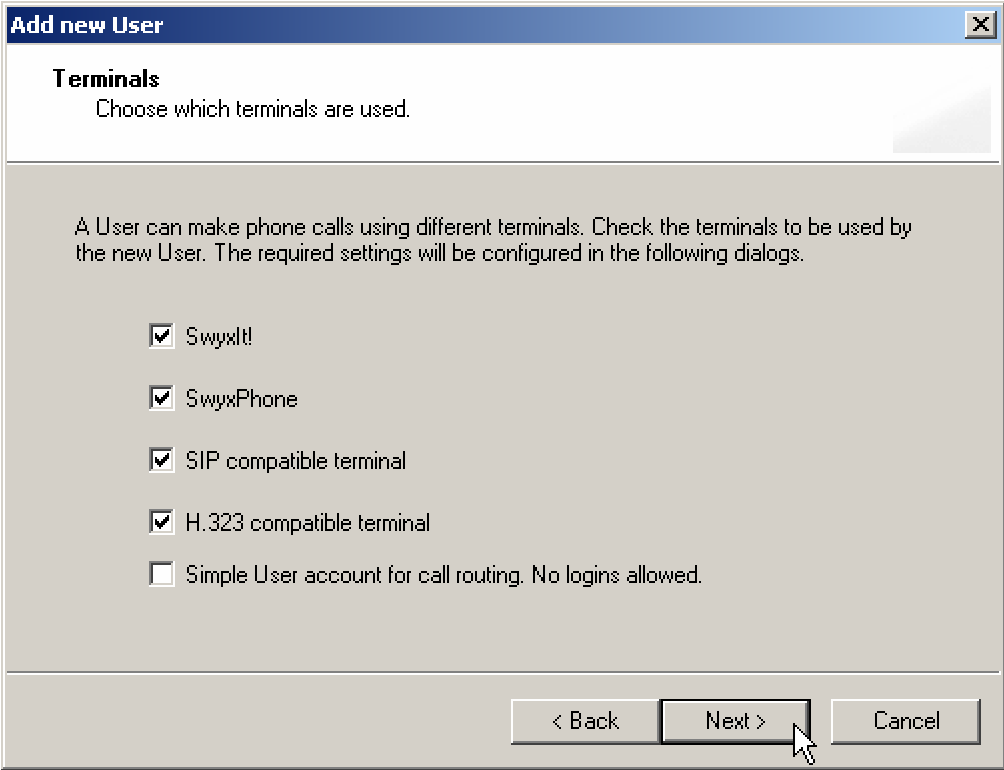
In the new window follow the steps shown in the pictures below.

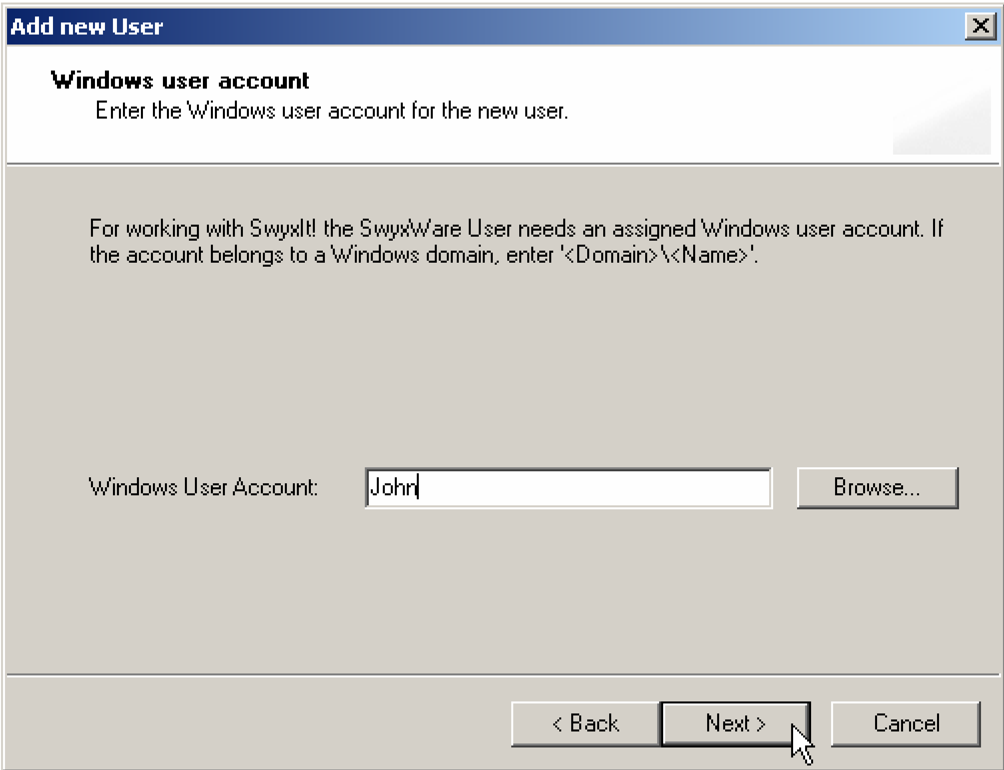


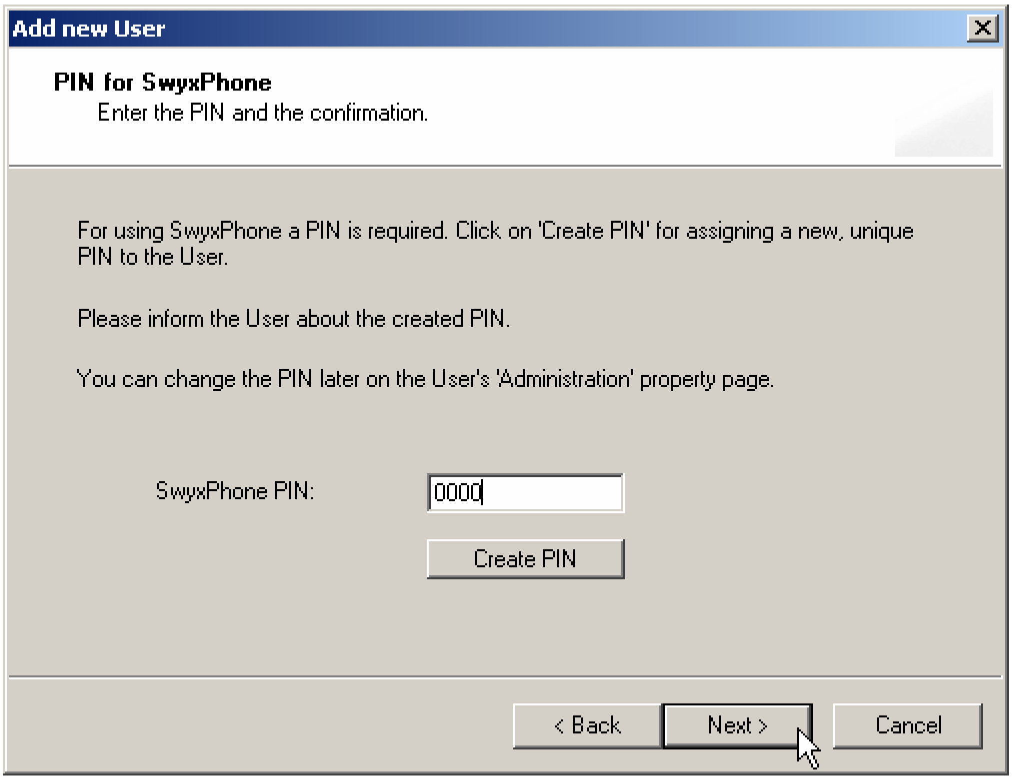


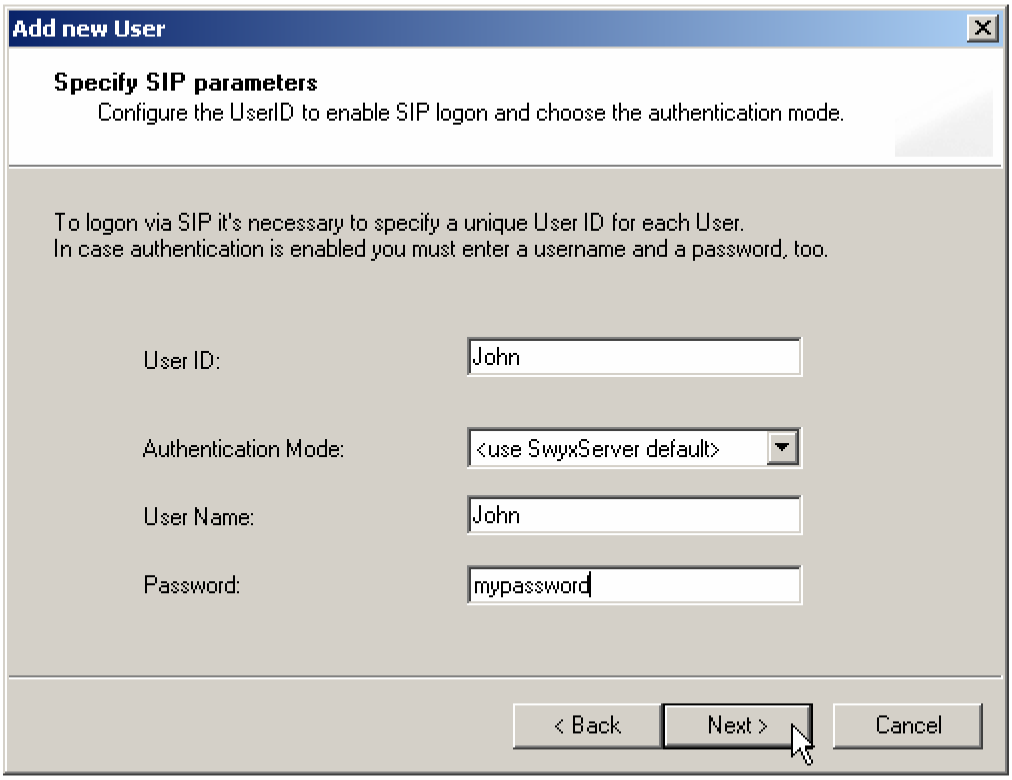

Add new User
Internal Number of the new User
Enter the Internal Number,
under which the new User will be reachable.
To define a Internal Number for this User, enter the chosen number and click "Verify" for checking if it is already in use. By entering a number and clicking "Next unused" the system will suggest the next free number after the given.
Uncheck "Show in Phonebook" if you e.g. want to use the Internal Number for call routing purposes only.
New Internal Number:
98
Verify
Next unused
Show in Phonebook
< Back
Next >
Cancel


Add new User
Internal Number mapping
Specify the Public Number to which the User's Internal Number will be mapped.
To permit calling this User directly from the public network, you have to associate the Internal Number to a Public Number.
To do so, choose one of the suggested Public Numbers from the drop-down list, or enter a Public Number (canonical format) or SIP URI manually.
Use the "Select..." button to obtain an overview of Public Numbers available in the entire system.
Internal Number:
98
Associated Public Number:
None
Select...
< Back
Next >
Cancel

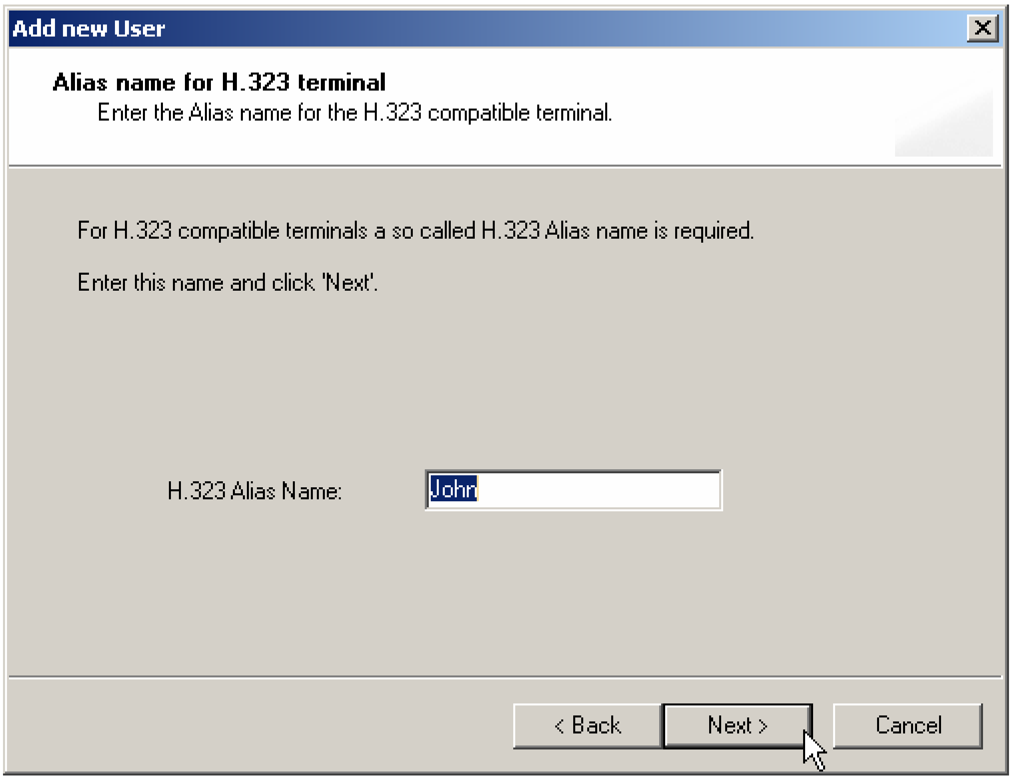

Add new User
Terminals
Choose which terminals are used.
A User can make phone calls using different terminals. Check the terminals to be used by the new User. The required settings will be configured in the following dialogs.
SwyxIt!
SwyxPhone
SIP compatible terminal
H.323 compatible terminal
Simple User account for call routing. No logins allowed.
< Back
Next >
Cancel

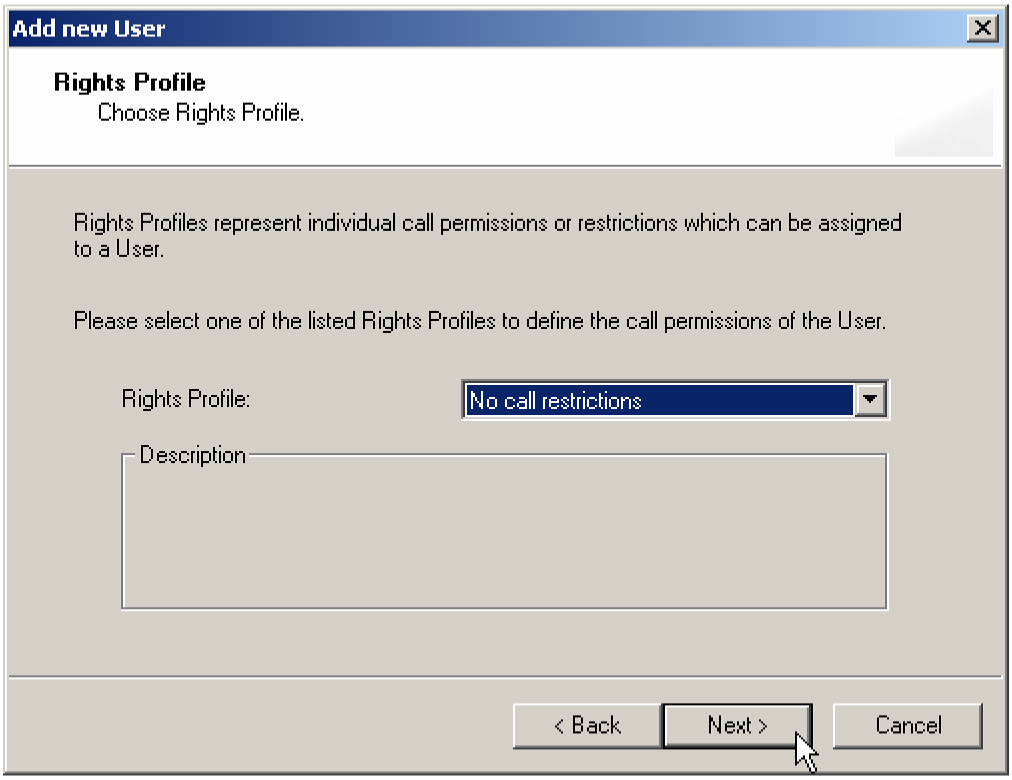

Add new User
Windows user account
Enter the Windows user account for the new user.
For working with SwyxIt! the SwyxWare User needs an assigned Windows user account. If the account belongs to a Windows domain, enter '<Domain>\<Name>'.
Windows User Account:
John
Browse...
< Back
Next >
Cancel

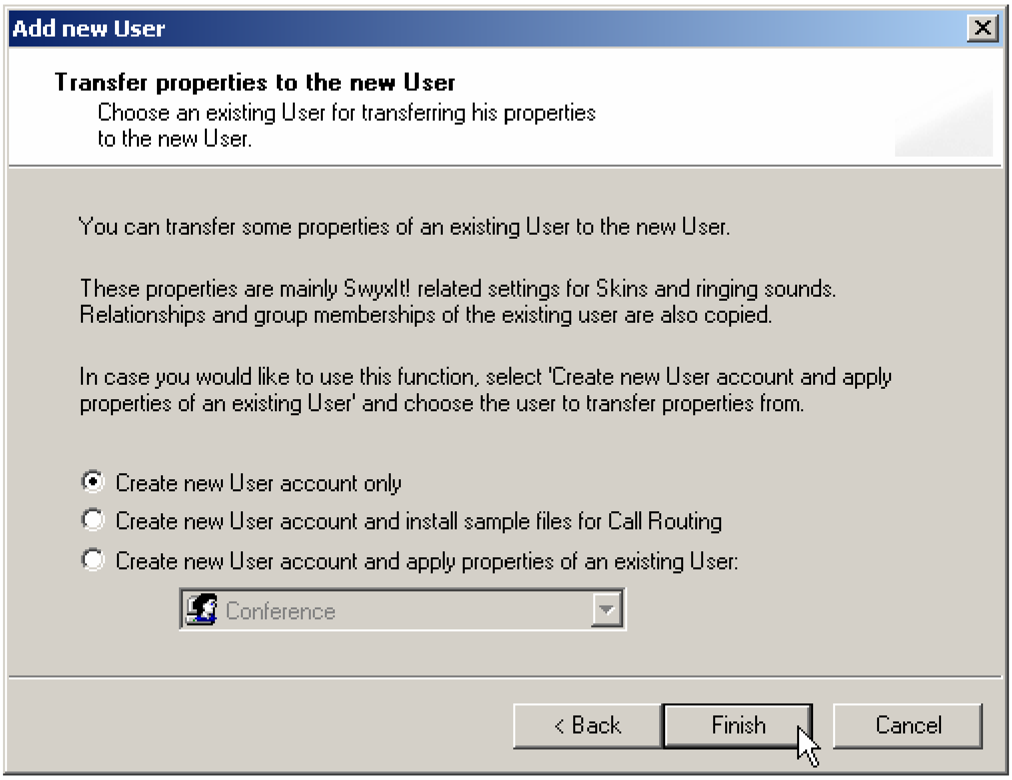




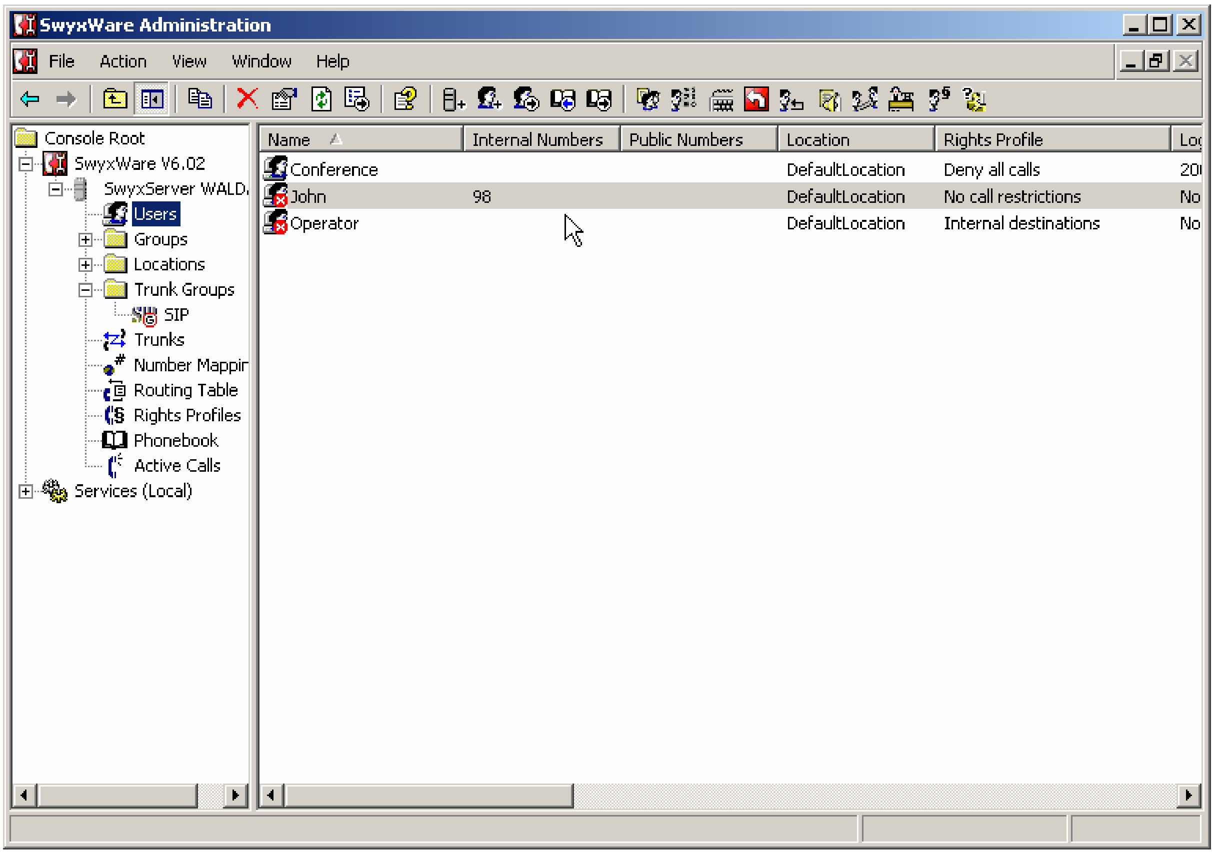
'User Name' and 'User ID' should be the same to avoid registration (logon) problems.


Add new User
Alias name for H.323 terminal
Enter the Alias name for the H.323 compatible terminal.
For H.323 compatible terminals a so called H.323 Alias name is required.
Enter this name and click 'Next'.
H.323 Alias Name:
John
< Back
Next >
Cancel


Add new User
Rights Profile
Choose Rights Profile.
Rights Profiles represent individual call permissions or restrictions which can be assigned to a User.
Please select one of the listed Rights Profiles to define the call permissions of the User.
Rights Profile:
No call restrictions
Description
< Back
Next >
Cancel


Add new User
Transfer properties to the new User
Choose an existing User for transferring his properties to the new User.
You can transfer some properties of an existing User to the new User.
These properties are mainly SwyxIt! related settings for Skins and ringing sounds. Relationships and group memberships of the existing user are also copied.
In case you would like to use this function, select 'Create new User account and apply properties of an existing User' and choose the user to transfer properties from.
Create new User account only
Create new User account and install sample files for Call Routing
Create new User account and apply properties of an existing User:
Conference
< Back
Finish
Cancel

When you click "Finish", new user (John, internal number 98) appears in the "Users" tab.

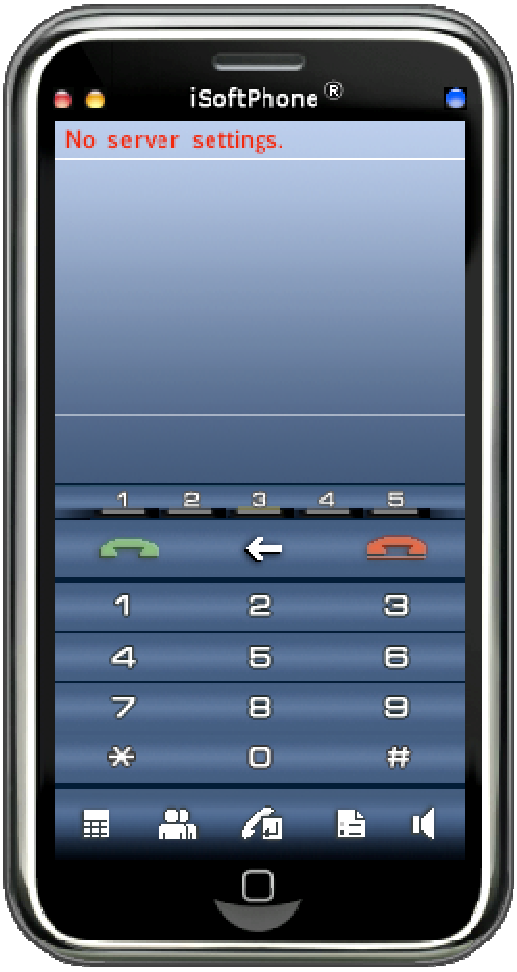


5. Configuration on iSoftPhone 1.3

Once iSoftPhone 1.3 is installed then SIP server settings must be configured.

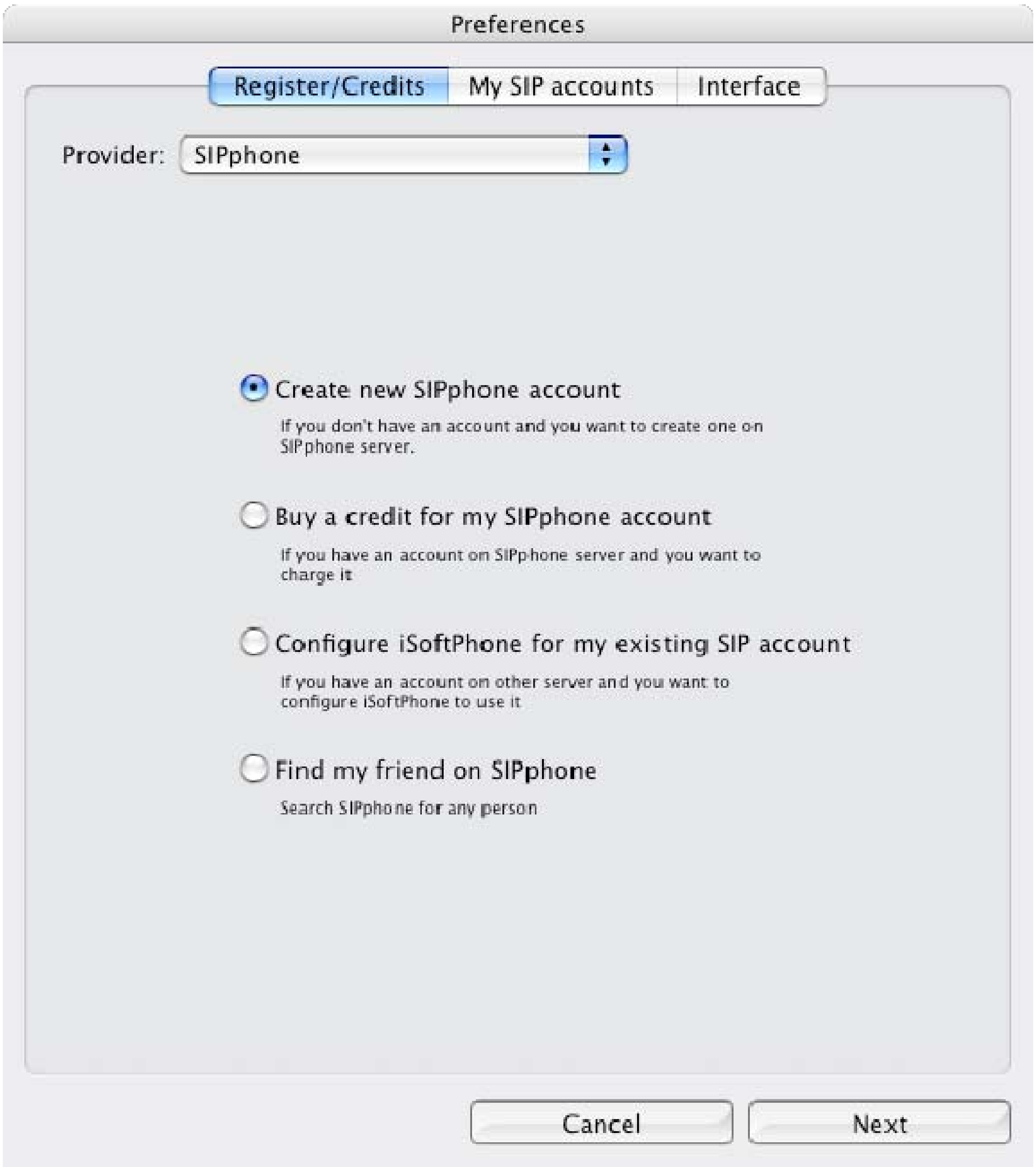
5.1 Configuring SIP server account

To configure SIP server account please press the icon  from the bottom toolbar of iSoftPhone.



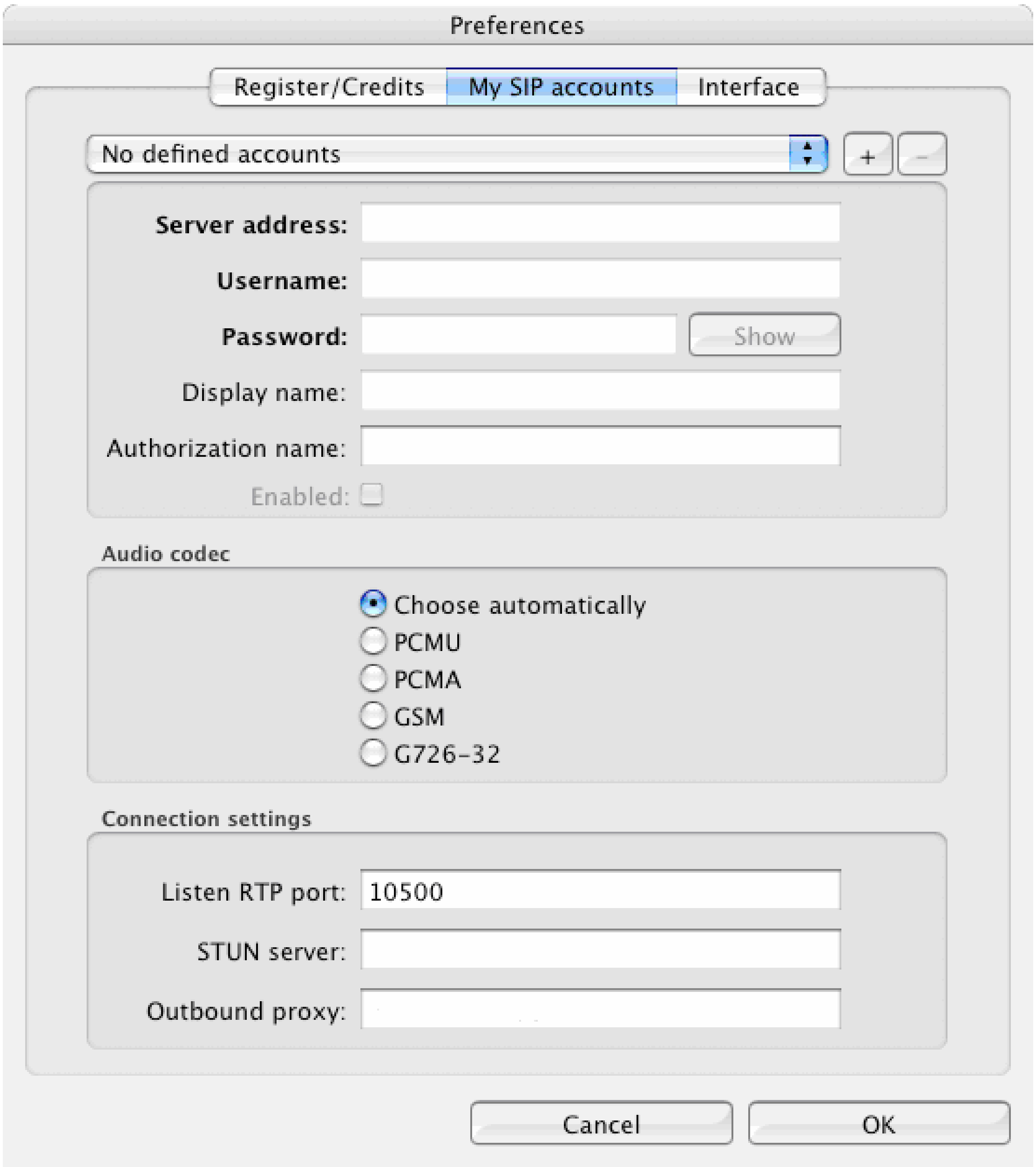
5.2 Preferences “Register/Credits”

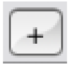
In the new appeared “Preferences” window please select “My SIP accounts” tab.

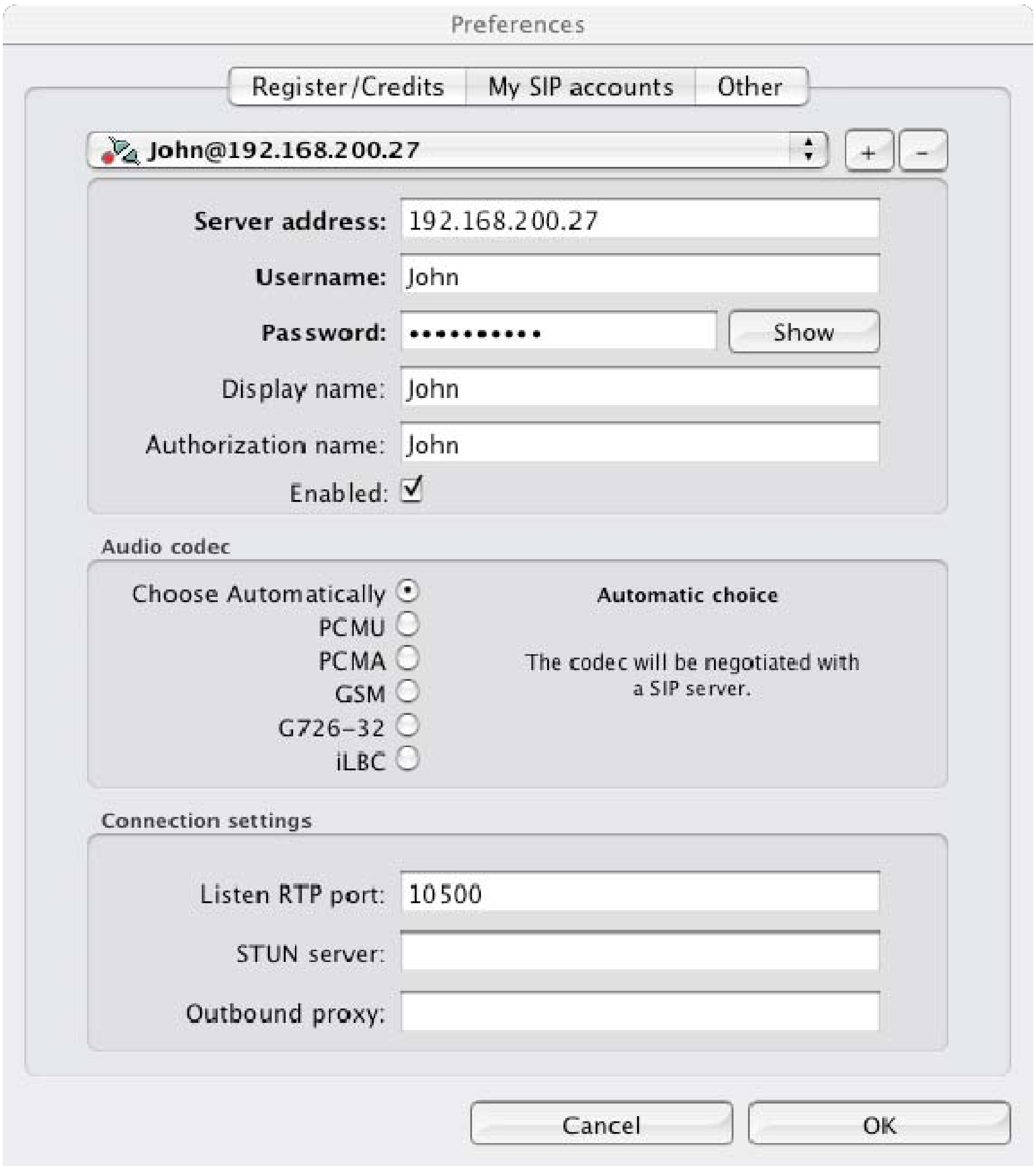


5.3 Preferences "My SIP accounts"

The empty "My SIP accounts" tab was shown below.



To configure SIP account that was created on elmeg ICT PABX please press the icon  and fill up parameters as was shown below.

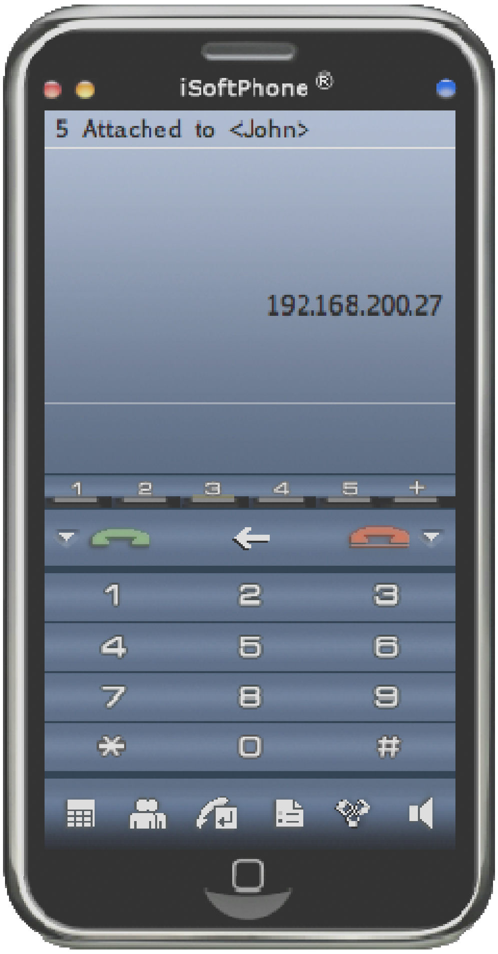


After all please confirm settings by pressing “OK” button.

5.4 Registration on SIP server account

Once SIP account settings were configured then iSoftPhone will try to connect and register on Swyx PABX. The process was shown below.

When all parameters were configured properly and iSoftPhone successfully registered on Swyx then application window will look as shown below.

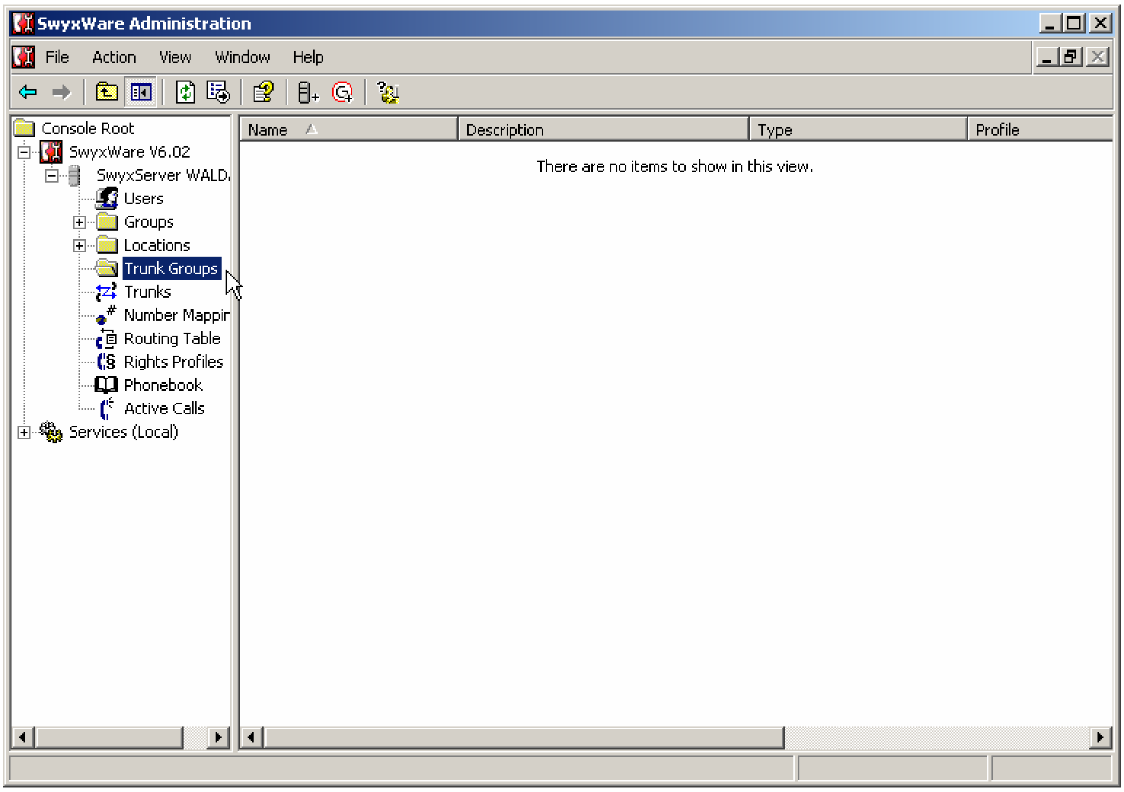


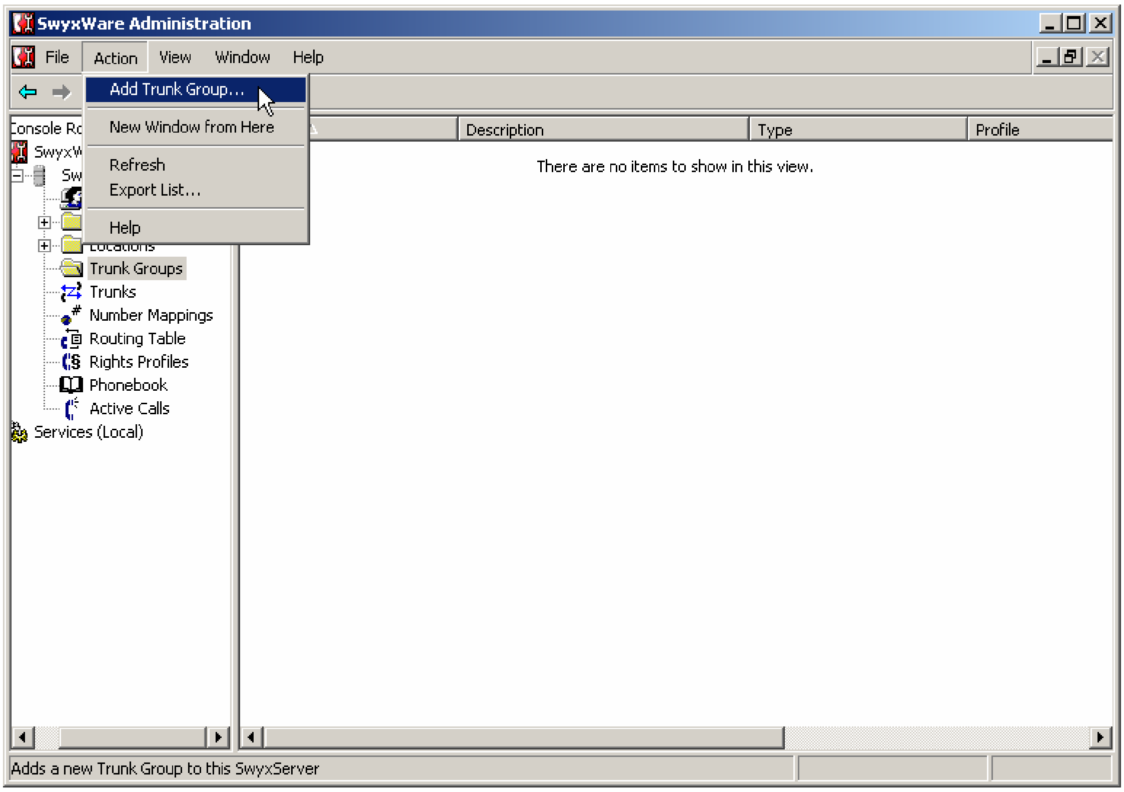
Congratulations! You have successfully configured iSoftPhone with Swyx PABX.

6. Configuration of the SIP account at SIP Provider (for external calls)

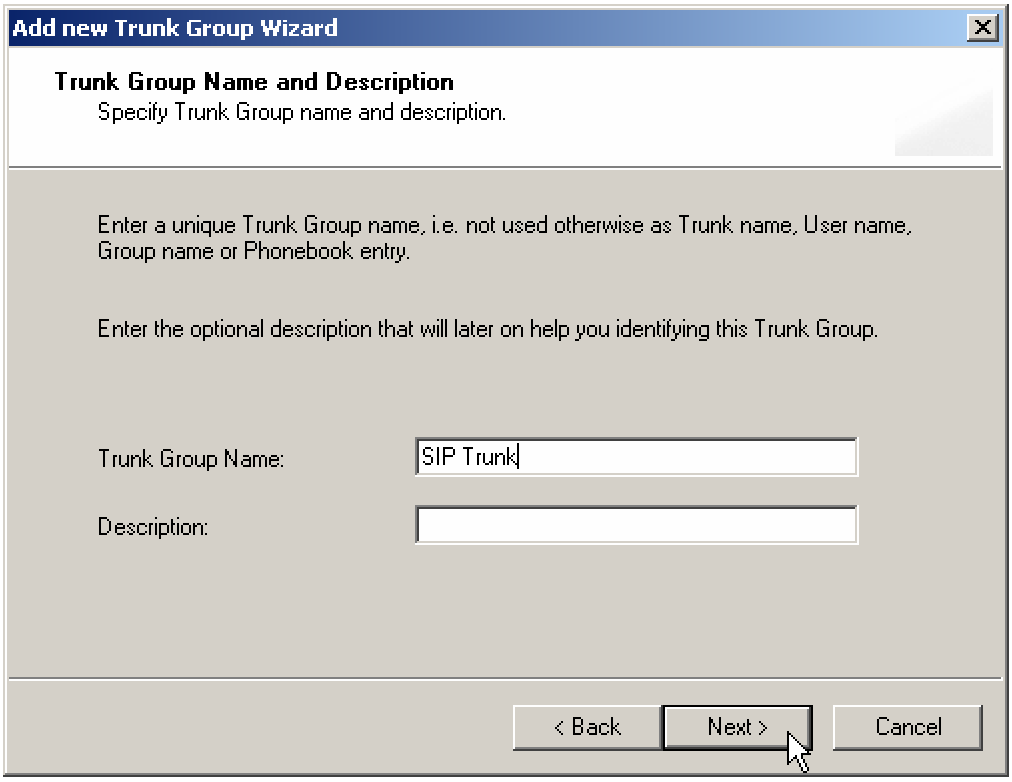
6.1 Creating a new SIP Trunk group

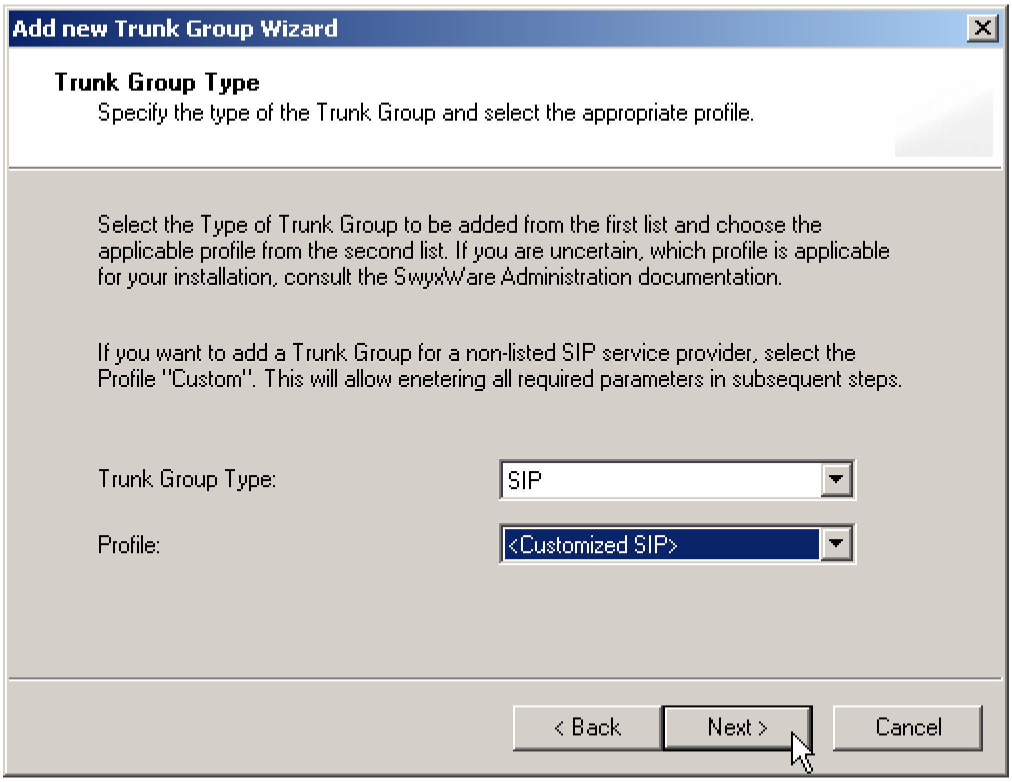
To add a new Trunk group in the SwyxWare Administration please open the "Trunk Groups" tab and select "Add Trunk Group..." from "Action" menu.


SwyxWare Administration
File
Action
View
Window
Help
Console Root
SwyxWare V6.02
Users
Groups
Locations
Trunk Groups
Trunks
Routing Table
Rights Profiles
Phonebook
Active Calls
Services (Local)
Name
Description
Type
Profile
There are no items to show in this view.

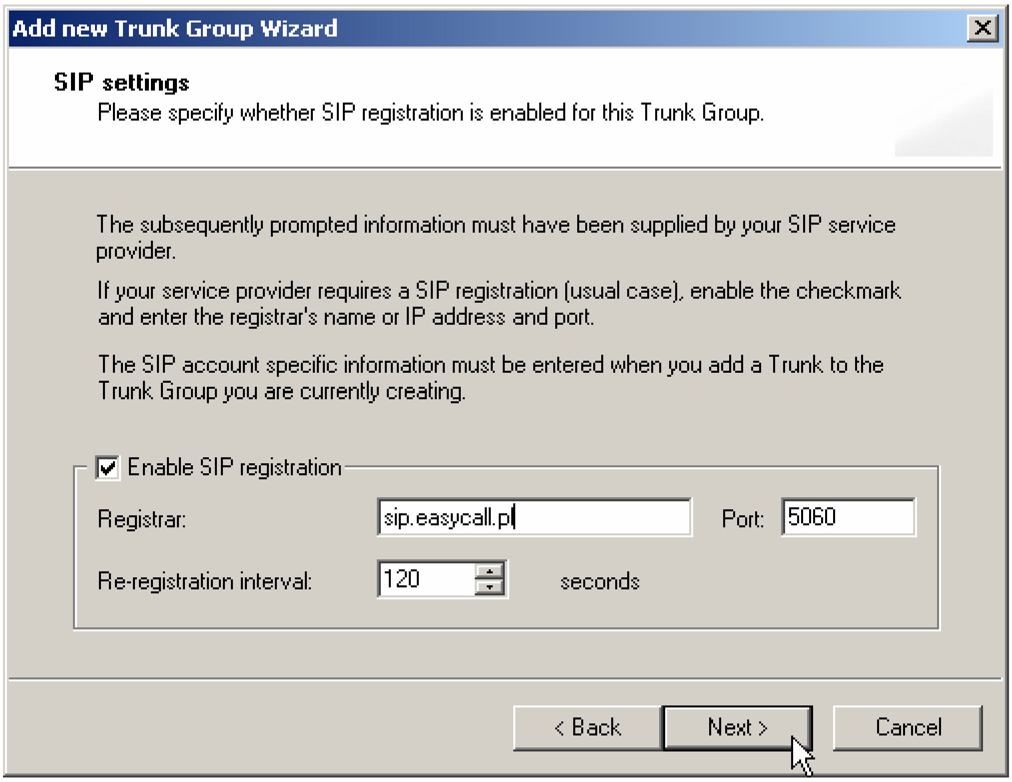

SwyxWare Administration
File
Action
View
Window
Help
Add Trunk Group...
New Window from Here
Refresh
Export List...
Help
Trunk Groups
Trunks
Number Mappings
Routing Table
Rights Profiles
Phonebook
Active Calls
Services (Local)
Description
Type
Profile
There are no items to show in this view.
Adds a new Trunk Group to this SwyxServer

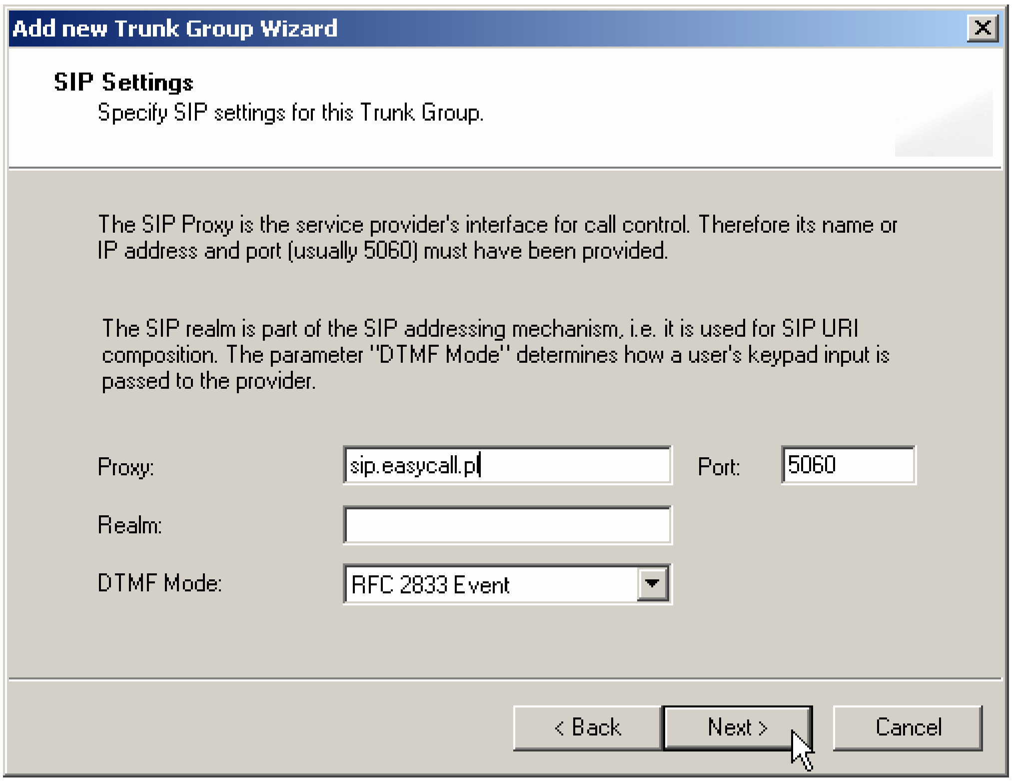
In the new window follow the steps shown in the pictures below.

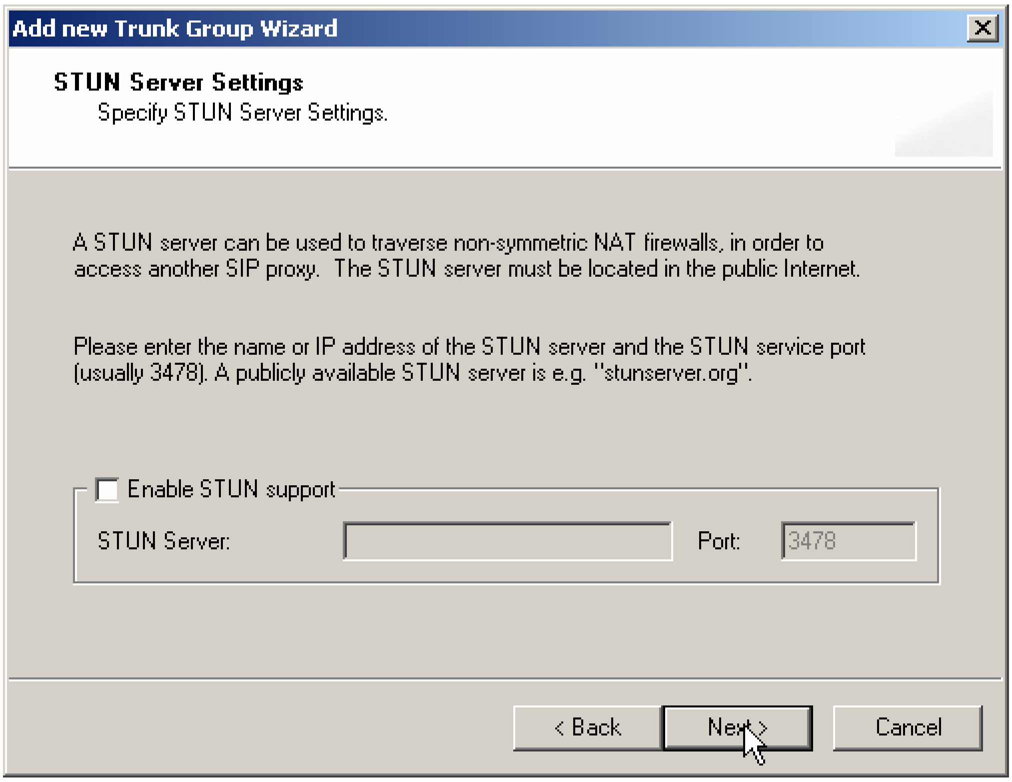


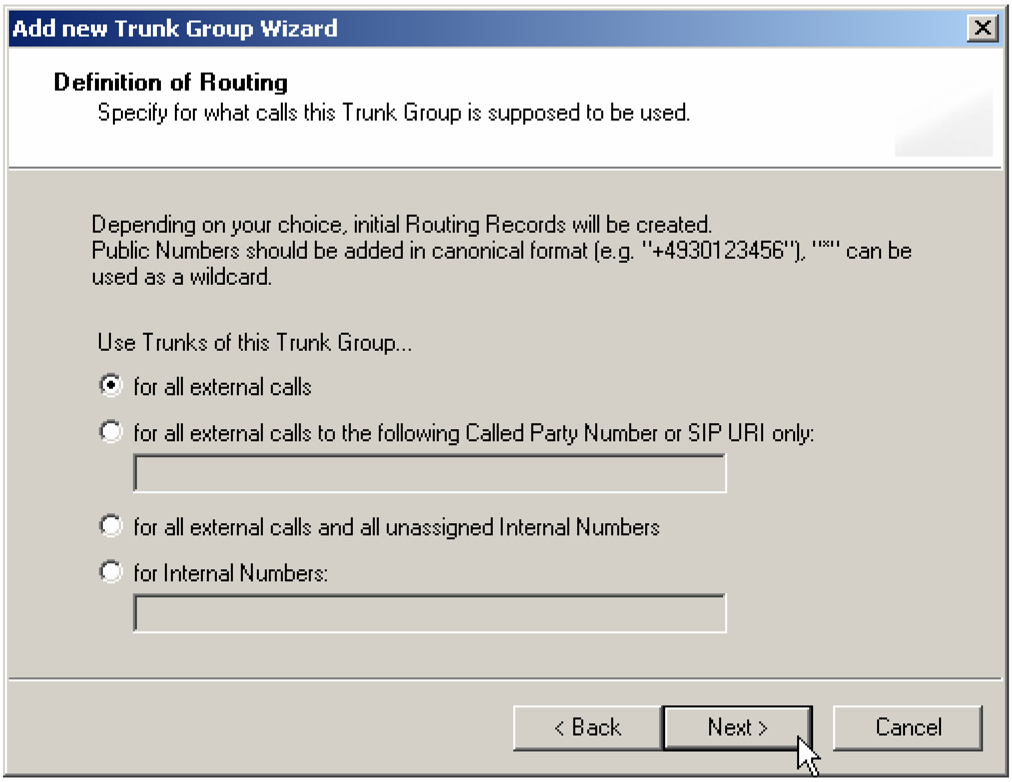


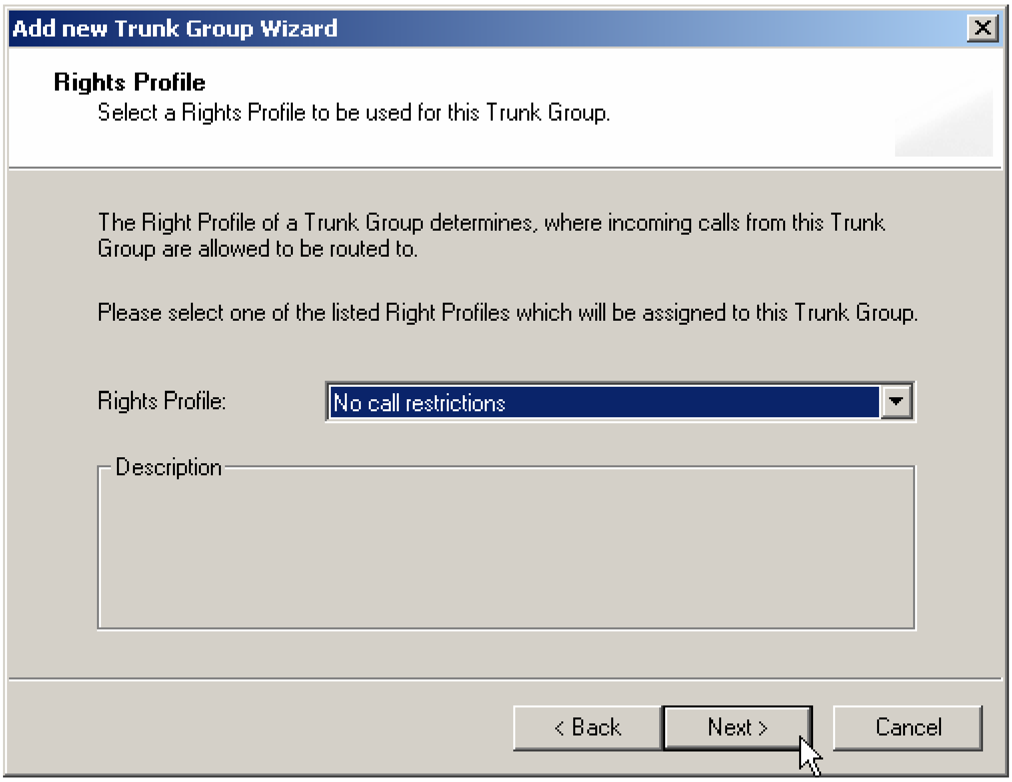
You can choose predefined SIP Provider from the list or create your own.

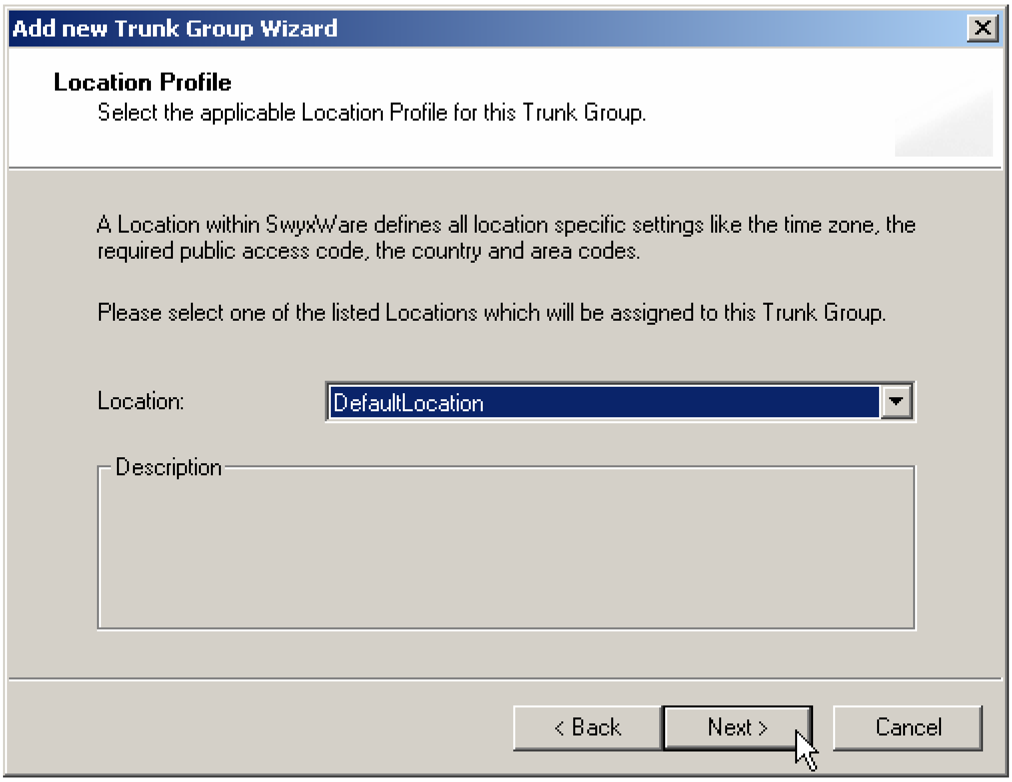



Add new Trunk Group Wizard
SIP Settings
Specify SIP settings for this Trunk Group.
The SIP Proxy is the service provider's interface for call control. Therefore its name or IP address and port (usually 5060) must have been provided.
The SIP realm is part of the SIP addressing mechanism, i.e. it is used for SIP URI composition. The parameter "DTMF Mode" determines how a user's keypad input is passed to the provider.
Proxy:
sip.easycall.pl
Port:
5060
Realm:
DTMF Mode:
RFC 2833 Event
< Back
Next >
Cancel


Add new Trunk Group Wizard
STUN Server Settings
Specify STUN Server Settings.
A STUN server can be used to traverse non-symmetric NAT firewalls, in order to access another SIP proxy. The STUN server must be located in the public Internet.
Please enter the name or IP address of the STUN server and the STUN service port (usually 3478). A publicly available STUN server is e.g. "stunserver.org".
Enable STUN support
STUN Server:
Port:
3478
< Back
Next >
Cancel

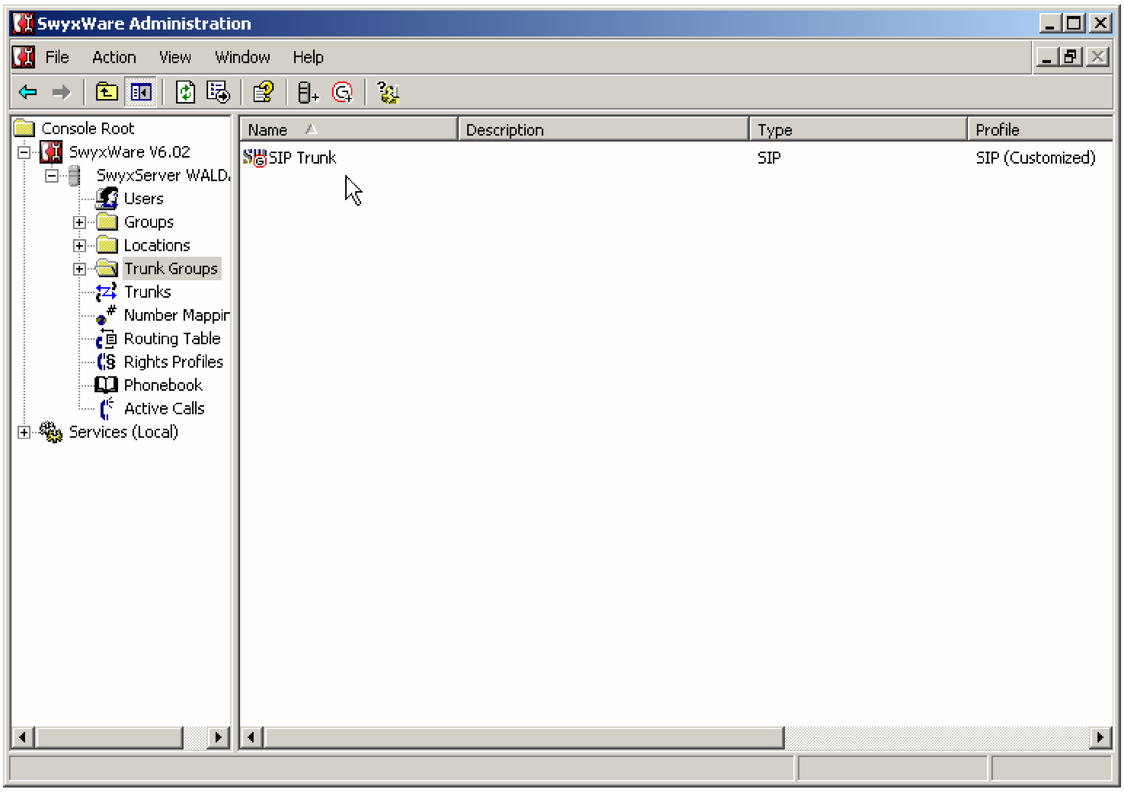

Add new Trunk Group Wizard
Definition of Routing
Specify for what calls this Trunk Group is supposed to be used.
Depending on your choice, initial Routing Records will be created.
Public Numbers should be added in canonical format (e.g. "+4930123456"), "*" can be used as a wildcard.
Use Trunks of this Trunk Group...
for all external calls
for all external calls to the following Called Party Number or SIP URI only:
for all external calls and all unassigned Internal Numbers
for Internal Numbers:
< Back
Next >
Cancel


Add new Trunk Group Wizard
Rights Profile
Select a Rights Profile to be used for this Trunk Group.
The Right Profile of a Trunk Group determines, where incoming calls from this Trunk Group are allowed to be routed to.
Please select one of the listed Right Profiles which will be assigned to this Trunk Group.
Rights Profile:
No call restrictions
Description
< Back
Next >
Cancel


Add new Trunk Group Wizard
Location Profile
Select the applicable Location Profile for this Trunk Group.
A Location within SwyxWare defines all location specific settings like the time zone, the required public access code, the country and area codes.
Please select one of the listed Locations which will be assigned to this Trunk Group.
Location:
DefaultLocation
Description
< Back
Next >
Cancel

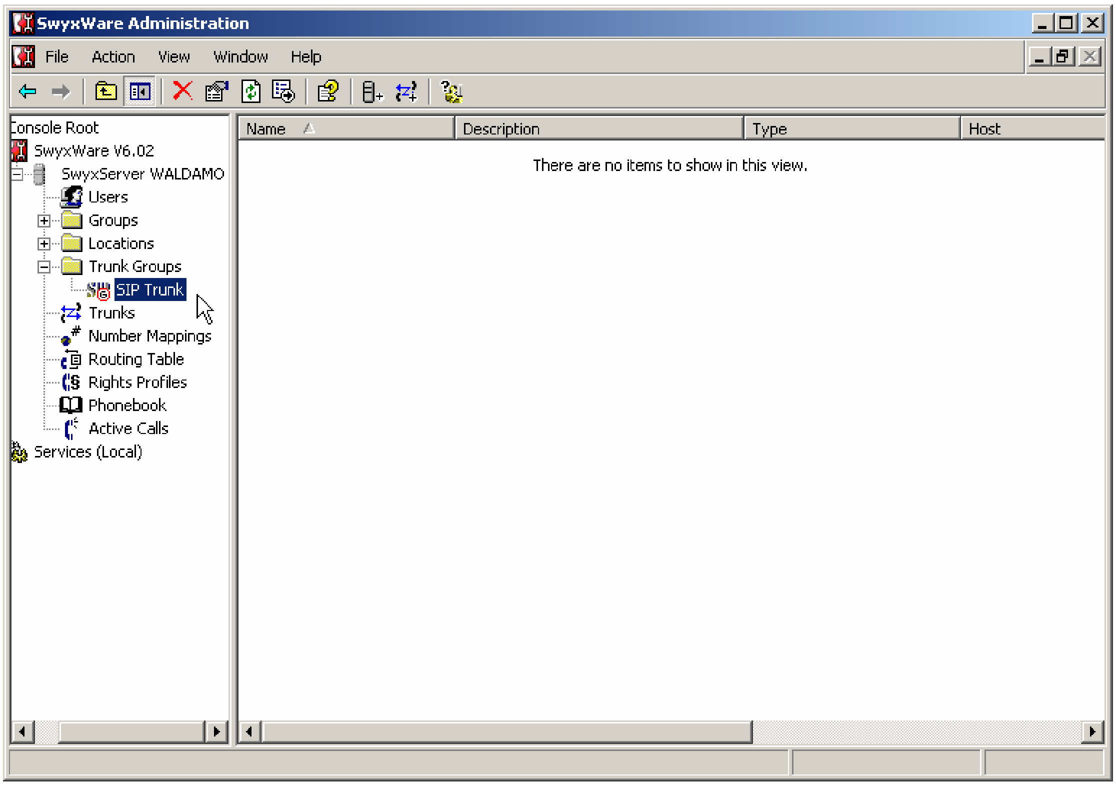

Add new Trunk Group Wizard
You have successfully completed the Add Trunk Group Wizard.
After finishing this Wizard you can assign Trunks to the created Trunk Group.
< Back
Finish
Cancel

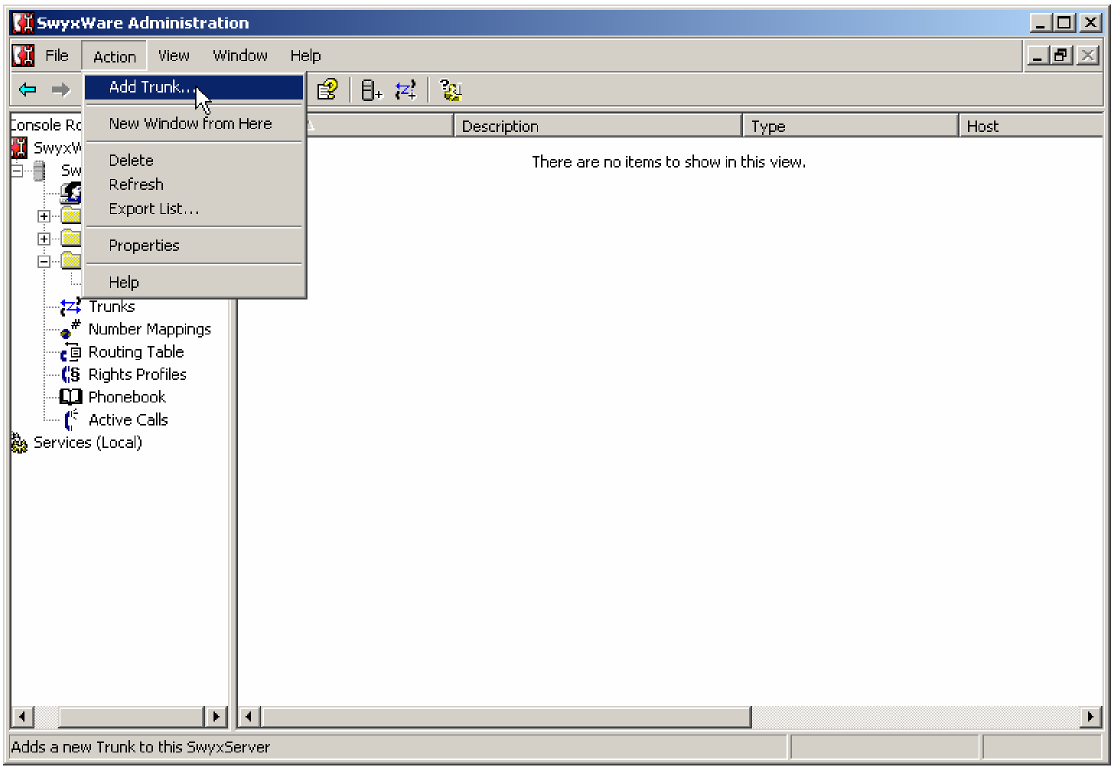
When you click “Finish”, new trunk group (SIP Trunk) appears in the “Trunk Groups” tab.



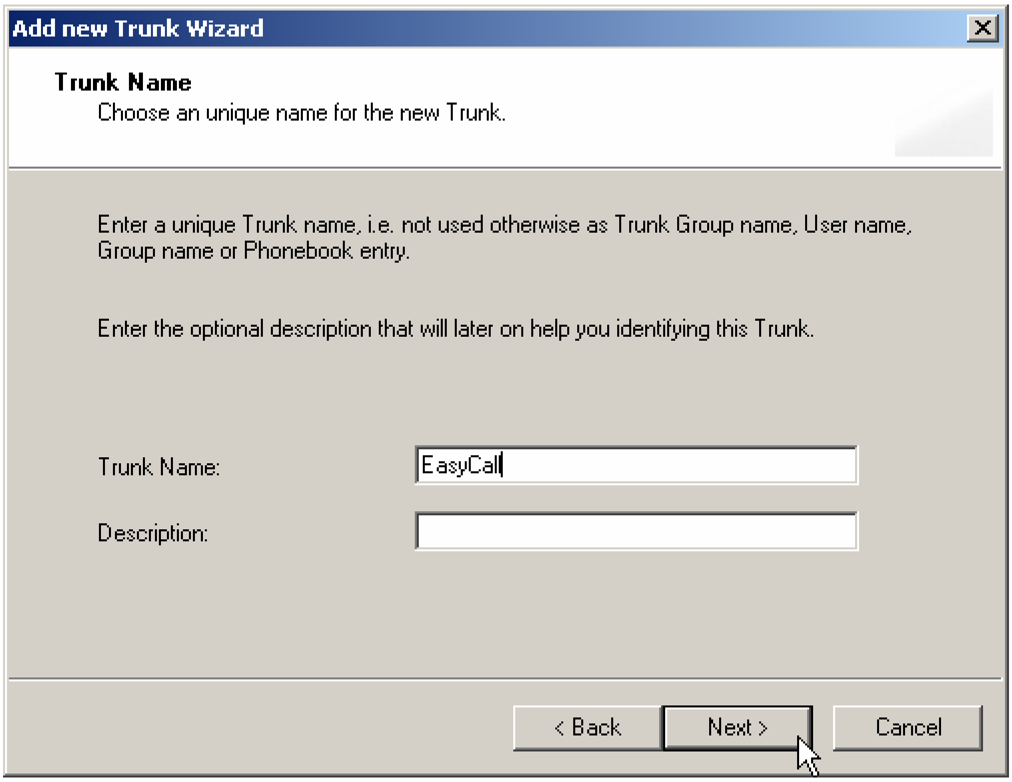
6.2 Adding new trunk

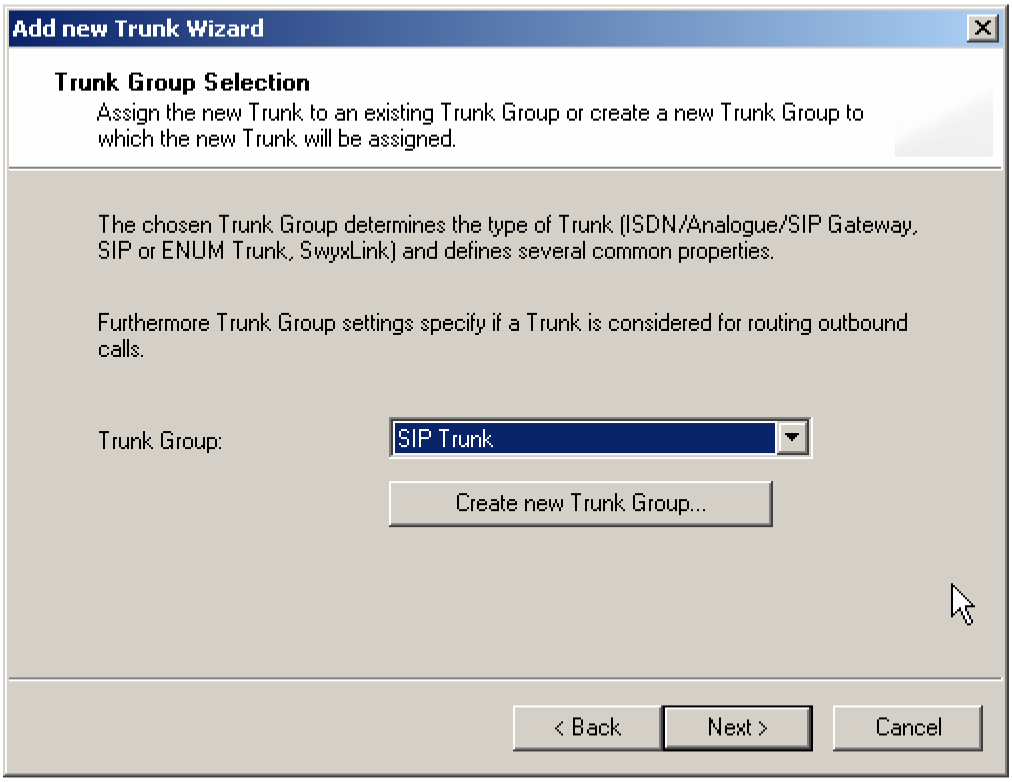
Now you need to configure the account provided to you by your SIP Provider (follow the steps shown in the pictures below).

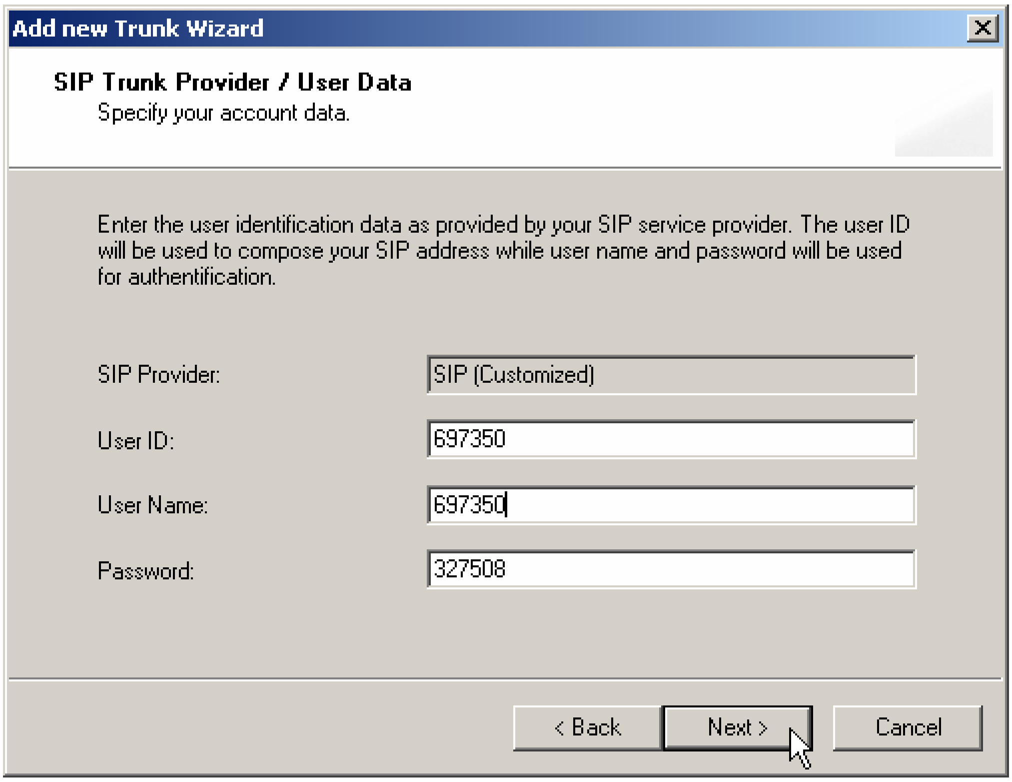


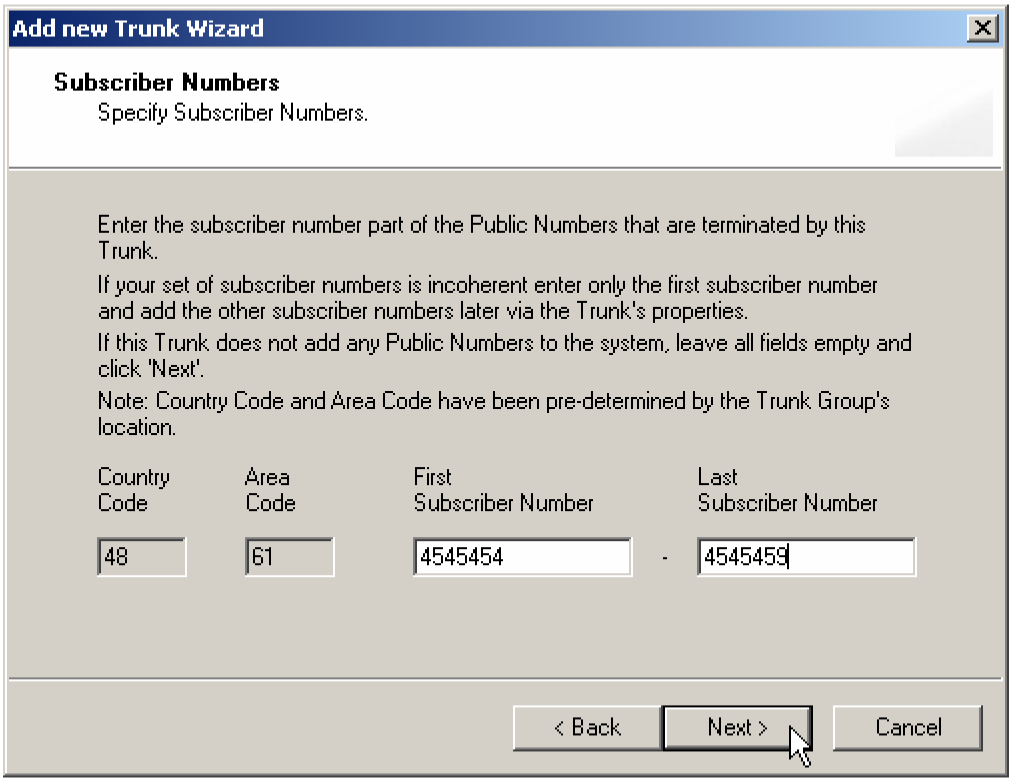

SwyxWare Administration
File
Action
View
Window
Help
Add Trunk...
New Window from Here
Delete
Refresh
Export List...
Properties
Help
Trunks
Number Mappings
Routing Table
Rights Profiles
Phonebook
Active Calls
Services (Local)
Description
Type
Host
There are no items to show in this view.
Adds a new Trunk to this SwyxServer

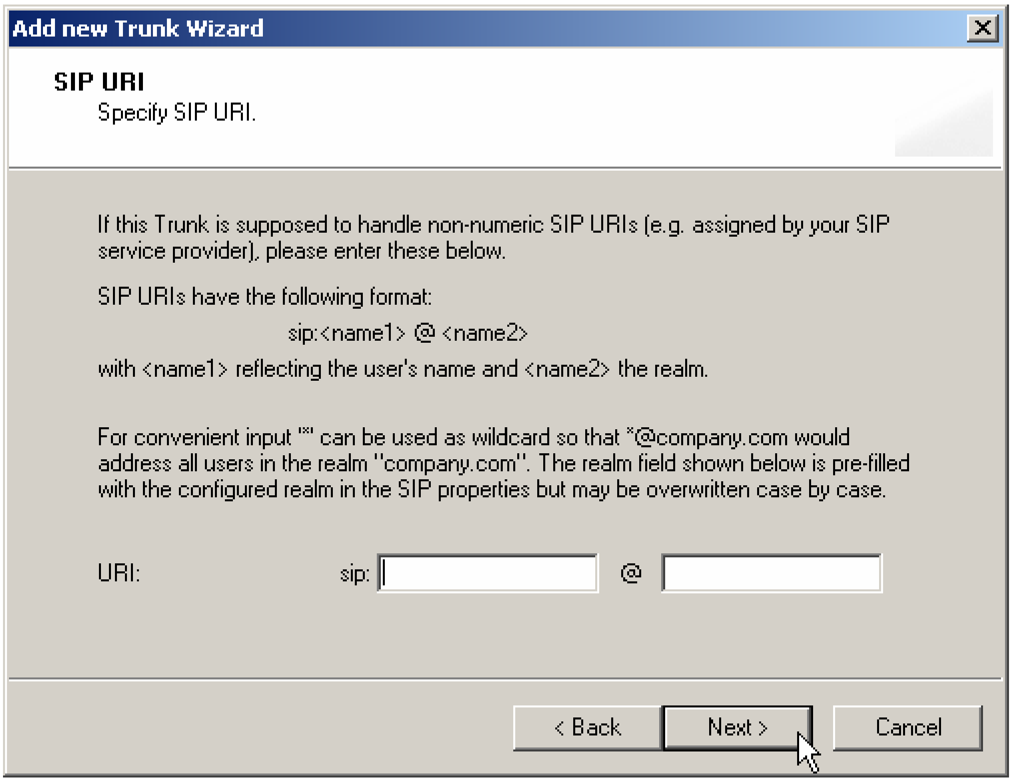

Add new Trunk Wizard
Welcome to the Add Trunk Wizard
This wizard will guide you through the process of adding a new Trunk to the SwyxServer configuration.
Before you start creating a new Trunk for SwyxWare make sure that you have done the necessary physical installation and connection work required for the specific Trunk type.
ISDN or analogue Trunks typically require installation of respective adapter boards in the system hosting that Trunk interface. Other Trunk types may require other additional configuration work.
< Back
Next >
Cancel

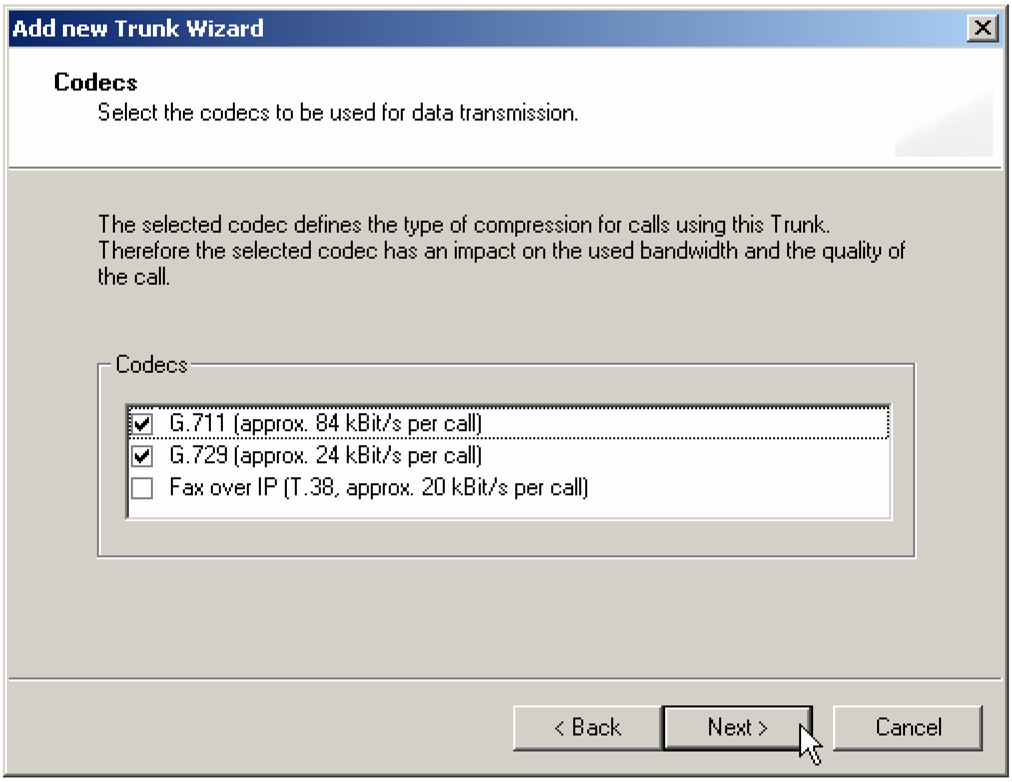

Add new Trunk Wizard
Trunk Name
Choose an unique name for the new Trunk.
Enter a unique Trunk name, i.e. not used otherwise as Trunk Group name, User name, Group name or Phonebook entry.
Enter the optional description that will later on help you identifying this Trunk.
Trunk Name:
EasyCall
Description:
< Back
Next >
Cancel

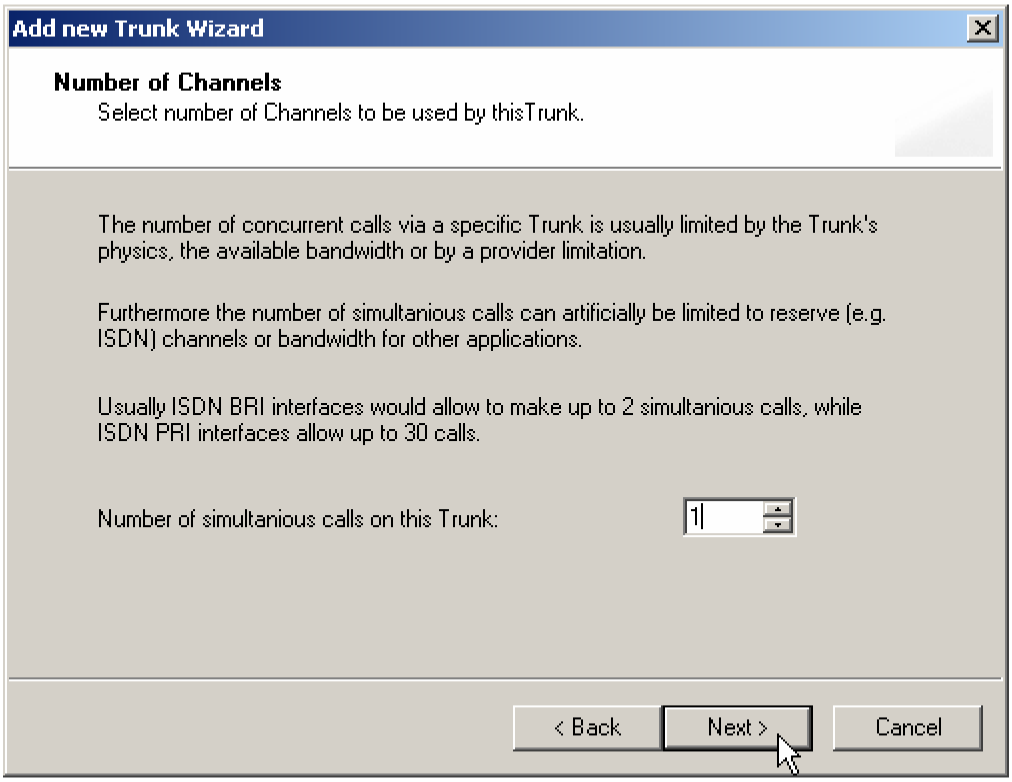

Add new Trunk Wizard
Trunk Group Selection
Assign the new Trunk to an existing Trunk Group or create a new Trunk Group to which the new Trunk will be assigned.
The chosen Trunk Group determines the type of Trunk (ISDN/Analogue/SIP Gateway, SIP or ENUM Trunk, SwyxLink) and defines several common properties.
Furthermore Trunk Group settings specify if a Trunk is considered for routing outbound calls.
Trunk Group:
SIP Trunk
Create new Trunk Group...
< Back
Next >
Cancel

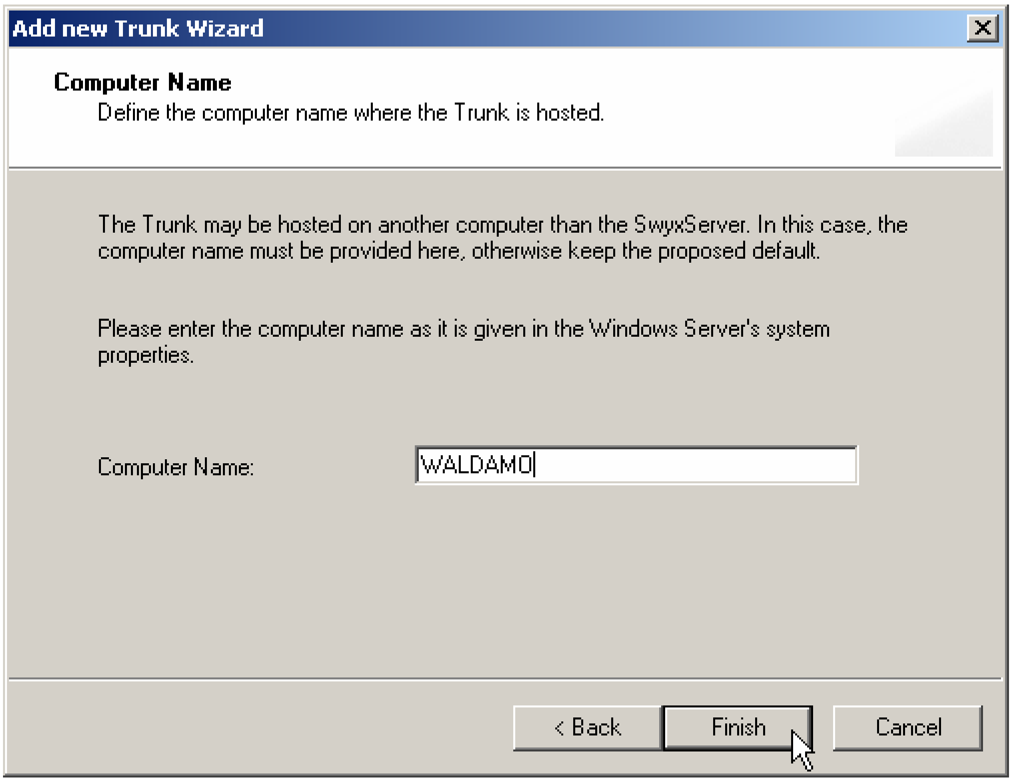

Add new Trunk Wizard
SIP Trunk Provider / User Data
Specify your account data.
Enter the user identification data as provided by your SIP service provider. The user ID will be used to compose your SIP address while user name and password will be used for authentification.
SIP Provider:
SIP (Customized)
User ID:
697350
User Name:
697350
Password:
327508
< Back
Next >
Cancel


Add new Trunk Wizard
Subscriber Numbers
Specify Subscriber Numbers.
Enter the subscriber number part of the Public Numbers that are terminated by this Trunk.
If your set of subscriber numbers is incoherent enter only the first subscriber number and add the other subscriber numbers later via the Trunk's properties.
If this Trunk does not add any Public Numbers to the system, leave all fields empty and click 'Next'.
Note: Country Code and Area Code have been pre-determined by the Trunk Group's location.
Country Code
Area Code
First Subscriber Number
Last Subscriber Number
48
61
4545454
-
4545459
< Back
Next >
Cancel

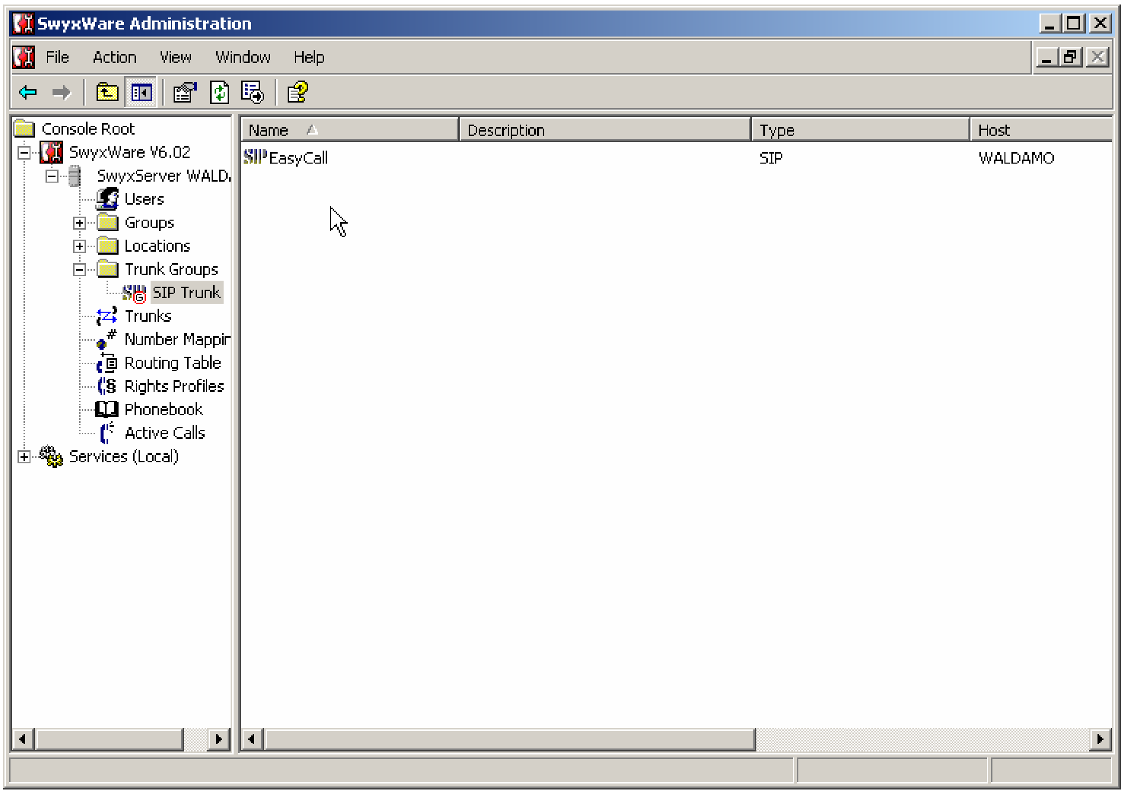

Add new Trunk Wizard
SIP URI
Specify SIP URI.
If this Trunk is supposed to handle non-numeric SIP URIs (e.g. assigned by your SIP service provider), please enter these below.
SIP URIs have the following format:
sip:<name1> @ <name2>
with <name1> reflecting the user's name and <name2> the realm.
For convenient input "*" can be used as wildcard so that *@company.com would address all users in the realm "company.com". The realm field shown below is pre-filled with the configured realm in the SIP properties but may be overwritten case by case.
URI:
sip:
@
< Back
Next >
Cancel


Add new Trunk Wizard
Codecs
Select the codecs to be used for data transmission.
The selected codec defines the type of compression for calls using this Trunk. Therefore the selected codec has an impact on the used bandwidth and the quality of the call.
Codecs
G.711 (approx. 84 kBit/s per call)
G.729 (approx. 24 kBit/s per call)
Fax over IP (T.38, approx. 20 kBit/s per call)
< Back
Next >
Cancel


Add new Trunk Wizard
Number of Channels
Select number of Channels to be used by thisTrunk.
The number of concurrent calls via a specific Trunk is usually limited by the Trunk's physics, the available bandwidth or by a provider limitation.
Furthermore the number of simultanious calls can artificially be limited to reserve (e.g. ISDN) channels or bandwidth for other applications.
Usually ISDN BRI interfaces would allow to make up to 2 simultanious calls, while ISDN PRI interfaces allow up to 30 calls.
Number of simultanious calls on this Trunk:
1
< Back
Next >
Cancel

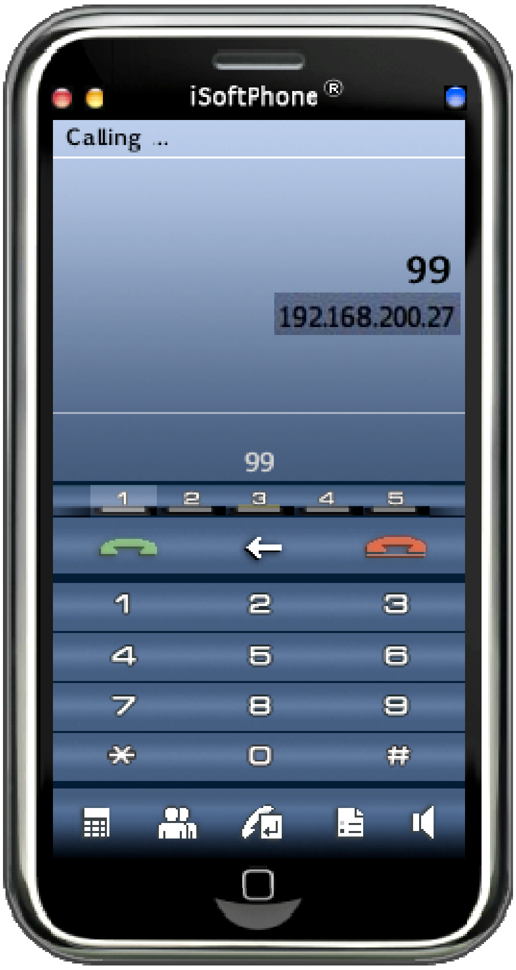

Add new Trunk Wizard
Computer Name
Define the computer name where the Trunk is hosted.
The Trunk may be hosted on another computer than the SwyxServer. In this case, the computer name must be provided here, otherwise keep the proposed default.
Please enter the computer name as it is given in the Windows Server's system properties.
Computer Name:
WALDAMO
< Back
Finish
Cancel

When you click “Finish”, new trunk (EasyCall) appears in the “Trunk Groups” tab.



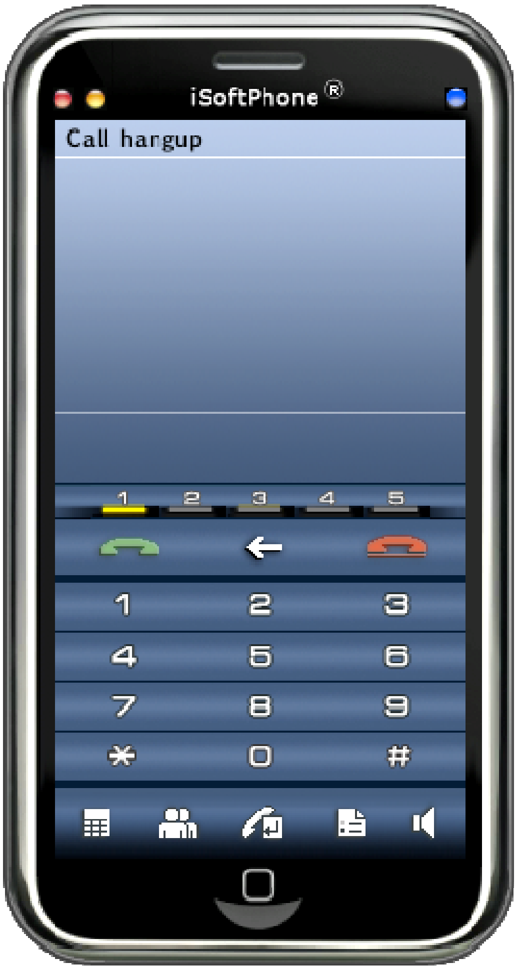
7. Making calls

Making calls from iSoftPhone is easy! Just enter the number to dial and hit <ENTER> or press  button. Below was shown sample call process for dialed number 99.



Once the connection is established then iSoftPhone display's will look like shown below.

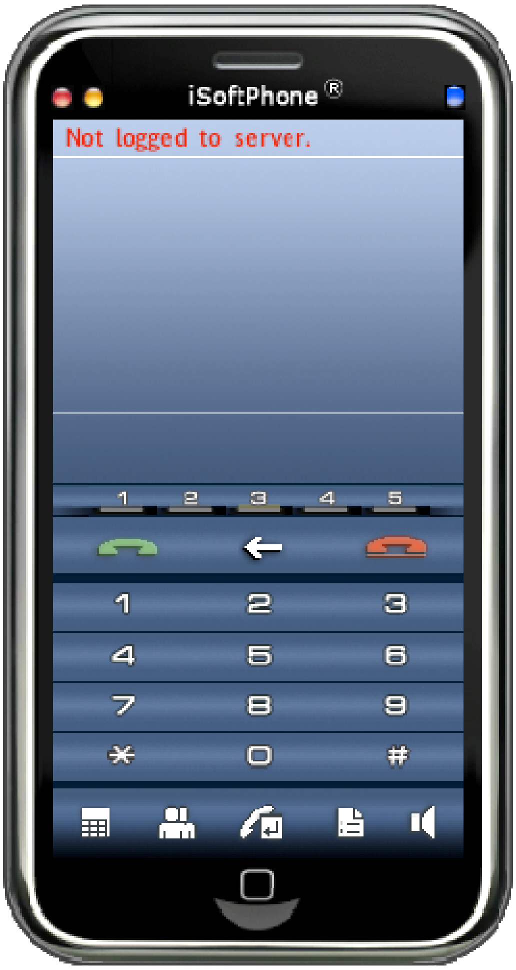
To finish the connection just hit <ESC> or press  button. Once the connection is finished then iSoftPhone display's will look like shown below.



8. Verification steps

The following steps can be used to verify and/or troubleshoot installations in the field.

1. Configure internal subscriber on Swyx PABX for the iSoftPhone. After configuring the iSoftPhone, verify that the “Logged in…” message appears in the upper left corner of the display, indicating that registration has occurred.
2. Verify that the extension shown in the brackets (in our example <John> is the desired value.
3. If “Not logged to server.” is displayed,



use the following to troubleshoot the problem: Check in Preferences “My SIP accounts” settings if the correct IP address of Swyx PABX host is entered. If “Connecting…” is displayed for a long time

please check that username and password is correct entered for this account in Preferences “My SIP accounts”.

4. Verify basic feature by making calls to other phones. If audio cannot be heard from an iSoftPhone, check the firewall/NAT settings to make sure that ports for VoIP communication are not blocked.

9. Support

For technical support of iSoftPhone please contact:

Internet: http://www.call4mac.com/isoftphone/support.html
E-mail: mac_support@xdsnet.de