

01

SwyxLANconfig

SwyxConnect is configured with the help of the SwyxLANconfig Setup Wizard, which guides you step by step through the configuration, prompting you for the necessary information. You will find SwyxLANconfig on the installation CD or at the following link: <http://www.swyx.com/support/update-download.html>.

Requirements:

- An executable SwyxWare (Version 6.0 or higher) must be present.
- All users who are to be operated on SwyxConnect must also have been created in SwyxWare.
- An IP connection must be available between the PC on which LANconfig is executed and SwyxConnect.

Note: Any changes to the configuration of SwyxConnect must also be made in the SwyxWare configuration!

→ Start SwyxLANconfig to configure SwyxConnect.

02

Initial Settings

After SwyxLANconfig is started, a Setup Wizard opens automatically. In this, you must first set the basic defaults for operating the new device.

→ Remove the check mark before **Enable DHCP server**, if you already have an active DHCP server in your network.

Confirm the inputs by clicking on **Next**.

→ It is essential to enter a password in order to protect the configuration of the device. The configuration can only be read or modified by entering the password. If you have not entered a password, the SwyxConnect power LED blinks alternately red and green.

→ Click on **Next**.

→ Follow the wizard and make the settings relating to configuration access.

→ End the run by clicking on **Finish**.

→ Then close the Setup Wizard by clicking **Cancel**.

→ After this, double-click on SwyxConnect to assign a device name (e.g. SC_out).

→ Click on **OK**.

Note: The base settings and the assignment of a device name are absolutely essential before you continue with the configuration of SwyxConnect!

03

Call the Setup Wizard

→ Now call the Setup Wizard again from the SwyxConnect shortcut menu (here the entry "SC_out").

→ Choose the component **Configure connection to SwyxWare**. You can also select settings for further components (e.g. configuration of the firewall).

→ Click on **Next**. The window "Connection to SwyxWare" offers you a brief introduction, and tells you about the requirements.

→ Click on **Next**.

04

Specify SIP settings

SwyxConnect needs various data in order to log on to SwyxWare:

- SwyxWare domain/realm
Give the SwyxWare domain or realm here (e.g. "Swyx.net"). If you should have problems with the connection to SwyxWare, enter the FQDN or the IP address of the SwyxServer in this field.
- Registrar (FQDN or IP)
The registrar is the address to which the SIP messages are sent. This entry is optional if you have already input an IP address or an FQDN in the field SwyxWare **domain/realm**.
- Outbound proxy
This entry is optional.
- Server port
Give the port on which the server responds to the SIP messages (standard: 5060).

→ Click on **Next**.

05

Specify SIP authentication data (SIP Gateway Trunk)

You have to input authentication data for the logon to SwyxWare. This data must match the data that you configured on the corresponding SIP Gateway Trunk (see section 14 "Create a SIP Gateway Trunk") on the SwyxServer for this connection. The following data is needed for the authentication:

- User ID:
The user ID is combined with the realm to create the SIP address (SIP URI).
- Display name (optional)
The display name is only needed if it is checked by the SIP provider during logon. The name entered here is displayed to the opposite terminal. It is not needed for the connection to the SwyxServer.
- User name
The user name and password are required for user authentication.
- Password
Enter here the password for SIP access. The Setup Wizard asks for confirmation of the password.

→ Click on **Next**.

06

Configuration of the PSTN interface

SwyxConnect 1723 has two ISDN interfaces and two analog interfaces. Both of these ISDN interfaces can be used towards the PSTN. The first ISDN interface can alternatively also be used - with the help of the supplied adapter - towards the analog PSTN. Only terminal devices or sub-PBX can be connected over the analog interfaces. On delivery, both analog interfaces are enabled.

Note: Requirement for the connection of SwyxConnect to a SwyxServer is a functional IP connection between SwyxConnect and the corresponding SwyxServer. A complete number plan should also be ready.

→ Select one of the following interfaces:

- **No connection to a public PSTN** → the ISDN1 interface to the public network is deactivated
Confirm the inputs by clicking on **Next** and then create the new SIP users (see section 07 "Create SIP User").
- **Connection to public PSTN via analog interface (ANALOG)** → To ISDN1 with supplied adapter
Confirm the inputs by clicking on **Next** and then create the new SIP users (see section 07 "Create SIP User").
- **Connection to public PSTN via ISDN interface 1 (ISDN1)**
Confirm the inputs by clicking on **Next** and then create the new SIP users (see section 07 "Create SIP User").

07

Create SIP User

Telephony subscribers are referred to as "users" in the SwyxConnect environment. A maximum of 32 SIP users can be created. That can be 32 SIP devices or SIP software clients connected via LAN, WLAN and DMZ. The data of the users' SIP accounts is needed in order to log the users on to SwyxWare and locally to SwyxConnect.

→ Click on the button **SIP users...**

The "SIP Users" window will open. Here you can add, edit, copy and remove SIP users.

Add SIP users

→ Click on the button **Add...** The "SIP Users - New Entry" window will open.

→ Enter the **Internal number/User ID**.

Take the user's MSN for this. This action ensures that incoming calls are signaled to this user even if the connection to the SwyxServer is not available.

→ In the **Comment** field, you can give additional information on a SIP user.

Then enter the logon data (user name and password) for the user. The password must be confirmed.

→ Select the appropriate device type (telephone, fax etc.).

→ Activate the SIP user by setting a check mark before **Entry active**. Close user creation by clicking on **OK**.

Edit SIP users

→ Highlight the SIP user to be edited.

→ Click on the button **Edit...**

The window "SIP users - Edit Entry" will open.

→ Edit the user data, and confirm your inputs by clicking on **OK**.

→ Save the changes in the window "SIP users" by clicking again on **OK**.

→ After creating/changing the SIP users, click on **Next**.

Note: If you use SIP devices, please note the section "Configure SIP devices for SwyxConnect".

08

Create ISDN User

A maximum of 40 ISDN users can be created. That can be 40 devices connected via the ISDN network, including the ISDN and analog devices connected to a superior ISDN telecommunication system.

→ Click on the button **ISDN users...**

For all ISDN devices that should be usable on SwyxConnect, an ISDN user must be created. You can add, edit, copy and remove the ISDN users at this point.

Add ISDN User

→ Click on the button **Add...**

→ Enter the **Internal number/User ID**.

Take the user's MSN for this. This action ensures that incoming calls are signaled to this user even if the connection to the SwyxServer is not available.

→ Enter the **Display name** (optional).

→ In the **Comment** field, you can enter additional information on an ISDN user (device).

→ Enter the ISDN parameters.

- MSN/DDI

Enter here the Multiple Subscriber Number or the Direct Dial In Number (DDI). DDI refers to the direct dial from a telephone network to a subscriber. The MSN or DDI given here is used as the fallback case for outgoing calls.

- ISDN/SO Bus

Select the ISDN/SO bus interface to which the device is connected.

→ Enter the logon data for SIP telecommunication system.

- PBX SIP Domain/Realm

Select here the SIP domain or the realm, or input the data.

- User Name / Password

Enter here the user name and the password for SIP access.

The password must be confirmed.

→ Edit the user data, and confirm your inputs by clicking on **OK**.

→ Save the inputs in the window "ISDN users" by clicking again on **OK**.

Note: Remember that the MSN of the ISDN device and the MSN in the field Internal no./user ID must be identical. Furthermore, the MSN must also be entered in the ISDN device.

The complete documentation can be found on the Swyx websites: <http://www.swyx.com/support/documentation.html> or contact your administrator.

Edit ISDN User

→ Highlight the ISDN user to be edited.

→ Click on the button **Edit...**

The window "ISDN users - Edit Entry" will open.

→ Modify the user data, and save the changes with a click on **OK**.

→ After creating/changing the ISDN users, click on **Next**.

09 Configure ISDN interface for devices

Now configure the internal ISDN interface for the connection of local ISDN telephones.

The selection of the ISDN interface is dependent on the PSTN interface selected in Step 06.

→ Select the interface for the connection of the local ISDN telephones.

The following interfaces are available:

If the PSTN interface "No connection to the public telephone network" is selected

- **None (inactive)** → the interface is deactivated.

→ Confirm the inputs by clicking on **Next**. After this, you can configure the analog users (see section 11 "Create analog users").

- **ISDN1**

→ Confirm the inputs by clicking on **Next**. If your internal ISDN interface is not configured in TE mode, check the protocol settings (see section 10 "Internal ISDN interface not configured in NT mode").

- **ISDN2**

→ Confirm the inputs by clicking on **Next**. If your internal ISDN interface is not configured in TE mode, check the protocol settings (see section 10 "Internal ISDN interface not configured in NT mode").

- **ISDN1 & ISDN2**

→ Confirm the inputs by clicking on **Next**. If your internal ISDN interface is not configured in TE mode, check the protocol settings (see section 10 "Internal ISDN interface not configured in NT mode").

If the PSTN interface "Connection to the public telephone network over the analog interface/over the ISDN interface 1 (ISDN1)" is selected:

- **None (inactive)** → the respective interface is deactivated.

→ Confirm the inputs by clicking on **Next**. After this, you can configure the analog users (see section 11 "Create analog users").

- **ISDN2**

→ Confirm the inputs by clicking on **Next**. If your internal ISDN interface is not configured in TE mode, check the protocol settings (see section 10 "Internal ISDN interface not configured in NT mode").

10 Internal ISDN interface not configured in NT mode

If the chosen ISDN interface is not configured in NT mode, select the necessary protocol setting. The following protocols are available for selection:

- Off → deactivates the connection
- Auto (only TE)
- DSS1 TE (Euro ISDN)
- DSS1 TE Point to Point
- 1TR6 TE (German ISDN)
- DSS1 NT → Default setting for connection of ISDN terminals
- DSS1 NT Point to Point → for connection of a sub-PBX, for example
- GRPO (Leased-line)

→ After selecting the protocol, click on **Next**.

Note: *If in doubt, select DSS1 NT, in order to connect ISDN devices to this bus.*

11 Create analog users

A maximum of 2 devices can be connected to the analog interfaces.

→ Click on the button **Analog users...**

You can add, edit, copy and remove analog users at this point.

Add analog users

→ Click on the button **Add...**

→ Enter the **Internal number/User ID**.

Take the user's MSN for this. This action ensures that incoming calls are signaled to this user even if the connection to the SwyxServer is not available.

→ Enter the **Display name** (optional).

→ In the **Comment** field, you can enter additional information on an analog user (device).

→ Enter the analog parameters.

- **Interface**
Select the analog interface.
- **Prevent your own number from being displayed**
If this field is activated, your number is not displayed.
- **Metering pulse**
If this field is activated, information is transmitted about the costs arising during a call, and is converted into a corresponding charge display. The line must support this function.
- Enter the logon data for SIP telecommunication system.
- **PBX SIP domain/realm**
Select here the SIP domain or the realm, or input the data.
- **User name / Password**
Enter here the user name and the password for SIP access. The password must be confirmed.
- Select the appropriate device type (telephone, fax etc.).
- Activate the analog user by setting a check mark before **Entry active**.

You can thus create an analog user, deactivate him for the time being and activate him later.

→ Confirm the inputs in the window "Analog users - New Entry" by clicking on **OK**.

→ Similarly, save the inputs in the window "Analog users" by clicking on **OK**.

Edit analog users

→ Mark the analog users to be edited, and click **Edit...** The window "Analog users - Edit Entry" will open.

→ Edit the user data, and confirm your inputs by clicking **OK**.

→ Save the changes in the window "Analog users" likewise by clicking on **OK**.

→ After creating/changing the analog users, click on **Next**.

12 Configure Public Line Access

→ In the field **Public Line Access**, give the corresponding public line access, which must be selected in order to reach a connection to the public ISDN network.

Note: *It is important that the same public line access is entered here as was configured in the location configuration for the corresponding SIP Gateway Trunk Group in SwyxServer.*

13 Finish connection to SwyxServer

You have given all the necessary details for the configuration of the connection to the SwyxServer.

→ Click on **Finish** to apply the settings. This completes the installation of SwyxConnect. Now set up the connection to SwyxConnect on the SwyxServer side. This is done via a SIP Gateway Trunk.

14 Create a SIP Gateway Trunk

The logon data for SwyxConnect is stored in a SIP Gateway Trunk. The configuration and administration of a SIP Gateway Trunk is handled with the SwyxWare administration.

→ Start the SwyxWare administration and select the SwyxServer.

Create a SIP Gateway Trunk Group

We recommend creating a SIP Gateway Trunk Group before creating a SIP Gateway Trunk. General parameters such as permissions, location and routings are specified in this group. When creating a Trunk, you then simply assign the Trunk Group to the Trunk. As a member of the group, the Trunk is thus given the corresponding parameters.

→ On the left side of the SwyxWare administration window, click with the right mouse button on **Trunk Group** and in the shortcut menu select the entry **Add Trunk Group...**

→ Click on **Next**.

The "Add Trunk Group..." wizard will appear.

→ Click on **Next**.

→ Name and description of the Trunk Group: Enter the **name** of the Trunk Group and a **description**, and click **Next**.

→ Type of Trunk Group: Enter the type of Trunk Group here. In this case "SIP Gateway".

→ In the lower field **Profile** select the entry "SwyxConnect" and click on **Next**.

→ Routing: Specify for which calls this Trunk Group should be used, and click on **Next**.

→ Rights Profile: Specify the rights profile for the Trunk Group. This rights profile applies to the incoming calls over this Trunk Group.

→ Click on **Next**.

→ Location profile: Define the location.

→ Click on **Next** and close the creation of the SIP Gateway Trunk Group by clicking on **Finish**.

Create a SIP Gateway Trunk

→ On the left side of the SwyxWare administration window, click with the right mouse button on **Trunks** and in the shortcut menu select the entry **Add Trunk...**

→ Click on **Next**.

The "Add Trunk..." wizard will appear.

→ Name and description of the Trunk: Enter the name of the Trunk and a description, and click on **Next**.

→ Select the Trunk Group that you previously created for SwyxConnect and click on **Next**.

→ SIP account: Enter here the data with which SwyxConnect should log on via this Trunk to the SwyxServer.

→ User ID: The user ID is combined with the realm to create the SIP address (SIP URI).

→ Authentication method: Indicate whether or not SwyxConnect needs to authenticate itself to SwyxServer with a user name and a password.

→ User name and password: The user name and password are required for user authentication.

Note: *This logon data must match the data you previously stored on the SwyxConnect side.*

→ Number: Please enter the public numbers to be routed by this Trunk. If you have several individual numbers or number ranges, enter only one number or one range here, and add the others subsequently in the Trunk properties.

→ Codecs: Select the Codec. With the help of the Codec you select how heavily the voice is compressed for transmission.

→ Voice channels: Specify how many calls may simultaneously be routed via this Trunk.

→ Computer name: Enter the name of the PC on which the SwyxWare runs, and click on **Finish**.

15 Configure SIP devices for SwyxConnect

Please note when using SIP devices that within configuration you enter the address of the SwyxConnect as registrar/proxy, and the address of the SwyxWare must be given as realm. If your device (e.g. snom phones) does not have a field for realm input, enter the address of the SwyxWare in the registrar field and the address of the SwyxConnect in the "Outbound Proxy" field. The entire SIP communication of the SIP devices thus goes via SwyxConnect to the SwyxWare. From the realm in the SIP messages, SwyxConnect detects that this device is associated with SwyxWare.

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