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This documentation is subject to constant change and may therefore contain inaccurate or erroneous information.

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About this documentation

This documentation contains the information necessary for making the most effective use of the Swyx solution and the advantages it provides.

Who is this Documentation written for?
The documentation is primarily directed at Users.

Conventions for the Descriptions

Operating steps
In this documentation, “Click” always means: You click the left mouse button once.

Menu operation
Instructions which refer to the selection of certain menu entries will be presented as follows:

“My profile | Password”
refers to the menu item “Password,” which you will find in the “My profile” menu.

Online help

To access the help system, click on 🔎 on the top right on a page.

Further information

- For current information on the products, please see our Internet homepage:
  https://www.swyx.com
- Under the ‘Support’ category of the homepage, you can download the most current version of the documentation (PDF) and software updates:

Further online help

<table>
<thead>
<tr>
<th>Product</th>
<th>WWW link</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwyxIt! Client</td>
<td>help.swyx.com/cpe/12.10/Client/Swyx/en-US</td>
</tr>
<tr>
<td>SwyxWare Administration</td>
<td>help.swyx.com/cpe/12.10/Administration/Swyx/en-US</td>
</tr>
<tr>
<td>Call Routing Manager</td>
<td>help.swyx.com/cpe/12.10/CRM/Swyx/en-US</td>
</tr>
<tr>
<td>Graphical Script Editor</td>
<td>help.swyx.com/cpe/12.10/GSE/Swyx/en-US</td>
</tr>
</tbody>
</table>
### 1 Logging in and logging out

You must authenticate yourself to gain access to Swyx Control Center. You receive the homepage address and the login data via email or directly from your Administrator.

When saving and processing personal data, observe the respective applicable legal data protection regulations. If you have any questions especially regarding data protection in SwyxWare, please contact your administrator.

#### How to log on

1. Enter the Swyx Control Center address to your web browser.
   - The login page appears.

2. Enter your SwyxWare user name and your password.

3. Click on “Log in”.
   - When you first log in, you are requested to set up two-factor authentication via an app on your smartphone.
   - For this purpose, the following steps are necessary:

   1. Click on “Next”.
      - The “Configure Two-Factor authentication” configuration wizard appears.
   2. Load one of the apps displayed onto your smartphone with internet access.
   3. Set up the app on your smartphone and start the QR code scan.
   4. In Swyx Control Center, click on “Next”.
      - A QR code appears in the Swyx Control Center for 30 seconds.
   5. Point your smartphone camera at the screen to scan the QR code.
      - A 6-digit PIN appears in the app on your smartphone.
   6. Enter the PIN on the Swyx Control Center within 6 minutes.
      - You are logged in.
      - The Swyx Control Center homepage appears.
      - For all following logins, you must enter the current PIN in the app on your smartphone in Swyx Control Center.

   If you do not scan the QR code within 30 seconds, you must restart the process. To do this, click on “Finish” and return to the login page.

   - A 6-digit PIN appears in the app on your smartphone.

   For security reasons, the PIN is regenerated every 30 seconds. A PIN is only valid one-off and respectively for 6 minutes.

6. Enter the PIN on the Swyx Control Center within 6 minutes.

   If you do not enter the PIN for setting up two-factor authentication within 6 minutes or enter it incorrectly, you must restart the process. To do this, click on “Finish” and return to the login page.

   - You are logged in.
   - The Swyx Control Center homepage appears.
   - For all following logins, you must enter the current PIN in the app on your smartphone in Swyx Control Center.

   If you cannot access the app, please contact your Administrator.
To log off from Swyx Control Center

1  Click on your display name in the title bar.
   - The sub-menu for “My Profile” appears.
2  Click on “Logout”.

For security reasons, you are automatically logged out after 60 minutes’ inactivity.

1.1 Forced password changes

If you log in and your administrator has forced you to change the password in your configuration, the “Change password” page appears, see also 3.7 Defining the log in settings, page 18.

Change password

New password
 Repeat new password

Enter your new password in the “New password” field and confirm the entry in the “Repeat new password” field, see section Minimum requirements for passwords, page 7.

It is not possible to use the current password again when changing a password.

1.2 Minimum requirements for passwords

Passwords must at least meet the following requirements:

- The passwords consists at least of eight characters.
- The password consists of any characters meeting at least the four following character categories:
  - upper-case letters such as: [A-Z]
  - lower-case letters such as: [a-z]
  - Numbers [0-9]
  - Non-alphanumeric characters (special characters) such as: full-stops, commas, brackets, blanks, hash tags (#), question marks (?), percent signs (%), ampersands (&).

For security reasons, you are automatically logged out after 60 minutes’ inactivity.

Alphabetic characters (such as: ß, ü, ä, è, ô) and non-Latin characters (such as: Ω, π, μ) are not special characters and are regarded as letters.

1.3 Limited number of log in attempts

The number of log in attempts can be limited.

When the maximum number of failed log in attempts has been reached, the account is locked and a message appears with an instruction to contact the Administrator.

You can no longer log in, neither via Swyx Control Center nor client nor end device, until the Administrator has reactivated your account.

See also 3.7 Defining the log in settings, page 18.

The number of failed log in attempts will be reset after a successful login.
1.4 Resetting your password

You can reset your password and have a new one sent to you.

To reset your password

1. On the login page, click on “Reset password”.
   ✔ You are redirected to the “Reset password” page.
2. Enter your email address or User name in the field.
   ✔ Your new password will be sent to you shortly via email.
3. In the email, click on the appropriate link.
   ✔ You are redirected to the “Reset password” page, see section Forced password changes, page 7.

The number of failed log in attempts is irrelevant, when the Administrator has established a forced password change, and the User attempts to log in with his/her previous password.

You can only reset your password if an email address has been stored for you in Swyx Control Center.

This function is not available for SwyxON.
2 User interface and menu navigation

You can only use the full functionality of Swyx Control Center cookies and pop-ups are permitted in your browser settings.

The elements shown on the User interface are based on context and/or profile, i.e. they vary for each user.
User interface and menu navigation

Fig. 2.1: Home page (example for visualization)
Title bar
Your name and User picture are displayed on the title bar.

With a click on your name, you move to your profile information, language selection and can log out.
Further information about your current settings is displayed under the title bar. Click on \( \times \) to hide the information.

Menu bar
On every page, you will see the menu that provides you with access to settings and information.
Use the arrow keys to hide or unhide submenu items.

<table>
<thead>
<tr>
<th>Button</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \downarrow )</td>
<td>Show sub-menu items</td>
</tr>
<tr>
<td>( \uparrow )</td>
<td>Hide sub-menu items</td>
</tr>
<tr>
<td>( \ll )</td>
<td>Fully hide menu (only appears if you remain above the menu bar with the mouse pointer)</td>
</tr>
<tr>
<td>( \gg )</td>
<td>Fully display menu</td>
</tr>
</tbody>
</table>

Main area
An overview of your created system units (e.g. Users, Desk Phones) appears on the start page with buttons for fast access to your tasks - a single click suffices to reach the appropriate menu item. In addition, the contact details of your reseller may appear.

On the menu pages, various settings appear as well as buttons providing access to configuration wizards. Additionally, some main menu items provide buttons for the quick access to settings which are available in submenu items.

### 2.1 Navigating and defining settings

The setting options on menu pages and in configuration wizards depend on your administration profile and your SwyxWare solution.

To create system units and configure basic settings, the corresponding menu pages in the provide configuration wizard. Use the “Next”, “Back” and “Cancel” buttons to navigate within the configuration wizard. In general, you are offered additional optional settings in step before last.

On the menu pages you can find further settings under various tabs; these can be defined after creation.

If inputs are incorrect or missing, \( \text{?} \) and a red margin around the corresponding field are displayed. An explanatory error message appears if you remain over the field with the mouse pointer.

With the help of the navigation path in configuration wizards and on menu pages, you can orientate yourself and return to a past step or a superordinate menu item with a single click.

#### 2.2 Searching and filtering in lists

In lists you can click on \( \text{?} \) in a table column heading to filter lists by search items.
Click on a column heading and an arrow is displayed which shows whether the column is sorted alphabetically backwards or forwards. Click again to reverse sorting or to hide the arrow again.

Click on to display further information.
Click on the dropdown list “Elements per page” to define how many list elements are displayed per page.

### 2.3 Starting calls from lists

In lists you can click on in the line of the appropriate User to call this User via SwyxIt! or Swyx Connector for Skype.

For this purpose, you must set SwyxIt! or Swyx Connector for Skype as the default program for tel: URL in your control panel.

As a User without administrator rights, you can call the Administrator on the start page by clicking or send him or her an email from your standard email program.
Editing General Settings

Under “General Settings” you can define settings which are valid for all Users, Locations, Desk Phones on the same server etc.

When saving and processing personal data, observe the respective applicable legal data protection regulations.

The setting options on menu pages and in configuration wizards depend on your administration profile and your SwyxWare solution.

Defining login and number range settings

3.1 Defining login and number range settings

Proxy server

For online licensing with license query by the Swyx license server a permanent internet connection to your SwyxServer must be established, see also the SwyxWare documentation for administrators, chapter “Licensing”, section “Online licensing”.

If you use a proxy server for this purpose, you must specify the required settings either during installation or in Swyx Control Center, see also the SwyxWare documentation for administrators, section “Configuring SwyxWare”.

To define a proxy server

1. In the menu, select “General Settings | System”.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing the connection</td>
<td>Click on the button to test the connection to the Swyx license server.</td>
</tr>
</tbody>
</table>

Internal number range

Under internal phone numbers, Users can be reached by other Users who are assigned to the same or a different networked location. For this purpose, a number range must be defined from which the internal numbers can be dialed, see also the SwyxWare Documentation for Administrators, chapter “Numbers and Number Mappings”.

The following specifications apply to internal phone numbers:

- Several internal phone numbers can be assigned to one User.
- Internal phone numbers may differ from the extension number of the external phone number.
  
  **Example**: External phone number +49 231 5666 227 -> Internal phone number 5227

- The maximum number of digits for internal numbers is 10.

- The lowest and highest numbers in the number range must have the same number of digits.
  
  **Example**: 111-999

- Internal phone numbers must not overlap with other phone numbers or codes used in the system.
  
  **Example**: An internal call number may not begin with a "0" if this is used for the outside line access of the location.
An internal call number must not be contained in an internal call number that has already been assigned.

**Examples:**

User 1 has the internal number 12345; User 2 must then not have the internal number 1234, 1235 would, however, be possible.

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest internal number</td>
<td>Enter the lowest of the phone numbers that can be assigned to the Users at SwyxServer.</td>
</tr>
<tr>
<td>Highest internal number</td>
<td>Enter the highest of the phone numbers that can be assigned to the Users at SwyxServer.</td>
</tr>
</tbody>
</table>

**Prevent registrations and calls**

For the maintenance of SwyxServer it may be necessary to block registrations and calls via SwyxServer. Once the options are enabled, Users can no longer log in and/or make calls. Existing calls are not interrupted. So you can wait until all calls are finished and then stop the server after activating this option.

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable login</td>
<td>Select the checkbox to prevent login to SwyxServer.</td>
</tr>
<tr>
<td>Disable calls</td>
<td>Activate the checkbox so that no calls can be made via SwyxServer.</td>
</tr>
</tbody>
</table>

**Public IP address for SIP**

In SwyxWare for DataCenter, SwyxServer (front end server) is installed in the network of a service provider. Such a network is usually protected by a firewall to the Internet. A direct communication from outside into the private network behind the firewall is not permitted; all data traffic goes through a security server. The SwyxServer inside the private network is addressed from outside (Internet) via a transfer server. This forwarding server has a public IP address and forwards the communication to SwyxServer, which only has a private IP address within the network.

SIP clients such as SwyxIt! that want to log on as SwyxWare Users via the Internet must configure the public IP address of the forwarding server as SwyxServer (=SIP Registrar/Proxy). This forwarding server forwards the login and also all other CallControl messages to SwyxServer.

When communicating with the SIP clients that connect to SwyxServer via the Internet, SwyxServer needs this public IP address to indicate it as the sender. For this reason, SwyxServer must be made known via which public IP address it can be reached from outside.

In a standard SwyxWare installation, specifying a public IP address of the forwarding server does not work. It will typically have a mixture of internal clients (within the company network) and external clients (on the Internet). In such a case, an SwyxServer access via VPN must be set up for the external clients.

**SwyxWare on systems with several IP addresses**

In special scenarios, it may happen that the computer on which SwyxServer is installed uses multiple IP addresses, see https://www.swyx.com/products/support/knowledge-base/article-details/swyxknowledge/kb2521.html

See also the SwyxWare Documentation for Administrators, chapter "Configuration of SwyxServer", section "Public IP Address for SIP".

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public IP address for SIP</td>
<td>Enter the public IP address that can be used to reach SwyxServer from the outside if the server is running behind a firewall. Leave the field empty if no public IP address is required.</td>
</tr>
</tbody>
</table>
3.2 Retrieving license information

You can get information about the scope of your licenses from the Swyx Flex license server, see also 4 Online Licensing, page 29 or 5 Licensing via license key, page 35.

For provisioning of Yealink Desk Phones in SwyxWare for DataCenter it is necessary that you connect once to the Swyx license server under https://license.swyx.com
Click on the "Activate" button to do this.
See also 3.13.2 Distributing firmware to certified SIP phones, page 24, and 11 Desk Phones, page 75.

If your licensing is about to expire or is insufficient, a warning will appear in the title bar.

To retrieve license information

1. In the menu, select “General Settings | Licenses and Features”.
   ✓ For online licensing and SwyxON a list appears with all of your licensed Feature Profiles.
   ✓ For licensing via license key, the list of your registered licenses appears.

For license information on licensing via license key see License information on licensing via license key, page 16.
For information on Feature Profiles in SwyxWare also see the SwyxWare Documentation for Administrators, chapter “Profiles”.

License information on online licensing

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Feature Profile name</td>
</tr>
<tr>
<td>Licensed</td>
<td>Number of licensed Feature Profiles</td>
</tr>
<tr>
<td>Used</td>
<td>Number of currently used Feature Profiles</td>
</tr>
<tr>
<td>Free</td>
<td>Number of licensed, unused Feature Profiles</td>
</tr>
</tbody>
</table>

Expiration date Date from which the license loses its validity, i.e. the corresponding Feature Profiles are deactivated

2. Click on the “User specific features” tab.
   ✓ A list appears with your licensed additional features which are assigned to certain Users.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name of the feature</td>
</tr>
<tr>
<td>Licensed</td>
<td>Number of licensed features</td>
</tr>
<tr>
<td>Used</td>
<td>Number of currently used features</td>
</tr>
<tr>
<td>Free</td>
<td>Number of licensed, unused features</td>
</tr>
</tbody>
</table>
| Expiration date Date from which the license loses its validity, i.e. the corresponding functions are deactivated

3. Click on the “Customer system specific features” tab.
   ✓ A list of your licensed features appears, which are billed per SwyxWare system and are available to all Users.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name of the feature</td>
</tr>
<tr>
<td>Licensed</td>
<td>Number of licensed features</td>
</tr>
<tr>
<td>Used</td>
<td>Number of currently used features</td>
</tr>
<tr>
<td>Free</td>
<td>Number of licensed, unused features</td>
</tr>
</tbody>
</table>
| Expiration date Date from which the license loses its validity, i.e. the corresponding functions are deactivated

Click on “Update license information” to retrieve the current information from the licensing server.
3.3 Entering a license activation key

If your system has been licensed online, you can enter a new activation key in Swyx Control Center, e.g. in case of a functional enhancement or after the evaluation period has expired.

You can obtain the activation key from your service provider, see 4 Online Licensing, page 29.

To enter an activation key

1. In the menu, select “General Settings | Licenses and Features”.
2. Click on “Enter activation key”.
   ✓ The input field “Activation key” appears.
3. Enter the activation key.
4. Click on “Activate”.
   The activation may take a while.
5. Click on “Update license information” to check the licensing.
   ✓ The activation is completed and the ordered features are available for you.

3.4 Assigning Feature Profiles

You can assign Feature Profiles to Users.

If the assignment is not possible, there is no license for the Feature Profile.

To assign Feature Profiles to Users

1. In the menu, select “General Settings | Licenses and Features”.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name of the feature</td>
</tr>
<tr>
<td>Licensed</td>
<td>Number of licensed features</td>
</tr>
<tr>
<td>Used</td>
<td>Number of currently used features</td>
</tr>
<tr>
<td>Free</td>
<td>Number of licensed, unused features</td>
</tr>
</tbody>
</table>

The infinity symbol means that the number is unlimited.

2. Click on the “Feature Profiles” tab.
   ✓ A list appears with all of your licensed Feature Profiles.

3. Drag and drop one of the Users on the right to a Feature Profile in the table on the left. To cancel the assignment, assign another profile to the user.

Use the search bar above the list of all users to search for users. Click on “View All” to end the search.

✓ The User can use the included features as soon as he or she logs in to SwyxServer.

License information on licensing via license key

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Name of the product</td>
</tr>
<tr>
<td>Permanent</td>
<td>Number of permanent licenses for the product</td>
</tr>
<tr>
<td>Temporary</td>
<td>Number of licenses for a time-limited installation</td>
</tr>
</tbody>
</table>

4. To access further information, click on ✓.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product details</td>
<td>Exact designation of the product</td>
</tr>
<tr>
<td>Type</td>
<td>Permanent or temporary</td>
</tr>
</tbody>
</table>
3.5 Connection to Cloud Services

To ensure the functionality of Swyx Meeting and Swyx Messenger you need to connect your installation with appropriate Swyx Cloud Services. Contact your SwyxWare service provider to check whether all requirements are met.

The connection to cloud services is registered to the domain name you set in Login settings, see Domain (not in SwyxON and SDC), page 19. Once the connection is established, you cannot change the domain name.

If you have not entered a domain name, a random name, such as "5wmoue.swyx.net" will be generated when connecting to cloud services.

For the provision of the Swyx Messenger / Swyx Meeting service, user-related data will be transmitted to and processed by our order processor, Voiceworks B.V. (also part of the Enreach Group) on the basis of a corresponding order processing contract. These products require the transmission of various data such as IP address, login data, chat messages, names of communication partners, dial-in numbers (Swyx Meeting), files sent and screen share content (Swyx Meeting) each time they are used. Please note your duty to inform your users according to Art. 13/14 GDPR.

To connect your system with Cloud Services

1. In the menu, select “General Settings | Licenses and Features”.
2. Click on “Connect to cloud services” and confirm the procedure.

   ✓ The message “You have connected to cloud services successfully” appears.

3.6 Configuring the provisioning of SIP phones

You can configure the provisioning of certified SIP phones in the local network, see also chapter 11.1 Certified SIP phones, page 75.

To configure SIP phone provisioning

1. In the menu, select “General Settings | System”.
2. Click on the “Provisioning” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentication of certified phones required</td>
<td>If you activate this option, all certified SIP phone Users must authenticate themselves once before they can use the relevant device.</td>
</tr>
<tr>
<td>URL auto detect (not in SwyxON and SDC)</td>
<td>Activate the checkbox if the IP address of the SwyxServer can be resolved automatically in the local network.</td>
</tr>
</tbody>
</table>
3.6.1 Displaying the administrative password for certified Yealink SIP phones

For certified Yealink SIP phones, you can define manufacturer-specific settings via the manufacturer’s web interface. The IP address can be found on the device under "Menu | Status". You can log in with the username "admin". Alternatively, you can define the settings directly on the device under "Menu | Settings | Advanced Settings".

To access the settings, you need the administrative password. The password is automatically set when you install your customer system and applies to all Yealink certified SIP phones provided in your network. The password cannot be changed.

**To display the administrative password**

1. In the menu, select “General Settings | System”.
2. Click on the “Provisioning” tab.
3. In the “Administrative device password for certified phones” field, click 
   
   - The password is displayed.
   
   or

4. Click on 
   
   - The password is stored in your clipboard.

3.7 Defining the log in settings

You can define server-wide password settings and the UPN suffix as part of the username that all Users can use to log on to SwyxServer. You can use the domain name or an alias for the UPN suffix.

To define the login settings

1. In the menu, select “General Settings | System”.
2. Click on the “Login” tab.

Logging on to terminal devices and SIP registrations as well as authentication via Windows user accounts are not affected by these password settings.

Independent of the password settings, any attempt to re-use the current password is checked by the system and not permitted.
Two-factor authentication is deactivated by default, except in SwyxON. For SwyxON the option cannot be deactivated.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Force complex user passwords</td>
<td>Activate the checkbox if you want Users to use a complex password. Existing User accounts will remain unaffected by the rule until a User changes a password on the User’s own volition or the Administrator forces a password change for a User. In SwyxON, the guideline for complex passwords is forced by default and cannot be removed by any administrator.</td>
</tr>
<tr>
<td>Force password change on first login for new Users</td>
<td>When this checkbox is activated, newly configured users will be required to reset their password themselves after the first login so that users will be the only person who know their passwords. Only the User himself knows his password.</td>
</tr>
<tr>
<td>Two-factor authentication</td>
<td>Activate the checkbox so that administrators must authenticate themselves via PIN to Swyx Control Center in addition to the user name and password, see also 1 Logging in and logging out, page 6.</td>
</tr>
<tr>
<td>Deactivate User after failed logins</td>
<td>Select this checkbox if you want the system to lock user accounts after a specified number of failed logins, such as entering the password incorrectly more than once. The appropriate Users will be deactivated and will not be able to use terminal devices or clients. System administrators are not locked.</td>
</tr>
</tbody>
</table>

3.8 Defining an email server

All recorded voice mails and welcome emails are delivered to the SwyxWare Users via your defined email server.

To define the settings for the email server

1. In the menu, select “General Settings | System”.
2. Click on the “Email server” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate SMTP</td>
<td>Activate the checkbox to activate the SMTP settings.</td>
</tr>
</tbody>
</table>
3.9 Defining the voicemail settings

You can define a standard voicemail announcement that will be used for all future Users created on the same server. Additionally, you can select the codec for voicemail recordings.

The voicemail function is only available if it is activated in a User’s Feature Profile.

If the caller enters the DTMF digit ‘0’ during the voicemail announcement, the voicemail will be interrupted and the caller will be connected to an operator. See also the SwyxWare Documentation for Administrators, section “Operator (AutoAttendant)”.

To define the voicemail settings

1. In the menu, select “General Settings | System”. Click on the “Voicemail” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMTP mail server</td>
<td>Enter the unique address of the email server you are using. Allowed format: Symbolic name, DNS name, IP address</td>
</tr>
<tr>
<td>SMTP port</td>
<td>Enter the SMTP port for connecting the mail server.</td>
</tr>
<tr>
<td>Originating address</td>
<td>Enter the email sender address for all voice mails and welcome emails which SwyxServer will use to make deliveries to SwyxWare Users (e.g. <a href="mailto:SwyxServer@company.com">SwyxServer@company.com</a>). The address must be chosen in correlation to the email server used. Some email servers support any choice of originating address, others require that the address be in the same format as the address which as already been stored for you. In any case, the domain name (e.g. “@company.com”) should be identical to one of the domains managed by the mail server.</td>
</tr>
<tr>
<td>SMTP authentication</td>
<td>Activate the checkbox to activate authentication on the e-mail server according to the RFC 2554 specification. Supported methods: “LOGIN”, “PLAIN”, “CRAM-MD5”</td>
</tr>
<tr>
<td>User name</td>
<td>Enter a Username for authentication of SwyxServer on the email server.</td>
</tr>
<tr>
<td>Password</td>
<td>Enter a password for authentication of SwyxServer on the email server.</td>
</tr>
<tr>
<td>Use SSL</td>
<td>Activate the checkbox to encrypt the connection to the email server.</td>
</tr>
</tbody>
</table>

3. Click on “Send test email” to send a test email via the specified mail server to the specified originating address.

4. Click on “Save”.

Label | Explanation |
--- | --- |
Standard voicemail announcement | In the dropdown list all announcement files stored in the database appear, see also the SwyxWare Documentation for Administrators, chapter “Configuration of SwyxServer”, section “Files’ Tab”. The files have the audio format “16 kHz 16 Bit PCM mono” |
Click the button to search for files in any wav format on the network. After selecting a wav file, it is converted to the above format and stored in the database. The Windows functions used in this conversion process may degrade the audio quality. In this case, use a professional conversion program instead of Windows conversion to create WAV files in the above format.

You can record announcements e.g. via SwyxIt! (Menu “Settings | Recording Wizard”, see also SwyxIt! User Documentation, section “The Recording Wizard”.

Click on the button to delete the selected announcement. You can only delete files you have created yourself.

Click on the button to test play the currently selected greeting.

Click the button to adjust the volume for test playback.

Click on the button to download the currently selected file.

Codec for recordings

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>🎤</td>
<td>Audio attachments are sent as wav files (Microsoft Wave Audio GSM) by default. As an alternative, additional built-in or custom compressions can be used to reduce the size of attachments. The compression to be used can be set for all Users, or individually for each User.</td>
</tr>
<tr>
<td>☑️</td>
<td>Microsoft wav Audio G711 wav file, G.711 compressed</td>
</tr>
<tr>
<td>☑️</td>
<td>Microsoft wav Audio GSM WAV file, GSM compressed (Default setting after installation)</td>
</tr>
<tr>
<td>☑️</td>
<td>Microsoft wav Audio PCM Standard WAV file, uncompressed</td>
</tr>
</tbody>
</table>

2 Click on “Save”.

### 3.10 Defining Remote Connector settings

Via Remote Connector you can establish a connection with SwyxServer if you are outside your company network (LAN or VPN). Encryption is ensured via TLS. Digital X.509 certificates are used to establish a secure Remote Connector connection. For this purpose, SwyxIt! Users need a valid client certificate, which they can generate in Swyx Control Center, see 8.8 Creating Remote Connector client certificates, page 54. See also the SwyxWare Documentation for Administrators, chapter “Cross-network connections” and section “Configuring SwyxWare”.

In SwyxON you cannot edit the Remote Connector settings.

Additionally you can display the Swyx Mobile configuration via Swyx Control Center and call the URL to configure your Swyx Mobile Client. See also 8.16 Displaying Swyx Mobile configuration and configuring Swyx Mobile, page 67.

**To define Remote Connector settings for Mobile Clients**

1 In the menu, select “General Settings | System”.
2 Click on the “Remote Connector” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑️</td>
<td>Activate remote access If support for direct internet connections to the clients is required, activate the check-box.</td>
</tr>
</tbody>
</table>
**Editing General Settings**  
**Synchronizing intersite connections**

1. In the menu, select “General Settings | System”.
2. Click on the “Remote Connector” tab.
3. Click on or .

3. Click on “Save”.

### Authentication server
Enter the public server address (FQDN or IP address) and the port in the respective fields, so that the clients can access SwyxServer via the internet. The registered public address of the authentication service must be configured within the respective settings on the Client computers. If you use a different standard port and not 9101, it has to be explicitly input in the Client settings. See also the SwyxWare Documentation for Administrators, chapter “Connections with the Swyx Mobile and macOS Clients”.

### Authentication port
Enter the port, so that the Swyx Mobile clients can access SwyxServer via the internet.

### Remote Connector server
Enter the public server address of the Remote Connector server. The standard ports are 16203 or 57203. See also the SwyxWare Documentation for Administrators, chapter “Internet connection via SwyxRemoteConnector”.

### Remote Connector port
Enter the Remote Connector server port.

3. Click on “Save”.

#### To display the Swyx Mobile configuration for all Users

1. In the menu, select “General Settings | System”.
2. Click on the “Remote Connector” tab.
3. Click on or .

### 3.11 Synchronizing intersite connections

By setting up a SwyxLink it is possible to implement a connection between two or more SwyxServers. By configuring this link, status information (available, away etc.), collaboration, video and instant messaging capabilities are available across servers. Similarly, the Users of one site will be displayed in the Global Phonebook of the other site, and vice versa. See also the SwyxWare Documentation for Administrators, chapter

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal server</td>
<td>SwyxServer address</td>
</tr>
<tr>
<td>External server</td>
<td>Remote Connector address</td>
</tr>
<tr>
<td>Server type</td>
<td>Determined automatically by the installation</td>
</tr>
</tbody>
</table>

### Label | Explanation

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection mode</td>
<td>Auto (default)</td>
</tr>
<tr>
<td></td>
<td>The available network is automatically set</td>
</tr>
<tr>
<td></td>
<td>Standard</td>
</tr>
<tr>
<td></td>
<td>Internet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection type</td>
<td>Business (default)</td>
</tr>
<tr>
<td></td>
<td>Data transmission via VoIP</td>
</tr>
<tr>
<td></td>
<td>Private</td>
</tr>
<tr>
<td></td>
<td>Data transmission via mobile network</td>
</tr>
<tr>
<td>Request</td>
<td>You are asked before each telephone call which connection type is to be used.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Connector mode</td>
<td>Auto</td>
</tr>
<tr>
<td></td>
<td>An automatic attempt will be made to establish a direct connection to SwyxServer. If the connection fails, e.g. because you are outside your company network, you are connected to SwyxServer via Remote Connector.</td>
</tr>
<tr>
<td></td>
<td>Always</td>
</tr>
<tr>
<td></td>
<td>Always connects you to SwyxServer via Remote Connector.</td>
</tr>
<tr>
<td></td>
<td>If no connection via Remote Connector is possible, no attempt will be made to establish a connection via your company network.</td>
</tr>
</tbody>
</table>

Select “Users” from the menu, select the appropriate User and click on “Client Settings” and “Remote Connector” to view the Swyx Mobile configuration for a selected User.
“Cross-network connections”, section “Intersite Presence”. In Swyx Control Center you can synchronize intersite connections or delete existing intersite connections.

To synchronize intersite connections

1. In the menu, select “General Settings | System | Intersite Connections”.
2. Click on “Start sync”.
   - All listed SwyxWare sites are synchronized with each other.
3. In the line of the appropriate SwyxWare site, click on [ ] to delete the intersite connection.
   - The intersite connection is deleted. The site is no longer part of the synchronization process.

3.12 Setting music on hold

You can upload a file that contains on-hold music or an announcement that plays while calls are on hold.

The music on hold delivered with SwyxWare was composed and made available by "corporatemusic". For more information on professional music and speech solutions, visit www.corporate-music.de and www.gema.de

To set the music on hold

1. In the menu, select “General Settings | System”.
2. Click the “Music on Hold” tab.

<table>
<thead>
<tr>
<th>Name</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard voicemail announcement</strong></td>
<td>In the dropdown list all announcement files stored in the database appear, see also the SwyxWare Documentation for Administrators, chapter &quot;Configuration of SwyxServer&quot;, section “Files’ Tab”. The files have the audio format “16 kHz 16 Bit PCM mono”.</td>
</tr>
</tbody>
</table>

Codec for recordings

Audio attachments are sent as wav files (Microsoft Wave Audio GSM) by default. Alternatively, it is possible to use other implemented or user-defined compressions in order to reduce the size of the attachments. The compression to be used can be configured for all users, or individually for each user.

- **Microsoft wav Audio G711**
  - wav file, G.711 compressed
- **Microsoft wav Audio GSM**
  - WAV file, GSM compressed
  - (Default setting after installation)
- **Microsoft wav Audio PCM**
  - Standard WAV file, uncompressed
3.13 Distributing software to clients or devices

You can distribute more recent SwyxIt! versions to Users or update the firmware of certified SIP phones. Version control is performed via Swyx version server.

3.13.1 Distributing SwyxIt! or NetPhone Client to Users

If a more recent SwyxIt! or NetPhone Client version is available you have the following options to distribute the version data from the Swyx versions server to the registered Users in your network:

- Manually: Check if a more recent version is available on the Swyx versions server and confirm the distribution
- Automatically: As soon as a more recent version is on the Swyx versions server let it be distributed without further confirmation (Auto sync)

When a User logs in to SwyxIt! or NetPhone Client the next time, an update request appears with the option to download the installation file, postpone the update or skip the version offered, see also the SwyxIt! or NetPhone User documentation, chapter "Installation", section "Update".

The automatic installation of and NetPhone Client can be done in the following ways:

- via logon script
- via Active Directory Group guidelines

(you may need to be logged in to view the content).

To provide SwyxIt! or NetPhone Client to the Users manually

1. In the menu, select “General Settings | Versions”.
2. Click on the „Swyx Solutions GmbH“ or „Deutsche Telekom AG“ tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Software vendor</td>
</tr>
<tr>
<td>Variant</td>
<td>Name of the software</td>
</tr>
<tr>
<td>Server version</td>
<td>Software version available on the Swyx versions server.</td>
</tr>
</tbody>
</table>

To provide SwyxIt! or NetPhone Client to the Users automatically

3. In the line of the corresponding software, click on the link to download a more recent software version to the database.
   ✓ The URL available on the server is copied over which the version can be distributed.

4. Click on ✓ to provide the software to the Users in your network.
   Click on ☑ to deactivate that the software is provided.
   Click on ⚒ to check the software URL, edit it if necessary and click on “Save” after that.

If you want to change the URL of the local version, e.g. to provide the software via local FTP server, make sure that the entered local version matches the version of the software package.

To provide SwyxIt! or NetPhone Client to the Users automatically

1. In the menu, select “General Settings | Versions”.
2. Click on the „Swyx Solutions GmbH“ or „Deutsche Telekom AG“ tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Software vendor</td>
</tr>
<tr>
<td>Variant</td>
<td>Name of the software</td>
</tr>
<tr>
<td>Server version</td>
<td>Software version available on the Swyx versions server.</td>
</tr>
<tr>
<td>Local version</td>
<td>Version available on your SwyxServer or NetPhone Server.</td>
</tr>
<tr>
<td>Distribution</td>
<td>✓ = the distribution of the software is activated</td>
</tr>
</tbody>
</table>

3. Click on ⚒ to let the software be distributed automatically.
3.13.2 Distributing firmware to certified SIP phones

When certified SIP phones are provided, the current firmware is transferred. If a newer firmware is available you can distribute it to the corresponding devices.

To update the firmware for certified SIP telephones

1. In the menu, select “General Settings | Versions”.
2. Click on the tab with the appropriate manufacturer name.
3. In the line of the corresponding firmware, click on \ to download a more recent firmware version to the database.
   ✓ The URL available on the server is copied over which the version can be distributed.
4. Click on \ to distribute the firmware in your network.
   If you click on \ in the second step, will be released for automatic distribution. No further steps are necessary on your part.

   Click on \ to deactivate automatic distribution.

   Click on \ to check the firmware URL, edit it if necessary and click on “Save” after that.

3.14 Defining client settings for all Users

You can define settings that apply server-wide to all SwyxWare telephony clients.

To define settings for SwyxIt!

1. In the menu, select “General Settings | Client Settings”.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default Skin</td>
<td>Select a Skin to be used server-wide as the default Skin. The setting is adopted by all Users who have defined the “Default Skin” in the User configuration.</td>
</tr>
</tbody>
</table>
| Standard directory for client recordings | Here you will find the standard directory in which the User’s voice recordings should be stored (default setting: %APPDATA%\Swyx\Recording). You can use placeholders: Environment variable %APPDATA% %APPDATA% is defined on the client computer and denotes the directory for this user’s application data. e. g. %APPDATA%\Recordings SwyxWare User name [username] The dummy [username] is replaced by SwyxIt! with the current SwyxWare- user name. The recordings can thus be stored in a directory within the domain e. g. \fileserver\callrecordings\[username]\ In the default setting the path is: %APPDATA%\Swyx\Recording All recordings are then saved locally among the application data of the user account under which SwyxIt! is running. If the User should be able to edit his recordings from other computers as well, please create a share for the User within the network and configure the path for the client recordings accordingly. For customizing a different directory, see 8.11.3 Activating conversation recordings, page 64.
To define SIP client settings

1. In the menu, select “General Settings | Client Settings”.
2. Click on the “SIP client settings” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard login mode for SIP devices</td>
<td>Select whether or not a SIP terminal device must be authenticated when logging in.</td>
</tr>
<tr>
<td>Standard realm for SIP devices</td>
<td>Define the standard realm (FQDN or IP address) for all Users at this SwyxServer.</td>
</tr>
<tr>
<td>STUN server</td>
<td>Enter the STUN server to be used by the SIP devices.</td>
</tr>
<tr>
<td>STUN-Port</td>
<td>Enter the associated port for the STUN server (standard value: 3478).</td>
</tr>
</tbody>
</table>

3. Click on “Save”.

3.15 Accessing SwyxWare Administration

Some of the settings for UC Tenants or SwyxServer are only available via SwyxWare Administration. The following is required for remote administration:

- Installation of SwyxWare Administration on the computer from which access is to be made.
- Authentication token (SwyxON) or SwyxWare login data
- IP address and port or the UC Tenant’s or SwyxServer’s FQDN

Remote Admin Connector must be installed before the installation of the SwyxWare Administration. If there is already a SwyxWare Administration installation on your system, you must uninstall the program and reinstall it after the installation of Remote Admin Connector.

To install Remote Admin Connector

Remote Admin Connector is included in the SwyxWare installation package, however it must be installed via command line parameters.

1. Navigate to the folder where the installation package is saved.
2. Execute the following command in the command line:
   ```
   msiexec /i Admin64.msi RemoteAdminConnector=1
   ```
   - The SwyxWare setup appears.
3. Select “Remote Admin Connector” from the list, click on “Next >” and confirm your input.

You can deinstall Remote Admin Connector via the Windows Control Panel.

To log in to Remote Admin Connector

1. To install “Remote Admin Connector”
   - A window appears and displays the current connection status.
2. Click on the “Select UC Tenant” button.
   - “Remote Admin Connector” appears, if applicable, with the UC Tenants list for which you last defined the settings via SwyxWare Administration.
3. Select an UC Tenant from the list, click on “Connect” and enter the respective authentication token or click on “Add Tenant Address” and enter the UC Tenant’s or SwyxServer’s IP address and port or FQDN for which you wish to determine settings in the SwyxWare Administration.
3.16 Defining codec filters

You can define codec filters server-wide for all Users and edit them in the user settings of each User.

Via codec filter you define the allowed codecs for calls. Codecs define how much voice data is compressed, i.e. how high the voice quality is for calls. In addition, you can filter out the T.38 protocol when establishing a fax connection in the user settings to ensure compatibility with IP adapters that do not support certain variants of the protocol.

Incoming calls with non-permitted codecs are rejected and an error message appears.

If you do not allow a codec, no phone calls are possible.

For new SwyxWare installations and updates, the codec filter is deactivated by default, i.e. all codecs are allowed.

To define a codec filter for all Users

1. In the menu, select “General Settings | System”.
2. Click on the “Standard Codec Filter” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use server default</td>
<td>Only available in the user settings: Select the checkbox if you want the default codec filter defined under “General Settings” to be applied for the selected User.</td>
</tr>
<tr>
<td>Allow the following codecs</td>
<td>Activate the checkbox to select individual codecs that are allowed to be used. If the checkbox is deactivated, all codecs are automatically allowed. If you activate the checkbox and do not select a codec, no phone calls are possible.</td>
</tr>
<tr>
<td>Label</td>
<td>Explanation</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>G.722 (around 64 kbit/s per call)</td>
<td>Activate the checkbox to allow this codec. Voice, high bandwidth. The voice data is transmitted in HD audio quality.</td>
</tr>
<tr>
<td>G.711a (around 64 kbit/s per call)</td>
<td>Activate the checkbox to allow this codec. Voice, high bandwidth. The voice data is slightly compressed.</td>
</tr>
<tr>
<td>G.711µ (around 64 kbit/s per call)</td>
<td>Activate the checkbox to allow this codec. Voice, high bandwidth. The voice data is slightly compressed.</td>
</tr>
<tr>
<td>G.729 (around 24 kbit/s per call)</td>
<td>Activate the checkbox to allow this codec. Voice, low bandwidth. The voice data is heavily compressed.</td>
</tr>
<tr>
<td>Fax over IP (T.38, around 20 kbit/s per call)</td>
<td>Activate the checkbox to allow this protocol. Fax - the special fax protocol T.38 is used, which takes the set-up of the IP network into consideration.</td>
</tr>
<tr>
<td>Action on fax receipt</td>
<td>Only available in the user settings: When a fax connection is set up, the T.38 protocol is negotiated between the two devices involved. Certain variants of this negotiation may not be supported by some IP adapters. Use the following fax/T.38 options to establish compatibility with such devices.</td>
</tr>
<tr>
<td>Remove T.38 codec from initial invite (SIP invite)</td>
<td>Activate the checkbox to activate this option. T.38 is removed from the first connection request. The fax devices first set up a voice connection and then switch to the fax protocol T.38 because of the fax tone (CED tone, 2100Hz).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Prohibit T.38 reinvite by sender | Activate the checkbox to activate this option.  
• The receiving fax device switches to T.38 after detecting the fax tone (CED tone, 2100Hz). Alternatively, the switch to T.38 can be carried out by the sending fax device. Some IP adapters don't support switching by the sender. If this option is activated, SwyxServer suppresses a switch to T.38 by the sender.  
• If the receiving side involves a combined phone/fax device (fax switch), a fax data transmission is impossible when the option "Prohibit T.38 reinvite by sender" is activated. |
### Online Licensing

Swyx offers various licensing models that can be tailored to the needs of your business.

There are following technical ways to licence your software:
- **Licensing via license key** where the purchased license key is checked once during the installation and
- **Online Licensing**, which requires a permanent Internet connection to the Swyx license server to check the validity of the license.

The Online Licensing is supported for new installations from SwyxWare Version 11.50.

### Ordering

Licenses are ordered via Swyx operator web portal by your service provider. The number of function profiles or additional functions ordered by you is licensed, see Feature Profile, page 29 and Additional functions, page 32.

#### Using activation key

You must enter the activation key, which you received from your provider, in the configuration wizard during the SwyxWare installation.

In Swyx Control Center you can enter the activation key afterwards, e.g. in case of a function extension, see 3.3 Entering a license activation key, page 16.

#### License server

The validity of the licenses is constantly checked by the Swyx license server. If, for example, the connection between SwyxServer and the Swyx license server is interrupted due to network problems, the technical supervisors are automatically informed. Since the licenses are stored locally on SwyxServer, SwyxWare can be operated for a few days without synchronization with the central Swyx license server.

### 4.1 Subscribe or Purchase

Online Licensing allows you to chose between the following variants:
- Swyx Purchasing
- Swyx Flex

#### Swyx Purchasing

You can purchase features for permanent use. You can extend the ordered functions at any time, e.g. upgrade the basic function profile to professional.

To obtain software updates outside the warranty, you must also close an update agreement with your service provider. The update agreement can also be closed subsequently. In this case, however, the full period of use from the delivery date will be invoiced.

#### Swyx Flex

You can subscribe to the required functions on a monthly basis and use them flexibly. You can order the corresponding license subscriptions via your service provider and adjust the scope at any time.

The included software updates keep SwyxWare up to date during the whole subscription period.

### 4.2 Feature Profile

The required SwyxWare functions are summarized in feature profiles.

The following function profiles are offered as standard:
- Basic
- Professional
- Premium

The feature profiles contain the following functions:
<table>
<thead>
<tr>
<th>Features</th>
<th>Feature Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>Professional</td>
</tr>
<tr>
<td>Telephony system and UC functionality  (incl. desktop clients for Windows and macOS)</td>
<td>✓</td>
</tr>
<tr>
<td>Connections: Voice and fax channels</td>
<td>✓</td>
</tr>
<tr>
<td>SwyxAdHocConference</td>
<td>✓</td>
</tr>
<tr>
<td>SwyxBCR (Basic Call Routing)</td>
<td>✓</td>
</tr>
<tr>
<td>SwyxECR (Extended Call Routing)</td>
<td>✓</td>
</tr>
<tr>
<td>Swyx Meeting 2</td>
<td>✓</td>
</tr>
<tr>
<td>Swyx Mobile</td>
<td>✓</td>
</tr>
<tr>
<td>SwyxConference</td>
<td>✓</td>
</tr>
<tr>
<td>SwyxRecord</td>
<td>✓</td>
</tr>
<tr>
<td>SwyxFax</td>
<td>✓</td>
</tr>
<tr>
<td>SwyxCTI+</td>
<td>✓</td>
</tr>
<tr>
<td>SwyxMonitor</td>
<td>✓</td>
</tr>
<tr>
<td>Swyx VisualContacts</td>
<td>✓</td>
</tr>
<tr>
<td>Swyx Connector for Skype</td>
<td>✓</td>
</tr>
</tbody>
</table>

### Functions in Detail: Performance features

<table>
<thead>
<tr>
<th>Name of the function</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwyxAdHocConference</td>
<td>Dial-in conferences with 3 internal and/or external participants</td>
</tr>
<tr>
<td>SwyxBCR (Basic Call Routing)</td>
<td>Use of the Call Routing Managers. This is an additional component of SwyxIt!, which allows the user to define simple call forwarding.</td>
</tr>
<tr>
<td>SwyxECR (Extended Call Routing)</td>
<td>This function contains the full usage of the Graphical Script Editor. This is an additional component of the SwyxIt! software, which offers the user a comfortable interface especially to clearly define and illustrate complex rules for call handling. Certain functions are supplied only by the the Graphical Script Editor, such as the access to email directories, the creation of queues or the addition of your own scripts. It is a significant extension of the Call Routing Managers.</td>
</tr>
<tr>
<td>Swyx Meeting (basic version)</td>
<td>WebRTC-based web conference service. Maximum 2 participants: 1 host + 1 guest</td>
</tr>
<tr>
<td>Swyx Mobile</td>
<td>Integration of mobile phones with “One Number” concept and telephony via data connections with apps for Android and iOS</td>
</tr>
<tr>
<td>SwyxConference</td>
<td>Dial-in conferences with any number of internal and external participants.</td>
</tr>
<tr>
<td>SwyxRecord</td>
<td>The recording function makes it possible to record, save and forward telephone calls with the Windows client. For users with other terminal devices, e.g. SwyxPhone, SIP phones or GSM phones (or with SwyxIt! in CTI mode), the conversations can be recorded directly on the trunk connection.</td>
</tr>
<tr>
<td>SwyxFax</td>
<td>Use of central, server-based fax services with the Windows client. Transmission of fax messages from all applications with a print function.</td>
</tr>
<tr>
<td>SwyxCTI+</td>
<td>Makes any phone (e.g. DECT, SIP or analog) an extension for incoming and outgoing calls with the Windows client.</td>
</tr>
</tbody>
</table>
You must consider the following information when ordering feature profiles:

**Licenses for Clients**
The number of telephony clients who can log on to SwyxServer is limited to four per user. This means that a user can e.g. log on simultaneously with a desktop client, a SwyxPhone at the workstation, a further SwyxPhone in the conference room and via the Swyx Mobile app.

**SwyxConference**
For using conferences you may have to appropriately extend the number of calls to a location.

**Swyx VisualContacts**
The technical prerequisite for this function is the installation of the ESTOS or C4B application. The corresponding server licenses are not part of the Swyxlicensing and must be purchased separately.

**Voice and fax channels**
The number of voice and fax channel licenses defines how many telephone calls or fax transmissions can be carried out in parallel on Swyx-Server. Voice and fax channels are generally free of charge, but their maximum number is limited by the following rule:

- The number of voice channels must not exceed the number of ordered function profiles multiplied by two.
  
  **Example**
  
  If you have ordered 50 function profiles, up to 100 voice channels can be used.

- The number of fax channels may not exceed the total number of ordered Professional and Premium Functional Profiles.
  
  **Example**
  
  If you have ordered 20 Professional and 10 Premium Function Profiles, you may use up to 30 fax channels.

The number of internal calls, i.e. calls between users of the same SwyxServer, is unlimited.

You must consider the following information when ordering feature profiles:

<table>
<thead>
<tr>
<th>Name of the function</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SwyxMonitor</strong></td>
<td>Permanent call recording of incoming or outgoing external calls, silent connection to calls (Silent Call Intrusion).</td>
</tr>
<tr>
<td><strong>Swyx VisualContacts</strong></td>
<td>Integration of contact information stored in the various applications in the company (e.g. merchandise management, CRM or other databases). Fast phone number identification and contact search directly in the Windows client.</td>
</tr>
<tr>
<td><strong>Swyx Connector for Skype for Business</strong></td>
<td>Integration of Swyx telephony functions into the Skype user interface.</td>
</tr>
</tbody>
</table>

**Swyx Monitor**
The SwyxMonitor function includes two options: permanent call recording, and intrusion on a conversation (Silent Call Intrusion).

- **Permanent call recording**
  On any trunk connection, the calls for selected internal numbers can be permanently recorded. It can be specified whether one or both sides of the conversation are recorded. This option is often used in call center scenarios for training purposes, or for calls in which important transactions are authorized.

- **Silent Call Intrusion**
  In a call center, the supervisor can use SwyxIt! to intrude on an ongoing conversation and listen in, give directions to the speaking call center agent (e.g. advice on presenting the case) or even actively join in the call.

When dialing an emergency number (e.g. 112), a voice channel cannot be released automatically, when all voice channels are already occupied by external phone calls. Configure enough voice channel licenses, so that sufficient capacities for external connections are guaranteed.

Stop

When dialing an emergency number (e.g. 112), a voice channel cannot be released automatically, when all voice channels are already occupied by external phone calls. Configure enough voice channel licenses, so that sufficient capacities for external connections are guaranteed.
4.3 Additional functions

In addition to the ordered feature profiles, you can order additional functions and assign them separately to the desired users.

The number of voice channels must not exceed the number of ordered function profiles multiplied by two. Some additional functions may only be ordered with Professional or Premium function profiles.

Example:

You have ordered 50 Basic, 30 Professional and 20 Premium function profiles. You can additionally order up to 100 System Phones, only up to 50 VisualGroups (Professional + Premium) and only up to 20 Swyx Connector for DATEV (Premium) additional functions.

You may order the following additional functions depending on the function profiles you have already purchased:

<table>
<thead>
<tr>
<th>Additional function</th>
<th>Purchased Feature Profiles:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic</td>
</tr>
<tr>
<td>System Phone license</td>
<td>✓</td>
</tr>
<tr>
<td>Feature Pack for Certified SIP phones</td>
<td>✓</td>
</tr>
<tr>
<td>Swyx Connector für Notes</td>
<td>✓</td>
</tr>
<tr>
<td>Swyx Meeting</td>
<td>✓</td>
</tr>
<tr>
<td>Swyx Analytics by aurenz</td>
<td>✓</td>
</tr>
</tbody>
</table>

You are obliged to adhere to any legal requirements when using the SwyxMonitor option pack.

SwyxMonitor-functions are only available when CTI is deactivated.

You can assign an additional function to any user. This means that a user with the Basic function profile, may be assigned additional functions that require the corresponding number of purchased Professional or Premium function profiles.

Additional functions: Performance features

<table>
<thead>
<tr>
<th>Name of the function</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Phone</td>
<td>Additional functions for system telephones (Unify), e.g. server-based call lists, telephone directories and extended CTI functions with the Windows client</td>
</tr>
<tr>
<td>Feature Pack for Certified SIP phones</td>
<td>Advanced SwyxWare features, such as CTI, global phonebook integration and various system phone features, with certified third-party SIP phones. The scope of functions depends on the provider and telephone model.</td>
</tr>
<tr>
<td>Swyx Connector für Notes</td>
<td>Integration in Lotus/IBM/HCL Notes, calendar-based forwarding, dialing from any contact databases, number identification</td>
</tr>
<tr>
<td>Swyx Meeting</td>
<td>WebRTC-based web conference service Maximum 10 participants: 1 host + 9 guests</td>
</tr>
<tr>
<td>Swyx Analytics by aurenz</td>
<td>Extension for the analysis of corporate communication on the basis of the generated call data</td>
</tr>
</tbody>
</table>
You must consider the following information when ordering additional functions:

**Licenses for desk phones**

With SwyxWare you can use both, the telephony client and Desk Phones. A separate license is required for each Desk Phone that is to be operated using SwyxWare. When telephones, e.g. SwyxPhones, are purchased within a SwyxWare installation, this individual license is included, i.e. SwyxServer will either recognize the SwyxPhone automatically (Whitelist) or an individual license for the system phone is included in the package.

<table>
<thead>
<tr>
<th>Desk Phone</th>
<th>License type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwyxPhone</td>
<td>Whitelist</td>
</tr>
<tr>
<td>System Phone (Phones by Unify)</td>
<td>System phone license (already included)</td>
</tr>
<tr>
<td>Certified SIP phones</td>
<td>Feature Pack for Certified SIP Phones</td>
</tr>
</tbody>
</table>

A Desk Phone license does not include a user license, it only serves to authorize the system phone to SwyxServer.

If a user is simultaneously logged on to SwyxServer with a SwyxIt! and a Desk Phone, he will only need one user license but he will also need a license for the Desk Phone if it is not a SwyxPhone.

**Swyx VisualGroups**

The number of queues used in a customer instance is not limited. A user can be assigned to an unlimited number of queues with a user license. In the SwyxWare variant for the installation in the customer network, the user license is floating based, i.e. only as many user licenses are needed as users are logged into VisualGroups queues.

Statistics, reporting and wallboards are only included in the Enhanced version.

<table>
<thead>
<tr>
<th>Function</th>
<th>Swyx Visual-Groups</th>
<th>Swyx Visual-Groups Enhanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queue</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>Statistics</td>
<td>included</td>
<td></td>
</tr>
<tr>
<td>Reporting</td>
<td>included</td>
<td></td>
</tr>
<tr>
<td>Administration missed calls</td>
<td>included</td>
<td></td>
</tr>
<tr>
<td>Wallboard</td>
<td>included</td>
<td></td>
</tr>
</tbody>
</table>

**Swyx Connector for DATEV**

The technical prerequisite for this function is the installation of the ESTOS or C4B application. The corresponding server licenses are not part of the Swyx Flex model and must be purchased separately.

**Swyx Analytics by aurenz**

This function must be ordered for the total number of users of your system.
4.4 Evaluation Installation

This evaluation installation is limited to a period of 30 days. Up to five users can thus use SwyxWare at the same time.

The following licenses are included:

<table>
<thead>
<tr>
<th>License</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature Profile “Premium”</td>
<td>5</td>
</tr>
<tr>
<td>System Phone</td>
<td>5</td>
</tr>
<tr>
<td>Feature Pack for Certified SIP phones</td>
<td>5</td>
</tr>
<tr>
<td>Swyx Connector für Notes</td>
<td>5</td>
</tr>
<tr>
<td>Swyx Connector for DATEV</td>
<td>5</td>
</tr>
<tr>
<td>Swyx Analytics by aurenz</td>
<td>5</td>
</tr>
<tr>
<td>SwyxConference</td>
<td>2</td>
</tr>
<tr>
<td>Fax channels</td>
<td>2</td>
</tr>
<tr>
<td>Voice channels</td>
<td>10</td>
</tr>
<tr>
<td>Swyx VisualGroups Enhanced</td>
<td>5</td>
</tr>
<tr>
<td>Swyx Meeting (basic version)</td>
<td>5</td>
</tr>
</tbody>
</table>

You have ordered 20 Premium, 30 Professional and 50 Basic function profiles. The ordered profiles may be assigned to a total of 100 users. 100 function profiles are recorded accordingly in the usage report.

With online licensing, the ordered number of function profiles is always taken into account. If you assign the function profile “Deactivated” to a user, you only release the ordered capacity for another user, billing will continue to take place.

You can configure additional users in advance, even if the number of function profiles ordered is exceeded. Assign the function profile “Deactivated” to the new users and order later if required.

4.5 Billing

With the Swyx purchase model, the invoice is issued once on the delivery date. An update agreement is invoiced monthly.

The billing for Swyx Flex is carried out monthly according to the usage report.

You can assign the licensed function profiles to the desired users. Only one function profile can be assigned to each user. Additionally, it is possible to assign each user an additional function or several different additional functions to each user. The number of ordered function profiles and additional functions will be invoiced.

Example:
5 Licensing via license key

Swyx offers various licensing models that can be tailored to the needs of your business.

There are following technical ways to licence your software:

- **Online Licensing**, which requires a permanent Internet connection to the Swyx license server.
- Licensing via license key where the purchased license key is checked once during the installation.

5.1 Licensing Procedure

During the first installation, you will be asked for the license keys. These license keys are limited to 30 days. The temporary license key is sent to you as a PDF. Within these 30 days it is possible to receive an unlimited (permanent) key for your SwyxWare installation by completing registration.

Permanent license keys can be requested using the SwyxWare Administration. In addition to customer data, the hardware information of the computer on which SwyxWare is installed is recorded in the form of checksums. The use of checksums ensures that Swyx does not acquire knowledge concerning your actual hardware information. This data is then sent to Swyx. Based on this data, Swyx derives an unlimited key for your SwyxWare installation which is then sent to you. The installation of SwyxWare onto another system (e.g. due to a failure of the previously used system) requires that you repeat the registration procedure.

The file which is created when requesting a permanent license key, contains encrypted information concerning the hardware of the computer on which the product is installed. Please note that you must create the license key request on the system you want to use later.

When purchasing additional licenses, it is possible to simply add other license keys in order to expand an existing license. See **User license**, page 36.

Swyx will only use the recorded data for licensing purposes.

Please see the license conditions included in the package for further information.

Evaluation Installation

An evaluation installation is limited to 30 days. Up to five users can thus use SwyxWare at the same time. After purchasing SwyxWare you can enter a valid license key within this 30 day period using SwyxWare Administration and after that request a permanent license key via SwyxWare Administration.

Update Licenses (kb2876)

If you want to update an older version, you need update licenses. Together with existing licensing, an update license allows a newer software version to be installed.

Before a new version is installed, you must have the necessary update license with the appropriate number of users. SwyxWare will not be available again until after input of the update license.

If you want to update an older version, please contact your Swyx partner or Support.

Number of update licenses

You need update licenses for each of your SwyxWare users.

*Example:*

*If you operate SwyxWare with 100 users, you will need an update license for 100 users.*

Receipt of Update Licenses

An update license cannot be directly or separately purchased. You can purchase the Swyx Update Service (SUS) for a specific validity period. During this validity period you will receive the necessary update licenses directly from Swyx.

See also **Swyx Update Service (SUS)**, page 36.
5.1.1 Swyx Update Service (SUS)

You need a Swyx Update Service license with the same scope for which you have licensed users. A Swyx Update Service license has a validity period of up to 3 years. During this validity period you will receive all necessary update licenses from Swyx with the scope of the existing Swyx Update Service licenses.

Example:
You have a SwyxWare version with 100 users. Therefore, you need 100 update licenses in order to upgrade to a later SwyxWare version. You buy a Swyx Update Service license for 100 users for a period of 3 years, and receive the required SwyxWare update licenses right away. The same naturally also applies for all other required update licenses within the coming 3 years.

The validity period of a Swyx Update Service license begins with the first permanent server key for your SwyxWare. This can be extended by the additional purchase of new Swyx Update Service Licenses.

To update from older versions you need an update key.

If you would like to upgrade an older version, you need an update license that has been specifically created for the desired new version. You cannot use it to update to any newer version of your choice.

The number of users or voice channels will not be changed during the update.

For further information, please contact your specialist dealer.

5.1.2 SwyxWare for DataCenter Licensing Procedure

A licensing server is licensed in the same way as SwyxWare is licensed. During installation a temporary license key is entered, which is made permanent in the procedure described. A customer installation is then licensed by a logon to the licensing server. The configured data is recorded daily, and summarized in monthly usage reports. These are sent to the service provider and Swyx. The invoicing can be based on these reports.

The backend server, which is used only for the license management and reporting, requires a special license.

5.1.3 User license

According to the type, the license will be granted either per logged-on user (SwyxWare), per configured user (SwyxWare for DataCenter) or per ordered user (SwyxON).

After the installation of an option pack the entire number of user licenses is reduced to the number of option pack licenses.

Please make sure to acquire a sufficient amount of option pack licenses.

Example:
If you have set up a SwyxWare installation with 100 users, and add a license for an additional option pack with 80 users, only 80 users can simultaneously logon to SwyxServer.

Example:
If there are 100 user licenses and the customer purchases 150 option pack licenses, only 100 user licenses including option pack will be available after adding the keys.

If you find that you have too few users after you have installed an option pack, you can remove the license for the option pack. You will then have the original number of users. Please contact your dealer in order to receive an option pack with a sufficient user quantity.

Does not include an upgrade of the current software version, see Update Licenses (kb2876), page 35.
5.1.4 Licenses for Clients

The number of telephony clients who can log on to SwyxServer is limited to four per user. This means that a User can e.g. log on simultaneously with a desktop client, a SwyxPhone at the workstation, a further SwyxPhone in the conference room and via the Swyx Mobile app.

Licenses for desk phones

With SwyxWare you can use both, the telephony client and Desk Phones. A separate license is required for each Desk Phone that is to be operated using SwyxWare. When telephones, e.g. SwyxPhones, are purchased within a SwyxWare installation, this individual license is included, i.e. SwyxServer will either recognize the SwyxPhone automatically (Whitelist) or an individual license for the system phone is included in the package.

<table>
<thead>
<tr>
<th>Desk Phone</th>
<th>License type</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwyxPhone</td>
<td>Whitelist</td>
</tr>
</tbody>
</table>

Licenses for Swyx Mobile

The functions of SwyxWare can also be used by mobile devices while traveling. For this

- the administrator must make the Swyx Mobile option available for the User (in the user properties on the "Rights" tab)
- the User himself - or the administrator on his behalf - must activate the use of Swyx Mobile in the Forwardings on the "Mobile Extensions" tab

The Swyx Mobile licenses are individual licenses and are valid for the number of Users who have activated this option in their call forwarding.

The Swyx Mobile license is an additional license for a User who is already configured and licensed.
5.1.5 Licensing of data channels

Voice Channel Licenses
The number of voice channels is licensed. A voice channel is the connection from the own network, where SwyxServer is installed, to a device connected to another network. A distinction is made according to the type of voice channel:
- Voice channels via ISDN into the public telephone network or over SIPGateway trunks are licensed per configured voice channel
- Voice channels via IP to another location (SwyxLink or SIP trunk) are only charged when an active call exists over this connection

Example:
A SwyxWare installation has 8 ISDN channels. A branch is further linked in with a maximum of 4 channels (SwyxLink), and a SIP trunk is set up to a provider with a maximum of 10 channels. Altogether 22 channels are set up.

In this case at least 9 channels should be licensed.

If 16 channels are licensed, then 8 channels are recorded via the ISDN trunk, and a further 8 channels are available for simultaneous calls via the SwyxLink trunk and the SIP trunk. If e.g. all 4 SwyxLink connections and 4 SIP trunk connections are active, no further call can be initiated via the SwyxLink or SIP trunk.

The number of internal calls, i.e. calls between users of the same SwyxServer, is unlimited.

Fax Channel Licenses
The number of configured fax channels is licensed. No distinction is made between the fax channel types, e.g. ISDN to the public telephone network or IP to another site (SwyxLink).

5.1.6 Options and Option Packs Option Packs
For certain use scenarios, supplementary modules are offered which significantly expand the functional scope of SwyxWare. These supplementary modules can either be added as option packs (e.g. Extended Call Routing for all users of a SwyxServer), or as options (single licenses for a certain number of SwyxFax users).

SwyxBCR (Basic Call Routing)
The option "SwyxBCR" for SwyxWare for DataCenter includes the use of the Call Routing Managers.

SwyxECR (Extended Call Routing)
This option pack contains the full usage of the Graphical Script Editor. This is an additional component of the SwyxIt! software, which offers the user a comfortable interface especially to clearly define and illustrate complex rules for call handling.

Certain functions are supplied only by the the Graphical Script Editor, such as the access to email directories, the creation of queues or the addition of your own scripts. It is a significant extension of the Call Routing Manager.

SwyxConference
The option pack offers professional conference management. You can hold conferences with numerous participants (more than three), and virtual conference rooms can be set up into which the individual subscribers can dial independently of one another, both from the company network and from outside.

Please note that in order to use conferences you must appropriately extend the number of calls to a location.
**SwyxAdHocConference**

The option "SwyxAdHocConference" for SwyxWare for DataCenter enables the user to initiate conferences spontaneously with more than three users. See also *Scope of functions in SwyxWare for DataCenter and SwyxON*, page 40.

**SwyxRecord**

If the "SwyxRecord" option pack is installed, then during a call a user can independently record the conversation (or terminate this recording) with a click of the mouse. For users with other devices, e.g. SwyxPhone, SIP phones or GSM phones (or with SwyxIt! in CTI mode), the conversations can be recorded directly on the trunk connection.

**SwyxProfessional**

The option pack "SwyxProfessional" includes the option packs SwyxRecord, SwyxConference, SwyxECR, Swyx Mobile and SwyxFax available for all SwyxWare Users.

**SwyxMonitor**

This function is not available for SwyxON.

The SwyxMonitor option pack requires the SwyxRecord option pack.

The “SwyxMonitor” option pack includes two options: permanent call recording, and intrusion on a conversation (Silent Call Intrusion).

- **Permanent call recording**
  On any trunk connection, the calls for selected internal numbers can be permanently recorded. It can be specified whether one or both sides of the conversation are recorded. This option is often used in call center scenarios for training purposes, or for calls in which important transactions are authorized.

- **Silent Call Intrusion**
  In a call center, the supervisor can use SwyxIt! to intrude on an ongoing conversation and listen in, give directions to the speaking call center agent (e.g. advice on presenting the case) or even actively join in the call.

You are obliged to adhere to any legal requirements when using the SwyxMonitor option pack.

SwyxMonitor-functions are only available when CTI is deactivated.

**Swyx Connector for Swyx Connector für Notes**

The Swyx option pack for Swyx Connector für Notes offers the following functions:

- Direct dialing from Swyx Connector für Notes
- Display Swyx Connector für Notes contacts (for incoming call, from lists)
- The search function in the SwyxIt! input field and the phonebook also searches Swyx Connector für Notes contacts
- Name resolution from Swyx Connector für Notes for incoming calls and for list search
- Swyx Connector für Notes on the Speed Dial button

**SwyxFax**

SwyxFax Server is a component of SwyxServer. With this component you can send and receive fax documents. SwyxFax uses the same connection to the public network as SwyxServer, typically an ISDN trunk. SwyxFax Server can be installed on the same computer as the ISDN card of the ISDN trunk, but also on another permanently running computer, which is connected via an IP network to the ISDN trunk (SwyxWare uses the T.38 protocol for secure transmission).
Licenses for SwyxFax Users
The number of SwyxFax Client installations is unlimited. Licensed is the number of Users who have configured a fax number and configured at least one fax forwarding (to SwyxFax Client, to an e-mail address or a printer).

SwyxCTI+
This option allows you to control a third party phone with CTI SwyxIt! or link with an external phone via its phone number.
The number of Users with this option must be licensed.

Swyx VisualContacts
Swyx VisualContacts is an option which allows a SwyxIt! User to access various contact data bases via the ESTOS MetaDirectory.
All SwyxIt! Users, who want to use the Swyx VisualContacts upgrade, need a Swyx VisualContacts license. SwyxIt! retrieves this license during log on to the SwyxServer, if Swyx VisualContacts is installed.

Swyx Connector for DATEV
Swyx Connector for DATEV is an option that integrates the DATEV telephony function into SwyxIt!.
SwyxIt! Users who use the integration with DATEV need a Swyx Connector for DATEV license. SwyxIt! retrieves this license when registering at SwyxServer, if Swyx Connector for DATEV is installed. Users with a Swyx Connector for DATEV license do not need an additional Swyx VisualContacts license.

Feature Pack for Certified SIP Phones
This option offers the possibility to use extended SwyxWare functionalities, such as CTI, integration of the global phone book and various system phone functions, with certified third-party SIP phones. The scope of functions depends on the provider and telephone model.

Swyx VisualGroups
The number of queues used in a customer instance is not limited. A user can be assigned to an unlimited number of queues with a user license. In the SwyxWare variant for the installation in the customer network, the user license is floating based, i.e. only as many user licenses are needed as users are logged into VisualGroups queues.
Statistics, reporting and wallboards are only included in the Enhanced version.

<table>
<thead>
<tr>
<th>Function</th>
<th>Swyx VisualGroups</th>
<th>Swyx VisualGroups Enhanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queue</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
<td>included</td>
</tr>
<tr>
<td>Reporting</td>
<td></td>
<td>included</td>
</tr>
<tr>
<td>Administration missed calls</td>
<td></td>
<td>included</td>
</tr>
<tr>
<td>Wallboard</td>
<td></td>
<td>included</td>
</tr>
</tbody>
</table>

The documentation for Swyx VisualGroups from version 1.1 can be found on the Swyx website.

Swyx Meeting (basic version)
WebRTC-based web conference service
Maximum 2 participants: 1 host, 1 guest

Swyx Meeting
WebRTC-based web conference service
Maximum 10 participants: 1 host, 9 guests
Licensing via license key  Licensing Procedure

Scope of functions in SwyxWare for DataCenter and SwyxON

The options offered by the various option packs are reflected in the feature profiles, which are assigned to the individual users. If you use another option, a different feature profile is assigned to the user. This profile contains the relevant feature and makes it available to the user.

Reporting daily records the functions or cloud profiles used and the number of users to whom these functions are assigned, along with the number of installed voice and fax channels and the conference rooms that have been set up. The cumulative data is sent monthly from the licensing server both to Swyx and to the provider.

5.1.7 SwyxWare Option packs at a glance

The following option packs are available:

<table>
<thead>
<tr>
<th>Option Pack</th>
<th>SwyxWare Variant</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwyxProfessional</td>
<td>• SwyxWare</td>
<td>Includes the option packs SwyxRecord, SwyxConference, SwyxECR, Swyx Mobile and SwyxFax</td>
</tr>
<tr>
<td>SwyxRecord</td>
<td>• SwyxWare</td>
<td>If the &quot;SwyxRecord&quot; option pack is installed, then during a call a user can independently record the conversation (or terminate this recording) with a click of the mouse (not in CTI mode!). For users with other devices, e.g. SwyxPhone, SIP phones or GSM phones (or with SwyxIt! in CTI mode), the conversations can be recorded directly on the trunk connection.</td>
</tr>
<tr>
<td>SwyxConference</td>
<td>SwyxWare</td>
<td>The option pack &quot;SwyxConference&quot; for SwyxWare offers professional conference management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option Pack</th>
<th>SwyxWare Variant</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwyxAdHocConference</td>
<td>• SwyxWare for Data-Center • SwyxON</td>
<td>The option pack &quot;SwyxAdHocConference&quot; offers users the opportunity to initiate 'ad hoc' conferences with three or more participants during a call. In SwyxWare, this basic function is included for three participants of a conference.</td>
</tr>
<tr>
<td>SwyxBCR</td>
<td>• SwyxWare for Data-Center • SwyxON</td>
<td>This package contains the full usage of the Call Routing Managers. This is an additional component of the SwyxIt! software, which enables complex rule-based call handling for the user. This option pack is already included in SwyxWare.</td>
</tr>
<tr>
<td>SwyxECR</td>
<td>• SwyxWare</td>
<td>This package contains the full usage of the Graphical Script Editor. This is an additional component of the SwyxIt! software, which offers the user a comfortable interface especially to clearly define and illustrate complex rules for call handling.</td>
</tr>
<tr>
<td>SwyxMonitor</td>
<td>• SwyxWare</td>
<td>The &quot;SwyxMonitor&quot; option pack includes two additional options: permanent call recording, and intrusion on a conversation (Silent Call Intrusion).</td>
</tr>
<tr>
<td>SwyxMeeting</td>
<td>• SwyxWare</td>
<td>WebRTC-based web conference service Maximum 10 participants, 1 host, 9 guests</td>
</tr>
<tr>
<td>Swyx VisualGroups</td>
<td>• SwyxWare</td>
<td>With Swyx VisualGroups, departments with a high caller volume receive an optimal queue solution with seamless integration into the SwyxIt! user interface.</td>
</tr>
</tbody>
</table>
## Cloud Services in SwyxON

<table>
<thead>
<tr>
<th>System Functions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basis system</td>
<td>Telephone system functionality and Unified Communications</td>
</tr>
<tr>
<td>Fax channel</td>
<td>T.38 support for sending fax messages</td>
</tr>
<tr>
<td>Conference Room</td>
<td>Participation in conferences with any number of internal and external participants</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User functions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic user</td>
<td>Basic functionality for users including desktop clients for Windows and macOS, Call Routing Manager, presence information, messaging, Outlook integration, CTI, Voicemail, ad-hoc conference feature</td>
</tr>
<tr>
<td>System Phone</td>
<td>Enables comfortable additional functions for system telephones such as server based call lists, telephone books and extended CTI functions for example SwyxIt!</td>
</tr>
<tr>
<td>Mobility</td>
<td>Integration with applications for Android and iOS.</td>
</tr>
<tr>
<td>Extended call routing basic</td>
<td>Use of company-wide call routing, e.g. as central call pickup and distribution or the creation of speech dialog systems (ACD/IVR)</td>
</tr>
</tbody>
</table>

### Table: User functions at a glance

<table>
<thead>
<tr>
<th>User functions</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended call routing User</td>
<td>Creation and execution of complex call diversions with the Graphical Script Editor individually for each User</td>
</tr>
<tr>
<td>VisualContacts</td>
<td>Integration of contact information which are saved in the company's various applications (e.g. logistics, CRM and further databases). Fast number identification and contact search directly in SwyxIt!</td>
</tr>
<tr>
<td>CTI+</td>
<td>Makes a telephone (DECT, SIP or analog telephones) an extension for incoming and outgoing calls with SwyxIt!</td>
</tr>
<tr>
<td>Recording</td>
<td>The recording function enables the recording, saving and forwarding of telephone calls with SwyxIt!</td>
</tr>
<tr>
<td>Fax</td>
<td>Use of central, server-based fax services with SwyxIt!. Transmission of fax messages from all applications with a print function</td>
</tr>
<tr>
<td>Swyx Connector for DATEV</td>
<td>Enables direct phone calls from DATEV applications</td>
</tr>
<tr>
<td>Swyx Connector für Notes</td>
<td>Integration in Lotus/IBM/HCL Notes, dialing from any contact databases, number identification</td>
</tr>
<tr>
<td>Swyx Connector for Skype</td>
<td>Integration with Skype user interface</td>
</tr>
<tr>
<td>Swyx Meeting</td>
<td>WebRTC-based web conference service Maximum 10 participants: 1 host, 9 guests</td>
</tr>
</tbody>
</table>

### 5.1.8 Licensing of the SwyxWare variants at a glance

<table>
<thead>
<tr>
<th></th>
<th>Evaluation Installation</th>
<th>SwyxWare</th>
<th>SwyxWare for DataCenter/ SwyxON</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwyxServer</td>
<td>1 license</td>
<td>1 license</td>
<td>unlimited</td>
</tr>
<tr>
<td>Users</td>
<td>5 licenses</td>
<td>Scope of supply</td>
<td>-</td>
</tr>
</tbody>
</table>
### Licensing via license key

#### Licensing Procedure

<table>
<thead>
<tr>
<th>Feature Pack for Certified SIP Phones</th>
<th>Evaluation Installation</th>
<th>SwyxWare</th>
<th>SwyxWare for DataCenter/ SwyxON</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Swyx</strong> Record <strong>SwyxFax</strong> <strong>SwyxPhone</strong> <strong>SwyxRecord</strong> <strong>SwyxConference</strong> <strong>SwyxMonitor</strong> <strong>SwyxStandby</strong> <strong>SwyxAdHocConference</strong> <strong>Swyx Option Pack for Swyx Connector für Notes</strong></td>
<td><strong>Evaluation Installation</strong></td>
<td><strong>SwyxWare</strong></td>
<td><strong>SwyxWare for DataCenter/ SwyxON</strong></td>
</tr>
<tr>
<td><strong>SwyxBCR</strong></td>
<td>included</td>
<td>included</td>
<td>pro User</td>
</tr>
<tr>
<td><strong>SwyxECR</strong></td>
<td>5 licenses</td>
<td>Option Pack</td>
<td>pro User</td>
</tr>
<tr>
<td><strong>SwyxFax</strong></td>
<td>5 licenses</td>
<td>Option</td>
<td>pro User</td>
</tr>
<tr>
<td><strong>SwyxPhone</strong></td>
<td>2 licenses</td>
<td>Option per phone</td>
<td>pro User/pro phone</td>
</tr>
<tr>
<td><strong>SwyxRecord</strong></td>
<td>5 licenses</td>
<td>Option Pack</td>
<td>pro User</td>
</tr>
<tr>
<td><strong>SwyxConference</strong></td>
<td>5 licenses</td>
<td>Option Pack</td>
<td></td>
</tr>
<tr>
<td><strong>SwyxMonitor</strong></td>
<td>5 licenses</td>
<td>Option Pack</td>
<td>pro User/pro</td>
</tr>
<tr>
<td><strong>SwyxStandby</strong></td>
<td>included</td>
<td>Option Pack</td>
<td></td>
</tr>
<tr>
<td><strong>SwyxAdHocConference</strong></td>
<td>included</td>
<td>included</td>
<td>pro User</td>
</tr>
<tr>
<td><strong>Swyx Option Pack for Swyx Connector für Notes</strong></td>
<td>5 licenses</td>
<td>Option Pack</td>
<td>pro User</td>
</tr>
<tr>
<td><strong>Conference Rooms (requires SwyxConference)</strong></td>
<td>any number</td>
<td>any number</td>
<td>per room set up</td>
</tr>
<tr>
<td><strong>Voice channels</strong></td>
<td>4 channels</td>
<td>Scope of supply</td>
<td>per channel</td>
</tr>
<tr>
<td><strong>Fax channels</strong></td>
<td>2 fax channels</td>
<td>Scope of supply</td>
<td>per channel</td>
</tr>
<tr>
<td><strong>Swyx VisualContacts</strong></td>
<td>5 licenses</td>
<td>Option</td>
<td>pro User</td>
</tr>
<tr>
<td><strong>Swyx Connector for DATEV</strong></td>
<td>5 licenses</td>
<td>Option</td>
<td>pro User</td>
</tr>
</tbody>
</table>

---

**Explanation:**
- **Option pack** -- All users must be licensed
- **Option** -- License per logged-on user
- **included** -- License is included in the basic version per user
- **per user** -- License per configured user per channel
- **per channel** -- License per configured channel
- **Scope of supply** -- Number is fixed with the order
- **pro phone** -- License per phone which was not purchased from Swyx

---
6 Creating and editing Locations

Location is a User and Trunk Group property, which Groups together site-dependent parameters.

The setting options on menu pages and in configuration wizards depend on your administration profile and your SwyxWare solution.

Creating Locations
Editing the Location settings

6.1 Creating Locations

To create a Location

1. In the menu, select “Connections | Locations”.
   ✔ A list appears with all Locations.

2. Click on “Create Location.”
   ✔ The “Create a Location” configuration wizard appears.

3. Define the Location settings.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Enter a name for the Location. The name must be unambiguous within SwyxWare.</td>
</tr>
<tr>
<td>Description</td>
<td>Enter a description, if applicable.</td>
</tr>
<tr>
<td>Time zone</td>
<td>Select the time zone this Location is assigned to. The time zone is required for evaluating time-dependent restrictions, for example for routing.</td>
</tr>
<tr>
<td></td>
<td>Example: A Trunk Group (e.g. ISDN, Location Germany) is enabled only from 6p.m. to 8p.m. If a User in England now calls at 7:15p.m. local time a number in Germany (German local time 8:15p.m.), the ISDN Trunk Group is disabled for this call.</td>
</tr>
<tr>
<td>Standard Location</td>
<td>Activate the check box, if you want the Location to be used as the default for all subsequently created Users and Trunk Groups.</td>
</tr>
<tr>
<td>Country code</td>
<td>Enter the country code of the Location. Example: ‘44’ for Germany</td>
</tr>
<tr>
<td>Area Code</td>
<td>Enter the area code of the Location without the preceding ‘0’. Example: ‘20’ for London or ‘161 for Manchester</td>
</tr>
<tr>
<td>Public line access codes (separated by “;”):</td>
<td>Enter the code for external calls, e.g. Default value:’0’ You are able to enter several public line accesses separated by a semicolon, e.g. to differentiate private and business calls using a different public line access.</td>
</tr>
<tr>
<td>Long distance call prefix</td>
<td>Enter the code for long distance calls. Example: ‘44’ for Germany</td>
</tr>
<tr>
<td>International call prefix</td>
<td>Enter the code for international calls. Example: ‘44’ for Germany</td>
</tr>
<tr>
<td>Number for undeliverable calls</td>
<td>Select from the Global Phonebook a User to whom calls will be forwarded which are in the SwyxServer number range but are not assigned to a User. The number for undeliverable calls can also be assigned to a User at a linked SwyxServer.</td>
</tr>
</tbody>
</table>

When making later changes to settings, click “Save” to save the settings.

4. Click on “Next”.

5. Define the number settings for the Location.
Creating and editing Locations

6.2 Editing the Location settings

You can also edit Locations, e.g. by adding further public line access prefixes.

To edit a Location

1. In the menu, select “Connections | Locations”.
   ✓ A list appears with all Locations.

2. In the line of the appropriate Location, click on .

To access further information, click on ✓.

6.3 Limiting the number of calls between Locations

To limit the number of calls between Locations

1. In the menu, select “Connections | Locations”.
   ✓ A list appears with all Locations.

2. In the line of the appropriate Location, click on .

3. Click on “Save”.

4. Click on the “Numbers” tab.
   See also step Define the number settings for the Location., page 44

6.4 Deleting Locations

How to delete a Location

1. In the menu, select “Connections | Locations”.
   ✓ A list appears with all Locations.

2. In the line of the appropriate Location, click on .

3. Click on “Yes” to confirm the process.
   ✓ The Location is deleted and is not available anymore.
**7 Trunks**

A Trunk is a connection to another network and a property of Users and Trunk Groups in which site-dependent parameters are combined. A Trunk must always be a member of a Trunk Group. The Trunks of a Trunk Group then have the same properties (such as the same connection protocol or the same rights parameters).

In SwyxWare there are the following Trunk types:
- ISDN Trunk (SwyxGate lines)
- SIP Trunk
- SIP Gateway Trunk
- ENUM Trunk
- SwyxLink Trunk (Server-server coupling)

In Swyx Control Center you can view the most important Trunk settings.

See also the SwyxWare Documentation for Administrators, chapter “Trunks and Trunk Groups”.

---

**Viewing the Trunk settings**

**7.1 Viewing the Trunk settings**

**To display the Trunk settings**

1. In the menu, select “Connections | Trunks”.
   - A list appears with all Trunks.

---

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Trunk name</td>
</tr>
<tr>
<td>Type</td>
<td>Type of Trunk</td>
</tr>
</tbody>
</table>

---

**To display the Trunk Group settings**

1. In the menu, select “Connections | Trunks”.
   - A list appears with all Trunks.

2. Click on the “Trunk Groups” tab.
   - A list appears with all Trunk Groups.

---

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of concurrent calls</td>
<td>Number of calls which may be routed via this Trunk at the same time Using a SIP Trunk, the provider will define how many connections at the same time will be possible. The maximum number of channels will be defined by the bandwidth to the provider and the Codec settings (i.e. the bandwidth per call).</td>
</tr>
<tr>
<td>Activated</td>
<td>✔ = Trunk is activated</td>
</tr>
<tr>
<td>Logged in</td>
<td>✔ = Trunk is logged in</td>
</tr>
</tbody>
</table>

---

**Label** | **Explanation**
---|---
Name | Name of the Trunk Group
Description | Description of the Trunk Group
Type | Type of Trunk Group
Profile | Specifies how the Trunk interprets and handles the call numbers Depending on the Trunk type, a number of predefined profiles are available. For each of these profiles, the number format is specified. For SIP Trunks in particular, the profile specifies the provider and the necessary SIP parameters. For the Trunk types SwyxLink and ENUM, only one profile is available at the moment in each case. See also the SwyxWare Documentation for Administrators, chapter „Profile of an ISDN Trunk Group“, chapter „Profile of a SIP Trunk Group“ and section „Creating a SIP Gateway Trunk“. |
### Location
Specifies prefixes and time zone for the Trunk Group
See also the SwyxWare Documentation for Administrators, sections “Profile of an ISDN Trunk Group”, “Profile of a SIP Trunk Group” and “Creating a SIP Gateway Trunk”.

### Calling Rights
Defines where incoming calls from this Trunk Group are forwarded to if the call destination is not a User at the same SwyxServer
See also the SwyxWare Documentation for Administrators, chapter “Trunks and Trunk Groups”.

<table>
<thead>
<tr>
<th><strong>Label</strong></th>
<th><strong>Explanation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>Specifies prefixes and time zone for the Trunk Group</td>
</tr>
<tr>
<td></td>
<td>See also the SwyxWare Documentation for Administrators, sections “Profile of an ISDN Trunk Group”, “Profile of a SIP Trunk Group” and “Creating a SIP Gateway Trunk”.</td>
</tr>
<tr>
<td><strong>Calling Rights</strong></td>
<td>Defines where incoming calls from this Trunk Group are forwarded to if the call destination is not a User at the same SwyxServer</td>
</tr>
<tr>
<td></td>
<td>See also the SwyxWare Documentation for Administrators, chapter “Trunks and Trunk Groups”.</td>
</tr>
</tbody>
</table>
8 Creating and editing Users

To log into SwyxServer Users need a SwyxWare account which they can create in Swyx Control Center.

When saving and processing personal data, observe the respective applicable legal data protection regulations. If you have any questions especially regarding data protection in SwyxWare, please contact your administrator.

Personal data cannot be deleted automatically. In order to meet the valid data protection regulations, it may be necessary to delete the entries manually.

Administration profiles

Creating Users

Editing Users’ general settings

8.1 Administration profiles

The administrator profile defines what rights this User has when he connects to a SwyxServer via SwyxWare Administration or Swyx Control Center. Depending on the profile, he can, for example, create or change Users or edit Phonebooks.

<table>
<thead>
<tr>
<th>Administration profile</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System administrator</td>
<td>This administrator has unrestricted access to SwyxWare.</td>
</tr>
<tr>
<td>Back office administrator</td>
<td>This administrator has all the rights required to configure SwyxServer. Primarily, this administrator can create or change feature profiles.</td>
</tr>
</tbody>
</table>

Please note that in a standby scenario the Users must be set up on both PCs where SwyxServer is installed. A User must, e.g. have the administration profile "User Administrator" on both computers in order to be able to edit Users, regardless of which of the two SwyxServers is currently active.

8.1.1 Administrators in SwyxWare for DataCenter and SwyxON

In SwyxWare for DataCenter and SwyxON we normally distinguish between provider and reseller or partner level administrators on the one hand and a customer's own administrators on the other hand.
Customer level administrators are entered by the provider or reseller or partner in order to provide the customer the option to administrate his telephone system himself.

In detail, the following options are provided:

<table>
<thead>
<tr>
<th>Administration profile</th>
<th>Solution</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced UC Tenant Administrator</td>
<td>SwyxON</td>
<td>This administrator manages his own UC Tenant as well as the objects created with it, including Trunk Groups and Trunks.</td>
</tr>
<tr>
<td>UC Tenant Administrator</td>
<td>SwyxON</td>
<td>This administrator manages his own UC Tenant except Trunk Groups and Trunks.</td>
</tr>
<tr>
<td>Customer Administrator</td>
<td>SwyxWare for DataCenter</td>
<td>This administrator has the maximum possible rights for a customer. He can make all necessary configurations for his front end server. The exception to this is Trunks, Trunk Groups and Feature Profiles.</td>
</tr>
<tr>
<td>User Administrator</td>
<td>SwyxWare for DataCenter</td>
<td>This administrator can make all configurations for Users and Groups. In particular, he can carry out number allocation, Group configuration and the allocation of administration profiles. The exception to this is Trunks, Trunk Groups and Feature Profiles.</td>
</tr>
<tr>
<td>Call Status Operator</td>
<td>SwyxWare for DataCenter</td>
<td>This administrator can recognize the current call status in the administration, e.g. whether calls are currently being made.</td>
</tr>
<tr>
<td>Phonebook Operator (editing the Global Phonebook)</td>
<td>• SwyxWare for DataCenter • SwyxON</td>
<td>This administrator can edit the Global Phonebook, i.e. for example the addition of or changes to further important company-wide telephone numbers.</td>
</tr>
</tbody>
</table>

The setting options on menu pages and in configuration wizards depend on your administration profile and your SwyxWare solution.

### 8.2 Creating Users

**To create a User**

1. In the menu, select “User”.
   - A list appears with all Users.
2. Click on “Create a User”.
   - The “Create a User” configuration wizard appears.
3. Define the general settings.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display name</td>
<td>Enter a name for the User that is displayed in Swyx Control Center. The display name should correspond to the User’s first and last name.</td>
</tr>
<tr>
<td></td>
<td>Example: John Jones</td>
</tr>
<tr>
<td>Email address</td>
<td>Enter a unique email address for the SwyxWare integration in Microsoft Office (SwyxIt! function “Office Communication AddIn”). The email address must be provided which is set-up as the User’s primary SMTP email address on the company’s E-mail server (e.g. Microsoft Exchange Server). The email address will also be used as a default for the delivery of voice mails. The voice mail address can be configured by the User himself or under “Call forwarding</td>
</tr>
<tr>
<td>Description</td>
<td>Enter a description, if applicable.</td>
</tr>
<tr>
<td>Administration profile</td>
<td>Select an Administration Profile for the User (Standard: No Administrator), see also section Administration profiles, page 48.</td>
</tr>
</tbody>
</table>
**Creating and editing Users**

### Creating Users

1. **Click on “Next”**.
2. **Define the numbers**.

<table>
<thead>
<tr>
<th><strong>Label</strong></th>
<th><strong>Explanation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feature profile</strong></td>
<td>Select a Feature Profile for the User. The feature profile determines which SwyxWare features a User can use. The “Default” profile is pre-configured and contains all licensed options.</td>
</tr>
<tr>
<td><strong>Activated</strong></td>
<td>Activate this checkbox if you would like to activate the user account directly after creation. Deactivated Users cannot log into SwyxServer. Deactivate the checkbox to temporarily deactivate a User account.</td>
</tr>
</tbody>
</table>

When making later changes to settings, click “Save” to save the settings.

3. **Click on “Next”**.
4. **Define the numbers**.

### Feature profile

<table>
<thead>
<tr>
<th><strong>Label</strong></th>
<th><strong>Explanation</strong></th>
</tr>
</thead>
</table>
| **Internal number**        | Enter the number under which the User is available site internally. May be preset by default: Next free number  
  Example: 101                                                                                     |
| **Public number**          | Enter the number under which the User is available publicly. Allowed format: canonical (+<country code><area code><number>)  
  Example: +49 231 1234100                                                                       |
| **Displaying in the Phonebook** | Activate the checkbox if you want the numbers to appear in the Global Phonebook.                                                                                     |
| **Location**               | Select the Location for the User.                                                                                                                                                                           |

### Calling Rights

<table>
<thead>
<tr>
<th><strong>Label</strong></th>
<th><strong>Explanation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Calling Rights</strong></td>
<td>Select the Calling Right for the User:</td>
</tr>
<tr>
<td><strong>Deny all calls</strong></td>
<td>The User may not make any calls. This Calling Right is useful for Users who will only receive calls, e.g. Script Users.</td>
</tr>
<tr>
<td><strong>Internal destinations</strong></td>
<td>Only calls to internal SwyxWare participants may be started.</td>
</tr>
<tr>
<td><strong>Local destinations</strong></td>
<td>Only calls within the area code may be started.</td>
</tr>
<tr>
<td><strong>National destinations</strong></td>
<td>Only calls within the country code may be started.</td>
</tr>
<tr>
<td><strong>European destinations</strong></td>
<td>Only calls within Europe can be started, i.e. the country code may only start with a 3 or a 4.</td>
</tr>
<tr>
<td><strong>No call restrictions</strong></td>
<td>There are no call restrictions.</td>
</tr>
</tbody>
</table>

When making later changes to settings, click “Save” to save the settings.

5. **Click on “Next”**.
6. **Define the numbers**.

### Location

<table>
<thead>
<tr>
<th><strong>Label</strong></th>
<th><strong>Explanation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>User account for Call Routing</strong></td>
<td>Activate the check box, if the User should only be used for call forwarding. In this case, the User cannot log in with a device.</td>
</tr>
</tbody>
</table>

7. **Click on “Next”**.
8. **Define the authentication settings for logging into SwyxServer**.

In SwyxON, the guideline for complex passwords is forced by default and cannot be removed by any administrator.
Creating and editing Users

Creating Users

If the rule “Force use of a complex password” is activated in the server configuration and/or in the User configuration, the User can continue to use his current password until he changes his password at his own wish or is forced to by the administrator.

Independent of the password settings, any attempt to re-use the current password is checked by the system and not permitted.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows account</td>
<td>Activate the checkbox if you want the User to log into SwyxServer with his Windows login data.</td>
</tr>
<tr>
<td>Add</td>
<td>If the User has Windows user accounts, you can find and add them. You can assign several accounts to the User. It is necessary that the computer of the SwyxIt! User resp. the Swyx Control Center installation and SwyxServer are members of the same domain. Windows user accounts cannot be used for logging in to Swyx Control Center.</td>
</tr>
<tr>
<td>SwyxWare login data</td>
<td>Activate the checkbox if you want the User to log on with SwyxWare his User name and password.</td>
</tr>
<tr>
<td>User name</td>
<td>The User name is configured automatically from the data you have entered. You can edit the Username.</td>
</tr>
<tr>
<td>TenantDomain</td>
<td>The UPN suffix is part of the Username and is automatically generated from your entered data, see also 3.7 Defining the login settings, page 18.</td>
</tr>
<tr>
<td>Password</td>
<td>Enter a password for the User.</td>
</tr>
<tr>
<td>Repeat password</td>
<td>Enter the password again to confirm your entry.</td>
</tr>
<tr>
<td>Change password on next login</td>
<td>Use this checkbox if you want the User to be required to change his or her password at the next login.</td>
</tr>
</tbody>
</table>

When making later changes to settings, click “Save” to save the settings.

9  Click on “Next”.
10 Define the SIP settings.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Login via SIP phone</td>
<td>Activate the checkbox to permit the use of third party SIP devices for the User.</td>
</tr>
<tr>
<td>SIP User ID</td>
<td>Enter an ID to log into SwyxServer with SIP devices.</td>
</tr>
<tr>
<td>SIP authentication method</td>
<td>Select how the User can log into SwyxServer with SIP devices:</td>
</tr>
<tr>
<td></td>
<td>&lt;SwyxServer default&gt;</td>
</tr>
<tr>
<td></td>
<td>The server default defines if the User must enter his or her login data for using a SIP device, see also 3.6 Configuring the provisioning of SIP phones, page 17.</td>
</tr>
<tr>
<td></td>
<td>No authentication</td>
</tr>
<tr>
<td></td>
<td>The User must never enter his login data for using a SIP device.</td>
</tr>
<tr>
<td></td>
<td>Always authenticate</td>
</tr>
<tr>
<td></td>
<td>The User must always enter his login data for using a SIP device.</td>
</tr>
<tr>
<td>SIP User name</td>
<td>Username to log into SwyxServer with SIP devices</td>
</tr>
<tr>
<td></td>
<td>The SIP User name need not be identical with the SwyxWare User name.</td>
</tr>
<tr>
<td>SIP password</td>
<td>Enter a password to log into SwyxServer with SIP devices.</td>
</tr>
<tr>
<td></td>
<td>The SIP password need not be identical with the SwyxWare password.</td>
</tr>
<tr>
<td>Repeat the SIP password</td>
<td>Enter the password again to confirm your entry.</td>
</tr>
</tbody>
</table>

When making later changes to settings, click “Save” to save the settings.

11 Click on “Next”.
12 Define the Desk Phone settings.
8.3 Editing Users’ general settings

You can edit the general settings for Users, e.g. name and email address.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Login via Swyx-Phone (deactivated)</td>
<td>If you have not created a PIN, the login via SwyxPhone is disabled.</td>
</tr>
<tr>
<td>User-PIN on Desk Phone</td>
<td>Enter a PIN or have a PIN created with which the User can log into SwyxPhone and/or Swyx certified phones.</td>
</tr>
<tr>
<td>Phone certified by Swyx</td>
<td>Activate the checkbox to permit the use of certified SIP devices for the User.</td>
</tr>
<tr>
<td>MAC address</td>
<td>Enter the MAC address of the certified Desk Phone e.g. a1:c2:e3:f4:11:12</td>
</tr>
</tbody>
</table>

13 Click on “Next”.

14 Click on “Create”.

✓ The User appears in the list with all Users.

8.4 Editing the authentication settings

You can edit the authentication settings for logging into SwyxServer.

To edit the authentication settings for a User

1 In the menu, select “User”.
✓ For administrators, a list appears with all Users.

2 As administrator, click on in the line of the appropriate user.

3 Click on the “Authentication” tab.

See also step Define the authentication settings for logging into SwyxServer., page 50

8.5 Editing the SIP settings

You can edit the settings for logging into SwyxServer with SIP devices.

To edit the SIP settings for a User

1 In the menu, select “User”.
✓ For administrators, a list appears with all Users.

2 As administrator, click on in the line of the appropriate user.

3 Click on the “SIP” tab.

See also step Define the SIP settings., page 51

8.6 Editing the encryption settings

You can edit the settings for the encryption of voice data.

To edit the encryption settings for a User

1 In the menu, select “User”.
✓ For administrators, a list appears with all Users.

2 As administrator, click on in the line of the appropriate user.

3 Click on the “Encryption” tab.
Creating and editing Users  Defining call and status signaling

If "No encryption" or "Encryption required" is set in the server-wide settings, you cannot change the setting for individual Users, see also SwyxWare Administration Documentation, chapter "Configuration of SwyxServer", Section “Security Tab”.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| **Encryption mode**    | Select the settings for the encryption of voice data:  
  - **No encryption**  
    If "No encryption" is selected, the speech data is not encrypted.  
  - **Encryption preferred**  
    If "Encryption preferred" is selected, the speech data is only encrypted if your call partner has configured either the "Encryption preferred" or "Encryption mandatory" mode. If this is not the case, the voice data is not encrypted, but telephony is still possible.  
  - **Encryption mandatory**  
    If "Encryption mandatory" is selected, voice data encryption is obligatory. This means that either encryption always occurs or the call is aborted with the reason "Incompatible encryption settings". This can be the case, for example, if the call partner has configured the "No encryption" mode. |
| **Pre-shared key**     | Enter a pre-shared key if the User uses SIP devices (with MIKEY support) from a third-party manufacturer. The key must then be stored in the device as well, e.g. via the phone’s web interface.  
  The key (PSK) is allocated automatically for Swyx components. |
| **Repeat pre-shared key** | Enter the pre shared again to confirm your entry.                                                                                                                                                    |

4 Click on “Save”.

8.7 Defining call and status signaling

You can define the signaling settings for calls and status (available, away etc.) between Users and Groups.

To define the call and status signaling for a User

1 In the menu, select “User”.  
   ✔ For administrators, a list appears with all Users.

2 As administrator, click on ➤ in the line of the appropriate user.

3 Click on the “Relationships” tab.

4 Click on “Create Relation” or in the line of the appropriate Relation, click on ✂.  
   ✔ The “Create Relation” or “Edit Relation” configuration wizard appears.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| **Signalize incoming calls** | Activate the check box if you want calls to this User to be signalized to the selected User.  
  A User can pick up calls signaled to him.                                                                                                     |
| **Status signaling to**    | Activate the check box if you want the status to be signalized to the selected User.  
  A User can only call another User via intercom connection or use the messenger if he or she is signaled the status of the other User.          |
| **Receive call signaling** | Activate the check box if you want incoming calls to the selected User to be signalized to the User.  
  A User can pick up calls signaled to him.                                                                                                     |
| **Receive status signaling** | Activate the check box if you want the selected User’s status to be signalized to the User.  
  A User can only call another User via intercom connection or use the messenger if he or she is signaled the status of the other User.          |

5 Click on “Save”.

From the dropdown list select the User for whom you want to define signaling settings.
8.8 Creating Remote Connector client certificates

Via Remote Connector you can establish a connection with SwyxServer if you are outside your company network (LAN or VPN). For this purpose, SwyxIt! Users must import a valid client certificate to SwyxIt!, which you can create in Swyx Control Center, see also the SwyxIt! User Documentation, chapter “SwyxIt! Configuration”, section “To specify the connection settings”.

See also 3.10 Defining Remote Connector settings, page 21.

To create a Remote Connector certificate for a User

1. In the menu, select “User”.
   ✓ For administrators, a list appears with all Users.

2. As administrator, click on in the line of the appropriate user.

3. Click on the “Remote Connector” tab.

Additionally, on the “Relationships” tab you get an overview of all Groups the User is assigned to. Click on \( \text{ } \) to remove the User from a Group. Click on “Add to Groups” and activate the checkbox of the appropriate Group to add the User.

✓ The Relationship appears in the list of all Relationships of the User.

To use Remote Connector, you need a server certificate and a root certificate. These are optionally created during the configuration of SwyxWare via the configuration assistant. If you have skipped this step and want to generate the certificates later, you can either start the configuration wizard or the Unattended Setup again or use your own server certificate.

To create the client certificate, have the password of the root certificate ready. This is not necessary in SwyxON.

8.9 Defining rights

You can define the following rights for Users:

- Calling Rights
- Feature Profile
- Available features

For further information see the SwyxWare documentation for administrators, chapter „User Configuration”.

To define the rights for a User

1. In the menu, select “User”.
   ✓ For administrators, a list appears with all Users.

2. As administrator, click on in the line of the appropriate user.

3. Click on the “Rights” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fingerprint</td>
<td>The client certificate’s digital thumbprint for SwyxRemote-Connector</td>
</tr>
<tr>
<td>Create certificate</td>
<td>Click on the button to create a new client certificate for the User.</td>
</tr>
<tr>
<td>Root certificate password</td>
<td>Enter the password you have used for the root certificate.</td>
</tr>
</tbody>
</table>
8.10 Defining a relation between manager and secretariate

You can specify that all calls to a User are forwarded to another User defined as the secretary.

The feature includes the following settings:

- Unconditional and no reply forwarding of all calls for the Management to the Secretariate
- No reply forwarding of all calls for the Secretariate to the standard voicemail
- Mutual call and status signaling
- Assigning the other’s number to the first Speed Dial

A User can be assigned to several Managements as a Secretariate, but only one Secretariate can be assigned to each Management.

To create a secretariate relation

1. In the menu, select “User”.  
   ✓ For administrators, a list appears with all Users.

2. As administrator, click on → in the line of the appropriate user.

3. In the line of the appropriate User, click on →.

4. Click on the “Secretariate” tab.  
   ✓ A list appears with all Secretariate relations of the selected User.

5. Click on “Add Management” to assign a Management to the selected User or on “Add Secretariate” to assign a Secretariate to the selected User.  
   ✓ The “Create Relation” configuration wizard appears.
### Creating and editing Users

#### Defining a relation between manager and secretariate

**Mutual call and status signaling**
- Activate the check box if you want calls and status (available, away etc.) are to be signaled mutually between Management and Secretariate.
- A User can pick up calls signaled to him.
- A User can only call another User via intercom connection or use the messenger if he or she is signaled the status of the other User.

**Speed Dials of Management**
- **Speed Dials of Secretariate**
  - Leave the first Speed Dial unchanged
    - The first Speed Dial of the Management/Secretariate remains unchanged.
  - Set Management’s/Secretariate’s Speed Dial as the first Speed Dial
    - The first Speed Dial of Management/Secretariate is assigned to the other. If the key is already assigned, the previous assignment is moved to the next Speed Dial, as with all other Speed Dials.
  - Overwrite first Speed Dial
    - The first Speed Dial of Management/Secretariate is assigned to the other. If the key is already assigned, the assignment is overwritten.

**Phone number of Management/Secretariate**
- Select from the dropdownlist the number of the Management/Secretariate with which the first Speed Dial of the other is to be assigned.

**Skin settings**
- Leave SwyxIt! Skin for Management and Secretariate unchanged
  - The Skin of Management/Secretariate remains unchanged.
- Transfer SwyxIt! Skin from Management to Secretariate
  - The Skin of the Management is loaded and used by the Secretariate’s SwyxIt!.
- Transfer SwyxIt! Skin from Secretariate to Management
  - The Skin of the Secretariate is loaded and used by the Management’s SwyxIt!.

The options for transfer are only available if the current Skins of Management and Secretariate differ. Changes made to the Skin by one User will only be adopted by the other User after a new login to SwyxServer.

---

**Label** | **Explanation**
---|---
**Mutual call and status signaling** | Activate the check box if you want calls and status (available, away etc.) are to be signaled mutually between Management and Secretariate. A User can pick up calls signaled to him. A User can only call another User via intercom connection or use the messenger if he or she is signaled the status of the other User.

<table>
<thead>
<tr>
<th>Speed Dials of Management</th>
<th>Speed Dials of Secretariate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave the first Speed Dial unchanged</td>
<td>Set Management’s/Secretariate’s Speed Dial as the first Speed Dial</td>
</tr>
<tr>
<td>The first Speed Dial of the Management/Secretariate remains unchanged.</td>
<td>The first Speed Dial of Management/Secretariate is assigned to the other. If the key is already assigned, the previous assignment is moved to the next Speed Dial, as with all other Speed Dials.</td>
</tr>
<tr>
<td>Overwrite first Speed Dial</td>
<td></td>
</tr>
<tr>
<td>The first Speed Dial of Management/Secretariate is assigned to the other. If the key is already assigned, the assignment is overwritten.</td>
<td></td>
</tr>
</tbody>
</table>

**Phone number of Management/Secretariate**
- Select from the dropdownlist the number of the Management/Secretariate with which the first Speed Dial of the other is to be assigned.

**Skin settings**
- Leave SwyxIt! Skin for Management and Secretariate unchanged
  - The Skin of Management/Secretariate remains unchanged.
- Transfer SwyxIt! Skin from Management to Secretariate
  - The Skin of the Management is loaded and used by the Secretariate’s SwyxIt!.
- Transfer SwyxIt! Skin from Secretariate to Management
  - The Skin of the Secretariate is loaded and used by the Management’s SwyxIt!.

The options for transfer are only available if the current Skins of Management and Secretariate differ. Changes made to the Skin by one User will only be adopted by the other User after a new login to SwyxServer.

---

**Label** | **Explanation**
---|---
**Same SwyxIt! Skin** | Name of the Skin used by Management and secretariate. If the field is empty, the same Skin is not used.

6. Click on “Save”.

7. In the line of the appropriate Secretariate Relation, click on to edit the settings.

8. In the line of the appropriate secretariate relationship, click on to delete the secretariate relationship.

### 8.10.1 Setting the telephony settings

You can define the following telephony settings for Users:
- Call forwarding
- Call properties
- Buttons
- Numbers
- Desk Phones
- Client settings

**To define the call forwarding settings for a User**

1. In the menu, select “User”.
   - For administrators, a list appears with all Users.

2. As administrator, click on in the line of the appropriate user.

3. Click on on the right next to the User name.

4. Click on the sub-menu item “Call Forwarding” that additionally appears.

If you have permitted “Change forwardings” for a User, the User can change the settings you have defined here via SwyxIt!.
Creating and editing Users  Defining a relation between manager and secretariate

If a User is not logged in, any calls are directly forwarded to the standard voicemail by default.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward all calls immediately</td>
<td>Activate the checkbox if you want all calls for the User to be immediately forwarded to the destination defined below.</td>
</tr>
<tr>
<td>Forward call to (number)</td>
<td>Enter the appropriate phone number or click on “Select” to select a number from the phonebook.</td>
</tr>
<tr>
<td>Standard Voicemail</td>
<td>All calls will be forwarded to the standard voicemail, see also step Click on the “Standard remote inquiry” tab., page 58</td>
</tr>
</tbody>
</table>

5 Click on “Save”.
6 Click on the “No reply” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward calls if the line is busy</td>
<td>Activate the checkbox if you want all calls for this User to be immediately forwarded to the destination stipulated below if the User’s line is busy.</td>
</tr>
<tr>
<td>Forward call to (number)</td>
<td>Enter the appropriate phone number or click on “Select” to select the number from the phonebook.</td>
</tr>
<tr>
<td>Standard Voicemail</td>
<td>All calls will be forwarded to the standard voicemail, see also step Click on the “Standard remote inquiry” tab., page 58</td>
</tr>
</tbody>
</table>

9 Click on “Save”.
10 Click on the “Standard Voicemail” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome message</td>
<td>Activate the checkbox to activate the welcome message settings. Select a welcome message from the dropdown list or click on to upload a .wav file.</td>
</tr>
<tr>
<td>Recording voicemail</td>
<td>Activate the checkbox to permit the recording voicemails for the User. The date format of the voicemail depends on the language setting in the Windows operating system, i.e. a computer with the language English (United States) will also provide the American date format (mm/dd/yy) for the voicemail.</td>
</tr>
<tr>
<td>Maximum voicemail length in seconds (3-600)</td>
<td>Enter the number of seconds for the maximum recording duration.</td>
</tr>
<tr>
<td>Send voice mails to the following email address</td>
<td>Enter the email address to which voicemails are to be sent to the User.</td>
</tr>
<tr>
<td>Starting Remote Inquiry via * button</td>
<td>Activate the checkbox to permit the User to start a remote inquiry for his standard voice mail with the * key.</td>
</tr>
</tbody>
</table>
Creating and editing Users

Defining a relation between manager and secretariat

11 Click on “Save”.
12 Click on the “Standard remote inquiry” tab.
Remote inquiry enables you both to listen to your voice mails and to change immediate call forwarding from any telephone.

If you have permitted “Change forwardings” for a User, the User can change the settings you have defined here via SwyxIt!.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN</td>
<td>Enter a PIN with which the User can authenticate him or herself for remote inquiry.</td>
</tr>
<tr>
<td>Confirm PIN</td>
<td>Enter the PIN again to confirm your entry.</td>
</tr>
<tr>
<td>Email server</td>
<td>Enter the address of the email server that SwyxServer requires for sending voicemails. The email server must support IMAP4.</td>
</tr>
<tr>
<td>User name</td>
<td>Enter the User name valid for the email server.</td>
</tr>
<tr>
<td>Password</td>
<td>Enter the password valid for the email server.</td>
</tr>
<tr>
<td>Repeat password</td>
<td>Enter the password again to confirm your entry.</td>
</tr>
</tbody>
</table>
| E-mail folder | Enter the email folder to be searched through for remote voice mail inquiries. Enter “INBOX” as the incoming mail folder, as this indicates the standard inbox regardless of the language used. For subdirectories, enter the correct name completely and with “/”.
Example: “INBOX/Voicemails” |
| Use SSL (Secure Socket Layer) | Activate the checkbox if you want the connection between SwyxServer and the mail server to be encrypted. |
| Only taking E-mails into account originating directly from SwyxServer (voice mails) | Activate the checkbox if you want only voice mails to be taken into account for remote inquiry sent directly from SwyxServer to the User. That speeds up querying incoming post. |

13 Click on “Save”.

To set the call settings for a User

1 In the menu, select “User”.
   ✓ For administrators, a list appears with all Users.
2 As administrator, click on ▶ in the line of the appropriate user.
3 Click on ✔ on the right next to the User name.
4 Click on the additional submenu item “Call settings”.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hide number/URI</td>
<td>Activate the checkbox if you want the User’s number not to be displayed to the contact person when making external calls.</td>
</tr>
<tr>
<td>Disable secondary call</td>
<td>Activate the checkbox if no further calls should be accepted if a line is busy.</td>
</tr>
</tbody>
</table>
| Transfer on hook on | Activate the checkbox to permit the User to connect two call partners when hanging up.
Example: Subscriber A is called by C. Then subscriber A begins a second call on another line to subscriber B. When A hangs up, B and C are connected with each other. |

5 Click on “Save”.

To define the number of buttons for a User

1 In the menu, select “User”.
   ✓ For administrators, a list appears with all Users.
2 As administrator, click on ▶ in the line of the appropriate user.
3 Click on ✔ on the right next to the User name.
4 Click on the sub-menu item “Keys” that additionally appears.
Creating and editing Users

Defining a relation between manager and secretariate

If you have permitted “Change User Profile” for a User, the User can change the settings you have defined here via SwyxIt!, see also Defining rights, page 54.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of line keys</td>
<td>Enter the number of line keys, which should be available to the User.</td>
</tr>
<tr>
<td>Number of speed dial keys</td>
<td>Enter the number of name keys, which should be available to the User.</td>
</tr>
</tbody>
</table>

5. Click on “Save”.
6. Click on the “Speed dials” tab.
   ✓ The list of speed dial keys configured for the User appears.
7. In the line of the appropriate name key, click on .

Label | Explanation                        |
--- | -----------------------------------|
Labelling | Enter the name of the key you want to appear in SwyxIt!. |
Number/URI | Enter a phone number or URI for the contact or select a number from the phonebook. |

8. Click on “Save”.
9. Click on the “Line keys” tab.
10. In the line of the appropriate line key, click on .

If you have permitted “Change User Profile” for a User, the User can change the settings you have defined here via SwyxIt!, see also Defining rights, page 54.

**Dialing options**

Select the dialing options for the speed dial:
- **Immediate dialing**
  Activation of the speed dial starts the call without additional actions (e.g. activation of the line key, taking the handset off the hook).
- **Deleting the display before dialing**
  Activation of the speed dial deletes any existing data in the phone number entry field.
- **Intercom connection**
  Activation of the speed dial starts intercom connection.

**Picture**

Select an image or upload an image to be displayed on the Name button:
- **No picture**
  No picture is used.
- **Automatic**
  The appropriate User picture is accessed from the SwyxWare database.

Click on the button to search for images in your file directory and upload them.

Click the button to delete the image.

If you have permitted “Change User Profile” for a User, the User can change the settings you have defined here via SwyxIt!, see also Defining rights, page 54.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labelling</td>
<td>Enter the name of the button you want to appear in SwyxIt!.</td>
</tr>
</tbody>
</table>
Creating and editing Users

Defining a relation between manager and secretariate

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use as default line</td>
<td>Activate the checkbox if all calls started by the User should be made via this line. This setting is only effective if the User has not activated another line key prior to this.</td>
</tr>
</tbody>
</table>
| Incoming calls               | Select which calls can be made via this line:  
  - All calls  
  - Only Group calls  
  - Using the number  
   *Incoming calls only for a specific number of the User are made via the line.*  
  Click on , to select one of the User's numbers.                                                                 |
| Outgoing calls               | Click on , to select the User's number which should be signalized when outgoing calls are made via this line.  
  *Example:*  
  A User has the internal extension “225”, which is allocated to the external number “+49 231 55666225”. Moreover, the User has the internal extension “325”, which is allocated to the external number “+44 778 88325”. If then only “225” is selected for incoming calls, this User signalizes the number “+49 231 55666225” externally. |
| Hide number/URI              | Activate the checkbox if the User's number should not be displayed to the contact person when making external calls on this line.                                                                             |
| Disable line after call      | Activate the checkbox if this line should remain busy for the defined time span following a call, for example for processing customer inquiries.                                                             |
| Wrap up time in seconds (5-1800) | Enter the time span for which the line will be blocked after a call.                                                                                                                                          |

11 Click on “Save”.

To edit the numbers for a User

1 In the menu, select “User”.  
   ✔ For administrators, a list appears with all Users.  
2 As administrator, click on in the line of the appropriate user.  
3 Click on ✔ on the right next to the User name.  
4 Click on the sub-menu item “Numbers” that additionally appears.  
5 Click on “Add number”.  
   ✔ The “Add number” configuration wizard appears.  
See also step Define the numbers., page 50

To define alternative numbers for a User

1 In the menu, select “User”.  
   ✔ For administrators, a list appears with all Users.  
2 As administrator, click on in the line of the appropriate user.  
3 Click on ✔ on the right next to the User name.  
4 Click on the sub-menu item “Numbers” that additionally appears.  
5 Click on the “Alternative numbers” tab.  
6 Click on “Add alternative number”.  
   ✔ The “Select alternative number” configuration wizard appears.  
7 Activate the checkbox in the line of the appropriate number and click on “Select”.  
   ✔ The alternative number appears in the list and can be used for outgoing calls.

To define fax numbers for a User

1 In the menu, select “User”.  
   ✔ For administrators, a list appears with all Users.

Label | Explanation
--- | ---
Wrap up time in seconds (5-1800) | Enter the time span for which the line will be blocked after a call.
Creating and editing Users  Defining a relation between manager and secretariate

2 As administrator, click on \( \Rightarrow \) in the line of the appropriate user.
3 Click on \( \checkmark \) on the right next to the User name.
4 Click on the sub-menu item “Numbers” that additionally appears.
5 Click on the “SwyxFax numbers” tab.

- The “Add number” configuration wizard appears.

6 Click on “Save”.

- The numbers appear in the list.

To define fax forwarding settings for a User

1 In the menu, select “User”.
- For administrators, a list appears with all Users.

2 As administrator, click on \( \Rightarrow \) in the line of the appropriate user.
3 Click on \( \checkmark \) on the right next to the User name.
4 Click on the sub-menu item “Numbers” that additionally appears.
5 Click on the “Fax forwarding” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal number</td>
<td>Enter a fax number under which the User is available site internally. May be preset by default: Next free number e.g. 102</td>
</tr>
<tr>
<td>Public number</td>
<td>Enter a fax number under which the User is available publicly, if applicable. Allowed format: canonical (+&lt;country code&gt;&lt;area code&gt;&lt;number&gt;) e.g. +49 231 1234102</td>
</tr>
</tbody>
</table>

6 Click on “Save”.

To define the CTI+ settings for a User

1 In the menu, select “User”.
- For administrators, a list appears with all Users.

2 As administrator, click on \( \Rightarrow \) in the line of the appropriate user.
3 Click on the sub-menu item “Numbers” that additionally appears.
4 Click on the “CTI+” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using an external telephone via this number</td>
<td>Enter a number or click on ( \ldots ), to select one of the User’s numbers.</td>
</tr>
<tr>
<td>Forward the caller to this number, also if SwyxIt! is terminated or CTI deactivated</td>
<td>Activate the checkbox if incoming calls should be forwarded to the external telephone, also if the User’s computer is switched off or CTI is deactivated.</td>
</tr>
</tbody>
</table>

5 Click on “Save”.

Label | Explanation
--- | ---
Email address | Enter the email address of the user.
Attachment format | Select the format for fax documents. If “TIFF and PDF” is selected, the e-mail will include two attachments. Click on “Add”.
Add printer | Click on the button to select the printer to be used to print incoming fax documents. Forwarding to a printer takes place via the SwyxFax Printer Gateway.
Printer | Select the printer.
Gateway | Enter the name of the gateway via which the fax documents are forwarded to the printer. Click on “Add”.

Label | Explanation
--- | ---
Forward faxes to the User’s fax client | Activate the checkbox if incoming fax documents should be forwarded to the User’s SwyxFax client.
Add email | Click on the button to add an email address to which the User’s incoming faxes will be sent.
### 8.11 Defining client settings for selected Users

You can define settings which are loaded when a User logs in to SwyxServer via SwyxIt!. The user can thus access the same SwyxIt! settings independently of the computer on which he logs in.

**To define the client settings for a User**

1. In the menu, select “User”.
   - For administrators, a list appears with all Users.
2. As administrator, click on the line of the appropriate user.
3. Click on the sub-menu item “Client Settings” that additionally appears.

If you have permitted “Change User Profile” for a User, the User can change the settings you have defined here via SwyxIt!, see also 8.9 *Defining rights*, page 54.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow Collaboration</td>
<td>Activate the check box so that the User can use Collaboration.</td>
</tr>
<tr>
<td>Call notification with tray icon for incoming calls</td>
<td>Activate the check box if you want incoming calls to be signalized via task bar.</td>
</tr>
<tr>
<td>Call notification with tray icon for call signaling</td>
<td>Activate the checkbox if you want signalized calls to be signalized via task bar.</td>
</tr>
<tr>
<td>SwyxIt! always on top</td>
<td>Activate the checkbox if you want SwyxIt! to be displayed permanently before other open applications.</td>
</tr>
<tr>
<td>Pop up on ringing</td>
<td>Activate the checkbox if you want SwyxIt! to be displayed in the foreground on an incoming call.</td>
</tr>
<tr>
<td>Pop up when in a call</td>
<td>Activate the checkbox if you want SwyxIt! to be displayed in the foreground during a call.</td>
</tr>
</tbody>
</table>

**8.11.1 Defining status signaling via device**

If Users are logged in to SwyxServer with different devices, you can specify which of the devices defines the status.

Example:

A User has a SwyxPhone installed on his desk and SwyxIt! installed on his workstation computer. The SwyxPhone is always logged in, the computer is only turned on when the User is at his or her workplace. It makes sense to have the login status signaled by SwyxIt! only. If SwyxIt! has not been started, the user is still able to make calls using the SwyxPhone, however, internal employees and the Call Routing receive the status “logged off”. If the user is making a call using SwyxPhone, the status “Speaking” is signaled to the employees, the status “logged off” is signaled to Call Routing.

If you have permitted “Change User Profile” for a User, the User can change the settings you have defined here via SwyxIt!, see also 8.9 *Defining rights*, page 54.

No more than a total of four devices of any type (SwyxIt!, Desk Phones, SIP phone, DECT device) can be simultaneously logged in to one SwyxWare user account.

The settings are loaded when a User logs in to SwyxServer via SwyxIt!. The user can thus access the same SwyxIt! settings independently of the computer on which he logs in.
### Creating and editing Users

#### Defining client settings for selected Users

To define the call settings for a User

1. In the menu, select “General Settings | System”.
   - Click on the “Status signaling” tab.
2. Activate the checkbox of the appropriate device.

#### Defining status signaling via device for a selected User

1. In the menu, select “User”.
   - For administrators, a list appears with all Users.
2. As administrator, click on in the line of the appropriate user.
3. Click on the sub-menu item “Client Settings” that additionally appears.
4. Click on the “Devices” tab.
5. Activate the checkbox of the appropriate device or activate “Use server default settings”.

#### 8.11.2 Defining settings for lists and buttons

You can define the maximum number of list entries that can be saved and the actions that can be started when certain buttons are clicked.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of shortcuts</td>
<td>Enter the number of shortcuts, which should be available to the User.</td>
</tr>
<tr>
<td>Caller list (maximum number of entries)</td>
<td>Enter the maximum number of entries in the User’s Caller list.</td>
</tr>
<tr>
<td>Redial list (maximum number of entries)</td>
<td>Enter the maximum number of entries in the User’s Redial list.</td>
</tr>
<tr>
<td>Timeout for Automatic Redial (in seconds)</td>
<td>Enter seconds Enter the number of seconds between two call attempts (0 to 3600 seconds).</td>
</tr>
</tbody>
</table>
| Standard behavior of the Voicemail button       | Select which action is started when the voicemail button is clicked (the other option is still available via the context menu):
   - **Launch email client**
     - The User’s standard email program appears.
   - **Voicemail remote inquiry**
     - The User’s remote inquiry starts. |
| Immediate dialing                               | Activate the checkbox if you want the automatic redial to start when you click the redial button.
   - If the option is deactivated, the phone number is only entered in the input field and the User must click on the receiver or enter button. |
| Always use Automatic Redial                     | Activate the checkbox if you always want the automatic redial to start when you click the redial button.
   - If the option is deactivated, the phone number is only entered in the input field and the User must click on the receiver or enter button. |

To define the lists and buttons settings for a User

1. In the menu, select “User”.
   - For administrators, a list appears with all Users.
2. As administrator, click on in the line of the appropriate user.
3. Click on the sub-menu item “Client Settings” that additionally appears.
4. Click on the “Lists and Buttons” tab.
5. Click on “Save”.

- You select can multiple devices.
- The “Basic Client” is the Swyx Mobile app for Windows phones.
- If you have permitted “Change User Profile” for a User, the User can change the settings you have defined here via SwyxIt!, see also 8.9 Defining rights, page 54.
8.11.3 Activating conversation recordings

You can define if a User is allowed to record conversations or specify that all of a User's conversations are recorded. The recording files are saved in.wav format.

If you have permitted "Change User Profile" for a User, the User can change the settings you have defined here via SwyxIt!, see also 8.9 Defining rights, page 54.

To activate recordings

1. In the menu, select "User". ✓ For administrators, a list appears with all Users.
2. As administrator, click on in the line of the appropriate user.
3. Click on the sub-menu item "Client Settings" that additionally appears.
4. Click on the "Recordings" tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate Conversation Recording</td>
<td>Select the checkbox to allow the User to record conversations himself.</td>
</tr>
<tr>
<td>Record all conversations</td>
<td>Activate the checkbox if you want all of the User's conversations to be recorded.</td>
</tr>
<tr>
<td>Use server settings</td>
<td>Select the checkbox if you want recording files to be stored in the location defined on server-side, see also SwyxWare documentation for administrators, chapter &quot;Configuration of SwyxServer&quot;, Section &quot;Client Preferences' Tab&quot;.</td>
</tr>
<tr>
<td>Storage location</td>
<td>Enter the storage location for conversation recordings, if applicable.</td>
</tr>
</tbody>
</table>

8.12 Editing shortcut keys

Shortcut keys allow you to access frequently used programs and websites via SwyxIt!. You can edit shortcut keys via SwyxIt! or Swyx Control Center and create additional shortcut keys via the Skin editor. See also the SwyxIt! user documentation, chapter "SwyxIt! - Functions in Detail" and chapter "The Use of Skins".

To edit shortcuts

1. In the menu, select "User". ✓ For administrators, a list appears with all Users.
2. As administrator, click on in the line of the appropriate user.
3. Click on the sub-menu item "Client Settings" that additionally appears.
4. Click the "Shortcut Keys" tab. ✓ The list of all shortcut keys appears.
5. Click on the line of the appropriate shortcut key.

The value "Index" is required by the system to assign the link.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shortcuts</td>
<td>Enter the web address or the name of the program file for the shortcut.</td>
</tr>
<tr>
<td>Working directory</td>
<td>Optionally, enter the path to the working directory of the linked program. This specification is required if the linked program must access files that are not stored in the same location as the program.</td>
</tr>
<tr>
<td>Picture</td>
<td>Select or upload a picture which will be displayed on the speed dial. - No picture - No picture is used.</td>
</tr>
<tr>
<td></td>
<td>Click on the button to search for images in your file directory and upload them.</td>
</tr>
<tr>
<td></td>
<td>Click the button to delete the image.</td>
</tr>
</tbody>
</table>
Creating and editing Users   Defining the skin

6 Click on "Save".
7 In the line of the appropriate shortcut, click on □ to delete the shortcut.

To delete several shortcuts at the same time, activate the check box in the line of the appropriate shortcut, click on "Delete several shortcuts" and confirm the operation with "Yes".

8.13 Defining the skin

You can define the standard Skin for Users. To select a server-wide Skin, see 3.14 Defining client settings for all Users, page 25.

To define the standard Skin

1 In the menu, select "User".
   ✔ For administrators, a list appears with all Users.

2 As administrator, click on ▶ in the line of the appropriate user.

3 Click on the sub-menu item "Client Settings" that additionally appears.

4 Click on the "Skins" tab.

Label | Explanation
---|---
Labelling | Enter the name of the button you want to appear in SwyxIt!

Label | Explanation
---|---
Call waiting tone for secondary calls | Activate the check box if you also want call signals to be acoustically indicated by an alerting tone. See also Defining call and status signaling, page 53.

Attention tone for signalled calls (call pickup) | Activate the “Enable acoustic second call signaling” in order to hear the call-waiting tone in the headset when a second call is received.

Ringing of CTI devices | In the drop-down list “Ringing of CTI devices” you can indicate which terminal devices should ring if SwyxIt! is operating in CTI mode: Both devices SwyxIt! in CTI mode and the controlled device (SwyxIt! or SwyxPhone) Only CTI SwyxIt! Only controlled device (SwyxIt! or SwyxPhone)

8.14 Editing the call signaling settings

You can define whether second calls and calls to other users or groups are signaled acoustically and on which devices calls are signaled.

To define call signaling settings

1 In the menu, select “User”.
   ✔ For administrators, a list appears with all Users.

2 As administrator, click on ▶ in the line of the appropriate user.

3 Click on the sub-menu item “Client Settings” that additionally appears.

4 Click on the “Signaling” tab.

Label | Explanation
---|---
Editing of Skins allowed | Activate the check box so that the User can use the Skin Editor.

5 Click on “Save”.

8.15 Defining ring tones

You can set individual ringing sounds depending on the caller and the User’s phone number.

To assign ringtones

1. In the menu, select “User”.
   ✓ For administrators, a list appears with all Users.

2. As administrator, click on in the line of the appropriate user.

3. Click on the sub-menu item “Client Settings” that additionally appears.

4. Click on the “Sounds” tab.

5. Click on the to select a different ringing sound.
   ✓ The “Ringing sound settings” configuration assistant appears.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td>Select for which calls the ringing sound is to be used: Internal calls</td>
</tr>
<tr>
<td></td>
<td>External calls</td>
</tr>
<tr>
<td><strong>Number/URI</strong></td>
<td>Call number/URI to which the ringing sound is assigned</td>
</tr>
<tr>
<td><strong>Sounds</strong></td>
<td>Currently selected ringing sound</td>
</tr>
<tr>
<td><strong>Call type</strong></td>
<td>Internal calls</td>
</tr>
<tr>
<td></td>
<td>External calls</td>
</tr>
<tr>
<td><strong>Caller’s or own number / URI</strong></td>
<td>Determine the phone number for which the selected ringing sound is used.</td>
</tr>
<tr>
<td></td>
<td>You have the following options:</td>
</tr>
<tr>
<td></td>
<td>You enter the phone number of a specific caller. When this caller calls</td>
</tr>
<tr>
<td></td>
<td>one of your phone numbers, the selected ringing sound is used. You enter</td>
</tr>
<tr>
<td></td>
<td>one of your phone numbers. When any caller calls this number, the selected</td>
</tr>
<tr>
<td></td>
<td>ring tone is used. You can also use placeholders for the phone number (for</td>
</tr>
<tr>
<td></td>
<td>multiple digits, ? for one digit).</td>
</tr>
<tr>
<td><strong>Sound</strong></td>
<td>Select the appropriate sound from the dropdown list or click on to upload</td>
</tr>
<tr>
<td></td>
<td>a .wav file.</td>
</tr>
<tr>
<td><strong>Pause between ringing</strong></td>
<td>Enter the number of seconds to elapse before the ringing sound is played</td>
</tr>
<tr>
<td></td>
<td>again.</td>
</tr>
<tr>
<td><strong>Click the button to search</strong></td>
<td>Click the button to search for ringing sounds in your file directory and</td>
</tr>
<tr>
<td></td>
<td>upload them.</td>
</tr>
<tr>
<td><strong>Click the button to delete</strong></td>
<td>Click the button to delete the ringing sound.</td>
</tr>
<tr>
<td><strong>Click the button to play</strong></td>
<td>Click the button to play the ringing sound.</td>
</tr>
<tr>
<td><strong>Click the button to pause</strong></td>
<td>Click the button to pause playback.</td>
</tr>
<tr>
<td><strong>Click the button to download</strong></td>
<td>Click the button to download the ringing sound.</td>
</tr>
<tr>
<td><strong>Move the slider left or right</strong></td>
<td>Move the slider left or right to set the playback volume. The setting</td>
</tr>
<tr>
<td></td>
<td>does not affect SwyxIt! or the devices used.</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>Slide the slider to the left or right to set the volume for SwyxIt! or the</td>
</tr>
<tr>
<td></td>
<td>User's devices.</td>
</tr>
<tr>
<td><strong>Apply volume to all ringing</strong></td>
<td>Activate the checkbox to apply the selected volume to all ringing sounds.</td>
</tr>
<tr>
<td><strong>sounds</strong></td>
<td></td>
</tr>
</tbody>
</table>
6 Click on “Save”.

8.16 Displaying Swyx Mobile configuration and configuring Swyx Mobile

You can display the Swyx Mobile configuration via Swyx Control Center and call the URL to configure your Swyx Mobile Client (Easy configuration).

To configure Swyx Mobile

1 In the menu, select “User”. ✓ If applicable, a list appears with all Users.
2 In the line of the appropriate User, click on .
3 Click on the sub-menu item “Client Settings” that additionally appears.
4 Click on the “Remote Connector” tab.
5 Click on or .
6 Scan the QR Code with your smartphone.
7 Android: You may need to install an app for reading QR Codes.
8 Open the link by confirming and select the Swyx Mobile App to open it.
9 Android: Enter your password under “Settings | Password” and log in under “Settings | Sign in”.
10 iOS: Enter your password, save and continue in the wizard.

See also the Swyx Mobile for iOS or Swyx Mobile for Android online help.

To display the Swyx Mobile configuration for a selected User

1 In the menu, select “User”. ✓ For administrators, a list appears with all Users.
2 As administrator, click on in the line of the appropriate user.
3 Click on the “Remote Connector” tab.
4 Click on or .

See also the Swyx Mobile for iOS or Swyx Mobile for Android online help.
8.17 Deleting Users

This is how you delete a User

1. In the menu, select "User".
   ✓ For administrators, a list appears with all Users.

2. As administrator, click on ∇ in the line of the appropriate user.

3. Click on "Yes" to confirm the process.
   ✓ The User’s numbers can be assigned elsewhere again.
Creating and editing Groups

Any number of Groups with any number of members can be configured in a SwyxWare installation; a User can be a member of more than one Group. Creating Groups makes it possible to contact members at a common Group number. There is a configuration wizard available to create Groups.

When saving and processing personal data, observe the respective applicable legal data protection regulations. If you have any questions especially regarding data protection in SwyxWare, please contact your administrator.

Personal data cannot be deleted automatically. In order to meet the valid data protection regulations, it may be necessary to delete the entries manually.

During a standard installation of SwyxServer several Groups and Users are already created.

The setting options on menu pages and in configuration wizards depend on your administration profile and your SwyxWare solution.

Creating Groups

Editing the general settings for Groups

9.1 Creating Groups

To create a Group

1 In the menu, select “Groups”. ✓ A list appears with all Groups.

2 Click on “Create Group”. ✓ The “Create a Group” configuration wizard appears.

3 Define the general settings for the Group.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a name for the Group.</td>
</tr>
<tr>
<td>Description</td>
<td>Enter a description, if applicable.</td>
</tr>
<tr>
<td>Make this Group the ‘Everyone Group’</td>
<td>Activate the checkbox, if you want all new Users to be added to this Group by default. The function can only be activated if you have previously deactivated it in the preconfigured “Everyone” group. As a consequence, new Users no longer have access to the functionalities of the preconfigured “Everyone” group. See also SwyxWare Documentation for Administrators, section “Pre-configured Users and Groups”.</td>
</tr>
<tr>
<td>Hunt Group type</td>
<td>Select one of the following hunt Group types: Parallel Calls to the Group number are delivered simultaneously to all members. The person who accepts the call first speaks to the caller. Random Calls are distributed randomly within the Group, i.e. when the time specified in the “Ringing time” filed is over, the next member is selected randomly from the entire Group. Rotary Calls to the Group are delivered to each Group member in order, always starting with the next Group member, i.e. for the second call with the second member, for the third call with the third member and so on. Sequential The calls to the Group are delivered according to the order of the Group members. always starting with the first Group member.</td>
</tr>
<tr>
<td>Call duration (in seconds)</td>
<td>Specify the maximum duration of an individual connection attempt, before the call is routed to the next member of the Group.</td>
</tr>
</tbody>
</table>
Creating and editing Groups  Creating Groups

Creating Groups

Click on "Next".

Define the numbers for the Group.

Click on "Next".

Assign Users to the Groups:
- Click on a User and then on one of the buttons , , to select him as a Group member or remove him from the Group.
- Click on one of the buttons , , to select or unselect all elements.
- Click on one of the buttons , , to position the element higher or lower.
- Use the input fields to search for names or phone numbers. Only the user’s main phone number is available for the search.
- When making later changes to settings, click “Save” to save the settings.

Calls to this Group will also be delivered to MEM devices
- Activate the check box if you want calls to this Group to be signalized on mobile devices.
- This option is only available after creating the Group, see also section Editing the general settings for Groups, page 71.

When making later changes to settings, click “Save” to save the settings.

4  Click on "Next".
5  Define the numbers for the Group.

Label | Explanation
--- | ---
Internal number | Enter the number under which the Group members are available site internally. May be preset by default: Next free number
Public number | Enter the number under which the Group members are available publicly, if applicable. Allowed format: canonical (+<country code><area code><number>)
Displaying in the Phonebook | Activate the checkbox if you want the Group number to be displayed in the Global Phonebook.

When making later changes to settings, click “Save” to save the settings.

6  Click on “Next”.
7  Assign Users to the Groups:
   - Click on a User and then on one of the buttons , , to select him as a Group member or remove him from the Group.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signalize incoming calls to</td>
<td>Activate the check box if you want calls to this Group or Group members to be signalized to the selected User or the members of the selected Group. A User can pick up calls signaled to him.</td>
</tr>
</tbody>
</table>

8  Click on "Next".
9  Specify the signaling settings for calls and status (available, away, etc.).

When making later changes to settings, click “Save” to save the settings.

Please be aware that call and status signaling settings are valid for a User or a Group member, not for Groups themselves. I.e. for example that a Group without members cannot signal calls to other Users or Groups.

If you have used a SwyxLink Trunk to configure a cross-server connection to another SwyxServer, then you likewise specify here the recipient on the linked site to whom the selected User signals the status.
9.2 Editing the general settings for Groups

To edit the settings for a Group

1. In the menu, select “Groups”.
   ✓ A list appears with all Groups.
2. In the line of the appropriate Group, click on 
   ✓ See also step Define the general settings for the Group., page 69

9.3 Editing the assignment of Users to Groups

To edit the assignment of Users to a Group

1. In the menu, select “Groups”.
   ✓ A list appears with all Groups.
2. In the line of the appropriate Group, click on 
3. Click on the “Members” tab.
   ✓ See also step Assign Users to the Groups., page 70

9.4 Editing numbers for Groups

To edit the numbers for a Group

1. In the menu, select “Groups”.
   ✓ A list appears with all Groups.
2. In the line of the appropriate Group, click on 
3. Click on the “Numbers” tab.
4. In the line of the appropriate numbers, click on  to edit the numbers or click on  to delete the numbers.

5. Click on “Add number” to add numbers.

See also step Define the numbers for the Group., page 70

### 9.5 Adding alternative numbers for Groups

You can define alternative numbers, which the Group members signal to the call partner on outgoing calls.

Which alternative number Users in the Group finally signal is defined on a line in the SwyxIt!/SwyxPhone. Alternative numbers are marked there by the addition Alternative number.

**Example:**

The administrator can allow every SwyxWare User to signal the operator’s number (+492314666100) externally, by adding this number as an alternative number to the Group “Everyone”. This allows every User to configure this number on the line button as outgoing number.

#### To add alternative numbers for a Group

1. In the menu, select “Groups”.
   - A list appears with all Groups.
2. In the line of the required Group, click on  .
3. Click on the “Alternative numbers” tab.
   - Click on “Add alternative number”.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| **Internal number** | Enter the number under which the Group members are available site internally.  
|                 | May be preset by default: Next free number                               |
| **Public number**  | Enter the number under which the Group members are available publicly, if applicable.  
|                 | Allowed format: canonical (+<country code><area code><number>)               |

4. Click on “Select”.

5. Click on  to remove the alternative number for the Group.

### 9.6 Editing the signaling settings for Groups

**To edit the signaling settings for a Group**

1. In the menu, select “Groups”.
   - A list appears with all Groups.
2. In the line of the appropriate Group, click on  .
3. Click on the “Relationships” tab.
4. Click on “Create Relation” or “Edit Relation”.

See also step Specify the signaling settings for calls and status (available, away, etc.), page 70

### 9.7 Deleting Groups

**To delete a Group**

1. In the menu, select “Groups”.
   - A list appears with all Groups.
2. In the line of the appropriate Group, click on  .
3. Click on “Yes” to confirm the process.
   - The Group related settings for the Users who had been assigned to the Group are deleted.
   - The Group numbers can be assigned elsewhere again.
In SwyxWare the prerequisite for using the conference room feature with more than three participants is the licensing of the SwyxConference feature. See also the SwyxWare Documentation for Administrators, chapter "Licensing".

The Conference function is implemented with the help of the SwyxConferenceManager service. SwyxConferenceManager can be installed on SwyxServer or on an independent computer. See also the SwyxWare Documentation for Administrators, chapter "SwyxWare installation", section "Installation of a SwyxWare component on an additional computer".

When SwyxConferenceManager is installed, a User is set up that is specifically intended for operating this SwyxConferenceManager. If there is more than one SwyxConferenceManager installed, a User is created for each of them. The conferences are then distributed to the various SwyxConferenceManagers.

If a SwyxConferenceManager is activated, all Users can initiate conferences and add more than two subscribers to conferences. See also the SwyxIt! documentation.

For a User to be able to start a conference, he must have this functionality available in his feature profile (SwyxAdHocConference) and he must have the functional permission for it. See also the SwyxWare Documentation for Administrators, chapter "User Configuration", section The “Properties...” Dialog: The “Rights” Tab. The “Rights” Tab.

You can create rules for this Conference Room via Call Routing Manager in order to limit access to the Conference Rooms for example by PIN request, number of the caller or time of day. See also the Swyx Extended Call Routing documentation.

In SwyxWare Advance for DataCenter and SwyxON, the configured conference rooms are counted separately in the license report.

### 10.1 Creating Conference Rooms

**To create a Conference Room**

1. In the menu, select “General Settings | Conference Rooms”.
   ✓ A list appears with all Conference Rooms.
2. Click on “Create Conference Room”.
   ✓ The “Create a Conference Room” configuration wizard appears.
3. Define the numbers for the Conference Room.
4. Click on “Save”.
   ✓ The Conference Room is displayed in the list of Conference Rooms.
10.2 Editing numbers for Conference Rooms

To edit the numbers for a Conference Room

1. In the menu, select “Conference Rooms”.
   - A list appears with all Conference Rooms.
2. In the line of the appropriate Conference Room, click on .
   See also step Define the numbers for the Conference Room., page 73

10.3 Deleting Conference Rooms

To delete a Conference Room

1. In the menu, select “Conference Rooms”.
   - A list appears with all Conference Rooms.
2. In the line of the appropriate Conference Room, click on .
3. Click on “Yes” to confirm the process.
   - The Conference Room is deleted.
   - The Conference Room numbers can be assigned elsewhere again.

To delete several Conference Rooms at the same time, activate the check box in the line of the appropriate conference room, click on "Delete several conference rooms" and confirm with "Yes".
11 Desk Phones

With SwyxWare you can use the following hardware devices:

Certified SIP phones
SwyxPhones

11.1 Certified SIP phones

Via Swyx Control Center you can create Swyx certified SIP devices. Proceed in the following order:

1. Optional: Preparing Yealink devices for the 802.1X authentication, see 802.1X authentication of Yealink devices in the SwyxWare environment, page 75

2. Create a desk phone object in the system, see section Creating Desk Phones, page 77. After creation the devices are detected by SwyxServer.

3. Connecting Desk Phones,
   - see Activating Desk Phones once, page 79,
   - see Log in/out Desk Phones, page 79,
   - see also https://help.swyx.com/docs/quickstarts/english/quickstart_Yealink_T4x5.pdf

If you connect the device to the network before the desk phone object has been created in Swyx Control Center, the login prompt may not appear during the initial operation. The desk phone object is not detected by SwyxServer. After you have created the desk phone object, you can trigger the restart of the device as well as the login prompt via "Reboot" or by briefly disconnecting the device from the power supply.

After putting the device into operation, the current firmware and user configuration data are transferred from the server.

Certified SIP devices are not supported in the standby scenario (Swyx-Standby). Certified SIP devices cannot log on to the standby server. If Desk Phones are processed on the standby system, this may result in disturbances on the master system.

If the provisioning of phones cannot be performed via multicast due to the network infrastructure, you can also distribute the provisioning URL (e.g., http://172.20.1.1:9200/ippbx/client/v1.0/deviceprovisioning/) via DHCP Option 66.

The setting options on menu pages and in configuration wizards depend on your administration profile and your SwyxWare solution.

11.1.1 802.1X authentication of Yealink devices in the SwyxWare environment

If you use certified SIP devices from Yealink, you have the option of further protecting access to your network.

The connected end devices can authenticate themselves via 802.1x protocol. Authentication against the authentication server is performed on Layer 2 (OSI).

For the provisioning of the Desk Phones it is necessary that the IP address of SwyxServer can be resolved in the local network. If no name resolving services (DNS) run in your network, enter the current IP address of the SwyxServer in the Windows Registry on the computer on SwyxServer is installed. (HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Swyx\General\CurrentVersion\Options\LocalIPAddress)

If you need to log in to Swyx Help Center to view the content, you may need to be logged in to Swyx Help Center to view the content.
Configuration on devices

The Yealink devices must be configured to use the IEEE 802.1X protocol. Refer to the manufacturer’s documentation at http://support.yealink.com/documentFront/forwardToDocumentFrontDisplayPage for details of the appropriate configuration.
Select <Terminal Model> | User & Administrator | Yealink 802.1X Authentication_VX_X.pdf.

Provisional provisioning network

If you are using a certificate-based authentication protocol such as EAP-TLS, you should set up an Initial Provision Network to upload certificates and configuration files to the endpoints. Further information can be found in the manufacturer documentation mentioned above.

The required configuration files are provided via HTTP server for downloading by the mobile devices. Make sure that the corresponding server URL is made known to the end devices via DHCP option 43.
The URL for root and client certificate is noted in the configuration file, see also Changing the certificate URL, page 77.

Company network with 802.1X authentication

After the configuration files have been downloaded to the end devices and the certificates installed, the end devices are ready for authentication in the 802.1X-protected network. After 802.1X network authentication, endpoints are automatically configured via DCF provisioning service to SwyxWare.
Changing the certificate URL

In some cases, e.g. in case of changes in the network infrastructure, it may be necessary to change the certificate URL afterwards.

While the configuration is being updated, the telephony function on the corresponding Desk Phones is not available for some time.

To change the certificate URL via Swyx PowerShell module

The connection to SwyxServer must be established.

1. Start the Swyx PowerShell module.
2. Extract the existing configuration from the SwyxWare database in a local folder with the following command:

   `Export-IpPbxYealinkConfigFile -Path <your local path>`

   For example
   
   `Export-IpPbxYealinkConfigFile -Path C:\`

3. Open the configuration file "common.cfg" in a text editor.
4. Add the following lines to the end of the file:

   ```
   static.network.802_1x.root_cert_url = <URL for the server certificate>
   static.network.802_1x.client_cert_url = <URL for the client certificate>
   
   For example
   
   static.network.802_1x.root_cert_url = http://192.168.2.51/ca_cert.pem
   static.network.802_1x.client_cert_url = http://192.168.2.51/client_cert.pem
   ```

5. Save the file.
6. Import the file via Swyx PowerShell module with the following command:

   `Import-IpPbxYealinkConfigFile -FilePath <full path of the modified configuration file>`

   For example

   `Import-IpPbxYealinkConfigFile -FilePath C:\common.cfg`

7. Confirm the execution of the command.

   According to the autoprovisioning schedule, the new configuration file is uploaded to the end devices.
   After the certificates have been downloaded, the end devices are restarted and re-registered.

11.1.2 Creating Desk Phones

To allow users of to use certified desktop phones, you must enter the appropriate MAC addresses in Swyx Control Center.
To create a Desk Phone

1. In the menu, select “Desk Phones”.
2. Click on “Create Desk Phone”.
   - The “Create Desk Phone” configuration wizard appears.
3. Click on “Create”.
   - The device appears in the list “Assigned certified phones” or “Unassigned certified phones”.

If you have not set a User PIN on Desk Phone for the User, he cannot log on or off independently.

Label | Explanation
--- | ---
Users | If applicable, select the User for whom the device should automatically be logged on or choose “Unassigned” - a User must log in to use the device and configure it via Swyx Control Center, see Log in/out Desk Phones, page 79.
MAC address | Enter the MAC address of the Desk Phone e.g. a1:c2:e3:f4:11:12
User-PIN on Desk Phone | If applicable, enter a number with which the User can log on to the Desk Phone. (User PIN on Desk Phone)
Notify User | Activate the checkbox if you want the User to receive a welcome email with his login data. Requirement: An email address is stored for the User in Swyx Control Center, see also section 8.3 Editing Users’ general settings, page 52.

1.1.2.1 Importing Desk Phones

As an alternative to creating Desk Phone objects in Swyx Control Center, you can import a .CSV file with the MAC addresses of the Desk Phones. For a User to be able to use a Desk Phone, you must enable its use in his or her user settings, see also 12 Define the Desk Phone settings., page 51

- The 8-digit activation key can be found in the menu under “Desk Phones | Unassigned certified phones” in the line of the appropriate device.
- The internal number of a user can be found in the user list.
- You can find or set the User-PIN on Desk Phone under “Users | <User Name> | Desk Phones | SwyxPhone”, see editSwyxPhones, page 83.

MAC addresses must be unique within SwyxWare.
The MAC addresses must be one below the other.
The .CSV file must not contain more than 100 entries.

To import Desk Phones

1. In the menu, select “Desk Phones”.
2. Click on “Import Desk Phones”.
   - The “Import Desk Phones” configuration wizard.
3. Click on “Select file” and on “Upload” to upload a file from your file system.
Click the cross icon to remove the file from the selection.

4 Click on "Next".
5 If applicable, select a User to log on to the device, see Log in/out Desk Phones, page 79.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC address</td>
<td>MAC address of the appropriate Desk Phone</td>
</tr>
<tr>
<td>Users</td>
<td>If applicable, select the User for whom the device should automatically be logged on or choose “Unassigned” - a User must log in to use the device, see Log in/out Desk Phones, page 79.</td>
</tr>
</tbody>
</table>

Assigning Users Click on the button to import the listed Desk Phones.

6 Check if all entries have been imported.
   If the import fails, you can adapt the erroneous lines or create the appropriate Desk Phones separately in Swyx Control Center, see also section Creating Desk Phones, page 77.

7 Click on "Finish".
   ✓ The Desk Phones have been registered in the system according to the import result and appear in the list “Assigned certified phones” or “Unassigned certified phones”.

11.1.3 Activating Desk Phones once

If you have activated the “Activation required on certified phones” (see Authentication of certified phones required, page 17), all certified SIP devices must be authenticated the first time they connect to the network.

The following entries must be made on the device during initial operation:

<table>
<thead>
<tr>
<th>Activation</th>
<th>Entries on the device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activation mandatory</td>
<td>• Internal number in the &quot;User Name&quot; field</td>
</tr>
<tr>
<td></td>
<td>• 8-digit activation key in the &quot;Password&quot; field</td>
</tr>
</tbody>
</table>

If you have not selected the option “Activation required”, certified SIP phones are immediately activated when they are connected to the network.

When a Desk Phone is activated and connected to the network, it can be in the following states:

| You have assigned the Desk Phone to a User. | The Desk Phone is logged on to the assigned User. |
| The Desk Phone is not assigned to any User. | The message “Logged off” appears on the display. Press “Log In” to open the logon dialog. |

11.1.4 Log in/out Desk Phones

Every User can log on to a logged off certified SIP device (Hot Desking). As an administrator, you can log off the logged in device or assign it to another user; the desk telephone is then automatically logged on for this user.

If you have not set a User PIN on Desk Phone for the User, he cannot log on or off independently.

For Hot Desking, the following steps may be necessary to use the device:

<table>
<thead>
<tr>
<th>Device status</th>
<th>Configuration in Swyx Control Center</th>
<th>Entries on the device</th>
</tr>
</thead>
<tbody>
<tr>
<td>logged off</td>
<td>Administrator assigns the Desk Phone to the User (Desk Phone is logged on automatically)</td>
<td>none</td>
</tr>
</tbody>
</table>

- Press “Log In”
- Internal number in the “Internal number” field
- User-PIN on Desk Phone in the “PIN” field
### To assign a Desk Phone to a User

1. In the menu, select “Desk Phones”.
2. Click on the “Unassigned certified phones” tab.
3. In the line of the appropriate Desk Phone, click on.
   - The “Assign Desk Phone” configuration wizard appears.
4. Select the User from the dropdown list.
5. If applicable, click on “Create PIN”.
6. If applicable, activate “Notify User” if you want the User to receive a welcome email with his login data.
7. Click on “Assign Desk Phone”.
   - The device is logged on to the desired User and appears in the “Assigned certified phones”.

### To log off a Desk Phone in Swyx Control Center

1. In the menu, select “Desk Phones”.
   - The “Assigned certified Desk Phones” list appears.
2. In the line of the appropriate Desk Phone, click on.
   - The device is logged off and appears in the list “Unassigned certified phones”.
3. Click on “Move Desk Phone”.
   - A User can log on to the device.

### To reassign a Desk Phone in Swyx Control Center

1. In the menu, select “Desk Phones”.
   - The “Unassigned certified phones” list appears.
2. In the line of the appropriate Desk Phone, click on.
   - The “Reassign Desk Phone” configuration wizard appears.
3. Check the current User’s data and select the desired User from the dropdown list “New User”.
4. If applicable, click on “Create PIN”.
5. If applicable, activate “Notify User” if you want the User to receive a welcome email with his login data.
6. Click on “OK”.
   - The Desk Phone is logged on to the desired User and appears in the “Assigned certified phones”.

### 11.1.5 Editing settings for certified Desk Phones

You can edit the following settings for Desk Phones:

- Assigning functions to function keys (e.g. name keys, number keys)
- Assigning contacts to name keys
- Copying function key assignment from a different Desk Phone

**Number keys**

If several internal numbers (including group numbers and alternative numbers) are configured for a User in his SwyxWare account, a corresponding function key with the “Internal numbers” function can be configured for each number.

- Incoming calls to the assigned numbers are highlighted on the key. This function is not available on a key module.
- Outgoing calls from the assigned number can be initiated via this key
Maximum quantity of numbers

On Yealink devices the maximum number of own numbers is limited. Only the first 5 numbers of a user account are supported on the T41S, and the first 9 numbers of a user account on the T42S, T46S and T48S models.

The numbers are used by the system according to the following prioritisation on Desk Phones:

1. All own numbers
2. All group numbers
3. All alternative numbers

The numbers which are outside the maximum quantity cannot be used on devices.

Example

For a User, 101, 102, 103, 104 are defined as own numbers in his user account. He is a member of a group with the number 200. His alternative number is 118. So he has 6 numbers in total.

On Yealink T41S, no number key should be assigned the number 118.

If you have configured number keys and the User has not selected a specific number during a call, the system uses his first internal number.

Exception: A different default line is configured in the SwyxIt! settings.

You can only edit logged on Desk Phones. The configuration applies to the logged in User and is stored in his SwyxWare user account.

When another user logs on to the device, his key configuration is loaded.

In the list of all certified Desk Phones, the phone’s current firmware appears in the column “Versions”, see also section 3.13 Distributing software to clients or devices, page 24.

To assign function keys

1. In the menu, select “Desk Phones”.
   ✓ A list appears with all Desk Phones.

2. In the line of the appropriate Desk Phone, click on ✂.
   ✓ The configuration assistant “Edit Desk Phone for User...” appears.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Button no.</td>
<td>Number of the assignable button in accordance with the numbering accepted. The adopted numbering of the function keys runs from the top to the bottom of the Desk Phones, visible marking doesn’t exist.</td>
</tr>
<tr>
<td>Labelling</td>
<td>Label which appears next to the function key on the LCD</td>
</tr>
<tr>
<td>Function</td>
<td>Select the function which you want to assign to the key. If you select “Speed dial”, the appropriate input fields “Index” and “Number” as well as the “Edit” option are ✂ activated, see To assign a Speed Dial, page 82.</td>
</tr>
</tbody>
</table>

3. Click on “Save all”.
   ✓ The changes are saved and updated on the Desk Phone.

To assign a number key

If you assign a number key with a number that is outside the maximum quantity of own numbers for this device (see Maximum quantity of numbers, page 81), the first number of the user account is used on the key.

1. In the menu, select “Desk Phones”.
   ✓ A list appears with all logged on Desk Phones.

2. In the line of the appropriate Desk Phone, click on ✂.
   ✓ The configuration assistant “Edit Desk Phone for User...” appears.

3. In the line of the appropriate key, select the function “Internal number”.

If a different default line is configured in the SwyxIt! settings, the first number of the user account is used on the key.
4 Click on .
   ✓ All of the user’s own (also group and alternative) numbers appear.
5 Activate the checkbox in the line of the number which should be assigned to the key, and confirm with “Select”.
6 Click on “Save all”.
   ✓ The changes are saved and updated on the Desk Phone.

To assign a Speed Dial

1 In the menu, select “Desk Phones”.
   ✓ A list appears with all Desk Phones.
2 In the line of the appropriate Desk Phone, click on .
   ✓ The configuration assistant “Edit Desk Phone for User...” appears.
3 Select the “Speed dial” option from the dropdown list.
4 Select the number for the intended speed dial under “Index”.

The “Index” number is used to allocate the Speed dial in the User account and does not determine the sequence of speed dial keys on the Desk Phone.

5 Click on in the line of the speed dial selected.

The settings for the selectable options and the User picture are only relevant for SwyxIt! or SwyxPhone Lxxx.

Dialing options

Activate the appropriate options, if applicable:

- Immediate dialing
- Clear display before dialing
- Intercom

User picture

Select whether a User picture will be displayed and upload a file from your file system, if applicable.

- Automatic
  The User picture is transmitted by SwyxServer.

To add a key module

1 In the menu, select “Desk Phones”.
   ✓ A list appears with all Desk Phones.
2 In the line of the appropriate Desk Phone, click on .
   ✓ The configuration assistant “Edit Desk Phone for User...“ appears.
3 Click on the “Add key module” tab.
4 Select the appropriate key module type from the dropdown list.
5 Click on “Add key module”.
6 Select from the appropriate key’s dropdown list the appropriate function.
7 Click on “Save all”.

To copy function key assignment from another Desk Phone

1 In the menu, select “Desk Phones”.
2 In the line of the appropriate Desk Phone, click on .
3 Click on “Copy settings from another Desk Phone”.
4 Activate the checkbox in the line of the appropriate Desk Phone.
5 Click on “Copy”.
6 Click on “Save all”.
   ✓ The function key assignment is copied and saved.

Label | Explanation
--- | ---
Labelling | Enter the display name for the respective speed dial.
Number/URI | Enter the number which is selected via the speed dial. The corresponding labelling is entered automatically.
Or: | Select a User from the phonebook via the button.
11.1.6 Deleting Desk Phones

You can delete logged on and logged off certified SIP devices.

To delete a logged off Desk Phone

1. In the menu, select “Desk Phones”.
2. Click on the “Unassigned certified phones” tab.
3. Click on “Yes” to confirm the process.
   ✓ The User’s Desk Phone is deleted and can no longer be used.

To connect SwyxPhones to SwyxServer

1. In the menu, select “Desk Phones”.
2. Click on the “SwyxPhones” tab.
3. Click on “Create IP address range”.
   ✓ The “Create IP address range” configuration wizard appears.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>From</td>
<td>Enter the first IP address range to be searched for SwyxPhones.</td>
</tr>
<tr>
<td>To</td>
<td>Enter the last IP address range to be searched for SwyxPhones.</td>
</tr>
<tr>
<td>PhoneManager</td>
<td>Enter the IP address of the PhoneManager to which the found SwyxPhones are to be connected.</td>
</tr>
<tr>
<td>Search period [1-72 hours]</td>
<td>Define how long you want the search to take.</td>
</tr>
<tr>
<td>Start</td>
<td>Start the search process.</td>
</tr>
<tr>
<td>Stop</td>
<td>Stop the search process.</td>
</tr>
</tbody>
</table>

4. Click on “Save”.

You can create another IP address range with the IP address of the corresponding PhoneManager to add more PhoneManagers.

5. In the line of the appropriate IP address range, click on ✏ to edit an IP address range.

6. In the line of the appropriate IP address range, click on ✋ to delete an IP address range or on “Delete multiple IP address ranges” to delete more than one IP address range.

11.2 SwyxPhones

You can connect the SwyxPhones in your local network to SwyxPhoneManager via SwyxServer service. SwyxPhoneManager is a component of SwyxServer and can also be used as a remote service. Additionally, you can use more than one PhoneManager.

For SwyxPhones to be able to register with SwyxServer via PhoneManager, you must distribute the IP address of the appropriate SwyxPhoneManager to the SwyxPhones. You can define the IP address range for the search for SwyxPhones and the PhoneManager address in Swyx Control Center. When you start the search process, all phones within the defined IP address range are connected to the corresponding PhoneManager.

The PhoneManager IP address remains stored in the SwyxPhones. Therefore, you only have to start the search process if you want to put new SwyxPhones into operation in the network.

11.2.1 editSwyxPhones

You can edit the SwyxPhone settings.
With the PIN that you define for SwyxPhones, the User can also log on to certified SIP devices.

To edit the settings for a SwyxPhone

1. In the menu, select “User”.
2. In the line of the appropriate User, click on.
3. Click on ✓ on the right next to the User name.
4. Click on the sub-menu item “Desk Phones” that additionally appears.
5. Click on the “SwyxPhone” tab.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwyxPhone</td>
<td>Activate the checkbox to permit the use of SwyxPhones for the User.</td>
</tr>
<tr>
<td>PIN</td>
<td>Enter a PIN or have a PIN created so that the User can log in to SwyxServer with any SwyxPhone and use his or her own number and key configuration. The name must be unique within SwyxServer.</td>
</tr>
<tr>
<td>Create PIN</td>
<td>Click on the button to create a new client certificate for the User. The User’s current PIN becomes invalid.</td>
</tr>
<tr>
<td>MAC address</td>
<td>Enter the Desk Phone’s MAC address, if applicable, so that a SwyxPhone can be assigned to the appropriate User during an automatic login. If you do not enter any information here, SwyxServer will note the MAC address of the SwyxPhone when the User logs in for the first time. If a User wants to log in with another SwyxPhone, you must delete the input field for the MAC address in order to enable taking over of the new telephone’s MAC address.</td>
</tr>
<tr>
<td>Automatic login</td>
<td>Activate the checkbox to permit STUN support. In this case, the User is permanently logged in to this SwyxPhone after rebooting the SwyxPhone.</td>
</tr>
</tbody>
</table>

6. Click on “Save”.

Voice codec

- **Prefer voice quality. If possible, use HD audio.**
  - If possible, the voice data is transferred in HD audio quality. An attempt is made in this case to use Codecs in the order G.722/G.711a/G.711μ/G.729.
- **Prefer voice quality. Only compress audio data if necessary.**
  - Voice data is only compressed if necessary. An attempt is made in this case to use Codecs in the order G.711a/G.711μ/G.729. Codec G.722 is never used.
- **Prefer low bandwidth. To spare bandwidth, compress the voice data.**
  - To spare bandwidth, the voice data is compressed. An attempt is made in this case to use Codecs in the order G.729/G.711a/G.711μ. Codec G.722 is never used.
- **Use lowest bandwidth. Always compress audio data.**
  - In order to use the lowest bandwidth, the voice data is always compressed. The Codec G.729 is used. See also the SwyxWare Documentation for Administrators, chapter “Cross-network connections”, section “Small Office - Connection”.

Label | Explanation
--- | ---
Voice codec | Select how the language data will be compressed during transfer. 
**Prefer voice quality. If possible, use HD audio.** If possible, the voice data is transferred in HD audio quality. An attempt is made in this case to use Codecs in the order G.722/G.711a/G.711μ/G.729. 
**Prefer voice quality. Only compress audio data if necessary.** Voice data is only compressed if necessary. An attempt is made in this case to use Codecs in the order G.711a/G.711μ/G.729. Codec G.722 is never used. 
**Prefer low bandwidth. To spare bandwidth, compress the voice data.** To spare bandwidth, the voice data is compressed. An attempt is made in this case to use Codecs in the order G.729/G.711a/G.711μ. Codec G.722 is never used. 
**Use lowest bandwidth. Always compress audio data.** In order to use the lowest bandwidth, the voice data is always compressed. The Codec G.729 is used. See also the SwyxWare Documentation for Administrators, chapter “Cross-network connections”, section “Small Office - Connection”.

6. Click on “Save”.
12 Editing phonebooks

The following Users can be displayed in the Global Phonebook:
- Users at the same SwyxServer
- Users connected to SwyxServer via SwyxLink trunk

For Users to appear in the Global Phonebook, the "Show in Phonebook" option must be activated in the user settings, see step 1.2.3.4.1.1 in the configuration wizard. (page 50).

Each User also has a Personal Phonebook. The Personal Phonebook can be edited by the appropriate User and the system administrator.

When saving and processing personal data, observe the respective applicable legal data protection regulations.

Personal data cannot be deleted automatically. In order to meet the valid data protection regulations, it may be necessary to delete the entries manually.

With an Intersite connection via a SwyxLink trunk, the users of all connected servers are also visible in the Global Phonebook of the SwyxPhones.

The setting options on menu pages and in configuration wizards depend on your administration profile and your SwyxWare solution.

12.1 Creating phonebook entries

To create an entry in the Global Phonebook

1. In the menu, select “Global Phonebook”.
   ✓ A list appears with all entries in the Global Phonebook.
2. Click on “Create Phonebook entry”.
   ✓ The “Create phonebook entry” configuration wizard appears.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter a name.</td>
</tr>
<tr>
<td>Description</td>
<td>Enter a description, if applicable.</td>
</tr>
<tr>
<td>Number</td>
<td>Enter a phone number or URI.</td>
</tr>
<tr>
<td>Displaying in the Phonebook</td>
<td>Activate the checkbox if you want the number to be displayed in the Global Phonebook.</td>
</tr>
</tbody>
</table>

3. Click on the button to delete the phone book entry.

4. Click on the button to download the phone book entry.

5. Click on “OK” to save the entry.
   ✓ The phonebook entry is created or updated and appears in the list of all Global Phonebook entries.

To create an entry in the Personal Phonebook

1. In the menu, select “User”.
   ✓ For administrators, a list appears with all Users.
2. As administrator, click on in the line of the appropriate user.
3. Click on the submenu item “Personal Phonebook”.
4. Click on “Create Phonebook entry”.
   ✓ A list appears with all entries in the Personal Phonebook of the appropriate User.
5. Click on “Create Phonebook entry”.

Creating phonebook entries
Editing phonebook entries
Exporting phone books
Importing phonebook entries
The "Create phone book entry" configuration wizard appears.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Enter the name.</td>
</tr>
<tr>
<td>Number</td>
<td>Enter a phone number or URI.</td>
</tr>
</tbody>
</table>
| Private     | Activate the check box if you only want to signal the phone number of the entry and not the name to other Users who receive call signaling.  

- = Private  

- = Non private

Click on the button to delete the phone book entry.

Click on the button to download the phone book entry.

To delete several entries at the same time, activate the checkbox in the line of the appropriate entry, click on "Delete multiple phonebook entries" and confirm with "Yes".

12.2 Editing phonebook entries

The name must be unambiguous within SwyxServer.

To edit an entry in the Global Phonebook

1 In the menu, select “Global Phonebook”.  
   ✓ A list appears with all entries in the Global Phonebook.
2 In the line of the appropriate entry, click on 🖊, to edit the entry.  
   See also step Enter a name., page 86
3 In the line of the appropriate entry, click on ✗, to delete the entry.

To export the Global Phonebook

1 In the menu, select “Global Phonebook”.  
   ✓ A list appears with all entries in the Global Phonebook.
2 Click on “Export Phonebook”.  
   ✓ The “Export Phonebook” configuration wizard appears.
3 Click on "OK".  
   ✓ The Global Phonebook is saved under the name “SwyxWarePhonebook.csv” in the directory set in your browser for downloads, e.g. “C:\Users\<Username>\Downloads”.

To export the Personal Phonebook

1 In the menu, select “User”.  
   ✓ For administrators, a list appears with all Users.
2 As administrator, click on in the line of the appropriate user.
3 Click on the submenu item “Personal Phonebook”.  
4 In the line of the appropriate entry, click on 🖊.  
   See also step Enter a name., page 86
5 In the line of the appropriate entry, click on ✗, to delete the entry.

12.3 Exporting phone books

You can export the phonebooks for editing or as a safety copy in .CSV format.

To export the Global Phonebook

1 In the menu, select “Global Phonebook”.  
   ✓ A list appears with all entries in the Global Phonebook.
2 Click on “Export Phonebook”.  
   ✓ The “Export Phonebook” configuration wizard appears.
3 Click on "OK".  
   ✓ The Global Phonebook is saved under the name “SwyxWarePhonebook.csv” in the directory set in your browser for downloads, e.g. “C:\Users\<Username>\Downloads”.

To export the Personal Phonebook

1 In the menu, select “User”.  
   ✓ For administrators, a list appears with all Users.
As administrator, click on \( \rightarrow \) in the line of the appropriate user.

Click on the submenu item "Personal Phonebook".

Click on “Export Phonebook”.

The “Export Phonebook” configuration wizard appears.

12.4 Importing phonebook entries

You can import Phonebooks in CSV format. The imported CSV file should have the following format:

First name 1; Surname 1; Phone number 1
First name 2; Surname 2; Phone number 2
or
First name 1; Surname 1; Phone number 1
First name 2; Surname 2; Phone number 2

To import entries into the Global Phonebook

1 In the menu, select “Global Phonebook”.
2 Click on “Import Phonebook”.
3 Click on “Select file”.
4 Select the CSV file and click on "Next".
5 Activate the checkbox “Automatically add the additional marking to the name entered.” as applicable if you wish to distinguish Users optically from other SwyxServers in the Phonebook.
6 Click on "Next".
7 Select the update mode:

<table>
<thead>
<tr>
<th>Mode</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update the existing entry</td>
<td>If an entry exists under the same name, the fields &quot;Telephone number&quot; and &quot;Description&quot; are overwritten with the contents of the import file.</td>
</tr>
<tr>
<td>Rename a new entry</td>
<td>If an entry exists under the same name, the entry of the import file is added under a different name.</td>
</tr>
<tr>
<td>Skipp a new entry</td>
<td>If an entry exists under the same name, the entry of the import file is not taken into account.</td>
</tr>
<tr>
<td>Delete existing Phonebook before import</td>
<td>The Phonebook is replaced in-full with the import file contents.</td>
</tr>
</tbody>
</table>

8 Click on “Import”.

To import entries into the Global Phonebook

1 In the menu, select “User”.
2 As administrator, click on \( \rightarrow \) in the line of the appropriate user.
3 Click on the submenu item "Personal Phonebook".

See section To import entries into the Global Phonebook, page 87
13 Call Detail Records (CDR)

SwyxWare allows you to record information concerning connected calls, so-called “Call Detail Records”, in a text file.

When saving and processing personal data, observe the respective applicable legal data protection regulations.

The setting options on menu pages and in configuration wizards depend on your administration profile and your SwyxWare solution.

13.1 Editing the CDR settings

SwyxWare allows you to record information concerning connected calls, so-called “Call Detail Records”, in a text file, see also chapter 13 Call Detail Records (CDR), page 88.

You can edit the following settings for CDR:

- Anonymization
- Storage
- Deletion

When saving and processing personal data, observe the respective applicable legal data protection regulations.

Please observe the respective applicable legal regulations. Please observe this in particular if you change the settings for memory restriction and/or select the database as storage Location.

Call Detail Records cannot be deleted from an external database. Please observe the respective applicable legal regulations. Please observe this in particular if you select the database as the memory Location.

Storing CDR to an external data base is not available for SwyxON.

To edit the settings for CDR

1. In the menu, select “Call Detail Records”.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activate CDR</td>
<td>Activate the checkbox if you want Call Detail Records to be recorded.</td>
</tr>
<tr>
<td>Anonymization</td>
<td>Select the level of anonymization for external numbers.</td>
</tr>
<tr>
<td>Store complete number</td>
<td>The entire external number is saved in the Call Detail Records.</td>
</tr>
<tr>
<td>Hide digits</td>
<td>Some of the digits are replaced by “X”. In the field “Number of digits” how many digits (from the end) are to be replaced.</td>
</tr>
<tr>
<td>Hide complete number</td>
<td>The entire external number is replaced with ‘XXX’. In this case you will not be able to see anymore whether the call was, e.g. an international or a local call.</td>
</tr>
</tbody>
</table>
### 13.2 Exporting Call Detail Records

You can export Call Detail Records into a text file, see also section File Format, page 90.

<table>
<thead>
<tr>
<th>Label</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage</strong></td>
<td>Select the storage Location for CDR.</td>
</tr>
<tr>
<td>Store to file</td>
<td>Enter the file and the directory where SwyxServer will save the Call Detail Records. You can restrict recording either according to file size or in terms of time. If the maximum file size or number of days is exceeded, a new file with the same name plus a counter will be created and filled. The existing files are only deleted if you select time restriction.</td>
</tr>
<tr>
<td><strong>External database (not for SwyxON)</strong></td>
<td>Call Detail Records are stored in an external database. Enter the database connection string. Via “Test Connection” you can check the connection to the database. According to data protection regulations, the deletion of CDR in this database should be executed manually. See also <a href="https://service.swyx.net/hc/en-gb/articles/360000013819-Write-Call-Details-Records-into-a-database">https://service.swyx.net/hc/en-gb/articles/360000013819-Write-Call-Details-Records-into-a-database</a> (you may need to be logged in to view the content).</td>
</tr>
<tr>
<td><strong>Internal database (SwyxON only)</strong></td>
<td>Call Detail Records are stored in the SwyxWare database. Under “Delete after (days)” you define after how many days CDR are deleted automatically.</td>
</tr>
</tbody>
</table>

1. Click on “Save”.

### 13.3 Deleting Call Detail Records

In accordance with legal data protection regulations, Call Detail Records must be deleted after a specified time.

1. In the menu, select “Call Detail Records”.
2. Click on the “Export” tab.
3. Select the month for which you want to download and export Call Detail Records.
4. Click on “Export”.
   - The text file is stored under the name `calldetail-records<yyyy><mm><dd>.txt` in the downloads directory of your browser., e.g. “C:\Users\<Username>\Downloads”.

When saving and processing personal data, observe the respective applicable legal data protection regulations.
To delete Call Detail Records

1. In the menu, select “Call Detail Records”.
2. Click on the “Deletion” tab.
3. Select the month for which you want to delete Call Detail Records.
4. Click on “Delete”.

✓ The Call Detail Records for the selected month are deleted.

13.4 File Format

The recorded ASCII text file contains one CDR per line. Each CDR, in turn, contains attributes separated by commas and enclosed in quotation marks. The first line contains a header line with column names enclosed in quotation marks separated by commas.

Each row contains the following attributes in the specified order:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| CallID          | Identification for a call
|                 | Each call (each CDR) contains a unique number. This ID is communicated to SwyxIt! as well, so it can be used via Client SDK, and can also be queried in the call routing script. Format: String |
| OriginName      | Caller number
|                 | For internal calls this is only the internal extension number, for external calls this is the number that is signaled in the network. If the call goes through a Trunk, the complete number in canonical format is entered here (+492314777222). If no number is delivered from the network for an external call, this field will remain empty. Format: String |
| OriginNumber    | Caller number
|                 | For internal calls this is only the internal extension number, for external calls this is the number that is signaled in the network. If the call goes through a Trunk, the complete number in canonical format is entered here (+492314777222). If no number is delivered from the network for an external call, this field will remain empty. Format: String |
| CalledNumber    | Called number
|                 | Number originally dialed by the caller
| CalledName      | Name of the person called
|                 | Name of the subscriber called, User name or name from the SwyxWare global phonebook
|                  | Format: String |
| DestinationName | Destination Name
|                 | Name of the subscriber who picked up the call
|                 | This is the same as CalledNumber for calls which have not been picked up.
|                  | Format: String |
| DestinationNumber| Destination Number
|                  | Number of the subscriber who picked up the call
|                  | This is the same as CalledNumber for calls which have not been picked up.
|                  | Format: String |
| StartDate       | Start Date
|                 | Date on which SwyxServer received the client’s call
|                  | Format: dd.mm.yyyy |
| StartTime       | Start Time
|                 | Time at which SwyxServer received the client’s call
|                  | Format: hh:mm:ss |
### Attribute | Explanation
--- | ---
**ScriptConnectDate** | Script start date  
Date on which the call was picked up via script (for incoming calls only)  
Format: dd.mm.yyyy
**ScriptConnectTime** | Script start time  
Time at which the call was picked up via script (for incoming calls only)  
Format: hh:mm:ss
**DeliveredDate** | Delivery date  
Date on which the call was delivered, e.g. by a ConnectTo in the script (for incoming calls only)  
Format: dd.mm.yyyy
**DeliveredTime** | Delivery time  
Time at which the call was delivered, e.g. by a ConnectTo in the script (for incoming calls only)  
Format: hh:mm:ss
**ConnectDate** | Connection date  
Date on which the call was picked up  
Format: dd.mm.yyyy
**ConnectTime** | Connection time  
Time at which the call was transferred  
Format: hh:mm:ss
**EndDate** | End Date  
Date on which the call is terminated  
Format: dd.mm.yyyy
**EndTime** | End Time  
Time at which the call was terminated  
Format: hh:mm:ss

### Attribute | Explanation
--- | ---
**Currency** | Currency of the charges  
If AOC = ‘1’ (Advice of charge) and if the public network supplies the charging units with currency, the currency is included here.  
If AOC = ‘1’ and the public network only supplies the charging unit, the currency included here is the currency which was configured in the SwyxWare Administration.  
If AOC = ‘0’, no charging information was delivered.  
Format: String
**Costs** | Cost of a call  
If AOC = ‘1’ (Advice of charge) and if the public network supplies the charging units with currency, the currency is included here.  
If AOC = ‘1’ and the public network only supplies the charging units, the calculated value of the costs included here as configured in the SwyxWare Administration.  
If AOC = ‘0’, no charging information was delivered.  
‘00’ = no costs  
Format: String
**State** | State of the call  
- Initialized: This is the initial state when picking up the handset.  
- Alerting: The call was ended while it was ringing at the destination number (DestinationNumber).  
- Connected: The call was ended while it was connected to the destination number.  
- ConnectedToScript: The call was ended while it was connected to a call routing script.  
- OnHold: The call was ended while on hold.  
- Transferred: The call was ended after it was transferred.  
Format: String
**PublicAccessPrefix** | Public Access Prefix  
Dailed public access number (for outgoing external calls only; optional)  
Format: String
**LCRProvider** | LCR code  
This field remains empty.  
Format: String
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project-Number</td>
<td>Project Codes</td>
</tr>
<tr>
<td></td>
<td>Code for a project (optional)</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>AOC</td>
<td>Charges information (Advice of Charge)</td>
</tr>
<tr>
<td></td>
<td>*&quot;1&quot; = Advice of charge information was taken from the network</td>
</tr>
<tr>
<td></td>
<td>'0' = The advice of charge information could not be taken from the network.</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>Origin-Device</td>
<td>Origin (Trunk)</td>
</tr>
<tr>
<td></td>
<td>Origin of the call (name of the Trunk)</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>Destination-Device</td>
<td>Destination (Trunk)</td>
</tr>
<tr>
<td></td>
<td>Destination of the call (name of the Trunk)</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>Transferred-ByNumber</td>
<td>Number of the transferor</td>
</tr>
<tr>
<td></td>
<td>Number of the subscriber who transferred the call</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>Transferred-ByName</td>
<td>Name of the transferor</td>
</tr>
<tr>
<td></td>
<td>Name of the subscriber who transferred the call</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>Transferred-CallID1</td>
<td>ID of the first call</td>
</tr>
<tr>
<td></td>
<td>CallID of the first CDR from which this CDR stems (for call transfers only)</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>Transferred-CallID2</td>
<td>ID of the second call</td>
</tr>
<tr>
<td></td>
<td>CallID of the second CDR from which this CDR stems (for call transfers only)</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>Transferred-ToCallID</td>
<td>ID of the transferred call</td>
</tr>
<tr>
<td></td>
<td>CallID of the new CDR resulting from a call transfer</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
<tr>
<td>Transfer-Date</td>
<td>Date of transfer</td>
</tr>
<tr>
<td></td>
<td>Date on which the call was transferred</td>
</tr>
<tr>
<td></td>
<td>Format: dd.mm.yyyy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer-Time</td>
<td>Time of transfer</td>
</tr>
<tr>
<td></td>
<td>Time at which the call was transferred.</td>
</tr>
<tr>
<td></td>
<td>Format: hh:mm:ss</td>
</tr>
<tr>
<td>Disconnect Reason</td>
<td>Reason for call termination</td>
</tr>
<tr>
<td></td>
<td>- Busy: Destination number is busy</td>
</tr>
<tr>
<td></td>
<td>- Reject: Destination rejects call</td>
</tr>
<tr>
<td></td>
<td>- NoAnswer: Destination does not pick up</td>
</tr>
<tr>
<td></td>
<td>- TooLate: A different device picked up the call</td>
</tr>
<tr>
<td></td>
<td>- UnknownNumber: The number called is unknown.</td>
</tr>
<tr>
<td></td>
<td>- Unreachable: Destination cannot be reached</td>
</tr>
<tr>
<td></td>
<td>- DirectCallImpossible: A connection for a direct call is not possible (deactivated in the settings)</td>
</tr>
<tr>
<td></td>
<td>- DivertToCallerImpossible: Caller cannot divert a call to himself</td>
</tr>
<tr>
<td></td>
<td>- NetworkCongestion: Network is overloaded</td>
</tr>
<tr>
<td></td>
<td>- BadFormatAddress: Format of the address is invalid</td>
</tr>
<tr>
<td></td>
<td>- ProceedWithDestinationScript: The call has been diverted to a call routing script of another subscriber</td>
</tr>
<tr>
<td></td>
<td>- CallRoutingFailed: Call routing failed (e. g. a call routing script could not be started)</td>
</tr>
<tr>
<td></td>
<td>- CallIgnored: Call has been ignored by the call routing script (e. g., when several ISDN devices are connected)</td>
</tr>
<tr>
<td></td>
<td>- PermissionDenied: Insufficient permission for this call</td>
</tr>
<tr>
<td></td>
<td>- CallDisconnected: Normal end of call</td>
</tr>
<tr>
<td></td>
<td>- CallDeflected: Call was manually diverted to another number or a voicemail without picking up</td>
</tr>
<tr>
<td></td>
<td>- IncompatibleDestination: Caller and destination are not compatible, e. g. different codecs</td>
</tr>
<tr>
<td></td>
<td>- SecurityNegotiationFailed: Caller and destination have incompatible encryption settings, (e.g. &quot;encryption mandatory&quot; - &quot;no encryption&quot;)</td>
</tr>
<tr>
<td></td>
<td>- NumberChanged: Destination number has been changed in PSTN</td>
</tr>
<tr>
<td></td>
<td>- NoChannelAvailable: No SwyxWare channel available</td>
</tr>
<tr>
<td></td>
<td>- OriginatorDisconnected: Caller ended the call</td>
</tr>
<tr>
<td></td>
<td>- CallTransferred: Call was transferred (call was recorded further under the newly assigned TransferredToCallID)</td>
</tr>
<tr>
<td></td>
<td>Format: String</td>
</tr>
</tbody>
</table>
13.5 Examples for CDR

The following examples are given to help you better understand CDR. These are CDR which are recorded after the call has been disconnected. To provide a better overview, only those CDR fields are listed, which help you to understand CDR recording.

13.5.1 CDR for a Simple Internal Call

User A (number 123) calls User B (number 456). Before dialing the number, he dials *4711# to assign the call to a project. This results in the following CDR:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CallID</td>
<td>3</td>
</tr>
<tr>
<td>OriginationNumber</td>
<td>+123</td>
</tr>
<tr>
<td>OriginationName</td>
<td>“User A”</td>
</tr>
<tr>
<td>CalledNumber</td>
<td>+456</td>
</tr>
<tr>
<td>CalledName</td>
<td>“User B”</td>
</tr>
<tr>
<td>StartDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>StartTime</td>
<td>“13.03:28”</td>
</tr>
<tr>
<td>DeliveredDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>DeliveredTime</td>
<td>“13.03:24”</td>
</tr>
<tr>
<td>ConnectDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>ConnectTime</td>
<td>“13.03:28”</td>
</tr>
<tr>
<td>EndDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>EndTime</td>
<td>“13.03:48”</td>
</tr>
<tr>
<td>State</td>
<td>“Connected”</td>
</tr>
<tr>
<td>ProjectNumber</td>
<td>+4711</td>
</tr>
<tr>
<td>DisconnectReason</td>
<td>OriginatorDisconnected</td>
</tr>
</tbody>
</table>

13.5.2 CDR for an External Call

User A (number +492314777123) forwards an external call to John Jones (number +49231456789). SwyxServer uses the Trunk "SwyxGate 1", to execute the call.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CallID</td>
<td>4</td>
</tr>
<tr>
<td>OriginationNumber</td>
<td>+492314777123</td>
</tr>
<tr>
<td>OriginationName</td>
<td>“User A”</td>
</tr>
<tr>
<td>CalledNumber</td>
<td>+49231456789</td>
</tr>
<tr>
<td>CalledName</td>
<td>“Jones, John”</td>
</tr>
<tr>
<td>StartDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>StartTime</td>
<td>“13.03:28”</td>
</tr>
<tr>
<td>DeliveredDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>DeliveredTime</td>
<td>“13.03:28”</td>
</tr>
<tr>
<td>ConnectDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>ConnectTime</td>
<td>“13.03:28”</td>
</tr>
<tr>
<td>EndDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>EndTime</td>
<td>“13.03:48”</td>
</tr>
<tr>
<td>State</td>
<td>“Connected”</td>
</tr>
<tr>
<td>PublicAccessPrefix</td>
<td>“+0”</td>
</tr>
<tr>
<td>DestinationDevice</td>
<td>“SwyxGate1”</td>
</tr>
<tr>
<td>DisconnectReason</td>
<td>CallDisconnected</td>
</tr>
</tbody>
</table>

The CalledName “Jones, Tom” comes from the global SwyxServer phonebook. The connection was terminated by the external subscriber (DisconnectReason = CallDisconnected).
### 13.5.3 CDR for a Call with Call Routing

User B has activated a call routing script. This script picks up a call, plays an announcement and transfers the call to an internal telephony client. If the call is not picked up there, the call will be transferred to the mobile telephone.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CallID</td>
<td>5</td>
</tr>
<tr>
<td>OriginationNumber</td>
<td>“+492314777123”</td>
</tr>
<tr>
<td>OriginationName</td>
<td>“User A”</td>
</tr>
<tr>
<td>CalledNumber</td>
<td>“+492314777456”</td>
</tr>
<tr>
<td>CalledName</td>
<td>“User B”</td>
</tr>
<tr>
<td>DestinationNumber</td>
<td>“+4916012345678”</td>
</tr>
<tr>
<td>DestinationName</td>
<td>“”</td>
</tr>
<tr>
<td>StartDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>StartTime</td>
<td>“13.03:28”</td>
</tr>
<tr>
<td>ScriptConnectDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>ScriptConnectTime</td>
<td>“13.03:30”</td>
</tr>
<tr>
<td>DeliveredDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>DeliveredTime</td>
<td>“13.03:55”</td>
</tr>
<tr>
<td>ConnectDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>ConnectTime</td>
<td>“13.03:59”</td>
</tr>
<tr>
<td>EndDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>EndTime</td>
<td>“13.05:09”</td>
</tr>
<tr>
<td>State</td>
<td>“Connected”</td>
</tr>
<tr>
<td>PublicAccessPrefix</td>
<td>“+0”</td>
</tr>
<tr>
<td>OriginationDevice</td>
<td>“”</td>
</tr>
</tbody>
</table>

### 13.5.4 CDR for a Transferred Call

User C (number +492314777101) calls User A (number +4916012345678) and puts this call on “Hold”. User C then calls User B (+49521087654321) and speaks with him. User C then connects Users A and B to one another. Due to the fact that User C initiated both calls, he will be charged for the costs for both calls. This results in three CDR, which can all be used for cost calculation.

#### CDR 1 (Call from C to A)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CallID</td>
<td>3</td>
</tr>
<tr>
<td>OriginationNumber</td>
<td>“+492314777101”</td>
</tr>
<tr>
<td>OriginationName</td>
<td>“User C”</td>
</tr>
<tr>
<td>CalledNumber</td>
<td>“+4916012345678”</td>
</tr>
<tr>
<td>CalledName</td>
<td>“User A”</td>
</tr>
<tr>
<td>StartTime</td>
<td>“13.08:24”</td>
</tr>
<tr>
<td>ConnectTime</td>
<td>“13.08:45”</td>
</tr>
<tr>
<td>EndTime</td>
<td>“13.15:44”</td>
</tr>
<tr>
<td>Currency</td>
<td>“EUR”</td>
</tr>
<tr>
<td>Costs</td>
<td>“1.23”</td>
</tr>
<tr>
<td>State</td>
<td>“Transferred”</td>
</tr>
<tr>
<td>AOC</td>
<td>“1”</td>
</tr>
<tr>
<td>OriginationDevice</td>
<td>“”</td>
</tr>
<tr>
<td>DestinationDevice</td>
<td>“SwyxGate1”</td>
</tr>
<tr>
<td>DisconnectReason</td>
<td>CallDisconnected</td>
</tr>
</tbody>
</table>
### Call Detail Records (CDR)  Examples for CDR

#### CDR 2 (Call from C to A)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>TransferredToCallID</td>
<td>8</td>
</tr>
<tr>
<td>TransferDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>TransferTime</td>
<td>“13:10:06”</td>
</tr>
<tr>
<td>DisconnectReason</td>
<td>CallTransferred</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CallID</td>
<td>7</td>
</tr>
<tr>
<td>OriginationNumber</td>
<td>“+492314777101”</td>
</tr>
<tr>
<td>OriginationName</td>
<td>“User C”</td>
</tr>
<tr>
<td>CalledNumber</td>
<td>“+49521087654321”</td>
</tr>
<tr>
<td>CalledName</td>
<td>“User B”</td>
</tr>
<tr>
<td>StartTime</td>
<td>“13:09:34”</td>
</tr>
<tr>
<td>ConnectTime</td>
<td>“13:09:56”</td>
</tr>
<tr>
<td>EndTime</td>
<td>“13:03:48”</td>
</tr>
<tr>
<td>Currency</td>
<td>“EUR”</td>
</tr>
<tr>
<td>Costs</td>
<td>“4.33”</td>
</tr>
<tr>
<td>State</td>
<td>“Transferred”</td>
</tr>
<tr>
<td>AOC</td>
<td>“1”</td>
</tr>
<tr>
<td>OriginationDevice</td>
<td></td>
</tr>
<tr>
<td>DestinationDevice</td>
<td>“SwyxGate1”</td>
</tr>
<tr>
<td>TransferredToCallID</td>
<td>8</td>
</tr>
<tr>
<td>TransferDate</td>
<td>“19.11.2012”</td>
</tr>
<tr>
<td>TransferTime</td>
<td>“13:10:06”</td>
</tr>
<tr>
<td>DisconnectReason</td>
<td>CallTransferred</td>
</tr>
</tbody>
</table>

#### CDR 3 (Transferred Call; A Speaks to B)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>CallID</td>
<td>8</td>
</tr>
<tr>
<td>OriginationNumber</td>
<td>“+4916012345678”</td>
</tr>
<tr>
<td>OriginationName</td>
<td>“User A”</td>
</tr>
<tr>
<td>CalledNumber</td>
<td>“+49521087654321”</td>
</tr>
<tr>
<td>CalledName</td>
<td>“User B”</td>
</tr>
<tr>
<td>StartTime</td>
<td>“13:10:07”</td>
</tr>
<tr>
<td>ConnectTime</td>
<td>“13:10:07”</td>
</tr>
<tr>
<td>EndTime</td>
<td>“13:15:44”</td>
</tr>
<tr>
<td>Currency</td>
<td>“”</td>
</tr>
<tr>
<td>Costs</td>
<td>“”</td>
</tr>
<tr>
<td>State</td>
<td>“Connected”</td>
</tr>
<tr>
<td>OriginationDevice</td>
<td>“SwyxGate1”</td>
</tr>
<tr>
<td>DestinationDevice</td>
<td>“SwyxGate1”</td>
</tr>
<tr>
<td>TransferredByNumber</td>
<td>“+101”</td>
</tr>
<tr>
<td>TransferredByName</td>
<td>“User C”</td>
</tr>
<tr>
<td>TransferredCallID1</td>
<td>3</td>
</tr>
<tr>
<td>TransferredCallID2</td>
<td>7</td>
</tr>
</tbody>
</table>