



MANUAL ANSWITCH V6

Manual anSwitch V6

User Telephony Features

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1 User Standard Telephony Call Features

1.1 Standard Call

The user operates the telephone service for outgoing and incoming calls and connections as usual.

Telephone provider-specific dialing procedures, e.g. international dialing of the destination also for national calls, must be used in accordance with the provider's specifications.

Incoming calls can be influenced by the following features:

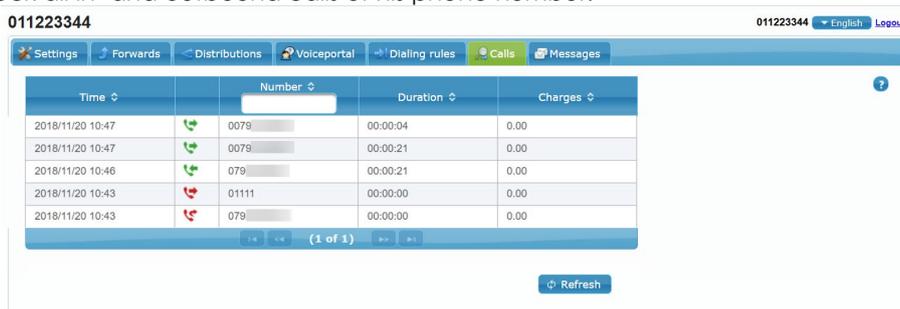
- ▶ Call Forward CF [↗] to a different destination or to the VoiceMail Box [↗].
- ▶ Call Reject CR [↗], e.g. anonymous calls not allowed by the user.
- ▶ The caller number is listed in the user's Blacklist [↗].
- ▶ Blocked caller number on level customer account.

Outgoing calls can be influenced by the following features:

1.2 Blocking Call List

1.2.1 Display the User's Call List in the AdminCenter

The user can check all in- and outbound calls of his phone number.



Time	Number	Duration	Charges
2018/11/20 10:47	0079	00:00:04	0.00
2018/11/20 10:47	0079	00:00:21	0.00
2018/11/20 10:46	079	00:00:21	0.00
2018/11/20 10:43	01111	00:00:00	0.00
2018/11/20 10:43	079	00:00:00	0.00

It is possible to sort, filter and search for calls.

1.3 TopStop

1.3.1 Overview TopStop

TopStop allows users to monitor their maximum monthly call charges. Once the maximum charge value has been reached, no further chargeable calls are possible!

The TopStop has following characteristics when activated:

- ▶ Definable monthly maximum charge blocking level.
- ▶ Definable alarming level when the charges have reached a certain threshold.
- ▶ Definable e-mail address to which information must be sent when the alarm and blocking thresholds are reached.
- ▶ When the blocking level is reached then no further chargeable calls are possible.
- ▶ When the blocking level is reached during a connection then the connection is interrupted.

Note

TopStop can also be seen as a security feature to prevent misuse. TopStop limits the damage if the SIP access data of the customer account is compromised. This can happen, for example, by hacking the user's SIP devices or loss or misuse of the SIP access data.

Note It is possible that the telephone service provider has activated a hidden TopStop at customer account level. If this is the case, the blocking level with the lowest maximum value will block further chargeable connections.

1.3.2 Manage TopStop via AdminCenter

Note: If a user has no access to the AdminCenter for managing the TopStop feature then an Operator of the telephone service provider must activate the feature for the user's number.

The user can configure the TopStop via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
Active	<input type="checkbox"/>	Activate Default: Not activated	If activated, the configuration of the TopStop is enabled.
Alarm level	Selection	[0% 10% ... 90% 100%] Default: 90%	Defines in % of the max. value when an alarming email is to be sent to the email address. Note: An email is sent in any case when the remaining amount is 0!
Alarm email	Email Address	[empty Max. 128 char] Default: empty	Defines the email address where messages are sent about a reached alarm or blocking level.
Current value	Charge	Display only	Display the currently used charge.
Remaining amount	Charge	Display only	Display the remaining used charge. ➔ If 0, then the number is blocked for any other outgoing call, except emergency calls.
Max. value	Charge	[empty value ≥0.0] Default: empty	Defines the blocking limit per month for the Number. It may not be exceeded by the charging sum of all connections of this number. If set to "empty" then no blocking limit is supervised.

1.4 Blacklist

1.4.1 Overview Blacklist

The user can blacklist any telephone number. Incoming calls from these numbers are automatically blocked and not signaled to the user's phones.

1.4.2 Manage Blacklist via AdminCenter

Note: If a user has no access to the AdminCenter for managing the Blacklist feature then an Operator of the telephone service provider must activate the feature for the user's number.

The user can configure the blacklisted numbers via the AdminCenter as follows:



It is possible to search for blacklisted numbers.

For an incoming call to be blocked, the caller's number and the blacklist number must match exactly.

Parameter Name	Data Type	Allowed Values	Description
Add Number	Number	+ Add ... 055667788	Add any dialable telephone number and click button: + Add ... Add just one single number at a time.
Delete a Number			Click icon at the desired number

1.5 Dialing Rules

1.5.1 Overview Dialing Rules

The user or an Operator of the telephone service provider can apply prepared Dialing Rules to his number. Outgoing or incoming calls are treated according to the selected dialing rules.

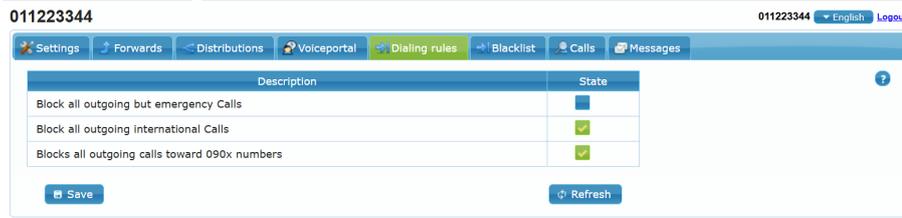
Dialing rules are prepared by an Operator of the telephone service provider. Check with the telephone service provider for their functionality.

Depending on the system settings, the dialing rules cannot be activated or deactivated by the user. In this case, it is only a status display for the user.

1.5.2 Manage Dialing Rules via AdminCenter

Note: If a user has no access to the AdminCenter for managing the Dialing Rules feature then an Operator of the telephone service provider must activate the feature for the user's number.

The user can select the dialing rules via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
State	<input type="checkbox"/>	Activate Default: Not activated	If activated, defines that the dialing rule is applied for outgoing or incoming calls.

1.6 Language, Location Account Properties

1.6.1 Overview of Account Properties

Several number-specific properties can be configured to adapt the telephone service and functions to the user's needs.

Property: Notification language

- ▶ Defines the language in which the standard notifications are played that a caller hears when, for example:
 - ▶ The caller has been forwarded to the user's VoiceMail Box.
 - ▶ The user has activated "Do not Disturb DnD".

Property: Location for emergency calls

- ▶ The location is used for prioritized call routing of emergency calls to the associated emergency call center of this location.
- ▶ When no location is configured then the location of the customer account is used.

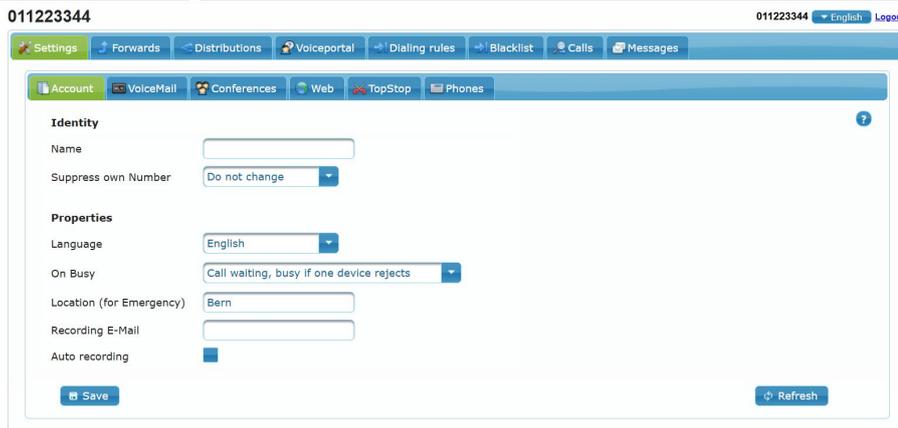
Use this location configuration of the number if, for example:

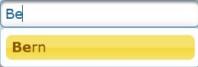
The head office is located in Zurich and therefore the location in the customer account is configured as "Zurich". However, if the user's office is located in Bern, it is recommended to configure "Bern" as the location.

1.6.2 Manage Account Properties via AdminCenter

Note: If a user has no access to the AdminCenter for managing the account properties then an Operator of the telephone service provider must configure these properties for the user's number.

The user can select the dialing rules via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
Language	Selection	[English German French Indonesian Italian Malaysian Vietnamese] Default: English	Defines the language in which the standard notifications are played that a caller hears when, for example: <ul style="list-style-type: none"> ▶ The caller has been forwarded to the user's VoiceMail Box. ▶ The user has activated "Do not Disturb DnD".
Location (for Emergency)	Selection	[empty Location] Default: empty	Defines the emergency call center that is called when the user dials an emergency number from his phones. For selecting a location, start to type the location name. The selection will present matching locations:  Values: <ul style="list-style-type: none"> ▶ empty: The emergency center which is configured on the number's customer accounts is called. ▶ Location: The emergency center which is associated with the location is called. Note: <ul style="list-style-type: none"> ▶ The assignment between the location and the appropriate emergency call center is defined at the system level of Switch V6. ▶ If the customer account has no location configured, then the system default emergency location is called.

- ▶ [↗] activated by the user.
- ▶ Blocking rules activated on level customer account.
- ▶ Expired TopStop [↗] limit activated by the user.
- ▶ Expired TopStop limit activated on level customer account.

1.7 Standard 3-Party Features: "Call Hold", "Call Transfer" and "3-Party Conference"

The standard 3-party features are supported by the anSwitch V6:

- ▶ "Call Hold" with "Music on Hold"
- ▶ Attended and unattended "Call Transfer"
- ▶ "3-Party Conference"

These functions are called up by the user on the SIP phone. The handling of the 3-party functions therefore depends on the implementation on the respective SIP phone.

→ Refer to the manufacturer's SIP phone manual to learn how to apply and use these features.

2 Managing User Features

2.1 Managing User Features via *#-Procedures by any Phone Type

2.1.1 Overview of User Features Manageable by *#-Procedures

All types of phones can manage a set of user features offered by the anSwitch V6 via *#-procedures:

- ▶ Call forward
- ▶ Call reject
- ▶ Call pick-up
- ▶ Call recording
- ▶ Outgoing anonymous call
- ▶ Access to the VoiceMail Box
- ▶ Setup a predefined audio conference
- ▶ Connection queries of last outgoing or incoming call

The collection of all available *#-procedures is listed in "Collection of *#-Procedure Codes" [↗](#). The functionality of the features is described in their respective chapters of this manual.

Example:

Unconditional call forward CFU to <NUMBER>: *21<NUMBER>

For example, dial on the phone: *210123456789

The user's phone or SIP device may offer other useful features that are handled by the device itself.

→ Refer to the manufacturer's SIP phone manual to learn how to apply and use these features.

2.1.2 Application of *#-Procedures by the User

The user activates, deactivates or manages the available "*" features with a sequence in the form:

```
*#CODE(*)PARAMETER_1*PARAMETER_2...(#)
```

***#**

Procedure start:

- * : Activate feature
- # : Deactivate feature
- *# : Status query of the feature

Code

Digit code of the feature, e.g.: 21

(*)

Optional * for separating the code from the parameters.

PARAMETER

None, one or more parameters, e.g. the call forwarding destination number 0123456789.

Mandatory * for separating multiple parameters.

(#)

Optional # for finishing the sequence.

For example, the valid sequences for an unconditional call forwarding to number 0123456789:

```
*210123456789
*21*0123456789
*210123456789#
*21*0123456789#
```

2.2 Managing User Features via Phone Provisioned via the AdminCenter

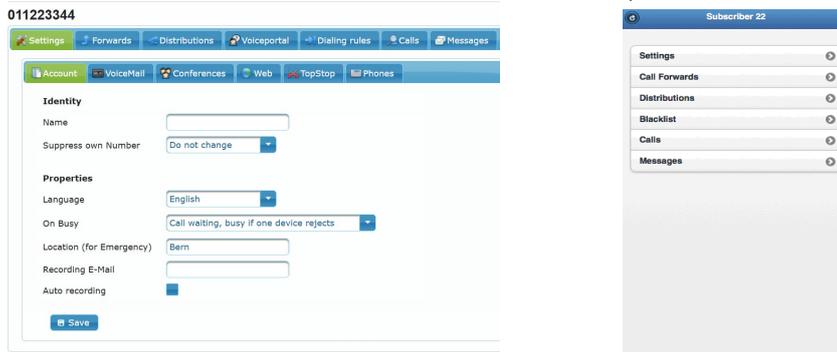
When a phone is provisioned via the AdminCenter, see chapter "Telephone Provisioning" ⁷, then some user feature can be assigned to configurable keys on the phone. The available features depend on the type of phone.

2.3 Managing User Features via the AdminCenter User Interface

2.3.1 Overview of the AdminCenter User Interface

The AdminCenter is the configuration GUI for the user e.g. for selfcare. The user can configure personal settings, e.g. call forwarding, accessing the VoiceMail Box, call list etc.

The AdminCenter GUI is different for PC web browsers and mobile phone web browsers:



2.3.2 Access to the AdminCenter

The telephony provider must grant users access to the AdminCenter. A user account must be created and eventually two-factor-authentication enforced.

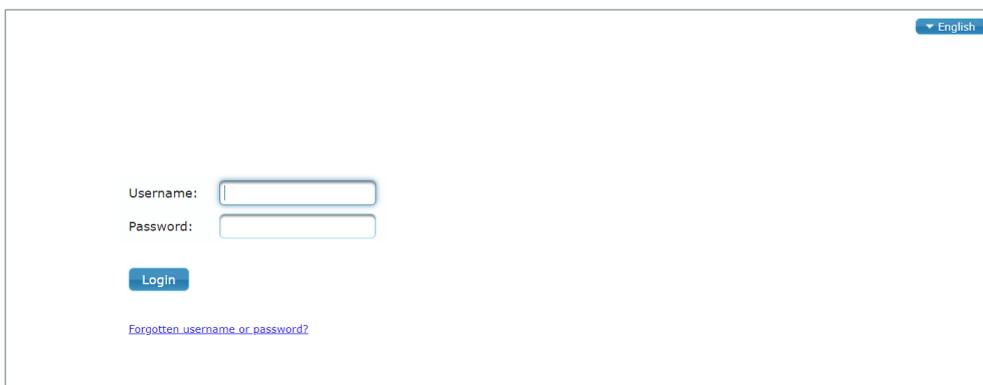
Access is possible with any modern web browser.

The user must get the access data from the provider:

- ▶ Username & password
- ▶ URL to the AdminCenter specified by the provider, for example: <https://admincenter.provider.com>

2.3.3 Welcome and Main Page

If contact was established with the AdminCenter via the web browser, the welcome window with the login dialog appears first, e.g.:



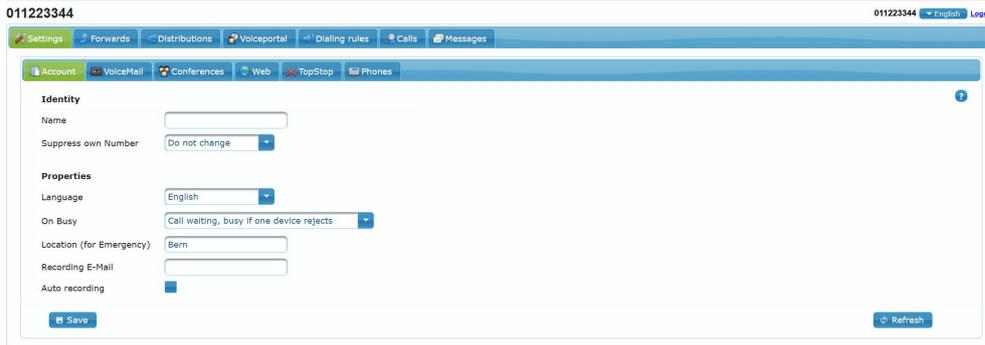
The content of the welcome window may vary depending on the provider's configuration.

If the password is lost, click the link [Forgotten username or password?](#) for receiving the password recovery instructions.

Change the language of the AdminCenter web pages at any time by selecting the language:



After entering the login credential, the main window of the AdminCenter opens:



The offered menus and configuration parameters may vary depending on the provider's configuration.

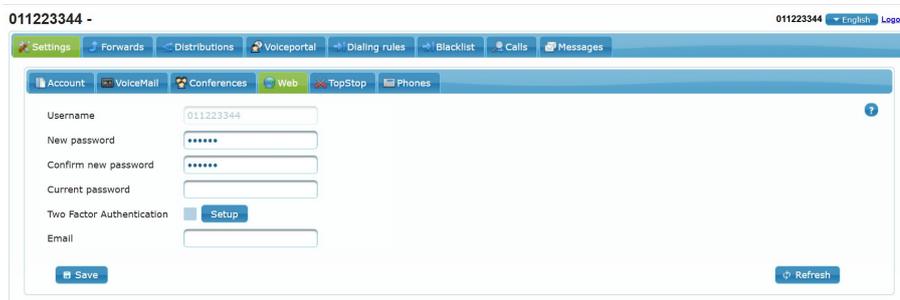
Logout at any time by clicking the link [Logout](#).

➔ Any unsaved configurations will be lost.

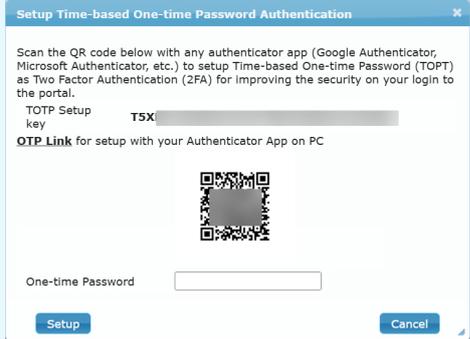
2.3.4 Manage the User Account Access and Activate Two Factor Authentication

The user can manage for his AdminCenter account:

- ▶ Set a new password.
- ▶ Activate Time-based One-time Password (TOPT) as Two Factor Authentication (2FA) for improving the login security.
- ▶ Email address where to send password recovery instructions.



Parameter Name	Data Type	Allowed Values	Description
Username	Display		Displays the username defined by an authority. To change it contact the telephone service provider.
New password	String	[empty Password, max. 128 char]	Defines the new password.
Confirm new password			

Parameter Name	Data Type	Allowed Values	Description
		Default: empty	The password must meet a certain quality defined by the telephone service provider. Values: <ul style="list-style-type: none"> ▶ empty: Not valid! ▶ Password: The new password
Current password	String	[empty Password, max. 128 char] Default: empty	For security insert the current password.
Two Factor Authentication	Display & Activation	<input type="checkbox"/> Setup	Activate the Two Factor Authentication by clicking button: Setup . Follow the instructions: 
Email	Email Address	[empty Max. 128 char] Default: empty	Defines the email address where to send password recovery instructions.

2.3.5 The AdminCenter Online-Help

Check the AdminCenter online-help [\[?\]](#) for the handling and all configuration possibilities.

On AdminCenter web pages where the icon  is present, you have direct access to the online-help for the topics on this page by clicking on this icon.

3 User Connection Features

3.1 Call Forward CF

3.1.1 Overview of a Call Forward CF

The feature "Call Forward CF" enables the user to forward incoming calls to a different destination.

The following call forwards are available for the user:

- ▶ Call forward unconditional CFU:
This call forwarding is executed in any case. The user's telephone does not ring for an incoming call.
- ▶ Call forward busy CFB:
This call forwarding is executed if the user is busy with another call.
- ▶ Call forward no reply CFNR
This call forwarding is executed when within a specified period of time the call is not answered by the user. The user's phone is still ringing when the call is forwarded.
- ▶ Call forward fall back CFF
This call forward is executed when the user's phone isn't reachable due to a e.g. due to power down, IP problems, phone defect.

Note

The call forwards activated by the user can be overwritten by call forwards activated on the customer account.

The user can configure several active call forwards for his number. If multiple call forwards are active, then they have the following execution order:

The user's phone is powered on and ready for incoming and outgoing calls (registered):

1. Call Forward Unconditional CFU
Depending on the connection status of the phone:
2. Call Forward if Busy CFB
3. Call Forward if No Reply CFNR
4. Call Forward Fallback CFF

The user's phone is not ready for incoming and outgoing calls (not registered), e.g.: due to power down, IP problems, phone defect:

1. Call Forward Fallback CFF
Call forwards that are ignored in this situation:
 - ▶ Call Forward Unconditional CFU
 - ▶ Call Forward if Busy CFB
 - ▶ Call Forward if No Reply CFNR

3.1.2 Manage Call Forward with *#-Procedures

The user can activate the diverse types of call forwards with *#-procedures from his phone directly. The user can also check if call forwards are active and can deactivate all call forwards he set in one command.

The value of <NUMBER> can be any dialable phone number. If the <NUMBER> is *86 then the call will be forwarded to the user's VoiceMail Box.

Feature	Description	*#-Codes	Remark
Call Forward Unconditional CFU	This call forwarding is executed in any case.	Activation: *21<NUMBER> Deactivation: #21 Status: *#21	AdminCenter: "Unconditional"

Feature	Description	*#-Codes	Remark
Call Forward if Busy CFB	This call forwarding is executed if the user is busy with another call.	Activation: *67<NUMBER> Deactivation: #67 Status: *#67	AdminCenter: "On Busy"
Call Forward if No Reply CFNR	This call forwarding is executed when within a specified period of time the call is not answered by the user. The user's phone is still ringing when the call is forwarded.	Activation: *61<NUMBER> Deactivation: #61 Status: *#61	AdminCenter: "No Reply"
Call Forward Fallback CFF	This call forward is executed when the user's phone isn't reachable due to a e.g. due to power down, IP problems, phone defect.	Activation: *22<NUMBER> Deactivation: #22 Status: *#22	AdminCenter: "Call Failed"
Call forking CFO	The call is forked additionally to the number.	Activation: *481<NUMBER> Deactivation: #481 Status: *#481	
Delete all active Call Forwards	Activates the deletion of all active Call Forwards CF.	Activation: *00 Status: *#00	

3.1.3 Manage Call Forward via the AdminCenter



Parameter Name	Data Type	Allowed Values	Description
Always			Defines the call forward type: <ul style="list-style-type: none"> ▶ Always: Defines a Call Forward Unconditional CFU. The call forwarding is executed in any case. ▶ Busy: Defines a Call Forward Busy CFB. The call forwarding is executed if the user is busy with another call. ▶ No Response: Call Forward No Reply CFNR. Defines that the call forwarding is executed when within the specified delay ("after") the call is not answered. ▶ Not Available: Defines a Call Forward Fallback CFF. The call forward is executed if no valid SIP device registration is active for this user phone number.
Busy			
No Response			
Not Available			

Parameter Name	Data Type	Allowed Values	Description
			Note: The combination of destination type "Number" and destination number value "empty" disables the call forward!
	Selection		Defines the destination type. Values: <ul style="list-style-type: none"> ▶ Number: Defines the destination number of the call forward. ▶ VoiceMail: Defines the VoiceMail Box of this user phone number as the call forward destination. ▶ Announcement: → Deprecated Defines an announcement in the menu "Voiceportal" of this user phone number as the call forward destination.
	Number		Defines the destination number and delay. The number value can be any type of dialable phone number.

3.2 Call Reject CR

3.2.1 Overview of a Call Reject CR

The feature "Call Reject CR" enables the user to reject incoming calls.

The user can activate the following types of call rejects:

- ▶ Do not Disturb DND:
If activated incoming calls are rejected. The caller will hear a notification.
- ▶ Anonymous Call Reject ACR:
If activated incoming calls are rejected when the caller is anonymous. The caller will hear a notification.

3.2.2 Manage Call Reject with *#-Procedures

The user can activate the different types of call rejects with *#-procedures from his phone directly.

Feature	Description	*#-Codes	Remark
Do not Disturb DND	All incoming calls are rejected.	Activation: *26 Deactivation: #26 Status: *#26	AdminCenter: "Do Not Disturb"
Anonymous Call Reject ACR	Anonymous incoming calls are rejected.	Activation: *99 Deactivation: #99 Status: *#99	AdminCenter: "Reject Anonymous Calls"

3.2.3 Manage Call Reject via the AdminCenter



Parameter Name	Data Type	Allowed Values	Description
Do not disturb	<input type="checkbox"/>	Activate Default: Not activated	If activated, defines that incoming calls are rejected. The caller will hear a notification.
Reject anonymous call	<input type="checkbox"/>	Activate Default: Not activated	If activated, defines that incoming calls are rejected when the caller is anonymous. The caller will hear a notification.

3.3 VoiceMail Box

3.3.1 Overview of the VoiceMail Box

The user's personal VoiceMail Box answers automatically incoming calls when the user:

- ▶ Activated the VoiceMail Box
- ▶ Activated a call forward to the VoiceMail Box

A caller may leave a message or send a Fax:

- ▶ Received messages:
 - ▶ Can be listened to via the user's phone by dialing: *86 .
 - ▶ Can be forwarded as audio file as an attachment of a configured email address.
 - ▶ Can be managed and listened to via the user's AdminCenter account.
- ▶ Received Fax:
 - ▶ Can be sent as PDF file attachment of a configured email address.

The following basic data apply to the VoiceMail Box:

- ▶ The maximum recording time of the VoiceMail Box is 5 minutes.
- ▶ The maximum length of a recorded message is 5 minutes.
- ▶ There is no limit to the number of saved messages.
- ▶ Message storage times:
 - ▶ New unread messages: 15 days.
 - ▶ Listened messages: 3 days.
 - ▶ Saved messages: 24 days.
- ▶ After 4 incorrect PIN, the VoiceMail Box is blocked for 5 minutes.

3.3.2 Manage the VoiceMail Box via Phone

Note: If a user has no access to the AdminCenter for managing the VoiceMail Box feature then an Operator of the telephone service provider must activate the feature for the user's number.

For recording caller message and/or receiving Fax, the user must configure a call forwarding to the VoiceMail Box with *#-procedures:

Call Forward Type	Description	*#-Codes	Remark
Call Forward Unconditional CFU	This call forwarding is executed in any case.	Activation: *28 Deactivation: #21 Status: *#21	AdminCenter: "Unconditional"
Call Forward if Busy CFB	This call forwarding is executed if the user is busy with another call.	Activation: *691> Deactivation: #67 Status: *#67	AdminCenter: "On Busy"
Call Forward if No Reply CFNR	This call forwarding is executed when within a specified period of time the call is not answered by the user. The user's phone is still ringing when the call is forwarded.	Activation: *68 Deactivation: #61 Status: *#61	AdminCenter: "No Reply" The delay is fix 14sec.
Call Forward Fallback CFF	This call forward is executed when the user's phone isn't reachable due to a e.g. due to power down, IP problems, phone defect.	Activation: *692 Deactivation: #22 Status: *#22	AdminCenter: "Call Failed"

3.3.3 Listen to Recorded Messages or Configure the VoiceMail Box via Phone

Listen to new messages from the user's associated phone.

2. Connect to the VoiceMail Box

Variant 1:

The user phone's message key is correctly with *86 configured. Then just the message key for accessing the VoiceMail Box.

Variant 2:

Dial the number: *86

3. The follow the instructions given by the VoiceMail Box portal:

- ▶ Wait for the welcome notification.
- ▶ Press * during the welcome notification.
- ▶ Enter the PIN when prompted and finish with #.
- ▶ The user is guided how to listen the message or configuring its VoiceMail Box.

3.3.4 Manage VoiceMail Box via the AdminCenter

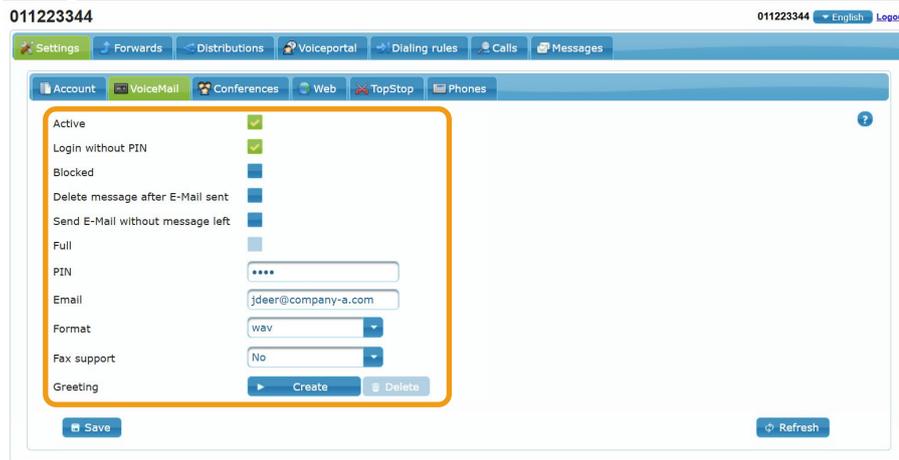
The user must activate the VoiceMail Box, see configuration parameter "Active" below.

For recording caller message and/or receiving Fax, the user must configure a call forwarding, for example for the situation "Busy" CFB:



The user may also activate a call forward via his phone with *#-procedures as described in "Manage the VoiceMail Box via Phone" [↗](#).

The user can configure the VoiceMail Box as follows:



Parameter Name	Data Type	Allowed Values	Description
Active	<input type="checkbox"/>	Activate Default: Not activated	If activated, defines that the VoiceMail Box is ready for recording caller messages and/or receiving Fax.
Login without PIN	<input type="checkbox"/>	Activate Default: Activated	If activated, defines that no PIN is needed for accessing the VoiceMail Box from a user's phone. Note: The PIN is always requested from any access other than the "own" phones.
Blocked	<input type="checkbox"/>	Display & Activate Default: Not activated	Displays if a VoiceMail Box is blocked after many failed logins. It can be manually de-blocked or blocked.
Delete message after E-Mail sent	<input type="checkbox"/>	Activate Default: Not activated	If activated, defines that the VoiceMail Box deletes a message or Fax after it is sent to the defined email address. This activation creates a limitless sized VoiceMail Box! → The messages are not stored in the VoiceMail Box! Note: An email address must be configured.
Send E-Mail without message left	<input type="checkbox"/>	Activate Default: Not activated	If activated, defines that a message is also sent when a caller doesn't leave a message.
Full	Display		Display when the VoiceMail Box is full.
PIN	PIN	Min 4 – max 16 digits	Defines the PIN need for accessing the VoiceMail Box.
Email	Email Address	[empty Max. 128 char] Default: empty	Defines the email address where messages or Fax will be sent to.
Format	Selection	[wav mp3] Default: wav	Defines the audio format a caller message is recorded.
Fax support	Selection	[no Automatic Fax only]	Defines which type of information the VoiceMail Box records.

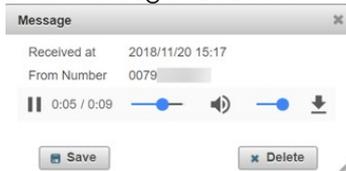
Parameter Name	Data Type	Allowed Values	Description
		Default: no	Values: <ul style="list-style-type: none"> ▶ no: Only caller messages are recorded. ▶ Automatic: Both caller messages and Fax transmissions are recorded. ▶ Fax only: Only Fax transmissions are recorded.
Greeting		<div style="display: flex; justify-content: space-around;"> ▶ Create 🗑 Delete </div>	Allows the user to upload a WAV-formatted audio file: <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;"> </div> <ul style="list-style-type: none"> ▶ For uploading an audio file click button: + Select File ..." For deleting an uploaded audio file click button: Delete

3.3.5 Listen to Recorded Messages via AdminCenter

Open tab "Messages". The available message are listed:



For listening to the message click the row of the desired message and start the playing, click icon: ▶ :



- ▶ To extend the storage period of the message, click button: Save .
- ▶ To download the message to the PC, click icon ⬇ .
- ▶ To delete the message, click button: Delete .

Note For privacy, neither an Administrator, Operator nor Supporter of the telephone service provider have access to the user's VoiceMail Box messages.

3.4 On-Busy / Call-Waiting

3.4.1 Overview On-Busy

If a user has several phones connected to its phone number or several users share the same number, then the feature On-Busy / Call-Waiting allows to define how call waiting is signaled to the called and how busy is signaled to the caller upon a coming call.

Use-cases of this feature:

- ▶ A user has several phones connected to his number and is currently in a connection.

When a new call is incoming there are two ways to react:

- ▶ "Signal busy":
The call is immediately rejected. The user will not hear a call waiting indication. The caller will hear busy.
- ▶ "Call waiting, busy if one device rejects":
The user will hear a call waiting indication and can manually reject or take the call. The caller will hear the alert tone. When the user rejects the call then the caller will hear the busy tone.

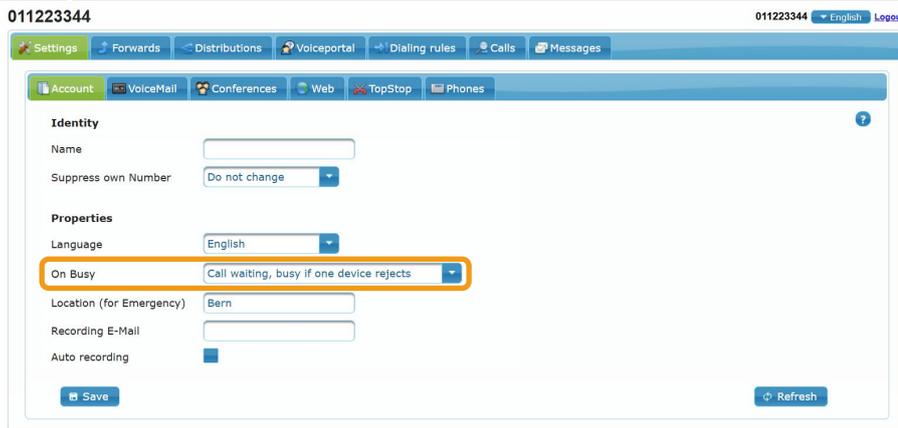
▶ A small company has several phones connected to its number. An employee of this company is currently in a connection. The other employees are free and could take a new incoming call. An appropriate reaction could be:

- ▶ "Call waiting, busy if all devices reject":
The employee in connection will hear call waiting indication. The phones of the free employees are ringing. The caller will hear the alert tone. A free employee can take this call. When all employees manually reject the incoming call then the caller will hear the busy tone.

3.4.2 Manage On-Busy via AdminCenter

Note: If a user has no access to the AdminCenter for managing the On-Busy feature then an Operator of the telephone service provider must activate the feature for the user's number.

The user can configure the On-Busy via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
On Busy	Selection	[Call waiting, busy if one device rejects Call waiting, busy if all devices reject Signal busy] Default: Call waiting, busy if one device rejects	Defines what a caller will hear when this number is already in an active call. Values: <ul style="list-style-type: none"> ▶ Call waiting, busy if one device rejects: All user phones are signaled with the new incoming call (call waiting). When one phone is rejecting the new call, then the caller hears the busy tone. ▶ Call waiting, busy if all devices reject: All user phones are signaled with the new incoming call (call waiting). When all user phones are rejecting the new call, then the caller hears the busy tone. ▶ Signaling Busy: A new incoming call is automatically

Parameter Name	Data Type	Allowed Values	Description
			rejected (no call waiting) when one device is busy, then the caller hears the busy tone.

3.5 Caller Identity: Display Name, Anonymous Calls

3.5.1 Overview of Caller Identity

The user can define the information to be displayed on the called peering device, e.g. phone:

- ▶ The source of the caller's name:
 - ▶ From the calling phone.
 - ▶ Replace the name delivered from the phone.
 - ▶ Delete the name delivered from the phone.
- ▶ The source for outgoing anonymous calls:
 - ▶ From the calling phone.
 - ▶ Set fix to anonymous.
 - ▶ Set fix to show the identity.

3.5.2 Manage Outgoing Anonymous Calls with *#-Procedures

The *#-procedures for executing outgoing anonymous calls must be made available by the telephone service provider.

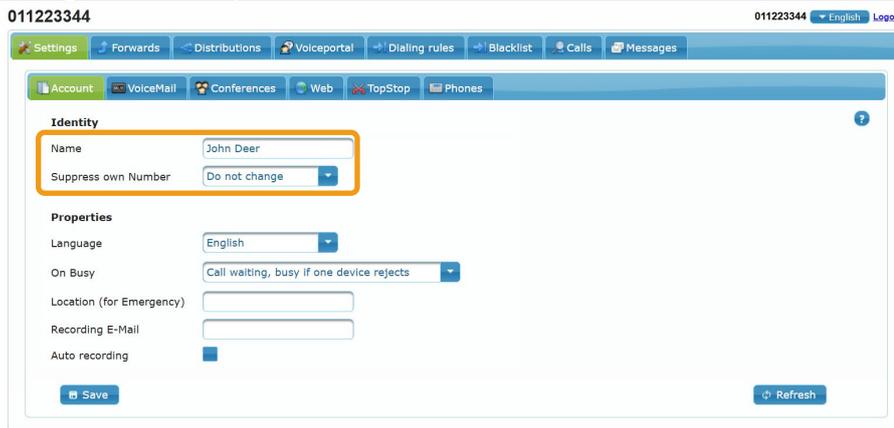
The value of <NUMBER> is the telephone number of the desired destination.

Feature	Description	*#-Codes	Remark
Anonymous for this call	Suppress the own number for this call.	Dial: *31<NUMBER>	This overrides all other show identity instructions from other sources.
Force to show the identity for this call	Force to show the identity for this call.	Dial: #31<NUMBER>	This overrides all other anonymous call instructions from other sources.
Force anonymous for all calls	Once activated, all outgoing calls are anonymous.	Dial: *32<NUMBER>	This overrides all other show identity instructions from other sources.
Force to show the identity for all calls	Once activated, all outgoing calls show the identity.	Dial: #32<NUMBER>	This overrides all anonymous call instructions from other sources.

3.5.3 Manage Caller Identity via AdminCenter

Note: If a user has no access to the AdminCenter for managing the caller identity then an Operator of the telephone service provider must configure these properties for the user's number.

The user can configure his identity via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
Name	String	[empty - Name, max. 64 char] Default: empty	<p>Defines the name that is displayed on the called side for an outgoing call from this number.</p> <p>Whether the name is displayed on the called side depends on this:</p> <ul style="list-style-type: none"> ▶ Whether the peering telephone can display it. ▶ Whether the information is transmitted via the telephone network. <p>Values:</p> <ul style="list-style-type: none"> ▶ empty: A name value delivered by a calling phone will not be changed. ▶ -: A name value delivered by a calling phone will be deleted. ▶ Name: Defines the name to display at the called side.
Suppress own Number	Selection	[Do not change Yes No] Default: Do not change	<p>Defines for all outgoing calls from this number under which conditions the own number and name should be displayed on the called peering device.</p> <p>Values:</p> <ul style="list-style-type: none"> ▶ Do not change: The caller's name and number are transferred to the peering side according to the calling phone. ▶ Yes: The caller's name and number are not transferred to the peering side → anonymous call. ▶ No: The caller's name and number are transferred to the peering side even when the calling phone forced an anonymous call.

3.6 Call Pick-Up

3.6.1 Overview Call Pick-Up

The call pickup feature allows the user to answer an incoming call on another ringing phone on their own phone. The Call Pick-Up is limited to phone numbers that belong to the same customer account.

3.6.2 Manage Call Pick-Up with *#-Procedure

The value of <NUMBER> must be a telephone number of the own customer account.

Feature	Description	*#-Codes	Remark
Call Pick-Up	The Call Pick-up allows to answer an incoming call on another ringing phone on their own phone.	Dial: *76<NUMBER>	The Call Pick-Up is limited to phone numbers that belong to the same customer account

3.7 Connection Queries

3.7.1 Overview Connection Queries

The Connection Queries allows the user to query telephone numbers of:

- ▶ The own phone
- ▶ The last dialed phone number
- ▶ The last incoming call

Additionally, the Connection Queries allows to call back to:

- ▶ The last dialed phone number
- ▶ The last incoming call

3.7.2 Manage Connection Queries with *#-Procedures

Feature	Description	*#-Codes	Remark
Query own number	Query the number of this phone.	Dial: *14	
Query last dialed number	Query the last dialed number.	Dial: *15	
Call last dialed number	Call back the last dialed number.	Dial: *11	
Query last incoming number	Query the number of the last incoming call.	Dial: *16	
Call last incoming number	Call back the number of the last incoming call.	Dial: *12	

3.8 Audio Conference

3.8.1 Overview Audio Conference

3.8.2 Manage Ad-Hoc Audio Conference with *#-Procedure

The user can start an audio conference with a max. of 8 participants by *#-procedure "*71":

- ▶ All participants are called immediately and join the conference when they pick up the incoming call.

For example, the user would like to set up a conference call with the following numbers:

- ▶ 011111111
- ▶ 022222222
- ▶ 033333333

→ The user dials from his phone: *71*011111111*022222222*033333333

Feature	Description	*#-Codes	Remark
Ad-Hoc Audio Conference	The user initiates an audio conference with the listed numbers of the participants. A called participant automatically joins the conference when they accept the incoming call.	Dial: *71*<NUMBER_1>*<NUMBER_2>*<NUMBER_3>*<...>*<NUMBER_8>	Max. 8 participant numbers are allowed.

3.8.3 Manage Audio Conference Room and Participants via AdminCenter

3.8.3.1 Manage Audio Conference Room

Note: Audio conference rooms can only be managed by users with AdminCenter access!

The user can manage the audio conference rooms via the AdminCenter as follows:



It is possible to sort and search for audio conference rooms.

Parameter Name	Data Type	Allowed Values	Description
Add a new audio conference room	Name	+ Add ... Name Sales Meeting	Add any name and click button: + Add ...
Manage an existing audio conference room			Click the row.
Delete audio conference room			Click icon at the desired audio conference room.

3.8.3.2 Configure an Audio Conference Room

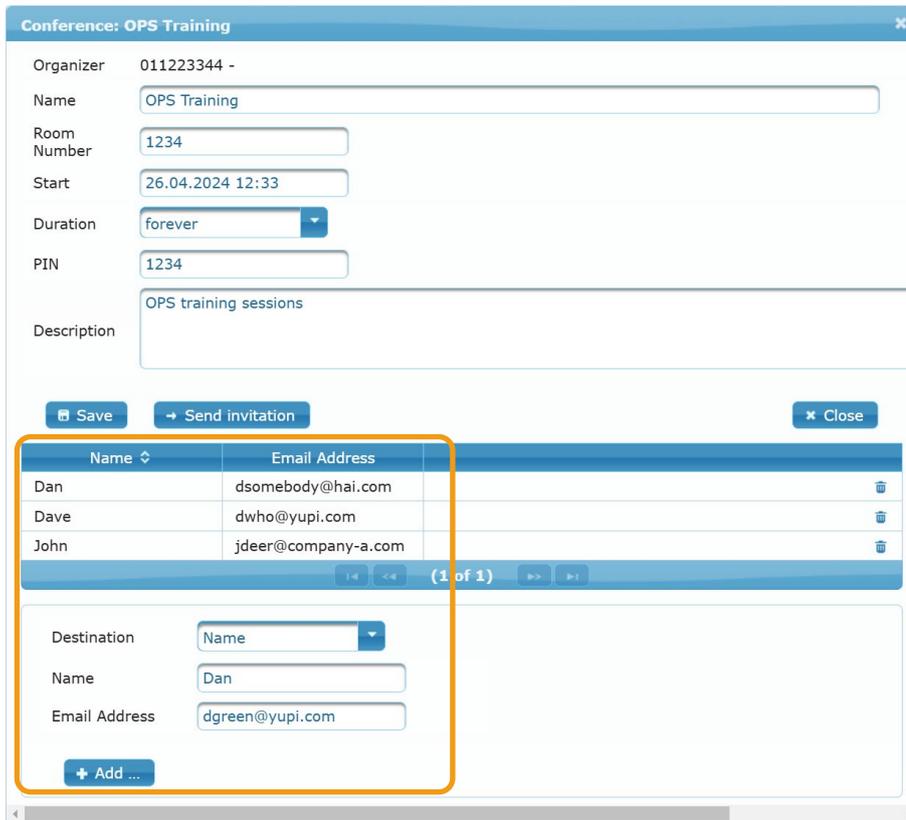
Parameter Name	Data Type	Allowed Values	Description
Organizer	Display		Shows the organizer and owner of this audio conference room.
Name	String	[empty Name, max. 256 char] Default: empty	Defines the name of the audio conference room.
Room Number	Number	[empty ≥ 1] Default: empty	Defines a unique room number. Note: If the room number already exists then a new unique one will be presented!
Start	Date/Time	29.04.2024 14:00 	Defines the start date/time from which the audio conference room is accessible.
Duration	Selection	[1 hour 2 hours 5 hours 10 hours 1 Day 1 Week	Defines how long the audio conference room is accessible from the start date/time.

Parameter Name	Data Type	Allowed Values	Description
		1 Month 1 Year forever] Default: 2 Hours	
PIN	PIN	Min 4 – max 16 digits	Defines the PIN need for accessing the audio conference room.
Description	String	[empty Description, max. 512 char] Default: empty	Any information about the audio conference room.

3.8.3.3 Manage Participants

Assigning participants to an audio conference room is optional. The advantage is that you can send invitations directly out of the audio conference room.

Best Practice: As organizer and owner of the audio conference room add yourself as participant and send the invitation to you. So, you obtain all needed access information and may deliver it over a any channel to the participants.



Manage participants:

Parameter Name	Data Type	Allowed Values	Description
Add a new participant			Configure the participant data and click button: + Add ...
Manage an existing participant.			This is not possible.

Parameter Name	Data Type	Allowed Values	Description
			Delete the participant and recreated it with the correct values.
Delete participant			Click icon at the desired participant

Configure a participant:

Parameter Name	Data Type	Allowed Values	Description
Destination	Selection	[Subscriber Phonebook Name] Default: Subscriber	Defines the participants of the audio conference who are informed when they are invited via the "Send invitation" button, see below [↗] . Values: <ul style="list-style-type: none"> ▶ Name: Defines the name of the participant. ▶ Subscriber: Deprecated vPBX options for defining participants. ▶ Phonebook: Deprecated vPBX options for defining participants.
Name	String	[empty Name, max. 32 char] Default: empty	Defines the name of the participant.
Email Address	Email Address	[empty Max. 64 char] Default: empty	Defines the email address where the invitation must be sent to.

3.8.3.4 Invite & Remind Participants

Send manually an invitation to the participants, click button: Send Invitation



Depending on the configuration of the telephone service provider at the system level of the anSwitch V6, up to 2 reminders are sent automatically in advance. Check with your telephone service provider for active automatic audio conference reminders and their values.

The participants will receive the information how to join the audio conference, e.g. via email:

```

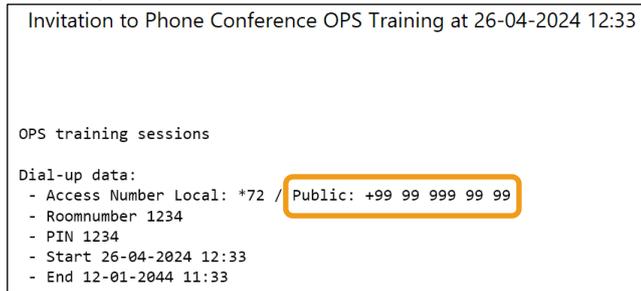
Invitation to Phone Conference OPS Training at 26-04-2024 12:33

OPS training sessions

Dial-up data:
- Access Number Local: *72 / Public: +99 99 999 99 99
- Roomnumber 1234
- PIN 1234
- Start 26-04-2024 12:33
- End 12-01-2044 11:33
    
```

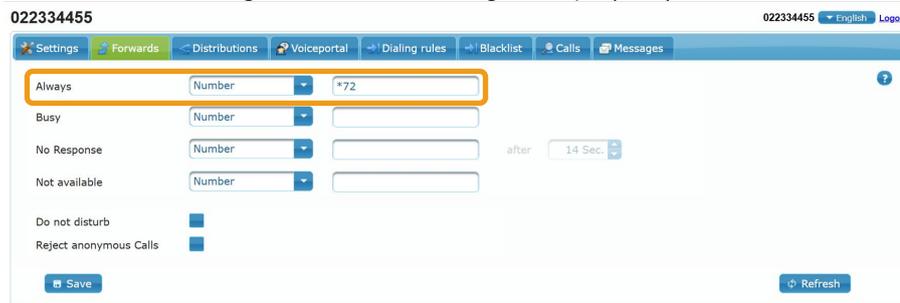
3.8.3.5 Manage the Public Access Number to the Audio Conference Portal

Usually, the telephone service provider has prepared a public number for accessing the Audio Conference Portal. This number is part of the invitation sent from the audio conference room:



If the telephone service provider has not prepared a public number or you want to have an own one, then proceed as follows:

4. Choose one of the public phone numbers in your customer account, e.g.: 022334455
5. Via the AdminCenter configure a call forwarding "Always" (CFU) to number: *72



Note: Your own public telephone number for the Audio Conference Portal is not automatically inserted in an invitation sent from the audio conference room.

3.8.4 Join an Audio Conference via the Audio Conference Portal

In order the participants can join the audio conference they need the following minimal information:

- ▶ Start date/time.
- ▶ Room number
- ▶ PIN
- ▶ Access phone number to the Audio Conference Portal:
 - ▶ Participants who belong to the same customer account can use the *#-procedure "*72".
 - ▶ Participants from anywhere can dial the offered public number.

As soon as a participant has dialed the access number and is connected to the Audio Conference Portal, they only need to follow the instructions to be connected to the audio conference.

3.9 Call Recording

3.9.1 Overview Call Recording

The Call Recording allows the user to start and stop a recording of an actual connection with his phone.

Call recording can also be automated for each connection to this telephone number. In this case, the manual start by the user is not necessary.

The call recording audio files are not stored on the anSwitch V6 but will be sent to a defined email address.

Warning	The Call Recording feature may violate laws or regulations of your country! Check the conditions before activating this feature.
----------------	--

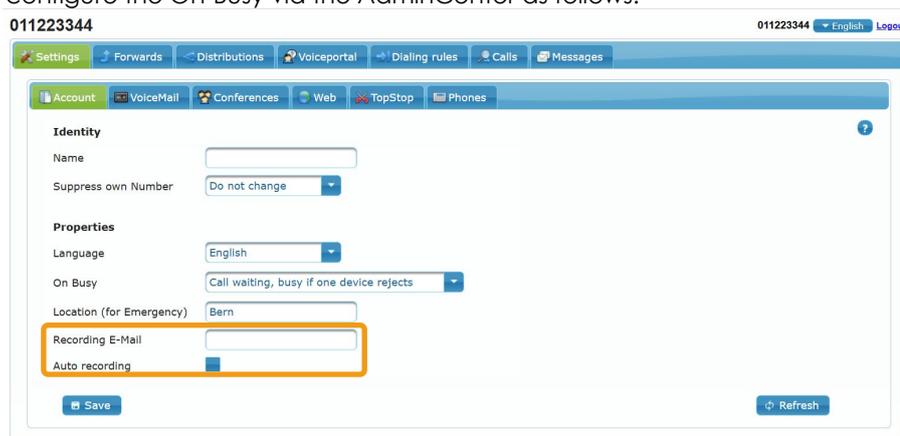
3.9.2 Manage Call Recording with *#-Procedures

Feature	Description	*#-Codes	Remark
Start call recording	Starts a call recording during the connection.	Dial: ##1	The call recording feature must be en.
End call recording	Stops a call recording during the connection.	Dial: ##2	The recording is automatically stopped when the connection ends.

3.9.3 Manage Call Recording via AdminCenter

Note: If a user has no access to the AdminCenter for managing the Call Recording feature then an Operator of the telephone service provider must activate the feature for the user's number.

The user can configure the On-Busy via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
Recording E-Mail	Email address	[empty Email address] Default: empty	Activates call recording and defines the email address where the audio file of the call recording must be sent to. Values: <ul style="list-style-type: none"> ▶ empty: The call recording is disabled. ▶ Email address: The email address where the audio file of the call recording is sent to.
Auto Recording	<input type="checkbox"/>	Activate Default: Not activated	If activated, every connection with this number is automatically recorded. Note: The recording email address must be defined!

3.10 Collection of *#-Procedure Codes

3.10.1 Call Forward *#-Procedures

3.10.1.1 Call Forward to Destinations with Phone Numbers

Feature	Description	*#-Codes	Remark
Call Forward Unconditional CFU	This call forwarding is executed in any case.	Activation: *21<NUMBER> Deactivation: #21 Status: *#21	AdminCenter: "Unconditional"
Call Forward if Busy CFB	This call forwarding is executed if the user is busy with another call.	Activation: *67<NUMBER> Deactivation: #67 Status: *#67	AdminCenter: "On Busy"
Call Forward if No Reply CFNR	This call forwarding is executed when within a specified period of time the call is not answered by the user. The user's phone is still ringing when the call is forwarded.	Activation: *61<NUMBER> Deactivation: #61 Status: *#61	AdminCenter: "No Reply"
Call Forward Fallback CFF	This call forward is executed when the user's phone isn't reachable due to a e.g. due to power down, IP problems, phone defect.	Activation: *22<NUMBER> Deactivation: #22 Status: *#22	AdminCenter: "Call Failed"
Call forking CFO	The call is forked additionally to the number.	Activation: *481<NUMBER> Deactivation: #481 Status: *#481	
Delete all active Call Forwards	Activates the deletion of all active Call Forwards CF.	Activation: *00 Status: *#00	

3.10.1.2 Call Forward to the VoiceMail Box of the User

Feature	Description	*#-Codes	Remark
Call Forward Unconditional CFU	This call forwarding is executed in any case.	Activation: *28 Deactivation: #21 Status: *#21	AdminCenter: "Unconditional"
Call Forward if Busy CFB	This call forwarding is executed if the user is busy with another call.	Activation: *691> Deactivation: #67 Status: *#67	AdminCenter: "On Busy"
Call Forward if No Reply CFNR	This call forwarding is executed when within a specified period of time the call is not answered by the user. The user's phone is still ringing when the call is forwarded.	Activation: *68 Deactivation: #61 Status: *#61	AdminCenter: "No Reply" The delay is fix 14sec.
Call Forward Fallback CFF	This call forward is executed when the user's phone isn't reachable due to a e.g. due to power down, IP problems, phone defect.	Activation: *692 Deactivation: #22 Status: *#22	AdminCenter: "Call Failed"

3.10.2 Call Reject *#-Procedures

Feature	Description	*#-Codes	Remark
Do not Disturb DND	All incoming calls are rejected.	Activation: *26 Deactivation: #26 Status: *#26	AdminCenter: "Do Not Disturb"
Anonymous Call Reject ACR	Anonymous incoming calls are rejected.	Activation: *99 Deactivation: #99 Status: *#99	AdminCenter: "Reject Anonymous Calls"

3.10.3 Call Pick-Up *#-Procedure

Feature	Description	*#-Codes	Remark
Call Pick-Up	The Call Pick-up allows to answer an incoming call on another ringing phone on their own phone.	Dial: *76<NUMBER>	The Call Pick-Up is limited to phone numbers that belong to the same customer account

3.10.4 Connection Queries *#-Procedures

Feature	Description	*#-Codes	Remark
Query own number	Query the number of this phone.	Dial: *14	
Query last dialed number	Query the last dialed number.	Dial: *15	
Call last dialed number	Call back the last dialed number.	Dial: *11	
Query last incoming number	Query the number of the last incoming call.	Dial: *16	
Call last incoming number	Call back the number of the last incoming call.	Dial: *12	

3.10.5 Call Recording *#-Procedures

Feature	Description	*#-Codes	Remark
Start call recording	Starts a call recording during the connection.	Dial: ##1	The call recording feature must be en.
End call recording	Stops a call recording during the connection.	Dial: ##2	The recording is automatically stopped when the connection ends.

3.10.6 Outgoing Anonymous Call *#-Procedures

The *#-procedures for executing outgoing anonymous calls must be made available by the telephone service provider.

Feature	Description	*#-Codes	Remark
Anonymous for this call	Suppress the own number for this call.	Dial: *31<NUMBER>	This overrides all other show identity instructions

Feature	Description	*#-Codes	Remark
			from other sources.
Force to show the identity for this call	Force to show the identity for this call.	Dial: #31<NUMBER>	This overrides all other anonymous call instructions from other sources.
Force anonymous for all calls	Once activated, all outgoing calls are anonymous.	Dial: *32<NUMBER>	This overrides all other show identity instructions from other sources.
Force to show the identity for all calls	Once activated, all outgoing calls show the identity.	Dial: #32<NUMBER>	This overrides all anonymous call instructions from other sources.

3.10.7 Ad-Hoc Audio Conference *#-Procedure

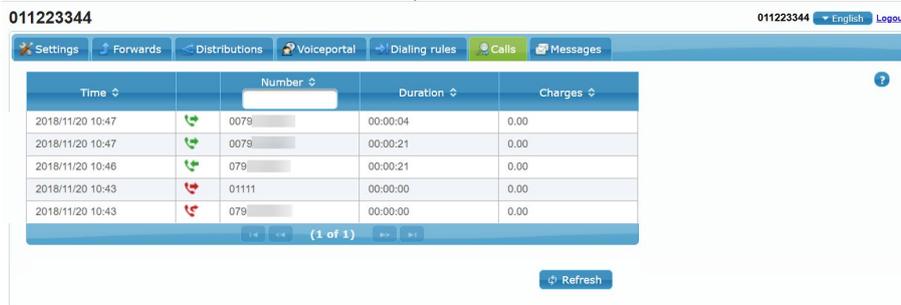
Feature	Description	*#-Codes	Remark
Ad-Hoc Audio Conference	The user initiates an audio conference with the listed numbers of the participants. A called participant automatically joins the conference when they accept the incoming call.	Dial: *71*<NUMBER_1>*<NUMBER_2>*<NUMBER_3>* ...<NUMBER_8>	Max. 8 participant numbers are allowed.

4 User Service Features

4.1 Call List

4.1.1 Display the User's Call List in the AdminCenter

The user can check all in- and outbound calls of his phone number.



Time	Number	Duration	Charges
2018/11/20 10:47	0079	00:00:04	0.00
2018/11/20 10:47	0079	00:00:21	0.00
2018/11/20 10:46	079	00:00:21	0.00
2018/11/20 10:43	01111	00:00:00	0.00
2018/11/20 10:43	079	00:00:00	0.00

It is possible to sort, filter and search for calls.

4.2 TopStop

4.2.1 Overview TopStop

TopStop allows users to monitor their maximum monthly call charges. Once the maximum charge value has been reached, no further chargeable calls are possible!

The TopStop has following characteristics when activated:

- ▶ Definable monthly maximum charge blocking level.
- ▶ Definable alarming level when the charges have reached a certain threshold.
- ▶ Definable e-mail address to which information must be sent when the alarm and blocking thresholds are reached.
- ▶ When the blocking level is reached then no further chargeable calls are possible.
- ▶ When the blocking level is reached during a connection then the connection is interrupted.

Note

TopStop can also be seen as a security feature to prevent misuse. TopStop limits the damage if the SIP access data of the customer account is compromised. This can happen, for example, by hacking the user's SIP devices or loss or misuse of the SIP access data.

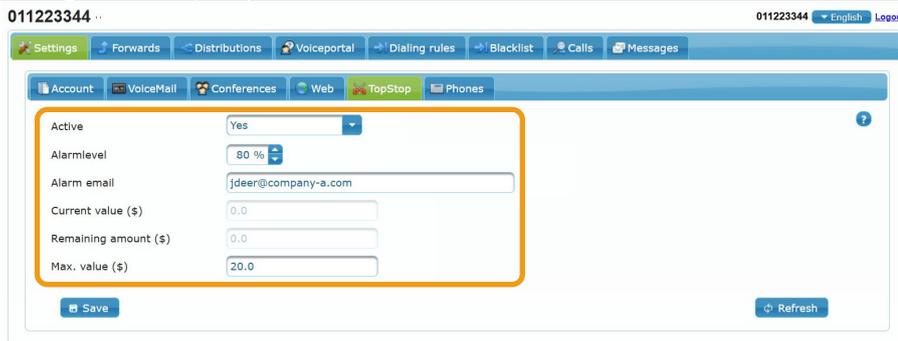
Note

It is possible that the telephone service provider has activated a hidden TopStop at customer account level. If this is the case, the blocking level with the lowest maximum value will block further chargeable connections.

4.2.2 Manage TopStop via AdminCenter

Note: If a user has no access to the AdminCenter for managing the TopStop feature then an Operator of the telephone service provider must activate the feature for the user's number.

The user can configure the TopStop via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
Active	<input type="checkbox"/>	Activate Default: Not activated	If activated, the configuration of the TopStop is enabled.
Alarm level	Selection	[0% 10% ... 90% 100%] Default: 90%	Defines in % of the max. value when an alarming email is to be sent to the email address. Note: An email is sent in any case when the remaining amount is 0!
Alarm email	Email Address	[empty Max. 128 char] Default: empty	Defines the email address where messages are sent about a reached alarm or blocking level.
Current value	Charge	Display only	Display the currently used charge.
Remaining amount	Charge	Display only	Display the remaining used charge. ➔ If 0, then the number is blocked for any other outgoing call, except emergency calls.
Max. value	Charge	[empty value ≥0.0] Default: empty	Defines the blocking limit per month for the Number. It may not be exceeded by the charging sum of all connections of this number. If set to "empty" then no blocking limit is supervised.

4.3 Blacklist

4.3.1 Overview Blacklist

The user can blacklist any telephone number. Incoming calls from these numbers are automatically blocked and not signaled to the user's phones.

4.3.2 Manage Blacklist via AdminCenter

Note: If a user has no access to the AdminCenter for managing the Blacklist feature then an Operator of the telephone service provider must activate the feature for the user's number.

The user can configure the blacklisted numbers via the AdminCenter as follows:



It is possible to search for blacklisted numbers.

For an incoming call to be blocked, the caller's number and the blacklist number must match exactly.

Parameter Name	Data Type	Allowed Values	Description
Add Number	Number	+ Add ... 055667788	Add any dialable telephone number and click button: + Add ... Add just one single number at a time.
Delete a Number			Click icon at the desired number

4.4 Dialing Rules

4.4.1 Overview Dialing Rules

The user or an Operator of the telephone service provider can apply prepared Dialing Rules to his number. Outgoing or incoming calls are treated according to the selected dialing rules.

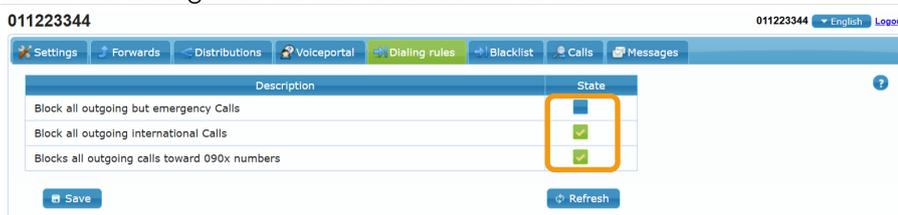
Dialing rules are prepared by an Operator of the telephone service provider. Check with the telephone service provider for their functionality.

Depending on the system settings, the dialing rules cannot be activated or deactivated by the user. In this case, it is only a status display for the user.

4.4.2 Manage Dialing Rules via AdminCenter

Note: If a user has no access to the AdminCenter for managing the Dialing Rules feature then an Operator of the telephone service provider must activate the feature for the user's number.

The user can select the dialing rules via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
State	<input type="checkbox"/>	Activate Default: Not activated	If activated, defines that the dialing rule is applied for outgoing or incoming calls.

4.5 Language, Location Account Properties

4.5.1 Overview of Account Properties

Several number-specific properties can be configured to adapt the telephone service and functions to the user's needs.

Property: Notification language

- ▶ Defines the language in which the standard notifications are played that a caller hears when, for example:
 - ▶ The caller has been forwarded to the user's VoiceMail Box.
 - ▶ The user has activated "Do not Disturb DnD".

Property: Location for emergency calls

- ▶ The location is used for prioritized call routing of emergency calls to the associated emergency call center of this location.
- ▶ When no location is configured then the location of the customer account is used.

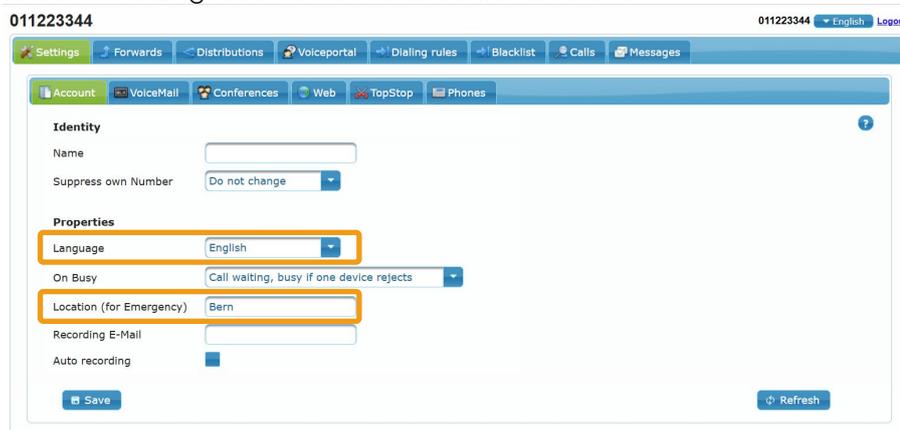
Use this location configuration of the number if, for example:

The head office is located in Zurich and therefore the location in the customer account is configured as "Zurich". However, if the user's office is located in Bern, it is recommended to configure "Bern" as the location.

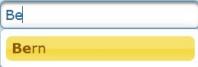
4.5.2 Manage Account Properties via AdminCenter

Note: If a user has no access to the AdminCenter for managing the account properties then an Operator of the telephone service provider must configure these properties for the user's number.

The user can select the dialing rules via the AdminCenter as follows:



Parameter Name	Data Type	Allowed Values	Description
Language	Selection	[English German French Indonesian Italian Malaysian Vietnamese] Default: English	Defines the language in which the standard notifications are played that a caller hears when, for example: <ul style="list-style-type: none"> ▶ The caller has been forwarded to the user's VoiceMail Box. ▶ The user has activated "Do not Disturb DnD".

Parameter Name	Data Type	Allowed Values	Description
Location (for Emergency)	Selection	[empty Location] Default: empty	<p>Defines the emergency call center that is called when the user dials an emergency number from his phones.</p> <p>For selecting a location, start to type the location name. The selection will present matching locations:</p>  <p>Values:</p> <ul style="list-style-type: none"> ▶ empty: The emergency center which is configured on the number's customer accounts is called. ▶ Location: The emergency center which is associated with the location is called. <p>Note:</p> <ul style="list-style-type: none"> ▶ The assignment between the location and the appropriate emergency call center is defined at the system level of Switch V6. ▶ If the customer account has no location configured, then the system default emergency location is called.

5 Telephone Provisioning

5.1 Overview of Phone Provisioning

The user has the following options for configuring a phone or any SIP device so that it is associated with the user's phone number and allows incoming and outgoing connections:

- ▶ Auto-provisioning via AdminCenter
- ▶ Configure the provisioning URL provided by the AdminCenter in the phone.
- ▶ Fully manually

Auto-Provisioning via AdminCenter

This is the most convenient way to set up a phone via the AdminCenter. The effort for the user is reduced to a minimum.

Via AdminCenter, the user can also assign certain telephony features to the configurable keys on the phone.

To configure the phone, either a QR code needs to be scanned or the device simply needs to be powered on.

→ Use this variant for provisioning the mobile application "an IP-Phone" and supported manufacturer phones available via AdminCenter.

For details see:

- ▶ "Auto-Provisioning the Mobile Application "an IP-Phone" " [↗](#).
- ▶ "Auto-Provisioning a Phone Type"Auto-Provisioning the Mobile Application "an IP-Phone" [↗](#).

For auto-provisioning for phones to work, a specific service (manufacturer redirection service) must be set up at system level for the AdminCenter. Check with the Telephone Service Provider for which manufacturers auto-provisioning is available. Possible manufacturers are:

- ▶ SNOM
- ▶ Yealink
- ▶ Grandstream
- ▶ Panasonic
- ▶ Patton

Configure the Provisioning URL provided by the AdminCenter in the Phone

This provisioning variant is available for all phone types supported by the AdminCenter. The AdminCenter provides the user with the provisioning URL that must be configured on the phone manually.

Via AdminCenter, the user can also assign certain telephony features to the configurable keys on the phone.

For configuring the phone, the user must access its configuration interface (usually web based) according to the manufacturer's manual. The AdminCenter delivers exact instructions on how and where to configure the provisioning URL in the phone.

→ Use this variant for provisioning any supported phones available via AdminCenter.

For details see:

- ▶ "Manual Provisioning the URL for a Phone Type" [↗](#)**Error! Reference source not found.**

Fully manually

Here the user configures the phone or SIP device manually according to the manufacturer's manual. From the Telephone Service Provider, the user needs the specific configuration data for assigning the device to the number.

→ Use this variant for provisioning special SIP devices, e.g. ATA for a Fax connection, or phones that are not available via AdminCenter.

For details see:

- ▶ "Phone & SIP Device Provisioning Manually" [↗](#).

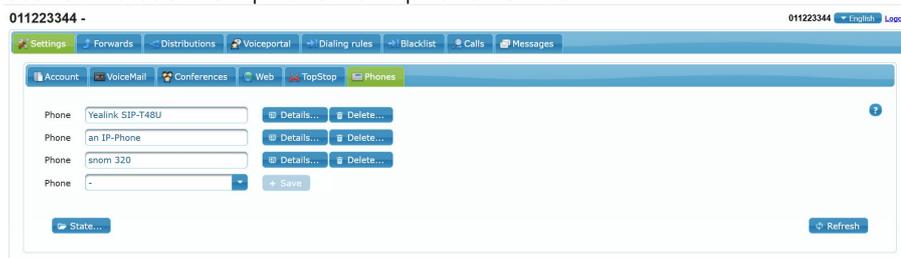
5.2 Overview Phone Provisioning via AdminCenter

The user with AdminCenter access can provide a telephone via the AdminCenter.

The advantages are:

- ▶ A wide range of different phone types selectable.
- ▶ A configuration file produced by the AdminCenter guarantees interoperability.
- ▶ Secure transfer of the SIP credentials and the application of one-time keys prevent fraudulent misuse of the configuration data.
- ▶ Auto-provisioning via several manufacturer's redirection service possible.
- ▶ The phone keys are preconfigured, e.g. VoiceMail Box access.
- ▶ Configurable phone keys can be assigned various selectable functions.

By default, a user can associate 4 phones to its phone number:

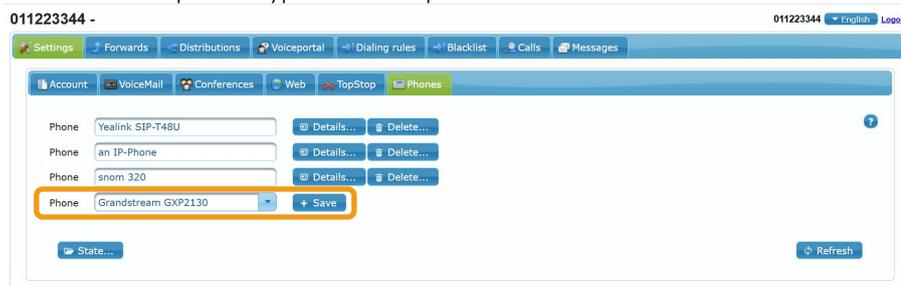


Note Depending on the Telephone Service Provider configuration on system level are:

- ▶ Which selectable phone types are available.
- ▶ For which phone types, the manufacturer's direction service is available for auto-provisioning.

5.3 Select the Phone Type in the First Step

The user selects the desired phone type from the provided list:

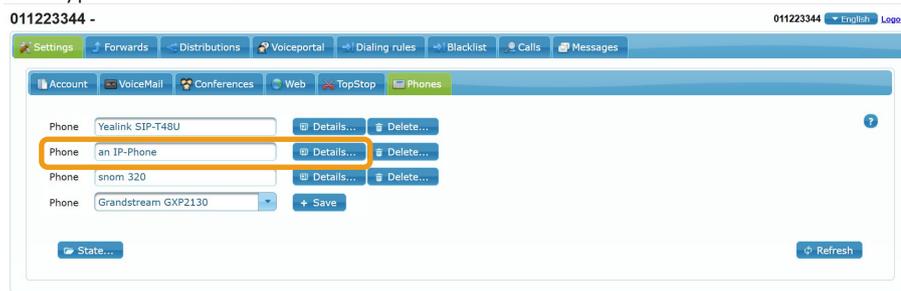


Parameter Name	Data Type	Allowed Values	Description
Phone	Selection	Grandstream GXP2130 <input type="button" value="+ Save"/>	Select the desired phone type and click button: + Save ...
Delete a phone			For details see "Delete a Phone" ↗

Note If the user's phone is not listed in the selection, then a basic configuration may still be possible. Select a phone type from this manufacturer that comes closest in terms of "phone family" and number of configurable keys. Execute the provisioning. In many cases, at least a basic configuration is successful.

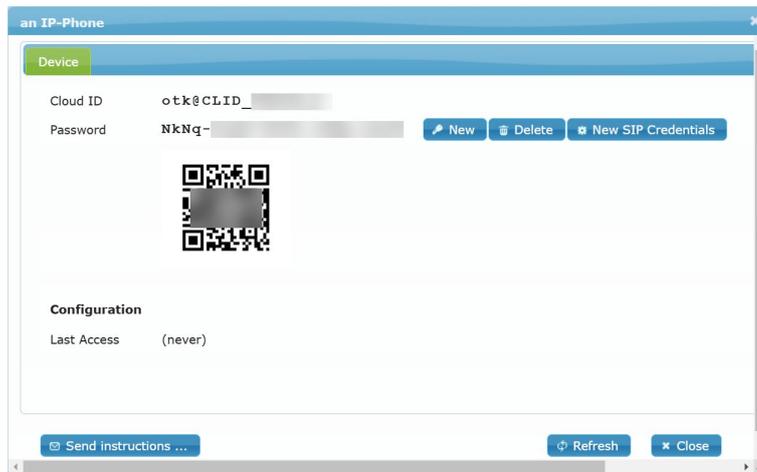
5.4 Auto-Provisioning the Mobile Application "an IP-Phone"

When the phone type is selected:



- > At the phone, click button: Details ...
- > The dialog "an IP-Phone" opens

The dialog "an IP-Phone" shows the needed QR-code:



Make the mobile app "an IP-Phone" ready for telephony:

1. Install the mobile app "an IP-Phone":
 - ▶ iPhone: [App Store](#)
 - ▶ Android: [Google play](#)
2. Open the "an IP-Phone" app on the mobile phone and scan the QR-code.

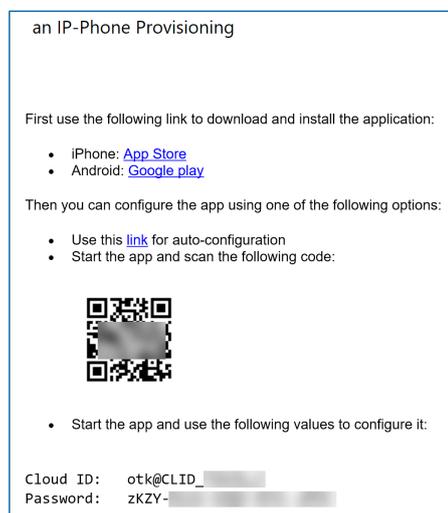


Send the installation instructions by email to the user if needed:

- > Click button: Send instructions ...
- ▶ Fill in the email address
- > Click button: Send mail



The email receiver will receive an email with all the necessary information for installing the mobile app and the QR-code for registering the app at the number:



5.5 Auto-Provisioning a Phone Type

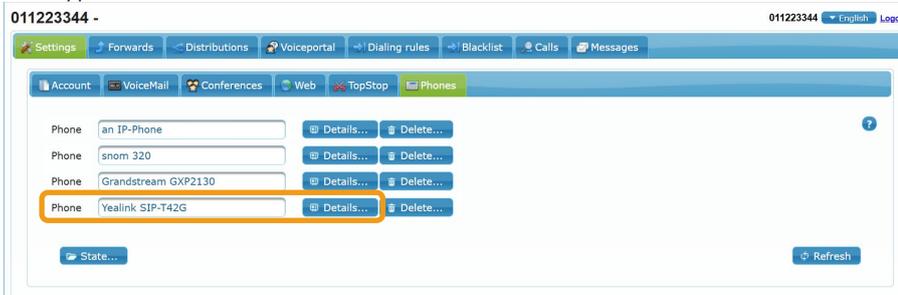
For the following manufacturers auto-provisioning is available:

- ▶ SNOM
- ▶ Yealink
- ▶ Grandstream
- ▶ Panasonic
- ▶ Patton

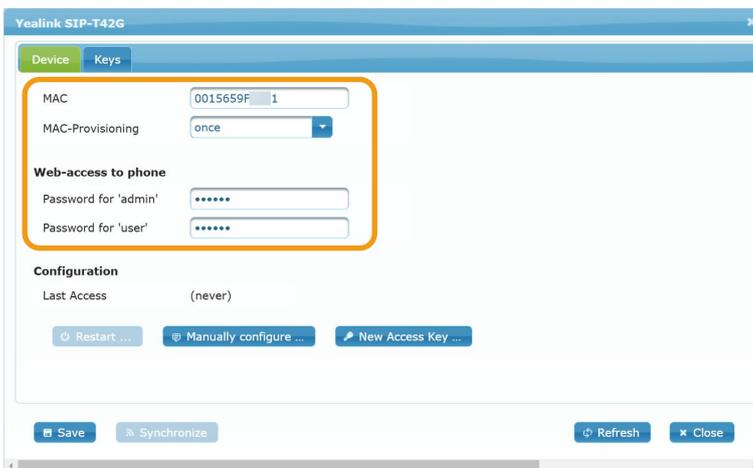
Note Check with your Telephone Service Provider for which manufacturer auto-provisioning is supported by the AdminCenter.

5.5.1 Activate AdminCenter Auto-Provisioning

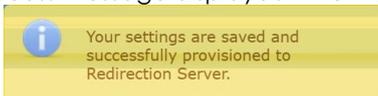
When the phone type is selected:



- > At the phone, click button: Details ...
 - > The dialog "Phone Type" opens.
 - > Click Tab: Device
 - > Configure in tab: Device
 - ▶ MAC: Configure the MAC address of the phone.
 - ▶ MAC-Provisioning: Select: **once**
 - ▶ Password for 'admin':
 - ▶ Password for 'user': Configure passwords if any administrator or user shall be enabled to access the phone's own configuration interface.



There is a success message displayed when the manufacturer's redirection service was configured correctly:



Parameter Name	Data Type	Allowed Values	Description
MAC	Hexadecimal Number	12-digit	Configure the MAC address of the phone . This is a configuration that is needed for auto-provisioning!

Parameter Name	Data Type	Allowed Values	Description
			<p>Check for the MAC address on the back of the phone, for example:</p> 
MAC-Provisioning	Selection	<p>[no once done]</p> <p>Default: no</p>	<p>Defines if the auto-configuration is applied.</p> <p>Values:</p> <ul style="list-style-type: none"> ▶ no: No auto-provisioning is applied. ▶ once: Defines that auto-provisioning is applied. The device is only allowed to request the download URL one time. ▶ done: Indicates that the device successfully requested the download URL.
Password for 'admin' Password for 'user'	String	<p>[empty Password, max. 128 char]</p> <p>Default: empty</p>	<p>Depending on the phone type an administrator and/or user password can be configured. The password is defined for the device's own configuration interface either web-based interface or command line.</p> <p>Values:</p> <ul style="list-style-type: none"> ▶ empty: If no password is defined by the user, then the AdminCenter replaces the factory default password by a 33digit random pattern. → The password can anytime be reconfigured via the AdminCenter. ▶ Password: The minimal password length is 6 and it needs to contain at least one digit, one lower- and one uppercase character but no special characters.

5.5.2 Execute the Auto-Provisioning Process

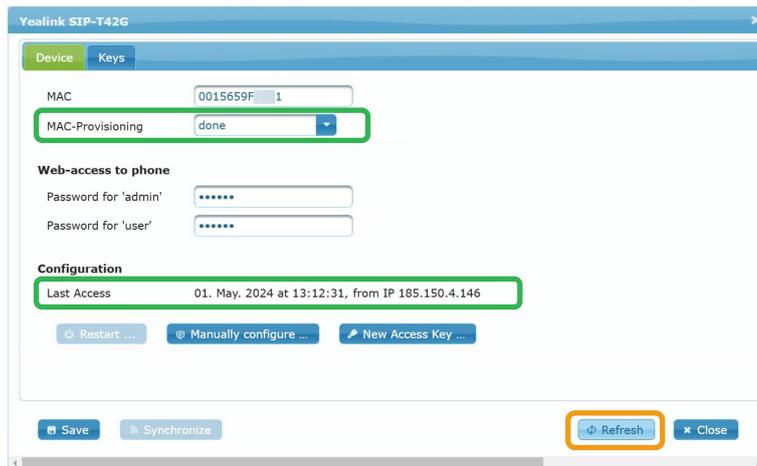
Make the phone ready for configuration:

1. Reset the phone to its **factory settings** (check the manual of the manufacturer).
2. Connect the phone to the designated IP network.
3. **Power up** the phone.

Check if the phone has downloaded its configuration after it has completely restarted:

1. Eventually click button: Refresh
2. Check if at "MAC-Provisioning" is displayed: "done".
If yes, the phone got its contact information from the manufacturer's redirection service and requested the configuration URL from the AdminCenter.

3. Check if at "Last Access" is displayed: A date/time and IP address.
If yes, the phone has downloaded its configuration file.



Check if the phone has registered successfully at its phone number:

1. Check the phone display. In most cases the phone number is displayed somewhere.
2. On the phone dial: *14 → Check that the correct number is being said..
3. Make incoming and outgoing test calls.

5.5.3 Measures when the Auto-Provisioning Fails

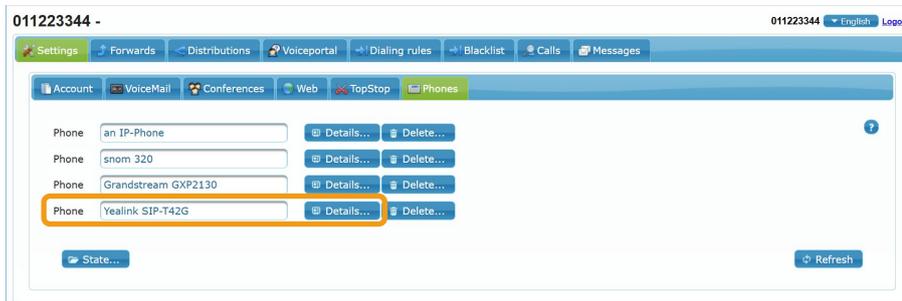
Check and act in the following order:

- a. "done" is not displayed in the AdminCenter after the phone has started up:
 - Fix a problem in interaction with the manufacturer's redirection service.
 - ▶ Check the configured MAC address.
 - ▶ Was the success message when configuring the redirection service displayed?
 - ▶ Was the phone started with factory settings?
 - ▶ Is the phone connected to the correct local IP network?
 - ▶ Does the phone have access to the Internet?
 - If you are unsuccessful, contact the person responsible for IT.
- b. "date/time" is not displayed in the AdminCenter after the phone has started up:
 - Fix a problem in interaction with the download of the configuration file from the AdminCenter.
 - ▶ Was "done" displayed?
 - ▶ Has the phone contact to the AdminCenter via the IP network?
 - If you are unsuccessful, contact the person responsible for IT.
 - If you are unsuccessful, contact the support of the Telephone Service Provider.
- c. The phone has started up, but the phone doesn't display its number and incoming and outgoing calls are not possible:
 - ▶ Was "date/time" displayed?
If yes, repeat the whole auto-provisioning process from scratch, a) delete the phone type in the AdminCenter, b) Factory reset the phone etc.
 - If you are unsuccessful, contact the support of the Telephone Service Provider.

5.6 Manual Provisioning the URL for a Phone Type

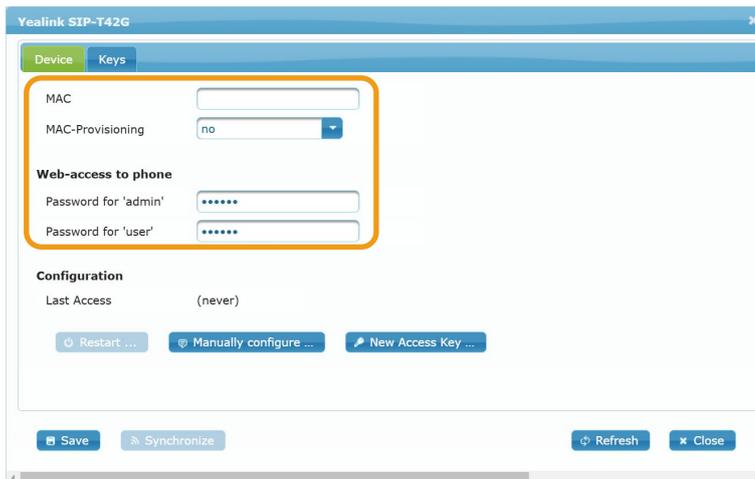
5.6.1 Activate AdminCenter Provisioning URL

When the phone type is selected:



- > At the phone, click button: Details ...
 - > The dialog "Phone Type" opens.
 - > Click Tab: Device
 - > Configure in tab: Device
 - ▶ MAC: (empty)
 - ▶ MAC-Provisioning: Select: **no**
 - ▶ Password for 'admin':
 - ▶ Password for 'user': Configure passwords if any administrator or user shall be enabled to access the phone's own configuration interface.

> Click button: Save



Parameter Name	Data Type	Allowed Values	Description
MAC	Hexadecimal Number	(empty)	No MAC configuration needed.
MAC-Provisioning	Selection	[no once done] Default: no	Defines if the auto-configuration is applied. Values: ▶ no: No auto-provisioning is applied. ▶ once: ▶ done: Only for auto-provisioning used.
Password for 'admin' Password for 'user'	String	[empty Password, max. 128 char] Default: empty	Depending on the phone type an administrator and/or user password can be configured. The password is defined for the device's own

Parameter Name	Data Type	Allowed Values	Description
			configuration interface either web-based interface or command line. Values: <ul style="list-style-type: none"> ▶ empty: <ul style="list-style-type: none"> If no password is defined by the user, then the AdminCenter replaces the factory default password by a 33digit random pattern. → The password can be reconfigured any-time via the AdminCenter. ▶ Password: <ul style="list-style-type: none"> The minimal password length is 6 and it needs to contain at least one digit, one lower- and one uppercase character but no special characters.

5.6.2 Execute the Provisioning URL Process

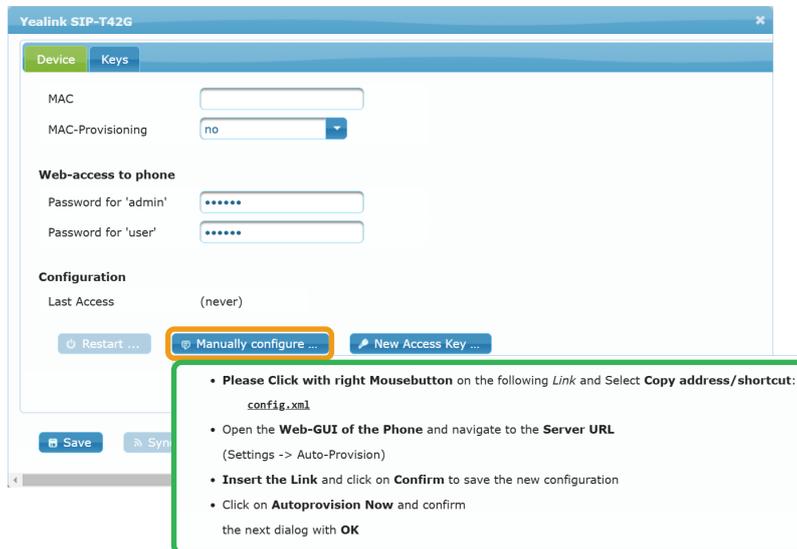
Make the phone ready for configuration. Follow the instructions of the manual of the manufacturer:

1. Login to the phone configuration interface.

Note: Eventually reset the phone to its factory settings.

Get the provision URL and phone configurations instructions from the AdminCenter:

1. Click button: Manually configure ...
2. Follow exactly the given instructions (they may vary from phone type to phone type):



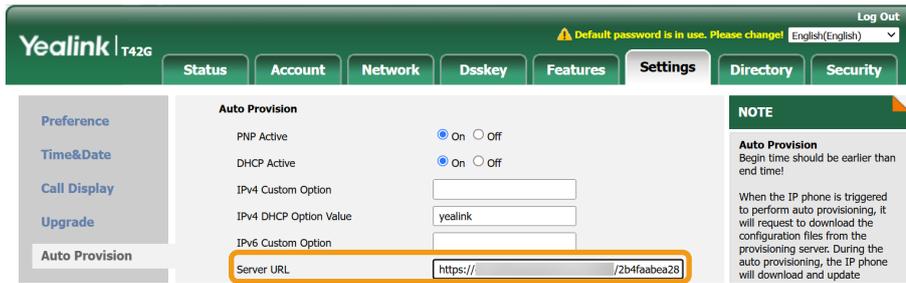
Note: The instructions are given until the device reboots or starts downloading the configuration.

Make the phone ready for configuration. Follow the instructions of the manual of the manufacturer:

1. Login to the phone configuration interface.

Note: Eventually reset the phone to its factory settings.

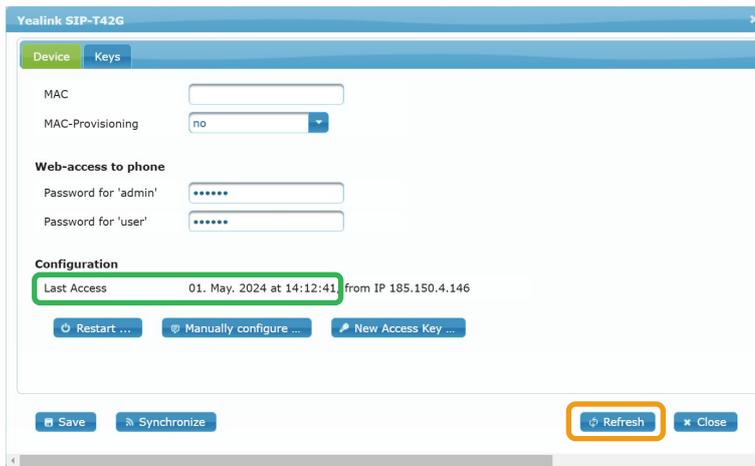
2. Configure the phone according to the instructions, for example:



Check in the AdminCenter if the phone has downloaded its configuration after it has completely restarted:

1. Eventually click button: Refresh
2. Check if at "Last Access" is displayed: A date/time and IP address.

If yes, the phone has downloaded its configuration file.



Check if the phone has registered successfully at its phone number:

1. Check the phone display. In most cases the phone number is displayed somewhere.
2. On the phone dial: *14 → Check that the correct number is being said.
3. Make incoming and outgoing test calls.

5.6.3 Measures when the URL Provisioning Fails

Check and act in the following order:

- a. "date/time" is not displayed in the AdminCenter after the phone has started up:
 - Fix a problem in interaction with the download of the configuration file from the AdminCenter.
 - ▶ Has the phone contact to the AdminCenter via the IP network?
 - If you are not successful, contact the person responsible for IT.
 - If you are not successful, contact the support of the Telephone Service Provider.
- b. The phone has started up, but the phone doesn't display its number or incoming and outgoing calls are not possible:
 - ▶ Was "date/time" displayed?
 - If yes, repeat the whole URL provisioning process from scratch, a) delete the phone type in the AdminCenter, b) Factory reset the phone etc.
 - If you are not successful, contact the support of the Telephone Service Provider.

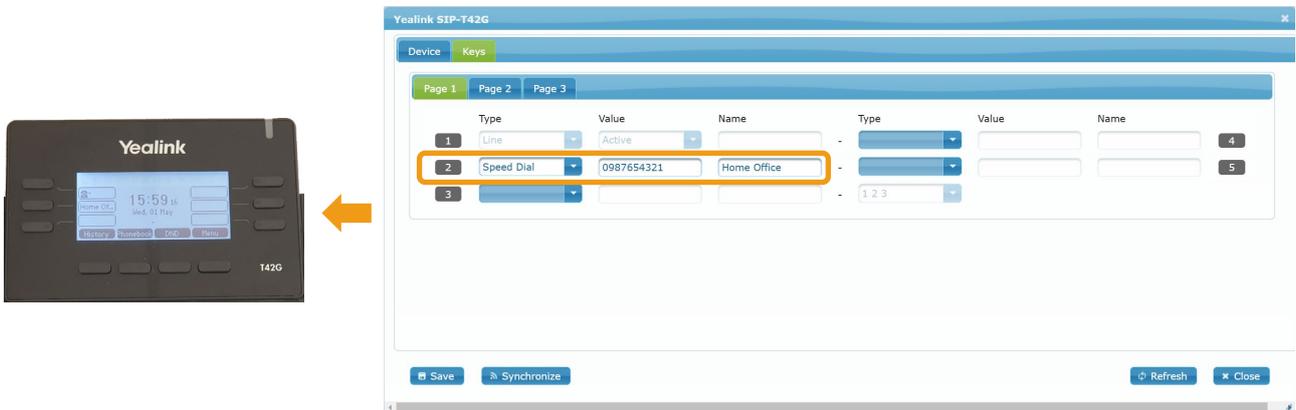
5.7 Telephone Key Configuration

5.7.1 Manage Configurable Phone Keys

The AdminCenter supports configuring the programmable keys of a phone and its attached keypad modules:

- > Manage configurable keys in tab: Device and/ Module
 - > Configure the single keys in tab: Keys and Module
- The possibilities vary between the different phone types. In most cases they offer:
- ▶ Type: Select the type of function.
 - ▶ Value: Depending on the assigned function this may be a phone number or a selection of different options.
 - ▶ Name: Any description of the function of the key.
-
- > Click button: Save
 - > Click button: Synchronize
-

The view for configuring the buttons is based on the phone layout, for example:



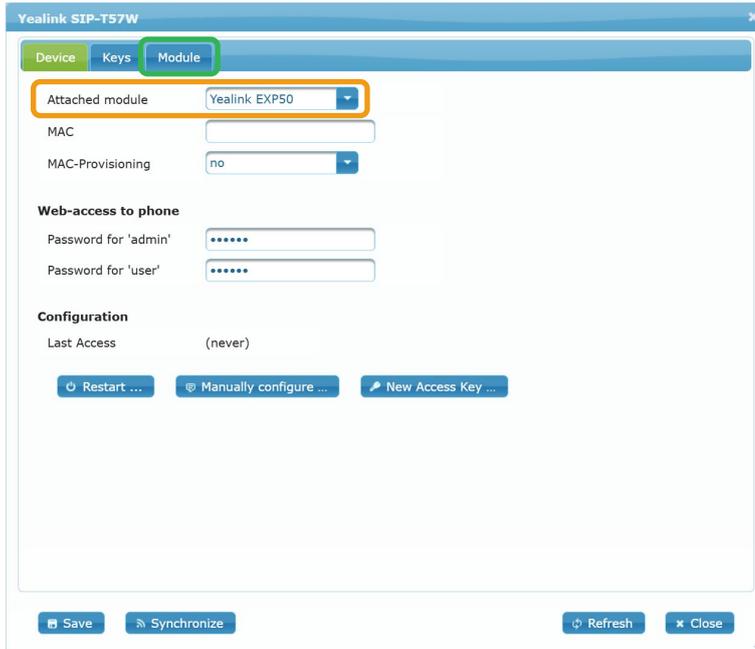
Parameter Name	Data Type	Allowed Values	Description
Type	Selection	[- (none) List of available functions] Default: - (none)	Defines the attached keypad extension. Values: ▶ - (none): No function assigned to the key. ▶ Function: Defines the assigned function to the key.
Value			Depending on the assigned function this may be a phone number or a selection of different options.
Name	String	[empty Name, max. 32 char] Default: empty	Defines an optional label description of the key. Values: ▶ empty: No label ▶ Name: Defines the label name of the key.

5.7.2 Manage Keypad Module

If a phone type offers keypad modules and the AdminCenter supports their configurations, then they can be assigned to the phone:

- > Modify values in the tab: Device
- ▶ Attached module: Select the desired module type.

- > Click button: Save
- > Click button: Synchronize



The new keypad module is added to the phone and can be configured via the tab: Module.

Parameter Name	Data Type	Allowed Values	Description
Attached module	Selection	[- (none) List of available keypad module types] Default: - (none)	Defines the attached keypad extension. Values: <ul style="list-style-type: none"> ▶ - (none): No keypad extension assigned. ▶ Keypad module type: Defines the keypad module scheme to support.

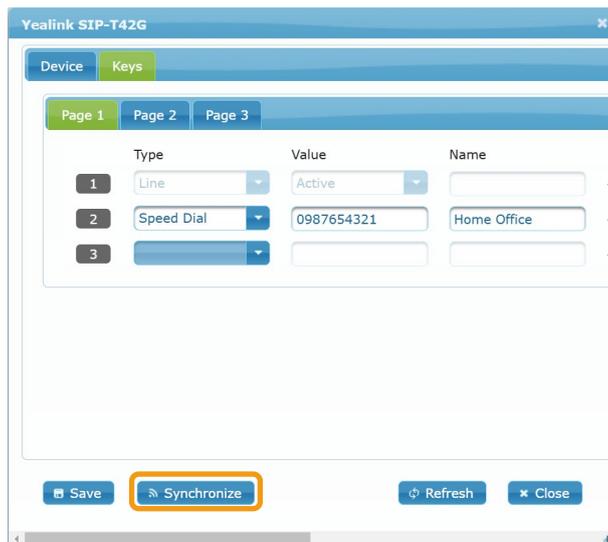
5.8 Synchronize the Phone Configurations

Whenever a phone configuration changed in the AdminCenter, e.g.:

- ▶ Admin or user password changed.
- ▶ Key configuration.
- ▶ Add a key extension module.

then, the changes must be synchronized to the phone.

- > Modify values in the tabs: Device or Keys
- > Click button: Save
- > Click button: Synchronize



The AdminCenter sends a message to the phone asking the phone to download the configuration file from the AdminCenter again. The different phone types can behave differently, some load quietly in the background and reconfigure themselves, others can reboot several times.

If a phone has contacted the AdminCenter and downloaded the configuration can be checked at the parameter "Last Access", it should show an actual date/time of the last download.

Configuration

Last Access	01. May. 2024 at 14:56:27	from IP 185.150.4.146
-------------	---------------------------	-----------------------

5.9 Delete a Phone

5.9.1 Delete the Mobile Application "an IP-Phone"

As it is not possible for the AdminCenter to manipulate the "an IP-Phone" app on the smartphone and its Push server directly, various measures must be taken on the AdminCenter to prevent further access from these entities.

The user should force the "an IP-Phone" app on the smartphone to be "quiet". This can be obtained either:

- a. Uninstall the "an IP-Phone" app on the smartphone.
- or
- b. Set the "an IP-Phone" app on the smartphone to factory settings:
 - > Menu: Settings
 - > Sub-Menu: Reset Application
 - > Confirm the dialog "Reset an IP-Phone? With OK"

Proceed as follows in the AdminCenter to protect the phone number and the user from further interactions with the "an IP-Phone" app:

1. Prevent the access from the "an IP-Phone" app to access the AdminCenter user account.
 - Change the user password:

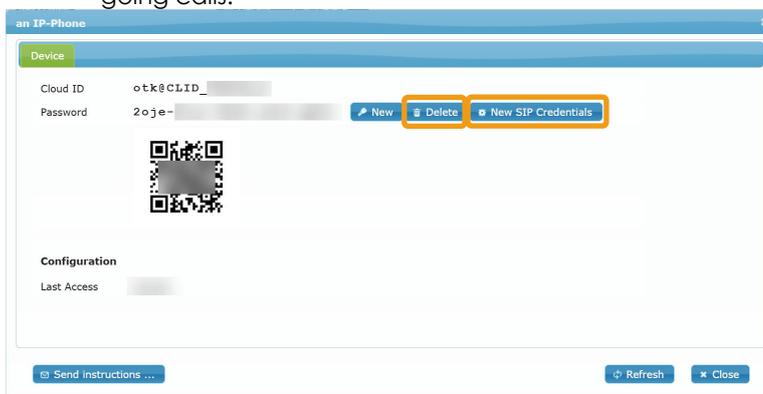


2. Delete the "an IP-Phone" app ID:

→ Click button: Delete .

→ It is recommended to generate new "SIP Credentials" too, click button: New SIP Credentials .

Note: Create new SIP credentials means that other phones associated with this number must be synchronized with the new SIP credentials else they are not able to do incoming or outgoing calls.

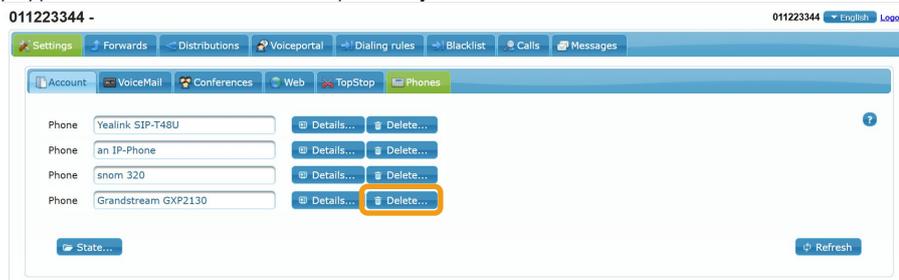


3. Delete the "an IP-Phone" phone type, click "Delete ..." and confirm.



5.9.2 Delete any SIP Phone Type

To delete any type of a manufacturer SIP phone just delete it:



Parameter Name	Data Type	Allowed Values	Description
Phone		Grandstream GXP2130	At the to delete phone click button: Delete ...

Note

The configuration on the SIP phone itself is not deleted!
 If the phone is not set to its factory settings, then it will continue to try to register at the customer account.
 → Check the manufacturers manual how to execute a factory reset of the phone.

5.10 Phone & SIP Device Provisioning Manually

Any type of SIP device can be connected (registered) to a user's phone number (customer account).

The user must request the following information from the Telephone Service Provider:

- ▶ Phone number, which is used for registering.
- ▶ anSwitch V6 IP address or domain URI for registering and call handling.
- ▶ SIP username.
- ▶ SIP password.

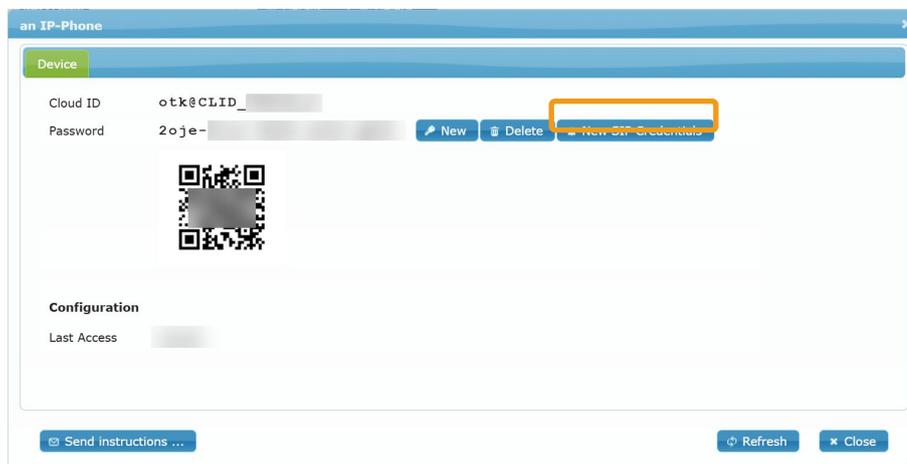
With this information the user can configure the phone or SIP device according to its manufacturer's manual.

5.11 Handle a Phone that was Hacked or Frauded

5.11.1 1st Step: Create new SIP Credentials in the Customer Account

If it has been determined that a customer account has been misused, **the following steps are necessary and must be carried out:**

1. An Operator of the telephone service provider must generate new SIP credentials!
 If no Operator is at hand and the user has access the AdminCenter do the following as first measure:
 - a. If not already available create an additional phone for this number with phone type: an IP-Phone .
 - b. Create new SIP credential for the customer account:



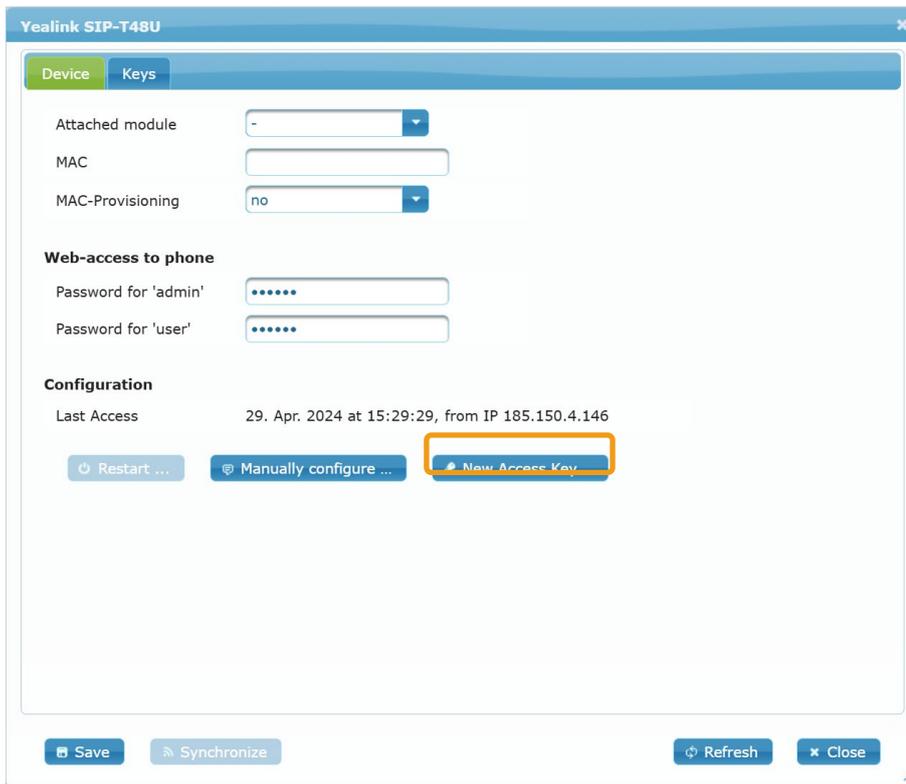
5.11.2 2nd Step: Reconfigure all Phones and SIP Devices of the Customer Account

For **all phones and SIP devices of this customer account** (not only of the number) their configuration must be adjusted to the new SIP credentials.

→ Re provision the phone according to its requirements via AdminCenter or manually.

If the provisioning was done via the AdminCenter proceed as follows:

- a. Create a new one-time-key, click button: New Access Key ...



- b. Revision the phone with auto-provisioning or configuring its provisioning URL.

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