

IP Anlagen-Anschluss

Anlagen-Anschluss Plus

Voice Manager User Guide



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Change customer



Search input field containing "Cust" with a magnifying glass icon on the right.

Result list item: Cool Customer

Select button

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1. The Vodafone Voice Manager for the Vodafone IP Anlagen-Anschluss and Anlagen-Anschluss Plus

1.1 Introduction

With the Vodafone Voice Manager, you can administer Vodafone products for business customer communication, including IP Anlagen-Anschluss and Vodafone Anlagen-Anschluss Plus.

The Vodafone Voice Manager provides a valuable overview of the current configuration status of connections. This includes general information such as addresses, customer numbers, and access identifiers. Additionally, technical details like the number and configuration of voice channels, inbound or outbound restrictions, phone functions, and telephone numbers are covered.

The Vodafone Voice Manager allows for important technical configurations such as call forwarding and blocking. It also enables configuration of telephone functions at various levels, such as at the connection level, number blocks, individual numbers, and extensions.

1.2 Target group

The Vodafone Voice Manager User Manual for the Vodafone IP Anlagen-Anschluss and Anlagen-Anschluss Plus is intended for administrators in companies who wish to configure various settings. Technical knowledge is required to use the Vodafone Voice Manager, as improper configuration can render ports unusable.

1.3 Preparation

To utilize the Vodafone Service Monitor for the Vodafone IP Anlagen-Anschluss, you will need an up-to-date web browser version. We recommend Firefox, Safari, or Mozilla. In other browsers, depending on the type and version, not all views may display as intended.

To access the Vodafone Service Monitor, you will require a Vodafone user account. You will receive an email from Vodafone containing a registration link. Click on this link and follow the registration process.

To begin using the Vodafone Service Monitor, visit the link <https://servicemonitor.vodafone.de> and log in.

Note: Please be aware that alias and free text fields allow a maximum of sixty characters. Permitted characters include -a-zA-Z0-9ÄäÖöÜüß &/0+ _.,!#. Please refrain from using unauthorized operations.



2. The Vodafone Voice Manager home screen

After logging into the corporate customer portal and launching the Vodafone Service Monitor, you will arrive at the location view. To switch from the location view to the Voice Manager, click on the active application (in this case, location view) to the right of the currently selected customer in the top menu, or click on the burger icon located to the right of the user icon.



Illustration 1: Main Menu - Location View

This action will open the Application Switch menu. Within this menu, you will find a list of accessible applications. The current application is displayed in bold and underlined. Clicking on **Voice Manager** will take you to the Voice Manager view.

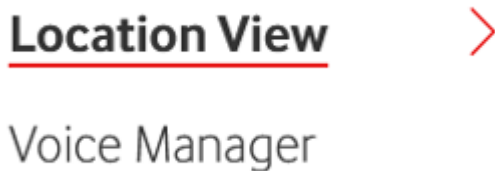


Illustration 2: Application Switch Menu

Here, you will see the following screen:

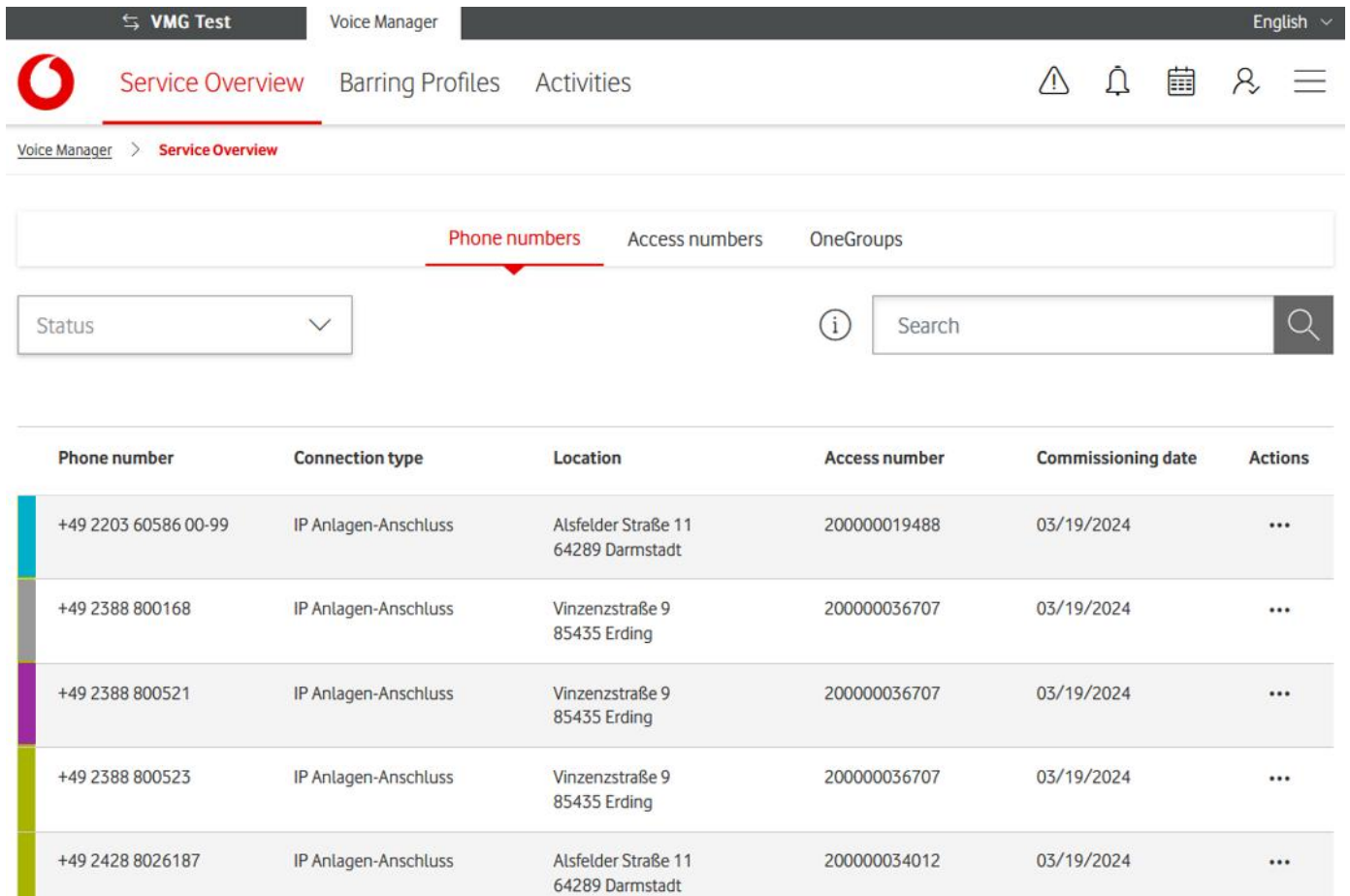


Illustration 3: Home



The screen is divided into three sections:

- Top Menu for Customer and Application Switch
- Voice Manager Main Menu
- Content Area

2.1 Top Menu

At the top of the Service Monitor, you will find the top menu. Here, the customer (client) can select the application and language.

Users with access to multiple customers can switch customers by clicking on the customer's name to open a dialog where they can select from available customers:

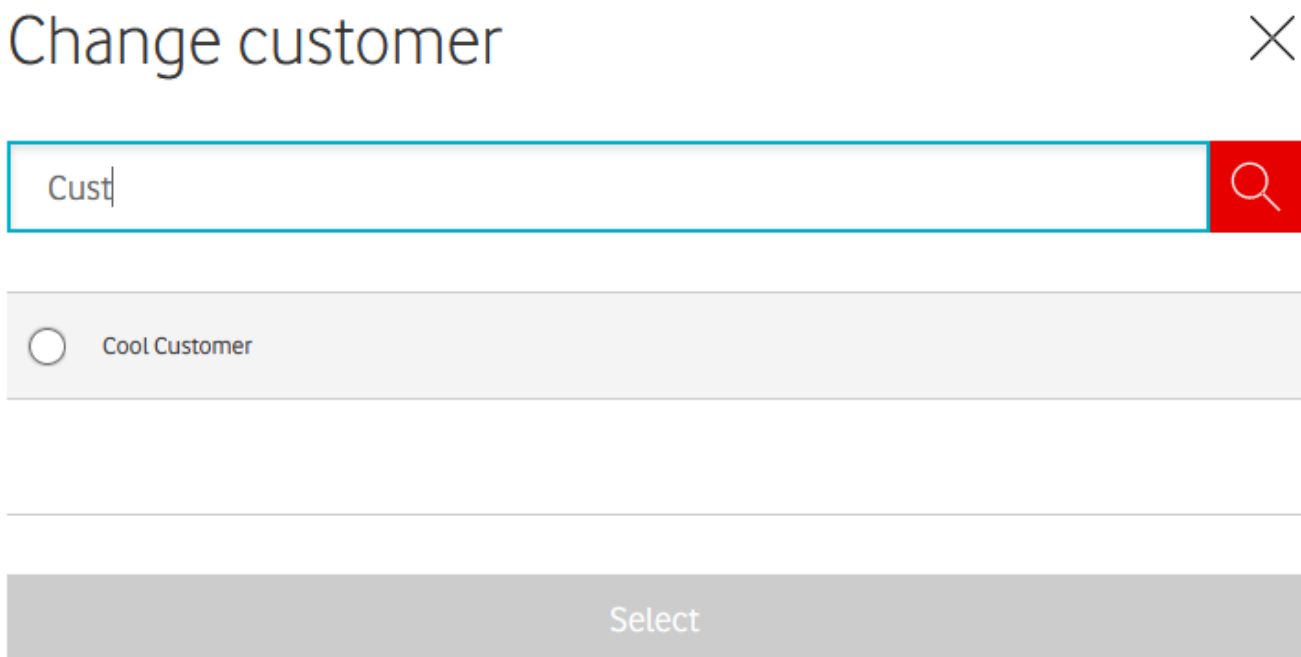


Illustration 4: Customer switch

Next to the customer's name is the application name. Clicking on the application name will open a burger menu allowing selection of another application.

On the right side of the top menu, you can switch between German and English languages.

2.2 Main menu

In the main menu of the Voice Manager, you will find the following elements:

- Service Overview
- Barring Profiles
- Activities
- Cooperation
- Notification icon
- Calendar icon
- User Menu Icon
- Application Change



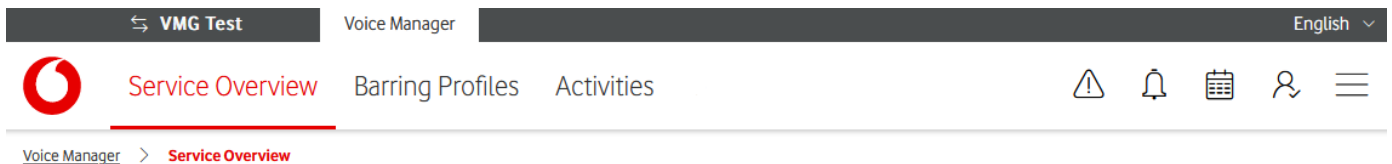


Illustration 5: Main Menu – Voice Manager

2.2.1 *Service Overview*

Your Vodafone Business Voice Service consists of various logical elements in the following layers:

- OneGroups
- Access numbers
- Phone numbers (number blocks and, if applicable, individual numbers)
- Extensions (not displayed in the service overview)

In the service overview, you will only see items for which you have authorization in the tables of the individual layers.

The top-level is the **OneGroup**, which acts as a technical bracket encompassing all connections of a particular type. There are two types: **IP Anlagen-Anschluss** and **Anlagen-Anschluss Plus**. If you have both types, you will have two OneGroups accordingly. This highest level allows you to set specific performance characteristics for all your connections of this type, such as preventing outgoing international calls.

Below the OneGroup are the **Access Numbers**. Each access number has a VoIP realm where your voice channels are located.

One level below are the **Phone Numbers**, including number blocks and, if applicable, individual numbers. The officially assigned phone number block is displayed.

At the lowest level are the **Extensions**. Customers can define the length of extensions. In the Voice Manager, you only need to define extensions for which you want to configure specific features.

You can switch between different layers using the tabs on the page.

2.2.2 *Barring Profiles*

Under the Barring Profiles menu, you will see a table listing all created barring profiles.

This is where you can create new barring profiles and assign them to phone numbers or access numbers. The actions available depend on your permissions.

2.2.3 *Activities*

All configurations made on your ports are logged and can be viewed in the Activities menu. For privacy reasons, you will only see whether you or a Vodafone agent made the changes.

2.2.4 *Cooperation*

The Collaborations view allows you to see and manage open collaborations. Collaborations refer to actions or activities that need to be performed by you within various applications or workflows. These collaborations can take various forms, such as reaching a new processing step, completing a workflow, or cancelling a workflow.

2.2.5 *Notification Overview*

The notification overview informs you when there is important news for your services or the Service Monitor. The notifications are cross-application. This means that you will see, for example, notifications about jobs in the location view, even if you are currently working in the Voice Manager.

You can specify which notifications you see in the notification settings of the user menu.



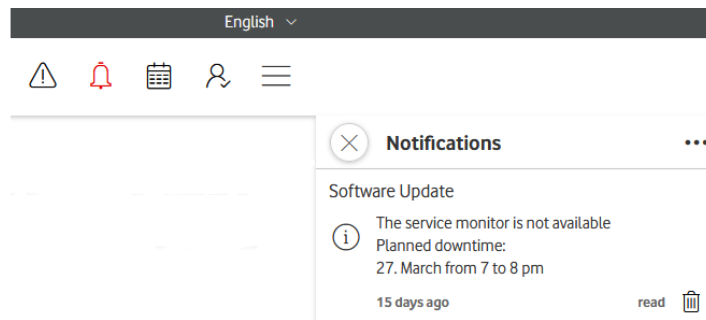


Illustration 6: Notification Overview

2.2.6 Calendar

In the Service Monitor calendar, you can view upcoming appointments. Similar to notifications, these appointments are cross-application.

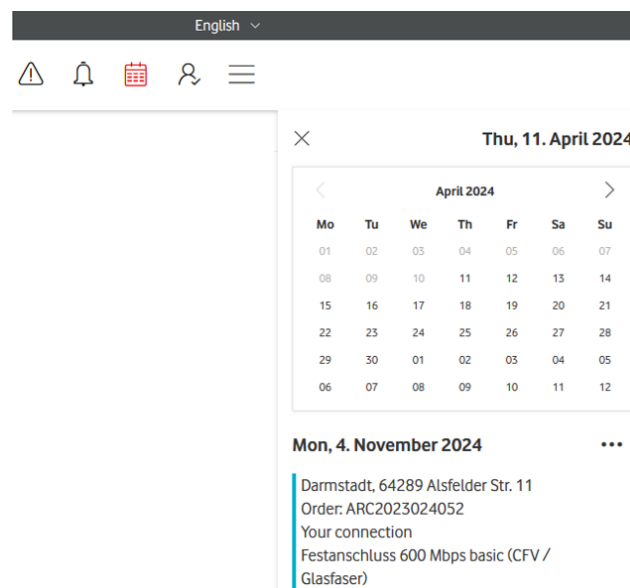


Illustration 7: Calendar

2.2.7 User Menu

In the user menu, you will find the following menu items:

- User management (only visible with appropriate authorization)
- Info & FAQ
- Notification Settings
- Log Out



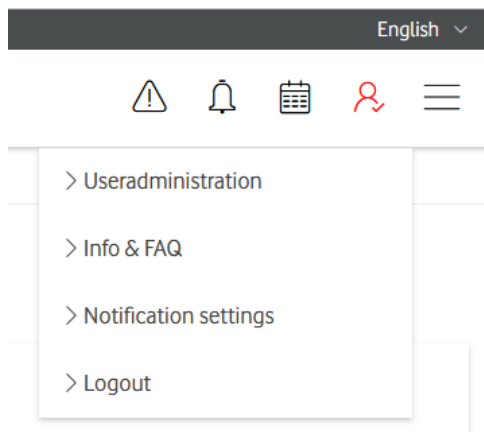


Illustration 8: User Menu

2.2.7.1 User Management

The **User Management** option is visible only if you have admin rights for any of the displayed elements. Selecting this menu item will display an overview of all users set up within the Voice Manager:

Name	E-mail	Mobile number	loggedin	2FA
Testuser 8 VM	testuser8@dicos.de		×	×
Testuser6 VM	testuser6@dicos.de		✓	×
Testuser5 VM	testuser5@dicos.de		✓	×
Testuser4 VM	testuser4@dicos.de		✓	×

Illustration 9: User Table

In addition to displaying the name, email address, and mobile phone number, the **Logged in** column indicates whether the user has previously logged into the Service Monitor.

On the right side of the table, you will find the following three columns:

- **2FA:** Indicates whether 2-factor authorization is enabled for the user.
- **Edit Icon:** Clicking this button opens a form to edit the user's settings.
- **Delete Icon:** Use this button to remove a user from the Voice Manager.

Above the table, you will find the **Add User** button. Clicking this button opens a form to invite additional users to the Voice Manager.



Add user

First name *

Last name *

E-mail *

Two-factor authentication

Mobile number

Notes

Illustration 10: Add user

All fields marked with a red asterisk (*) are mandatory and must be completed to submit the form.

In addition to providing general user information, you can specify which elements the user can access within the Voice Manager and define their rights on these elements.

OneGroup-ID 000000638402 Not visible

Access Number 200000010383 Not visible

Phone number(s)/block +49 3763 1775 00-99 Not visible

OneGroup-ID 000000017202 Not visible

Select authorization ^

- Admin
- Write
- Call forwarding
- Read only
- Not visible

Illustration 11: User Management – Define Rights

Visibility and rights can be set at various levels:

- OneGroup
- Access number
- Phone number or number block

The available rights options include:



- **Admin:** Allows the user to perform all operations on the specified element, including inviting other users. Only users with admin rights can access the **User Management** menu.
- **Write:** Grants permission to perform all configuration operations.
- **Call Forwarding:** Enables configuration of call forwarding for the element without allowing other changes.
- **Read Only:** Displays the element in tables, allowing details retrieval but no modifications.
- **Not Visible:** Hides the element from the tables.

Once all necessary information is provided, submit the changes. The newly added user will receive an invitation to join the Voice Manager via the provided email address.

2.2.7.2 Info & FAQ

Selecting this menu item will take you to a help page where you can find detailed information about the Service Monitor.

2.2.7.3 Notification Settings

In this menu, you can specify which events the Service Monitor should notify you about. The descriptions of the notification settings features in this guide pertain to the location view.

2.2.7.4 Log Out

Clicking on this menu item will log you out of the Service Monitor.

2.2.8 Application switch

Clicking on the application switch icon opens a burger menu where you can select another application. In the application overview, you can switch between different Service Monitor applications, provided they are assigned to you.



3. Service Overview

In the service overview, you will find all your services presented in a tabular format. There are four levels:

- OneGroup
- Access numbers
- Phone Numbers
- Extensions

This hierarchy is essential for organizing your connections and phone numbers.

At the top level is the **OneGroup**, serving as a logical grouping for all connections of a specific type, whether **IP Anlagen-Anschluss** or **Anlagen-Anschluss Plus**.

The OneGroup allows you to globally set specific performance characteristics or restrictions for all connections underneath.

The next level contains the **access numbers**, which represent your connection to the Vodafone network.

Below the access numbers, you will find the **phone numbers** level, displaying all phone numbers or blocks of phone numbers associated with your connections.

During the initial setup of your product, only these three levels are configured. However, you can still configure **extensions** beneath the phone number level. This allows you to apply configurations to individual extensions within the Vodafone network. For instance, you can establish call forwarding within Vodafone's network technology rather than just within your PBX.

Since extensions are not universally implemented and their numbers are dynamic, you will not find a separate table for them in the Voice Manager. Instead, extensions can always be accessed via the corresponding numbers or number blocks above them.

Important: Certain configurations may not be possible at all levels, depending on the connector type and product. If you cannot locate specific parameters at one level, check the next higher or lower level to determine if the configuration can be performed there.

The following sections describe the changes you can implement at each level.

3.1 Settings at OneGroup level

The OneGroup table provides an overview of all your OneGroups. It indicates whether the OneGroup combines connections of type IP Anlagen-Anschluss or Anlagen-Anschluss Plus. Additionally, it shows the associated company and customer number. This is particularly relevant if you use separate OneGroups for different subcontractors.

The **Number of access** column displays how many access numbers are grouped under each OneGroup.

You can use the free-text search field above the table to filter results by OneGroup, connection type, company name, or customer number of your choice.

To view detailed information about a OneGroup or make changes, click on the corresponding row. If you see fewer columns than depicted in the table below, your screen resolution may be too low. Consider viewing the table on a larger screen or accessing detailed information from the detailed view.



[Phone numbers](#) [Access numbers](#) **[OneGroups](#)**

(i)

OneGroup-ID	Connection type	Company	Customer number	Number of Access
00000057352	IP Anlagenanschluss	Musterfirma C	001929682811	1
000000117852	IP Anlagenanschluss	Musterfirma C	001926639362	1
000000288152	Anlagenanschluss Plus	Vodafone Phase out ISDN	001944706011	1
000000305552	IP Anlagenanschluss	Musterfirma C	001929682811	1
000000311952	IP Anlagenanschluss	Musterfirma E	001944198061	1

Illustration 12: OneGroup Table

3.1.1 Detailed information about OneGroup

At the top of the OneGroup detail page, you will find a segment displaying the organizational information of the OneGroup. You have the option to assign any name as an alias for the OneGroup. Additionally, the information from the table is summarized here for quick reference.

Below this, up to three tabs are displayed. You can switch between these tabs by clicking on the headings. Each tab provides specific information about the current configuration of the OneGroup. If you have permissions such as administrator rights, write permissions, or call forwarding capabilities, you can customize the settings of your OneGroup. Tabs or segments without data will not be displayed.

OneGroup 000000330404, OneGroup 000000330404

<p>Connection type: Anlagenanschluss Plus</p> <p>Pooling: Active automatic</p> <p>SipTrunkCount: 2</p>	<p>Company: Vodafone</p> <p>Customer number: 995500000001</p>
---	---

[Call forwarding](#) [Barrings](#) [Technical parameters](#)

Illustration 13: Detailed information about OneGroup

3.1.1.1 Call Forwarding tab

In this tab, you can configure call forwarding at the OneGroup level. You will see a table listing all the call forwarding settings you have saved in the Service Monitor. Each entry in the table displays the destination number and the type of call forwarding.

The configured parameters apply to the entire OneGroup and its associated elements, such as access numbers or phone numbers. If you have set up call forwarding for the entire OneGroup, the destination number and type will be visible in this section.



You can also assign an individual alias to make identification easier. The alias is purely for internal reference within the Service Monitor and does not impact network provisioning.

Existing call forwarding entries are listed at the top of the table. A blue slider indicates that call forwarding is currently active.

If you have scheduled call forwarding to activate at a specific time, the **Type** column will display the activation date and time.

To activate call forwarding directly, simply move the slider to the right in the respective row.

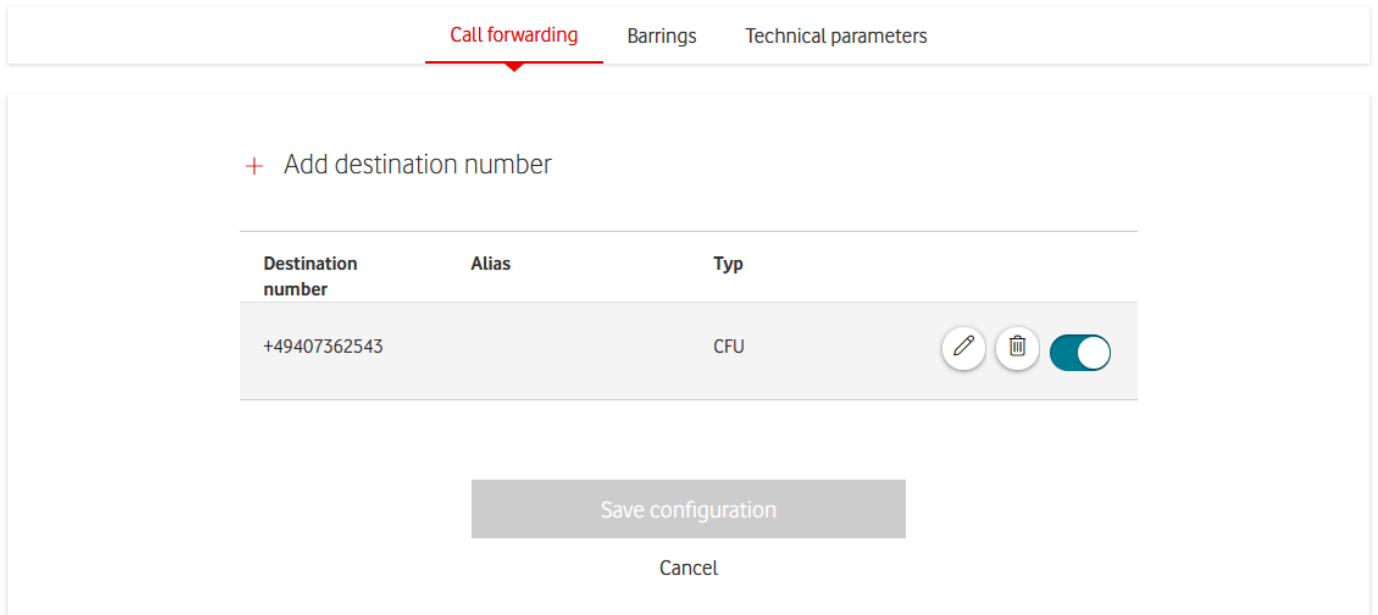


Illustration 14: OneGroup – Call Forwarding Table

To set up a new call forwarding, click on **Add destination number** above the table. Enter the destination number and select the call forwarding type (CFU). Other call forwarding types are not available at this level.

You can assign an alias for easy reference. After clicking **Planned Activation**, choose a time for automatic activation of the call forwarding. Click the **green checkmark** to add the call forwarding to the table.

Use the slider on the right to activate the desired destination number. **Remember**, activating the destination number here does not immediately activate it on the network or store it in the Service Monitor. Click **Save settings** to confirm and save your changes.



+ Add destination number



Destination number *

Alias

Call forwarding type *

CFU - Call forwarding unconditional

Planned activation

From *

14 : 10



Until

HH : MM

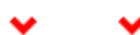


Illustration 15: OneGroup – Add Call Forwarding

Important Note: Only one call forwarding can be active on a OneGroup at a time. If you activate a new call forwarding manually or when the scheduled activation time is reached, the previously set call forwarding will be automatically deactivated.

To **modify an existing call forwarding entry**, click the pencil icon. This will reveal the same input fields used for adding a new call forwarding below the selected row. You can also schedule activations for an existing call forwarding entry here.

Use the trash can icon to **permanently delete an entry**. If you want to disable call forwarding temporarily without deleting the entry, simply slide the toggle to the left to deactivate.

3.1.1.2 Barrings tab

This tab allows you to establish and manage several types of blocks for your OneGroup configuration, including dunning blocks, fraud blocks, and the setup of blocking profiles for the entire OneGroup. Note that the parameters and options will only be visible if the relevant blocks are enabled.

3.1.1.2.1 Segment Dunning / Fraud Blocking

If dunning or fraud blocks are active, they will be displayed in a dedicated segment directly below the tab bar. The parameters are shown only when a block is active; otherwise, this section will not appear.

- **Dunning block**

When a dunning block is active, outgoing calls and call forwarding through your OneGroup will be restricted, except for emergency calls. Incoming calls will still be routed to you.



Call forwarding	Barrings	Technical parameters
Dunning block:	Originating	
International:	Active	
		Not european: Active
		National: Active

Illustration 16: OneGroup - Dunning / Fraud Blocks

3.1.1.2.2 Barring Information segment

With Admin or Write permissions, you can configure the Barring Profiles for the entire OneGroup within this segment.

Only one barring profile can be established for each type (Forwarding, Inbound, and Outbound). To deactivate a barring profile, click the **x** icon in the right part of the selection box. Confirm any changes by clicking **Submit**.

In addition to the standard profiles **International**, **National**, and **Non-Europe**, you can create and assign your own custom barring profiles. These will be displayed categorized by type **Forwarding**, **Inbound**, or **Outbound**.

Important Note: You can only assign Barring Profiles that have been previously created. To create a new barring profile, navigate to **Barring Profiles** in the menu (see [Create a new barring profile](#)). Write permissions are required to create new profiles. The cumulative effect of all barring profiles is applied to elements such as connection IDs or phone numbers across the entire OneGroup.

Forwarding

Sperrprofil für Anrufweiterleitungen
x
▼

Terminating

Russlandsperr
x
▼

Originating

Nicht EU-Ausland sperren
x
▼

Submit

Cancel

Illustration 17: OneGroup – Set Barring Profiles

3.1.1.3 Technical Parameters tab

In this tab you will find the technical limitations of the OneGroup. Here you can edit the technical parameters of your OneGroup with the Admin or Write authorization. You can assign an alias and activate and deactivate the CNIP and CNIR parameters.

Alias: The alias is only used for internal designation within the Voice Manager.

CNIP: The Calling Name Identification Presentation feature allows the caller's name to be displayed for incoming calls. The name displayed is transmitted by the caller.



CNIR: The Calling Name Identification Restriction feature allows the transmission of the name to be suppressed for outgoing calls.

With VoIP, a name can be transmitted in addition to a phone number, which some telephone systems use. With this parameter, you can see whether a name is transmitted. The following are possible:

- **CNIP active** and **CNIR not active:** The name is always displayed.
- Both **CNIP** and **CNIR not active:** The name is suppressed for incoming calls.
- Both **CNIP** and **CNIR active:** The name is suppressed for outgoing calls.
- **CNIP not active** and **CNIR active:** The name is suppressed in both directions of traffic.
- You can configure suppression on the underlying levels of the connection IDs or phone numbers.

The following parameter is also displayed:


CLIP no screening: CLIP (Calling Line Identification Presentation) means that the number of the calling subscriber is displayed for the called party. For outgoing calls, Vodafone checks whether the number transmitted by your telephone system belongs to your connection or number block. If not, it will be replaced by Vodafone with a number of the connection. If CLIP no screening is activated, the check is omitted. For example, the number of the original caller can be transmitted when a call is forwarded on the telephone system.

In the **Technical voice channels** section, you can see how many calls can be made in parallel within this OneGroup. The limit can be configured differently for reciprocal, incoming and outgoing calls.



[Call forwarding](#) [Barrings](#) **[Technical parameters](#)**

Alias


OneGroup 000000366202 

Calling name identification presentation (CNIP) Yes


Calling name identification restriction (CNIR) No

Technical channels

Maximum bidirectional

8 

Of which maximum incoming

8 

Of which maximum outgoing


8 

Illustration 18: OneGroup – Technical Parameters

3.2 Settings at access number level

In the Access Numbers table, you can view an overview of all your access numbers.



Access number	Connection type	Phone numbers/ number blocks	Commissioning date	Actions
200000010383	IP Anlagen-Anschluss	Phone numbers: 0 Number blocks: 1	03/19/2024	...
200000038431	IP Anlagen-Anschluss	Phone numbers: 0 Number blocks: 1	03/19/2024	...
200000040369	IP Anlagen-Anschluss	Phone numbers: 0 Number blocks: 1	03/19/2024	...
200000444001	IP Anlagen-Anschluss	Phone numbers: 1 Number blocks: 1	03/19/2024	...
320000006011	Anlagen-Anschluss Plus (S0)	Phone numbers: 0 Number blocks: 1	02/05/2024	...

Illustration 19: Table Access numbers

For the connection type IP Anlagen-Anschluss or Anlagen-Anschluss Plus, you can see how many phone numbers and number blocks are below the connection ID and when the connection was first activated.

You can use the free text search field above the table to filter the display by Access number or a connection type of your choice.

To see detailed information about a connection ID or to change something, click on the corresponding line.

If you see fewer columns, the screen resolution is too low. Take a look at the table on a larger screen or take the information from the detailed view.

For each line, you will also see an action menu with direct links for these functions:

- Set up call forwarding
- Download a list of current call forwarding
- Configuring Active Call Forwarding for All Items within the Connection ID Collectively
- PBX-Download
- Reset Password

Good to know: Not all features are always available. It depends on which options you used to book your product.

Use the button, **CSV export** above the table allows you to export the settings of your Access numbers in a clear way. You will receive the detailed information for all your connection IDs in CSV format as a download.

Explanations of all these operations can be found in this section.

3.2.1 Detailed information about the access number

On the details page for the connection ID, you will find a segment with the organizational information of the connection ID in the upper area.

The parameters **Company**, **Customer Number**, **Connection Type** and **OneGroup ID** describe parameters of the parent OneGroup. So they are identical for different connections of the same OneGroup.

The **Technical Voice Channels** parameter describes the number of available voice channels of the Access number.



The **Mode** parameter can be either **REGISTRATION** or **STATIC**. **REGISTRATION** means that the port uses SIP registration, while **STATIC** means a static configuration.

Below that, you will see several tabs. You can switch between them by clicking on the heading. Each tab provides information about a specific aspect of the current access number configuration. If you have one of the Admin, Write Permissions or Call Forwarding permissions, you can configure your connection ID individually. If you do not have data for individual tabs or segments, you will not see them.

Sip Trunk 100000000004, SIP-Trunk Test

Connection type:	IP Anlagen-Anschluss	Company:	Vodafone
Mode:	STATIC	Customer number:	000070084440
OneGroup-ID:	<u>000000928402</u>	Technical channels:	30

Call forwarding	Barrings	Technical parameters	PBX
------------------------	----------	----------------------	-----

Illustration 20: Detailed information about the Access number

3.2.1.1 Call Forwarding tab

In this tab, you will find up to two segments for managing your call forwarding.

For Anlagen-Anschluss Plus Connections, a segment is available for setting up call forwarding. Below that, you will find another segment that allows you to download and Call forwarding upload. This function is available for both Anlagen-Anschluss Plus and IP Anlagen-Anschlusses.

3.2.1.1.1 Set up call forwarding segment

For a connection ID of type Anlagen-Anschluss Plus, you can configure call forwarding at the level of the connection ID in this segment. This function is not available for access numbers of type IP Attachment connection and the entire segment is not displayed. However, you can use the analogue function at the level of phone numbers or OneGroups.

You will see a table with all the call forwarding that you have saved in the Service Monitor for this connection ID. For each call forwarding, you can see the destination number and call forwarding type. In addition, you can assign an individual alias that makes it easier for you to identify. The alias is only relevant internally in the Service Monitor and has no effect on provisioning in the network.

If you have set up call forwarding for the entire line ID, you can see the destination number and call forwarding type here. If call forwarding has already been set up, it is at the top of the table. The blue slider indicates that call forwarding is active.

In addition, the following parameters are only available for Access numbers of the type Anlagen-Anschluss Plus:

- **CLIP**
Calling Line Identification Presentation: The phone number of the calling party is displayed to the callee if the caller does not have CLIR enabled.
- **CLIR**
Calling Line Identification Restriction: The phone number of the calling party is not displayed to the callee party.
- **COLR**
Connected Line Identification Restriction: Prevents the caller from displaying the phone number of the



answering party to the caller. This means that with call forwarding, the caller does not see the number that is answering the call.

- **ACR**
Anonymous Call Rejection: Incoming anonymous calls are rejected.
- **FCR**
Forwarded Call Rejection: Forwarded calls are rejected.
- **Call Forwarding with 181 Response**
The calling party is signalled when the call has been transferred.

If you have set call forwarding to be enabled at a specific time, you will also see the date and time of activation in the **Type** column.

If you want to activate call forwarding directly, simply move the slider in the corresponding line to the right.



Forwarding number	Alias	Typ	
01724319400	Roland Handy	CFNR	  <input checked="" type="checkbox"/>

Illustration 21: Access number – Call Forwarding Table

If you want to set up a new call forwarding, click **Add destination number** above the table.

Enter the desired destination number and select the call forwarding type. You can choose between CFU and CFNR. **CFU** stands for **call forwarding unconditional**. This means that all calls are forwarded to the appropriate number. **CFNR** stands for **call forwarding not reachable/no reply**: Calls are only forwarded if no connection could be established within a certain period of time.

You have the option to assign an alias. After clicking on **Scheduled Activation**, you can also select a time when call forwarding should be automatically activated and until which time it should run.

By clicking on the green checkmark, you can add call forwarding to the table. **Important:** This means that it is neither active in the network nor stored in the Service Monitor. Only when you click on **Save settings** will you save all the changes you have made.



+ Add forwarding number



Destination number *

e.g. 0664147343

Alias

Call forwarding type *

- CFU - Call forwarding unconditional
- CFNR - Call forwarding not registered/reachable

Planned activation

From *

11. April 2024

14 : 20

Until

HH : MM

Illustration 22: Access number – Add Call Forwarding

Good to know: It is not technically possible to activate more than one call forwarding for a connection ID at the same time. Therefore, you cannot select the same activation time for two different call forwarders.

If a new call forwarding is activated, either manually or by reaching the activation time, the old call forwarding is automatically deactivated.

If you want to change an **existing call forwarding**, use the icon with the pencil symbol. After clicking, the same input fields as when adding a new call forwarding appear below the selected line. You can also conduct planned activations of an existing call forwarding at this point.

Use the trash can icon if you want to **permanently delete an entry**. Do you just want to disable call forwarding, but keep the entry for later use? Then set the slider to the left to inactive.

3.2.1.1.2 Call Forwarding download/upload segment

This segment is only visible if you have write or admin rights on the connection ID.



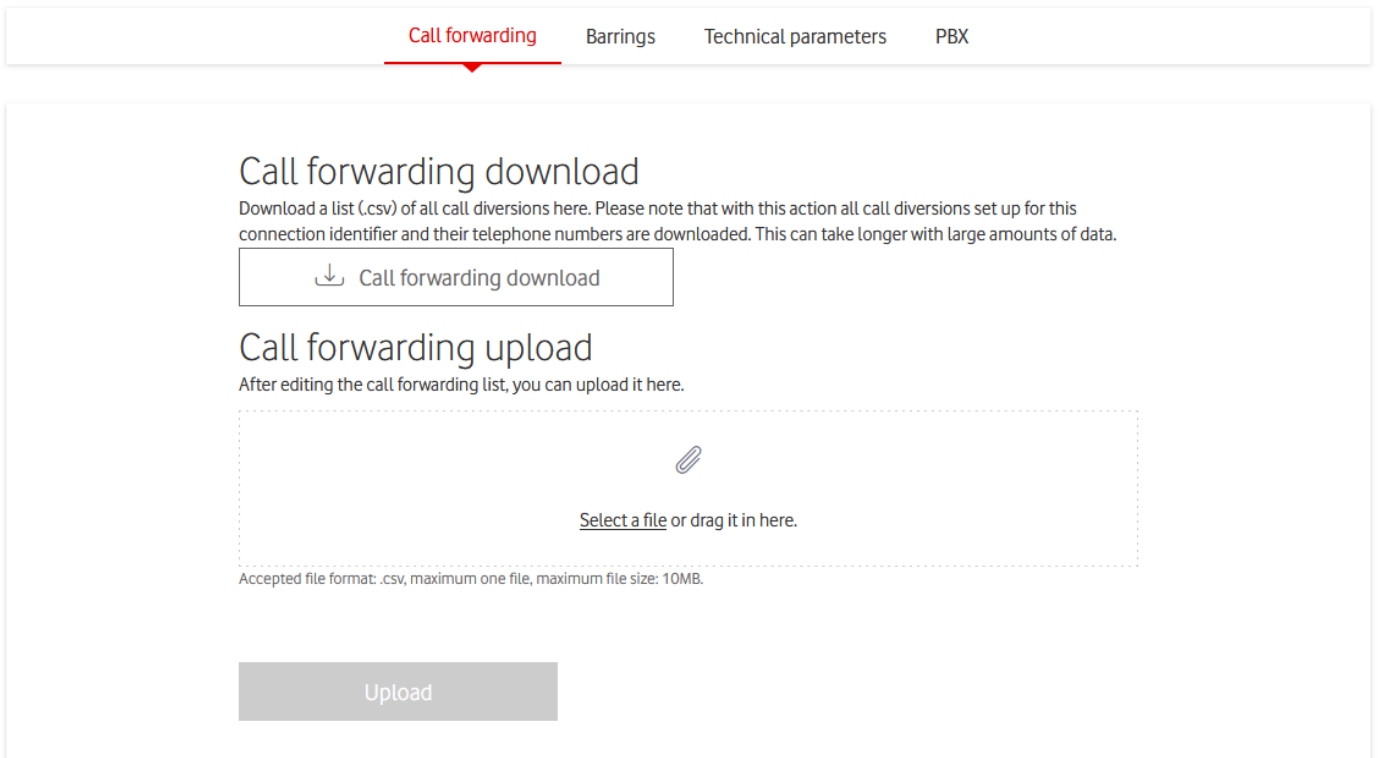


Illustration 23: Access number – Call forwarding download

By clicking on the **Call forwarding download** button, you start a download of all active call forwarding that are set up for elements in this connection ID. In addition to the connection ID itself, these are all phone numbers and number blocks that are assigned to the connection ID, as well as the extensions underneath.

You will receive a CSV file in which the active call forwarding is displayed for each element. Each element has its own line, regardless of whether call forwarding has actually been created. In the case of an item without active call forwarding, the corresponding fields will simply remain empty.

To make it easier for you to find your way around, you will find the respective alias for each element and call forwarding, if you have assigned one.

After downloading, you can edit the CSV file and return it to the Voice Manager under **call forwarding upload**. **Important:** Do not change the file format or the table structure.

Save the edited file in CSV format with Tab as a separator. No rows may be added. Changes are only allowed in the **Destination number, Forwarding Alias, and Call Forwarding Type** columns.

All three fields per row must be empty. Or the destination number must be a phone number including the area code and the call forwarding type **CFU** or **CFNR** must be specified.

Upload the file using the **Upload** button. The Voice Manager automatically registers all changes made and ensures that call forwarding is provisioned in the network.

Important to know: Voice Manager considers empty fields for destination number and call forwarding type to be deactivated call forwarding. If you do not want to make any changes to an element, simply leave the previous entry as it is.

3.2.1.2 Barring tab

With the Admin or Write permissions, you can configure the Barring Profiles for the entire port ID in this tab. Provided you have write permissions on the parent OneGroup. If Barring Profiles are already configured at the level of the OneGroup, they also have an effect on the entire access number.



Only one barring profile can be set up for each type Forwarding, Inbound, and Outbound. By clicking on a barring profile, the profile can be viewed and edited. If you do not want a barring profile to be active, click on the x in the right part of the selection box. Confirm your changes by clicking Submit.

Important: You can only assign Barring Profiles that have already been created. You can create a new barring profile under the menu item Barring Profiles. To do this, you need write permissions at the level of the OneGroup.

Call forwarding **Barrings** Technical parameters PBX

Forwarding
CALL_FORWARDING 4 x ▾

Terminating
TERMINATING 4 x ▾

Originating
ORIGINATING 8 x ▾

Submit

Cancel

Illustration 24: Access number – Set Lock

3.2.1.3 Technical Parameters tab

The tab provides an overview of the technical settings and configurations of your port ID. Here you can find essential information about various parameters that affect your connection ID, including the number of phone numbers, operating mode, SIP configurations, and other technical details. Depending on your permissions, you can edit or just read some of these parameters.

3.2.1.3.1 Technical Information Segment

This segment displays all non-editable technical information.



Phone number count:	1	Operation mode:	ISDN
High Availability:	Inactive	Registration IMPU:	entrST320000181252@entr.fixed.vodafone.de
Registration mode user name:	entrST320000181252	Registration type:	SINGLE
SIP proxy uri:	0711.sipt.vodafone.de		

Illustration 25: Access number – Technical Information

The display depends in part on the connection type or mode. The meaning of each parameter can be found in the following table:

Table 1: Access number Parameters

Parameter	Display	Meaning
Sperre Test phase	Active/Inactive → Displayed only when parameter is active	This barring is used for testing periods. In this case, calls abroad and to service numbers are blocked.
Dunning block	Not displayed if Dunning barring is NONE, otherwise one of the two values: <ul style="list-style-type: none"> • Mutually → BOTH_WAY • Outgoing → ORIGINATING_ONLY 	This block is set up by Vodafone. There are two levels: <ol style="list-style-type: none"> 1. Outgoing calls and transfers are blocked, with the exception of emergency calls. 2. In addition to first, incoming calls are also blocked. Emergency calls are still possible.
Mode	IP or ISDN	Only for Anlagen-Anschluss Plus
Redundancy	One of the four values: <ul style="list-style-type: none"> • No → NONE • Active → STANDARD • High → HA • Unknown → UNKNOWN 	This parameter specifies the redundancy that is set up in the grid connection.
Registration IMPU	Only for REGISTRATION mode, e.g. entrST2000000000123@entr.fixed.vodafone.de.	Displays the enrolment identifier
Registration Mode Username	Only for REGISTRATION mode, e.g. entrST2100000000123	Displays the registry username
Registry Type	SINGLE or MULTI	Indicates whether all phone numbers or number blocks are registered at once (SINGLE) or individually
Number of phone numbers	Number	Displays the total number and number blocks that have been



		set up for this extension identifier
High Availability	One of the four values: <ul style="list-style-type: none"> • Inactive → NONE • Inactive → STANDARD • High → HA • Inactive → UNKNOWN 	This parameter specifies the redundancy that is set up in the grid connection.

In this segment, you will also see the SIP configuration that you need to use to connect to the Vodafone network. The individual parameters can be found in the following table:

Table 2: Access number SIP Configuration

Parameter
Fashion
SIP domain
SIP proxy type
SIP proxy IPv6
SIP proxy type2
SIP proxy2 IPv6

3.2.1.3.2 Technical Parameters Segment

Here you edit the technical parameters of your connection ID with the Admin or Write permissions permission. You can set the following parameters:

Table 3: Edit Access number

Parameter	Display	Meaning
Alias	always	Name of the Access number
Number Suppression (CLIR)	Anlagen-Anschluss Plus	The phone number of the calling party is not displayed by the person called.
Number Suppression (COLR)	Anlagen-Anschluss Plus	Prevents the caller from displaying the phone number of the answering party to the caller. This means that with call forwarding, the caller does not see the number that is answering the call.
Call forwarding feedback	Anlagen-Anschluss Plus	The callee will be notified when the call has been transferred.
Anonymous Call Rejection (ACR)	Anlagen-Anschluss Plus	Prevents calls with a suppressed number from




		coming into your connection ID.
Rejecting Forwarded Calls (FCR)	Anlagen-Anschluss Plus	Prevents your connection ID from receiving calls that have forwarded the caller.
PBX Technology	Anlagen-Anschluss Plus	Allows you to switch between IP and ISDN on the Plusbox.
Call Forwarding (CD 302)	Active/Inactive → Only visible for IP Anlagen-Anschluss	If this parameter is active, the PBX can initiate call forwarding in the Vodafone network through a SIP-302 response with the new destination number.
Diversion Header Support	DIVERSION_HEADER_TRANSLATION or HISTORY_INFO_HEADER Only visible in STATIC mode	The selection must match the function of the telephone system.


The Technical **Voice Channels** section shows how many calls can be made in parallel within this connection ID. You can configure the limit for reciprocal, incoming, and outgoing calls differently.




Alias


SIP Trunk 320000246954 

Calling line identification restriction (CLIR)

Activation per call (default) 

Permanent connected line identification restriction (COLR)

Activation per call (default) 

Call forwarding feedback  Yes

Anonymous call rejection No

Forwarded call rejection No


Phone system technology

IP (max. 90 voice channels)


ISDN (max. 8 voice channels)

Technical channels


Maximum bidirectional

2 

Of which maximum incoming

2 

Of which maximum outgoing

2 

Submit

Cancel

Illustration 26: Access number – Edit Technical Parameters for Anlagen-Anschluss Plus

3.2.1.4 PBX Information tab

In this segment you will find all the information about the PBX that is set up for your connection ID.



[Call forwarding](#) [Barrings](#) [Technical parameters](#) **PBX**

Connection reuse No
 Authentication Mutual
 Load balancing
ROUND_ROBIN ▼
 Number format
INTERNATIONAL ▼
 Protocol
TLS ▼
 Option ping Active

+ Add telephone system

Nr.	IP address	PBX name	Port	
1	2a01:860:fe:3::10	pbx23547	5061	<input type="button" value="✎"/> <input type="button" value="🗑️"/>

Save configuration
Cancel

Illustration 27: Access number – PBX

Table 4: Access number – Meaning of PBX Parameters

Parameter	Meaning
Connection reuse	In the case of TCP or TLS, Vodafone does not establish a TCP or TLS connection to the PBX but uses the connection of the PBX for incoming calls. This is always the case with Registration Mode.
Load balancing	Describes how to distribute incoming calls to a PBX with multiple IP addresses. This is only possible in conjunction with Static Mode. In ROUND_ROBIN, the IP addresses are used in cyclical order. In HUNTING, the first IP address is always used, the second only if the first one is not available, and so on.
Phone Number Format	Phone numbers are used in the international format +... signalled.



	Exception: The dialled number for outgoing calls can also be transmitted in local or national format. For static mode, it is also possible to transmit phone numbers in both directions in the national format.
Ping option	With a SIP Options ping, Vodafone can check every minute whether the PBX is reachable and responding. This feature is only available in Static Mode.
Protocol	Here you can see which transport protocol is set up by Vodafone. This info is only relevant for static mode. In Registration Mode, the PBX can select the protocol. This does not apply to the connection type Anlagen-Anschluss Plus.
Call Rate	Vodafone limits the number of call attempts per second to this value.
TLS-Authentication	Applies to Static Mode only. In the case of MUTUAL, Vodafone requests a TLS certificate from the PBX, but not in the case of SERVER.
Special configuration	Individual configurations in the project business

Below that, the list of all PBX set up for the access number is displayed.

For each PBX, the hunting order, IP address, PBX type, and selected port are displayed. Possible PBX types are PBX, PLUS_BOX, VOICE_GW and Direct Routing (MS Teams).

However, the Hunting order column is omitted if load balancing is set to ROUND_ROBIN or only one PBX is configured.

For access numbers of type IP Anlagen-Anschluss in STATIC mode that are not MS Direct routing connections, you can edit the PBX of your connection in this segment. To do this, you need write or admin rights for your connection ID.

If you want to switch load balancing to HUNTING_PHONENUMBER_BASED, first make sure that exactly 2 PBX are configured in the PBX list in the lower part.

You can only change the Load Balancing parameter to one of the other two values if all phone numbers and number blocks below this extension ID have the pbxSortOrder ASC.

The Voice Manager checks both conditions and automatically disables any options that are incompatible with the current configuration.

You can only see the log, but you cannot edit it yourself. Please contact your Vodafone account manager if you would like to make any changes.

In the PBX list, you can see the currently configured PBX of this access number.

Use the trash can icon if you want to **remove** a **PBX**. You can use the pencil icon to **reconfigure** an **existing PBX**.

Good to know: You can only delete a PBX if load balancing is not set to HUNTING_PHONENUMBER_BASED, as exactly 2 PBX must always be configured.

The PBX name is assigned by the network technology and cannot be edited.

You are free to choose the IP address and port. The IP address can be in IPv4 or IPv6 format.

The port must always be a 4-digit number. If you change the position, the entry is automatically re-sorted. The position of the other PBX is automatically changed if necessary.

The **Add PBX option** allows you to add new PBX to the list. However, the button is only clickable if there are no technical restrictions preventing you from configuring another PBX. That would be the case if:

- 10 PBX are already configured,
- It is a high-availability access number and 2 PBX are already configured



- or the load balancing parameter is set to HUNTING_PHONENUMBER_BASED.

Otherwise, a form will open with the same input options as for edited PBX. When you pass the configuration, add the PBX to the list with the green checkmark. Confirm your changes with **Save Settings**.

+ Add telephone system



Position *

IP address *

Port*

Illustration 28: Access number – Add PBX

3.2.2 Actions

You can perform different actions for each access number by clicking on the three dots in the action column of the table.

In the action menu, you will find an overview of actions with direct links for various functions: **Call Forwarding**, **Call Forwarding download**, **Call Forwarding upload**, **PBX Download**, and **SIP Trunk Password Reset**.

Please note that not all promotions are always available. Availability depends on the options booked for your product.



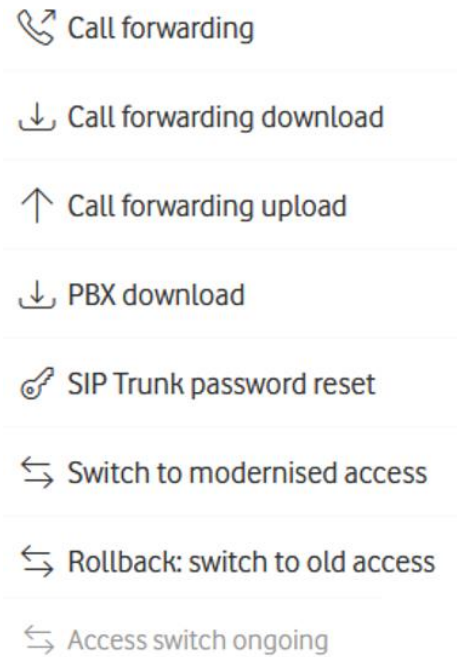


Illustration 29: Access number - Action Menu

3.2.2.1 Set up call forwarding

In the action menu, the Call Forwarding button is only displayed for Anlagen-Anschluss Plus. A click on the button will redirect you to the call forwarding segment of the corresponding connection ID.

3.2.2.2 Call forwarding download

The **Actions** menu offers the option to **Call forwarding download**. If you select this, all call forwarding for the connection ID and its phone numbers will be downloaded. You will receive a CSV file with item ID, type, alias, destination number, destination alias, and call forwarding type. All items are exported, even if there is no call forwarding.

Call forwarding download

This action will download all configured call forwardings for this access number and its associated phone numbers. This process can take several minutes for large amounts of data.



Illustration 30: Access number – Action menu – Call forwarding download

3.2.2.3 Call forwarding upload

If you click the Call forwarding upload button in the action menu, you will be redirected to the Call Forwarding segment on the Edit page of the connection ID.

3.2.2.4 PBX-Download

If you click on the **PBX Download** button in the action menu, a PDF will be provided with the necessary configuration parameters for setting up the PBX. The parameters are displayed according to the connection type of your connection (Anlagen-Anschluss Plus, IP Anlagen-Anschluss Registration and IP Anlagen-Anschluss Static Mode).



In the PDF, blank parameter lines are hidden to ensure a clear and concise representation of the relevant information. In addition, all URLs and links in the PDF are clickable, so you can quickly and easily access additional resources to help you set up your PBX.

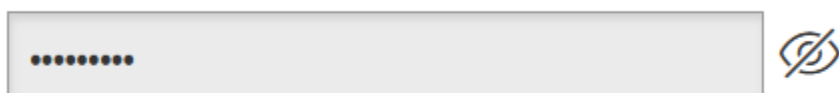
3.2.2.5 SIP Trunk Password Reset

This option is only available if there is no PBX with the Voice Gateway option for your port ID.

To create a new password for your SIP trunk:

- Click on the three dots of the **Actions** column in the Connection ID table.
- Select **SIP Trunk Password Reset**.
- Enter a password.

SIP Trunk password reset



With this action you can reset the password of your SIP trunk. Please note that you must also change the password on your PBX.



Illustration 31: Access number – Action menu – SIP Trunk Password Reset

Use the eye icon on the right side of the pop-up to view or copy the password. The change will take effect as soon as you click **Save**.

Important: You can only change the password stored in network provisioning via the Service Monitor. You have to adjust the settings on your PBX yourself so that your connection continues to work.

3.2.2.6 Switch to modernised access

If you click on this button, this means that you want to switch your connection to the modernized platform. This button is displayed when it is possible to switch to the new platform. After you have triggered the action, a pop-up window appears with a security prompt. As soon as you confirm this, a migration to the IMS_SIP_TRUNK platform is started. Please note that after the migration, the incoming traffic of your connection will be routed to the new platform.

Switch access

Are you sure you want to start the switchover?



Illustration 32: Access number – Action menu – Connection changeover

3.2.2.7 Rollback: switch to old access

This button is displayed if it is possible to return to the old connection. Clicking on this button opens a pop-up window with a confirmation prompt. After confirming this query, a migration to the NGN_IP_ALA platform is



started to bring your connection back to the previous configuration. Please note that after the migration, the incoming traffic of your connection will be routed to the old platform.

3.2.2.8 Access switch ongoing

This button is displayed if a migration order has been imported for your SIP trunk and the migration has not yet been completed. It is for information purposes only and is highlighted in gray to indicate that a migration is in progress. It is not a button that you can activate. As soon as the migration is complete, this button is no longer displayed.

3.2.3 CSV-Export

With this option you start a download of all detailed information of all your connection IDs. Depending on the number of connection IDs you have, this may take some time. But the download runs in the background, so you can use the Service Monitor as usual.

In the CSV file, each row represents an access number and the columns contain the various parameters. An empty field means that the respective parameter is not set for the corresponding Access number.

To view the CSV file, you can use programs such as ModernCSV.

You can also open the file in Microsoft Excel if you import it correctly. Here is how:

- Open a blank workbook.
- Under **Data** at the top left, select **From Text/CSV**.
- Select the downloaded file.
- Click **Import** and **Transform Data** at the bottom of the window to open the Power Query Editor.
- Select the entire table with Ctrl+A and select **Text** as the data type.
- In the pop-up, click **Replace Current**, and then click **Close & Load**.

3.3 Settings at phone numbers and number blocks level

In the **Phone Numbers** table, you can see an overview of all your phone numbers and number blocks.

Phone number	Connection type	Location	Access number	Commissioning date	Actions
+49 2203 60586 00-99	IP Anlagen-Anschluss	Alsfelder Straße 11 64289 Darmstadt	200000019488	03/19/2024	...
+49 2388 800168	IP Anlagen-Anschluss	Vinzenzstraße 9 85435 Erding	200000036707	03/19/2024	...
+49 2388 800521	IP Anlagen-Anschluss	Vinzenzstraße 9 85435 Erding	200000036707	03/19/2024	...
+49 2388 800523	IP Anlagen-Anschluss	Vinzenzstraße 9 85435 Erding	200000036707	03/19/2024	...
+49 2428 8026187	IP Anlagen-Anschluss	Alsfelder Straße 11 64289 Darmstadt	200000034012	03/19/2024	...

Illustration 33: Phone Number Table



You can tell whether an entry is a single number or an entire block by looking at the entry in the **Telephone number** column: In the case of a block of phone numbers, you will find information about the block boundaries, for example **00–29**.

In the other columns, you can see the connection type IP Anlagen-Anschluss or Anlagen-Anschluss Plus. In addition, the location, the higher-level Access number, and the date of commissioning.

In the Actions menu, you will find a direct link to create call forwarding.

You can use the free text search field above the table to filter the hits by a phone number, a connection type, a location, or a connection ID of your choice.

To see detailed information about a phone number or to change something, click on the corresponding line.

If you see fewer columns, the screen resolution is too low. Take a look at the table on a larger screen or take the information from the detailed view.

3.3.1 Detailed information about the phone number

On the detail page for the phone number, you will find up to four tabs, depending on the type of connection. Each tab provides information about a specific aspect of the current configuration of the phone number.

The upper segment shows the organizational information of the phone number. The parameters **Company**, **Customer Number**, **Connection Type** and **OneGroup ID** describe parameters of the parent OneGroup. This means that they are identical for different phone numbers within the same OneGroup. In addition, you can see here how in the table overview, which connection ID the phone number is assigned to and at which location the line is located.

If you have one of the Admin, Write Permissions or Call Forwarding permissions, you can configure your connection ID individually.

Phone number +49 2388 800168

Connection type:	IP Anlagen-Anschluss	Company:	Vodafone
Access number:	200000036707	Customer number:	995500000001
OneGroup-ID:	000000366202	Location:	85435 Erding, Vinzenzstraße 9

Illustration 34: Detailed information about the phone number

3.3.1.1 Call Forwarding tab

For a phone number or a block of numbers of the type IP Attachment connection, you can configure call forwarding at the level of the phone number in this tab.

This function is not available for the Anlagen-Anschluss Plus type and the segment is not displayed. However, you can use the analogous function at the level of Access numbers or extensions.



Call forwarding Barrings Technical parameters Extensions

+ Add destination number

Destination number	Alias	Typ	
01234	Hauptpforte	CFU	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
012345	Wartung	CFU	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
0123	Wochenendvertretung	CFU	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Illustration 35: Phone Number – Call Forwarding

You will see a table with all the call forwarding that you have saved in the Service Monitor for this phone number. For each call forwarding, you can see the destination number and call forwarding type.

If you want to configure a telephone number of the type Anlagen-Anschluss Plus accordingly, edit the configuration at the level of the connection ID.

If you have set up call forwarding for the phone number, you can see the destination number and call forwarding type here. You can also see the current settings for the following parameters:

- **CLIR**
Calling Line Identification Restriction: The phone number of the calling party is not displayed to the callee party.
- **COLR**
Connected Line Identification Restriction: Prevents the caller from displaying the answering party's phone number to the caller. So, with call forwarding, the caller does not see the phone number answering the call.
- **ACR**
Anonymous Call Rejection: Unknown callers are rejected.
- **FCR**
Forwarded Call Rejection: Forwarded calls are rejected.
- **Call Forwarding with 181 Response**
The callee is notified when the call has been transferred.

In addition, you can assign an individual alias that makes it easier for you to identify. The alias is only relevant internally in the Service Monitor and has no effect on provisioning in the network.

Call forwarding that has already been set up is at the top of the table. The blue slider indicates that call forwarding is active.

Have you set up call forwarding to be enabled at a specific time? Then, in the **Type** column, you will also see the date and time of activation.



All other call forwarding can be activated manually using the slider.

If you want to set up a new call forwarding, click **Add destination number** above the table.

+ Add destination number



Destination number *

Alias

Call forwarding type *

- CFU - Call forwarding unconditional
- CFNR - Call forwarding not registered/reachable

Planned activation

From *

14 : 31

Until

HH : MM X

Illustration 36: Phone Number – Add Call Forwarding

Enter the desired destination number and select the call forwarding type. You can choose between CFU and CFNR. **CFU** stands for **call forwarding unconditional**. This means that all calls are forwarded to the appropriate number. **CFNR** stands for **call forwarding not reachable/no reply**: Calls are only forwarded if no connection could be established within a certain period of time.

You have the option to assign an alias. After clicking on **Scheduled Activation**, you can also select a time at which call forwarding should be automatically activated.

By clicking on the green checkmark, you can add call forwarding to the table. **Important:** This means that it is neither active in the network nor stored in the Service Monitor. Only when you click on **Save settings** will you save all the changes you have made.

It is not possible to activate more than one call forwarding for a phone number or number block at the same time. Therefore, you cannot select the same activation time for two different call forwarders. If a new call forwarding is activated, either manually or by reaching the activation time, the old call forwarding is automatically deactivated.

If you want to change an **existing call forwarding**, use the pencil symbol. After clicking, the same input fields as when adding a new call forwarding appear below the selected line. You can also conduct planned activations of an existing call forwarding at this point.

Use the trash can icon if you want to **permanently delete an entry**. Do you just want to disable call forwarding, but keep the entry for later use? Then set the slider to the left to inactive.



3.3.1.2 Barring tab

With the Admin or Write permissions, you can configure the blocking profiles for the phone number or number block in this tab.

The screenshot shows a configuration interface for a phone number. At the top, there are four tabs: 'Call forwarding', 'Barrings' (which is highlighted with a red underline and a red arrow pointing down), 'Technical parameters', and 'Extensions'. Below the tabs, there are three sections for configuring barring profiles:

- Forwarding:** A selection box containing 'Sperrprofil für Anrufweiterleitungen' with an 'x' and a dropdown arrow on the right.
- Terminating:** A selection box containing 'Russlandsperre' with an 'x' and a dropdown arrow on the right.
- Originating:** A selection box containing 'Ausland gesperrt' with an 'x' and a dropdown arrow on the right.

At the bottom of the form, there are two buttons: a red 'Submit' button and a 'Cancel' button.

Illustration 37: Phone Number – Set Barrings

Only one barring profile can be set up for each type Forwarding, Inbound, and Outbound. If you do not want a barring profile to be active, click on the **x** in the right part of the selection box. Confirm your changes by clicking **Submit**.

Important: You can only assign Barring Profiles that have already been created. You can create a new barring profile under the menu item Barring Profiles [_Sperrprofile](#). To do this, you need write permissions at the level of the OneGroup.

3.3.1.3 Technical Parameters tab

For its part, this tab is subdivided. In the **Technical Voice Channels section**, you can see whether there is a limit on how many calls can be made at the same time at the phone number level.

The limit can be configured differently for mutual, incoming, and outgoing calls. If no limitation has been set here, only the setting at the level of the connection ID restricts how many calls can be made in parallel.

By clicking on a barring profile, the profile can be viewed and edited. The prerequisite is write permissions on the higher-level OneGroup. If Barring Profiles have already been configured at the level of the OneGroup or the connection ID, they will have an additional effect.

If set, you will find settings for your PBX order and your IMS Public User Identity.



Call forwarding Barrings Technical parameters Extensions

Alias

Calling line identification restriction (CLIR)

Activation per call (default) ▼

Permanent connected line identification restriction (COLR)

Activation per call (default) ▼

Call forwarding feedback (i) Yes

Anonymous call rejection No

Forwarded call rejection No

IMS public user identity entr4922036058600@entr.fixed.vodafone.de

Technical channels

Restrict channels Yes

Maximum bidirectional

25 ⌵

Of which maximum incoming

25 ⌵

Of which maximum outgoing

25 ⌵

Submit

Cancel

Illustration 38: Telephone number – Technical information

With the Admin or Write permissions, you can edit the technical parameters of your connection ID in this segment. The following parameters can be set:

Table 5: Edit phone numbers

Parameter	Display	Meaning
-----------	---------	---------



Alias	always	Name of the phone number
Number Suppression (CLIR)	IP Anlagen-Anschluss	
Number Suppression (COLR)	IP Anlagen-Anschluss	
Call forwarding feedback	IP Anlagen-Anschluss	
Anonymous Call Rejection (ACR)	IP Anlagen-Anschluss	Prevents your phone number from receiving calls with a suppressed number.
Rejecting Forwarded Calls (FCR)	IP Anlagen-Anschluss	Prevents your phone number from receiving calls where the caller has been transferred.
PBX Order	IP Anlagen-Anschluss. The port ID must be set to Load Balancing HUNTING_PHONENUMBER_BASED. Load balancing can only be set to DESC if at least one other phone number of the same connection ID has the PBX order set to ASC.	

In the case of a block of phone numbers, you will also see the **Technical Voice Channels** section. There you define how many calls can be made on this block of numbers at the same time.

The limitation can be set individually for incoming, outgoing and reciprocal calls. The limit on incoming and outgoing calls must not exceed the number of calls to each other. In addition, it is not possible to choose higher values than the limitation at the level of the Access number.

Confirm your changes by clicking **Submit**.

3.3.1.4 Extensions tab

For a block of numbers, you can use this tab to manage the extensions that are within your block.

For each extension you create, you may see the alias, a call forwarding that has been set up, and the active blocking profiles.

Use the free text search field to filter for a keyword of your choice. You can delete existing extensions by clicking on the trash can icon or add new extensions above the table.

The new extension must not yet be assigned and must be within the number block. However, it may have more digits than the block. Save the changes by clicking on **Save settings**.



Extension	Alias	Call forwarding	Barring
+49 2388 800521	Umleitung Service Nummer	0800123123 CFU - unconditional	Ruslandssperre

Illustration 39: Phone Number – Extensions


By clicking on one of the extensions, you will be taken to the overview page of the extension. There you can also make changes to the configuration. An overview of the features can be found in the next main chapter.

3.3.2 Actions

You can perform different actions for each phone number by clicking on the three dots in the action column of the table.

In the action menu, you will find an overview of actions with direct links for various functions: **call forwarding** and **extensions download**.

Please note that not all promotions are always available. Availability depends on the options booked for your product.

 Call forwarding


 Extensions download

Illustration 40: Phone Number - Action Menu

3.3.2.1 Call forwarding

This action is only available for IP Anlagen-Anschluss. When you click on it, you will be redirected to the **Call Forwarding** tab of the corresponding phone number.

3.3.2.2 Download extensions

This action allows you to download the extensions for a phone number, if you are authorized to do so. When you click on the button, a warning message is displayed. You have the option to cancel or continue. When you click **Next**, a CSV file in UTF-8 format with tab delimiter will be downloaded. This file will be named **Durchwahlen_<Phone Number>_yyyy.mm.dd.csv**, where **<Phone Number>** will be replaced by the appropriate phone number.

3.4 Settings at the extension level

You will not see your set up extensions directly in the service overview, but only on the detail pages of your number blocks.



- Find the phone number block to which the extension you are looking for belongs.
- Navigate to the **Extensions** segment in the detailed information.
- By clicking on the area code, you will be taken to the detailed view of the extension.

On the phone number detail page, you will find three tabs. Each tab provides information about a specific aspect of the current configuration of the phone number.

In the upper segment, you can see the full **extension number**, alias, and parent attributes (OneGroup ID, connection ID, customer number).

With the Admin, Write Permissions or Call Forwarding permissions, you can configure your connection ID individually.

Phone number +49 2388 800168

Connection type:	IP Anlagen-Anschluss	Company:	Vodafone
Access number:	200000036707	Customer number:	995500000001
OneGroup-ID:	000000366202	Location:	85435 Erding, Vinzenzstraße 9

Illustration 41: Detailed information about the extension

3.4.1 Call forwarding tab

In this segment, you configure call forwarding for extension. If you have set up call forwarding for the phone number, you can see the destination number and call forwarding type here.

Call forwarding
Barrings
Technical parameters

+ Add destination number

Destination number	Alias	Typ	
0800123123		CFU	<input type="text" value="edit"/> <input type="text" value="delete"/> <input checked="" type="checkbox"/>

Save configuration

Cancel

Illustration 42: Extension – Call Forwarding Table

You will see a table of all the call forwarding that you have saved in Service Monitor for that extension. For each call forwarding, you can see the destination number and call forwarding type.

In addition, you can assign an individual alias that makes it easier for you to identify. The alias is only relevant internally in the Service Monitor and has no effect on provisioning in the network.



Call forwarding that has already been set up is at the top of the table. The blue slider indicates that call forwarding is active.

Have you set up call forwarding to be enabled at a specific time? Then, in the **Type** column, you will also see the date and time of activation.

All other call forwarding can be activated manually using the slider.

If you want to set up a new call forwarding, click **Add destination number** above the table.

+ Add destination number



Destination number *

Alias

Call forwarding type *

CFU - Call forwarding unconditional

CFNR - Call forwarding not registered/reachable

Planned activation

From *

14 : 34

Until

HH : MM X

Illustration 43: Extension – Add Call Forwarding

Enter the desired destination number and select the call forwarding type. You can choose between CFU and CFNR. **CFU** stands for **call forwarding unconditional**. This means that all calls are forwarded to the appropriate number. **CFNR** stands for **call forwarding not reachable/no reply**: Calls are only forwarded if no connection could be established within a certain period of time.

You have the option to assign an alias. After clicking on **Scheduled Activation**, you can also select a time at which call forwarding should be automatically activated.

By clicking on the green checkmark, you can add call forwarding to the table. Use the slider to activate call forwarding. **Important:** This means that it is neither active nor stored in the Service Monitor. Only by clicking on **Save settings** can you save all changes made and activate the new call forwarding.

It is not technically possible to activate more than one call forwarding for an extension at the same time. Therefore, it is not possible to select the same activation time for two different call forwarding. If a new call forwarding is activated, either manually or by reaching the activation time, the old call forwarding is automatically deactivated.

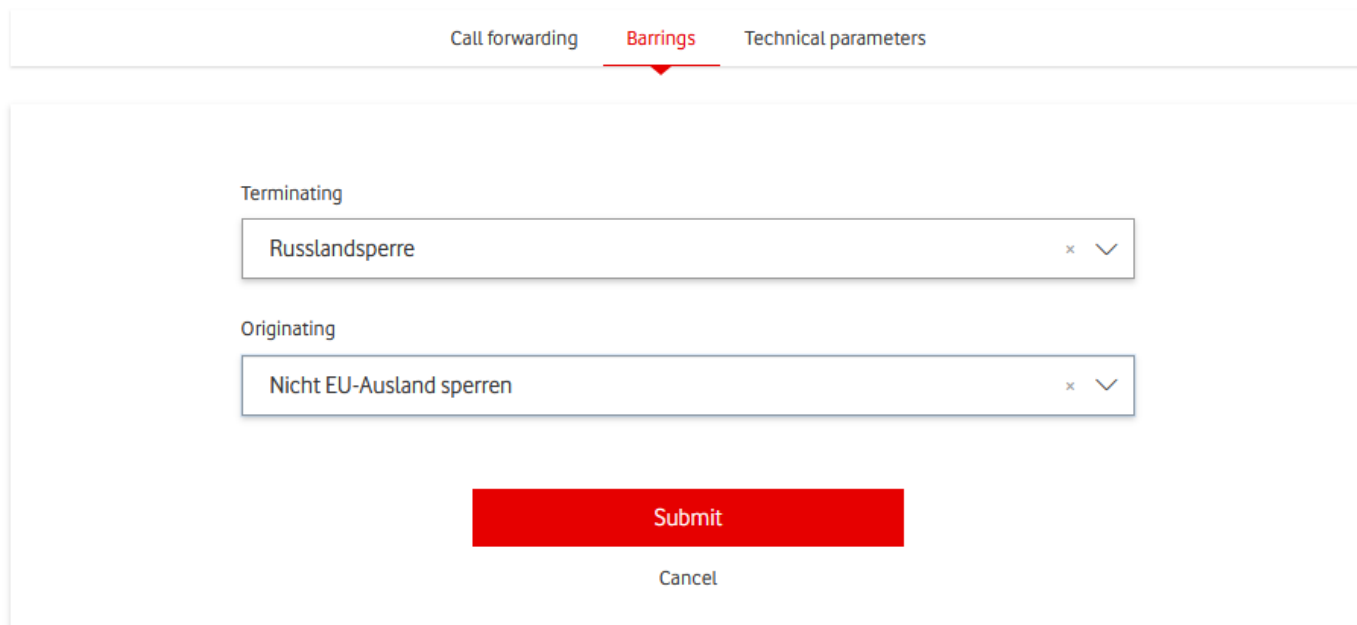
If you want to change an **existing call forwarding**, use the pencil symbol. After clicking, the same input fields as when adding a new call forwarding appear below the selected line. You can also conduct planned activations of an existing call forwarding at this point.



Use the trash can icon if you want to **permanently delete an entry**. Do you just want to disable call forwarding, but keep the entry for later use? Then set the slider to the left to inactive.

3.4.2 *Lock Information tab*

Here you can see which Barring Profiles are set up for your extension. With the Admin or Write permissions, you can configure the blocking profiles for the phone number or number block in this tab.



The screenshot shows the 'Barrings' tab in a configuration interface. At the top, there are three tabs: 'Call forwarding', 'Barrings' (which is active and highlighted in red), and 'Technical parameters'. Below the tabs, there are two sections: 'Terminating' and 'Originating'. Each section has a dropdown menu. The 'Terminating' dropdown shows 'Ruslandsperre' with a close icon (x) and a dropdown arrow (v) on the right. The 'Originating' dropdown shows 'Nicht EU-Ausland sperren' with a close icon (x) and a dropdown arrow (v) on the right. Below these dropdowns, there are two buttons: a red 'Submit' button and a grey 'Cancel' button.

Illustration 44: Extension – Set Lock

Only one barring profile can be set up for each Inbound and Outbound type. Forwarding blocking profiles are not available at the extension level.

If you do not want a barring profile to be active, click on the x in the right part of the selection box. Confirm your changes by clicking **Submit**.

By clicking on a barring profile, you can view and edit the profile. To do this, you need write permissions on the parent OneGroup. If blocking profiles are already configured at the level of the OneGroup, the connection ID or the phone number block, then they have an additional effect.

Good to know: You can only assign Barring Profiles that have already been created. You can create a new barring profile under the menu item Barring Profiles [_Sperrprofile](#). To do this, you need write permissions at the level of the OneGroup.


3.4.3 *Technical Parameters tab*

With the Admin or Write permissions, you can change the alias of the extension in this tab. Enable the **Reject Anonymous Calls (ACR)** option if you want to avoid receiving calls from a suppressed number on your extension. Enable the **Reject Diverted Calls (FCR)** option if you want to avoid receiving calls on your extension where the caller has been transferred.



Call forwarding Barrings **Technical parameters**

Alias

Umleitung Service Nummer 

Anonymous call rejection No

Forwarded call rejection No

Submit

Cancel

Illustration 45: Extension – Edit Technical Parameters

You will also see the current settings for the **Anonymous Call Rejection (ACR)** and **Diverted Call Rejection (FCR)** parameters. Enable ACR if you want to avoid receiving calls with a suppressed number on your phone number. Enable FCR if you do not want your phone number to receive calls that have forwarded the caller.



4. Barring Profiles

If you have access to at least one OneGroup, you will see an overview of all your **barring profiles** under the menu item Barring Profiles.

Profile name	Profile type	Description	Available in OneGroup-ID	Status	Actions
Anrufe Chef verbieten	Terminating	Anrufe Chef verbieten	000000935652	Active	...
Anrufe Exfrau verbieten	Terminating	Anrufe Exfrau verbieten	000000935652	Not assigned	...
Ausland	Terminating	Ausland	000000933602	Active	...
Ausland und Service	Originating	Ausland und Service	000000935652	Not assigned	...
Blacklist1	Originating		000000927802	Not assigned	...

Illustration 46: Barring Profile Table

Shown is a table in which each row represents a barring profile. The colour bar on the left and the **Status** column indicate whether the barring profile is active (green), not active (grey), or unassigned (blue).

You can filter by this status by clicking on the **Status** button and selecting the points you want to see.

Use the free text search field to filter by profile name or OneGroup.

In the table, you can see what type the barring profile is and in which OneGroup it is available.

In the **Actions menu**, you can:

- copy an existing profile to another OneGroup,
- edit or delete a profile, and
- Assign a barring profile to one or more items within the appropriate OneGroup.

You can create a new barring profile by clicking on the **Create new profile** button above the table.

4.1 Creating a New barring Profile

To create a new barring profile, click **Create New Profile** above the barring profile table.



Add barring profile

OneGroup-ID*

Name *

Description

Profile type *

Illustration 47: Add barring Profile

In the window that appears, specify the OneGroup in which you want to use the profile. Give it a name and a description. Select one of the Inbound, Outbound, or Forwarding profile types.

The profile type determines whether the blocking profile applies only to incoming, outgoing, or forwarded calls.

If you select Inbound or Outbound as the type, you will be suggested phone number lanes that you could block. Select which of these you want to block the barring profile by selecting the appropriate checkboxes.



<input type="checkbox"/> National
<input type="checkbox"/> Mobile
<input type="checkbox"/> Service number
<input type="checkbox"/> Televoting (0137)
<input type="checkbox"/> Services (0180)
<input type="checkbox"/> Services (0181-0189)
<input type="checkbox"/> Personal numbers
<input type="checkbox"/> Premium rate services
<input type="checkbox"/> Satellite connection
<input type="checkbox"/> Information services
<input type="checkbox"/> Other service numbers (032)
<input type="checkbox"/> International all
<input type="checkbox"/> International flat 2
<input type="checkbox"/> International flat 3
<input type="checkbox"/> International not covered by flat

Illustration 48: Configuring the barring Profile Individually

Below that, you have the option of blocking additional phone numbers individually by adding them to the blacklist. You can also unblock certain phone numbers by whitelisting them.

To do this, enter phone numbers with area codes. German phone numbers start with **0**, international phone numbers with **+** or **00**.



The wildcard character * allows you to lock or unlock entire blocks.

For forwarding profiles, you cannot use the checkboxes or the whitelist. There is only one blacklist available to you here.

In addition, only one barring profile of type Forwarding can be set up per OneGroup.

Blacklist phone numbers

Add additional phone numbers which should be blocked.

Add phone number to blacklist

Description

Whitelist phone numbers

Add additional phone numbers which should be reachable although they are blocked.

Add phone number to whitelist

Description

Illustration 49: Blacklist und Whitelist

4.2 Copy barring Profile

This feature is only available for inbound and outbound Barring Profiles. If you want to use an existing barring profile in another OneGroup, first copy it to the new OneGroup.

To do this, find the desired profile in the barring profile table and select **Copy** from the Actions menu.

You will now see the same input mask as when creating a new barring profile. However, the difference is that the settings of the profile to be copied have already been adopted and the profile type cannot be changed.



Specify the new OneGroup and adjust the profile configuration if necessary. You set up the profile by clicking **Submit** at the bottom.

You can also use the feature to copy a barring profile within a OneGroup. **Important:** Be sure to give it a new name, as the barring profile names must be unique per OneGroup.

4.3 Editing barring Profile

By clicking on **Edit** in the Actions menu or clicking on a barring profile, you will be taken to the configuration page of the barring profile. There you can make changes.

The view is similar to the page for creating a new barring profile. However, it is not possible to change the profile type or the OneGroup. The other parameters can be freely configured.

As soon as you click **submit**, the changes will be applied. This means that you are active for all elements that are already using the selected barring profile.

4.4 Deleting a barring Profile

You can use the Actions menu in the barring profile overview to permanently delete a barring profile.

A profile can only be deleted if it is no longer applied. Otherwise, you must first remove the barring profile from all elements that have used it so far. To do this, you can use the **Assign** option in the Actions menu.

4.5 Assign barring Profile

If you want to check which elements a particular barring profile is currently being used for, use the **Assign** action in the Actions menu of the barring Profile overview.

In the upper part, you can see the profile name, the OneGroup in which the barring profile can be selected, the status and the profile type Inbound, Outbound or Forwarded.

Below you will find an overview of all OneGroup Access numbers. The checkbox on the right-hand side indicates whether the barring profile is active on this port ID.

Assign barring profile

Profile name:	Anrufe Chef verbieten	Status:	ACTIVE
OneGroup-ID:	000000935652	Type:	TERMINATING

<input type="checkbox"/>	Access Number 200000045051 / SIP-Trunk 200000045051	<input type="checkbox"/>
<input type="checkbox"/>	Access Number 200000045052 / SIP-Trunk 200000045052	<input type="checkbox"/>

Illustration 50: Assign barring Profile



By clicking on an arrow on the left-hand side, you can open an overview of all phone numbers below the connection ID. Accordingly, you can open an overview of all extensions of a block of numbers at the level of the phone numbers.

For each element, you can see if the barring profile is active here. Use the checkboxes if you want to assign the barring profile to a new element or if you want to remove an existing assignment.

By clicking on a checkbox, all subordinate checkboxes are automatically activated or deactivated.

Important to know: Blocking profiles can only be set up at the level of the Access number for the type Anlagen-Anschluss Plus and at the level of the phone numbers only for the type IP Anlagen-Anschluss.

You can use the checkboxes for IP Anlagen-Anschluss Access numbers and for Attachment Connection Plus Numbers to conveniently activate all subordinate checkboxes. But the barring profile itself is then configured exclusively on the element's underneath.



5. Activities

All changes that have been provisioned in the network via the Voice Manager are logged. Changes that affect your connections can be viewed under the menu item **Activities**. Provided you have Call Forwarding, Write Permissions, or Admin permissions on at least one OneGroup.

A table is shown in which each row represents a change order that has been transferred to the network technology.

The colour bar on the left indicates whether the job has been completed successfully (green), failed (red), or is still being processed (blue).

You can filter by this status by clicking on the **Status** button and selecting the points you want to see.

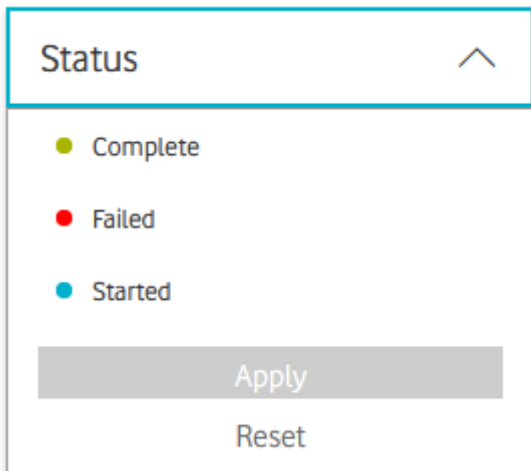


Illustration 51: Filter activities by status

In the table, in the **Element** column, you can see the name and type of the item for which a change has been made.

The **Start** column shows the date and time when the job was placed.

If it is a job that has been set up for a later date, you will see the **Scheduled** note instead. The latter is only possible with call forwarding.

Under **Role**, you can see whether one of your employees (**Customer**) or a Vodafone Supporter (**Vodafone**) has started the job.



VMG Test Voice Manager English

Service Overview Barring Profiles **Activities**

Voice Manager > Activities

Status Search

Activity type	Activity	Element	Role	Start
BARRING_PROFILE	BARRING_PROFILE_CREATE	BARRING_PROFILE Blocking profile for call forwarding	Customer	04/11/2024 02:15 PM
TELEPHONY_FEATURES	TELEPHONY_FEATURES_MODIFY	ONE_GROUP 000000330401	Customer	04/08/2024 02:25 PM
BARRING_PROFILE	BARRING_PROFILE_SET	ONE_GROUP 000000330402	Customer	04/05/2024 11:20 AM
TELEPHONY_FEATURES	TELEPHONY_FEATURES_MODIFY	PHONE_NUMBER +49254173756 00-29	Customer	04/04/2024 04:38 PM
BARRING_PROFILE	BARRING_PROFILE_SET	ONE_GROUP 000000366202	Customer	04/04/2024 04:19 PM

Illustration 52: Activity Table

The Activity **Type** and **Activity** columns indicate what type of change has been made. Here are the following options:

- Type BARRING_PROFILEBARRING_PROFILE_CREATE is used when a new barring profile has been created. BARRING_PROFILE_DELETE is used when a barring profile has been deleted. BARRING_PROFILE_MODIFY is used when a barring profile has been edited. BARRING_PROFILE_REMOVE is used when a barring profile has been disabled. BARRING_PROFILE_SET is used when a barring profile has been enabled.
- Type CALL_FORWARDINGCALL_FORWARDING_SET is used when an active call forwarding has been modified.
- Type TELEPHONY_FEATURESTELEPHONY_FEATURES_MODIFY is used when phone functions have been edited.
- Type INFORMATIONPBX_INFO_MODIFY is used when PBX information has been edited.
- Type EXTENSIONEXTENSION_CREATE is used when a new extension has been created. EXTENSION_DELETE is used when an extension has been deleted. EXTENSION_MODIFY is used when an extension has been edited.

You can also see the detailed information about an activity by clicking on a row in the table. In addition to the information from the table, the job ID that clearly identifies the activity also appears here.



Detail information for activity

Job-ID: vm-747552fc-8ebf-479a-95a3-65071003d82a


General information 		
Status	Activity type	Activity
Failed	BARRING_PROFILE	BARRING_PROFILE_CREATE
Element	Element name	Role
BARRING_PROFILE	Blocking profile for call forwarding	Customer
Start	End	
04/11/24 02:15 PM	04/11/24 02:15 PM	

Illustration 53: Detailed information about the activity



6. Tutorials

The purpose of this chapter is to explain in detail some of the most common use cases of Voice Manager.

6.1 How do I set up call forwarding?

You can use call forwarding to forward incoming calls to another destination number. To do this, there are two different settings that determine in which case calls are forwarded:

- **CFNR** (Call forwarding not reachable): The call will only be forwarded to the destination number if the original number called cannot be reached.
- **CFU** (Call forwarding unconditional): Each call is forwarded without checking the availability.

The Voice Manager helps you set up call forwarding at various levels. This allows you to individually configure whether you want to redirect calls only to a single extension or to your entire OneGroup.

6.1.1 Note the connection type

You can also set up call forwarding at the level of number blocks and connection IDs. However, this depends on the type of connection:

For an IP attachment Access number, you can set up call forwarding at the level of the number blocks, but not at the level of the line identifier.

For an Anlagen-Anschluss Plus connection Plus-Anschlusskennung, you can use the option of call forwarding directly at the level of the connection ID. However, you cannot create individual call forwarding for the number blocks. However, you can still redirect individual extensions.

6.1.2 Call forwarding at various levels

If you set up call forwarding at various levels, e.g. one call forwarding at the line level and one at the number level, the priority is highest at the lowest level.

For example, you can set up call forwarding at the connection level, which should apply generally. At the lower levels of the phone number or extension, you can then specify special call forwarding as an exception.

6.1.3 Individual call forwarding

If you only want to set up a few call forwarding, do so in the **Edit** tab of the respective element. To reach this, you are looking for:

- Your OneGroup in the OneGroup table, click on the row and go to the **Edit** tab
- Your Attachment Connection Plus Connection ID in the Connection ID Table and use **Call Forwarding** in the Actions menu
- Your IP Anlagen-Anschluss number block in the phone number table and use **call forwarding** in the Actions menu
- Click on the number block in which your extension is located in the phone number table, click on the row, select the desired extension in the **Extensions** segment, and switch to the **Edit** tab

In all cases, you will see the **Set-up call forwarding** segment. This allows you to delete the existing call forwarding, edit it, or set up a new call forwarding for this item.

6.1.4 Current and old call forwarding

You can see an existing call forwarding as the top entry of the call forwarding table. The blue slider will tell you that call forwarding is active.

Call forwarding that you have set up before is stored in Voice Manager. They appear in the table below the current call forwarding. The slider is grey, which means that these call forwards are not active.



You can always reactivate an old call forwarding by setting the slider to active and saving the settings.

This automatically deactivates the previously active call forwarding but remains saved.

6.1.5 *Create a new call forwarding*

If you want to set up call forwarding that has not yet been configured, you must first create it. You can do this by clicking on the **Add destination number** button.

To do this, enter a **destination number with area code and a call forwarding type**. The call forwarding type can be CFU or CFNR, at the level of the OneGroup only CFU works.

You can **assign an alias** to each call forwarding so that you can immediately see the purpose of the call forwarding. The alias is not passed on to the outside world by the Service Monitor.

You can also **activate call forwarding at a defined time**. To do this, check the **Scheduled activation** box and set the activation time.

If you decide not to activate a scheduled activation, you will have to activate call forwarding manually. To do this, use the slider in the call forwarding table.

6.1.6 *Set call forwarding in bulk*

If you want to set up many call forwards at once, you can configure call forwarding for all elements of the same line ID together.

Here is how:

- In the line identifier table, locate the line identifier for which you want to configure call forwarding.
- Select **Call forwarding download** from the Actions menu. You download a CSV file with all active call forwarding of all elements within the connection ID.
- Edit the call forwarding for all elements of your connection ID collected in this CSV file.
- Upload the CSV file to Voice Manager. To do this, select **Call forwarding upload** from the Actions menu of the same connection ID. The Voice Manager detects all changes made and adjusts the active call forwarding in the network technology.

6.1.7 *Edit CSV file*

To edit the CSV file, you can use programs such as ModernCSV.

You can also edit the file in Microsoft Excel if you import it correctly. Here is how:

- Open a blank workbook.
- Under **Data** at the top left, select **From Text/CSV**.
- Select the downloaded file.
- Click **Import** and **Transform Data** at the bottom of the window to open the Power Query Editor.
- Select the entire table with Ctrl+A and select Text as the data type.
- In the pop-up, click **Replace Current**, and then click **Close & Load**.

Important when editing:

- Always download an up-to-date version of the CSV file. If you are working on an outdated version, it can happen that you unintentionally overwrite changes made in the meantime.
- You must not change the first line of the CSV file (headings).
- In the first three columns of the CSV file, you will see information about the element itself, in the last three columns you will see information about the active call forwarding that has been set up. You may only make changes in the back three columns.
- If you want to leave the call forwarding of an element unchanged, you must not change the line. If you delete the entries, the Voice Manager interprets this as disabled call forwarding.
- Specify all destination numbers with area code and without spaces.
- As a call forwarding type, you can choose between CFU and CFNR.



6.2 How do I configure Barring Profiles?

Blocking profiles allow you to specify which phone numbers you do not want to use to make phone calls. For example, you can prevent calls from abroad or a premium service from being called from your lines.

Each barring profile has a type: Outbound, Inbound, or Forward. It only works on calls of the same type. This means that if you only have an outgoing block profile enabled, incoming calls will continue to get through.

To use a barring profile, proceed in two steps:

1. Creating a barring Profile
2. Assign the barring profile to an item where you want it to be active

You can skip the first step if a barring profile with the desired configuration has already been created in the OneGroup. Creating Barring Profiles is possible via the barring profile table and is described here.

Important: The barring profile is not yet active after you create it, so your ports will behave as before. However, it is now available for all elements within your OneGroup and you can assign it to the desired elements.

It is not possible to use a barring profile within another OneGroup. However, you can use the [Copy barring Profile](#) function to create a copy of the barring profile within the other OneGroup.

You can only assign **one barring profile per barring profile** type to each element. For example, it is not possible to assign two different outbound blocking profiles to a phone number.

However, you can **assign blocking profiles at various levels**. Each activated blocking profile automatically affects all subordinate elements: If you activate a blocking profile at the level of the OneGroup, it also affects all Access numbers of this OneGroup, all Phone numbers of these Access numbers and all extensions of these Phone numbers.

If custom Barring Profiles of the same type are enabled, the sum of all Barring Profiles will take effect. This means that a phone call is prevented exactly if the phone number is on at least one blacklist or is in at least one of the excluded blocks, but is not entered on a whitelist.

Example:

You create 3 Barring Profiles in your OneGroup:

- **No foreign countries (outgoing)** – a blocking profile of type Outbound with the checkbox **Abroad complete** set
- **No foreign countries (inbound)** – a blocking profile of type Inbound for which the checkbox **Abroad complete** has been set
- **Whitelist Italy** – a blocking profile of type Outgoing, where the checkbox **Abroad Complete** has been activated, but **+39*** is entered on the whitelist

Attached to your OneGroup is a connection ID, AK1. Connection ID AK1 has 2 blocks of numbers, RB1 and RB2. And on the number block RB1 is the extension D1.

To assign the Barring Profiles:

- **No foreign countries (outgoing)** to OneGroup.
- **No foreign countries (inbound)** assign you to RB1.
- **Whitelist Italy** assign D1.

Now you can observe the following behaviour:

- If you are trying to call to Denmark from a number in RB1 or RB2, this is not possible. The **No foreign countries (outgoing)** blocking profile prevents the call from being made on all elements of the OneGroup.
- If a caller from Denmark tries to reach a number in RB1, this will also be prevented. The **No foreign countries (incoming)** blocking profile rejects this call on all numbers in RB1.



- On the other hand, a caller from Denmark who calls a number in RB2 is successful. **No foreign country (outbound)** is not active on this block of numbers and **No foreign country (outgoing)** has the wrong profile type to block incoming calls.
- Try to reach a number in Italy from D1, you will succeed. The **Whitelist Italy** profile at the extension level overrides the foreign block at the OneGroup level.
- However, if you try to reach an Italian number from an extension other than D1, this will not succeed because **whitelist Italy** is not assigned here.
- If a caller from Italy contacts the number D1, no connection will be established. The **No foreign country (inbound)** blocking profile at the phone number level blocks incoming calls from abroad for all extensions below the number block. And **Whitelist Italy** has the wrong profile type to unblock it.

If you want to set Barring Profiles for an element, first check which Barring Profiles are already assigned on the levels above.

6.2.1 *Barring Profiles of type Forwarding*

Of this type, only one barring profile per OneGroup is possible. Therefore, the **Copy** action is omitted. Also, you cannot add phone numbers to the whitelist or block default blocks.

In all other respects, the forwarding Barring Profiles work in the same way as inbound or outbound Barring Profiles.

6.3 *How do I limit how many and which calls can be made at the same time?*

By purchasing your connection IDs, you have access to a certain number of voice channels that you can use at the same time. If you have booked a connection ID with 50 technical voice channels, you can make calls to 50 different phone numbers within this connection ID at the same time. If all of them are in use, call 51 will not be able to establish a connection to one of your phone numbers.

You can ensure that a voice channel is always available for certain actions by limiting the use of voice channels for other use cases. Here are a few examples of when this can be useful:

1. You use your connection ID as a service hotline. Usually, you only expect incoming calls. But you want to make sure that your employees always have the opportunity to call customers themselves. Without limitation, it can happen that all 50 voice channels are blocked by incoming calls and outgoing calls are no longer possible.
Solution: You limit the number of incoming calls for the connection ID to 45. This means that there are always 5 voice channels available for outgoing calls.
2. You have an Access number of type IP Anlagen-Anschluss with 2 blocks of phone numbers for different departments. You do not want one of the two departments to occupy all 50 voice channels and thus block the other department.
Solution: You limit the number of reciprocals calls for both number blocks to 40 each. This ensures that at least 10 voice channels are available for both departments.

6.3.1 *Setting up the limitation for the Anlagen-Anschluss Plus*

The configuration for Anlagen-Anschluss Plus Access numbers is simple: Here you can limit the technical voice channels only at the level of the Access number.

To do this, select the desired line identifier in the line identifier table, go to the **Edit** tab, and enter the maximum values for incoming and outgoing calls.

The maximum value for mutual calls is for your information only and cannot be edited. You cannot set a higher limit for both incoming and outgoing calls than you can for two-way calls.

6.3.2 *Setting up a limitation for the IP Anlagen-Anschluss*

For IP Anlagen-Anschluss Access numbers, you can set limitations on two levels.



It is always possible to set a limit at the level of the number block, as in example two. This limitation ensures that a single block of numbers does not restrict the remaining blocks too much.

Usually, you have a maximum number of voice channels per Access number, which you can never exceed.

If you have a OneGroup with five connection IDs with 50 voice channels each, you cannot make 51 calls in parallel on any connection ID. Not even if the other four access numbers are not fully utilized.

To limit the voice channels on your connection ID:

- Use the port ID table to navigate to the desired detail view.
- In the **Edit** tab, in the **Technical Parameters** segment, you specify the maximum number of voice channels available for incoming and outgoing calls.
- In the non-editable **Maximum Voice Channels** field, you can see how many voice channels are available to you in total. You cannot exceed this value with either incoming or outgoing voice channels.

To limit the voice channels at the level of a number block:

- Use the phone number table to navigate to the detailed view of your phone number block.
- Here you can limit the voice channels in the **Edit** tab in the **Technical Parameters** segment. In addition to the incoming and outgoing voice channels, there are also mutual voice channels.
- It is not possible to set higher values here than at the level of the access number. The Voice Manager will let you know if you are violating this rule.

It is technically possible to set a higher value for incoming or outgoing voice channels than for mutual voice channels. However, it has no practical effects, as the limitation of the reciprocal voice channels would take effect first in this case.



7. List of abbreviations

Table 6: List of abbreviations

2FA	Two factor authentication
AA+	Anlagen-Anschluss Plus (S0)
ACR	Anonymous call restriction
CFNR	Call forwarding no reply
CFU	Call forwarding unconditional
CLIP	Calling line identification presentation
CLEAR	Calling line identification restriction
CNIP	Calling name identification presentation
CNIR	Calling name identification restriction
COLR	Connected line identification restriction
CSV	Comma separated value
FCR	Forwarding call restriction
IMPU	IMS public user identity
IP-ALA	IP Anlagen-Anschluss
PBX	Private branch exchange, TK-Anlage
SIP	Session initiation protocol

