

EVOIPneo active for SIPREC SRC



Administration manual for system providers

3/27/2020

Product line neo, version 6.x

The described functions can be used with the following ASC products:

EVOIPneo

EVOLUTIONneo / XXL / eco

EVOflex (country-specific)

Please note that you can always find the most up-to-date technical documentation and product updates in the partner area on our website at <http://www.asctechnologies.com>.

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2 Introduction

This manual describes the installation and configuration of the recording solution in the application System Configuration.



Basic information about using the application System Configuration can be found in the user manual for administrators *System Configuration - General information*.

The recording solution EVOIP_{neo} active for SIPREC SRC initiated provides the functionality which is necessary for an active IP recording of unencrypted and encrypted conversations in an environment with SIPREC.

A recording session to the recording server is established via SIPREC and the audio data is transferred either in a mixed or alternatively in two separate RTP data streams. Additional data is transferred by means of SIPREC in an added XML document.

Based on the criteria configured in the Recording Planner, the Recording Control service makes a recording decision. The EVOIP_{neo} recording service records the corresponding conversation data and saves them on the recording server.

EVOIP_{neo} active for SIPREC SRC initiated via PBX

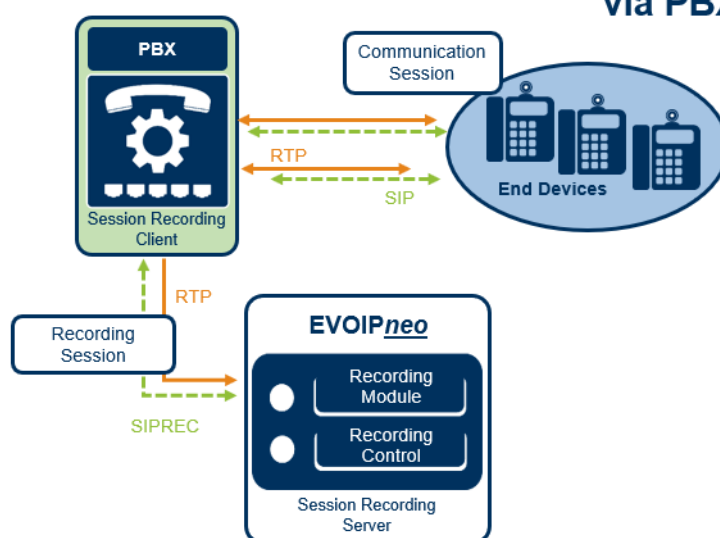


Fig. 1: Overview of the recording solution SIPREC with Session Recording Client

3 System requirements



For basic information about the necessary hardware and software components refer to the installation manual *Installation requirements*.



A list of the codecs supported in this recording solution can be found in the installation manual *Installation requirements*.



A list of the supported PBXs and end devices as well as their supported versions can be found at ASC XCHANGE (<https://www.asc.de/partner>) in the current *neo Integration Overview*.

3.1 Hardware components



For basic information about the necessary hardware components refer to the installation manual *Installation requirements*.



EVOIP_{neo} recording software can be used on the customer's existing hardware. Alternatively, you can use ASC recorders.

3.1.1 Recorder

For the recording solution you can use the following systems:

- EVOLUTION_{neo} eco
- EVOLUTION_{neo}
- EVOLUTION_{neo} XXL



With hybrid systems (VoIP and TDM) the required software for the recording solution has already been installed on the EVOLUTION_{neo} recorder. If more performance is needed, an additional EVOLUTION_{neo} recorder or EVOIP_{neo} server can be added.

3.2 Software components

For the recording, you need the installation medium with the server software *neo* Suite which is installed on the ASC recording server.

3.3 External components



A list of the supported PBXs and end devices as well as their supported versions can be found at ASC XCHANGE (<https://www.asc.de/partner>) in the current *neo Integration Overview*.

3.3.1 PBX

Supported are PBXs end devices which use SIP as signaling protocol.

3.3.2 Supported PBXs and end devices

The following standards are supported:

- RFC 2833/4733 (DTMF) optional
- RFC 3261 (SIP)
- RFC 3550 (RTP)
- RFC 3665 (SIP Basic Call Flow Examples)
- RFC 3711 (SRTP)

- RFC 4566 ([SDP](#) Session Description Protocol)
- RFC 4568 ([SDES](#))
- RFC 6341 ([SIP](#)-Based Media Recording)
- RFC 7245 ([SIP](#)-Based Media Recording)
- RFC 7865 ([SIPREC](#) Recording Metadata)
- RFC 7866 ([SIPREC](#) protocol)

ASC gives no guarantee for the functionality of untested end devices.

3.3.3 Genesys system components (optional)

3.3.3.1 Genesys Framework

When using a CTI~~connect~~ for Genesys T-Server, a Genesys Framework with T-Servers and Genesys Configuration Servers are required.

4 Installation requirements



For basic information about the used default ports refer to the installation manual *Installation requirements* in chapter *Communication matrix*.



If you have configured customer-specific ports, you have to open them in the firewall separately.

4.1 Licenses

ASC

License name	Number
EVOIP ^{neo} Base license - active	1 license per recording server
EVOIP ^{neo} active for SIP	1 license per concurrent recording

Tab. 1: Licenses of ASC

Sparkassen FI ISP (optional)

License name	Number
CTI ^{connect} for Sparkassen FI ISP	1 per recording system

Tab. 2: Licenses for Sparkassen FI ISP optional

OpenScape Contact Center (optional)

License name	Number
CTI ^{connect} for Unify OpenScape Contact Center	1 per recording system
SDK license for OpenScape Contact Center of Unify	1 per monitored business unit Number of the SDK licenses

Tab. 3: Licenses for OpenScape Contact Center optional

Genesys T-Server (optional)

License name	Number
CTI ^{connect} for Genesys T-Server	1 per recording system
Genesys Recording Connector	1 per monitored recording resource
Genesys Universal SDK	1 per recording server

Tab. 4: Licenses for Genesys

4.2 Information

Before you start the installation, make sure that the following information is available:

- IP address of the recording server
- SIP port of the recording server



In this recording solution, the [SIP](#) authentication methods *basic* and *auth* are supported.

The following steps have to be carried out:

1. Install *neo* software
2. Configure PBX
 - Since the configuration is vendor-specific, the steps cannot be described here. The configuration is usually done by the telecommunication technician.
3. Configure System Configuration
 - Create and activate recording architectures
 - The recording servers, recording types, and the integration types are assigned in the Recording Architectures module.
 - Configure servers
 - In the Servers module, the usage of the server is configured.
A server can be used for archiving, import, export, replay, data storage or for audio analysis.
 - Create PBX
 - A PBX configuration can either be created via the PBX module or via the configuration in the Integrations module.
 - Configure integration
 - Configure recording architecture
Connecting integration with the previously created recording architecture
 - Configure CTI connection data
Configuration of CTI connection parameters and of the grammar
 - Global recording settings
Configuration of port and transport protocol for SIP signaling
 - Configure recording servers
Configuration of the parameters of the recording server, e. g. IP address, RTP incoming port and extensions
 - Configure add-on
The add-on is disabled by default.
Optionally, you can configure the following add-ons for this recording solution:
OpenScape Contact Center
Sparkassen FI ISP
Genesys T-Server
 - Configure miscellaneous settings
Optional configuration of participant information in an additional data field

6

Installation



Before installing the *neo* software, ensure that Microsoft Windows has been installed and configured according to our specifications.



For information about the installation and configuration of Microsoft Windows refer to the respective installation manual for system providers *Configuration Windows Server 2012 R2*, *Configuration Windows Server 2016* or *Configuration Windows Server 2019*.



For information about the installation of the *neo* software refer to the installation manual for system providers *Installation of the recording software of ASC*.

6.1

Install OpenScape Contact Center SDK-Runtime (optional)

If you would like to use the software OpenScape Contact Center, you have to additionally install the following components.

Check which version of the OpenScape Contact Center is used, e. g. V8 R2 GP03.

Then install the *basic setup* for the release and subsequently the appropriate *general patch*, in the example GP03.

6.1.1

Basic setup

1. From the installation path, extract the ZIP file which corresponds to the version of your server, e. g. `\ASC\ASC Product Suite\thirdparty\OSCCRuntimeSDK\ SDK_Runtime_V8R2.zip`.
2. Execute the installation file `setup.exe` and follow the instructions of the installation wizard.

6.1.2

General patch

Start the Windows Installer Patch `OSCC80R2G03SDKRuntime.msp` under `\ASC\ASC Product Suite\thirdparty\OSCCRuntimeSDK\`.

6.2

Install certificate for TLS encryption

For encrypted transfer between the recording server and the [SIP](#) trunk, both components must be able to match and confirm the certificate of the other participant. Therefore, both certificates must be available on both components.

To be able to establish an encrypted connection, proceed as follows:

- [chapter "Import certificate to recording server"](#), p. 11
- [chapter "Import certificate to SIP client"](#), p. 14

6.2.1

Import certificate to recording server

To enable the recording server to confirm the certificate of the [SIP](#) client, the certificate must be available on the recording server.

There are 2 possibilities to import [TLS](#) certificates:

- *Installing a customer-specific certificate*, see [chapter "Import customer-specific certificate to the recording server"](#), p. 12
- *Installing PBX certificate already existing on the SIP client*, see [chapter "Import PBX certificate to recording server"](#), p. 13

6.2.1.1 Import customer-specific certificate to the recording server

If you would like to use a customer-specific certificate, you can import it to the keystore of the recording server by means of the program *certimporter.exe*.

1. To import the [TLS](#) certificate to the recording server, change to the recording server.
2. Open the tool Certificate Import Tool in the folder
C:\Program Files (x86)\ASC\ASC Product Suite\scripts.
 ⇒ The window Certificate Import Tool appears.

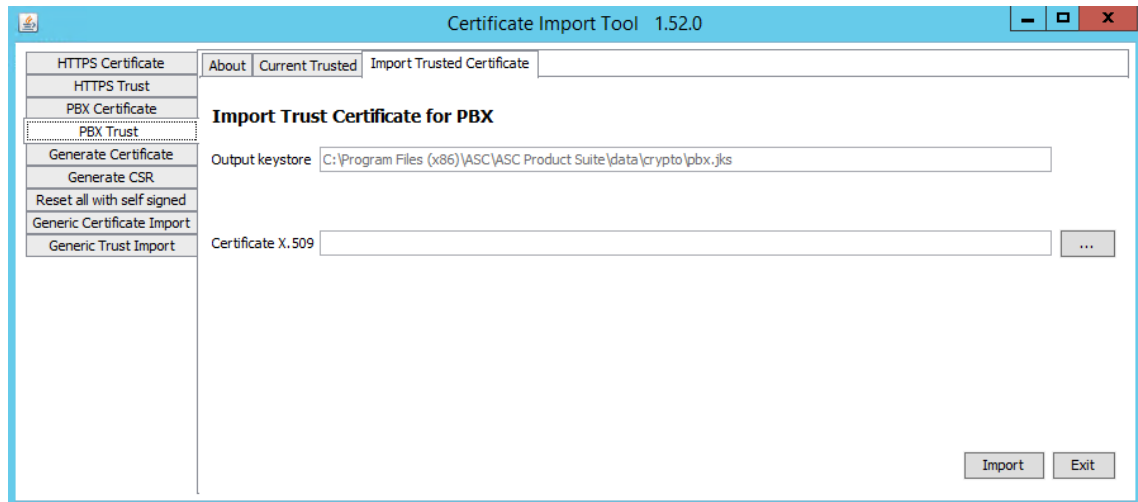



Fig. 2: Selection of the certificate

3. Select the menu item *PBX Trust* in the navigation bar.
 This function enables you to fill the keystore with the customer-specific certificate.
4. Select the tab *Import Trusted Certificate*.
5. Click on the button  next to the field *Certificate X.509* to select the certificate file.

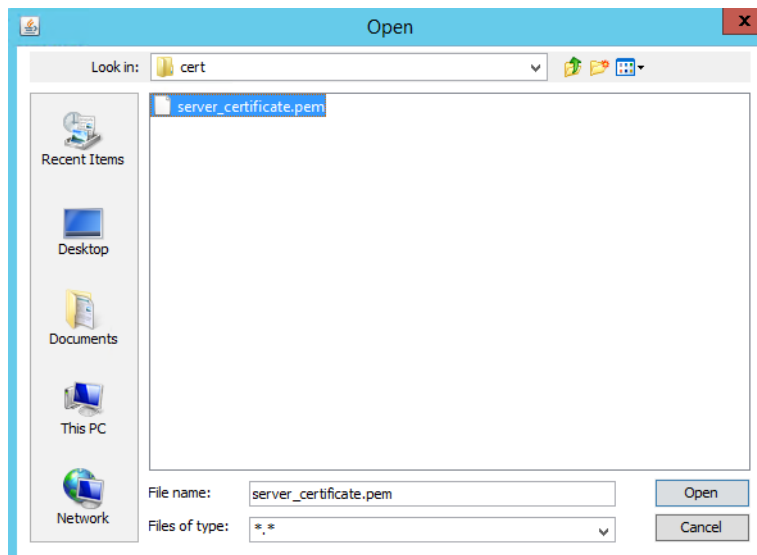


Fig. 3: Import certificate

6. Select the certificate file *server_certificate.pem* that you have copied from the [SIP](#) client.
7. Click on the button *Open*.
 ⇒ The window to enter the alias appears.

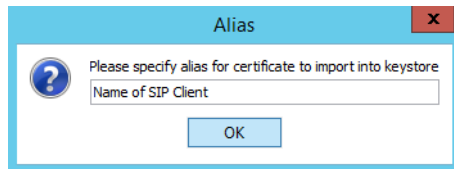


Fig. 4: Confirm alias

8. Enter the name of the [SIP](#) client.
9. Click on the button *OK* to confirm the alias.
 - ⇒ A message will inform you about the successful import.

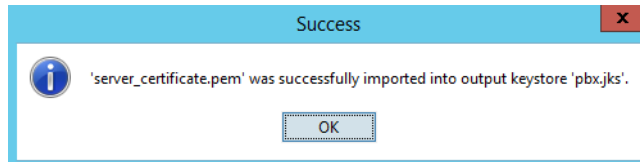


Fig. 5: Message - Successful import

10. Click on the button *OK* to confirm the success message.
11. Click on the button *Exit* to close the program Certificate Import Tool.

6.2.1.2 Import PBX certificate to recording server

By means of this function you overwrite the delivered certificate on the recording server with the certificate of the [SIP](#) client or of the [PBX](#).

1. Copy the certificate of the [SIP](#) client or of the [PBX](#) to the recording server.
2. Open the tool *Certificate Import Tool* in the folder *C:\Program Files (x86)\ASC\ASC Product Suite\scripts*.
 - ⇒ The window *Certificate Import Tool* appears.

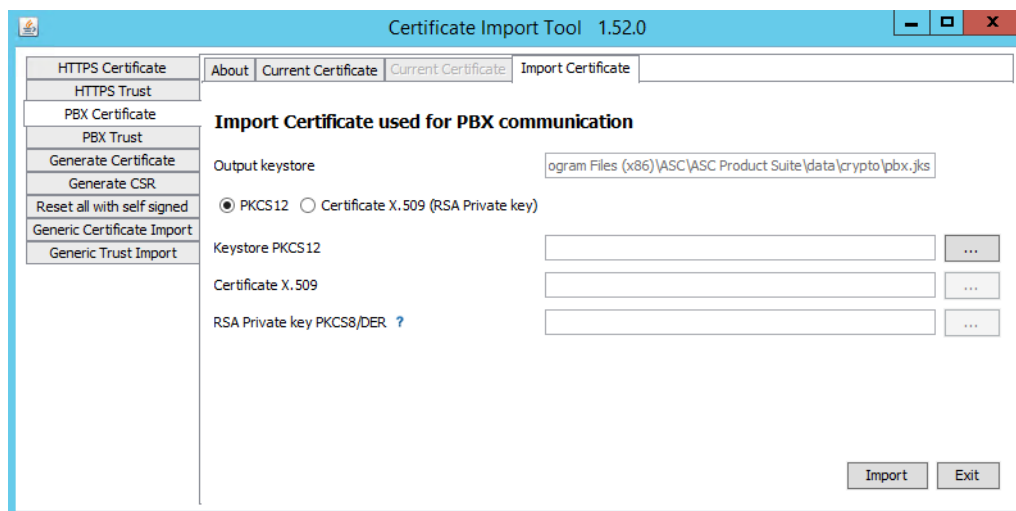



Fig. 6: Selection of the certificate

3. Select the menu item *PBX Certificate* in the navigation bar.
By means of this function you overwrite the delivered certificate on the recording server.
4. Select the tab *Import Certificate*.
5. Select the format of the certificate.
6. Click on the button  next to the respective entry field to select the certificate file.
7. Select the respective certificate file that you have copied from the [SIP](#) client.
8. Click on the button *Open*.

- ⇒ The window to enter the alias appears.
- 9. Enter the alias of the **SIP** client.
- 10. Click on the button **OK** to confirm the alias.
 - ⇒ A message will inform you about the successful import.
- 11. Click on the button **OK** to confirm the success message.
- 12. Click on the button **Exit** to close the program *Certificate Import Tool*.

6.2.2 Import certificate to SIP client

To enable the **SIP** client to confirm the certificate of the recording server, the certificate of the recording server must be available in the certificate management of the **SIP** client.

6.2.2.1 Export TLS certificate from recording server

1. To export the certificate from the recording server, change to the recording server.
2. Open the Certificate Import Tool *certimporter.exe* in the folder *C:\Program Files (x86)\ASC\ASC Product Suite\scripts*.
 - ⇒ The following window appears:

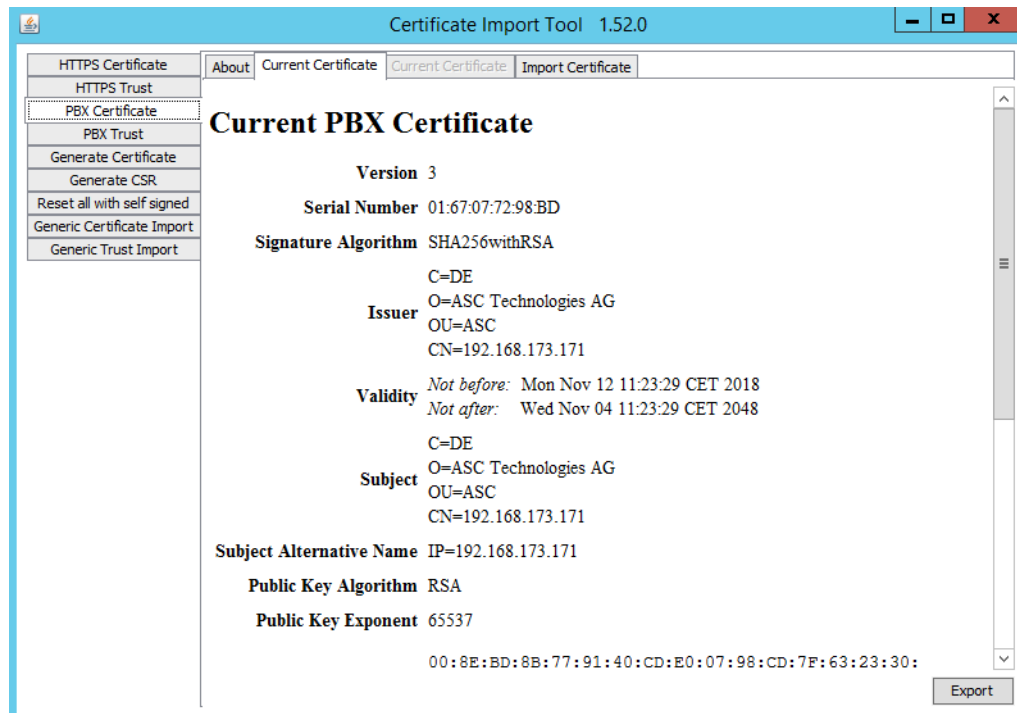
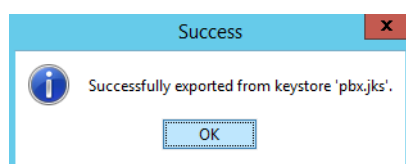


Fig. 7: Export PBX certificate from recording server

3. Select the menu item *PBX Certificate* in the navigation bar.
4. Click on the tab *Current Certificate*.
5. Click on the button **Export** to export the current certificate.
6. Select an appropriate storage location for the certificate.
7. Click on the button **Save**.
 - ⇒ A success message appears.



8. Upon confirmation, you can import the certificate to the [SIP](#) client.

6.2.2.2 Import TLS certificate to SIP client

To be able to establish an encrypted connection to the recording server, you must import the certificate of the recording server to the trust store in the certificate management of the [SIP](#) client.

7 Configuration

7.1 System Configuration



Basic information about using the application System Configuration can be found in the user manual for administrators *System Configuration - General information*.

7.1.1 Start application

During the installation routine, shortcuts for the *neo* programs are created on your desktop.

1. To start the application directly on the server, double-click on the shortcut System Configuration.

To access the application from a computer via the web, enter the following URL in the address bar:

https://<System-IP>/SystemConfiguration.

If you have configured customer-specific ports, you have to include the port in the URL:

https://<System-IP>:<Port>/SystemConfiguration.

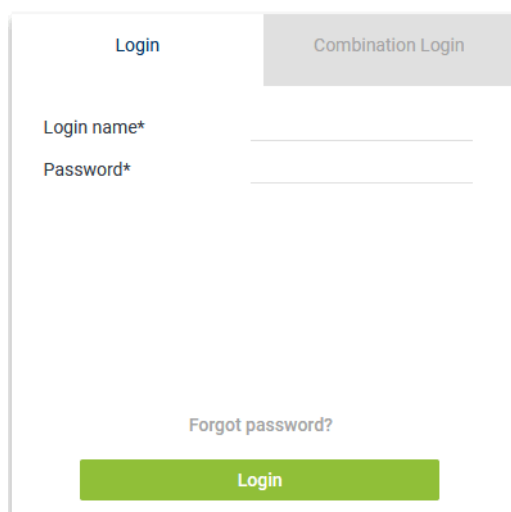


Fig. 8: System Configuration - web interface

To install and configure the recording solutions, you have to log in as system provider.

Login data for the administrator of the system provider:

User name:	<i>system-admin</i>
<i>neo</i> version < 6.3	
Default password:	<i>1</i>
	If the default password <i>1</i> has never been changed before a software update to a <i>neo</i> version ≥ 6.3 , the password must be changed upon the next login or by entering it again. If the default password has already been changed before a software update to a <i>neo</i> version ≥ 6.3 , the changed password remains.
<i>neo</i> version ≥ 6.3	
Default password:	<i>A\$c123</i>

Tab. 5: Login data - system provider

2. Log in to the web interface.
⇒ The main window System Configuration appears.

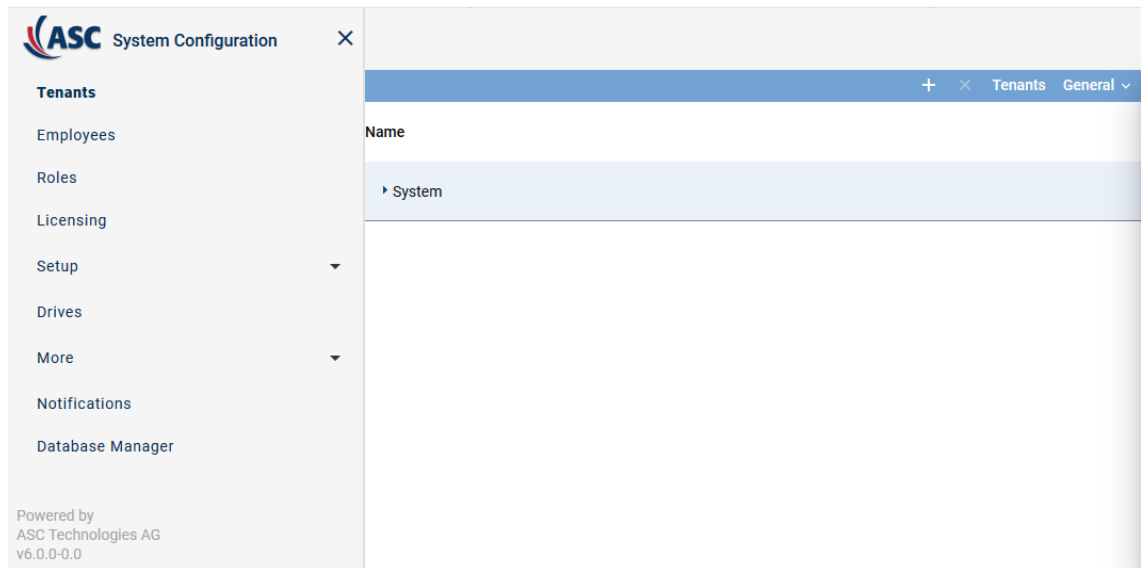


Fig. 9: System Configuration - main view:

7.1.2 Configure recording solution

Supported recording architectures

In this recording solution, the following recording architecture types are supported:

- All-in-one Basic Recording
- All-in-one Failover
- All-in-one Parallel Recording
- Multi-Server Recording
- Multi-Server Failover
- Multi-Server Parallel Recording

7.1.2.1 Configure recording solution All-in-one Basic

7.1.2.1.1 Create recording architecture

Start the configuration in the Recording Architectures module because an activated recording architecture is required for further configuration.

The recording servers, recording types, and the integration types are assigned in the Recording Architectures module.

1. Select the menu item *Setup > Recording Architectures* in the navigation bar.
 - ⇒ The following window appears:

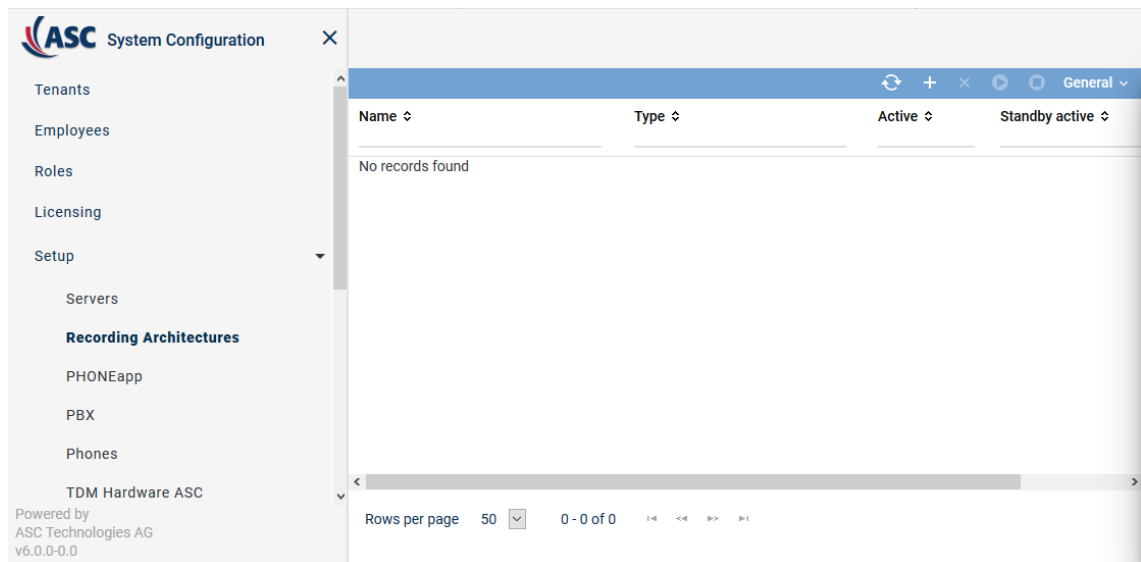




Fig. 10: Recording architectures - main view

Name	Name of the recording architecture
Type	Type of the recording architecture
Active	Shows whether the recording architecture has been activated and is ready to be used for the recording. <div> ✓ = Recording architecture is active and ready to be used for recording. It can be deactivated by clicking on the icon  (<i>Deactivate</i>) in the toolbar. ✗ = Recording architecture is not active. It can be activated by clicking on the icon  (<i>Activate</i>) in the toolbar. </div>
Standby Active	Shows whether the standby server is active for one or several recording components in the recording architecture. <div> ✓ = At least 1 standby server is active. ✗ = No standby server is active or no standby server has been defined. </div>
Creation Date	Date on which the recording architecture was installed.
Updated	Date on which the settings of the recording architecture were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Recording Architectures module

The toolbar offers the following functions.

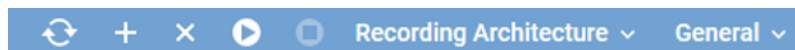







Fig. 11: Toolbar Recording Architectures module

	Refresh	Refreshes the main view.
	Create	Creates a new recording architecture.
	Delete	Deletes the selected recording architecture. The recording architecture is removed from the list of the main view. NOTICE! You can only delete recording architectures which are inactive and have not been assigned to an integration or server for the import.

	<i>Activate</i>	Activates the selected recording architecture.
	<i>Deactivate</i>	Deactivates the selected recording architecture. NOTICE! You can only deactivate recording architectures which have neither been assigned to an active integration nor to an active import.
<i>Recording Architecture</i>	<i>Standby Management</i>	The menu item is only available for recording architectures with failover possibilities. By clicking on the menu item Standby Management, you can open a window in which you can manually define the active server in architectures with failover concepts.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
	<i>Reset Search</i>	Resets all manually entered search criteria.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.




For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create recording architecture All-in-one Basic

If the entire *neo* software has been installed on one server, you must create a recording architecture of the type *All-in-one Basic Recording*.



Depending on the selected recording architecture type, the following configuration steps vary. The following configuration steps are exemplary for the recording architecture *All-in-one Basic Recording*.

- To create a new recording architecture, click on the icon  (*Create*) in the toolbar of the main view.
⇒ The window *New Recording Architecture* appears.

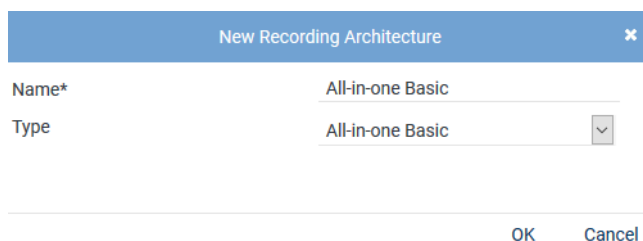
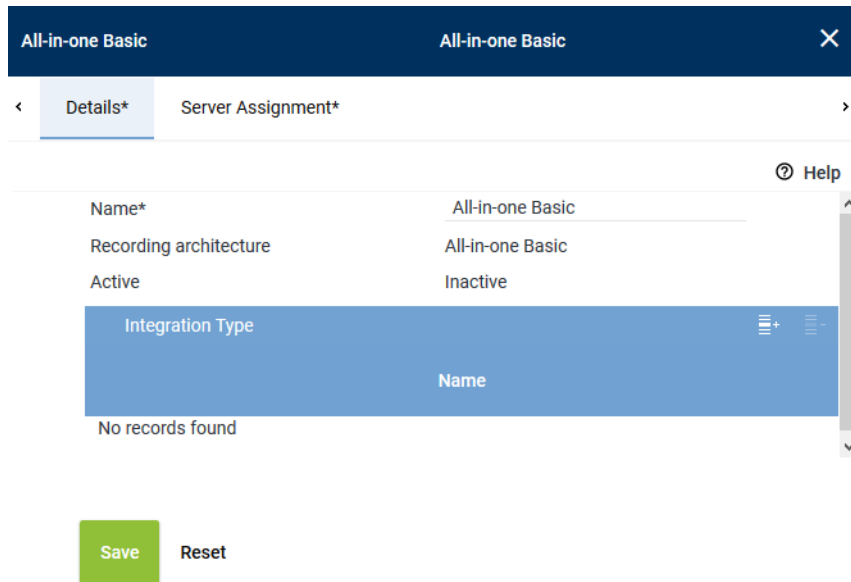


Fig. 12: Create recording architecture - All-in-one Basic Recording

2. In the entry field *Name*, enter a descriptive name for the recording architecture.
3. From the drop-down list *Type*, select the recording architecture type *All-in-one Basic Recording*.
NOTICE! The drop-down list only displays the supported recording architecture types.
4. Click on the button *OK*.
 ⇒ Your entries now appear in the detail view.




The screenshot shows a configuration window titled 'All-in-one Basic'. It has two tabs: 'Details*' (selected) and 'Server Assignment*'. The 'Details*' tab contains the following fields:

- Name***: All-in-one Basic
- Recording architecture**: All-in-one Basic
- Active**: Inactive

Below these fields is a table titled 'Integration Type' with a 'Name' column. The table is currently empty, showing 'No records found'. At the bottom of the window are two buttons: 'Save' (green) and 'Reset'.

Fig. 13: Recording architecture - tab Details

Add integration type

1. Click on the icon  (Add) in the toolbar of the list *Integration Type*.
 ⇒ The window *Integration Type* appears.

Integrationstyp

Name

SIP active

Hinzufügen
Abbrechen

Fig. 14: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.



Any number of integration types can be assigned to a recording architecture.

- Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Assign server for All-in-one Basic

- Click on the tab *Server Assignment* to assign a recording server to the recording architecture.

All-in-one Basic
All-in-one Basic

Details*
Server Assignment*

Server*
REC-01
+
-

Used in activated architecture
No

Recording type
☐ VoIP/Video
☐ TDM
☐ Screen
☐ Chat

Save
Reset

Fig. 15: Recording Architecture - tab Server Assignment

2. Click on the button **+** behind the entry field *Server*.
⇒ The window *Servers* appears.

Servers		
Name ↕	IP Address ↕	Path ↕
REC-01	192.168.173.171	C:\

Rows per page 20 ▾ 1 - 8 of 8 < << >> >

Add Cancel

Fig. 16: Recording Architecture - assign server

3. Select the entry of the corresponding server.



A server can be configured in several recording architectures, but you cannot activate several recording architectures with the same server at the same time.
If you would like to activate several recording architectures at the same time, you have to use different servers to do so.

4. Click on the button *Add*.
⇒ The name of the server now appears in the detail view.
5. Activate the check box in front of the recording types for which you would like to use this server.

Recording type

☒ VoIP/Video

☐ TDM

☐ Screen

☐ Chat


Save Reset

Fig. 17: Recording Architecture - activate recording type



You can activate several recording types if the integration has been designed for this and if you have installed the respective licenses.

Activate recording architecture

1. Click on the button *Save*.
2. Select the recording architecture in the main view so that the icon  (*Activate*) in the tool-bar becomes active.

- To activate the recording architecture, click on the icon  (Activate).
⇒ In the column *Active*, the icon  (Active) appears.





Recording Architecture			
Name ▾	Type ▾	Active	Standby active ▾
All-in-one Basic	All-in-one Basic		

Fig. 18: Recording architecture - activate recording architecture

- To deactivate the recording architecture, if required, click on the icon  (Deactivate).
⇒ In the column *Active*, the icon  (Inactive) appears.



The recording architecture must have been activated so that the integration can be configured.



For updates, the recording architecture is stopped and deactivated. Once the update has been completed, check that the recording architecture has been activated again.



If you install an extension for the integration subsequently, you must deactivate the recording architecture and activate it again after having installed the license.

7.1.2.1.2 Configure servers

Every server in your network that the *neo* software has been installed on is automatically identified as a server of the recording system and displayed in the main view of the Servers module. In the Servers module, you can configure the usage of the servers in your recording system.

- Select the menu item *Setup > Servers* in the navigation bar.
⇒ The following window appears:

ASC

System Configuration

Tenants

Employees

Roles

Licensing

Setup

Servers

Recording Architectures

PHONEapp

PBX

Phones

TDM Hardware ASC

Powered by
ASC Technologies AG
v6.0.0-0.0

Fig. 19: Servers - main view

Depending on the configuration of the columns, the following information is displayed in the main view:

<i>Name</i>	Shows the name of the server.
<i>IP Address</i>	Shows the IP address of the server.
<i>Path</i>	Shows the path of the server.

<i>Creation Date</i>	Date on which the server was installed.
<i>Updated</i>	Date on which the settings of the server were updated for the last time.



NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Servers module

The toolbar offers the following functions.



Fig. 20: Toolbar Servers module

	<i>Refresh</i>	Refreshes the main view.
	<i>Delete</i>	Deletes the selected server configuration. This function is meant to delete the server configuration if the hardware of a server has been removed and there is no connection to the <i>neo</i> system.
<i>Servers</i>	<i>Administrate Server Locations</i>	Opens a window in which you can create and administrate locations of the servers, see chapter "Administrate server locations", p. 24 .
	<i>Administrate NTP Server</i>	Opens a window in which you can administrate the servers for the time synchronization, see chapter "Administrate NTP server", p. 41 .
	<i>Manage Synchronization Configurations</i>	Opens a window in which you can manage the synchronization configurations.
<i>General</i>	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
	<i>Reset Search</i>	Resets all search filters so that all sets of data are displayed in the main view again.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Administrate server locations

You can create and manage a list of server locations. In the tab *Details*, you can assign locations to the servers.

Add server locations

- Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.

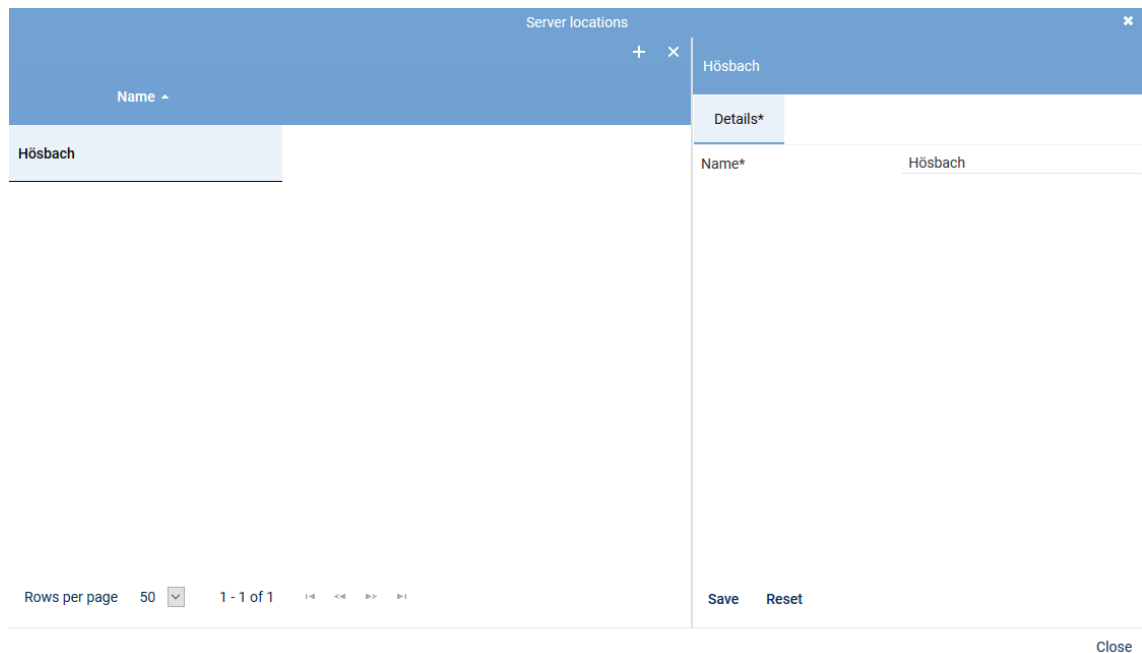



Fig. 21: Add server locations

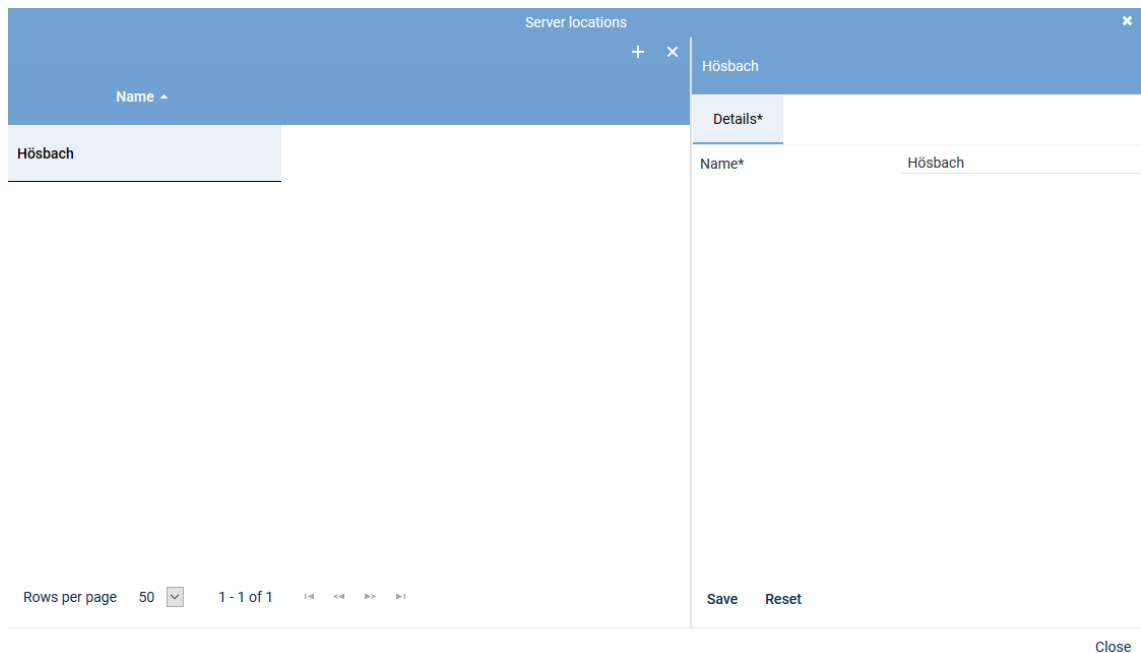
- Click on the icon  (*Create*) in the toolbar of the window *Server Locations*.
- Enter the name of the location on the right side in the tab *Details*.
- To save the entry, click on the button *Save*.
To discard the entry, click on the button *Reset*.
- To add further locations, repeat the last 3 steps.
- To close the window, click on the button *Close*.

Delete server location




A server location can only be deleted when it has not been assigned. To be able to delete a server location, you must first delete possible assignments.

- Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.
- Select the location you would like to delete.



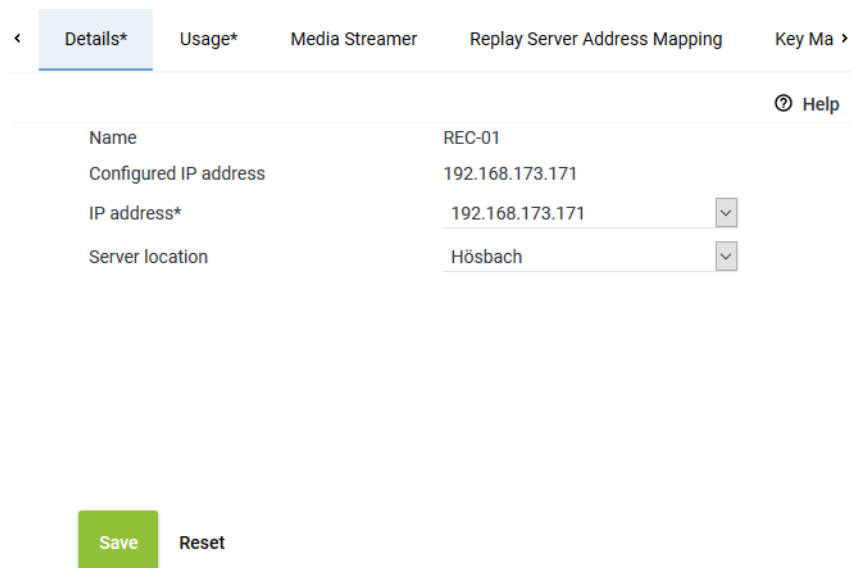
The screenshot shows a window titled "Server locations" with a close button (x) in the top right. Below the title bar is a table with one row containing the text "Hösbach". To the right of the table is a tab labeled "Details*". Below the tab is a form with a label "Name*" and a text input field containing "Hösbach". At the bottom left of the window, there is a "Rows per page" dropdown set to "50" and a "1 - 1 of 1" indicator. At the bottom right, there are "Save" and "Reset" buttons. A "Close" button is located at the bottom right of the window frame.

Fig. 22: Delete server location



3. Click on the icon  (*Delete*) in the toolbar of the window.
4. To delete further locations, repeat the last 2 steps.
5. To close the window, click on the button *Close*.

Tab Details

1. To configure the server, select the entry of the corresponding server in the main view.
 - ⇒ In the detail view, the tab *Details* appears.
 - The information *Name* and *Configured IP address* has already been entered during the installation and is displayed for your information only.



The screenshot shows a window titled "Servers - tab Details" with a close button (x) in the top right. Below the title bar is a tab labeled "Details*" which is active. To the right of the tab are other tabs: "Usage*", "Media Streamer", "Replay Server Address Mapping", and "Key Ma". Below the tabs is a form with the following fields:

Name	REC-01
Configured IP address	192.168.173.171
IP address*	192.168.173.171 
Server location	Hösbach 

At the bottom left of the window, there is a green "Save" button and a "Reset" button. A "Help" icon is located at the bottom right of the window frame.

Fig. 23: Servers - tab Details

2. From the drop-down list, select the IP address which is supposed to be used as default address of the server in the system.
3. Select the *Server location* in the drop-down list. The drop-down list displays all locations which have been created in the location management.

- Click on the button **Save** if the entries are correct.

Tab Usage

- Click on the tab **Usage** to configure the purpose of usage.



Since a server can be used for several recording solutions, all purposes of use are listed. Note that some purposes of use do not apply for some recording solutions. As an example: You cannot use audio analysis or replay via phone in a chat recording.

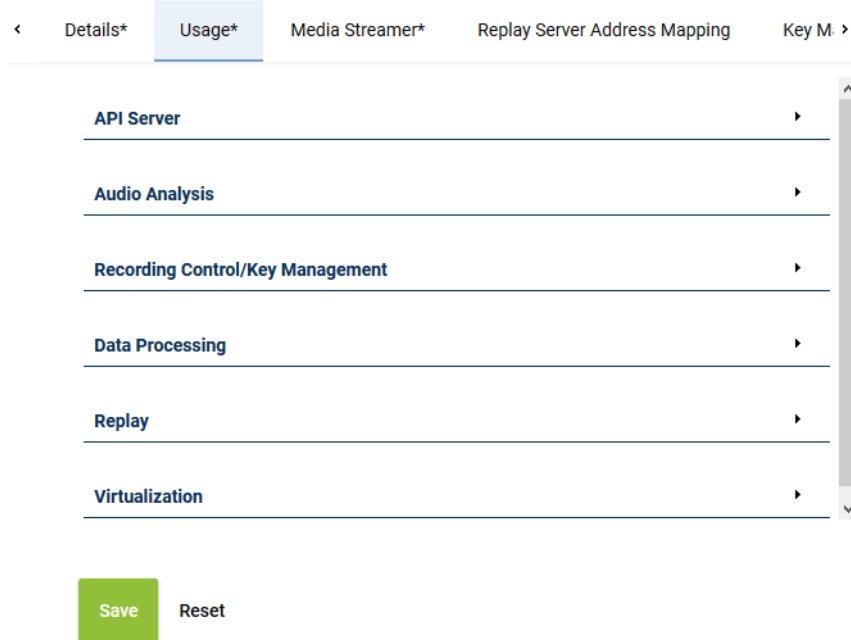


Fig. 24: Servers - tab Usage

Group field API Server

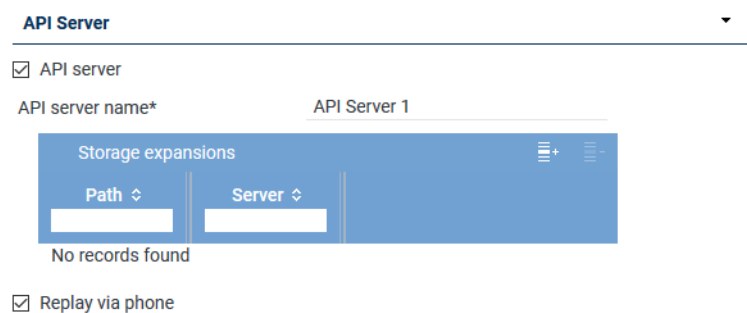




Fig. 25: Group field API Server


The API server is a service in the neo software. It contains the interface for the client applications. Once the service has been started, the client applications can communicate with the neo system via this interface by means of defined commands.

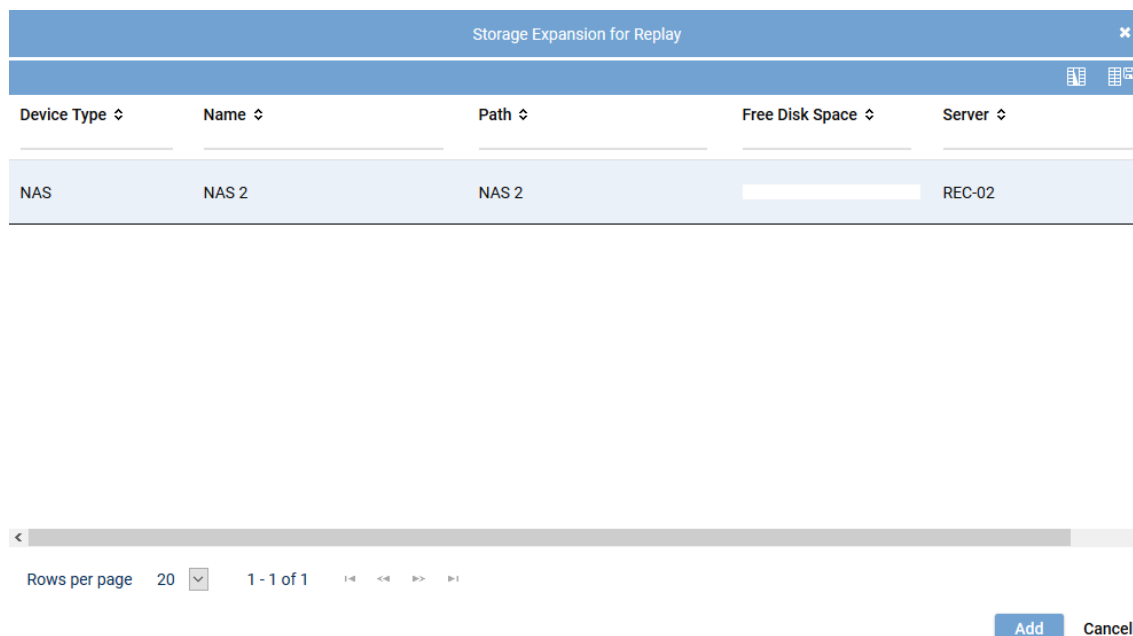
The API server is responsible for replay via the web browser, too. The API server has to be started before the replay server can be activated and the API server assigned for replay via the web applications.

Parameter	Value/Description
API server	Tick the check box to start the API server. <input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>API server</i> .

Parameter	Value/Description
	<p><input type="checkbox"/> = Function has not been activated.</p> <p>In order to be able to reach the API server from a public network and with configured port forwarding, too, you have to adjust the settings in the tab <i>Replay Server Address Mapping</i>, see chapter "Tab Replay Server Address Mapping", p. 37.</p>
<i>API server name</i>	<p>Enter the name which is supposed to denote the server in the system. The displayed name can be selected arbitrarily and is a kind of pseudonym.</p> <p>The displayed name is meant to make it easier for users to select a server as different API servers may be used across the system by different tenants. When selecting the API server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p>
<i>List Storage expansions</i>	<p>Here, you can add storage expansions for replay. If a recording which is supposed to be replayed cannot be found on the server, the search is continued on the storage expansions which have been entered here. That way, even recordings can be replayed which have not been transferred to the server.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the storage expansions, see chapter "Add storage expansion for replay", p. 29. By clicking on the icon  (<i>Remove</i>), you can remove the storage expansions from the list. <p>If you use several recording servers in your system for which storage expansions have been configured, you can add any storage expansion of any recording server on every API server of the system.</p>
<i>Replay via phone</i>	<p>Activate this function if you would like to use the functions <i>Replay via phone</i> or <i>Last Call Repeat</i>.</p> <p><input checked="" type="checkbox"/> = Function has been activated.</p> <p><input type="checkbox"/> = Function has not been activated.</p> <p>NOTICE! The function <i>Replay via phone</i> has been implemented in the following <i>neo</i> components:</p> <ul style="list-style-type: none"> Application POWER<i>play</i> Pro Application POWER<i>play</i> Instant Replay module <p>In order to enable a client to use the functionality <i>Replay via phone</i>, you have to assign this client an identifier either in the Employees module or in the Phones module which allows the system to clearly identify the phone.</p> <p>NOTICE! In the tab <i>Media Streamer</i>, you have to assign this function to a PBX, see chapter "Tab Media Streamer", p. 36. To be able to do so, at least 1 PBX must have been configured in the system.</p>

Add storage expansion for replay

1. Click on the icon  (Add) in the toolbar of the list.
2. Select 1 or several storage expansions.
If you would like to select several storage expansions or revoke a selection, click on the respective line while holding the [Ctrl] key down.



Device Type	Name	Path	Free Disk Space	Server
NAS	NAS 2	NAS 2	<div></div>	REC-02

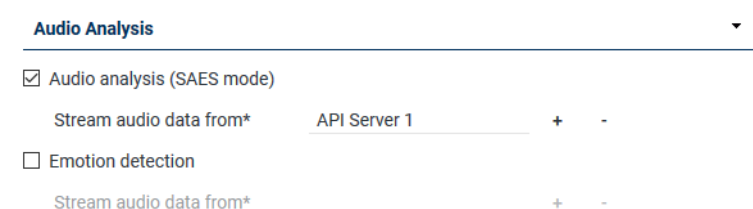
Rows per page 20 1 - 1 of 1

Add Cancel

Fig. 26: Select storage expansion

3. To apply the selected storage expansions, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Audio Analysis



Audio Analysis


☒ Audio analysis (SAES mode)

Stream audio data from* API Server 1 + -

☐ Emotion detection

Stream audio data from* + -

Fig. 27: Group field Audio Analysis

Parameters	Value/Description
<i>Audio analysis</i>	<p>Activate this check box to use the server for audio analysis. The audio data is then streamed for audio analysis from the configured server to this server.</p> <ul style="list-style-type: none"> Stream audio data from From the list of available servers, select the server from which the audio data is supposed to be streamed for audio analysis via the button .
<i>Emotion detection</i>	<p>Activate this check box to activate emotion detection for the audio analysis.</p> <p><input checked="" type="checkbox"/> = Function has been activated. Tenants can use the emotion detection function.</p>

Parameters	Value/Description
	<input type="checkbox"/> = Function has not been activated.

Tab. 6: Configure audio analysis

Group field Recording Control/Key Management

Recording Control/Key Management ▼

☒ Recording control/Monitoring

Recording architecture Please choose... ▼

☒ neo key management

Fig. 28: Group field Recording Control/Key Management

Parameters	Value/Description
<i>Recording control/Monitoring</i>	<p>Activate the check box if you would like to use <i>CLIENT^{command}</i> or an API recording control or if you would like to use <i>Monitoring</i>. This feature is only available if a recording architecture has been configured and activated.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the respective recording architecture you would like to use for the control.
- <i>neo key management</i>	<p>The function allows customer-specific encryption of the recordings. To be able to configure the key management, you have to activate the check box <i>Key management</i>.</p> <p>This function can only be activated if the license <i>ASC_KEY_MANAGEMENT</i> is available.</p> <p>For further information about the configuration of the key management refer to the administration manual <i>Configuration of servers and recording architectures</i> and to the installation manual <i>Installation Dongle Manager</i>.</p>

Tab. 7: Configure Recording Control/Key Management

Group field Data Processing

Data Processing ▼

☒ Data storage

☒ Transfer data for replay

Target Server

Name	IP Address ↕
No records found	

☒ Transfer data for data storage

Target Server

Name	IP Address ↕
No records found	

Activate period of time ☒

from 11:59:36

to 11:59:36

Receives data from

Name	Only Replay
No records found	



☒ Archiving





☒ Export

☒ Import

Recording architecture Please choose... ▼


Fig. 29: Group field Data Processing

Parameter	Value/Description
<i>Data storage</i>	Activate the check box to allow the modification of the additional functions of data processing.
<i>Transfer data for replay</i>	<p>Activate the check box if you would like to transfer data only for replay to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for replay. The data is not stored on the target server but deposited in a cache temporarily in order to be replayed.</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the target server, see chapter "Add target server to a list", p. 32. By clicking on the icon  (<i>Remove</i>), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which an API server and a replay server have been configured.</p>
<i>Transfer data for data storage</i>	<p>Activate the check box if you would like to transfer data for storage to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for data storage purposes. In the drop-down list, all servers are displayed on which the function <i>Data Storage</i> has been activated. The data is copied to the target server and stored there.</p>

Parameter	Value/Description
	<ul style="list-style-type: none"> By clicking on the icon  (Add), you can add the target server, see chapter "Add target server to a list", p. 32. By clicking on the icon  (Remove), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which the function <i>Data Storage</i> has been activated.</p> <p>If the function has been activated, you can activate the transfer for a certain period of time.</p> <ul style="list-style-type: none"> Activate period of time <input checked="" type="checkbox"/> = Function has been activated. The fields for entering the time become active. Select the time via the rotating field for the period from – to. Active period of time <input type="checkbox"/> = Function has not been activated. <p>NOTICE! In distributed systems with slow network connections, the storage interval for the data transfer can be adjusted. The storage interval for the data transfer has to be configured by an ASC service technician or by an authorized partner company.</p>
<i>Receives data from</i>	<p>This table contains those servers which transfer data to this server.</p> <p>In the column <i>Name</i>, the name of the server appears from which data has been transferred.</p> <p>In the column <i>Only Replay</i>, the purpose of the transfer is displayed:</p> <p> = Data is transferred only for replay.</p> <p> = Data is transferred for data storage.</p>
<i>Archiving</i>	Activate the check box <i>Archiving</i> if you would like to use the server for archiving purposes.
<i>Export</i>	Activate the check box <i>Export</i> to allow the export from this server.
<i>Import</i>	<p>Activate the check box <i>Import</i> so that the imported data can be stored on this server.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the recording architecture that fulfills this function. In the drop-down list, all recording architectures are displayed which enable this function as well. <p>NOTICE! If you would like to use a server for the import function on which no recording is supposed to take place, you can configure an architecture exclusively for the import.</p>

Tab. 8: Configure data storage

Add target server to a list

- In the toolbar of the list *Target Server*, click on the icon  (Add).
- Select the server from the list to which you would like to transfer the data.
If you would like to select several servers or revoke a selection, click on the respective line while holding the [Ctrl] key down.



Name	IP Address
RC-02	192.168.173.176
REC-04	192.168.173.174
RC-01	192.168.173.175
REC-02	192.168.173.172
CTI-01	192.168.173.177
REC-03	192.168.173.173

Rows per page: 20 | 1 - 6 of 6

Add Cancel

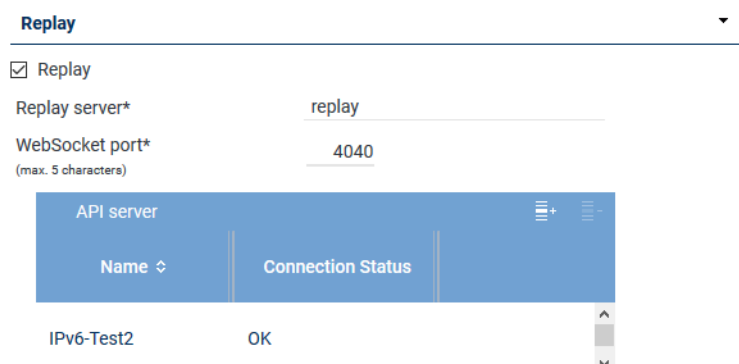
Fig. 30: Select server



Only those servers are available on which the function *Data storage* has been activated.

- To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Replay



Replay

☒ Replay



Replay server*

WebSocket port*
(max. 5 characters)

Name	Connection Status
IPv6-Test2	OK

Fig. 31: Group field Replay

Parameter	Value/Description
<i>Replay</i>	<p>A replay server can replay recordings via the integrated <i>Replay Feature</i>. Only data which has either been recorded directly on this server or which has been transferred to this server for data storage or only for replay purposes can be replayed. The client computers of the system can connect to a replay server for replay purposes.</p> <p>Activate the check box <i>Replay</i> to be able to use the replay function of the players and the phones.</p> <p><input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>Replay server</i>.</p> <p><input type="checkbox"/> = Function has not been activated.</p>

Parameter	Value/Description
<i>Replay server</i>	<p>If the function has been activated, you can enter a displayed name which is supposed to denote the server as the replay server in the system in the entry field <i>Replay server</i>. The displayed name can be selected arbitrarily and is a kind of pseudonym. As the replay server and the API server must not be identical, you can select different pseudonyms.</p> <p>The displayed name is meant to make it easier for users to select a server as different replay servers may be used across the system by different tenants. When selecting the replay server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p> <p>In order to be able to reach the server activated for replay from a public network and with configured port forwarding, you have to set the configuration in the tab <i>Replay Server Address Mapping</i>. For further details about the configuration refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>
<i>WebSocket port (maximum of 5 characters)</i>	Enter the port via which the data to be replayed in <i>POWERplay</i> Web are supposed to be transmitted.
<i>List API server</i>	<p>Here, you can add API servers that the replay server may use. If a recording which is supposed to be replayed cannot be found on a server, the search is continued on the API servers which have been entered here.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the API server, see chapter "Add API server to a list", p. 34. By clicking on the icon  (<i>Remove</i>), you can remove selected API servers from the list.

Tab. 9: Configure replay

Search and replay functions



To be able to use the search and replay functions via [LCR](#) as well as to use replay via phone, you have to create the users with the respective access rights in the application System Configuration in the Employees module. For information about the configuration refer to the administration manual *User management* for tenants.

Add API server to a list

The replay server required the services of an [API](#) server. The configuration must be as follows:


- If the replay server runs on a server with a local [API](#) server, it must not necessarily be assigned as the replay server always addresses the local [API](#) server first.
 - If the replay server runs on a separate server, you must assign at least one [API](#) server that the replay server can address.
 - If several [API](#) servers are available in the network, you can assign further [API](#) servers in addition to the local [API](#) server. The assigned [API](#) servers are addressed in order. For this reason, the local [API](#) server should always be first in the list.
- To assign an [API](#) server, click on the icon  (*Add*) in the toolbar of the list *API Server*.
 - Select the server from the list on which the [API](#) service is running.



Fig. 32: Select server



Only those servers are available on which the [API](#) service has been installed and activated. See [chapter "Group field API Server", p. 27](#).

- To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Virtualization



Fig. 33: Group field Virtualization

Parameter	Value/Description
<i>VM support</i>	<p>Activate the check box <i>VM support</i> to be able to use the licensing for several VM installations.</p> <p>This function can only be activated if the system has been installed in a VMware and no <i>TRUSTED_VIRTUALIZATION</i> license has been imported to the system.</p> <p>When activating the function <i>VM support</i>, you have to configure the respective settings in the tab <i>Keystore/VM Licensing</i>. For further details about the configuration of this function refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>

Tab. 10: Configure virtualization



For the *virtualization* without Internet connection, a dongle is required which contains the system information. The application *Dongle Manager*, required to read the dongle, has to be installed on the server that the dongle has been connected to.

- To save the entries, click on the button *Save* in the detail view.
To reset the entries, click on the button *Reset* in the detail view.

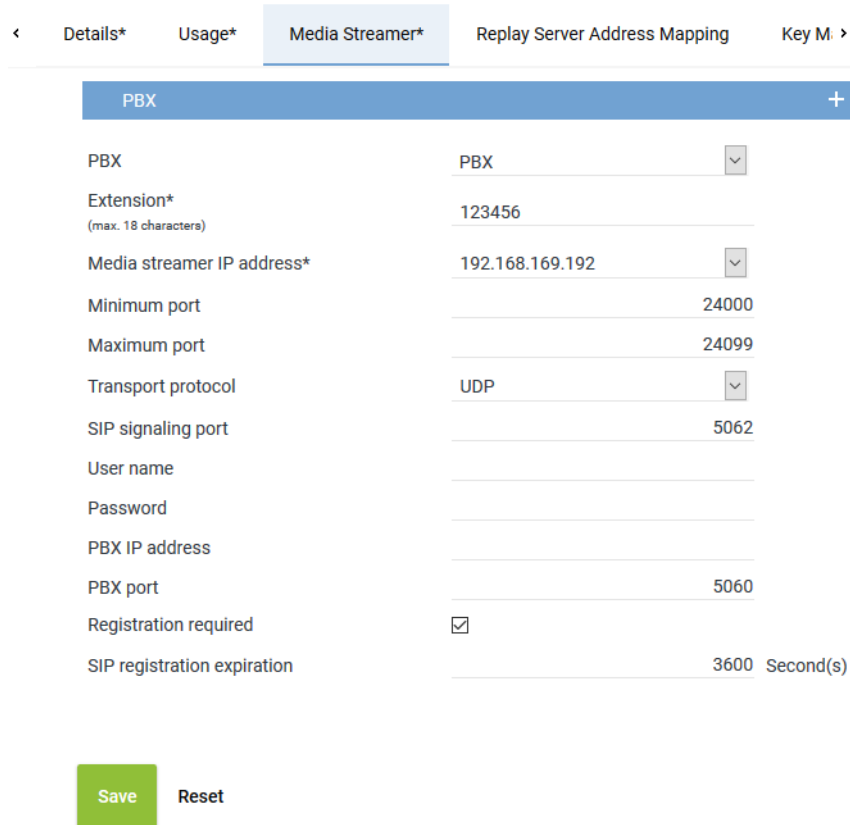
Tab Media Streamer

1. Click on the tab *Media Streamer* in the detail view.

In this tab, you can configure the Media Streamer for the functionalities *Replay via phone* and *Last Call Repeat Facility*.



The tab *Media Streamer* is only active if the function *Replay via phone* has been activated in the tab *Usage*.



< Details* Usage* **Media Streamer*** Replay Server Address Mapping Key M. >

PBX +

PBX	PBX	▼
Extension* (max. 18 characters)	123456	
Media streamer IP address*	192.168.169.192	▼
Minimum port		24000
Maximum port		24099
Transport protocol	UDP	▼
SIP signaling port		5062
User name		
Password		
PBX IP address		
PBX port		5060
Registration required	<input checked="" type="checkbox"/>	
SIP registration expiration		3600 Second(s)

Save Reset

Fig. 34: Servers module - tab Media Streamer

2. Enter the following parameters:

PBX	<p>PBX that the Media Streamer is supposed to be mapped to.</p> <p>Select a PBX from the drop-down list. The drop-down list displays all PBXs which have been created in the system.</p> <p>If no PBX has been created in the system yet, you can create a PBX via the blue bar PBX, see chapter "Create PBX", p. 42.</p>
Extension	<p>Extension which is supposed to be mapped to the Media Streamer. This is a mandatory field; the configuration cannot be saved if this information is missing.</p> <p>If an external analog gateway has been integrated, enter the value 8000.</p>
Media streamer IP address	<p>IP address which is supposed to be used for the exchange of the audio data and for the SIP communication.</p> <p>Select an IP address from the drop-down list. In the drop-down list, all IP addresses of the server are displayed.</p> <p>If an external analog gateway has been integrated, select the IP address 169.254.254.100 in the drop-down list.</p>

<i>Minimum port</i>	Enter the minimum port which is supposed to be used for the audio data exchange.
<i>Maximum port</i>	Enter the maximum port which is supposed to be used for the audio data exchange. A port range of 100 (e. g. 24000-24099) is sufficient for 50 licenses. The port range should be twice as wide as the number of available licenses.
<i>Transport protocol</i>	Select the transport protocol type you would like to use for the SIP communication from the drop-down list. TCP = unencrypted UDP = unencrypted TLS = encrypted If an external analog gateway has been integrated, select UDP in the drop-down list.
<i>SIP signaling port</i>	Enter the port for the SIP communication. Port for data exchange: 5062
<i>User name</i>	Enter the user name for the authentication on the SIP server.
<i>Password</i>	Enter the password for the authentication on the SIP server.
<i>PBX IP address</i>	Enter the IP address of the SIP registrar of the PBX . If an external analog gateway has been integrated, enter the IP address 169.254.254.101.
<i>PBX port</i>	Enter the port of the SIP registrar of the PBX . If an external analog gateway has been integrated, enter the value 5060.
<i>Registration required</i>	Select whether the SIP extension has to be registered with the SIP registrar of the PBX . <input checked="" type="checkbox"/> = SIP extension has to be registered. <input type="checkbox"/> = SIP extension does not have to be registered. If an external analog gateway has been integrated, deactivate the check box <i>Registration required</i> .
<i>SIP registration expiration</i>	Enter the time interval after which the registration has to be repeated.

Tab Replay Server Address Mapping

1. Click on the tab *Replay Server Address Mapping* in the detail view.

In this tab, you can configure the replay server address mapping. Servers which have been activated for replay require this address mapping so that they can be reached from a public network and with configured port forwarding.



The tab *Replay Server Address Mapping* is only active if the function *Replay* has been enabled in the tab *Usage*.

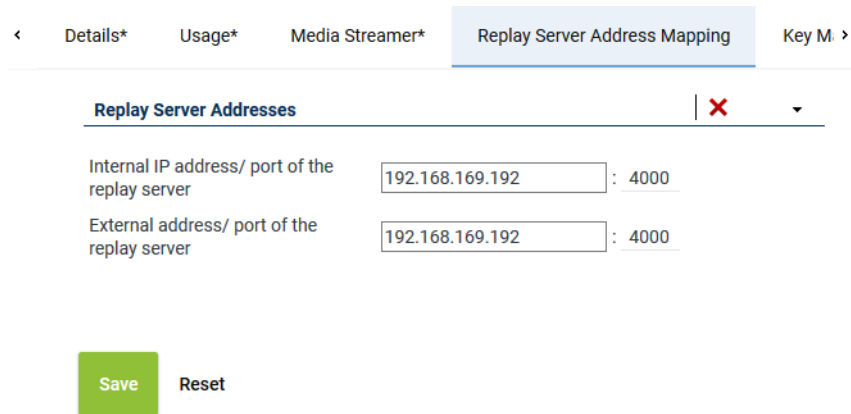


Fig. 35: Servers Module - tab Replay Server Address Mapping

Group field Replay Server Addresses

1. Enter the following parameters:

<i>Internal IP address/ port of the replay server</i>	Enter the destination IP address and the port of the replay server at which the Replay module can be reached internally.
<i>External address / Port of the replay server</i>	Enter the URL or the IP address and the port at which the Replay module can be reached via the browser from outside. When entering the external address consider whether the SSL certificate has been created for an IP address or for a DNS address. In the latter case, it is imperative to enter the DNS name! Otherwise the certificate check in the replay applications will fail.

If you would like to remove the addresses, click on the icon  in the title bar of the group field.



If address mapping has been configured, the Replay module receives the configured address and the configured port.

If address mapping has not been configured, the Replay module receives the IP address and the default port *4040* as entered in the tab *Details*.



To allow the users of the respective tenant to access the replay server via the browser, an internal address and/or an external IP address or a DNS name must be configured in the *Tenants* module.



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Key Management

1. Click on the tab *Key Management* in the detail view.

In this tab, you can configure the settings for the *neo* key management. This tab is only active if you have installed the corresponding license and enabled the function *neo Key Management* in the tab *Usage*.

< Usage* Media Streamer* Replay Server Address Mapping Key Management >

Key creation interval

☒ All
365 Day(s)

☐ Create key manually

Delay usage

until 0 Day(s) 0 Hour(s)

☐ Key expiration date

after 0 Day(s)

☒ In case of an error switch to simple key management automatically

Save Reset

Fig. 36: Servers module - tab Key Management

<i>Key creation interval</i>	<p>Select whether a key is supposed to be generated automatically or manually. Select one of the following options:</p> <ul style="list-style-type: none"> • <i>All</i> Select the intervals in which a new key is supposed to be generated automatically. Possible time interval: 1 to 365 days Default value: 365 days • <i>Create key manually</i> Select that a key is supposed to be generated manually. <p>Old keys which are no longer used for encryption become inactive for the time being. They remain in the database, though, since they are still required for the decryption of old recordings.</p>
<i>Delay usage</i>	<p>If required, enter a time interval during which the new key is not supposed to be used yet after having been created. Not until after this time interval has passed can the key be actually used for encryption.</p> <p>Possible time interval: 0 to 14 days Default value: 0 days (new keys are immediately used for encryption)</p> <p>A delay guarantees that the key has been captured by a database backup before it will actually be used.</p>
<i>Key expiration date</i>	<p>Select whether an inactive key is supposed to become invalid after the expiration of the time interval defined here.</p> <p><input type="checkbox"/> = Key never becomes invalid.</p> <p><input checked="" type="checkbox"/> = Key becomes invalid. In the entry field, enter the time interval after which the key loses its validity. Once this time interval has passed, the key cannot be used anymore. If recording data must be deleted after a certain period of time, this option offers additional security on top of the configured date of deletion. This especially applies to the case when recording data has been transferred manually to a storage location where the deletion mechanism of the system cannot find it.</p>

CAUTION! All recordings which have been encrypted with a key which has meanwhile become invalid are useless and cannot be replayed anymore.

In case of an error ... automatically

Select whether simple key management is supposed to be used if the neo key management does not work (e. g. if the service *DongleMan* fails). If you have not activated the option, no recording takes place as long as the neo key management has been activated but does not work.

☒ = In case of an error, simple key management is used as replacement.

☐ = In case of an error, no recording takes place as long as the neo key management has been activated. In this case, disable key management in the tab *Usage*.



On top of the settings in this tab, each tenant who would like to use the neo key management has to define individual settings in his own user management (Tenants module).



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Keystore/Virtualization

1. Click on the tab *Keystore/Virtualization* in the detail view.

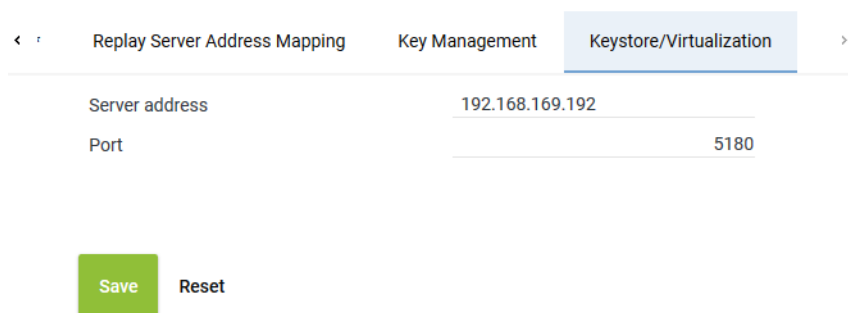
In this tab, you can configure the connection data for the service *DongleMan* for the neo key management and for the authentication of the VM.



If your system has been installed in a virtual environment, the application Dongle Manager must have been installed and started locally outside the VM so that the access to the dongle works. The dongle must have been connected to the server on which the VM has been installed.



For detailed information about neo key management refer to the administration manual *Encryption of recordings*.



	Replay Server Address Mapping	Key Management	Keystore/Virtualization
Server address			192.168.169.192
Port			5180

Save Reset

Fig. 37: Servers module - tab Keystore/Virtualization

Server address

Enter the address of the server for this connection.

- If you use the neo key management as well as the virtualization:
IP address of the server that the service *DongleMan* has been installed on.
- If you use only virtualization, you can authenticate the VM via the ASC License Management System, too. In this case, enter the following address:
licensing.asc.de

	<ul style="list-style-type: none"> If you use only the ASC key management: IP address of the server with the master password database
Port	Enter the port for the connection. Default value: 5180

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

Administrate NTP server

The recording system works with an **NTP**-based time synchronization. The function *Administrate NTP server* allows defining several **NTP** servers. Every server in the system identifies all **NTP** servers configured within the system and can use any **NTP** server for time synchronization. That way, every server can connect immediately to another **NTP** server if its current **NTP** server connection breaks down.

Add NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.

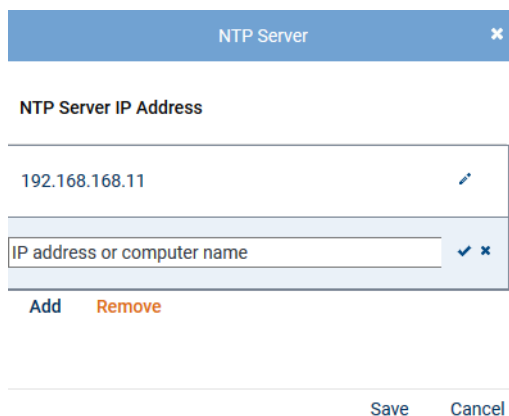





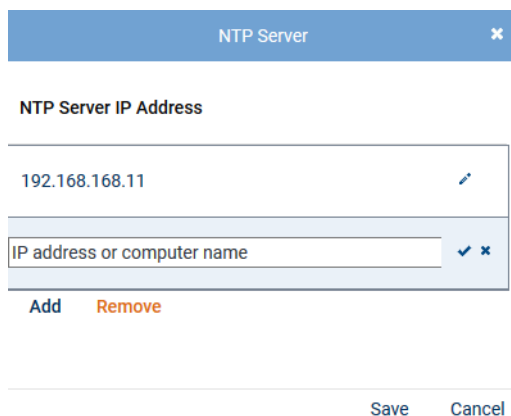
Fig. 38: Add NTP server

The list displays all NTP servers that have been configured during the installation.

- To add a server, click on the button *Add*.
- In the newly added row, click on the icon  (*Edit*).
- Enter the **IP** address or the name of the **NTP** server in the entry field.
- To save the entry in the row, click on the icon  (*Save*).
To discard the entry in the row, click on the icon  (*Discard*).
- To save all changes in the list, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.




Edit IP address

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



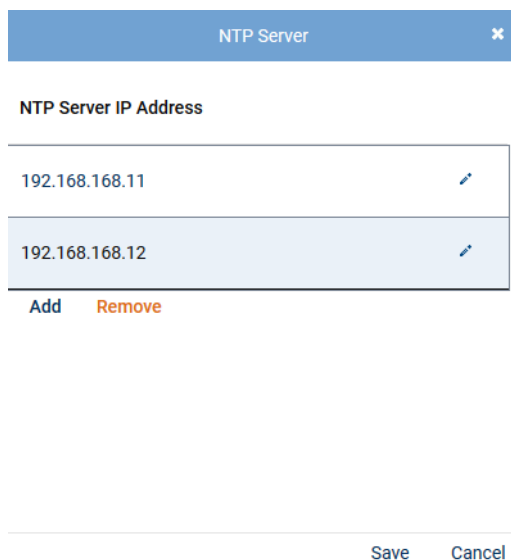
The screenshot shows a window titled "NTP Server" with a close button (X). Below the title is the section "NTP Server IP Address". It contains a table with one row showing the IP address "192.168.168.11" and an edit icon (pencil). Below the table is a text input field with the placeholder "IP address or computer name" and check/cancel icons. At the bottom are "Add" and "Remove" buttons. At the very bottom are "Save" and "Cancel" buttons.

Fig. 39: Edit IP address

- Click on the icon  (*Edit*) in the row with the **IP** address that you would like to edit.
- Change the entry in the entry field.
- To save the change, click on the icon  (*Save*).
To discard the change, click on the icon  (*Discard*).
- To save the changes, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.

Remove NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



The screenshot shows the "NTP Server" window with two rows in the "NTP Server IP Address" table. The first row has the IP "192.168.168.11" and an edit icon. The second row has the IP "192.168.168.12" and an edit icon. Below the table are "Add" and "Remove" buttons. At the bottom are "Save" and "Cancel" buttons.

Fig. 40: Remove NTP server

- In the list, select the **NTP** server that you would like to remove.
- Click on the button *Remove*.
⇒ The NTP server is removed from the list.
- To save the change, click on the button *Save*.
To discard the change and close the window, click on the button *Cancel*.

7.1.2.1.3 Create PBX

The PBX can either be configured via the PBX module or via the Integrations module.

In this configuration step, the parameters for the PBX are configured, e. g. the name, the area code and the net code.

1. Select the menu item *Setup > PBX* in the navigation bar.

⇒ The following window appears:

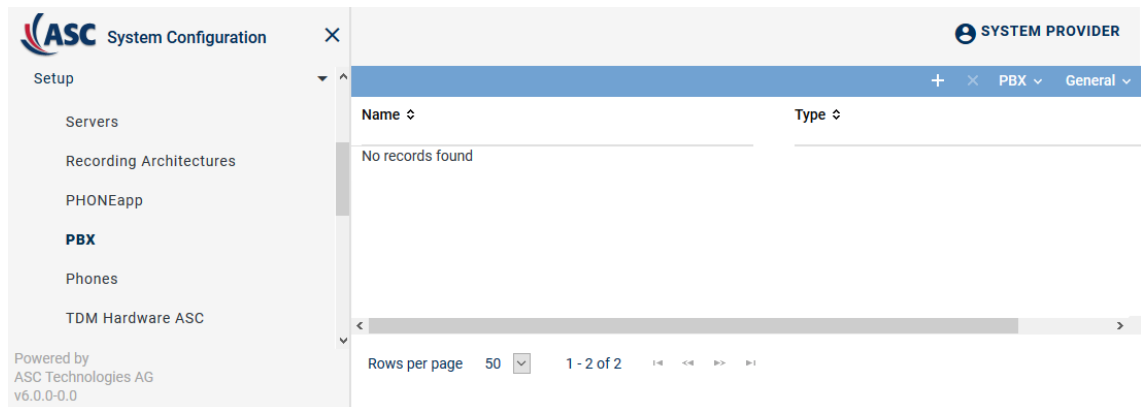




Fig. 41: Create new PBX

Toolbar of the PBX module

The toolbar offers the following functions.



Fig. 42: Toolbar PBX module

	<i>Create</i>	In the detail view, you can enter the parameters of the new PBX.
	<i>Delete</i>	Deletes the selected PBX configuration. A PBX can only be deleted if it is not used in any configuration.
<i>PBX</i>	<i>Phone Configuration</i>	Opens a window in which you can create and configure phones.
	<i>Administrate Unused Extensions</i>	Opens a window in which you can delete extensions that are not used in any configuration.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create new PBX

1. Click on the icon  (*Create*) in the toolbar of the main view of the PBX module.

⇒ In the detail view, the tab *Details* appears.

×

<
Details*
PHONEapp Configuration
Web Service >

Name* SIPREC

PBX type* Universal VoIP v

Maximum length of extensions 4 v

Country code
☒ Select from list
United States (1) v
☐ Enter manually

Area code* 6021

Net code* 5963

Non Phone IPs

No records found

[Add](#) [Delete](#)

IPs to be Ignored

No records found

[Add](#) [Delete](#)

MACs to be Ignored

No records found

[Add](#) [Delete](#)

Save

Reset

Fig. 43: Create new PBX - tab Details

2. Set the following parameters in the detail view:

Parameter	Value/Description
<i>Name</i>	This <i>name</i> serves as the identifier of this PBX.
<i>PBX type</i>	Select the type of the PBX from the drop-down list.
<i>Maximum length of the extensions</i>	Enter the number of digits of the extensions, e. g. 4.
<i>Country code</i>	Select the option for the country code: <ul style="list-style-type: none"> <i>Select from list</i> Select the country code from the drop-down list. <i>Enter manually</i> If the corresponding country code is not available in the drop-down list, you can enter the 3-digit code manually. e. g. for Sri Lanka 094.
<i>Area code</i>	Enter the area code without the preceding 0, e. g. 6021.
<i>Net code</i>	Enter the net code, e. g. 5963. Do not enter an extension here.

Tab. 11: Create PBX

If you would like to display the complete phone number, e. g. if you use more than one PBX, several area codes, or if you would like to record mobile phones, you have to configure the value 0 in the following parameters:

Parameter	Value/Description
<i>Maximum length of the extensions</i>	Enter the number 0 in the field maximum length of the extensions to display the complete phone number.
<i>Area code</i>	Enter the number 0 as area code to display the complete phone number.
<i>Net code</i>	Enter the number 0 as net code to display the complete phone number.

Tab. 12: PBX parameters with complete phone number

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

7.1.2.1.4 Assign recording resources

In multi-tenant systems, you have to assign each tenant its own recording resources.

Depending on the recording type, agents can be assigned to the recording resource via the extension, via the PBX Agent ID or via the chat ID. Within one tenant, you can configure all three possibilities.

Assign extensions to tenants

If you would like to make an assignment based on extensions, you can assign the respective tenant the extension designated for recording in the Tenants module.



In 1-tenant systems, all extensions are automatically assigned to the tenant who has been created by the system (1st tenant). Extensions are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the extensions manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of extensions is not possible until a PBX has been created since extensions are assigned in relation to the PBX.

- Select the menu item *Tenants* in the navigation bar.

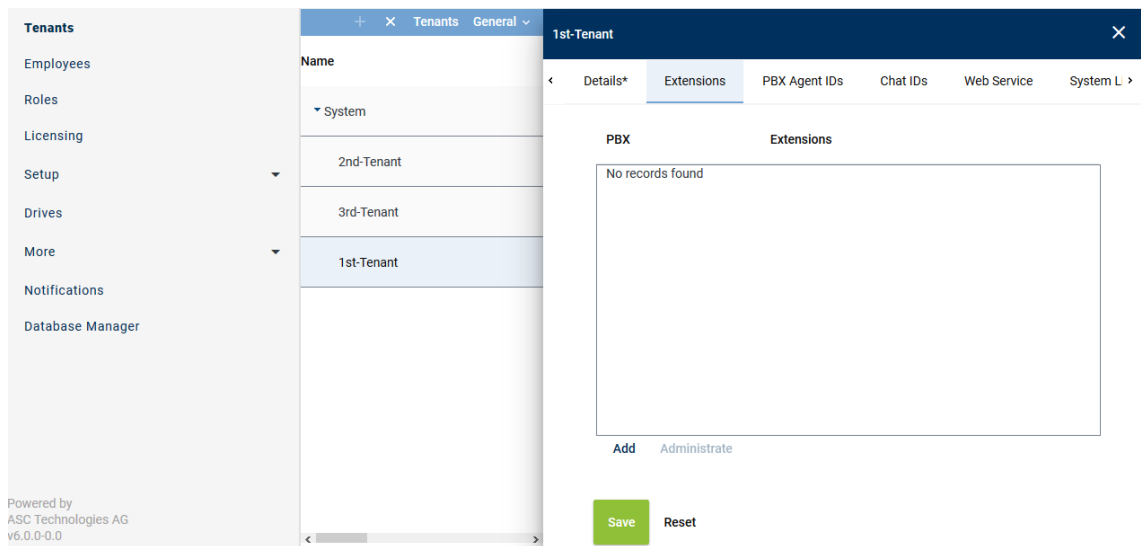


Fig. 44: Tenants - main view - tab Extensions

Add extensions

1. In the main view, select the tenant to whom you would like to assign extensions.
2. Click on the tab *Extensions*.
3. Click on the button *Add*.

⇒ The following window appears:

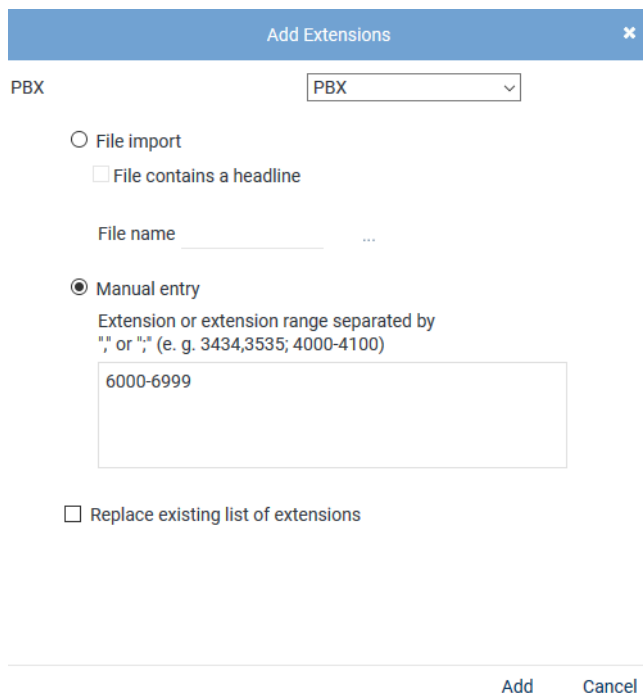




Fig. 45: Assign extensions to tenants

4. From the drop-down list, select the PBX in which the extensions for this tenant have been configured.

<i>File import</i>	Select this option to import extensions from an existing CSV file and add them to the table of extensions.
<i>File contains a headline</i>	

	<p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CSV file, you have to pack it in a ZIP file.</p> <p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> • Click on the button  behind the field <i>File name</i>. • Click on the button <i>Choose File</i>. • Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. • Click on the button  <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter extensions or extension ranges manually.</p> <p>Enter the extension range that is reserved for this tenant using a hyphen, e. g. from 6000 to 6999. Alphanumerical entries with a hyphen are not detected as a range, they must be entered individually.</p> <p>You can separate the different extensions and extension ranges by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of extensions</i>	<p>Activate the check box to replace the list of extensions.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the extensions of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured extensions of all PBXs are kept and the new extensions are added to the selected PBX.</p>

- Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
- If errors have been detected, the window *Result* appears.
 - Click on the button *Display Error Report* to open the window *Error Report*.
 - To close the window *Error Report*, click on the button *Close*.
 - To close the window *Result*, click on the button *Close*.
- The configured extensions now appear in the detail view.
- Click on the button *Save* in the detail view to save the entries.

Remove extensions

- In the list, select the **PBX** for which you would like to remove the assigned extensions.

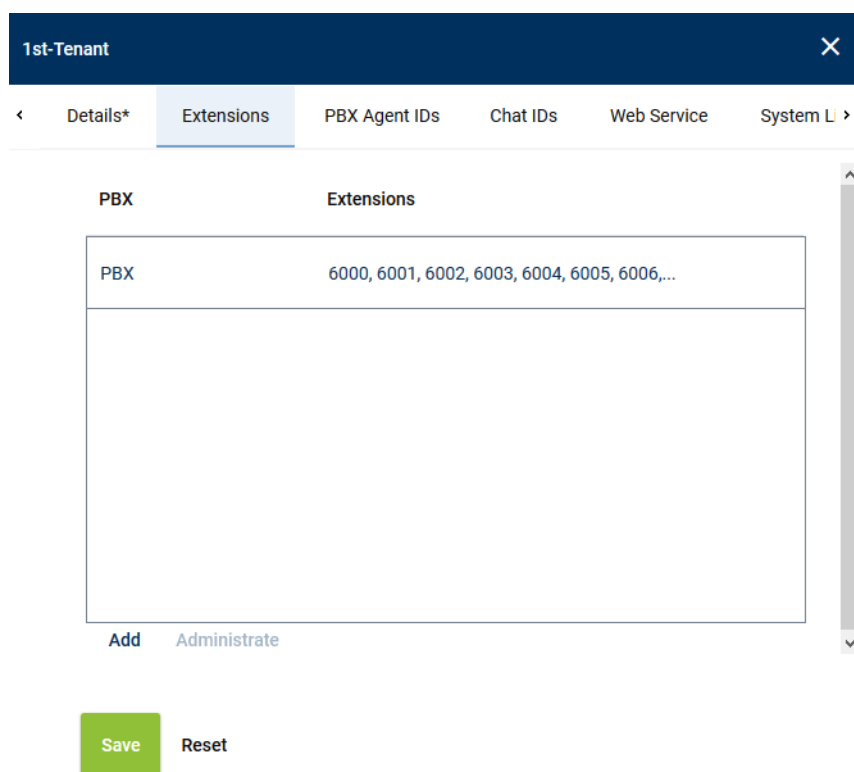


Fig. 46: Remove extensions

2. Click the button *Administrate*.
3. Select one or several extensions you would like to remove from the assignment.
To select several extensions or to revoke the selection, click on the respective line while holding the [Ctrl] key down.



Fig. 47: Select extensions

4. To remove the selected extensions, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

Assign PBX Agent IDs to tenants

If the information about PBX Agent IDs is delivered by the PBX, you can make an assignment by means of the PBX Agent IDs. In this case, you can assign the respective tenant the PBX Agent IDs designated for recording in the Tenants module.



In 1-tenant systems, the PBX Agent IDs are automatically assigned to the tenant who has been created by the system (1st tenant). PBX Agent IDs are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the PBX Agent IDs manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of PBX Agent IDs is not possible until a PBX has been created since the assignment is PBX-related.

1. Select the menu item *Tenants* in the navigation bar.

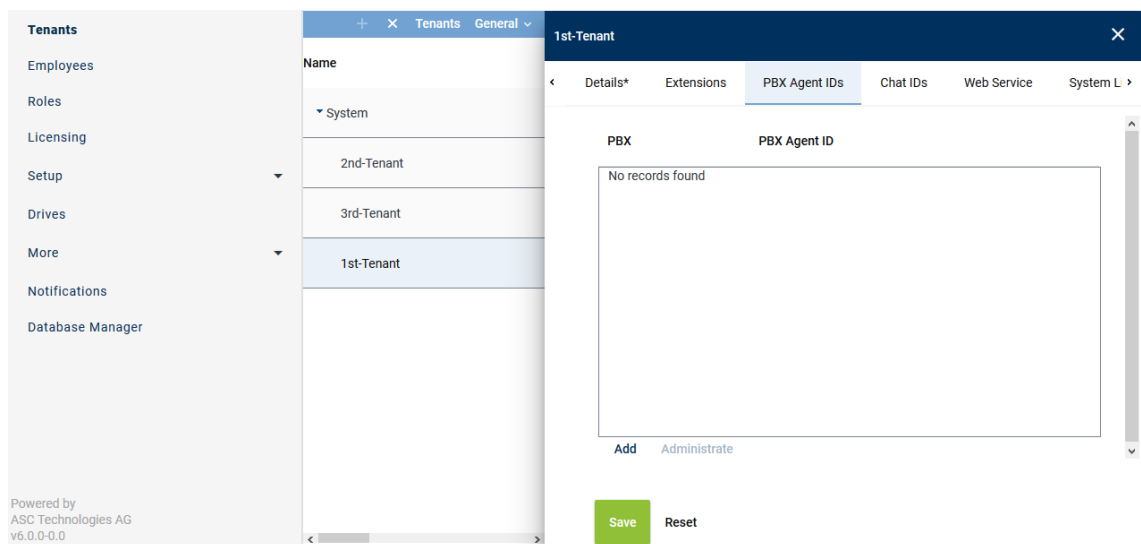


Fig. 48: Tenants - main view - tab PBX Agent ID

Add PBX Agent ID

1. In the main view, select the tenant to whom you would like to assign the PBX Agent IDs.
2. Click on the tab *PBX Agent IDs*.
3. Click on the button *Add*.
⇒ The following window appears:

Add PBX Agent IDs
✕

PBX

PBX

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

PBX Agent IDs separated by ";" or ","

427agent1,427agent2

☐ Replace existing list of PBX Agent IDs

Add
Cancel

Fig. 49: Assign PBX Agent IDs to tenants

4. From the drop-down list, select the PBX in which the PBX Agent IDs for this tenant have been configured.

<i>File import</i>	<p>Select this option to import the PBX Agent IDs from an existing CSV file and add them to the table of PBX Agent IDs.</p>
	<p><i>File contains a headline</i></p> <p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CVS file, you have to pack it in a ZIP file.</p>
	<p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> Click on the button ... behind the field <i>File name</i>. Click on the button <i>Choose File</i>. Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. Click on the button ↗ <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter PBX Agent IDs manually.</p> <p>You can separate the individual PBX Agent IDs by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of PBX Agent IDs</i>	<p>Activate the check box to replace the list of PBX Agent IDs.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the PBX Agent IDs of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured PBX Agent IDs of all PBXs are kept and the new PBX Agent IDs are added to the selected PBX.</p>

5. Click on the button *Add*.
⇒ The PBX Agent IDs are added to the table of PBX Agent IDs.
6. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
7. The configured PBX Agent IDs now appear in the detail view.
8. Click on the button *Save* in the detail view to save the entries.

Remove PBX Agent ID

1. In the list, select the **PBX** for which you would like to remove the assigned PBX Agent IDs.
2. Click the button *Administrate*.
3. Select one or several PBX Agent IDs you would like to remove from the assignment.
To select several PBX Agent IDs or to revoke the selection, click on the respective line while holding the [Ctrl] key down.

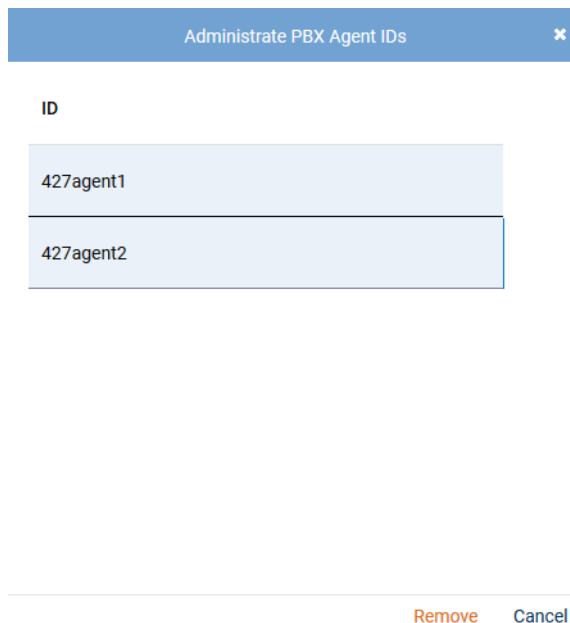


Fig. 50: Select PBX Agent IDs

4. To remove the selected PBX Agent IDs, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

7.1.2.1.5 Configure additional data

In the Additional Data module, you can configure the additional data which is delivered for a conversation with a protocol.



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured here in the Additional Data module. Only then can you map the additional data in the integration under the Global Recording Settings in the tab *SIP Header Tagging*.

For selection fields to appear in the drop-down list, they have to be configured in the Additional Data module.

1. Select the menu item *Setup > Additional Data* in the navigation bar.

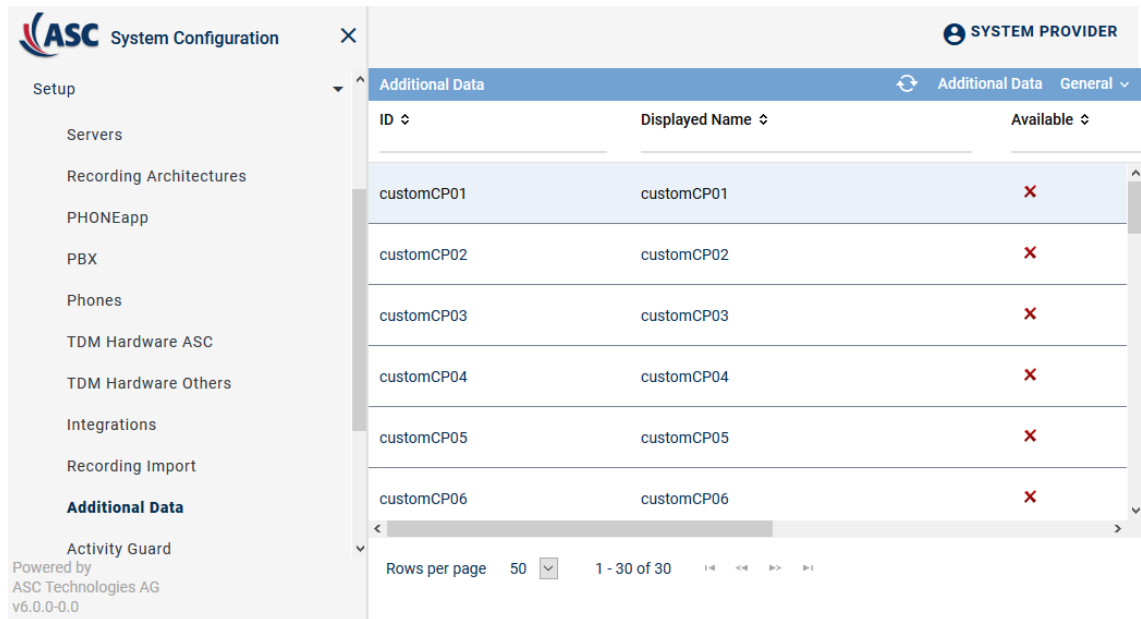


Fig. 51: Additional Data module main view

2. Select a set of data.
 - ⇒ The detail view displays the information you can configure.

Change display name







Change Display Name		
Language	Content	
ar_SA	customCP01	
bg_BG	customCP01	
de_DE	Universal Call ID	
en_GB	customCP01	
en_US	Universal Call ID	 

Fig. 52: Configure additional data

1. To change the display name, click on the pen in the line of the language you would like to change.
2. Enter a display name and click on the check mark at the end of the line to confirm the entry.

Availability

Availability	
Available	<input checked="" type="checkbox"/>
Editable	<input checked="" type="checkbox"/>
External recording control	<input checked="" type="checkbox"/>

Save
Reset

Fig. 53: Additional data - configure availability

1. To make the data field available to the entire system, activate the check box of the option *Available*.
2. To make the data field in the search and replay applications editable later on, activate the check box of the option *Editable*.
3. To be able to use the data field for external recording control, activate the check box of the option *External recording control*. This option is only available if recording control has been activated in the *Servers module* in the tab *Usage*.
4. Click on the button *Save* to save the settings.



For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



Additional data which is not delivered along with the protocol is not available for further use.

7.1.2.1.6 Create integration for All-in-one Basic

In the Integrations module, the PBX-related recording settings are configured.

You first have to create and activate a recording architecture to be able to create a integration and to assign it here.

Depending on the recording solution, you additionally have to configure IP addresses, ports, protocols, sniffer cards, CTI connection data, phones, monitor points, and, where required, add-ons.

1. In the navigation bar, select the menu item *Setup > Integrations*.
⇒ The following window appears:

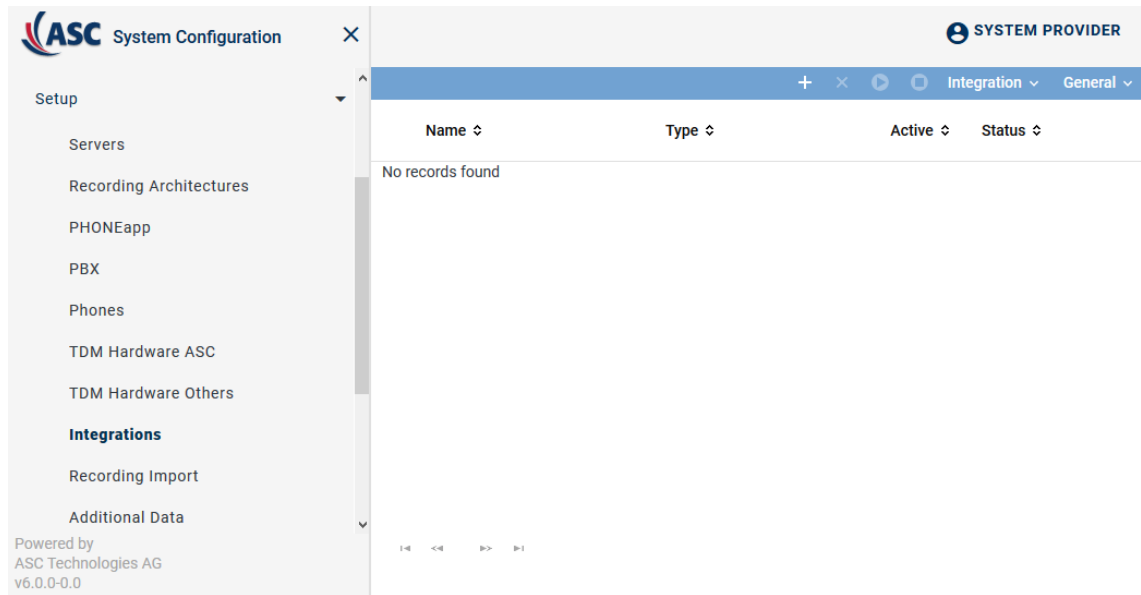




Fig. 54: Integrations - main view

In the table in the main view, the following information is displayed:





Name	Name of the integration
Type	Type of the integration
Active	Shows whether the integration has been activated and is used for the recording. <div> ✓ = Integration is active, can be deactivated in the toolbar via the icon . ✗ = Integration is not active, can be activated in the toolbar via the icon . </div>
Status	Shows whether the configuration has been carried out completely. <div> ✓ = Configuration is complete. ✗ = Configuration is incomplete. </div>

Toolbar of the Integrations module

The toolbar offers the following functions.



Fig. 55: Toolbar Integrations module

	Create	Opens the detail view so that you can create a new integration.
	Delete	Deletes the selected integration. The integration can only be deleted if it has been deactivated.
	Activate	Activates the selected integration. The integration can only be activated if it has been configured completely.
	Deactivate	Deactivates the selected integration. This stops running recordings.
Integration	Import Grammar	By clicking on this menu item, you can import a customized grammar which you can then configure in the configuration step for the CTI connection data.
General	General Help	Opens the online help.
	Module Help	Opens the module-specific online help.

Import grammar

Depending on the deployed PBX, conversation events are signaled differently.

A grammar recognizes and processes the events occurring during a call such as ringing, answering, consultation, hanging up. A grammar contains rules which are required to correctly translate PBX-specific call information and call states into a PBX-neutral format.

- To import a new grammar, click on the menu item *Integration > Import Grammar* in the toolbar of the main view.
⇒ The window *Upload File* appears.

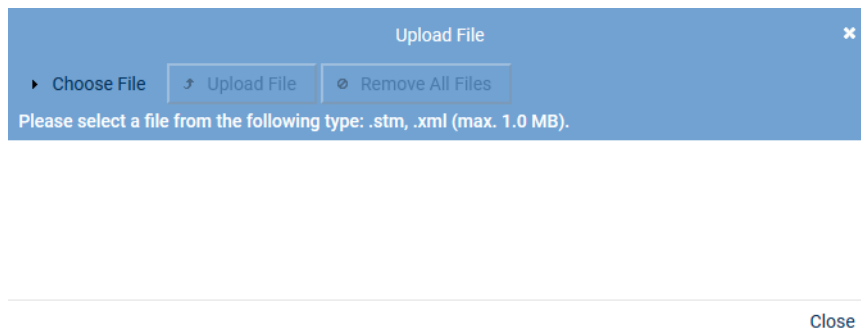


Fig. 56: Choose file

- Click on the button *Choose File*.
- Select the respective grammar of the file type *.stm* or *.xml* via the Explorer.
- Click on the button *Open*.
⇒ The selected file appears in the window *Upload File*.

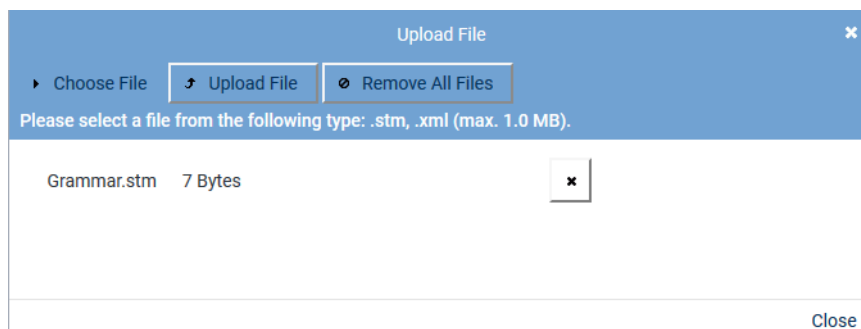



Fig. 57: Upload grammar

- To remove a selected file from the list, click on the button  (*Remove file*) next to the respective file.
To upload the file, click on the button *Upload File*.
⇒ The window closes and a notification appears in the main view that the file has been uploaded successfully.

Assign integration type


- Click on the icon  (*Create*) in the toolbar of the main view to create a new integration.
⇒ In the detail view, the tab *Integration Type* appears.



Fig. 58: Create integration type

2. Enter the following parameters:

Parameter	Value
<i>Name</i>	In the entry field, enter a descriptive name for the integration. This name is used as the identifier of this integration in the system.
<i>Integration type</i>	Select the entry <i>SIP active</i> from the drop-down list <i>Integration type</i> .

Tab. 13: Create integration type

3. To assign the PBX, click on the button **+** behind the field *PBX*.
⇒ The window *PBX* appears.

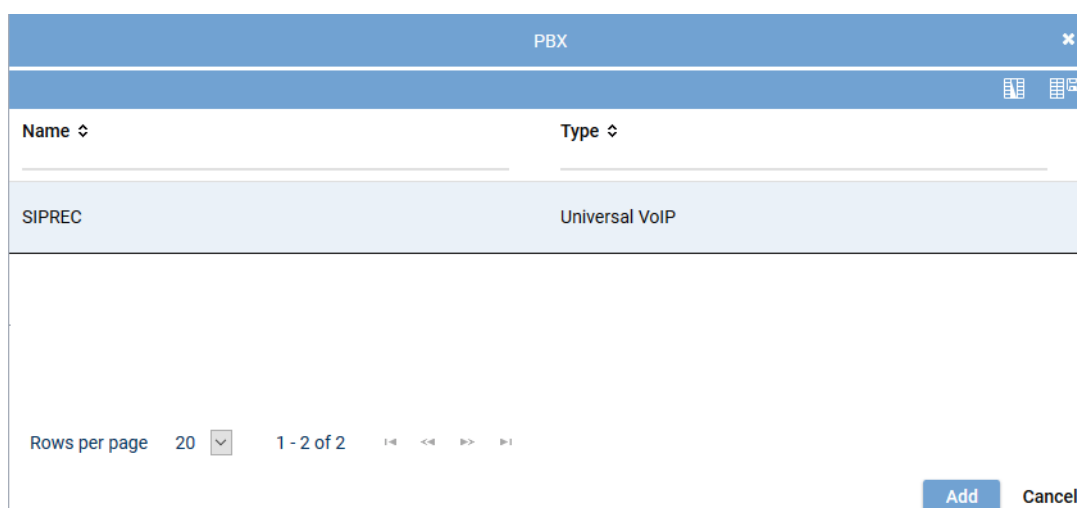


Fig. 59: Select PBX

4. Select the respective *PBX* from the list of available PBXs.
5. Click on the button *Add*.

Assign recording architecture for All-in-one Basic

1. In the detail view on the bottom right, click on the button *Next*.
⇒ The tab *Recording Architecture* appears.



New Integration

Integration Type Recording Architecture

Recording Architecture

Recording architecture* All-in-one Basic

Save Cancel Back Next

Fig. 60: Assign recording architecture - All-in-one Basic


2. Select the respective recording architecture from the drop-down list *Recording architecture*.



Only activated recording architectures in which the appropriate integration type has been configured appear in the drop-down list.

3. Click on the button **Save**.
⇒ The integration now appears in the main view.

Configuration steps

1. To complete the configuration of the integration, click on the icon  in front of the name of the new integration.
⇒ The following configuration steps appear:







SIPREC		SIP active		
Step		Configuration		
Configure recording architecture		✓		
Global recording settings		✗		
Configure recording servers		✗		
Configure add-on		✓		
Configure miscellaneous settings		✓		

Fig. 61: Configuration steps of the integration

Configure recording architecture

The section *Configure recording architecture* has already been configured in previous steps.

1. Click on the button  (*Edit configuration step*) in the line *Configure recording architecture* in the main view to show the configuration.
⇒ In the detail view, the configuration step appears with the information of the assigned recording architecture.

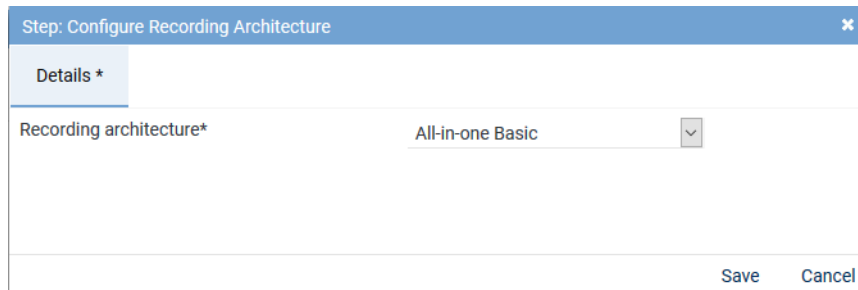



Fig. 62: Configuration step - Configure Recording Architecture

- Click on the button *Save* to save changes and to finish the configuration step.
- Click on the button *Cancel* to cancel the configuration step without applying changes.

Global recording settings for All-in-one Basic

- Click on the button  (*Edit configuration step*) in the line *Global recording settings* in the main view.
⇒ The window *Step: Global Recording Settings* appears.

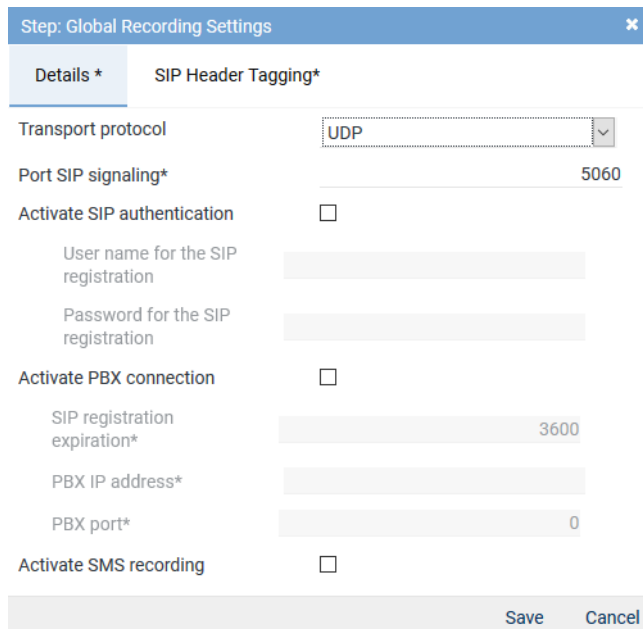


Fig. 63: Configuration step - Global Recording Settings - All-in-one Basic Recording

- Set the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Transport protocol</i>	From the drop-down list, select the used transport protocol for the SIP signaling between the recording server and the PBX. The following protocols are available: TCP = unencrypted UDP = unencrypted TLS = encrypted
<i>Port SIP signaling</i>	Enter the port for the SIP signaling, where the recording server is expecting the signaling. Default value for UDP and TCP is 5060. Default value with TLS encryption is 5061.

Parameter	Value/Description
<i>Activate SIP authentication</i>	Deactivate this option for this recording solution.
<i>Activate PBX connection</i>	Deactivate this check box for this recording solution.
<i>Activate SMS recording</i>	Activate the check box if you would like to use SMS recording.

Tab. 14: Global recording settings

- To save the entries, click on the button *Save*.
To discard entries, click on the button *Cancel*.

Tab SIP Header Tagging



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured in the Additional Data module and subsequently mapped in the tab SIP Header Tagging.

- Select the tab *SIP Header Tagging*.

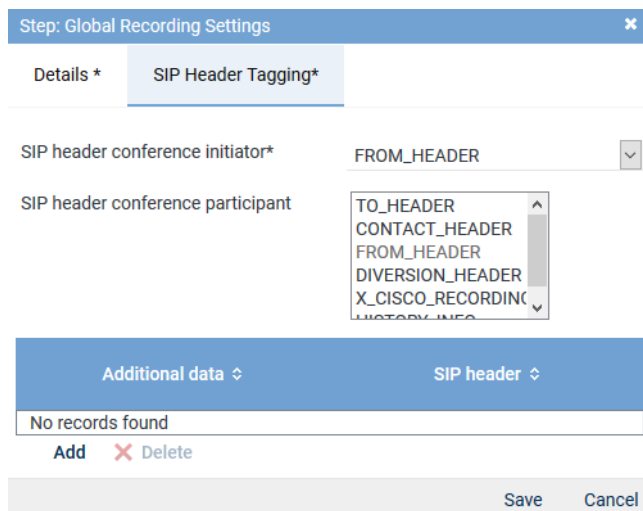


Fig. 64: Tab SIP Header Tagging Configure sources

- If you would like to configure individual additional data that you have defined previously in the Additional Data module, click on the button *Add* in the section *Additional data*.
⇒ The window *SIP Additional Data* appears.

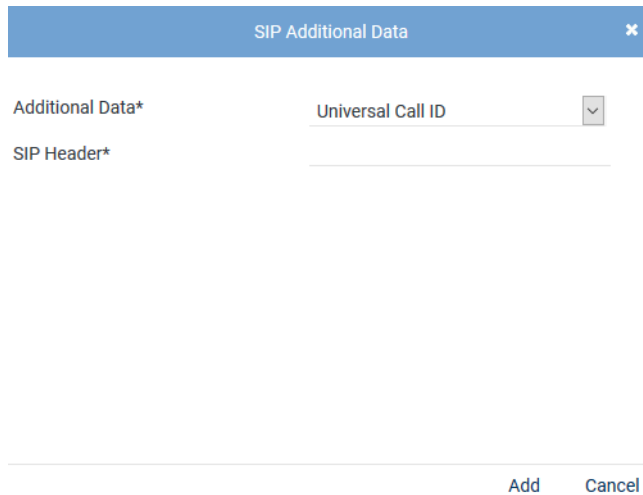


Fig. 65: SIP Additional Data



Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.


- Enter the following parameters:

Parameter	Value/Description
<i>Additional Data</i>	In the drop-down list, select the display name of the field in which the information of the SIP header is supposed to be released.
<i>SIP Header</i>	<p>If you would like to use additional data, the mapping of the tag name must have been configured in the file <i>siprecmapping.xml</i>. Then you can enter the tag name from where the information is to be extracted.</p> <p>To have ASC configure the mapping file, contact your distribution partner.</p>

Tab. 15: Configure SIP conversation parameters

- Click on the button **Save** to close the window.
- Click on the button **Save** to finish the configuration in this step.

Configure recording server for All-in-one Basic

- In the main view in the line *Configure recording servers* click on the button  (*Edit configuration step*).
⇒ The window *Step: Configure Recording Servers* appears.

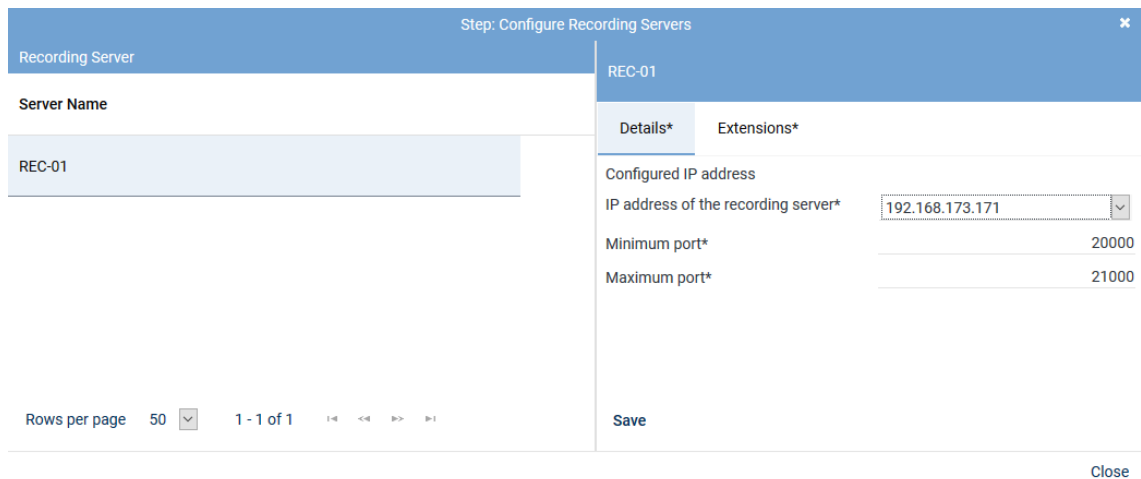


Fig. 66: Configuration step - Configure recording servers

2. Enter the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Configured IP address</i>	Here, the IP address is displayed which has been configured for this recording server and via which the data to be recorded are received.
<i>IP address of the recording server</i>	From the drop-down list, select one of the available IP addresses of the recording server for the recording data.
<i>Minimum port</i>	Enter the lowest port of the port range configured on the PBX that is used to receive the RTP data from the recording server, e. g. 20000 .
<i>Maximum port</i>	Enter the highest port configured on the PBX that is used to receive the RTP data from the recording server, e. g. 21000 .

Tab. 16: Configure recording servers



This recording solutions allows recording data streams in stereo. For stereo recording, reckon with 4 ports as only even ports are used to receive **RTP**.

Stereo recording requires more storage space, too.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.

Configure add-on



The use of the add-on in the integration is optional. The status of this configuration step has been set to *No selection* by default and is considered to be completely configured that way. You can activate and use the integration without an add-on, too.

If you use an application with add-on, you can select the required grammar in the corresponding version in this configuration step. Additionally, you can configure the connection data and the additional data.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTI~~connect~~ module of the integration.

Configure add-on for Sparkassen FI ISP (optional)

The add-on refers to the usage of CTIconnect for Sparkassen FI ISP in the DACH region and only has to be configured if the add-on is used.



The add-on cannot be used in a failover architecture. The application Sparkassen FI ISP cannot connect to more than one IP address.

The integration runs in combination with a PBX and the recording server. The service CTIconnect for Sparkassen FI ISP receives the additional data from the PBX and sends them to the recording server. In addition, the recording decision which is initiated by the user on the end device is processed via CTIconnect for Sparkassen FI ISP and sent to the recording server.

Sparkassen FI Interaktive Service Plattform

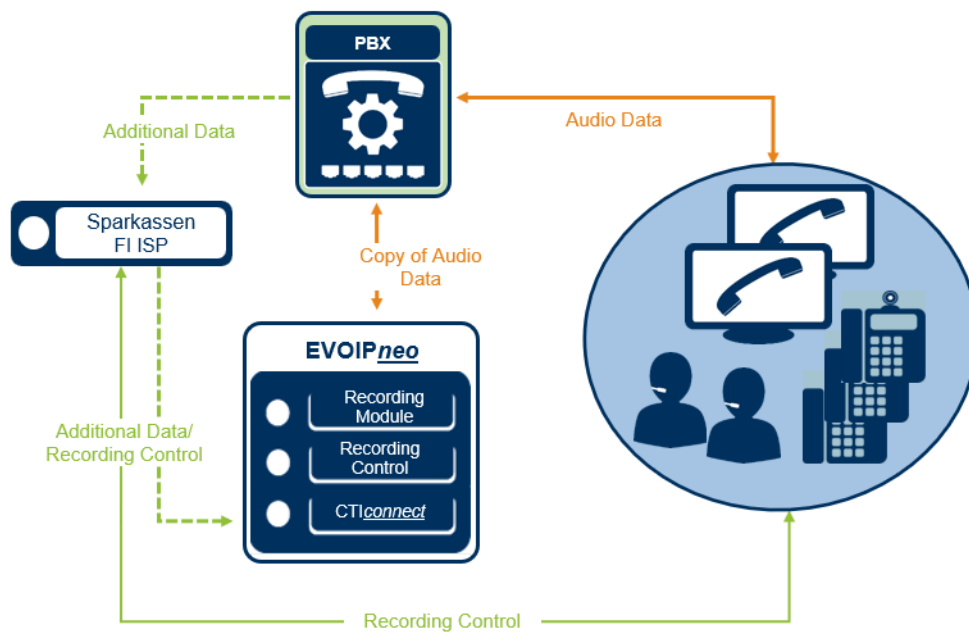



Fig. 67: Overview of Sparkassen FI ISP

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on *Sparkassen FI ISP* in the detail view.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Sparkassen FI ISP

CTIconnect Module

TypeCTIconnect passive
Grammar name*ISP Sparkassen FI
Grammar version*1.00.05

Connection Data

Listener port*3468

Additional Data

ID des Call CentersCall Center ID
ID des Calls aus GenesysUniversal Call ID
Anmeldename des KundenUser name
Name des KundenCustomer name
Personennummer des KundenCustomer ID

Arbitrary assignment

Please select...
 Please select...
 Please select...

SaveCancel

Fig. 68: Configure add-on for Sparkassen FI ISP

Group field CTIconnect Module

- Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 17: Configure CTIconnect module



For recording control via the add-on of the Sparkassen FI ISP, grammar version 1.00.05 or higher is required. If the grammar in the respective version is not available yet, you can import it. See [chapter "Import grammar", p. 55](#).

Group field Connection Data

Set the following parameter in the group field *Connection Data*; the IP address for the PBX does not have to be entered, since the PBX connects to our recording server:

Parameter	Value/Description
<i>Listener port</i>	Enter the port that the add-on connects to, e. g. 3468.

Tab. 18: Configure connection data

Group field Additional Data



This add-on is used exclusively in the DACH region; for this reason the additional data is only available in German, too. The names of the fields refer to the assignment of the strings which are delivered by the interface.

When using CTIconnect for Sparkassen FI ISP, the following additional data is delivered with the protocol:

- *ID of the call center*
- *ID of the call from Genesys*
- *Login name of the customer*
- *Name of the customer*
- *Employee number of the customer*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

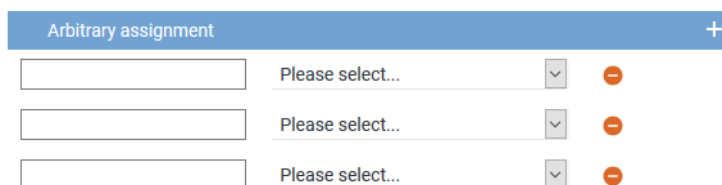
For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.




Arbitrary assignment			+
<input type="text"/>	Please select...	▼	➖
<input type="text"/>	Please select...	▼	➖
<input type="text"/>	Please select...	▼	➖

Fig. 69: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*
- *End time*
- *Duration*
- *Calling Party Phone Number*
- *Called Party Phone Number*

- *Conversation Direction*
- 2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
- 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
- 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
- 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.



To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.


Configure add-on for OpenScape Contact Center (optional)

The add-on refers to the usage of the OpenScape Contact Center and must only be configured if a OpenScape Contact Center is used.

The integration runs in combination with a Unify PBX which is responsible for recording. The CTIconnect service receives the conversation events of the agents via a SDK link in the OpenScape Contact Center and sends the additional data to the EVOIPneo recording service.

For information about the configuration of the OpenScape Contact Center, see [chapter "Configure OpenScape Contact Center \(optional\)", p. 394](#).

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on OpenScape Contact Center in the detail view.

Step: Configure Add-on
✕

Details

Select add-on

☐ None

☒ OpenScape Contact Center

CTIconnect Module

Type CTIconnect passive

Grammar name* Unify OpenScape Contact Center ▾

Grammar version* 1.00.04 ▾

Connection Data ▾

Connection data

6000@192.168.170.29

Add
Edit
Delete

Additional Data ▾

Business Unit Business Unit ▾

Department Department ▾

Department Key Department Key ▾

Call ID Universal Call ID ▾

To Party To Party ▾

ACD Group Number ACD Group Number ▾

Arbitrary assignment
+

Please select...
▾
-

Please select...
▾
-

Save Cancel

Fig. 70: Configure add-on for OSCC

Group field CTIconnect Module

- Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 19: Configure CTIconnect module

Group field Connection Data

In the table Connection Data, you can enter one or several sets of connection data.

If you are configuring several connections, several connections to different business units are established simultaneously in the recording solution with OpenScape Contact Center.

- In the group field *Connection Data* in the table, click on the button *Add*.
 - ⇒ The following window appears:

Configure Connection
✕

Link name*

Business unit*

User name*

Password*

Add Cancel

Fig. 71: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Link name</i>	Enter the link to the OSCC server in the format <code>osccport@ascserver</code> . The default value for the OSCC port is 6000 and the name of the OSCC server is usually spelled in minor letters. A valid link can look like this: 6000@osccv7r3. Ensure that the server name (e. g. osccv7r3) can be resolved to an IP address. Check whether the address can be reached via the ping command. Alternatively, you can also enter the IP address.
<i>Business unit</i>	The default name of a business unit is <i>default</i> . This is a predefined name for the business unit after a new OSCC server installation. Enter the business unit's actual name you would like to use in the future.
<i>User name</i>	Create a valid user for the business unit that you have created on the OSCC server, so the CTIconnect service can establish the connection to the OSCC server. See chapter "Create user for CTIconnect", p. 394 .
<i>Password</i>	Enter the password for the user of the business unit.

Tab. 20: Configure connection data

3. Click on the button *Add* to save the entries and to close the window.
4. To configure additional connections, repeat the configuration steps accordingly.

Group field Additional Data

When using **CTIconnect** for Unify OpenScope Contact Center, the following additional data is delivered with the protocol by default:

- *Business unit*
- *Department*
- *Department Key*
- *Call ID*
- *To Party*

- *ACD Group Number*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must have been configured and made available in the Additional Data module previously.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.

Here, you can map the database fields for the additional data which is delivered by the [OSCC](#). The contact data of the processed contacts of the OpenScape Contact Center provides a list of key pairs/value pairs. The keyword of this key pair/value pair can be chosen arbitrarily and adjusted customer-specifically. If you would like to use more than one word, avoid spaces. Use underscores instead of spaces, e. g. *ACD_group*.

1. In the group field headline *Additional Data*, click on the arrow ▶ to expand the group field and to assign the additional data to the data fields of the search and replay applications.

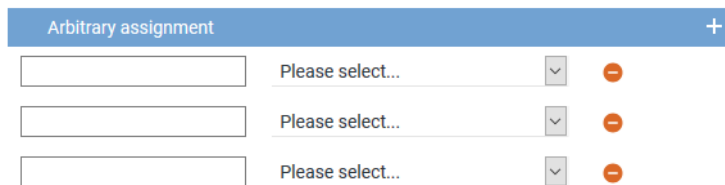




Fig. 72: Arbitrary assignment of the additional data

2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
3. From the drop-down list, select a configured display name of the additional data type which is supposed to appear as column headline in the players. Here, you can only select the display names for the additional data that you have configured and made available in the Additional Data module.
4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
⇒ An additional row appears to assign another additional data type.
5. To delete an assignment, click on the icon  in the respective row.
6. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

Configure add-on for Genesys T-Server (optional)

The add-on refers to the usage of Genesys T-Servers and must only be configured if you use Genesys T-Servers.

The integration runs in combination with the PBX and the recording server. The CTIconnect service receives the information which Genesys T-Server the monitor points have been assigned to from the Genesys Configuration Server. The monitor points must register on the respective Genesys T-Server. Upon successful registration, the respective Genesys T-Server sends all conversation events and additional data of the agents to the recording server.

CTIconnect for Genesys T-Server

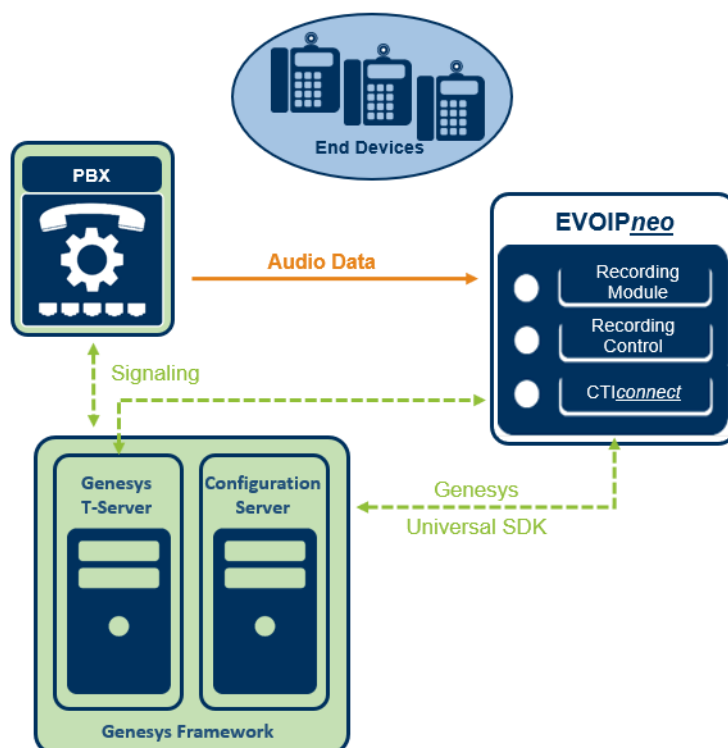


Fig. 73: Overview of the add on of Genesys T-Server

CTIconnect for Genesys T-Server

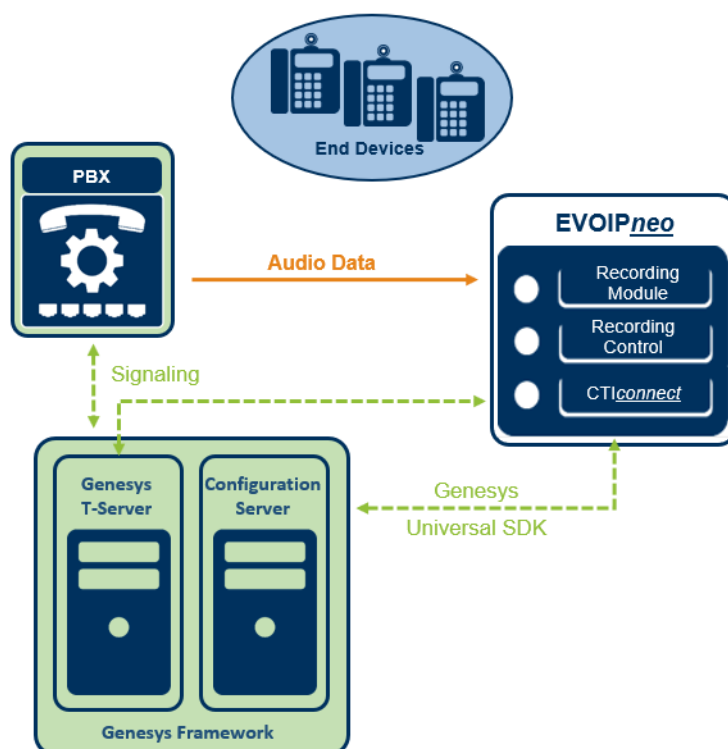


Fig. 74: Overview of the add-on of Genesys T-Server



For further information about the configuration of Genesys T-Servers, see [chapter "Configure Genesys T-Server \(optional\)", p. 395](#).

The Genesys add-on uses either a unique call ID or the extension to unambiguously identify the conversations to be recorded.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

When using a CTIconnect for Genesys T-Server, a Genesys Framework with T-Servers and Genesys Configuration Servers are required.


By default, the Genesys data field *CallID* has been selected as identifier. If a different data field is supposed to be used for internal control, this can be changed in the configuration file *basic.pif.properties*.

Adjust configuration file for Genesys add-on

The data field which is supposed to be used by the Genesys add-on is selected by means of the parameter *pifgenesys.call_identifier*.

1. To adjust the identifier, change to the path
C:\ASC Product Suite\data\CTIConnectForGenesysT.
2. Open the file *basic.pif.properties*.
3. Enter the respective data field for the parameter *pifgenesys.call_identifier*.
4. Save the changes in the file.
5. Restart the recording architecture after completing the change.

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. In the detail view, select the add-on *Genesys T-Server*.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Genesys T-Server

CTIconnect Module

Type	CTIconnect passive
Grammar name*	standard
Grammar version*	1.15.00
T-server redundancy*	HAconnect
Config server redundancy*	Warm standby
T-Server application name	
T-Server password	

Connection Data

Configuration server name

192.168.169.178

Add Edit Delete

Additional Data

Arbitrary assignment +

Please select...

Save Cancel

Fig. 75: Configure add-on for Genesys T-Server

Group field CTIconnect Module

1. Enter the following parameters:

Parameter	Value/Description
Type	Here, the type of the CTI <u>connect</u> module is displayed.
Grammar name	Select the respective grammar.
Grammar version	Select the respective grammar version.
T-server redundancy	Select the redundancy which is used from the drop-down list. <ul style="list-style-type: none"> • No redundancy • HAconnect - for High Availability Connection • Warm Standby - for a connectable redundancy
Config server redundancy	From the drop-down list, select the redundancy which is used for the Configuration Server of Genesys. <ul style="list-style-type: none"> • No redundancy • HAconnect - for High Availability Connection • Warm Standby - for a connectable redundancy

Parameter	Value/Description
<i>T-Server application name</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the application name that the CTIconnect module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>
<i>T-Server password</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the password that the CTIconnect module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>

Tab. 21: Configure add-on for Genesys T-Server

Group field Connection Data

In this group field, you can enter one or several sets of connection data.

- In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

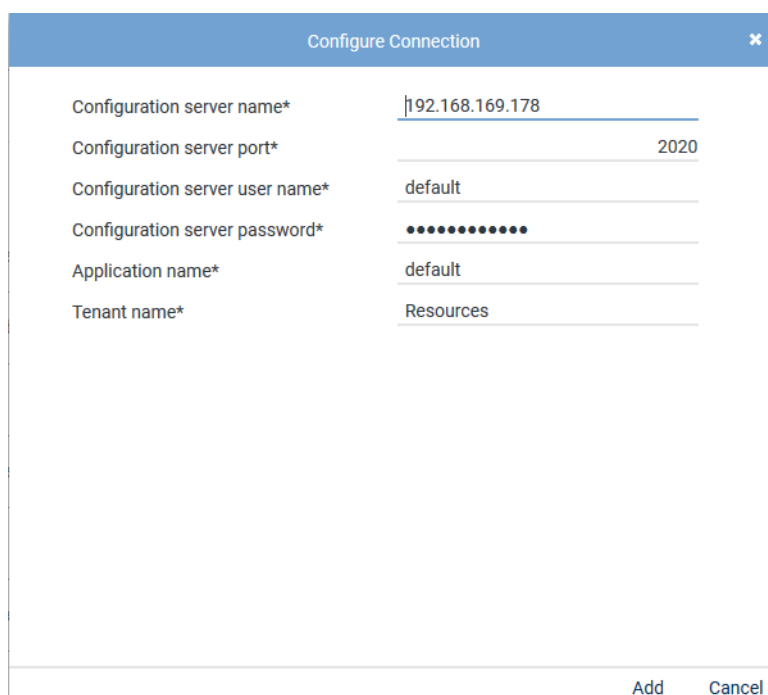


Fig. 76: Configure connection data

- Enter the following parameters:

Parameter	Value/Description
<i>Configuration Server: Name</i>	Enter the IP address or the name of the computer that the Genesys Configuration Server runs on.
<i>Configuration Server: Port</i>	Enter the port of the Genesys Configuration Server.
<i>Configuration Server: User name</i>	Enter the user name to log in to the Genesys Configuration Server.
<i>Configuration Server: Password</i>	Enter the password to log in to the Genesys Configuration Server.

Parameter	Value/Description
<i>Application name</i>	Enter the application name that the recording servers uses to log in to the Genesys Configuration Server. Default is <i>default</i> .
<i>Tenant name</i>	Enter the name of the Genesys tenant(s) that are supposed to request the configuration data. Default is <i>Resources</i> . Several tenants can be added separated by commas.

Tab. 22: Configure connection data

Group field Additional Data

The following additional data is delivered by default in the protocol when using Genesys T-Server:

- *CallID*
- *ANI*
- *CallUuid*
- *DNIS*



Further additional data depend on the configuration of the Genesys T-Servers. Check the list *AttributeUserData* in the trace files to find out which further additional data have been delivered by the Genesys T-Servers. Put the addition *UserData* in front of the additional data type when configuring customer-specific additional data, e. g. for *RTargetAgentGroup* you have to configure *UserDataRTargetAgentGroup*.

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

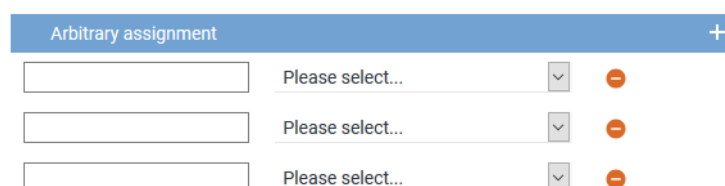
For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.




Arbitrary assignment			+
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–

Fig. 77: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*

- *End time*
 - *Duration*
 - *Calling Party Phone Number*
 - *Called Party Phone Number*
 - *Conversation Direction*
2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.




To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.

Configure miscellaneous settings

1. Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Miscellaneous Settings* appears.

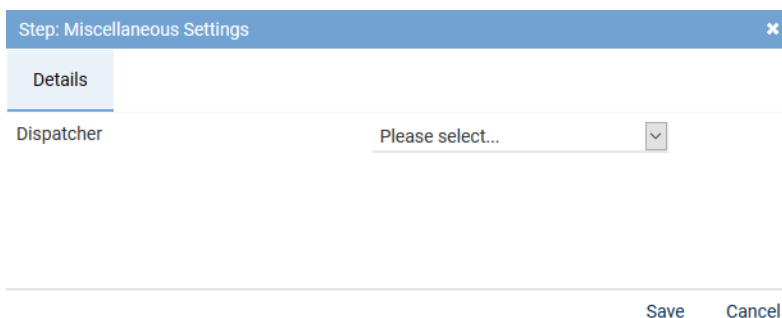


Fig. 78: Configure miscellaneous settings

2. Enter the following parameter:


Parameters	Description
<i>Dispatcher</i>	From the drop-down list, select the previously created additional data field that the participant information is supposed to be connected with.





Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

Activate integration

The integration can only be activated after the configuration is complete.

If not all configuration steps have been carried out completely, the icon  (*Incomplete*) will appear in the main view, in the line of the created integration, in the column *Status*.

If the configuration has been carried out completely, the icon  (*Complete*) will appear in the line of the respective step, in the column *Configuration*.

If all settings are complete, the icon  (*OK*) will appear in the main view, in the line of the created integration, in the column *Status*.













SIPREC		SIP active		
Step		Configuration		
Configure recording architecture				
Global recording settings				
Configure recording servers				
Configure add-on				
Configure miscellaneous settings				

Fig. 79: Activate integration

1. Mark the integration in the main view, so that the icon  (*Activate*) becomes active in the toolbar.
2. To activate the integration, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.






+ ×   Integration ▾ General			
Name ▾	Type ▾	Active ▾	Status ▾
 SIPREC	SIP active		

Fig. 80: Activated integration



If you use several PBXs, you can create and activate several integrations with the same recording architecture.



If you take advantage of the grace period and there is no valid license file in the system after its expiration, all integrations are deactivated. After uploading a valid license file, you have to activate the integrations again.





Upon activating the standard configuration, a bulk recording will start.

To restrict the recording to particular end devices, the tenant can configure the Recording Planner in the System Configuration accordingly.

Deactivate/Delete integration

To be able to delete an integration, it has to be deactivated.

1. To deactivate the integration, click on the icon  (*Deactivate*) in the toolbar.

- ⇒ In the column *Active*, the icon  (*Inactive*) appears.
- ⇒ The icon  (*Delete*) becomes active in the toolbar.









    Integration ▾ General			
Name ↕	Type ↕	Active ↕	Status ↕
 SIPREC	SIP active		

Fig. 81: Deactivate integration

2. Click on the icon  (*Delete*) and confirm the security prompt to delete the integration.

7.1.2.2 Configure recording solution All-in-one Failover

7.1.2.2.1 Create recording architecture

Start the configuration in the Recording Architectures module because an activated recording architecture is required for further configuration.

The recording servers, recording types, and the integration types are assigned in the Recording Architectures module.

1. Select the menu item *Setup > Recording Architectures* in the navigation bar.
 - ⇒ The following window appears:












 System Configuration	    General ▾			
	Name ↕	Type ↕	Active ↕	Standby active ↕
No records found				
Rows per page 50 0 - 0 of 0 < << >> >				

Fig. 82: Recording architectures - main view

Name	Name of the recording architecture
Type	Type of the recording architecture
Active	Shows whether the recording architecture has been activated and is ready to be used for the recording.  = Recording architecture is active and ready to be used for recording. It can be deactivated by clicking on the icon  (<i>Deactivate</i>) in the toolbar.  = Recording architecture is not active. It can be activated by clicking on the icon  (<i>Activate</i>) in the toolbar.
Standby Active	Shows whether the standby server is active for one or several recording components in the recording architecture.  = At least 1 standby server is active.  = No standby server is active or no standby server has been defined.

<i>Creation Date</i>	Date on which the recording architecture was installed.
<i>Updated</i>	Date on which the settings of the recording architecture were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Recording Architectures module

The toolbar offers the following functions.

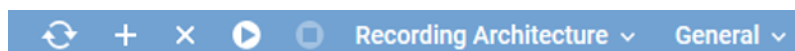







Fig. 83: Toolbar Recording Architectures module


	<i>Refresh</i>	Refreshes the main view.
	<i>Create</i>	Creates a new recording architecture.
	<i>Delete</i>	Deletes the selected recording architecture. The recording architecture is removed from the list of the main view. NOTICE! You can only delete recording architectures which are inactive and have not been assigned to an integration or server for the import.
	<i>Activate</i>	Activates the selected recording architecture.
	<i>Deactivate</i>	Deactivates the selected recording architecture. NOTICE! You can only deactivate recording architectures which have neither been assigned to an active integration nor to an active import.
<i>Recording Architecture</i>	<i>Standby Management</i>	The menu item is only available for recording architectures with failover possibilities. By clicking on the menu item Standby Management, you can open a window in which you can manually define the active server in architectures with failover concepts.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
	<i>Reset Search</i>	Resets all manually entered search criteria.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



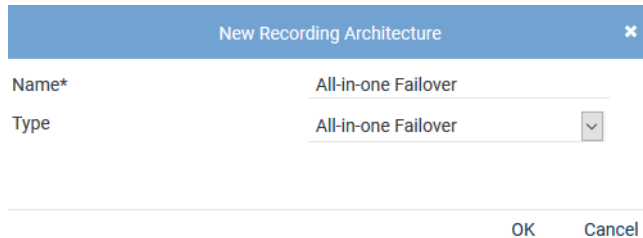
For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create recording architecture All-in-one Failover

If a standby recording server is supposed to take over recording in case of an error, you have to create a recording architecture of the type *All-in-one Failover*.

1. To create a new recording architecture, click on the icon  (*Create*) in the toolbar of the main view.

⇒ The window *New Recording Architecture* appears.

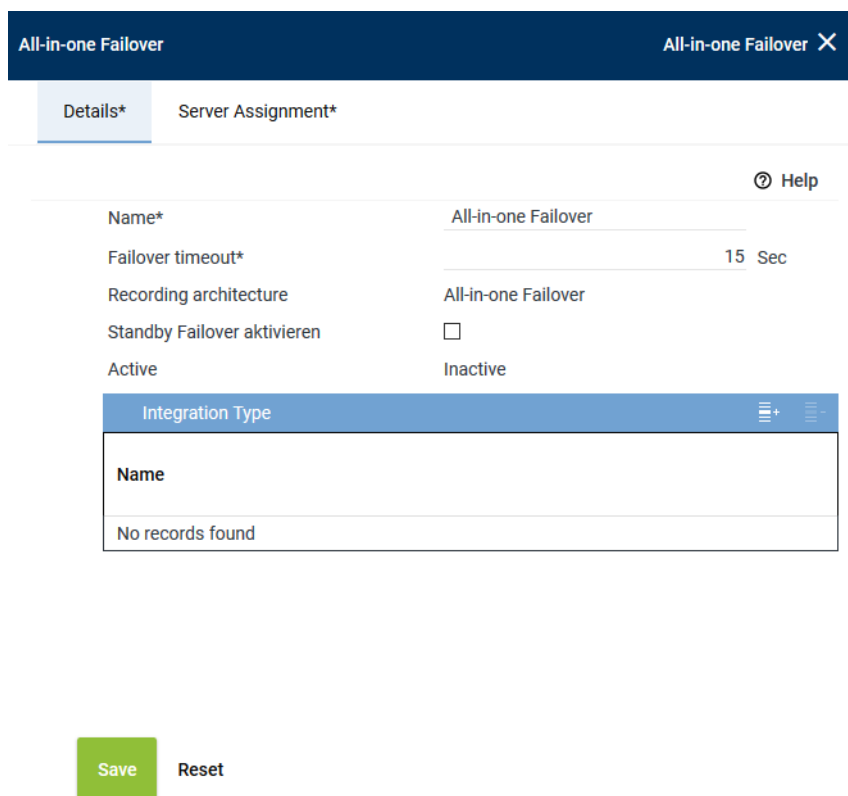


The dialog box titled "New Recording Architecture" has a close button (X) in the top right corner. It contains two input fields: "Name*" with the value "All-in-one Failover" and "Type" with a dropdown menu showing "All-in-one Failover". At the bottom right, there are "OK" and "Cancel" buttons.

Fig. 84: Create recording architecture - All-in-one Failover

2. In the entry field *Name*, enter a descriptive name for the recording architecture.
3. From the drop-down list *Type*, select the recording architecture type *All-in-one Failover*. **NOTICE!** The drop-down list only displays the supported recording architecture types.
4. Click on the button *OK*.

⇒ Your entries now appear in the detail view.



The "All-in-one Failover" detail view has a title bar with "All-in-one Failover" and a close button (X). Below the title bar are two tabs: "Details*" (selected) and "Server Assignment*". The "Details*" tab contains a form with the following fields:

- Name***: All-in-one Failover
- Failover timeout***: 15 Sec
- Recording architecture**: All-in-one Failover
- Standby Failover aktivieren**: ☐
- Active**: Inactive


Below the form is a table titled "Integration Type" with a "+" button and a minus button. The table has one column labeled "Name" and shows "No records found". At the bottom of the form are "Save" and "Reset" buttons.

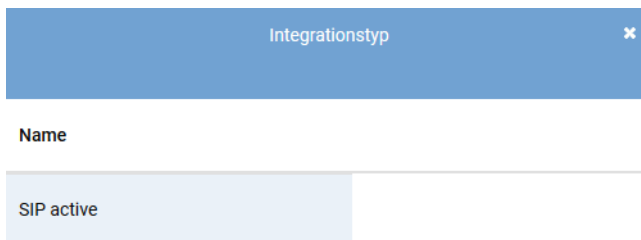
Fig. 85: Recording architecture - tab Details - All-in-one Failover

As standby components may have been configured for the active recording server, a failover timeout may be configured in this recording architecture. For further information about failover architectures, see [chapter "Standby management for failover architectures", p. 390](#).

<i>Failover timeout</i>	<p>Enter a timeout of a minimum of 15 seconds after which the failover process is supposed to start. Depending on the system architecture it may make sense to configure a longer timeout period. The timeout defines the elapse time until the failover process starts. If the status returns to <i>OK</i> within this time, then the failover process is not triggered.</p> <p>NOTICE! Check these parameters after an update and set the timeout to 15 seconds, if required.</p>
<i>Activate standby failover</i>	<p>Activate this option if you would like to ensure that the system switches back to the primary server in case of an error of the standby server.</p> <p>NOTICE! There is no check whether the primary database is working properly before switching back. As a result it is possible that both databases are in an undefined state.</p> <p>NOTICE! After switching back to the original primary server from the standby server, this option is deactivated. If the switching process is supposed to be carried out automatically in the event of a new error, you must activate this option again.</p>
<i>Active</i>	Shows the status of the recording architecture.

Add integration type

- Click on the icon  (Add) in the toolbar of the list *Integration Type*.
⇒ The window *Integration Type* appears.



Hinzufügen Abbrechen

Fig. 86: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.

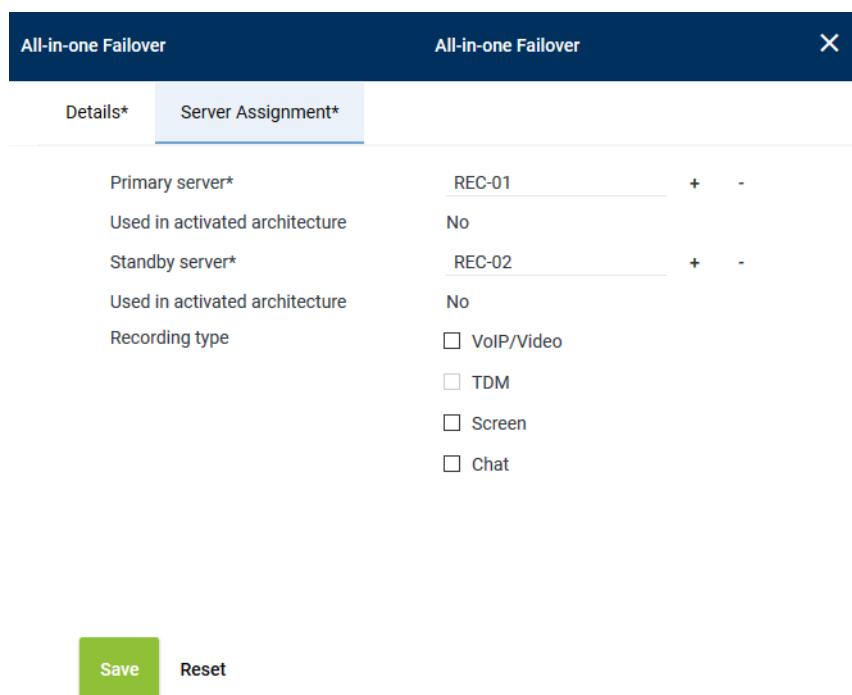


Any number of integration types can be assigned to a recording architecture.

2. Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Assign servers for All-in-one Failover Recording

1. Click on the tab *Server Assignment* to assign the recording servers to the recording architecture *All-in-one Failover Recording*.



The screenshot shows a configuration window titled 'All-in-one Failover' with a close button (X). It has two tabs: 'Details*' and 'Server Assignment*'. The 'Server Assignment*' tab is active, showing a form with the following fields:

Primary server*	REC-01	+	-
Used in activated architecture	No		
Standby server*	REC-02	+	-
Used in activated architecture	No		
Recording type	<input type="checkbox"/> VoIP/Video <input type="checkbox"/> TDM <input type="checkbox"/> Screen <input type="checkbox"/> Chat		

At the bottom, there are two buttons: 'Save' (green) and 'Reset' (grey).

Fig. 87: Recording Architecture - tab Server Assignment

2. Click on the button **+** behind the entry field *Primary server*.
⇒ The window *Servers* appears.



The screenshot shows a window titled 'Servers' with a close button (X). It contains a table with the following data:

Name ↕	IP Address ↕	Path ↕
REC-01	192.168.173.171	C:\
REC-02	192.168.173.172	C:\

At the bottom, there is a pagination bar showing 'Rows per page 20' and '1 - 8 of 8'. There are also navigation icons (first, previous, next, last) and two buttons: 'Add' and 'Cancel'.

Fig. 88: Recording Architecture - assign server - example

3. Select the *primary server*.



A server can be configured in several recording architectures, but you cannot activate several recording architectures with the same server at the same time.
If you would like to activate several recording architectures at the same time, you have to use different servers to do so.

4. Click on the button *Add*.
⇒ The name of the server now appears in the detail view.
5. To delete an assignment, click on the button *-*.
6. Repeat the steps and select the server which is supposed to be use in case of an error failover operation in the entry field *Standby server*.
7. Select the recording type you would like to use for these servers by activating the check box.

Recording type

☒ VoIP/Video

☒ TDM

☒ Screen

☒ Chat




Fig. 89: Recording Architecture - activate recording type



You can activate several recording types if the integration has been designed for this and if you have installed the respective licenses.

8. To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

Activate recording architecture

1. Once all servers have been assigned, click on the button *Save*.
2. Select the recording architecture in the main view so that the icon  (*Activate*) in the tool-bar becomes active.
3. To activate the recording architecture, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.










     Recording Architecture ▾ General ▾			
Name ↕	Type ↕	Active ↕	Standby active ↕
All-in-one Failover	All-in-one Failover		

Fig. 90: Recording architecture - activate recording architecture

4. To deactivate the recording architecture, if required, click on the icon  (*Deactivate*).
⇒ In the column *Active*, the icon  (*Inactive*) appears.



The recording architecture must have been activated so that the integration can be configured.



For updates, the recording architecture is stopped and deactivated. Once the update has been completed, check that the recording architecture has been activated again.



For all recording architectures with failover components, you can manage to the standby components via standby management. This holds true for Multi-Server Recording and Multi-Server Parallel Recording systems if redundancy options are available for these systems. See [chapter "Standby management for failover architectures", p. 390](#).



If you install an extension for the integration subsequently, you must deactivate the recording architecture and activate it again after having installed the license.

7.1.2.2.2 Configure servers

Every server in your network that the *neo* software has been installed on is automatically identified as a server of the recording system and displayed in the main view of the Servers module. In the Servers module, you can configure the usage of the servers in your recording system.

1. Select the menu item *Setup > Servers* in the navigation bar.

⇒ The following window appears:

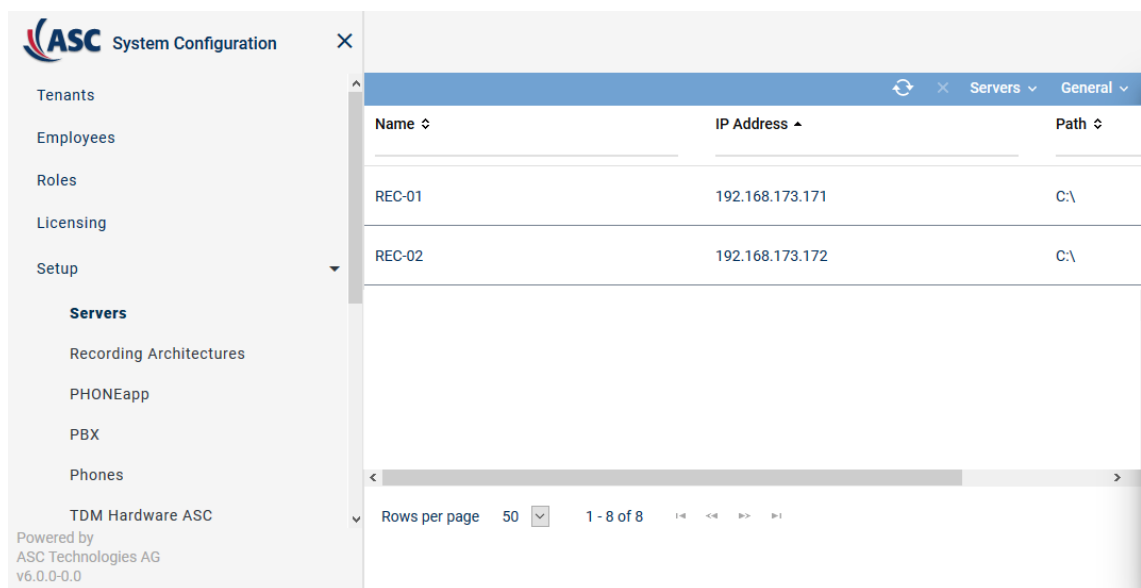


Fig. 91: Servers - main view

Depending on the configuration of the columns, the following information is displayed in the main view:

<i>Name</i>	Shows the name of the server.
<i>IP Address</i>	Shows the IP address of the server.
<i>Path</i>	Shows the path of the server.
<i>Creation Date</i>	Date on which the server was installed.
<i>Updated</i>	Date on which the settings of the server were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Servers module

The toolbar offers the following functions.

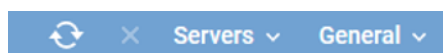




Fig. 92: Toolbar Servers module

	Refresh	Refreshes the main view.
-------------------------------------------------------------------------------------	----------------	--------------------------

	<i>Delete</i>	Deletes the selected server configuration. This function is meant to delete the server configuration if the hardware of a server has been removed and there is no connection to the <i>neo</i> system.
<i>Servers</i>	<i>Administrate Server Locations</i>	Opens a window in which you can create and administrate locations of the servers, see chapter "Administrate server locations", p. 83 .
	<i>Administrate NTP Server</i>	Opens a window in which you can administrate the servers for the time synchronization, see chapter "Administrate NTP server", p. 100 .
	<i>Manage Synchronization Configurations</i>	Opens a window in which you can manage the synchronization configurations.
<i>General</i>	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
	<i>Reset Search</i>	Resets all search filters so that all sets of data are displayed in the main view again.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



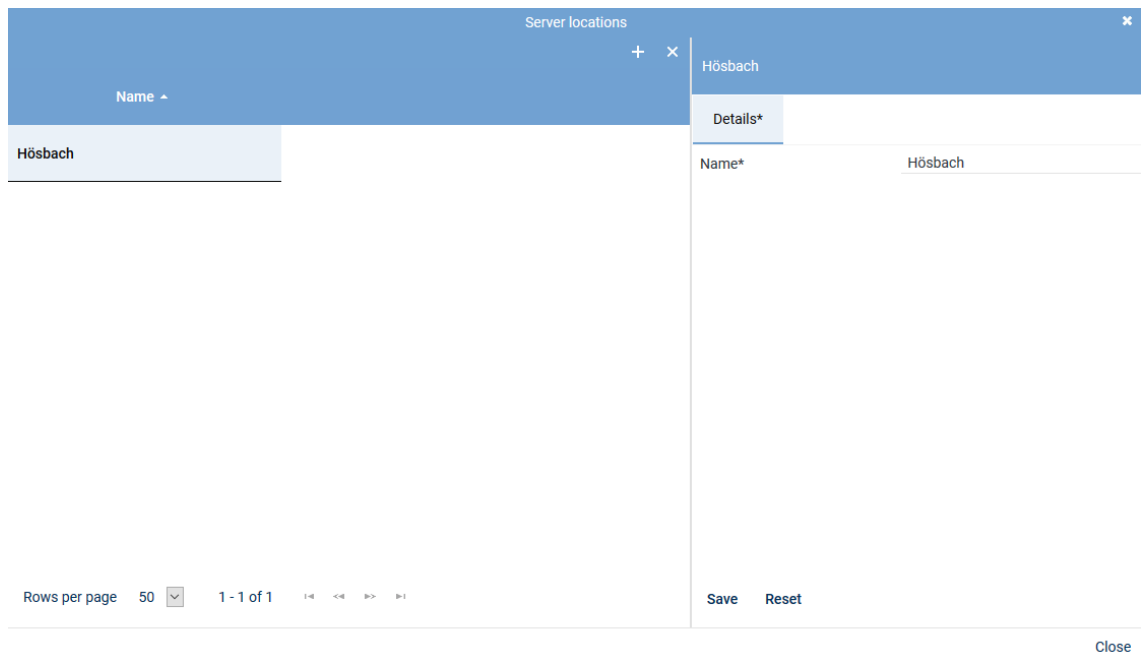
For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Administrate server locations

You can create and manage a list of server locations. In the tab *Details*, you can assign locations to the servers.


Add server locations

1. Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.



The screenshot shows a window titled "Server locations" with a close button (x) in the top right corner. Below the title bar is a toolbar with a plus icon (+) and a minus icon (-). The main area is divided into two panes. The left pane contains a table with one row: "Hösbach". The right pane has a tab labeled "Details*" and a form with a label "Name*" and a text input field containing "Hösbach". At the bottom of the right pane are "Save" and "Reset" buttons. At the bottom of the left pane, there is a pagination bar showing "Rows per page 50", "1 - 1 of 1", and navigation icons. A "Close" button is located at the bottom right of the window.

Fig. 93: Add server locations

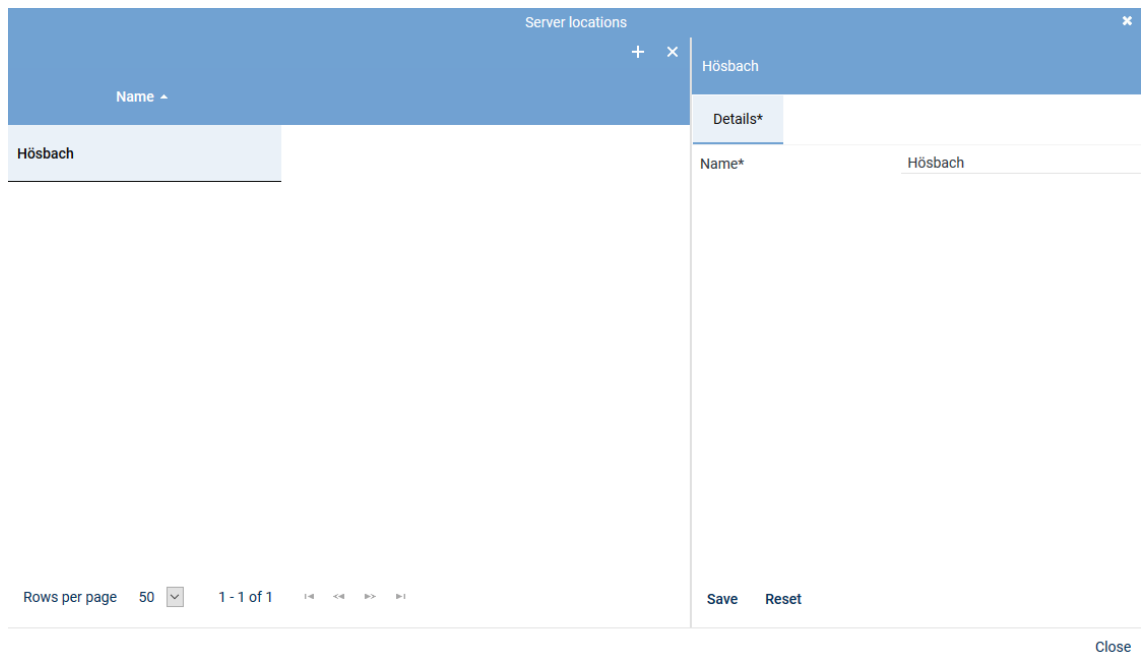
2. Click on the icon  (*Create*) in the toolbar of the window *Server Locations*.
3. Enter the name of the location on the right side in the tab *Details*.
4. To save the entry, click on the button *Save*.
To discard the entry, click on the button *Reset*.
5. To add further locations, repeat the last 3 steps.
6. To close the window, click on the button *Close*.

Delete server location



A server location can only be deleted when it has not been assigned. To be able to delete a server location, you must first delete possible assignments.

1. Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.
2. Select the location you would like to delete.



Server locations

Name
Hösbach

Details*


Name* Hösbach

Rows per page 50 1 - 1 of 1

Save Reset

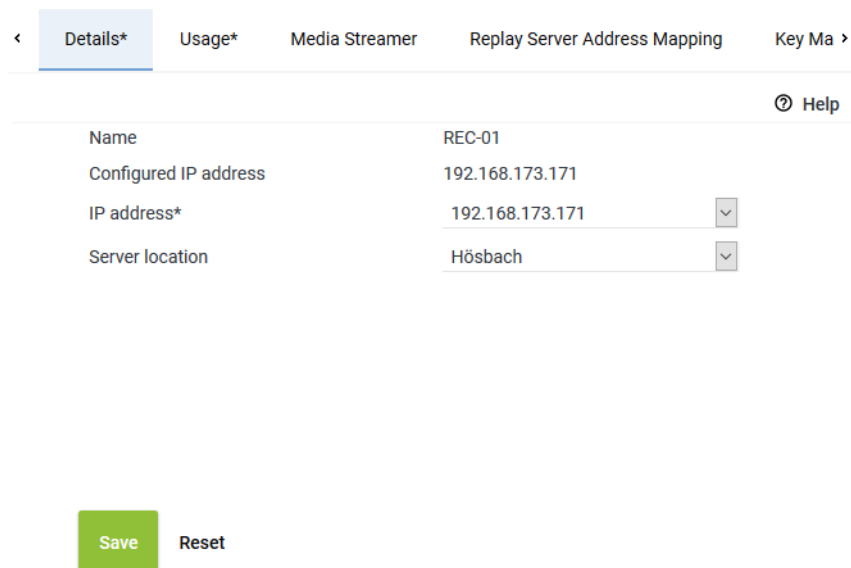
Close

Fig. 94: Delete server location

- Click on the icon  (*Delete*) in the toolbar of the window.
- To delete further locations, repeat the last 2 steps.
- To close the window, click on the button *Close*.

Tab Details

- To configure the server, select the entry of the corresponding server in the main view.
 - ⇒ In the detail view, the tab *Details* appears.
 - The information *Name* and *Configured IP address* has already been entered during the installation and is displayed for your information only.



Details* Usage* Media Streamer Replay Server Address Mapping Key Ma >

Help

Name	REC-01
Configured IP address	192.168.173.171
IP address*	192.168.173.171
Server location	Hösbach

Save Reset

Fig. 95: Servers - tab Details

- From the drop-down list, select the IP address which is supposed to be used as default address of the server in the system.
- Select the *Server location* in the drop-down list. The drop-down list displays all locations which have been created in the location management.

- Click on the button **Save** if the entries are correct.

Tab Usage

- Click on the tab **Usage** to configure the purpose of usage.



Since a server can be used for several recording solutions, all purposes of use are listed. Note that some purposes of use do not apply for some recording solutions. As an example: You cannot use audio analysis or replay via phone in a chat recording.

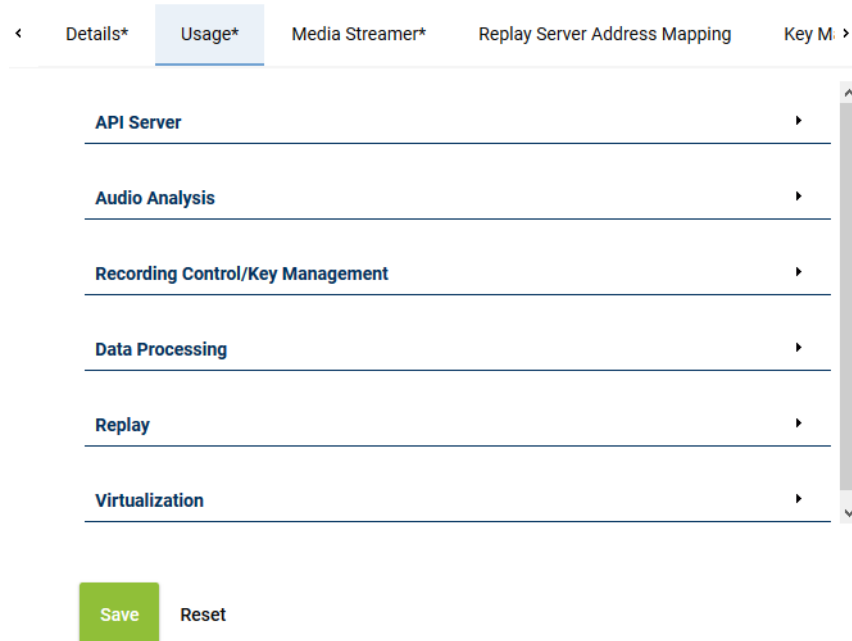


Fig. 96: Servers - tab Usage

Group field API Server

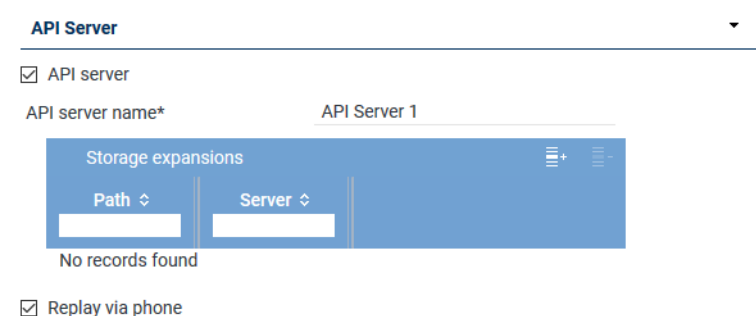




Fig. 97: Group field API Server


The API server is a service in the neo software. It contains the interface for the client applications. Once the service has been started, the client applications can communicate with the neo system via this interface by means of defined commands.

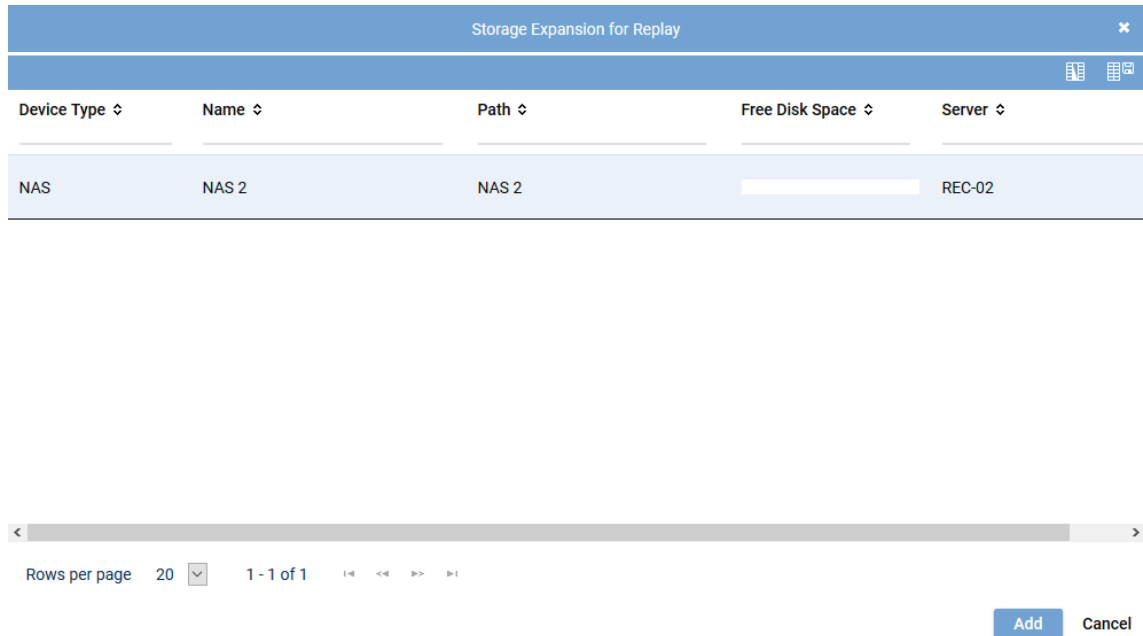
The API server is responsible for replay via the web browser, too. The API server has to be started before the replay server can be activated and the API server assigned for replay via the web applications.

Parameter	Value/Description
API server	Tick the check box to start the API server. <input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>API server</i> .

Parameter	Value/Description
	<p><input type="checkbox"/> = Function has not been activated.</p> <p>In order to be able to reach the API server from a public network and with configured port forwarding, too, you have to adjust the settings in the tab <i>Replay Server Address Mapping</i>, see chapter "Tab Replay Server Address Mapping", p. 96.</p>
<i>API server name</i>	<p>Enter the name which is supposed to denote the server in the system. The displayed name can be selected arbitrarily and is a kind of pseudonym.</p> <p>The displayed name is meant to make it easier for users to select a server as different API servers may be used across the system by different tenants. When selecting the API server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p>
<i>List Storage expansions</i>	<p>Here, you can add storage expansions for replay. If a recording which is supposed to be replayed cannot be found on the server, the search is continued on the storage expansions which have been entered here. That way, even recordings can be replayed which have not been transferred to the server.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> • By clicking on the icon  (<i>Add</i>), you can add the storage expansions, see chapter "Add storage expansion for replay", p. 88. • By clicking on the icon  (<i>Remove</i>), you can remove the storage expansions from the list. <p>If you use several recording servers in your system for which storage expansions have been configured, you can add any storage expansion of any recording server on every API server of the system.</p>
<i>Replay via phone</i>	<p>Activate this function if you would like to use the functions <i>Replay via phone</i> or <i>Last Call Repeat</i>.</p> <p><input checked="" type="checkbox"/> = Function has been activated.</p> <p><input type="checkbox"/> = Function has not been activated.</p> <p>NOTICE! The function <i>Replay via phone</i> has been implemented in the following <i>neo</i> components:</p> <ul style="list-style-type: none"> • Application POWERplay Pro • Application POWERplay Instant • Replay module <p>In order to enable a client to use the functionality <i>Replay via phone</i>, you have to assign this client an identifier either in the Employees module or in the Phones module which allows the system to clearly identify the phone.</p> <p>NOTICE! In the tab <i>Media Streamer</i>, you have to assign this function to a PBX, see chapter "Tab Media Streamer", p. 95. To be able to do so, at least 1 PBX must have been configured in the system.</p>

Add storage expansion for replay

1. Click on the icon  (Add) in the toolbar of the list.
2. Select 1 or several storage expansions.
If you would like to select several storage expansions or revoke a selection, click on the respective line while holding the [Ctrl] key down.



Device Type	Name	Path	Free Disk Space	Server
NAS	NAS 2	NAS 2	<div></div>	REC-02

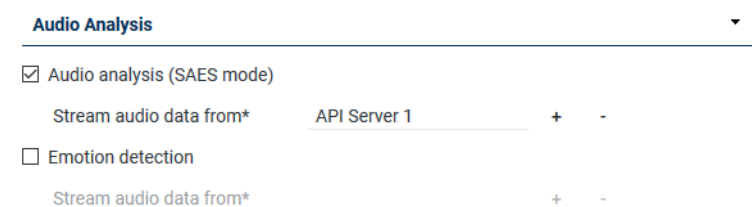
Rows per page 20 1 - 1 of 1

Add Cancel

Fig. 98: Select storage expansion

3. To apply the selected storage expansions, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Audio Analysis



Audio Analysis


☒ Audio analysis (SAES mode)

Stream audio data from* API Server 1 + -

☐ Emotion detection

Stream audio data from* + -

Fig. 99: Group field Audio Analysis

Parameters	Value/Description
<i>Audio analysis</i>	<p>Activate this check box to use the server for audio analysis. The audio data is then streamed for audio analysis from the configured server to this server.</p> <ul style="list-style-type: none"> Stream audio data from From the list of available servers, select the server from which the audio data is supposed to be streamed for audio analysis via the button .
<i>Emotion detection</i>	<p>Activate this check box to activate emotion detection for the audio analysis.</p> <p><input checked="" type="checkbox"/> = Function has been activated. Tenants can use the emotion detection function.</p>

Parameters	Value/Description
	<input type="checkbox"/> = Function has not been activated.

Tab. 23: Configure audio analysis

Group field Recording Control/Key Management

Recording Control/Key Management ▼

☒ Recording control/Monitoring

Recording architecture Please choose... ▼

☒ neo key management

Fig. 100: Group field Recording Control/Key Management

Parameters	Value/Description
<i>Recording control/Monitoring</i>	<p>Activate the check box if you would like to use <i>CLIENT^{command}</i> or an API recording control or if you would like to use <i>Monitoring</i>. This feature is only available if a recording architecture has been configured and activated.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the respective recording architecture you would like to use for the control.
- <i>neo key management</i>	<p>The function allows customer-specific encryption of the recordings. To be able to configure the key management, you have to activate the check box <i>Key management</i>.</p> <p>This function can only be activated if the license <i>ASC_KEY_MANAGEMENT</i> is available.</p> <p>For further information about the configuration of the key management refer to the administration manual <i>Configuration of servers and recording architectures</i> and to the installation manual <i>Installation Dongle Manager</i>.</p>

Tab. 24: Configure Recording Control/Key Management

Group field Data Processing

Data Processing ▼

☒ Data storage

☒ Transfer data for replay

Target Server

Name	IP Address ↕
No records found	

☒ Transfer data for data storage

Target Server

Name	IP Address ↕
No records found	

Activate period of time ☒

from 11:59:36

to 11:59:36

Receives data from

Name	Only Replay
No records found	



☒ Archiving





☒ Export

☒ Import

Recording architecture Please choose... ▼


Fig. 101: Group field Data Processing


Parameter	Value/Description
<i>Data storage</i>	Activate the check box to allow the modification of the additional functions of data processing.
<i>Transfer data for replay</i>	<p>Activate the check box if you would like to transfer data only for replay to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for replay. The data is not stored on the target server but deposited in a cache temporarily in order to be replayed.</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the target server, see chapter "Add target server to a list", p. 91. By clicking on the icon  (<i>Remove</i>), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which an API server and a replay server have been configured.</p>
<i>Transfer data for data storage</i>	<p>Activate the check box if you would like to transfer data for storage to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for data storage purposes. In the drop-down list, all servers are displayed on which the function <i>Data Storage</i> has been activated. The data is copied to the target server and stored there.</p>

Parameter	Value/Description
	<ul style="list-style-type: none"> By clicking on the icon  (Add), you can add the target server, see chapter "Add target server to a list", p. 91. By clicking on the icon  (Remove), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which the function <i>Data Storage</i> has been activated.</p> <p>If the function has been activated, you can activate the transfer for a certain period of time.</p> <ul style="list-style-type: none"> Activate period of time <input checked="" type="checkbox"/> = Function has been activated. The fields for entering the time become active. Select the time via the rotating field for the period from – to. Active period of time <input type="checkbox"/> = Function has not been activated. <p>NOTICE! In distributed systems with slow network connections, the storage interval for the data transfer can be adjusted. The storage interval for the data transfer has to be configured by an ASC service technician or by an authorized partner company.</p>
<i>Receives data from</i>	<p>This table contains those servers which transfer data to this server.</p> <p>In the column <i>Name</i>, the name of the server appears from which data has been transferred.</p> <p>In the column <i>Only Replay</i>, the purpose of the transfer is displayed:</p> <p> = Data is transferred only for replay.</p> <p> = Data is transferred for data storage.</p>
<i>Archiving</i>	Activate the check box <i>Archiving</i> if you would like to use the server for archiving purposes.
<i>Export</i>	Activate the check box <i>Export</i> to allow the export from this server.
<i>Import</i>	<p>Activate the check box <i>Import</i> so that the imported data can be stored on this server.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the recording architecture that fulfills this function. In the drop-down list, all recording architectures are displayed which enable this function as well. <p>NOTICE! If you would like to use a server for the import function on which no recording is supposed to take place, you can configure an architecture exclusively for the import.</p>

Tab. 25: Configure data storage

Add target server to a list

- In the toolbar of the list *Target Server*, click on the icon  (Add).
- Select the server from the list to which you would like to transfer the data.
If you would like to select several servers or revoke a selection, click on the respective line while holding the [Ctrl] key down.



Target Server

Name ↕	IP Address ↕
RC-02	192.168.173.176
REC-04	192.168.173.174
RC-01	192.168.173.175
REC-02	192.168.173.172
CTI-01	192.168.173.177
REC-03	192.168.173.173

Rows per page 20 1 - 6 of 6

Add Cancel

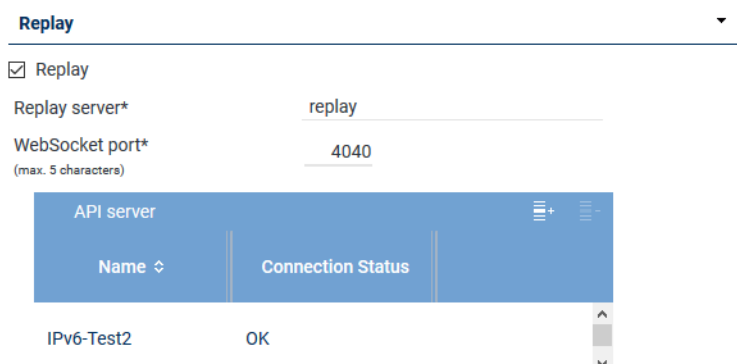
Fig. 102: Select server



Only those servers are available on which the function *Data storage* has been activated.

- To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Replay



Replay

☒ Replay



Replay server* replay

WebSocket port* 4040
(max. 5 characters)

API server	
Name ↕	Connection Status
IPv6-Test2	OK

Fig. 103: Group field Replay

Parameter	Value/Description
<i>Replay</i>	<p>A replay server can replay recordings via the integrated <i>Replay Feature</i>. Only data which has either been recorded directly on this server or which has been transferred to this server for data storage or only for replay purposes can be replayed. The client computers of the system can connect to a replay server for replay purposes.</p> <p>Activate the check box <i>Replay</i> to be able to use the replay function of the players and the phones.</p> <p><input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>Replay server</i>.</p> <p><input type="checkbox"/> = Function has not been activated.</p>

Parameter	Value/Description
<i>Replay server</i>	<p>If the function has been activated, you can enter a displayed name which is supposed to denote the server as the replay server in the system in the entry field <i>Replay server</i>. The displayed name can be selected arbitrarily and is a kind of pseudonym. As the replay server and the API server must not be identical, you can select different pseudonyms.</p> <p>The displayed name is meant to make it easier for users to select a server as different replay servers may be used across the system by different tenants. When selecting the replay server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p> <p>In order to be able to reach the server activated for replay from a public network and with configured port forwarding, you have to set the configuration in the tab <i>Replay Server Address Mapping</i>. For further details about the configuration refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>
<i>WebSocket port (maximum of 5 characters)</i>	Enter the port via which the data to be replayed in <i>POWERplay</i> Web are supposed to be transmitted.
<i>List API server</i>	<p>Here, you can add API servers that the replay server may use. If a recording which is supposed to be replayed cannot be found on a server, the search is continued on the API servers which have been entered here.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the API server, see chapter "Add API server to a list", p. 93. By clicking on the icon  (<i>Remove</i>), you can remove selected API servers from the list.

Tab. 26: Configure replay

Search and replay functions



To be able to use the search and replay functions via [LCR](#) as well as to use replay via phone, you have to create the users with the respective access rights in the application System Configuration in the Employees module. For information about the configuration refer to the administration manual *User management* for tenants.

Add API server to a list

The replay server required the services of an [API](#) server. The configuration must be as follows:


- If the replay server runs on a server with a local [API](#) server, it must not necessarily be assigned as the replay server always addresses the local [API](#) server first.
 - If the replay server runs on a separate server, you must assign at least one [API](#) server that the replay server can address.
 - If several [API](#) servers are available in the network, you can assign further [API](#) servers in addition to the local [API](#) server. The assigned [API](#) servers are addressed in order. For this reason, the local [API](#) server should always be first in the list.
- To assign an [API](#) server, click on the icon  (*Add*) in the toolbar of the list *API Server*.
 - Select the server from the list on which the [API](#) service is running.



Fig. 104: Select server



Only those servers are available on which the [API](#) service has been installed and activated. See [chapter "Group field API Server", p. 86](#).

- To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Virtualization



Fig. 105: Group field Virtualization

Parameter	Value/Description
<i>VM support</i>	<p>Activate the check box <i>VM support</i> to be able to use the licensing for several VM installations.</p> <p>This function can only be activated if the system has been installed in a VMware and no <i>TRUSTED_VIRTUALIZATION</i> license has been imported to the system.</p> <p>When activating the function <i>VM support</i>, you have to configure the respective settings in the tab <i>Keystore/VM Licensing</i>. For further details about the configuration of this function refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>

Tab. 27: Configure virtualization



For the *virtualization* without Internet connection, a dongle is required which contains the system information. The application *Dongle Manager*, required to read the dongle, has to be installed on the server that the dongle has been connected to.

- To save the entries, click on the button *Save* in the detail view.
To reset the entries, click on the button *Reset* in the detail view.

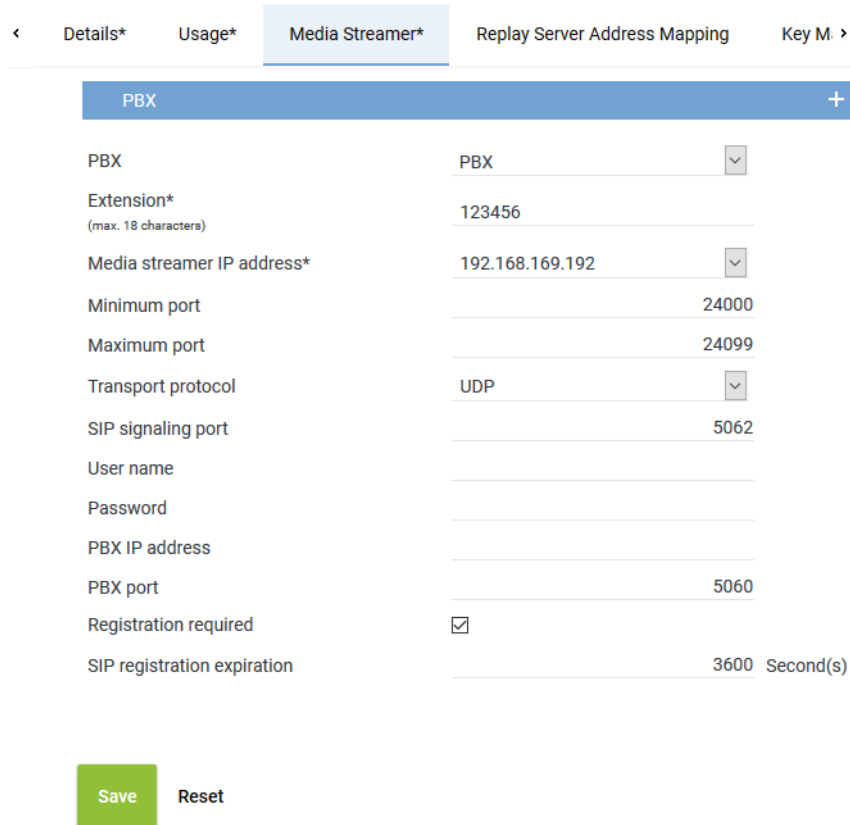
Tab Media Streamer

1. Click on the tab *Media Streamer* in the detail view.

In this tab, you can configure the Media Streamer for the functionalities *Replay via phone* and *Last Call Repeat Facility*.



The tab *Media Streamer* is only active if the function *Replay via phone* has been activated in the tab *Usage*.



< Details* Usage* **Media Streamer*** Replay Server Address Mapping Key M. >

PBX +

PBX	PBX	▼
Extension*	123456	
<small>(max. 18 characters)</small>		
Media streamer IP address*	192.168.169.192	▼
Minimum port	24000	
Maximum port	24099	
Transport protocol	UDP	▼
SIP signaling port	5062	
User name		
Password		
PBX IP address		
PBX port	5060	
Registration required	<input checked="" type="checkbox"/>	
SIP registration expiration	3600	Second(s)

Save Reset

Fig. 106: Servers module - tab Media Streamer

2. Enter the following parameters:

PBX	<p>PBX that the Media Streamer is supposed to be mapped to.</p> <p>Select a PBX from the drop-down list. The drop-down list displays all PBXs which have been created in the system.</p> <p>If no PBX has been created in the system yet, you can create a PBX via the blue bar PBX, see chapter "Create PBX", p. 101.</p>
Extension	<p>Extension which is supposed to be mapped to the Media Streamer. This is a mandatory field; the configuration cannot be saved if this information is missing.</p> <p>If an external analog gateway has been integrated, enter the value 8000.</p>
Media streamer IP address	<p>IP address which is supposed to be used for the exchange of the audio data and for the SIP communication.</p> <p>Select an IP address from the drop-down list. In the drop-down list, all IP addresses of the server are displayed.</p> <p>If an external analog gateway has been integrated, select the IP address 169.254.254.100 in the drop-down list.</p>

<i>Minimum port</i>	Enter the minimum port which is supposed to be used for the audio data exchange.
<i>Maximum port</i>	Enter the maximum port which is supposed to be used for the audio data exchange. A port range of 100 (e. g. 24000-24099) is sufficient for 50 licenses. The port range should be twice as wide as the number of available licenses.
<i>Transport protocol</i>	Select the transport protocol type you would like to use for the SIP communication from the drop-down list. TCP = unencrypted UDP = unencrypted TLS = encrypted If an external analog gateway has been integrated, select UDP in the drop-down list.
<i>SIP signaling port</i>	Enter the port for the SIP communication. Port for data exchange: 5062
<i>User name</i>	Enter the user name for the authentication on the SIP server.
<i>Password</i>	Enter the password for the authentication on the SIP server.
<i>PBX IP address</i>	Enter the IP address of the SIP registrar of the PBX . If an external analog gateway has been integrated, enter the IP address 169.254.254.101.
<i>PBX port</i>	Enter the port of the SIP registrar of the PBX . If an external analog gateway has been integrated, enter the value 5060.
<i>Registration required</i>	Select whether the SIP extension has to be registered with the SIP registrar of the PBX . <input checked="" type="checkbox"/> = SIP extension has to be registered. <input type="checkbox"/> = SIP extension does not have to be registered. If an external analog gateway has been integrated, deactivate the check box <i>Registration required</i> .
<i>SIP registration expiration</i>	Enter the time interval after which the registration has to be repeated.

Tab Replay Server Address Mapping

1. Click on the tab *Replay Server Address Mapping* in the detail view.

In this tab, you can configure the replay server address mapping. Servers which have been activated for replay require this address mapping so that they can be reached from a public network and with configured port forwarding.



The tab *Replay Server Address Mapping* is only active if the function *Replay* has been enabled in the tab *Usage*.

[Details*](#)
[Usage*](#)
[Media Streamer*](#)
[Replay Server Address Mapping](#)
[Key M. >](#)

Replay Server Addresses
✖

Internal IP address/ port of the replay server
 : 4000

External address/ port of the replay server
 : 4000

Save
Reset

Fig. 107: Servers Module - tab Replay Server Address Mapping

Group field Replay Server Addresses

1. Enter the following parameters:

<i>Internal IP address/ port of the replay server</i>	Enter the destination IP address and the port of the replay server at which the Replay module can be reached internally.
<i>External address / Port of the replay server</i>	Enter the URL or the IP address and the port at which the Replay module can be reached via the browser from outside. When entering the external address consider whether the SSL certificate has been created for an IP address or for a DNS address. In the latter case, it is imperative to enter the DNS name! Otherwise the certificate check in the replay applications will fail.

If you would like to remove the addresses, click on the icon ✖ in the title bar of the group field.



If address mapping has been configured, the Replay module receives the configured address and the configured port.

If address mapping has not been configured, the Replay module receives the IP address and the default port 4040 as entered in the tab *Details*.



To allow the users of the respective tenant to access the replay server via the browser, an internal address and/or an external IP address or a DNS name must be configured in the Tenants module.



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Key Management

1. Click on the tab *Key Management* in the detail view.

In this tab, you can configure the settings for the *neo* key management. This tab is only active if you have installed the corresponding license and enabled the function *neo Key Management* in the tab *Usage*.

< Usage* Media Streamer* Replay Server Address Mapping
Key Management >

Key creation interval

☒ All

365 Day(s)

☐ Create key manually

Delay usage

until

0 Day(s)

0 Hour(s)

☐ Key expiration date

after

0 Day(s)

☒ In case of an error switch to simple key management automatically

Save

Reset

Fig. 108: Servers module - tab Key Management

<i>Key creation interval</i>	<p>Select whether a key is supposed to be generated automatically or manually. Select one of the following options:</p> <ul style="list-style-type: none"> • <i>All</i> Select the intervals in which a new key is supposed to be generated automatically. Possible time interval: 1 to 365 days Default value: 365 days • <i>Create key manually</i> Select that a key is supposed to be generated manually. <p>Old keys which are no longer used for encryption become inactive for the time being. They remain in the database, though, since they are still required for the decryption of old recordings.</p>
<i>Delay usage</i>	<p>If required, enter a time interval during which the new key is not supposed to be used yet after having been created. Not until after this time interval has passed can the key be actually used for encryption.</p> <p>Possible time interval: 0 to 14 days Default value: 0 days (new keys are immediately used for encryption)</p> <p>A delay guarantees that the key has been captured by a database backup before it will actually be used.</p>
<i>Key expiration date</i>	<p>Select whether an inactive key is supposed to become invalid after the expiration of the time interval defined here.</p> <p><input type="checkbox"/> = Key never becomes invalid.</p> <p><input checked="" type="checkbox"/> = Key becomes invalid. In the entry field, enter the time interval after which the key loses its validity. Once this time interval has passed, the key cannot be used anymore. If recording data must be deleted after a certain period of time, this option offers additional security on top of the configured date of deletion. This especially applies to the case when recording data has been transferred manually to a storage location where the deletion mechanism of the system cannot find it.</p>

CAUTION! All recordings which have been encrypted with a key which has meanwhile become invalid are useless and cannot be replayed anymore.

In case of an error ... automatically

Select whether simple key management is supposed to be used if the neo key management does not work (e. g. if the service *DongleMan* fails). If you have not activated the option, no recording takes place as long as the neo key management has been activated but does not work.

☒ = In case of an error, simple key management is used as replacement.

☐ = In case of an error, no recording takes place as long as the neo key management has been activated. In this case, disable key management in the tab *Usage*.



On top of the settings in this tab, each tenant who would like to use the neo key management has to define individual settings in his own user management (Tenants module).



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Keystore/Virtualization

1. Click on the tab *Keystore/Virtualization* in the detail view.

In this tab, you can configure the connection data for the service *DongleMan* for the neo key management and for the authentication of the VM.



If your system has been installed in a virtual environment, the application Dongle Manager must have been installed and started locally outside the VM so that the access to the dongle works. The dongle must have been connected to the server on which the VM has been installed.



For detailed information about neo key management refer to the administration manual *Encryption of recordings*.

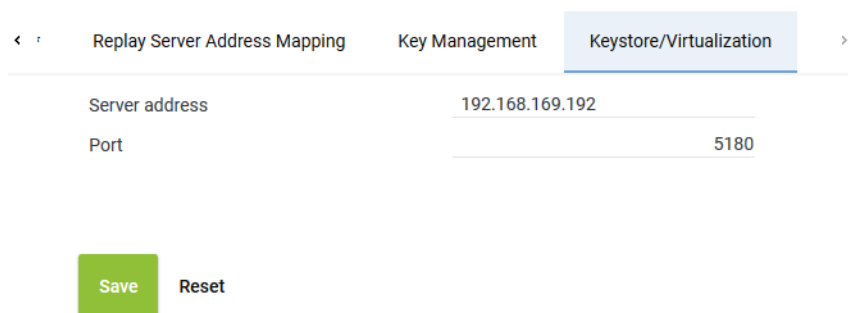


Fig. 109: Servers module - tab Keystore/Virtualization

Server address

Enter the address of the server for this connection.

- If you use the neo key management as well as the virtualization:
IP address of the server that the service *DongleMan* has been installed on.
- If you use only virtualization, you can authenticate the VM via the ASC License Management System, too. In this case, enter the following address:
licensing.asc.de

	<ul style="list-style-type: none"> If you use only the ASC key management: IP address of the server with the master password database
Port	Enter the port for the connection. Default value: 5180

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

Administrate NTP server

The recording system works with an **NTP**-based time synchronization. The function *Administrate NTP server* allows defining several **NTP** servers. Every server in the system identifies all **NTP** servers configured within the system and can use any **NTP** server for time synchronization. That way, every server can connect immediately to another **NTP** server if its current **NTP** server connection breaks down.

Add NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.

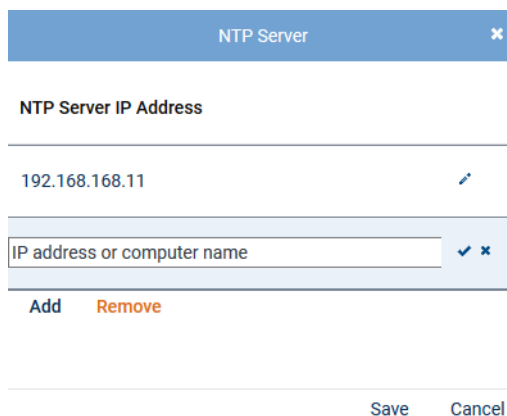





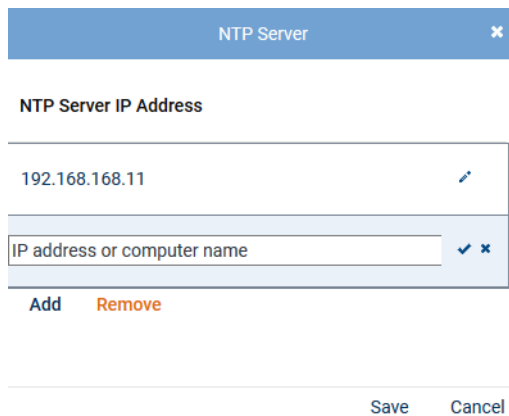
Fig. 110: Add NTP server

The list displays all NTP servers that have been configured during the installation.

- To add a server, click on the button *Add*.
- In the newly added row, click on the icon  (*Edit*).
- Enter the **IP** address or the name of the **NTP** server in the entry field.
- To save the entry in the row, click on the icon  (*Save*).
To discard the entry in the row, click on the icon  (*Discard*).
- To save all changes in the list, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.




Edit IP address

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



NTP Server




NTP Server IP Address

192.168.168.11	
IP address or computer name	 

Add Remove

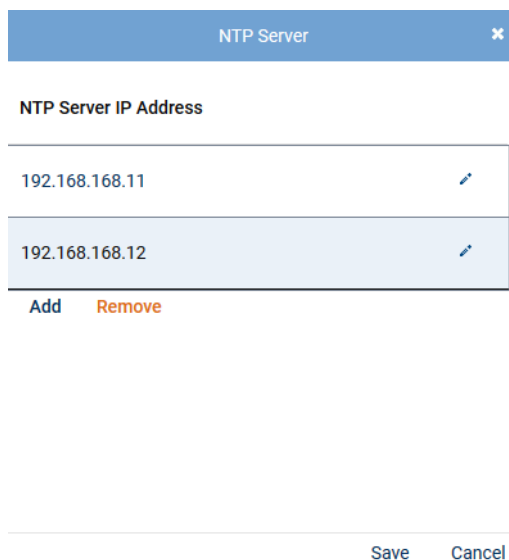
Save Cancel

Fig. 111: Edit IP address

- Click on the icon  (*Edit*) in the row with the IP address that you would like to edit.
- Change the entry in the entry field.
- To save the change, click on the icon  (*Save*).
To discard the change, click on the icon  (*Discard*).
- To save the changes, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.



Remove NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



NTP Server

NTP Server IP Address

192.168.168.11	
192.168.168.12	

Add Remove

Save Cancel

Fig. 112: Remove NTP server

- In the list, select the NTP server that you would like to remove.
- Click on the button *Remove*.
⇒ The NTP server is removed from the list.
- To save the change, click on the button *Save*.
To discard the change and close the window, click on the button *Cancel*.

7.1.2.2.3 Create PBX

The PBX can either be configured via the PBX module or via the Integrations module.

In this configuration step, the parameters for the PBX are configured, e. g. the name, the area code and the net code.

1. Select the menu item *Setup > PBX* in the navigation bar.

⇒ The following window appears:

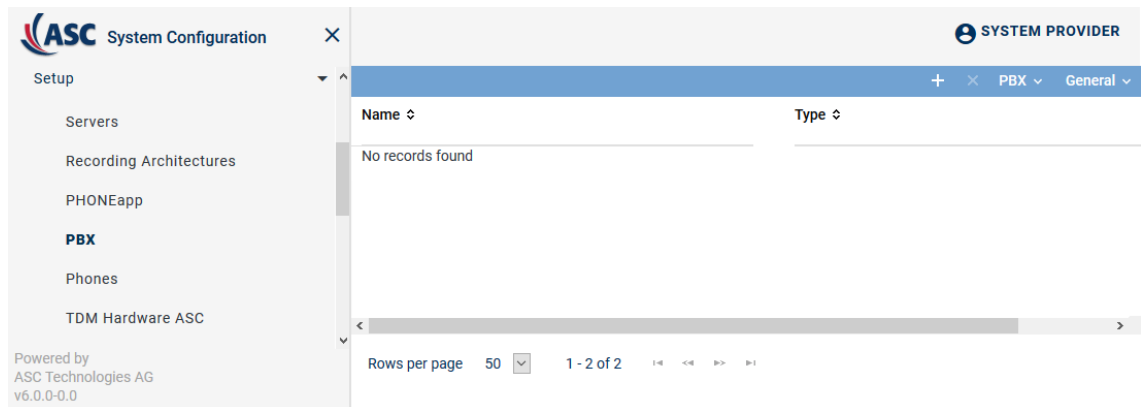




Fig. 113: Create new PBX

Toolbar of the PBX module

The toolbar offers the following functions.



Fig. 114: Toolbar PBX module

	<i>Create</i>	In the detail view, you can enter the parameters of the new PBX.
	<i>Delete</i>	Deletes the selected PBX configuration. A PBX can only be deleted if it is not used in any configuration.
<i>PBX</i>	<i>Phone Configuration</i>	Opens a window in which you can create and configure phones.
	<i>Administrate Unused Extensions</i>	Opens a window in which you can delete extensions that are not used in any configuration.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create new PBX

1. Click on the icon  (*Create*) in the toolbar of the main view of the PBX module.

⇒ In the detail view, the tab *Details* appears.

×

<
Details*
PHONEapp Configuration
Web Service
>

Name*

PBX type*

Maximum length of extensions

Country code

Area code*

Net code*

SIPREC

Universal VoIP ▼

4 ▼

☒ Select from list
United States (1) ▼
☐ Enter manually

6021

5963

Non Phone IPs

No records found

Add Delete

IPs to be Ignored

No records found

Add Delete

MACs to be Ignored

No records found

Add Delete

Save

Reset

Fig. 115: Create new PBX - tab Details

2. Set the following parameters in the detail view:

Parameter	Value/Description
<i>Name</i>	This <i>name</i> serves as the identifier of this PBX.
<i>PBX type</i>	Select the type of the PBX from the drop-down list.
<i>Maximum length of the extensions</i>	Enter the number of digits of the extensions, e. g. 4.
<i>Country code</i>	Select the option for the country code: <ul style="list-style-type: none"> <i>Select from list</i> Select the country code from the drop-down list. <i>Enter manually</i> If the corresponding country code is not available in the drop-down list, you can enter the 3-digit code manually. e. g. for Sri Lanka 094.
<i>Area code</i>	Enter the area code without the preceding 0, e. g. 6021.
<i>Net code</i>	Enter the net code, e. g. 5963. Do not enter an extension here.

Tab. 28: Create PBX

If you would like to display the complete phone number, e. g. if you use more than one PBX, several area codes, or if you would like to record mobile phones, you have to configure the value 0 in the following parameters:

Parameter	Value/Description
<i>Maximum length of the extensions</i>	Enter the number 0 in the field maximum length of the extensions to display the complete phone number.
<i>Area code</i>	Enter the number 0 as area code to display the complete phone number.
<i>Net code</i>	Enter the number 0 as net code to display the complete phone number.

Tab. 29: PBX parameters with complete phone number

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

7.1.2.2.4 Assign recording resources

In multi-tenant systems, you have to assign each tenant its own recording resources.

Depending on the recording type, agents can be assigned to the recording resource via the extension, via the PBX Agent ID or via the chat ID. Within one tenant, you can configure all three possibilities.

Assign extensions to tenants

If you would like to make an assignment based on extensions, you can assign the respective tenant the extension designated for recording in the Tenants module.



In 1-tenant systems, all extensions are automatically assigned to the tenant who has been created by the system (1st tenant). Extensions are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the extensions manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of extensions is not possible until a PBX has been created since extensions are assigned in relation to the PBX.

- Select the menu item *Tenants* in the navigation bar.

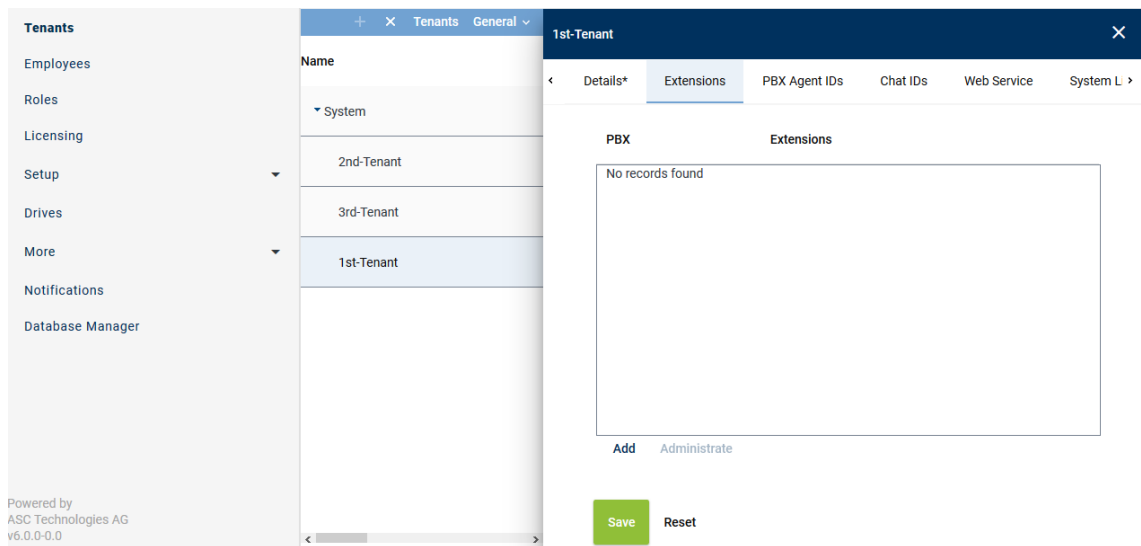


Fig. 116: Tenants - main view - tab Extensions

Add extensions

1. In the main view, select the tenant to whom you would like to assign extensions.
2. Click on the tab *Extensions*.
3. Click on the button *Add*.

⇒ The following window appears:

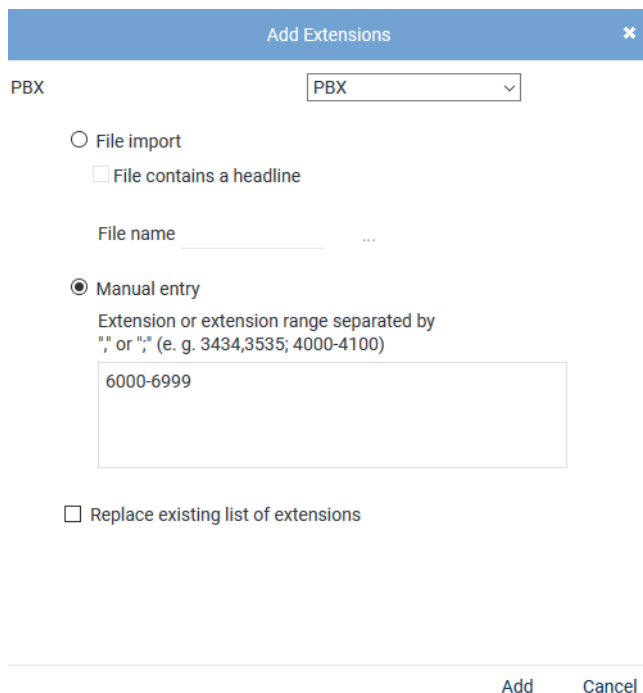




Fig. 117: Assign extensions to tenants

4. From the drop-down list, select the PBX in which the extensions for this tenant have been configured.

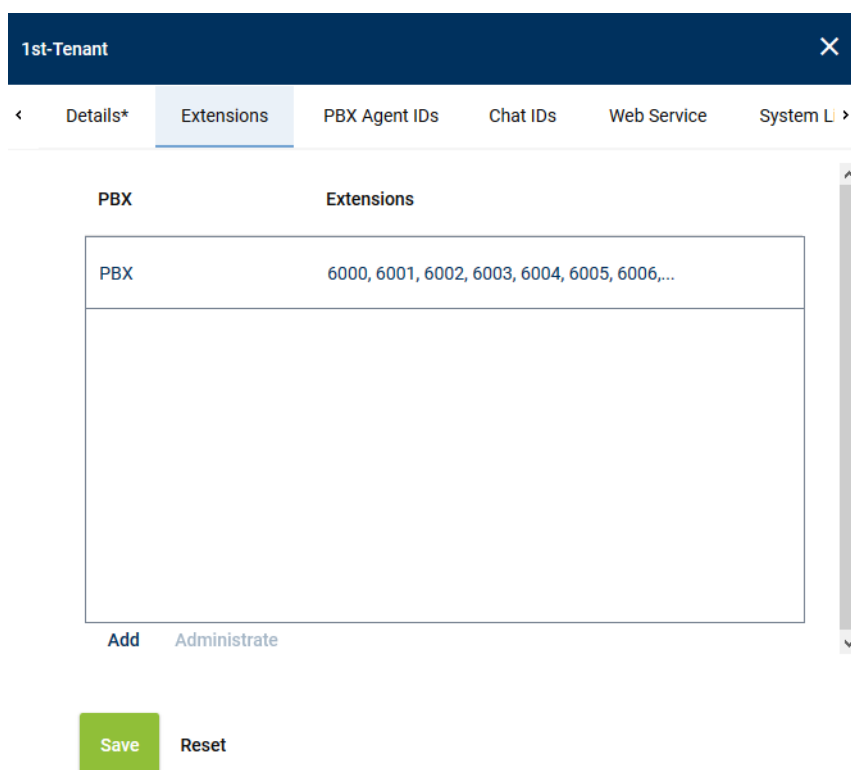
File import	Select this option to import extensions from an existing CSV file and add them to the table of extensions.
File contains a headline	

	<p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CSV file, you have to pack it in a ZIP file.</p> <p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> • Click on the button  behind the field <i>File name</i>. • Click on the button <i>Choose File</i>. • Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. • Click on the button  <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter extensions or extension ranges manually.</p> <p>Enter the extension range that is reserved for this tenant using a hyphen, e. g. from 6000 to 6999. Alphanumerical entries with a hyphen are not detected as a range, they must be entered individually.</p> <p>You can separate the different extensions and extension ranges by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of extensions</i>	<p>Activate the check box to replace the list of extensions.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the extensions of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured extensions of all PBXs are kept and the new extensions are added to the selected PBX.</p>

- Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
- If errors have been detected, the window *Result* appears.
 - Click on the button *Display Error Report* to open the window *Error Report*.
 - To close the window *Error Report*, click on the button *Close*.
 - To close the window *Result*, click on the button *Close*.
- The configured extensions now appear in the detail view.
- Click on the button *Save* in the detail view to save the entries.

Remove extensions

- In the list, select the **PBX** for which you would like to remove the assigned extensions.



1st-Tenant

< Details* Extensions PBX Agent IDs Chat IDs Web Service System L >

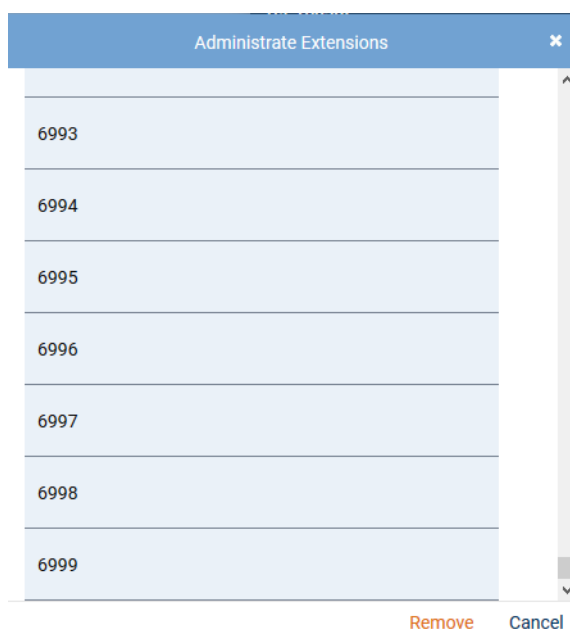
PBX	Extensions
PBX	6000, 6001, 6002, 6003, 6004, 6005, 6006,...

Add Administrate

Save Reset

Fig. 118: Remove extensions

- Click the button *Administrate*.
- Select one or several extensions you would like to remove from the assignment.
To select several extensions or to revoke the selection, click on the respective line while holding the [Ctrl] key down.



Administrate Extensions

6993
6994
6995
6996
6997
6998
6999

Remove Cancel

Fig. 119: Select extensions

- To remove the selected extensions, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

Assign PBX Agent IDs to tenants

If the information about PBX Agent IDs is delivered by the PBX, you can make an assignment by means of the PBX Agent IDs. In this case, you can assign the respective tenant the PBX Agent IDs designated for recording in the Tenants module.



In 1-tenant systems, the PBX Agent IDs are automatically assigned to the tenant who has been created by the system (1st tenant). PBX Agent IDs are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the PBX Agent IDs manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of PBX Agent IDs is not possible until a PBX has been created since the assignment is PBX-related.

1. Select the menu item *Tenants* in the navigation bar.

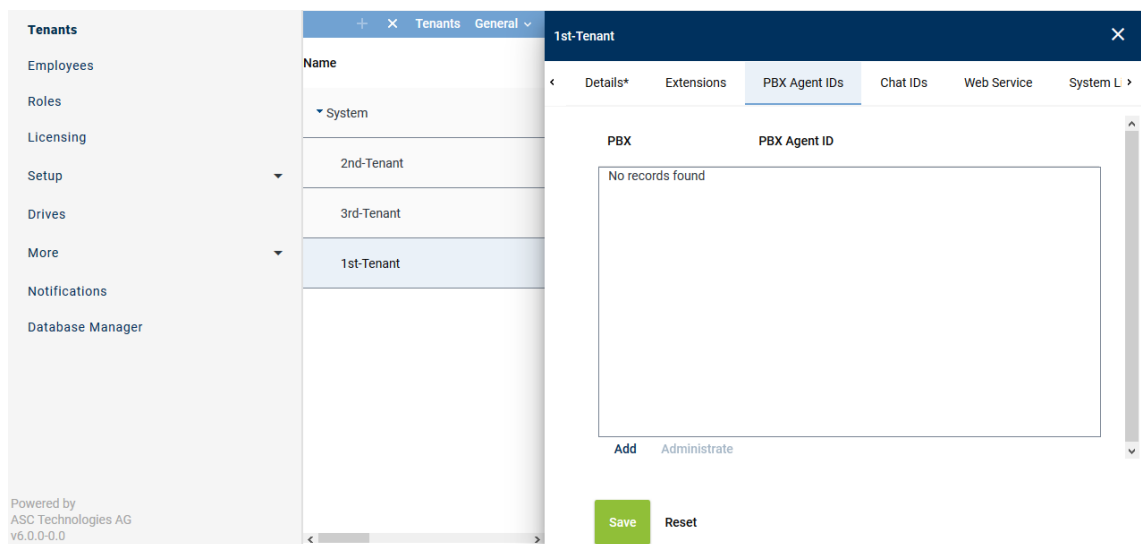


Fig. 120: Tenants - main view - tab PBX Agent ID

Add PBX Agent ID

1. In the main view, select the tenant to whom you would like to assign the PBX Agent IDs.
2. Click on the tab *PBX Agent IDs*.
3. Click on the button *Add*.
⇒ The following window appears:

Add PBX Agent IDs
✕

PBX

PBX

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

PBX Agent IDs separated by ";" or ":"

427agent1,427agent2

☐ Replace existing list of PBX Agent IDs

Add
Cancel

Fig. 121: Assign PBX Agent IDs to tenants

4. From the drop-down list, select the PBX in which the PBX Agent IDs for this tenant have been configured.

<i>File import</i>	<p>Select this option to import the PBX Agent IDs from an existing CSV file and add them to the table of PBX Agent IDs.</p>
	<p><i>File contains a headline</i></p> <p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CVS file, you have to pack it in a ZIP file.</p>
	<p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> Click on the button ... behind the field <i>File name</i>. Click on the button <i>Choose File</i>. Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. Click on the button ↗ <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter PBX Agent IDs manually.</p> <p>You can separate the individual PBX Agent IDs by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of PBX Agent IDs</i>	<p>Activate the check box to replace the list of PBX Agent IDs.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the PBX Agent IDs of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured PBX Agent IDs of all PBXs are kept and the new PBX Agent IDs are added to the selected PBX.</p>

5. Click on the button *Add*.
⇒ The PBX Agent IDs are added to the table of PBX Agent IDs.
6. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
7. The configured PBX Agent IDs now appear in the detail view.
8. Click on the button *Save* in the detail view to save the entries.

Remove PBX Agent ID

1. In the list, select the **PBX** for which you would like to remove the assigned PBX Agent IDs.
2. Click the button *Administrate*.
3. Select one or several PBX Agent IDs you would like to remove from the assignment.
To select several PBX Agent IDs or to revoke the selection, click on the respective line while holding the [Ctrl] key down.

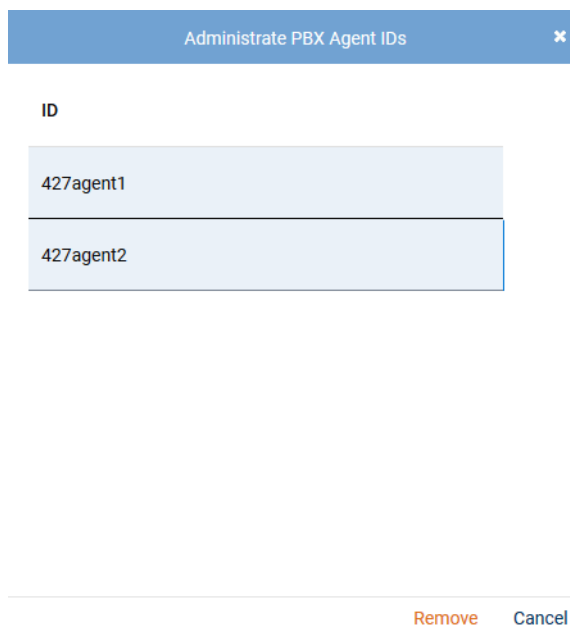


Fig. 122: Select PBX Agent IDs

4. To remove the selected PBX Agent IDs, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

7.1.2.2.5 Configure additional data

In the Additional Data module, you can configure the additional data which is delivered for a conversation with a protocol.



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured here in the Additional Data module. Only then can you map the additional data in the integration under the Global Recording Settings in the tab *SIP Header Tagging*.

For selection fields to appear in the drop-down list, they have to be configured in the Additional Data module.

1. Select the menu item *Setup > Additional Data* in the navigation bar.




 System Configuration			
	SYSTEM PROVIDER		
Setup	Additional Data  Additional Data General		
Servers	ID	Displayed Name	Available
Recording Architectures	customCP01	customCP01	✗
PHONEapp	customCP02	customCP02	✗
PBX	customCP03	customCP03	✗
Phones	customCP04	customCP04	✗
TDM Hardware ASC	customCP05	customCP05	✗
TDM Hardware Others	customCP06	customCP06	✗
Integrations	Rows per page 50 1 - 30 of 30		
Recording Import			
Additional Data			
Activity Guard			
Powered by ASC Technologies AG v6.0.0-0.0			

Fig. 123: Additional Data module main view

- Select a set of data.
 - ⇒ The detail view displays the information you can configure.

Change display name







Change Display Name		
Language	Content	
ar_SA	customCP01	
bg_BG	customCP01	
de_DE	Universal Call ID	
en_GB	customCP01	
en_US	Universal Call ID	 

Fig. 124: Configure additional data

- To change the display name, click on the pen in the line of the language you would like to change.
- Enter a display name and click on the check mark at the end of the line to confirm the entry.

Availability

Availability	
Available	<input checked="" type="checkbox"/>
Editable	<input checked="" type="checkbox"/>
External recording control	<input checked="" type="checkbox"/>

Save
Reset

Fig. 125: Additional data - configure availability

1. To make the data field available to the entire system, activate the check box of the option *Available*.
2. To make the data field in the search and replay applications editable later on, activate the check box of the option *Editable*.
3. To be able to use the data field for external recording control, activate the check box of the option *External recording control*. This option is only available if recording control has been activated in the *Servers module* in the tab *Usage*.
4. Click on the button *Save* to save the settings.



For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



Additional data which is not delivered along with the protocol is not available for further use.

7.1.2.2.6 Create integration for All-in-one Failover

In the Integrations module, the PBX-related recording settings are configured.

You first have to create and activate a recording architecture to be able to create a integration and to assign it here.

Depending on the recording solution, you additionally have to configure IP addresses, ports, protocols, sniffer cards, CTI connection data, phones, monitor points, and, where required, add-ons.

1. In the navigation bar, select the menu item *Setup > Integrations*.
⇒ The following window appears:

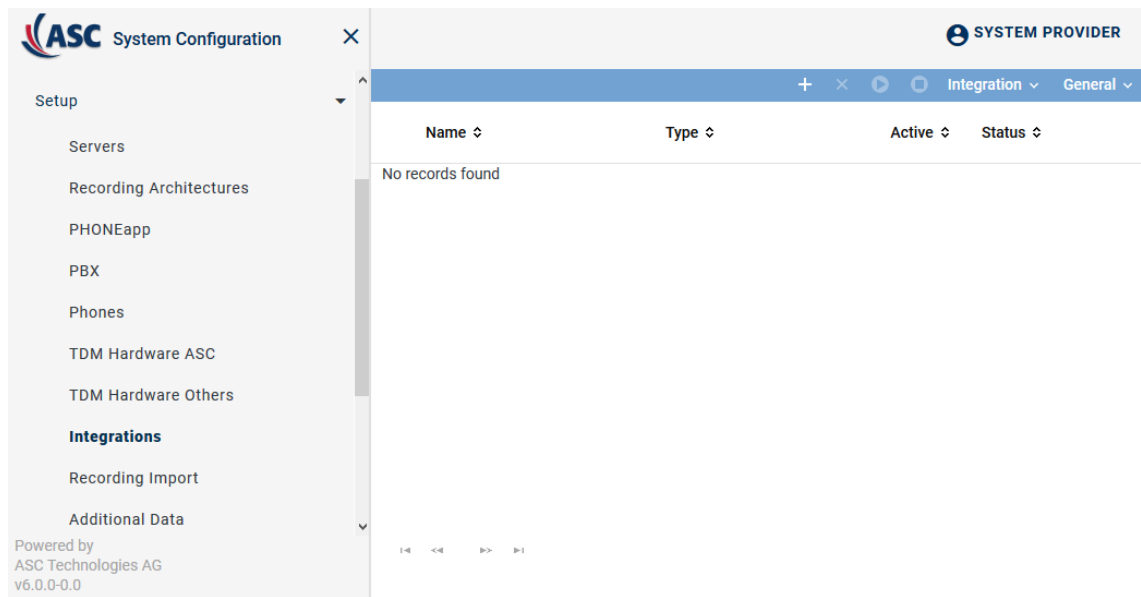




Fig. 126: Integrations - main view

In the table in the main view, the following information is displayed:





Name	Name of the integration
Type	Type of the integration
Active	Shows whether the integration has been activated and is used for the recording. <div> ✓ = Integration is active, can be deactivated in the toolbar via the icon . ✗ = Integration is not active, can be activated in the toolbar via the icon . </div>
Status	Shows whether the configuration has been carried out completely. <div> ✓ = Configuration is complete. ✗ = Configuration is incomplete. </div>

Toolbar of the Integrations module

The toolbar offers the following functions.



Fig. 127: Toolbar Integrations module

	Create	Opens the detail view so that you can create a new integration.
	Delete	Deletes the selected integration. The integration can only be deleted if it has been deactivated.
	Activate	Activates the selected integration. The integration can only be activated if it has been configured completely.
	Deactivate	Deactivates the selected integration. This stops running recordings.
Integration	Import Grammar	By clicking on this menu item, you can import a customized grammar which you can then configure in the configuration step for the CTI connection data.
General	General Help	Opens the online help.
	Module Help	Opens the module-specific online help.

Import grammar

Depending on the deployed PBX, conversation events are signaled differently.

A grammar recognizes and processes the events occurring during a call such as ringing, answering, consultation, hanging up. A grammar contains rules which are required to correctly translate PBX-specific call information and call states into a PBX-neutral format.

- To import a new grammar, click on the menu item *Integration > Import Grammar* in the toolbar of the main view.
 - ⇒ The window *Upload File* appears.

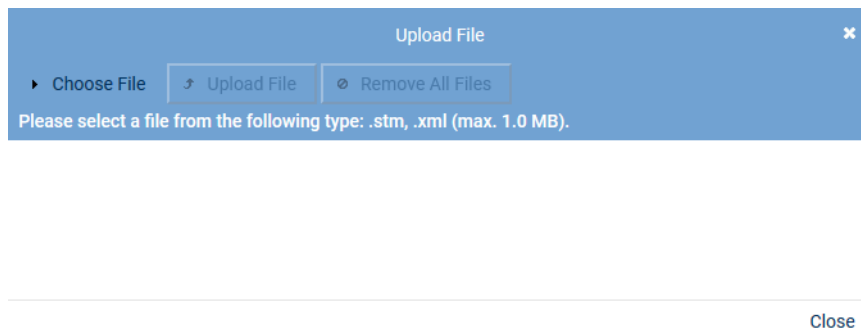


Fig. 128: Choose file

- Click on the button *Choose File*.
- Select the respective grammar of the file type *.stm* or *.xml* via the Explorer.
- Click on the button *Open*.
 - ⇒ The selected file appears in the window *Upload File*.

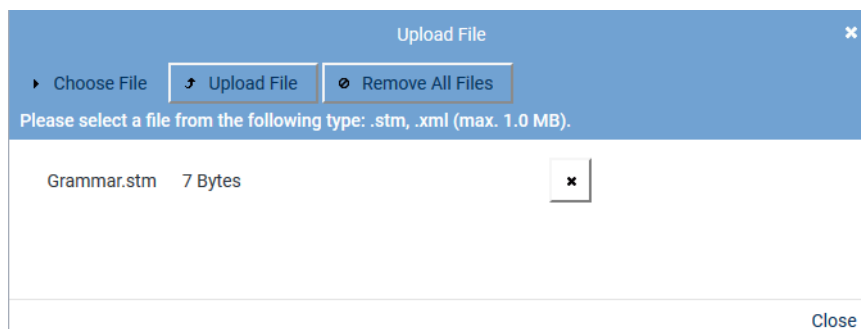



Fig. 129: Upload grammar

- To remove a selected file from the list, click on the button  (*Remove file*) next to the respective file.
 - To upload the file, click on the button *Upload File*.
- ⇒ The window closes and a notification appears in the main view that the file has been uploaded successfully.

Assign integration type


- Click on the icon  (*Create*) in the toolbar of the main view to create a new integration.
 - ⇒ In the detail view, the tab *Integration Type* appears.



Fig. 130: Create integration type

2. Enter the following parameters:

Parameter	Value
<i>Name</i>	In the entry field, enter a descriptive name for the integration. This name is used as the identifier of this integration in the system.
<i>Integration type</i>	Select the entry <i>SIP active</i> from the drop-down list <i>Integration type</i> .

Tab. 30: Create integration type

3. To assign the PBX, click on the button **+** behind the field *PBX*.
⇒ The window *PBX* appears.



Fig. 131: Select PBX

4. Select the respective *PBX* from the list of available PBXs.
5. Click on the button *Add*.

Assign recording architecture for All-in-one Failover

1. In the detail view on the bottom right, click on the button *Next*.
⇒ The tab *Recording Architecture* appears.

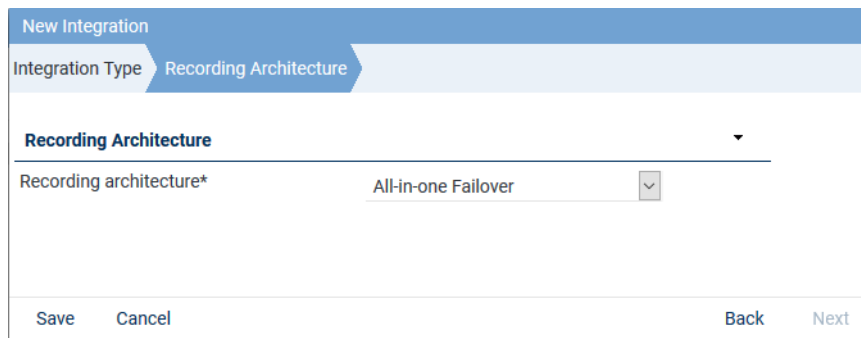


Fig. 132: Assign recording architecture - All-in-one Failover


2. Select the respective recording architecture from the drop-down list *Recording architecture*.



Only activated recording architectures in which the appropriate integration type has been configured appear in the drop-down list.

3. Click on the button **Save**.
⇒ The integration now appears in the main view.

Configuration steps

1. To complete the configuration of the integration, click on the icon  in front of the name of the new integration.
⇒ The following configuration steps appear:







SIPREC		SIP active	X	
Step	Configuration			
Configure recording architecture	✓			
Global recording settings	X			
Configure recording servers	X			
Configure add-on	✓			
Configure miscellaneous settings	✓			

Fig. 133: Configuration steps of the integration

Configure recording architecture

The section *Configure recording architecture* has already been configured in previous steps.



1. Click on the button  (*Edit configuration step*) in the line *Configure recording architecture* in the main view to show the configuration.
⇒ In the detail view, the configuration step appears with the information of the assigned recording architecture.



Fig. 134: Configuration step - Configure Recording Architecture

2. Click on the button *Save* to save changes and to finish the configuration step.
3. Click on the button *Cancel* to cancel the configuration step without applying changes.

Global recording settings for All-in-one Failover

1. Click on the button  (*Edit configuration step*) in the line *Global recording settings* in the main view.
⇒ The window *Step: Global Recording Settings* appears.

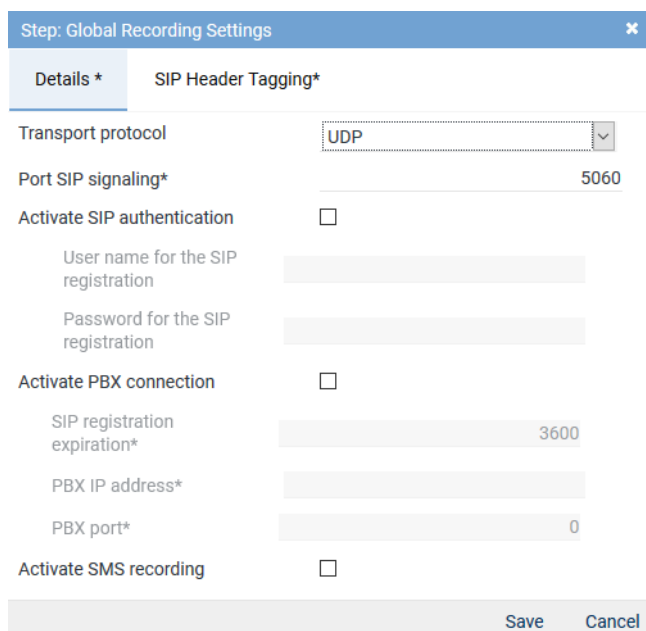


Fig. 135: Configuration step - Global Recording Settings - All-in-one Basic Recording

2. Set the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Transport protocol</i>	From the drop-down list, select the used transport protocol for the SIP signaling between the recording server and the PBX. The following protocols are available: TCP = unencrypted UDP = unencrypted TLS = encrypted
<i>Port SIP signaling</i>	Enter the port for the SIP signaling, where the recording server is expecting the signaling. Default value for UDP and TCP is 5060. Default value with TLS encryption is 5061.

Parameter	Value/Description
<i>Activate SIP authentication</i>	Deactivate this option for this recording solution.
<i>Activate PBX connection</i>	Deactivate this check box for this recording solution.
<i>Activate SMS recording</i>	Activate the check box if you would like to use SMS recording.

Tab. 31: Global recording settings

- Click on the button *Save*.

Tab SIP Header Tagging



In this recording solution, no additional data is extracted from the *SIP header*. The [SIPREC](#) meta data is provided by means of an [XML](#) document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured in the Additional Data module and subsequently mapped in the tab SIP Header Tagging.

- Select the tab *SIP Header Tagging*.

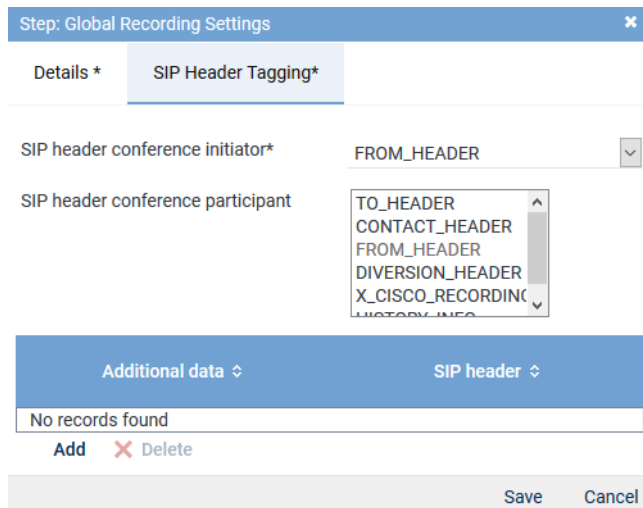


Fig. 136: Tab SIP Header Tagging Configure sources

- If you would like to configure individual additional data that you have defined previously in the Additional Data module, click on the button *Add* in the section *Additional data*.
⇒ The window *SIP Additional Data* appears.

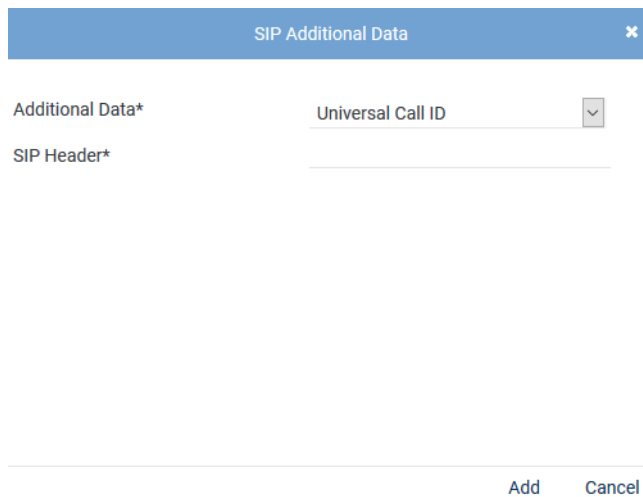


Fig. 137: SIP Additional Data



Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

3. Enter the following parameters:

Parameter	Value/Description
<i>Additional Data</i>	In the drop-down list, select the display name of the field in which the information of the SIP header is supposed to be released.
<i>SIP Header</i>	<p>If you would like to use additional data, the mapping of the tag name must have been configured in the file <i>siprecmapping.xml</i>. Then you can enter the tag name from where the information is to be extracted.</p> <p>To have ASC configure the mapping file, contact your distribution partner.</p>


Tab. 32: Configure SIP conversation parameters

4. Click on the button **Save** to close the window.
5. Click on the button **Save** to finish the configuration in this step.

Configure recording server for All-in-one Failover

To guarantee that switching servers in case of failover runs smoothly, you must configure a port range for both recording servers. The range may be the same for both recording servers. Make sure, though, that the port range lies within the range of ports activated in the firewall, refer to the installation manual Installation requirements in chapter Communication matrix.

This configuration takes place in the configuration step *Configure recording servers*.

1. Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Configure Recording Servers* appears.

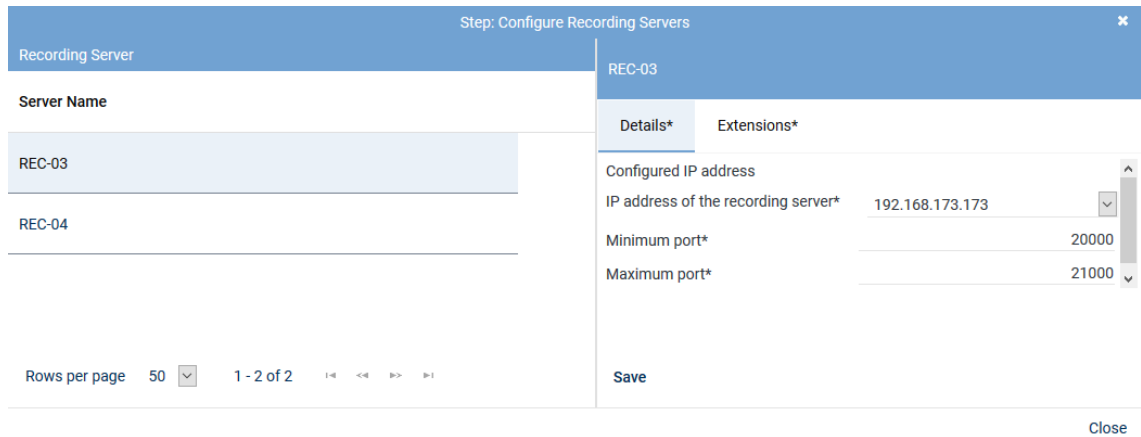


Fig. 138: Configuration step - Configure recording servers

2. Enter the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Configured IP address</i>	Here, the IP address is displayed which has been configured for this recording server and via which the data to be recorded are received.
<i>IP address of the recording server</i>	From the drop-down list, select one of the available IP addresses of the recording server for the recording data.
<i>Minimum port</i>	Enter the lowest port of the port range configured on the PBX that is used to receive the RTP data from the recording server, e. g. 20000 .
<i>Maximum port</i>	Enter the highest port configured on the PBX that is used to receive the RTP data from the recording server, e. g. 21000 .

Tab. 33: Configure recording servers



This recording solutions allows recording data streams in stereo. For stereo recording, reckon with 4 ports as only even ports are used to receive **RTP**.

Stereo recording requires more storage space, too.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.

Tab Extensions

1. Click on the tab *Extensions*.

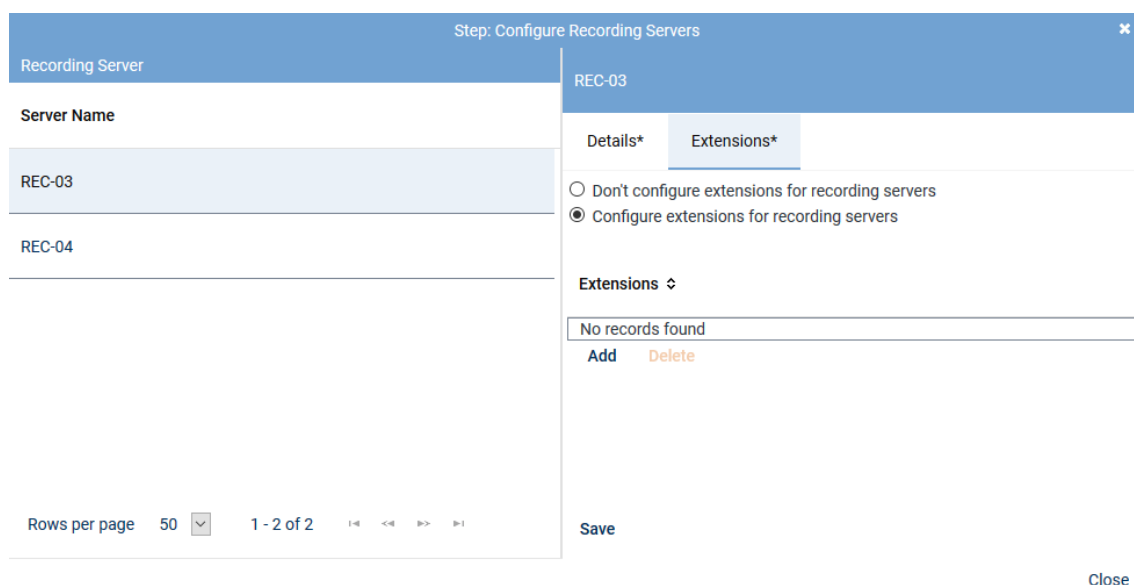


Fig. 139: Tab Extensions

The following options are available:

<i>Configure no extensions for recording servers</i>	Activate this option if you have not configured the extensions for the recording server in the PBX.
<i>Configure extensions of the recording server</i>	Activate this option if you have configured extensions for the recording server in the PBX and add the extensions.

- To add extensions, click on the button *Add* in the table *Extensions*.
⇒ The window *Add Extensions* appears.

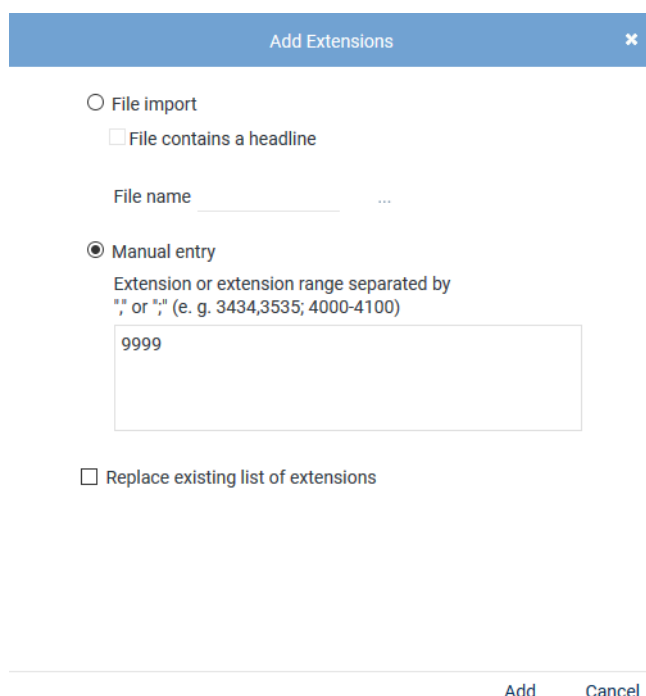


Fig. 140: Add extensions

- In the window *Add Extensions*, enter either a single extension or an extension range that the recording server is to use when registering on the PBX.
- Click on the button *Add*.
⇒ The extensions are added in the table of extensions.

5. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
6. The configured extensions now appear in the detail view.

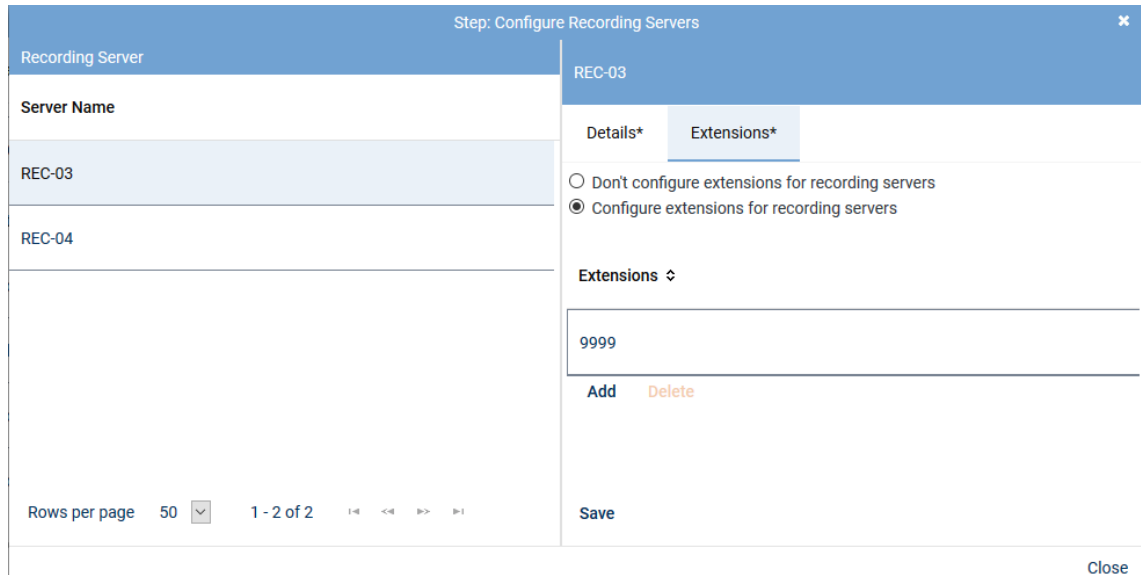


Fig. 141: Added extensions

7. Repeat the steps for additional servers. For each server, configure its own extension or extension range depending on how it can be reached.
8. Click on the button *Save*.
9. Click on the button *Close* to finish this configuration step.

Configure add-on



The use of the add-on in the integration is optional. The status of this configuration step has been set to *No selection* by default and is considered to be completely configured that way. You can activate and use the integration without an add-on, too.

If you use an application with add-on, you can select the required grammar in the corresponding version in this configuration step. Additionally, you can configure the connection data and the additional data.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

Configure add-on for Sparkassen FI ISP (optional)

The add-on refers to the usage of CTIconnect for Sparkassen FI ISP in the DACH region and only has to be configured if the add-on is used.



The add-on cannot be used in a failover architecture. The application Sparkassen FI ISP cannot connect to more than one IP address.

The integration runs in combination with a PBX and the recording server. The service CTIconnect for Sparkassen FI ISP receives the additional data from the PBX and sends them to the recording server. In addition, the recording decision which is initiated by the user on the end device is processed via CTIconnect for Sparkassen FI ISP and sent to the recording server.

Sparkassen FI Interaktive Service Plattform

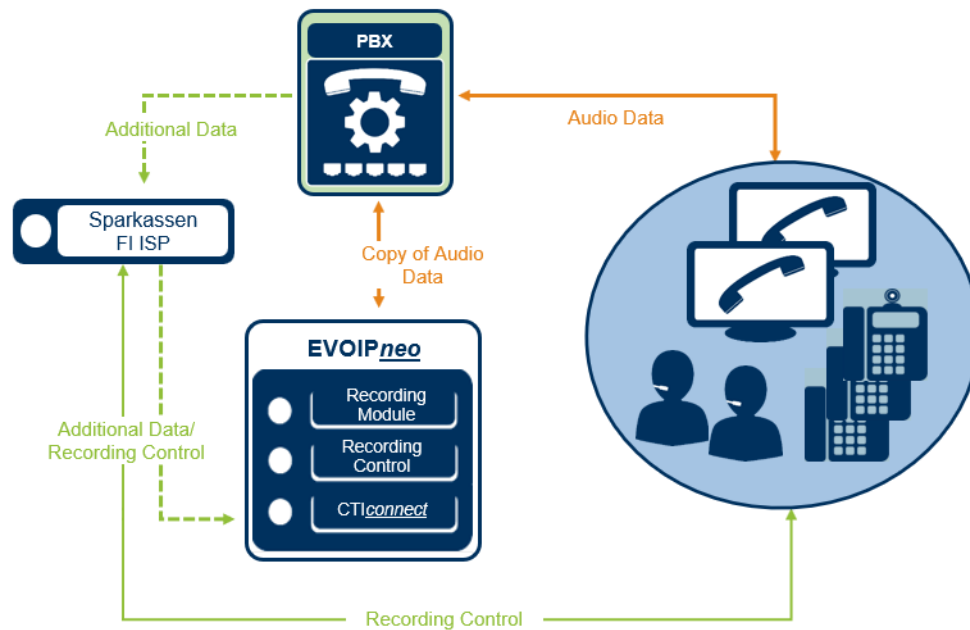



Fig. 142: Overview of Sparkassen FI ISP

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on *Sparkassen FI ISP* in the detail view.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Sparkassen FI ISP

CTIconnect Module

TypeCTIconnect passive
Grammar name*ISP Sparkassen FI
Grammar version*1.00.05

Connection Data

Listener port*3468

Additional Data

ID des Call CentersCall Center ID
ID des Calls aus GenesysUniversal Call ID
Anmeldename des KundenUser name
Name des KundenCustomer name
Personennummer des KundenCustomer ID

Arbitrary assignment

Please select...
Please select...
Please select...

SaveCancel

Fig. 143: Configure add-on for Sparkassen FI ISP

Group field CTIconnect Module

1. Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 34: Configure CTIconnect module



For recording control via the add-on of the Sparkassen FI ISP, grammar version 1.00.05 or higher is required. If the grammar in the respective version is not available yet, you can import it. See [chapter "Import grammar", p. 114](#).

Group field Connection Data

Set the following parameter in the group field *Connection Data*; the IP address for the PBX does not have to be entered, since the PBX connects to our recording server:

Parameter	Value/Description
<i>Listener port</i>	Enter the port that the add-on connects to, e. g. 3468.

Tab. 35: Configure connection data

Group field Additional Data



This add-on is used exclusively in the DACH region; for this reason the additional data is only available in German, too. The names of the fields refer to the assignment of the strings which are delivered by the interface.

When using CTIconnect for Sparkassen FI ISP, the following additional data is delivered with the protocol:

- *ID of the call center*
- *ID of the call from Genesys*
- *Login name of the customer*
- *Name of the customer*
- *Employee number of the customer*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.

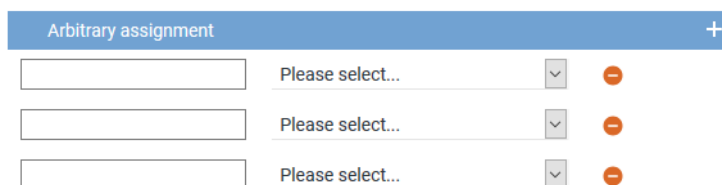



Fig. 144: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*
- *End time*
- *Duration*
- *Calling Party Phone Number*
- *Called Party Phone Number*

- *Conversation Direction*
- 2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
- 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
- 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
- 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.



To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.


Configure add-on for OpenScape Contact Center (optional)

The add-on refers to the usage of the OpenScape Contact Center and must only be configured if a OpenScape Contact Center is used.

The integration runs in combination with a Unify PBX which is responsible for recording. The CTIconnect service receives the conversation events of the agents via a SDK link in the OpenScape Contact Center and sends the additional data to the EVOIPneo recording service.

For information about the configuration of the OpenScape Contact Center, see [chapter "Configure OpenScape Contact Center \(optional\)", p. 394](#).

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on OpenScape Contact Center in the detail view.

Step: Configure Add-on

Details

Select add-on
☐ None
☒ OpenScape Contact Center

CTIconnect Module

TypeCTIconnect passive
Grammar name*Unify OpenScape Contact Center
Grammar version*1.00.04

Connection Data

Connection data

6000@192.168.170.29

Add Edit Delete

Additional Data

Business UnitBusiness Unit
DepartmentDepartment
Department KeyDepartment Key
Call IDUniversal Call ID
To PartyTo Party
ACD Group NumberACD Group Number

Arbitrary assignment

Please select...

Please select...

Save Cancel

Fig. 145: Configure add-on for OSCC

Group field CTIconnect Module

- Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 36: Configure CTIconnect module

Group field Connection Data

In the table Connection Data, you can enter one or several sets of connection data.

If you are configuring several connections, several connections to different business units are established simultaneously in the recording solution with OpenScape Contact Center.

- In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

Configure Connection
✕

Link name*

Business unit*

User name*

Password*

Add
Cancel

Fig. 146: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Link name</i>	Enter the link to the OSCC server in the format <i>osccport@ascserver</i> . The default value for the OSCC port is 6000 and the name of the OSCC server is usually spelled in minor letters. A valid link can look like this: 6000@osccv7r3. Ensure that the server name (e. g. osccv7r3) can be resolved to an IP address. Check whether the address can be reached via the ping command. Alternatively, you can also enter the IP address.
<i>Business unit</i>	The default name of a business unit is <i>default</i> . This is a predefined name for the business unit after a new OSCC server installation. Enter the business unit's actual name you would like to use in the future.
<i>User name</i>	Create a valid user for the business unit that you have created on the OSCC server, so the CTI connect service can establish the connection to the OSCC server. See chapter "Create user for CTIconnect", p. 394 .
<i>Password</i>	Enter the password for the user of the business unit.

Tab. 37: Configure connection data

3. Click on the button *Add* to save the entries and to close the window.
4. To configure additional connections, repeat the configuration steps accordingly.

Group field Additional Data

When using CTI**connect** for Unify OpenScope Contact Center, the following additional data is delivered with the protocol by default:

- *Business unit*
- *Department*
- *Department Key*
- *Call ID*
- *To Party*

- *ACD Group Number*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must have been configured and made available in the Additional Data module previously.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.

Here, you can map the database fields for the additional data which is delivered by the [OSCC](#). The contact data of the processed contacts of the OpenScape Contact Center provides a list of key pairs/value pairs. The keyword of this key pair/value pair can be chosen arbitrarily and adjusted customer-specifically. If you would like to use more than one word, avoid spaces. Use underscores instead of spaces, e. g. *ACD_group*.

1. In the group field headline *Additional Data*, click on the arrow ▶ to expand the group field and to assign the additional data to the data fields of the search and replay applications.

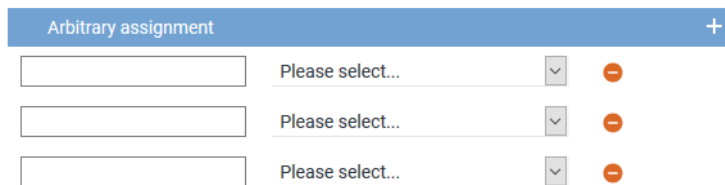




Fig. 147: Arbitrary assignment of the additional data

2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
3. From the drop-down list, select a configured display name of the additional data type which is supposed to appear as column headline in the players. Here, you can only select the display names for the additional data that you have configured and made available in the Additional Data module.
4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
⇒ An additional row appears to assign another additional data type.
5. To delete an assignment, click on the icon  in the respective row.
6. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

Configure add-on for Genesys T-Server (optional)

The add-on refers to the usage of Genesys T-Servers and must only be configured if you use Genesys T-Servers.

The integration runs in combination with the PBX and the recording server. The CTI~~connect~~ service receives the information which Genesys T-Server the monitor points have been assigned to from the Genesys Configuration Server. The monitor points must register on the respective Genesys T-Server. Upon successful registration, the respective Genesys T-Server sends all conversation events and additional data of the agents to the recording server.

CTIconnect for Genesys T-Server

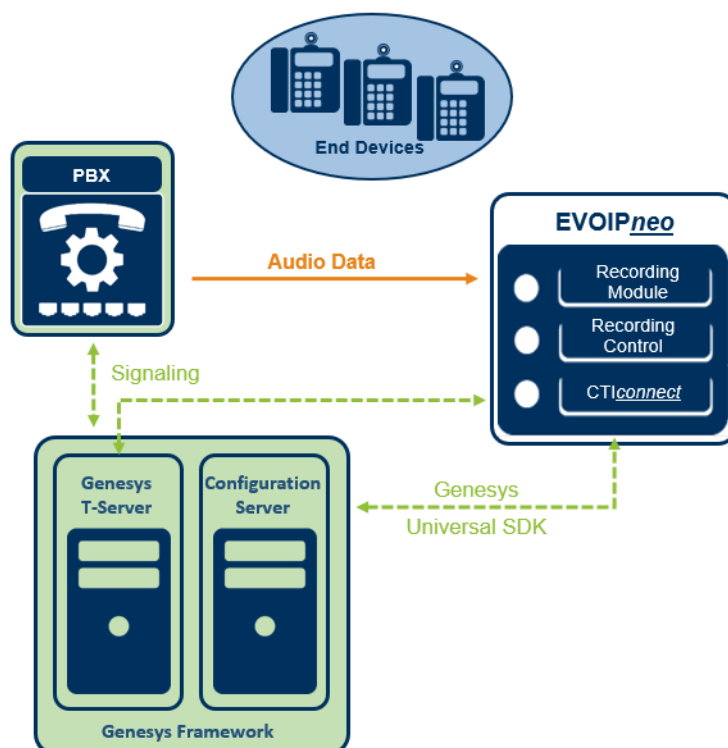


Fig. 148: Overview of the add on of Genesys T-Server

CTIconnect for Genesys T-Server

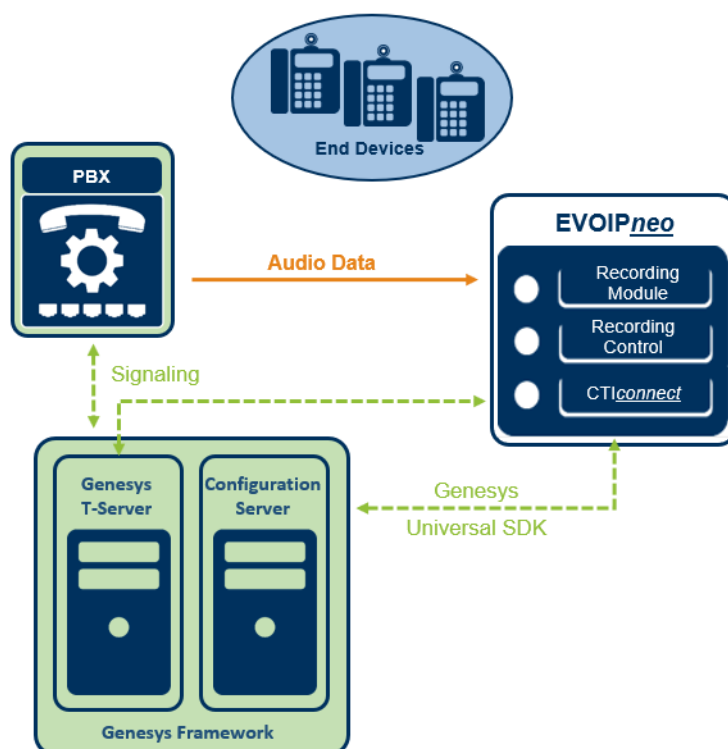


Fig. 149: Overview of the add-on of Genesys T-Server



For further information about the configuration of Genesys T-Servers, see [chapter "Configure Genesys T-Server \(optional\)", p. 395](#).

The Genesys add-on uses either a unique call ID or the extension to unambiguously identify the conversations to be recorded.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

When using a CTIconnect for Genesys T-Server, a Genesys Framework with T-Servers and Genesys Configuration Servers are required.


By default, the Genesys data field *CallID* has been selected as identifier. If a different data field is supposed to be used for internal control, this can be changed in the configuration file *basic.pif.properties*.

Adjust configuration file for Genesys add-on

The data field which is supposed to be used by the Genesys add-on is selected by means of the parameter *pifgenesys.call_identifier*.

1. To adjust the identifier, change to the path
C:\ASC Product Suite\data\CTIConnectForGenesysT.
2. Open the file *basic.pif.properties*.
3. Enter the respective data field for the parameter *pifgenesys.call_identifier*.
4. Save the changes in the file.
5. Restart the recording architecture after completing the change.

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. In the detail view, select the add-on *Genesys T-Server*.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Genesys T-Server

CTIconnect Module

Type CTIconnect passive
Grammar name* standard
Grammar version* 1.15.00
T-server redundancy* HAconnect
Config server redundancy* Warm standby
T-Server application name
T-Server password

Connection Data

Configuration server name
192.168.169.178
Add Edit Delete

Additional Data

Arbitrary assignment
Please select...

Save Cancel

Fig. 150: Configure add-on for Genesys T-Server

Group field CTIconnect Module

1. Enter the following parameters:

Parameter	Value/Description
Type	Here, the type of the CTI <u>connect</u> module is displayed.
Grammar name	Select the respective grammar.
Grammar version	Select the respective grammar version.
T-server redundancy	Select the redundancy which is used from the drop-down list. <ul style="list-style-type: none"> • No redundancy • HAconnect - for High Availability Connection • Warm Standby - for a connectable redundancy
Config server redundancy	From the drop-down list, select the redundancy which is used for the Configuration Server of Genesys. <ul style="list-style-type: none"> • No redundancy • HAconnect - for High Availability Connection • Warm Standby - for a connectable redundancy

Parameter	Value/Description
<i>T-Server application name</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the application name that the CTI<u>connect</u> module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>
<i>T-Server password</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the password that the CTI<u>connect</u> module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>

Tab. 38: Configure add-on for Genesys T-Server

Group field Connection Data

In this group field, you can enter one or several sets of connection data.

- In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

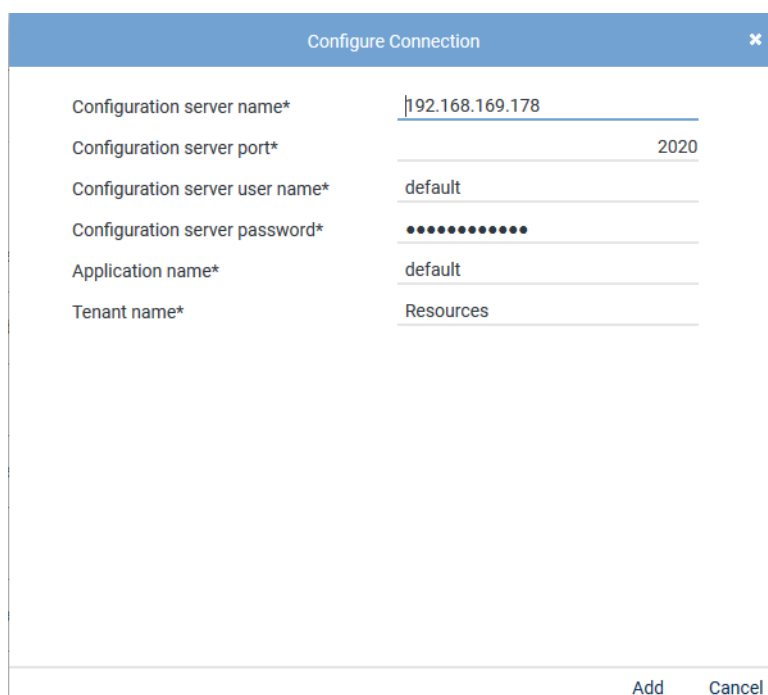


Fig. 151: Configure connection data

- Enter the following parameters:

Parameter	Value/Description
<i>Configuration Server: Name</i>	Enter the IP address or the name of the computer that the Genesys Configuration Server runs on.
<i>Configuration Server: Port</i>	Enter the port of the Genesys Configuration Server.
<i>Configuration Server: User name</i>	Enter the user name to log in to the Genesys Configuration Server.
<i>Configuration Server: Password</i>	Enter the password to log in to the Genesys Configuration Server.

Parameter	Value/Description
<i>Application name</i>	Enter the application name that the recording servers uses to log in to the Genesys Configuration Server. Default is <i>default</i> .
<i>Tenant name</i>	Enter the name of the Genesys tenant(s) that are supposed to request the configuration data. Default is <i>Resources</i> . Several tenants can be added separated by commas.

Tab. 39: Configure connection data

Group field Additional Data

The following additional data is delivered by default in the protocol when using Genesys T-Server:

- *CallID*
- *ANI*
- *CallUuid*
- *DNIS*



Further additional data depend on the configuration of the Genesys T-Servers. Check the list *AttributeUserData* in the trace files to find out which further additional data have been delivered by the Genesys T-Servers. Put the addition *UserData* in front of the additional data type when configuring customer-specific additional data, e. g. for *RTargetAgentGroup* you have to configure *UserDataRTargetAgentGroup*.

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

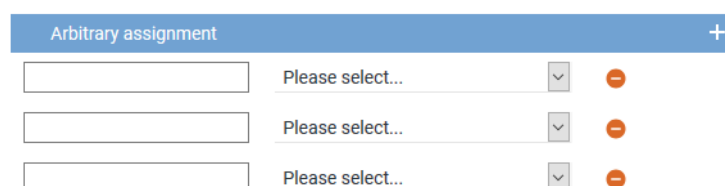
For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.




Arbitrary assignment			+
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–

Fig. 152: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*

- *End time*
 - *Duration*
 - *Calling Party Phone Number*
 - *Called Party Phone Number*
 - *Conversation Direction*
2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.




To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.

Configure miscellaneous settings

1. Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Miscellaneous Settings* appears.

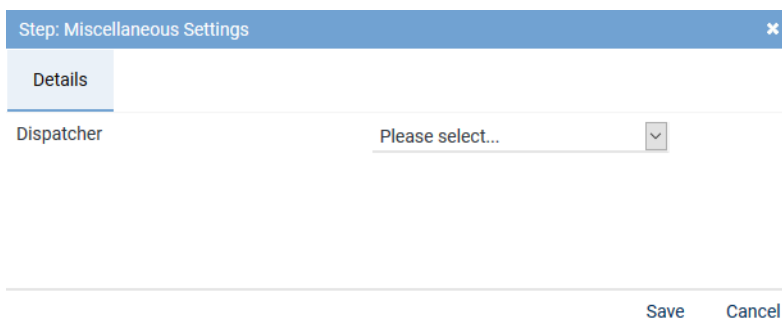


Fig. 153: Configure miscellaneous settings

2. Enter the following parameter:


Parameters	Description
<i>Dispatcher</i>	From the drop-down list, select the previously created additional data field that the participant information is supposed to be connected with.





Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

Activate integration

The integration can only be activated after the configuration is complete.

If not all configuration steps have been carried out completely, the icon  (*Incomplete*) will appear in the main view, in the line of the created integration, in the column *Status*.

If the configuration has been carried out completely, the icon  (*Complete*) will appear in the line of the respective step, in the column *Configuration*.

If all settings are complete, the icon  (*OK*) will appear in the main view, in the line of the created integration, in the column *Status*.













SIPREC		SIP active		
Step		Configuration		
Configure recording architecture				
Global recording settings				
Configure recording servers				
Configure add-on				
Configure miscellaneous settings				

Fig. 154: Activate integration

1. Mark the integration in the main view, so that the icon  (*Activate*) becomes active in the toolbar.
2. To activate the integration, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.






+ ×   Integration ▾ General			
Name ▾	Type ▾	Active ▾	Status ▾
 SIPREC	SIP active		

Fig. 155: Activated integration



If you use several PBXs, you can create and activate several integrations with the same recording architecture.



If you take advantage of the grace period and there is no valid license file in the system after its expiration, all integrations are deactivated. After uploading a valid license file, you have to activate the integrations again.





Upon activating the standard configuration, a bulk recording will start.

To restrict the recording to particular end devices, the tenant can configure the Recording Planner in the System Configuration accordingly.

Deactivate/Delete integration

To be able to delete an integration, it has to be deactivated.

1. To deactivate the integration, click on the icon  (*Deactivate*) in the toolbar.

- ⇒ In the column *Active*, the icon  (*Inactive*) appears.
- ⇒ The icon  (*Delete*) becomes active in the toolbar.







+ ×   Integration ▾ General			
Name ↕	Type ↕	Active ↕	Status ↕
 SIPREC	SIP active		

Fig. 156: Deactivate integration

2. Click on the icon  (*Delete*) and confirm the security prompt to delete the integration.

7.1.2.3 Configure recording solution All-in-one Parallel Recording

7.1.2.3.1 Create recording architecture

Start the configuration in the Recording Architectures module because an activated recording architecture is required for further configuration.

The recording servers, recording types, and the integration types are assigned in the Recording Architectures module.

1. Select the menu item *Setup > Recording Architectures* in the navigation bar.
 - ⇒ The following window appears:











 System Configuration <ul style="list-style-type: none"> Tenants Employees Roles Licensing Setup ▾ <ul style="list-style-type: none"> Servers Recording Architectures PHONEapp PBX Phones TDM Hardware ASC 	<div>  + ×   General ▾ </div>			
	Name ↕	Type ↕	Active ↕	Standby active ↕
No records found				
<div> Rows per page 50 ▾ 0 - 0 of 0 < << >> > </div>				

Fig. 157: Recording architectures - main view

Name	Name of the recording architecture
Type	Type of the recording architecture
Active	Shows whether the recording architecture has been activated and is ready to be used for the recording.  = Recording architecture is active and ready to be used for recording. It can be deactivated by clicking on the icon  (<i>Deactivate</i>) in the toolbar.  = Recording architecture is not active. It can be activated by clicking on the icon  (<i>Activate</i>) in the toolbar.
Standby Active	Shows whether the standby server is active for one or several recording components in the recording architecture.  = At least 1 standby server is active.  = No standby server is active or no standby server has been defined.

<i>Creation Date</i>	Date on which the recording architecture was installed.
<i>Updated</i>	Date on which the settings of the recording architecture were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Recording Architectures module

The toolbar offers the following functions.

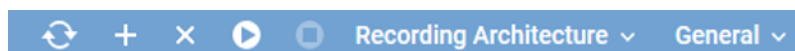







Fig. 158: Toolbar Recording Architectures module


	<i>Refresh</i>	Refreshes the main view.
	<i>Create</i>	Creates a new recording architecture.
	<i>Delete</i>	Deletes the selected recording architecture. The recording architecture is removed from the list of the main view. NOTICE! You can only delete recording architectures which are inactive and have not been assigned to an integration or server for the import.
	<i>Activate</i>	Activates the selected recording architecture.
	<i>Deactivate</i>	Deactivates the selected recording architecture. NOTICE! You can only deactivate recording architectures which have neither been assigned to an active integration nor to an active import.
<i>Recording Architecture</i>	<i>Standby Management</i>	The menu item is only available for recording architectures with failover possibilities. By clicking on the menu item Standby Management, you can open a window in which you can manually define the active server in architectures with failover concepts.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
	<i>Reset Search</i>	Resets all manually entered search criteria.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.




For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create recording architecture All-in-one Parallel Recording

If there are two recording servers which are supposed to record the same tracks in parallel, you have to create a recording architecture of the type *All-in-one Parallel Recording*.

1. To create a new recording architecture, click on the icon  (*Create*) in the toolbar of the main view.

⇒ The window *New Recording Architecture* appears.



The dialog box titled "New Recording Architecture" has a close button (X) in the top right corner. It contains two input fields: "Name*" with the text "All-in-one Parallel Recording" and "Type" with a dropdown menu showing "All-in-one Parallel Recording". At the bottom, there are "OK" and "Cancel" buttons.

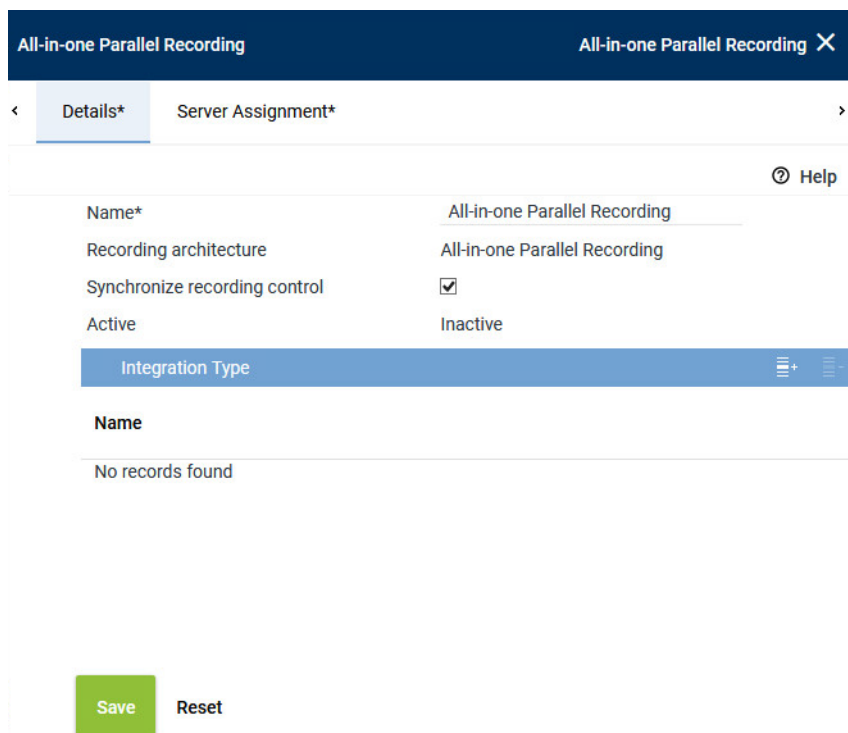
Fig. 159: Create recording architecture - All-in-one Parallel Recording

2. In the entry field *Name*, enter a descriptive name for the recording architecture.
3. From the drop-down list *Type*, select the recording architecture type *All-in-one Parallel Recording*.

NOTICE! The drop-down list only displays the supported recording architecture types.

4. Click on the button *OK*.

⇒ Your entries now appear in the detail view.




The screenshot shows the "All-in-one Parallel Recording" detail view. It has a title bar with the name and a close button. Below the title bar are two tabs: "Details*" (selected) and "Server Assignment*". The "Details*" tab contains a form with the following fields: "Name*" (value: All-in-one Parallel Recording), "Recording architecture" (value: All-in-one Parallel Recording), "Synchronize recording control" (checked checkbox), and "Active" (value: Inactive). There is a "Help" icon in the top right of the form area. Below the form is a section titled "Integration Type" with a list of integration types. At the bottom, there are "Save" and "Reset" buttons.

Fig. 160: Recording architecture - tab Details - All-in-one Parallel Recording

5. Activate the check box *Synchronize recording control* so that the Recording Control services can be synchronized and only one service controls recording for the two recording servers, see [chapter "Synchronizing recording control", p. 383](#).

NOTICE! Activating the option *Synchronize recording control* avoids double recordings. That way, you do not have to configure duplicate detection. If you do not want to synchronize recording control, you can configure duplicate detection, see [chapter "Duplicates in parallel recording architectures"](#), p. 386.

Add integration type

- Click on the icon  (Add) in the toolbar of the list *Integration Type*.
⇒ The window *Integration Type* appears.

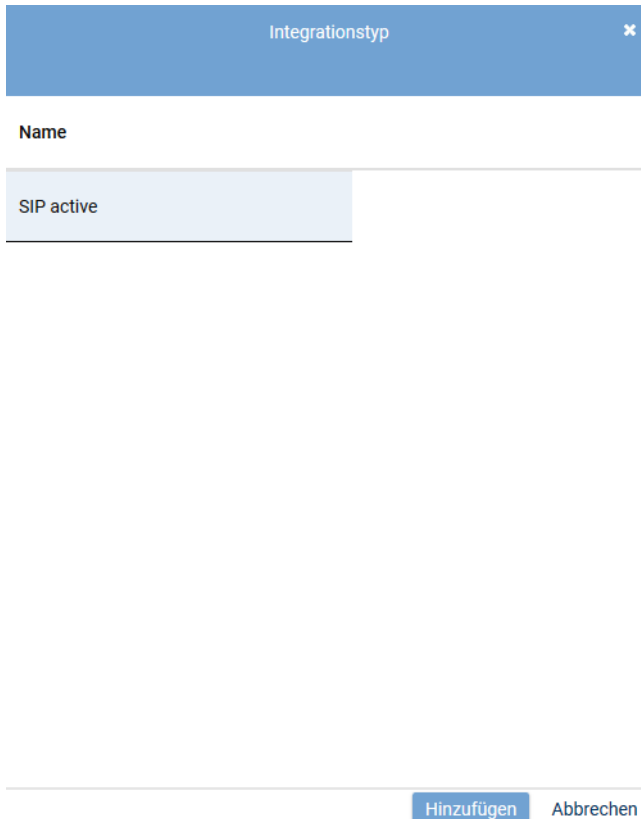


Fig. 161: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.

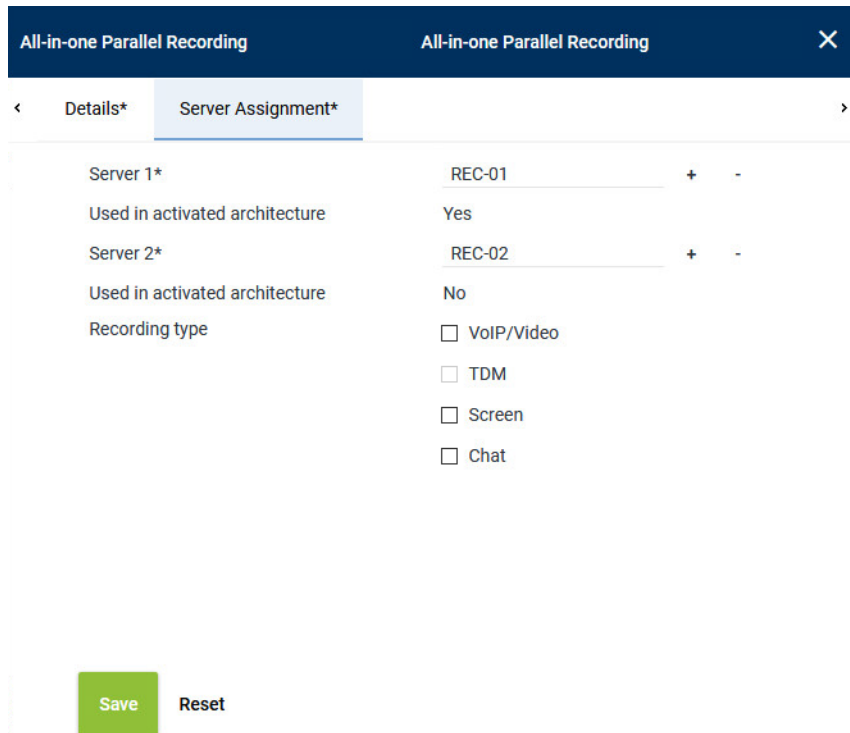


Any number of integration types can be assigned to a recording architecture.

- Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Assign server for All-in-one Parallel Recording

- Click on the tab *Server Assignment* to assign the recording servers to the recording architecture *All-in-one Parallel Recording*.



All-in-one Parallel Recording		All-in-one Parallel Recording	
<div> <div>Details*</div> <div>Server Assignment*</div> </div>			
Server 1*	REC-01	+	-
Used in activated architecture	Yes		
Server 2*	REC-02	+	-
Used in activated architecture	No		
Recording type	<input type="checkbox"/> VoIP/Video <input type="checkbox"/> TDM <input type="checkbox"/> Screen <input type="checkbox"/> Chat		
<div> <div>Save</div> <div>Reset</div> </div>			

Fig. 162: Recording Architecture - tab Server Assignment

- Click on the button **+** behind the entry field *Server 1*.
⇒ The window *Servers* appears.



Servers		
Name ↕	IP Address ↕	Path ↕
REC-01	192.168.173.171	C:\
REC-02	192.168.173.172	C:\

Rows per page 20 1 - 8 of 8

Add Cancel

Fig. 163: Recording Architecture - assign server - example


- Select *Server 1*.



A server can be configured in several recording architectures, but you cannot activate several recording architectures with the same server at the same time.
If you would like to activate several recording architectures at the same time, you have to use different servers to do so.

- Click on the button *Add*.

⇒ The name of the server now appears in the detail view.

5. To delete an assignment, click on the button .
6. Repeat the steps and select Server 2 for the entry field *Server 2*.
7. Select the recording type you would like to use for these servers by activating the check box.

Recording type	<input checked="" type="checkbox"/> VoIP/Video
	<input checked="" type="checkbox"/> TDM
	<input checked="" type="checkbox"/> Screen
	<input checked="" type="checkbox"/> Chat

Save

Reset




Fig. 164: Recording Architecture - activate recording type

8. To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.



You can activate several recording types if the integration has been designed for this and if you have installed the respective licenses.

Activate recording architecture

1. Once all servers have been assigned, click on the button *Save*.
2. Select the recording architecture in the main view so that the icon  (*Activate*) in the tool-bar becomes active.
3. To activate the recording architecture, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.










     General ▾			
Name ▾	Type ▾	Active	Standby active ▾
All-in-one Parallel Recording	All-in-one Parallel Recording		

Fig. 165: Activate recording architecture

4. To deactivate the recording architecture, if required, click on the icon  (*Deactivate*).
⇒ In the column *Active*, the icon  (*Inactive*) appears.



The recording architecture must have been activated so that the integration can be configured.



For updates, the recording architecture is stopped and deactivated. Once the update has been completed, check that the recording architecture has been activated again.



Parallel recording results in redundant recording data in the system. To make sure that this data does not remain in the system permanently, you can configure duplicate detection so that duplicate sets of data are deleted, see [chapter "Configure duplicate detection", p. 387](#).



If you install an extension for the integration subsequently, you must deactivate the recording architecture and activate it again after having installed the license.

7.1.2.3.2 Configure servers

Every server in your network that the *neo* software has been installed on is automatically identified as a server of the recording system and displayed in the main view of the Servers module. In the Servers module, you can configure the usage of the servers in your recording system.

1. Select the menu item *Setup > Servers* in the navigation bar.

⇒ The following window appears:

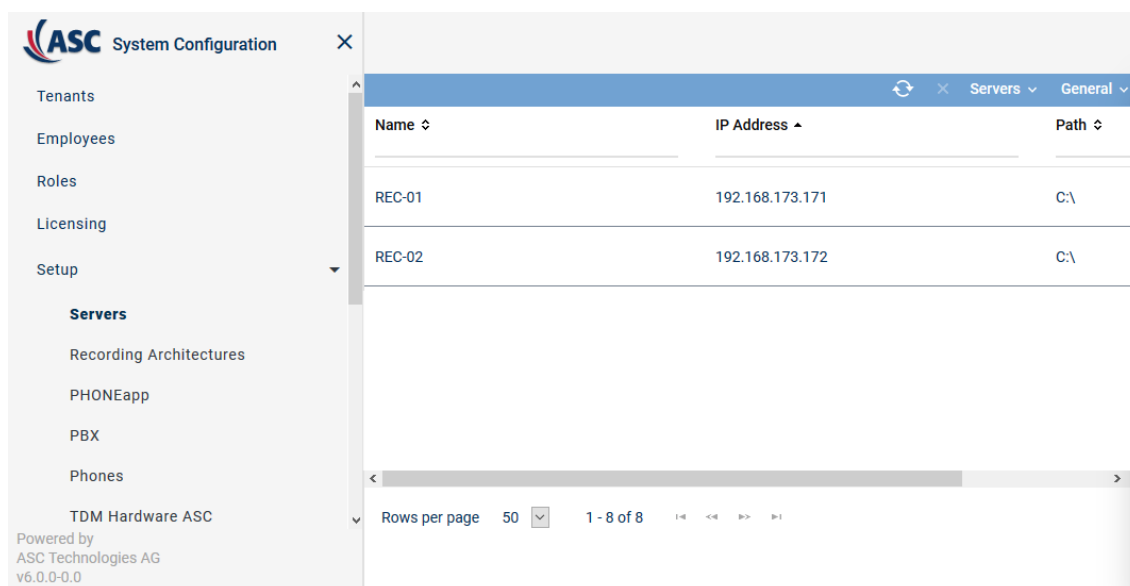


Fig. 166: Servers - main view

Depending on the configuration of the columns, the following information is displayed in the main view:

<i>Name</i>	Shows the name of the server.
<i>IP Address</i>	Shows the IP address of the server.
<i>Path</i>	Shows the path of the server.
<i>Creation Date</i>	Date on which the server was installed.
<i>Updated</i>	Date on which the settings of the server were updated for the last time.



NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Servers module

The toolbar offers the following functions.



Fig. 167: Toolbar Servers module

	<i>Refresh</i>	Refreshes the main view.
	<i>Delete</i>	Deletes the selected server configuration. This function is meant to delete the server configuration if the hardware of a server has been removed and there is no connection to the <i>neo</i> system.
<i>Servers</i>	<i>Administrate Server Locations</i>	Opens a window in which you can create and administrate locations of the servers, see chapter "Administrate server locations" , p. 144.

	<i>Administrate NTP Server</i>	Opens a window in which you can administrate the servers for the time synchronization, see chapter "Administrate NTP server", p. 161 .
	<i>Manage Synchronization Configurations</i>	Opens a window in which you can manage the synchronization configurations.
<i>General</i>	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
	<i>Reset Search</i>	Resets all search filters so that all sets of data are displayed in the main view again.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



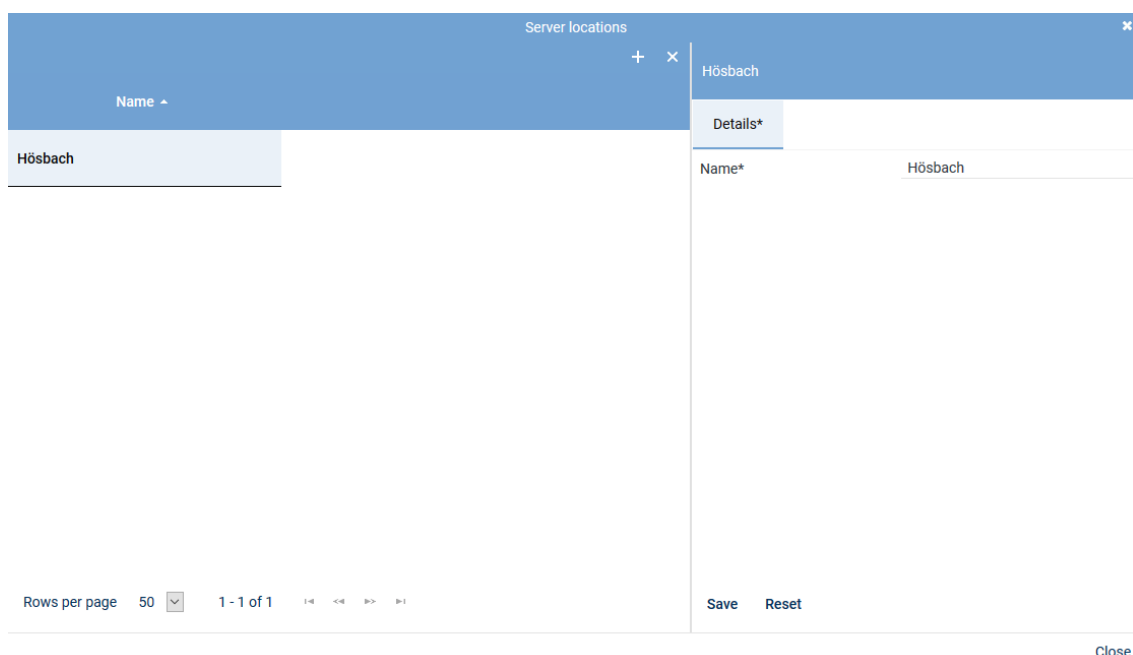
For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Administrate server locations

You can create and manage a list of server locations. In the tab *Details*, you can assign locations to the servers.


Add server locations

1. Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.



The screenshot shows a window titled "Server locations" with a close button (x) in the top right corner. Below the title bar is a toolbar with a plus icon (+) and a minus icon (-). The main area is divided into two panes. The left pane contains a table with a single row: "Hösbach". The right pane has a tab labeled "Details*" and a form with a label "Name*" and a text input field containing "Hösbach". At the bottom of the right pane are "Save" and "Reset" buttons. At the bottom of the left pane, there is a pagination bar showing "Rows per page 50", "1 - 1 of 1", and navigation icons. A "Close" button is located at the bottom right of the window.

Fig. 168: Add server locations

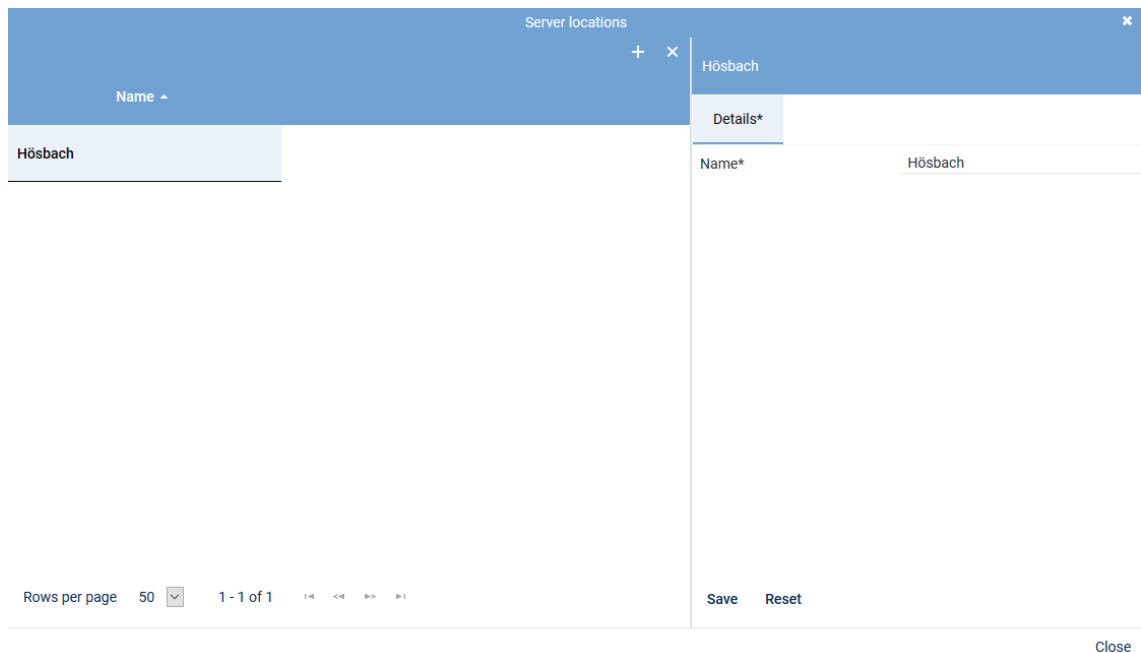
2. Click on the icon  (*Create*) in the toolbar of the window *Server Locations*.
3. Enter the name of the location on the right side in the tab *Details*.
4. To save the entry, click on the button *Save*.
To discard the entry, click on the button *Reset*.
5. To add further locations, repeat the last 3 steps.
6. To close the window, click on the button *Close*.

Delete server location



A server location can only be deleted when it has not been assigned. To be able to delete a server location, you must first delete possible assignments.

1. Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.
2. Select the location you would like to delete.



Server locations

Name
Hörsbach

Details*


Name* Hörsbach

Rows per page 50 1 - 1 of 1

Save Reset

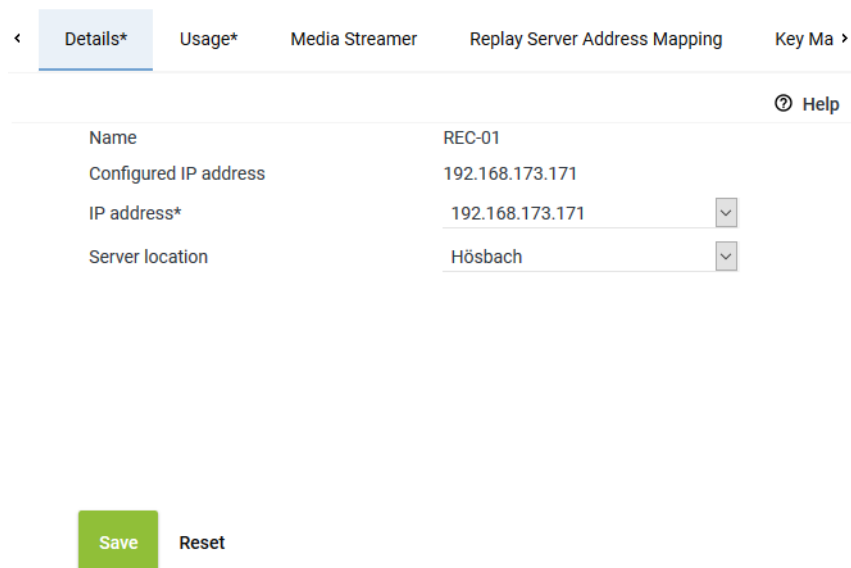
Close

Fig. 169: Delete server location

- Click on the icon  (*Delete*) in the toolbar of the window.
- To delete further locations, repeat the last 2 steps.
- To close the window, click on the button *Close*.

Tab Details

- To configure the server, select the entry of the corresponding server in the main view.
 - ⇒ In the detail view, the tab *Details* appears.
 - The information *Name* and *Configured IP address* has already been entered during the installation and is displayed for your information only.



< Details* Usage* Media Streamer Replay Server Address Mapping Key Ma >

Help

Name	REC-01
Configured IP address	192.168.173.171
IP address*	192.168.173.171
Server location	Hörsbach

Save Reset

Fig. 170: Servers - tab Details

- From the drop-down list, select the IP address which is supposed to be used as default address of the server in the system.
- Select the *Server location* in the drop-down list. The drop-down list displays all locations which have been created in the location management.

- Click on the button **Save** if the entries are correct.

Tab Usage

- Click on the tab **Usage** to configure the purpose of usage.



Since a server can be used for several recording solutions, all purposes of use are listed. Note that some purposes of use do not apply for some recording solutions. As an example: You cannot use audio analysis or replay via phone in a chat recording.

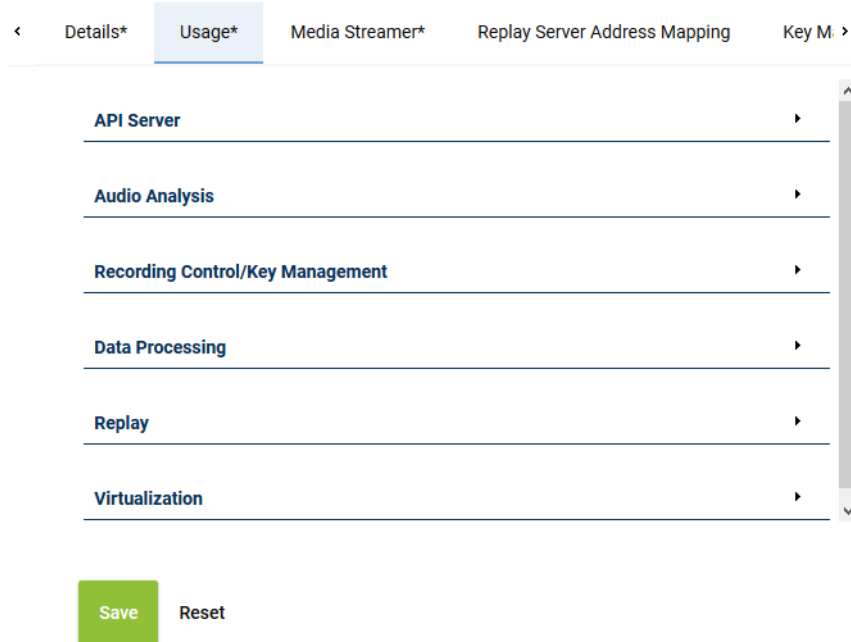


Fig. 171: Servers - tab Usage

Group field API Server

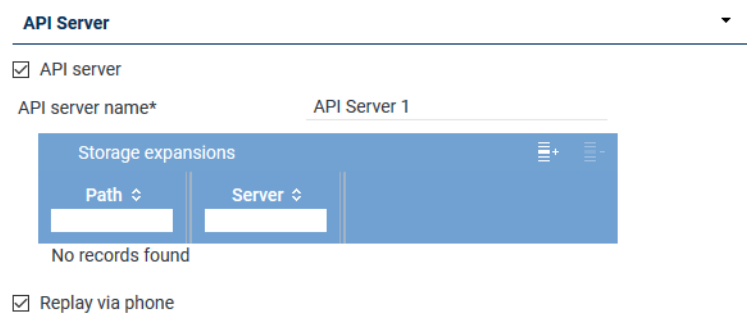




Fig. 172: Group field API Server


The API server is a service in the neo software. It contains the interface for the client applications. Once the service has been started, the client applications can communicate with the neo system via this interface by means of defined commands.

The API server is responsible for replay via the web browser, too. The API server has to be started before the replay server can be activated and the API server assigned for replay via the web applications.

Parameter	Value/Description
API server	Tick the check box to start the API server. <input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>API server</i> .

Parameter	Value/Description
	<p><input type="checkbox"/> = Function has not been activated.</p> <p>In order to be able to reach the API server from a public network and with configured port forwarding, too, you have to adjust the settings in the tab <i>Replay Server Address Mapping</i>, see chapter "Tab Replay Server Address Mapping", p. 157.</p>
<i>API server name</i>	<p>Enter the name which is supposed to denote the server in the system. The displayed name can be selected arbitrarily and is a kind of pseudonym.</p> <p>The displayed name is meant to make it easier for users to select a server as different API servers may be used across the system by different tenants. When selecting the API server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p>
<i>List Storage expansions</i>	<p>Here, you can add storage expansions for replay. If a recording which is supposed to be replayed cannot be found on the server, the search is continued on the storage expansions which have been entered here. That way, even recordings can be replayed which have not been transferred to the server.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the storage expansions, see chapter "Add storage expansion for replay", p. 149. By clicking on the icon  (<i>Remove</i>), you can remove the storage expansions from the list. <p>If you use several recording servers in your system for which storage expansions have been configured, you can add any storage expansion of any recording server on every API server of the system.</p>
<i>Replay via phone</i>	<p>Activate this function if you would like to use the functions <i>Replay via phone</i> or <i>Last Call Repeat</i>.</p> <p><input checked="" type="checkbox"/> = Function has been activated.</p> <p><input type="checkbox"/> = Function has not been activated.</p> <p>NOTICE! The function <i>Replay via phone</i> has been implemented in the following <i>neo</i> components:</p> <ul style="list-style-type: none"> Application POWERplay Pro Application POWERplay Instant Replay module <p>In order to enable a client to use the functionality <i>Replay via phone</i>, you have to assign this client an identifier either in the Employees module or in the Phones module which allows the system to clearly identify the phone.</p> <p>NOTICE! In the tab <i>Media Streamer</i>, you have to assign this function to a PBX, see chapter "Tab Media Streamer", p. 156. To be able to do so, at least 1 PBX must have been configured in the system.</p>

Add storage expansion for replay

1. Click on the icon  (Add) in the toolbar of the list.
2. Select 1 or several storage expansions.
If you would like to select several storage expansions or revoke a selection, click on the respective line while holding the [Ctrl] key down.

Storage Expansion for Replay				
Device Type ↕	Name ↕	Path ↕	Free Disk Space ↕	Server ↕
NAS	NAS 2	NAS 2	<div></div>	REC-02

Rows per page 20 1 - 1 of 1

Add Cancel

Fig. 173: Select storage expansion

3. To apply the selected storage expansions, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Audio Analysis

Audio Analysis


☒ Audio analysis (SAES mode)

Stream audio data from* API Server 1 + -

☐ Emotion detection

Stream audio data from* + -

Fig. 174: Group field Audio Analysis

Parameters	Value/Description
Audio analysis	Activate this check box to use the server for audio analysis. The audio data is then streamed for audio analysis from the configured server to this server. <ul style="list-style-type: none"> Stream audio data from From the list of available servers, select the server from which the audio data is supposed to be streamed for audio analysis via the button .
Emotion detection	Activate this check box to activate emotion detection for the audio analysis. <p><input checked="" type="checkbox"/> = Function has been activated. Tenants can use the emotion detection function.</p>

Parameters	Value/Description
	<input type="checkbox"/> = Function has not been activated.

Tab. 40: Configure audio analysis

Group field Recording Control/Key Management

Recording Control/Key Management ▼

☒ Recording control/Monitoring

Recording architecture Please choose... ▼

☒ neo key management

Fig. 175: Group field Recording Control/Key Management

Parameters	Value/Description
<i>Recording control/Monitoring</i>	<p>Activate the check box if you would like to use <i>CLIENT^{command}</i> or an API recording control or if you would like to use <i>Monitoring</i>. This feature is only available if a recording architecture has been configured and activated.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the respective recording architecture you would like to use for the control.
- <i>neo key management</i>	<p>The function allows customer-specific encryption of the recordings. To be able to configure the key management, you have to activate the check box <i>Key management</i>.</p> <p>This function can only be activated if the license <i>ASC_KEY_MANAGEMENT</i> is available.</p> <p>For further information about the configuration of the key management refer to the administration manual <i>Configuration of servers and recording architectures</i> and to the installation manual <i>Installation Dongle Manager</i>.</p>

Tab. 41: Configure Recording Control/Key Management

Group field Data Processing

Data Processing ▼

☒ Data storage

☒ Transfer data for replay

Target Server

Name	IP Address ↕
No records found	

☒ Transfer data for data storage

Target Server

Name	IP Address ↕
No records found	

Activate period of time ☒

from 11:59:36

to 11:59:36

Receives data from

Name	Only Replay
No records found	



☒ Archiving





☒ Export

☒ Import

Recording architecture Please choose... ▼


Fig. 176: Group field Data Processing

Parameter	Value/Description
<i>Data storage</i>	Activate the check box to allow the modification of the additional functions of data processing.
<i>Transfer data for replay</i>	<p>Activate the check box if you would like to transfer data only for replay to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for replay. The data is not stored on the target server but deposited in a cache temporarily in order to be replayed.</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the target server, see chapter "Add target server to a list", p. 152. By clicking on the icon  (<i>Remove</i>), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which an API server and a replay server have been configured.</p>
<i>Transfer data for data storage</i>	<p>Activate the check box if you would like to transfer data for storage to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for data storage purposes. In the drop-down list, all servers are displayed on which the function <i>Data Storage</i> has been activated. The data is copied to the target server and stored there.</p>

Parameter	Value/Description
	<ul style="list-style-type: none"> By clicking on the icon  (Add), you can add the target server, see chapter "Add target server to a list", p. 152. By clicking on the icon  (Remove), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which the function <i>Data Storage</i> has been activated.</p> <p>If the function has been activated, you can activate the transfer for a certain period of time.</p> <ul style="list-style-type: none"> Activate period of time <input checked="" type="checkbox"/> = Function has been activated. The fields for entering the time become active. Select the time via the rotating field for the period from – to. Active period of time <input type="checkbox"/> = Function has not been activated. <p>NOTICE! In distributed systems with slow network connections, the storage interval for the data transfer can be adjusted. The storage interval for the data transfer has to be configured by an ASC service technician or by an authorized partner company.</p>
<i>Receives data from</i>	<p>This table contains those servers which transfer data to this server.</p> <p>In the column <i>Name</i>, the name of the server appears from which data has been transferred.</p> <p>In the column <i>Only Replay</i>, the purpose of the transfer is displayed:</p> <p> = Data is transferred only for replay.</p> <p> = Data is transferred for data storage.</p>
<i>Archiving</i>	Activate the check box <i>Archiving</i> if you would like to use the server for archiving purposes.
<i>Export</i>	Activate the check box <i>Export</i> to allow the export from this server.
<i>Import</i>	<p>Activate the check box <i>Import</i> so that the imported data can be stored on this server.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the recording architecture that fulfills this function. In the drop-down list, all recording architectures are displayed which enable this function as well. <p>NOTICE! If you would like to use a server for the import function on which no recording is supposed to take place, you can configure an architecture exclusively for the import.</p>

Tab. 42: Configure data storage

Add target server to a list

- In the toolbar of the list *Target Server*, click on the icon  (Add).
- Select the server from the list to which you would like to transfer the data.
If you would like to select several servers or revoke a selection, click on the respective line while holding the [Ctrl] key down.



Name	IP Address
RC-02	192.168.173.176
REC-04	192.168.173.174
RC-01	192.168.173.175
REC-02	192.168.173.172
CTI-01	192.168.173.177
REC-03	192.168.173.173

Rows per page: 20 | 1 - 6 of 6

Add Cancel

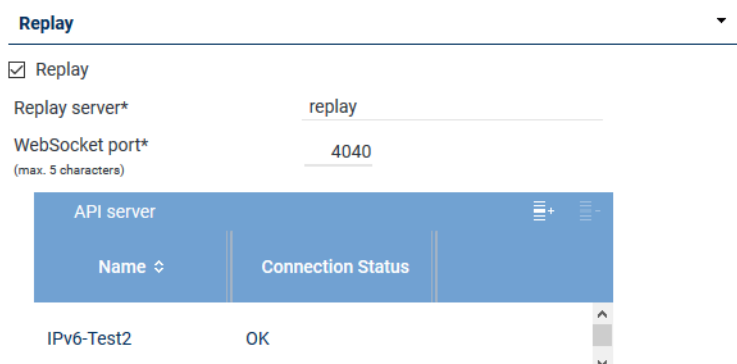
Fig. 177: Select server



Only those servers are available on which the function *Data storage* has been activated.

- To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Replay



Replay

☒ Replay



Replay server*

WebSocket port*
(max. 5 characters)

Name	Connection Status
IPv6-Test2	OK

Fig. 178: Group field Replay

Parameter	Value/Description
<i>Replay</i>	<p>A replay server can replay recordings via the integrated <i>Replay Feature</i>. Only data which has either been recorded directly on this server or which has been transferred to this server for data storage or only for replay purposes can be replayed. The client computers of the system can connect to a replay server for replay purposes.</p> <p>Activate the check box <i>Replay</i> to be able to use the replay function of the players and the phones.</p> <p><input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>Replay server</i>.</p> <p><input type="checkbox"/> = Function has not been activated.</p>

Parameter	Value/Description
<i>Replay server</i>	<p>If the function has been activated, you can enter a displayed name which is supposed to denote the server as the replay server in the system in the entry field <i>Replay server</i>. The displayed name can be selected arbitrarily and is a kind of pseudonym. As the replay server and the API server must not be identical, you can select different pseudonyms.</p> <p>The displayed name is meant to make it easier for users to select a server as different replay servers may be used across the system by different tenants. When selecting the replay server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p> <p>In order to be able to reach the server activated for replay from a public network and with configured port forwarding, you have to set the configuration in the tab <i>Replay Server Address Mapping</i>. For further details about the configuration refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>
<i>WebSocket port (maximum of 5 characters)</i>	Enter the port via which the data to be replayed in <i>POWERplay</i> Web are supposed to be transmitted.
<i>List API server</i>	<p>Here, you can add API servers that the replay server may use. If a recording which is supposed to be replayed cannot be found on a server, the search is continued on the API servers which have been entered here.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the API server, see chapter "Add API server to a list", p. 154. By clicking on the icon  (<i>Remove</i>), you can remove selected API servers from the list.

Tab. 43: Configure replay

Search and replay functions



To be able to use the search and replay functions via [LCR](#) as well as to use replay via phone, you have to create the users with the respective access rights in the application System Configuration in the Employees module. For information about the configuration refer to the administration manual *User management* for tenants.

Add API server to a list

The replay server required the services of an [API](#) server. The configuration must be as follows:


- If the replay server runs on a server with a local [API](#) server, it must not necessarily be assigned as the replay server always addresses the local [API](#) server first.
 - If the replay server runs on a separate server, you must assign at least one [API](#) server that the replay server can address.
 - If several [API](#) servers are available in the network, you can assign further [API](#) servers in addition to the local [API](#) server. The assigned [API](#) servers are addressed in order. For this reason, the local [API](#) server should always be first in the list.
- To assign an [API](#) server, click on the icon  (*Add*) in the toolbar of the list *API Server*.
 - Select the server from the list on which the [API](#) service is running.



Fig. 179: Select server



Only those servers are available on which the [API](#) service has been installed and activated. See [chapter "Group field API Server", p. 147](#).

- To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Virtualization



Fig. 180: Group field Virtualization

Parameter	Value/Description
<i>VM support</i>	<p>Activate the check box <i>VM support</i> to be able to use the licensing for several VM installations.</p> <p>This function can only be activated if the system has been installed in a VMware and no <i>TRUSTED_VIRTUALIZATION</i> license has been imported to the system.</p> <p>When activating the function <i>VM support</i>, you have to configure the respective settings in the tab <i>Keystore/VM Licensing</i>. For further details about the configuration of this function refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>

Tab. 44: Configure virtualization



For the *virtualization* without Internet connection, a dongle is required which contains the system information. The application *Dongle Manager*, required to read the dongle, has to be installed on the server that the dongle has been connected to.

- To save the entries, click on the button *Save* in the detail view.
To reset the entries, click on the button *Reset* in the detail view.

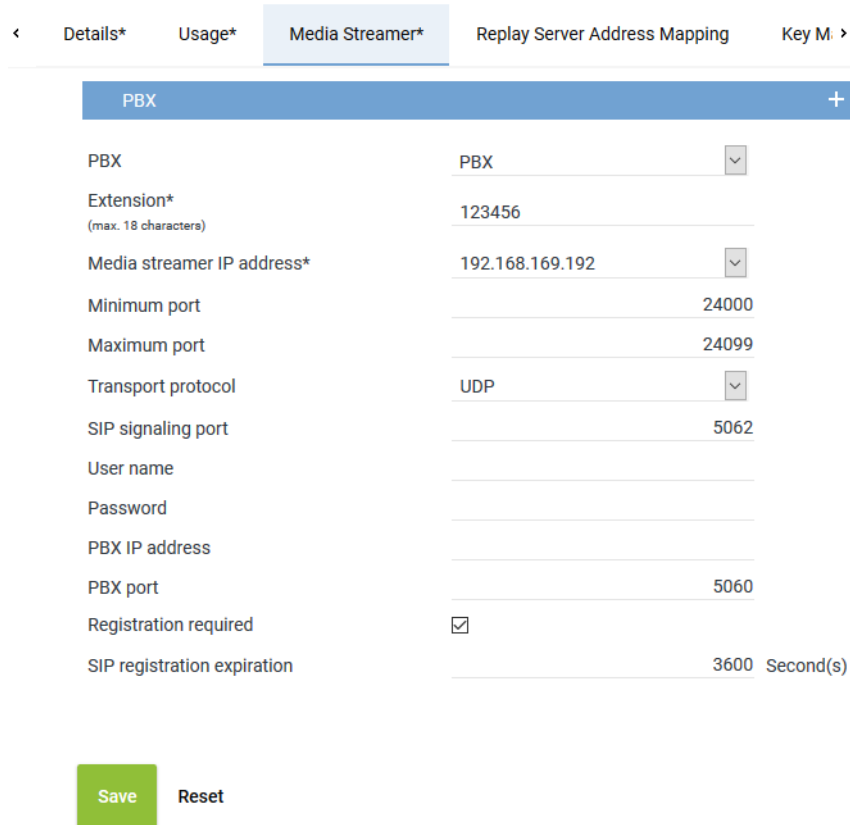
Tab Media Streamer

1. Click on the tab *Media Streamer* in the detail view.

In this tab, you can configure the Media Streamer for the functionalities *Replay via phone* and *Last Call Repeat Facility*.



The tab *Media Streamer* is only active if the function *Replay via phone* has been activated in the tab *Usage*.



< Details* Usage* **Media Streamer*** Replay Server Address Mapping Key M. >

PBX +

PBX PBX
 Extension* (max. 18 characters) 123456
 Media streamer IP address* 192.168.169.192
 Minimum port 24000
 Maximum port 24099
 Transport protocol UDP
 SIP signaling port 5062
 User name
 Password
 PBX IP address
 PBX port 5060
 Registration required ☒
 SIP registration expiration 3600 Second(s)

Save Reset

Fig. 181: Servers module - tab Media Streamer

2. Enter the following parameters:

PBX	<p>PBX that the Media Streamer is supposed to be mapped to.</p> <p>Select a PBX from the drop-down list. The drop-down list displays all PBXs which have been created in the system.</p> <p>If no PBX has been created in the system yet, you can create a PBX via the blue bar PBX, see chapter "Create PBX", p. 162.</p>
Extension	<p>Extension which is supposed to be mapped to the Media Streamer. This is a mandatory field; the configuration cannot be saved if this information is missing.</p> <p>If an external analog gateway has been integrated, enter the value 8000.</p>
Media streamer IP address	<p>IP address which is supposed to be used for the exchange of the audio data and for the SIP communication.</p> <p>Select an IP address from the drop-down list. In the drop-down list, all IP addresses of the server are displayed.</p> <p>If an external analog gateway has been integrated, select the IP address 169.254.254.100 in the drop-down list.</p>

<i>Minimum port</i>	Enter the minimum port which is supposed to be used for the audio data exchange.
<i>Maximum port</i>	Enter the maximum port which is supposed to be used for the audio data exchange. A port range of 100 (e. g. 24000-24099) is sufficient for 50 licenses. The port range should be twice as wide as the number of available licenses.
<i>Transport protocol</i>	Select the transport protocol type you would like to use for the SIP communication from the drop-down list. TCP = unencrypted UDP = unencrypted TLS = encrypted If an external analog gateway has been integrated, select UDP in the drop-down list.
<i>SIP signaling port</i>	Enter the port for the SIP communication. Port for data exchange: 5062
<i>User name</i>	Enter the user name for the authentication on the SIP server.
<i>Password</i>	Enter the password for the authentication on the SIP server.
<i>PBX IP address</i>	Enter the IP address of the SIP registrar of the PBX . If an external analog gateway has been integrated, enter the IP address 169.254.254.101.
<i>PBX port</i>	Enter the port of the SIP registrar of the PBX . If an external analog gateway has been integrated, enter the value 5060.
<i>Registration required</i>	Select whether the SIP extension has to be registered with the SIP registrar of the PBX . <input checked="" type="checkbox"/> = SIP extension has to be registered. <input type="checkbox"/> = SIP extension does not have to be registered. If an external analog gateway has been integrated, deactivate the check box <i>Registration required</i> .
<i>SIP registration expiration</i>	Enter the time interval after which the registration has to be repeated.

Tab Replay Server Address Mapping

1. Click on the tab *Replay Server Address Mapping* in the detail view.

In this tab, you can configure the replay server address mapping. Servers which have been activated for replay require this address mapping so that they can be reached from a public network and with configured port forwarding.



The tab *Replay Server Address Mapping* is only active if the function *Replay* has been enabled in the tab *Usage*.

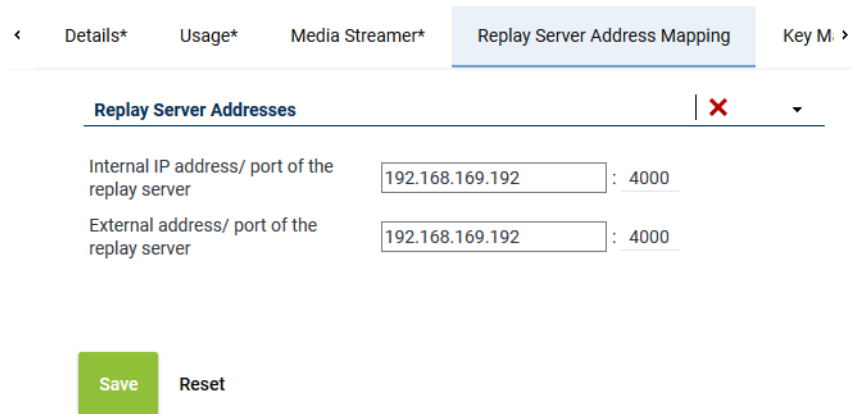


Fig. 182: Servers Module - tab Replay Server Address Mapping

Group field Replay Server Addresses

1. Enter the following parameters:

<i>Internal IP address/ port of the replay server</i>	Enter the destination IP address and the port of the replay server at which the Replay module can be reached internally.
<i>External address / Port of the replay server</i>	Enter the URL or the IP address and the port at which the Replay module can be reached via the browser from outside. When entering the external address consider whether the SSL certificate has been created for an IP address or for a DNS address. In the latter case, it is imperative to enter the DNS name! Otherwise the certificate check in the replay applications will fail.

If you would like to remove the addresses, click on the icon  in the title bar of the group field.



If address mapping has been configured, the Replay module receives the configured address and the configured port.

If address mapping has not been configured, the Replay module receives the IP address and the default port *4040* as entered in the tab *Details*.



To allow the users of the respective tenant to access the replay server via the browser, an internal address and/or an external IP address or a DNS name must be configured in the Tenants module.



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Key Management

1. Click on the tab *Key Management* in the detail view.

In this tab, you can configure the settings for the *neo* key management. This tab is only active if you have installed the corresponding license and enabled the function *neo Key Management* in the tab *Usage*.

< Usage* Media Streamer* Replay Server Address Mapping
Key Management >

Key creation interval

☒ All

365 Day(s)

☐ Create key manually

Delay usage

until

0 Day(s)

0 Hour(s)

☐ Key expiration date

after

0 Day(s)

☒ In case of an error switch to simple key management automatically

Save

Reset

Fig. 183: Servers module - tab Key Management

<i>Key creation interval</i>	<p>Select whether a key is supposed to be generated automatically or manually. Select one of the following options:</p> <ul style="list-style-type: none"> • <i>All</i> Select the intervals in which a new key is supposed to be generated automatically. Possible time interval: 1 to 365 days Default value: 365 days • <i>Create key manually</i> Select that a key is supposed to be generated manually. <p>Old keys which are no longer used for encryption become inactive for the time being. They remain in the database, though, since they are still required for the decryption of old recordings.</p>
<i>Delay usage</i>	<p>If required, enter a time interval during which the new key is not supposed to be used yet after having been created. Not until after this time interval has passed can the key be actually used for encryption.</p> <p>Possible time interval: 0 to 14 days Default value: 0 days (new keys are immediately used for encryption)</p> <p>A delay guarantees that the key has been captured by a database backup before it will actually be used.</p>
<i>Key expiration date</i>	<p>Select whether an inactive key is supposed to become invalid after the expiration of the time interval defined here.</p> <p><input type="checkbox"/> = Key never becomes invalid.</p> <p><input checked="" type="checkbox"/> = Key becomes invalid. In the entry field, enter the time interval after which the key loses its validity. Once this time interval has passed, the key cannot be used anymore. If recording data must be deleted after a certain period of time, this option offers additional security on top of the configured date of deletion. This especially applies to the case when recording data has been transferred manually to a storage location where the deletion mechanism of the system cannot find it.</p>

CAUTION! All recordings which have been encrypted with a key which has meanwhile become invalid are useless and cannot be replayed anymore.

In case of an error ... automatically

Select whether simple key management is supposed to be used if the neo key management does not work (e. g. if the service *DongleMan* fails). If you have not activated the option, no recording takes place as long as the neo key management has been activated but does not work.

☒ = In case of an error, simple key management is used as replacement.

☐ = In case of an error, no recording takes place as long as the neo key management has been activated. In this case, disable key management in the tab *Usage*.



On top of the settings in this tab, each tenant who would like to use the neo key management has to define individual settings in his own user management (Tenants module).



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Keystore/Virtualization

1. Click on the tab *Keystore/Virtualization* in the detail view.

In this tab, you can configure the connection data for the service *DongleMan* for the neo key management and for the authentication of the VM.



If your system has been installed in a virtual environment, the application Dongle Manager must have been installed and started locally outside the VM so that the access to the dongle works. The dongle must have been connected to the server on which the VM has been installed.



For detailed information about neo key management refer to the administration manual *Encryption of recordings*.

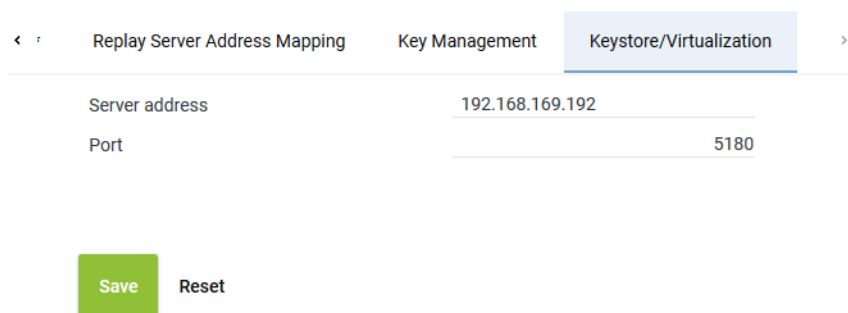


Fig. 184: Servers module - tab Keystore/Virtualization

Server address

Enter the address of the server for this connection.

- If you use the neo key management as well as the virtualization:
IP address of the server that the service *DongleMan* has been installed on.
- If you use only virtualization, you can authenticate the VM via the ASC License Management System, too. In this case, enter the following address:
licensing.asc.de

	<ul style="list-style-type: none"> If you use only the ASC key management: IP address of the server with the master password database
Port	Enter the port for the connection. Default value: 5180

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

Administrate NTP server

The recording system works with an **NTP**-based time synchronization. The function *Administrate NTP server* allows defining several **NTP** servers. Every server in the system identifies all **NTP** servers configured within the system and can use any **NTP** server for time synchronization. That way, every server can connect immediately to another **NTP** server if its current **NTP** server connection breaks down.

Add NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.

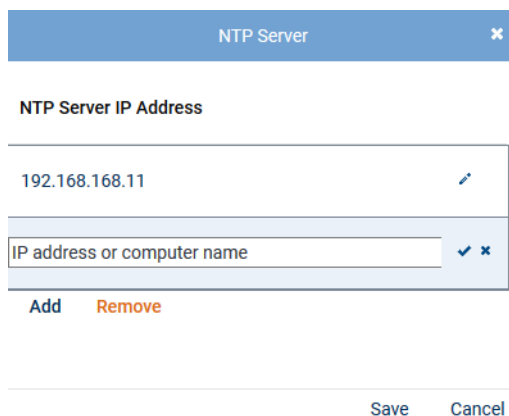





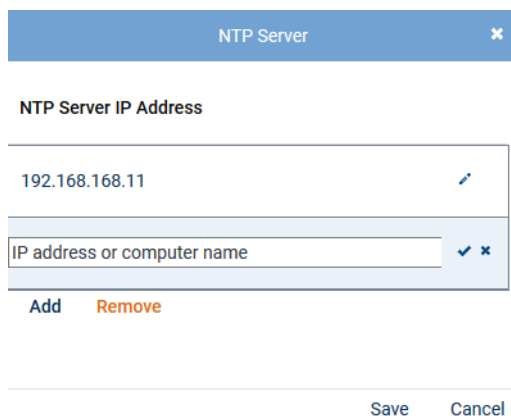
Fig. 185: Add NTP server

The list displays all NTP servers that have been configured during the installation.

- To add a server, click on the button *Add*.
- In the newly added row, click on the icon  (*Edit*).
- Enter the **IP** address or the name of the **NTP** server in the entry field.
- To save the entry in the row, click on the icon  (*Save*).
To discard the entry in the row, click on the icon  (*Discard*).
- To save all changes in the list, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.




Edit IP address

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



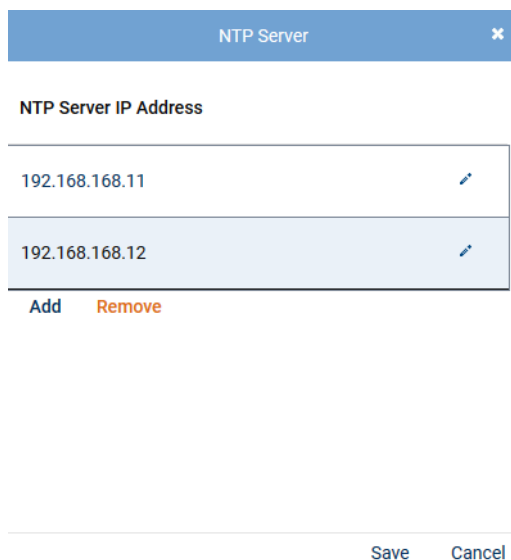
The screenshot shows a window titled "NTP Server" with a close button (X). Below the title bar, the text "NTP Server IP Address" is displayed. A table contains one row with the IP address "192.168.168.11" and an edit icon (pencil). Below the table is a search bar labeled "IP address or computer name" with a checkmark and an X icon. At the bottom of the window are buttons for "Add" (in blue) and "Remove" (in orange), and at the very bottom are "Save" and "Cancel" buttons.

Fig. 186: Edit IP address

2. Click on the icon  (*Edit*) in the row with the IP address that you would like to edit.
3. Change the entry in the entry field.
4. To save the change, click on the icon  (*Save*).
To discard the change, click on the icon  (*Discard*).
5. To save the changes, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.

Remove NTP server

1. Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



The screenshot shows the "NTP Server" window with two rows in the table. The first row has the IP address "192.168.168.11" and an edit icon. The second row has the IP address "192.168.168.12" and an edit icon. The "Add" button is blue and the "Remove" button is orange. "Save" and "Cancel" buttons are at the bottom.

Fig. 187: Remove NTP server

2. In the list, select the NTP server that you would like to remove.
3. Click on the button *Remove*.
⇒ The NTP server is removed from the list.
4. To save the change, click on the button *Save*.
To discard the change and close the window, click on the button *Cancel*.

7.1.2.3.3 Create PBX

The PBX can either be configured via the PBX module or via the Integrations module.

In this configuration step, the parameters for the PBX are configured, e. g. the name, the area code and the net code.

1. Select the menu item *Setup > PBX* in the navigation bar.

⇒ The following window appears:

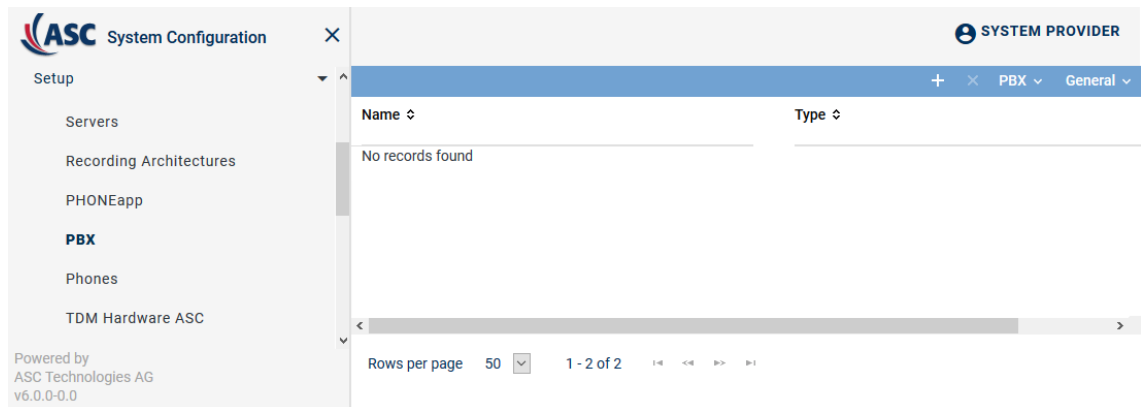




Fig. 188: Create new PBX

Toolbar of the PBX module

The toolbar offers the following functions.



Fig. 189: Toolbar PBX module

	<i>Create</i>	In the detail view, you can enter the parameters of the new PBX.
	<i>Delete</i>	Deletes the selected PBX configuration. A PBX can only be deleted if it is not used in any configuration.
<i>PBX</i>	<i>Phone Configuration</i>	Opens a window in which you can create and configure phones.
	<i>Administrate Unused Extensions</i>	Opens a window in which you can delete extensions that are not used in any configuration.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create new PBX

1. Click on the icon  (*Create*) in the toolbar of the main view of the PBX module.

⇒ In the detail view, the tab *Details* appears.

×

<
Details*
PHONEapp Configuration
Web Service
>

Name*

PBX type*

Maximum length of extensions

Country code

Area code*

Net code*

SIPREC

Universal VoIP ▼

4 ▼

☒ Select from list
 United States (1) ▼
☐ Enter manually

6021

5963

Non Phone IPs

No records found

Add Delete

IPs to be Ignored

No records found

Add Delete

MACs to be Ignored

No records found

Add Delete

Save

Reset

Fig. 190: Create new PBX - tab Details

2. Set the following parameters in the detail view:

Parameter	Value/Description
<i>Name</i>	This <i>name</i> serves as the identifier of this PBX.
<i>PBX type</i>	Select the type of the PBX from the drop-down list.
<i>Maximum length of the extensions</i>	Enter the number of digits of the extensions, e. g. 4.
<i>Country code</i>	Select the option for the country code: <ul style="list-style-type: none"> • <i>Select from list</i> Select the country code from the drop-down list. • <i>Enter manually</i> If the corresponding country code is not available in the drop-down list, you can enter the 3-digit code manually. e. g. for Sri Lanka 094.
<i>Area code</i>	Enter the area code without the preceding 0, e. g. 6021.
<i>Net code</i>	Enter the net code, e. g. 5963. Do not enter an extension here.

Tab. 45: Create PBX

If you would like to display the complete phone number, e. g. if you use more than one PBX, several area codes, or if you would like to record mobile phones, you have to configure the value 0 in the following parameters:

Parameter	Value/Description
<i>Maximum length of the extensions</i>	Enter the number 0 in the field maximum length of the extensions to display the complete phone number.
<i>Area code</i>	Enter the number 0 as area code to display the complete phone number.
<i>Net code</i>	Enter the number 0 as net code to display the complete phone number.

Tab. 46: PBX parameters with complete phone number

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

7.1.2.3.4 Assign recording resources

In multi-tenant systems, you have to assign each tenant its own recording resources.

Depending on the recording type, agents can be assigned to the recording resource via the extension, via the PBX Agent ID or via the chat ID. Within one tenant, you can configure all three possibilities.

Assign extensions to tenants

If you would like to make an assignment based on extensions, you can assign the respective tenant the extension designated for recording in the Tenants module.



In 1-tenant systems, all extensions are automatically assigned to the tenant who has been created by the system (1st tenant). Extensions are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the extensions manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of extensions is not possible until a PBX has been created since extensions are assigned in relation to the PBX.

- Select the menu item *Tenants* in the navigation bar.

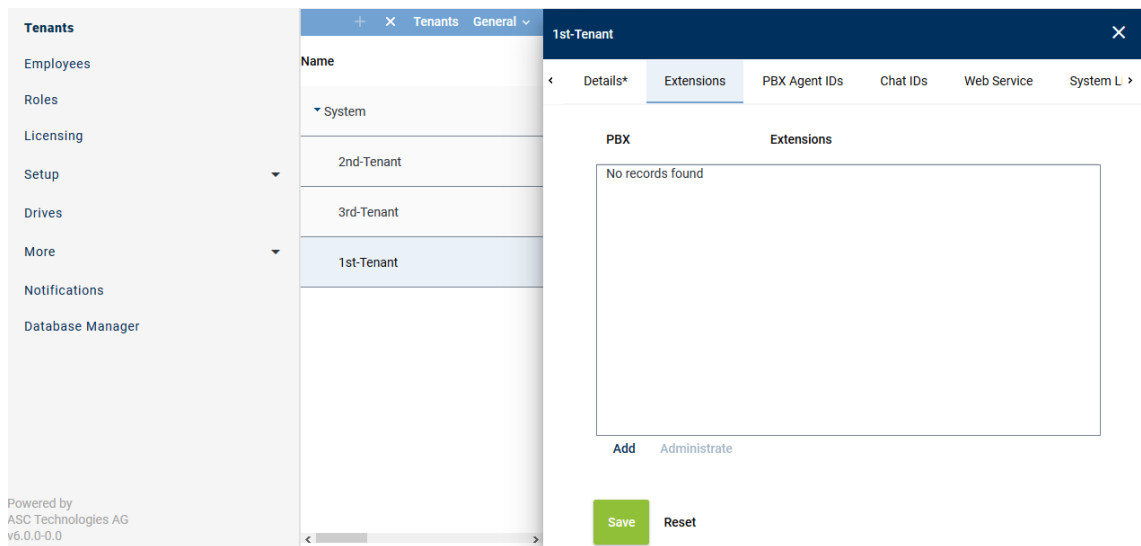


Fig. 191: Tenants - main view - tab Extensions

Add extensions

1. In the main view, select the tenant to whom you would like to assign extensions.
2. Click on the tab *Extensions*.
3. Click on the button *Add*.

⇒ The following window appears:

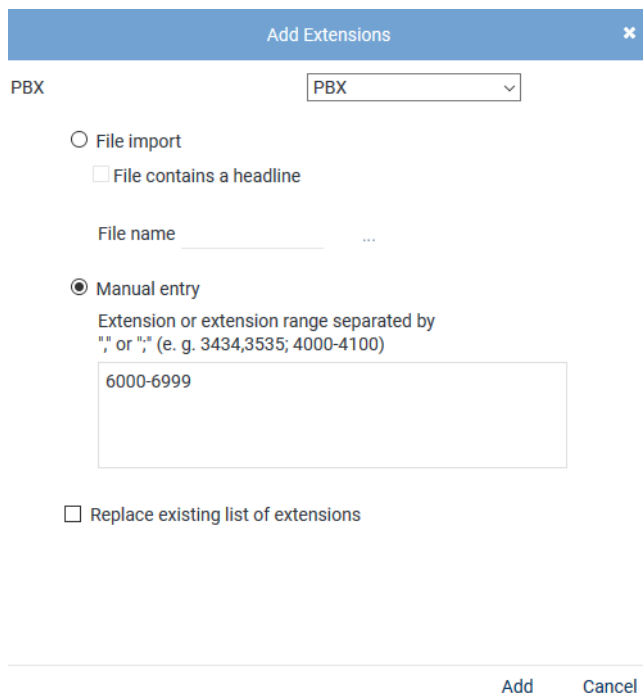




Fig. 192: Assign extensions to tenants

4. From the drop-down list, select the PBX in which the extensions for this tenant have been configured.

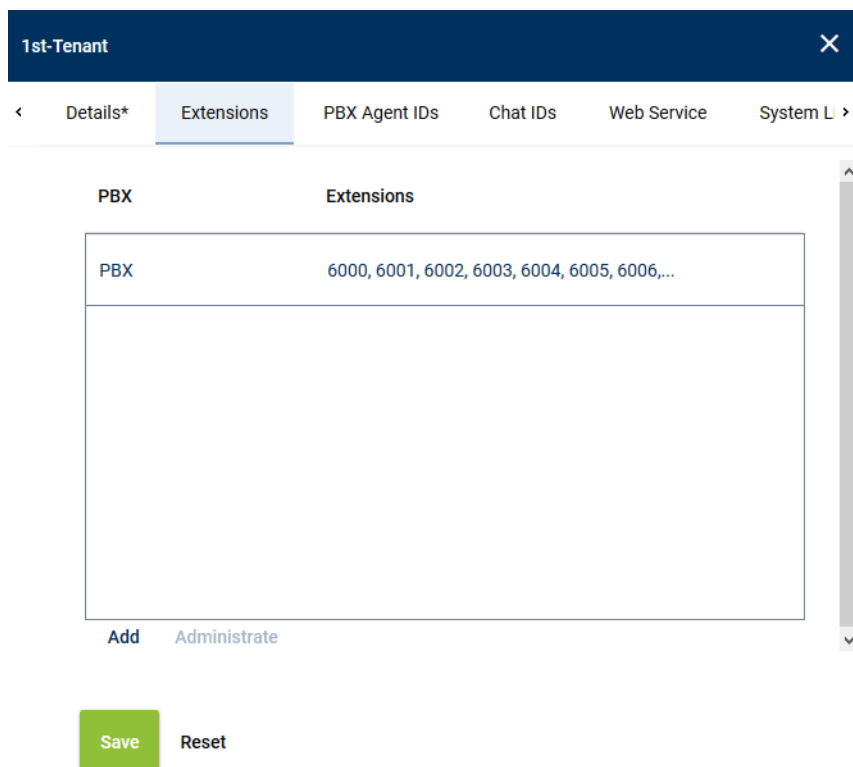
File import	Select this option to import extensions from an existing CSV file and add them to the table of extensions.
File contains a headline	

	<p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CSV file, you have to pack it in a ZIP file.</p> <p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> • Click on the button  behind the field <i>File name</i>. • Click on the button <i>Choose File</i>. • Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. • Click on the button  <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter extensions or extension ranges manually.</p> <p>Enter the extension range that is reserved for this tenant using a hyphen, e. g. from 6000 to 6999. Alphanumerical entries with a hyphen are not detected as a range, they must be entered individually.</p> <p>You can separate the different extensions and extension ranges by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of extensions</i>	<p>Activate the check box to replace the list of extensions.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the extensions of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured extensions of all PBXs are kept and the new extensions are added to the selected PBX.</p>

- Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
- If errors have been detected, the window *Result* appears.
 - Click on the button *Display Error Report* to open the window *Error Report*.
 - To close the window *Error Report*, click on the button *Close*.
 - To close the window *Result*, click on the button *Close*.
- The configured extensions now appear in the detail view.
- Click on the button *Save* in the detail view to save the entries.

Remove extensions

- In the list, select the **PBX** for which you would like to remove the assigned extensions.



1st-Tenant

< Details* Extensions PBX Agent IDs Chat IDs Web Service System L >

PBX	Extensions
PBX	6000, 6001, 6002, 6003, 6004, 6005, 6006,...

Add Administrate

Save Reset

Fig. 193: Remove extensions

- Click the button *Administrate*.
- Select one or several extensions you would like to remove from the assignment.
To select several extensions or to revoke the selection, click on the respective line while holding the [Ctrl] key down.



Administrate Extensions

6993
6994
6995
6996
6997
6998
6999

Remove Cancel

Fig. 194: Select extensions

- To remove the selected extensions, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

Assign PBX Agent IDs to tenants

If the information about PBX Agent IDs is delivered by the PBX, you can make an assignment by means of the PBX Agent IDs. In this case, you can assign the respective tenant the PBX Agent IDs designated for recording in the Tenants module.



In 1-tenant systems, the PBX Agent IDs are automatically assigned to the tenant who has been created by the system (1st tenant). PBX Agent IDs are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the PBX Agent IDs manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of PBX Agent IDs is not possible until a PBX has been created since the assignment is PBX-related.

1. Select the menu item *Tenants* in the navigation bar.

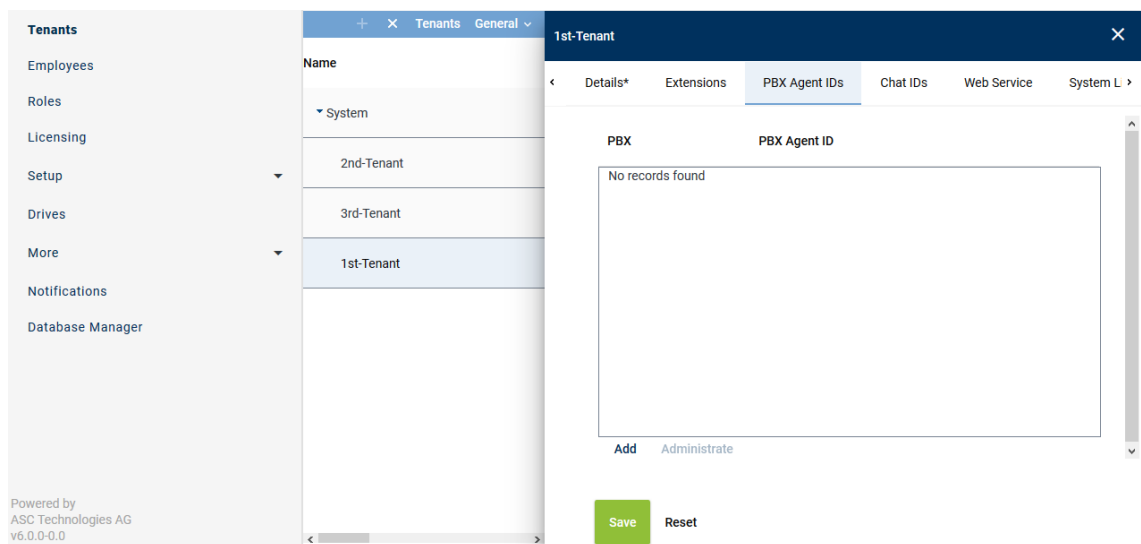


Fig. 195: Tenants - main view - tab PBX Agent ID

Add PBX Agent ID

1. In the main view, select the tenant to whom you would like to assign the PBX Agent IDs.
2. Click on the tab *PBX Agent IDs*.
3. Click on the button *Add*.
⇒ The following window appears:

Add PBX Agent IDs
✕

PBX

PBX

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

PBX Agent IDs separated by ";" or ","

427agent1,427agent2

☐ Replace existing list of PBX Agent IDs

Add
Cancel

Fig. 196: Assign PBX Agent IDs to tenants

4. From the drop-down list, select the PBX in which the PBX Agent IDs for this tenant have been configured.

<i>File import</i>	<p>Select this option to import the PBX Agent IDs from an existing CSV file and add them to the table of PBX Agent IDs.</p>
	<p><i>File contains a headline</i></p> <p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CVS file, you have to pack it in a ZIP file.</p>
	<p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> • Click on the button ... behind the field <i>File name</i>. • Click on the button <i>Choose File</i>. • Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. • Click on the button ↗ <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter PBX Agent IDs manually.</p> <p>You can separate the individual PBX Agent IDs by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of PBX Agent IDs</i>	<p>Activate the check box to replace the list of PBX Agent IDs.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the PBX Agent IDs of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured PBX Agent IDs of all PBXs are kept and the new PBX Agent IDs are added to the selected PBX.</p>

5. Click on the button *Add*.
⇒ The PBX Agent IDs are added to the table of PBX Agent IDs.
6. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
7. The configured PBX Agent IDs now appear in the detail view.
8. Click on the button *Save* in the detail view to save the entries.

Remove PBX Agent ID

1. In the list, select the **PBX** for which you would like to remove the assigned PBX Agent IDs.
2. Click the button *Administrate*.
3. Select one or several PBX Agent IDs you would like to remove from the assignment.
To select several PBX Agent IDs or to revoke the selection, click on the respective line while holding the [Ctrl] key down.

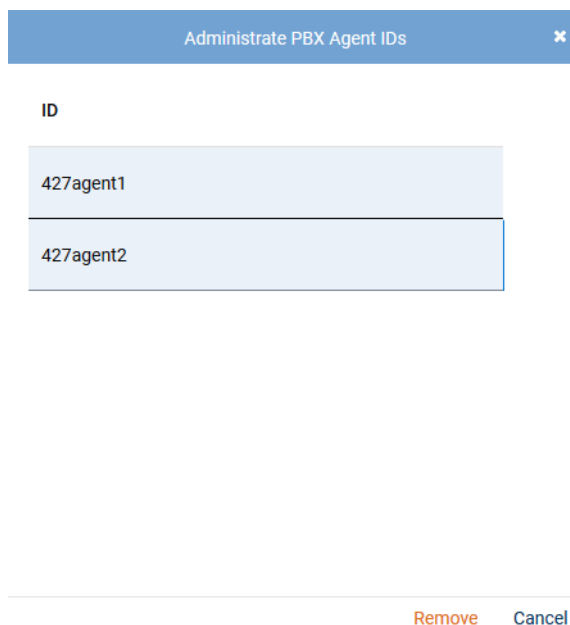


Fig. 197: Select PBX Agent IDs

4. To remove the selected PBX Agent IDs, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

7.1.2.3.5 Configure additional data

In the Additional Data module, you can configure the additional data which is delivered for a conversation with a protocol.



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured here in the Additional Data module. Only then can you map the additional data in the integration under the Global Recording Settings in the tab *SIP Header Tagging*.

For selection fields to appear in the drop-down list, they have to be configured in the Additional Data module.

1. Select the menu item *Setup > Additional Data* in the navigation bar.

ASC

System Configuration

Setup

Servers

Recording Architectures

PHONEapp

PBX

Phones

TDM Hardware ASC

TDM Hardware Others

Integrations

Recording Import

Additional Data

Activity Guard

Powered by

ASC Technologies AG

v6.0.0-0.0

SYSTEM PROVIDER

Additional Data

Additional Data

General

ID	Displayed Name	Available
customCP01	customCP01	
customCP02	customCP02	
customCP03	customCP03	
customCP04	customCP04	
customCP05	customCP05	
customCP06	customCP06	

Rows per page

50

1 - 30 of 30

Fig. 198: Additional Data module main view

- Select a set of data.
⇒ The detail view displays the information you can configure.

Change display name

Change Display Name		
Language	Content	
ar_SA	customCP01	✎
bg_BG	customCP01	✎
de_DE	Universal Call ID	✎
en_GB	customCP01	✎
en_US	Universal Call ID	✓ ✕

Fig. 199: Configure additional data

- To change the display name, click on the pen in the line of the language you would like to change.
- Enter a display name and click on the check mark at the end of the line to confirm the entry.

Availability

Availability	
Available	<input checked="" type="checkbox"/>
Editable	<input checked="" type="checkbox"/>
External recording control	<input checked="" type="checkbox"/>

Save
Reset

Fig. 200: Additional data - configure availability

1. To make the data field available to the entire system, activate the check box of the option *Available*.
2. To make the data field in the search and replay applications editable later on, activate the check box of the option *Editable*.
3. To be able to use the data field for external recording control, activate the check box of the option *External recording control*. This option is only available if recording control has been activated in the *Servers module* in the tab *Usage*.
4. Click on the button *Save* to save the settings.



For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



Additional data which is not delivered along with the protocol is not available for further use.

7.1.2.3.6 Create integration for All-in-one Parallel Recording

In the Integrations module, the PBX-related recording settings are configured.

You first have to create and activate a recording architecture to be able to create a integration and to assign it here.

Depending on the recording solution, you additionally have to configure IP addresses, ports, protocols, sniffer cards, CTI connection data, phones, monitor points, and, where required, add-ons.

1. In the navigation bar, select the menu item *Setup > Integrations*.
⇒ The following window appears:

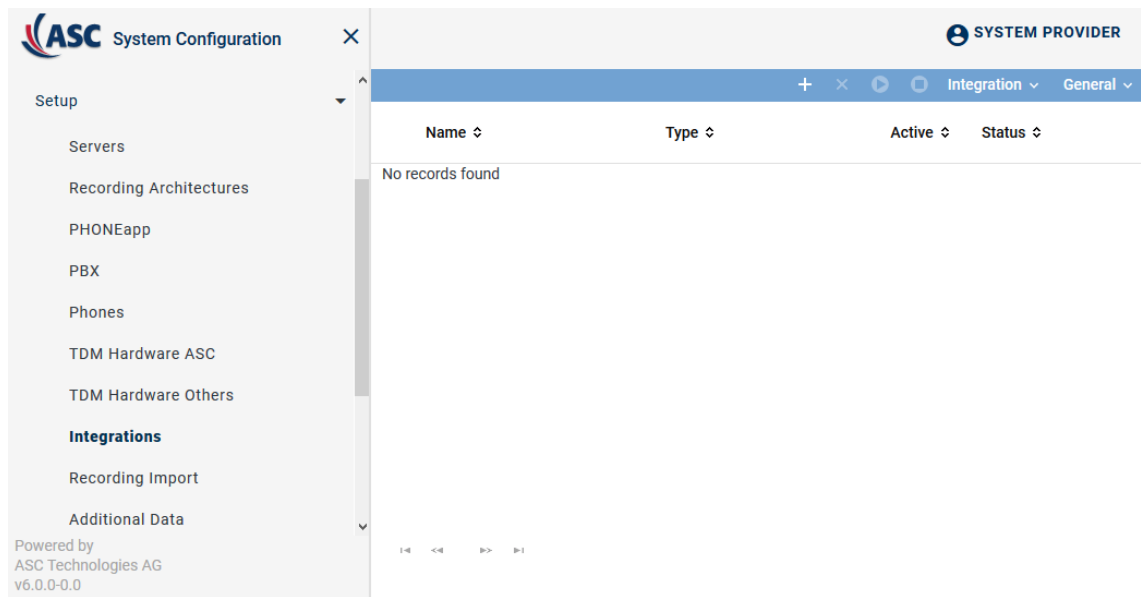




Fig. 201: Integrations - main view

In the table in the main view, the following information is displayed:





Name	Name of the integration
Type	Type of the integration
Active	Shows whether the integration has been activated and is used for the recording. <div> ✓ = Integration is active, can be deactivated in the toolbar via the icon . ✗ = Integration is not active, can be activated in the toolbar via the icon . </div>
Status	Shows whether the configuration has been carried out completely. <div> ✓ = Configuration is complete. ✗ = Configuration is incomplete. </div>

Toolbar of the Integrations module

The toolbar offers the following functions.



Fig. 202: Toolbar Integrations module

	Create	Opens the detail view so that you can create a new integration.
	Delete	Deletes the selected integration. The integration can only be deleted if it has been deactivated.
	Activate	Activates the selected integration. The integration can only be activated if it has been configured completely.
	Deactivate	Deactivates the selected integration. This stops running recordings.
Integration	Import Grammar	By clicking on this menu item, you can import a customized grammar which you can then configure in the configuration step for the CTI connection data.
General	General Help	Opens the online help.
	Module Help	Opens the module-specific online help.

Import grammar

Depending on the deployed PBX, conversation events are signaled differently.

A grammar recognizes and processes the events occurring during a call such as ringing, answering, consultation, hanging up. A grammar contains rules which are required to correctly translate PBX-specific call information and call states into a PBX-neutral format.

1. To import a new grammar, click on the menu item *Integration > Import Grammar* in the toolbar of the main view.
⇒ The window *Upload File* appears.

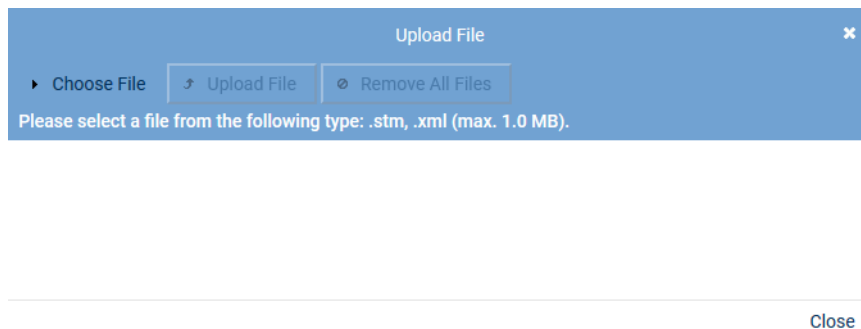


Fig. 203: Choose file

2. Click on the button *Choose File*.
3. Select the respective grammar of the file type *.stm* or *.xml* via the Explorer.
4. Click on the button *Open*.
⇒ The selected file appears in the window *Upload File*.

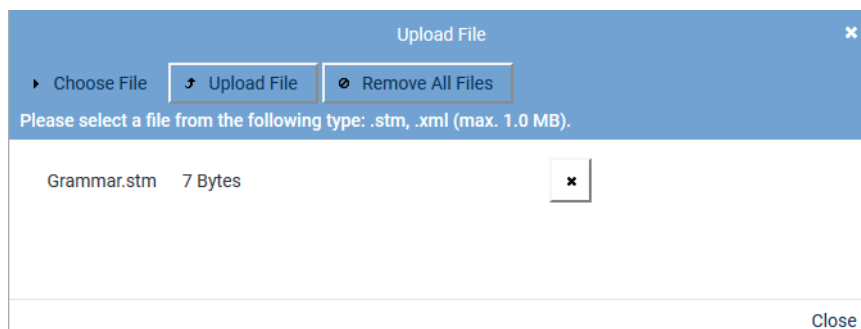



Fig. 204: Upload grammar

5. To remove a selected file from the list, click on the button  (*Remove file*) next to the respective file.
To upload the file, click on the button *Upload File*.
⇒ The window closes and a notification appears in the main view that the file has been uploaded successfully.

Assign integration type


1. Click on the icon  (*Create*) in the toolbar of the main view to create a new integration.
⇒ In the detail view, the tab *Integration Type* appears.



Fig. 205: Create integration type

- Enter the following parameters:

Parameter	Value
<i>Name</i>	In the entry field, enter a descriptive name for the integration. This name is used as the identifier of this integration in the system.
<i>Integration type</i>	Select the entry <i>SIP active</i> from the drop-down list <i>Integration type</i> .

Tab. 47: Create integration type

- To assign the PBX, click on the button **+** behind the field *PBX*.
⇒ The window *PBX* appears.

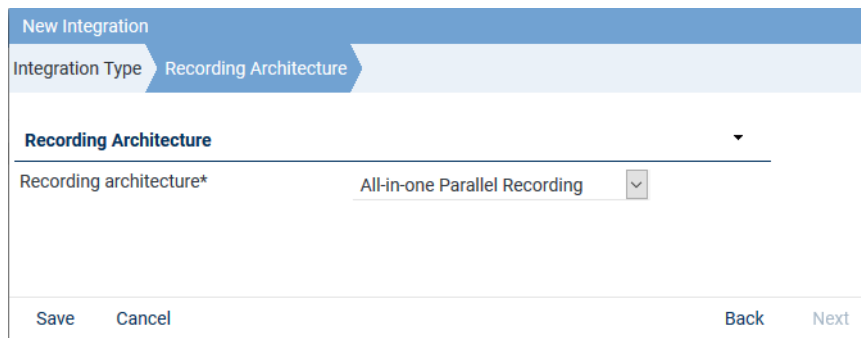


Fig. 206: Select PBX

- Select the respective *PBX* from the list of available PBXs.
- Click on the button *Add*.

Assign recording architecture for All-in-one Parallel Recording

- In the detail view on the bottom right, click on the button *Next*.
⇒ The tab *Recording Architecture* appears.



The screenshot shows a web interface for configuring a new integration. At the top, there's a blue header bar with 'New Integration'. Below it, a breadcrumb trail shows 'Integration Type' followed by 'Recording Architecture'. A dropdown menu is open under 'Recording Architecture', showing 'Recording architecture*' with a selected value of 'All-in-one Parallel Recording'. At the bottom, there are buttons for 'Save', 'Cancel', 'Back', and 'Next'.

Fig. 207: Assign recording architecture - All-in-one Parallel

2. Select the respective recording architecture from the drop-down list *Recording architecture*.



Only activated recording architectures in which the appropriate integration type has been configured appear in the drop-down list.


3. Click on the button *Save*.

⇒ The integration now appears in the main view.



When using a recording architecture with parallel recording, the tab *Parallel Recording* appears in the detail view. In this tab, you can adjust the settings for the duplicate detection of parallel configured servers, see [chapter "Duplicates in parallel recording architectures", p. 386](#).

Configuration steps

1. To complete the configuration of the integration, click on the icon  in front of the name of the new integration.

⇒ The following configuration steps appear:







SIPREC		SIP active		
Step		Configuration		
Configure recording architecture		✓		
Global recording settings		✗		
Configure recording servers		✗		
Configure add-on		✓		
Configure miscellaneous settings		✓		

Fig. 208: Configuration steps of the integration

Configure recording architecture

The section *Configure recording architecture* has already been configured in previous steps.

1. Click on the button  (*Edit configuration step*) in the line *Configure recording architecture* in the main view to show the configuration.

⇒ In the detail view, the configuration step appears with the information of the assigned recording architecture.

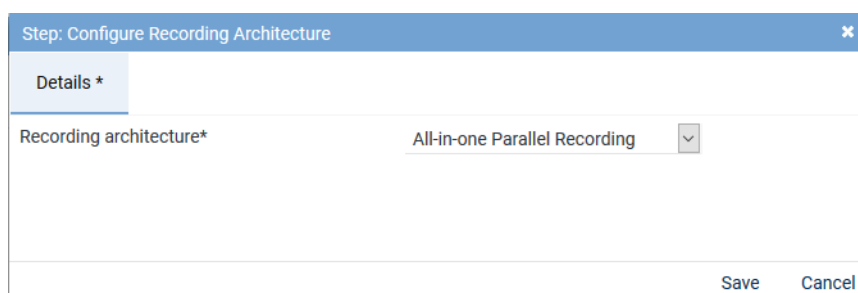



Fig. 209: Configuration step - Configure Recording Architecture

2. Click on the button *Save* to save changes and to finish the configuration step.
3. Click on the button *Cancel* to cancel the configuration step without applying changes.

Global recording settings for All-in-one Parallel Recording

1. Click on the button  (*Edit configuration step*) in the line *Global recording settings* in the main view.
⇒ The window *Step: Global Recording Settings* appears.

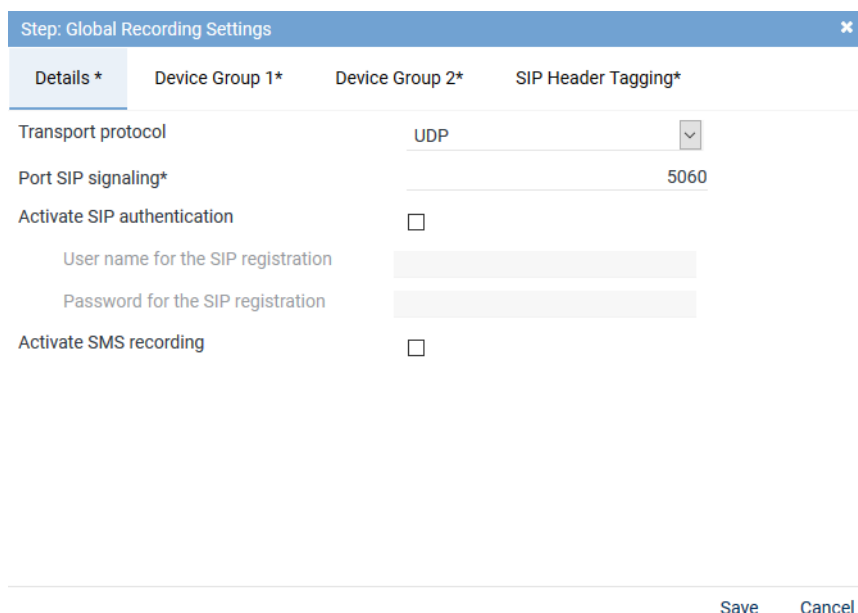


Fig. 210: Configuration step - Global Recording Settings - All-in-one Parallel Recording

2. Set the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Transport protocol</i>	Select the transport protocol <i>UDP</i> for the SIP signaling between the recording server and the PBX.
<i>Port SIP signaling</i>	Enter the port for the <i>SIP</i> signaling, where the recording server is expecting the signaling. Default value for <i>UDP</i> and <i>TCP</i> is <i>5060</i> . Default value with <i>TLS</i> encryption is <i>5061</i> .
<i>Activate SIP authentication</i>	Deactivate this option for this recording solution.
<i>Activate SMS recording</i>	This function is not supported in this recording solution.

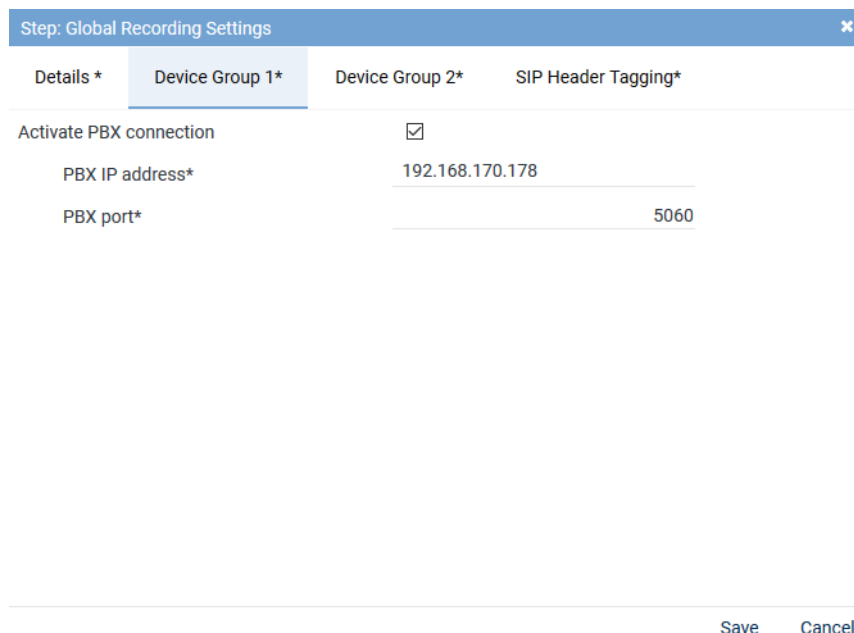
Tab. 48: Global recording settings

3. To save the entries, click on the button *Save*.
To discard entries, click on the button *Cancel*.

Tab Device Groups

In parallel recording, you can configure connections to different PBXs.

1. Select the tab *Device Group 1* to configure the connection to PBX 1.



Step: Global Recording Settings ✕

Details *	Device Group 1*	Device Group 2*	SIP Header Tagging*
Activate PBX connection	<input checked="" type="checkbox"/>		
PBX IP address*	192.168.170.178		
PBX port*			5060

Save Cancel

Fig. 211: Configure device group 1

Parameter	Description
<i>Activate PBX connection</i>	Activate the check box to configure the connection data. If the option has been activated, the entry fields for the IP address and the port become active.
<i>PBX IP address</i>	Enter the IP address of the PBX for the first device group.
<i>PBX port</i>	Enter the port of the PBX which is used to communicate with the PBX.

2. Select the tab *Device Group 2* to configure the connection to PBX 2.

Step: Global Recording Settings

Details *

Device Group 1*

Device Group 2*

SIP Header Tagging*

Activate PBX connection

PBX IP address*

PBX port*

☒

192.168.170.178

5060

Save

Cancel

Fig. 212: Configure device group 2

Parameter	Description
<i>Activate PBX connection</i>	Activate the check box to configure the connection data. If the option has been activated, the entry fields for the IP address and the port become active.
<i>PBX IP address</i>	Enter the IP address of the PBX for the second device group.
<i>PBX port</i>	Enter the port of the PBX which is used to communicate with the PBX.

- To save the entries, click on the button *Save* in the detail view.
To reset the entries, click on the button *Reset* in the detail view.

Tab SIP Header Tagging



In this recording solution, no additional data is extracted from the *SIP header*. The [SIPREC](#) meta data is provided by means of an [XML](#) document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured in the Additional Data module and subsequently mapped in the tab SIP Header Tagging.

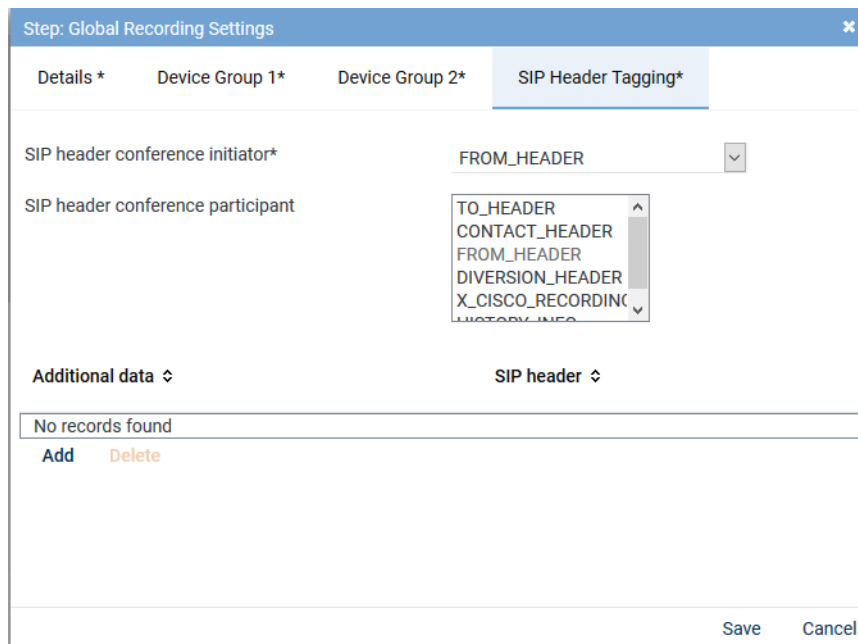


Fig. 213: Tab SIP Header Tagging Configure sources

1. If you would like to configure individual additional data that you have defined previously in the Additional Data module, click on the button *Add* in the section *Additional data*.
⇒ The window *SIP Additional Data* appears.

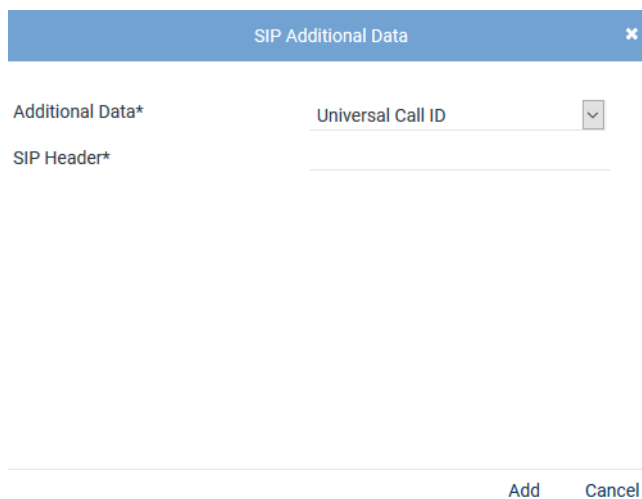


Fig. 214: SIP Additional Data



Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

2. Enter the following parameters:

Parameter	Value/Description
<i>Additional Data</i>	In the drop-down list, select the display name of the field in which the information of the SIP header is supposed to be released.
<i>SIP Header</i>	If you would like to use additional data, the mapping of the tag name must have been configured in the file <i>siprecmapping.xml</i> . Then you can enter the tag name from where the information is to be extracted.

Parameter	Value/Description
	To have ASC configure the mapping file, contact your distribution partner.


Tab. 49: Configure SIP conversation parameters

- Click on the button **Save** to close the window.
- Click on the button **Save** to finish the configuration in this step.

Configure recording server for All-in-one Parallel Recording

To guarantee smooth parallel recording, you must configure a port range for both recording servers. The range may be the same for both recording servers. Make sure, though, that the port range lies within the range of ports activated in the firewall, refer to the installation manual Installation requirements in chapter Communication matrix.

This configuration takes place in the configuration step *Configure recording servers*.

- Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
⇒ The window *Step: Configure Recording Servers* appears.

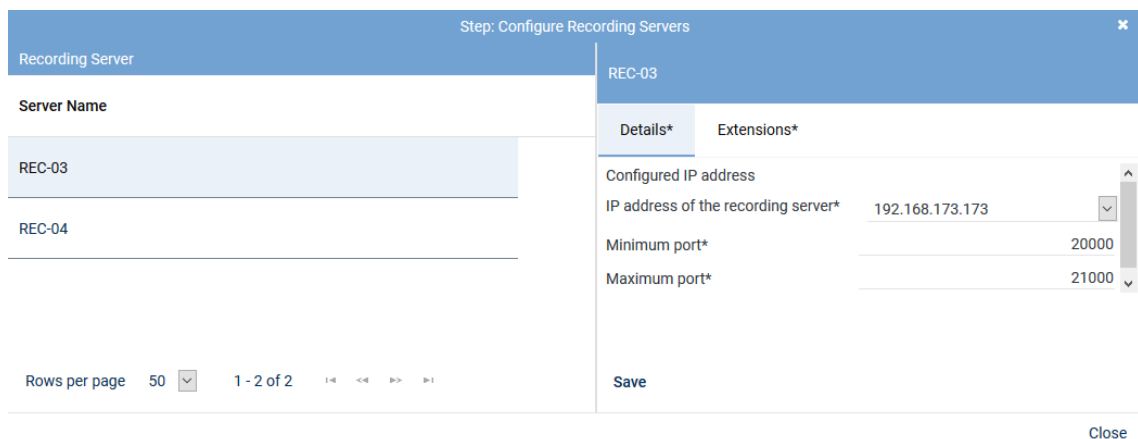


Fig. 215: Configuration step - Configure recording servers

- Enter the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Configured IP address</i>	Here, the IP address is displayed which has been configured for this recording server and via which the data to be recorded are received.
<i>IP address of the recording server</i>	From the drop-down list, select one of the available IP addresses of the recording server for the recording data.
<i>Minimum port</i>	Enter the lowest port of the port range configured on the PBX that is used to receive the RTP data from the recording server, e. g. 20000 .
<i>Maximum port</i>	Enter the highest port configured on the PBX that is used to receive the RTP data from the recording server, e. g. 21000 .

Tab. 50: Configure recording servers



This recording solutions allows recording data streams in stereo. For stereo recording, reckon with 4 ports as only even ports are used to receive **RTP**.

Stereo recording requires more storage space, too.



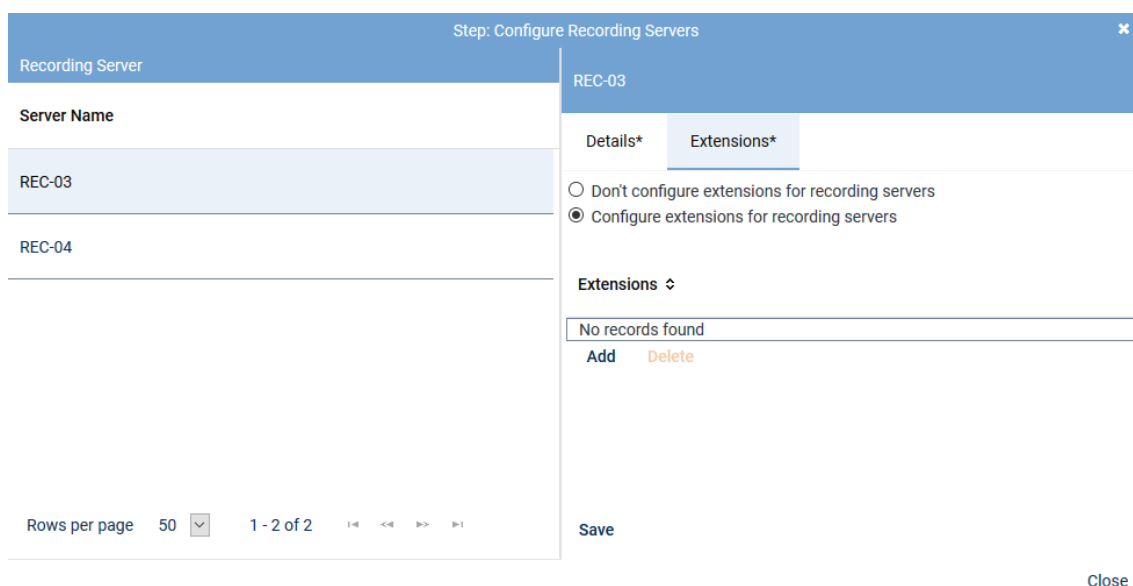
If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.




If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.

Tab Extensions

1. Click on the tab *Extensions*.



Step: Configure Recording Servers

Recording Server	REC-03
Server Name	Details* Extensions*
REC-03	<input type="radio"/> Don't configure extensions for recording servers <input checked="" type="radio"/> Configure extensions for recording servers
REC-04	Extensions  No records found Add Delete

Rows per page 50 1 - 2 of 2 Save

Close

Fig. 216: Tab Extensions

The following options are available:

<i>Configure no extensions for recording servers</i>	Activate this option if you have not configured the extensions for the recording server in the PBX.
<i>Configure extensions of the recording server</i>	Activate this option if you have configured extensions for the recording server in the PBX and add the extensions.

2. To add extensions, click on the button *Add* in the table *Extensions*.
 ⇒ The window *Add Extensions* appears.

Add Extensions ✕

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

Extension or extension range separated by
",", or ";", (e. g. 3434,3535; 4000-4100)

9999

☐ Replace existing list of extensions

[Add](#) [Cancel](#)

Fig. 217: Add extensions

3. In the window *Add Extensions*, enter either a single extension or an extension range that the recording server is to use when registering on the PBX.
4. Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
5. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
6. The configured extensions now appear in the detail view.

Step: Configure Recording Servers ✕

Recording Server	REC-03
Server Name REC-03 REC-04	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;"> Details* Extensions* </div> <p><input type="radio"/> Don't configure extensions for recording servers</p> <p><input checked="" type="radio"/> Configure extensions for recording servers</p> <p>Extensions ⚡</p> <div style="border: 1px solid #ccc; padding: 5px; min-height: 30px;"> 9999 </div> <p style="text-align: center;"> Add Delete </p> <p style="text-align: center; margin-top: 10px;">Save</p>

Rows per page 50 1 - 2 of 2 << < > >>

Close

Fig. 218: Added extensions

7. Repeat the steps for additional servers. For each server, configure its own extension or extension range depending on how it can be reached.
8. Click on the button *Save*.

9. Click on the button *Close* to finish this configuration step.

Configure add-on



The use of the add-on in the integration is optional. The status of this configuration step has been set to *No selection* by default and is considered to be completely configured that way. You can activate and use the integration without an add-on, too.

If you use an application with add-on, you can select the required grammar in the corresponding version in this configuration step. Additionally, you can configure the connection data and the additional data.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

Configure add-on for Sparkassen FI ISP (optional)

The add-on refers to the usage of CTIconnect for Sparkassen FI ISP in the DACH region and only has to be configured if the add-on is used.



The add-on cannot be used in a failover architecture. The application Sparkassen FI ISP cannot connect to more than one IP address.

The integration runs in combination with a PBX and the recording server. The service CTIconnect for Sparkassen FI ISP receives the additional data from the PBX and sends them to the recording server. In addition, the recording decision which is initiated by the user on the end device is processed via CTIconnect for Sparkassen FI ISP and sent to the recording server.

Sparkassen FI Interaktive Service Plattform

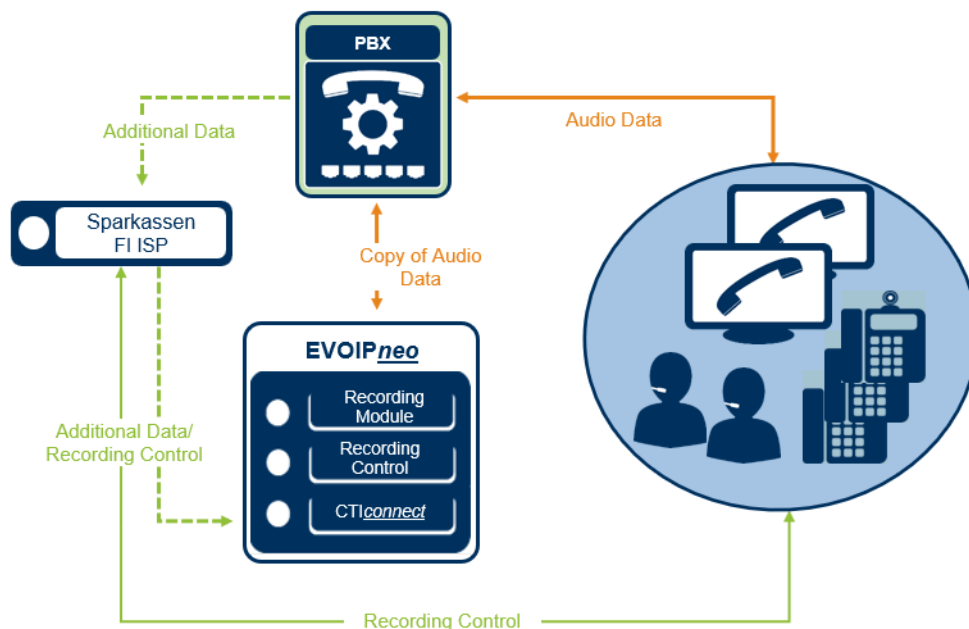



Fig. 219: Overview of Sparkassen FI ISP

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on *Sparkassen FI ISP* in the detail view.

Step: Configure Add-on
✕

Details *

Select add-on

☐ None

☒ Sparkassen FI ISP

CTIconnect Module

Type	CTIconnect passive	
Grammar name*	ISP Sparkassen FI	▼
Grammar version*	1.00.05	▼

Connection Data

Listener port*	3468
----------------	------

Additional Data

ID des Call Centers	Call Center ID	▼
ID des Calls aus Genesys	Universal Call ID	▼
Anmeldename des Kunden	User name	▼
Name des Kunden	Customer name	▼
Personennummer des Kunden	Customer ID	▼

Arbitrary assignment
+

	Please select...	▼	-
	Please select...	▼	-
	Please select...	▼	-

Save Cancel

Fig. 220: Configure add-on for Sparkassen FI ISP

Group field CTIconnect Module

1. Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 51: Configure CTIconnect module



For recording control via the add-on of the Sparkassen FI ISP, grammar version 1.00.05 or higher is required. If the grammar in the respective version is not available yet, you can import it. See [chapter "Import grammar", p. 175](#).

Group field Connection Data

Set the following parameter in the group field *Connection Data*; the IP address for the PBX does not have to be entered, since the PBX connects to our recording server:

Parameter	Value/Description
<i>Listener port</i>	Enter the port that the add-on connects to, e. g. 3468.

Tab. 52: Configure connection data

Group field Additional Data



This add-on is used exclusively in the DACH region; for this reason the additional data is only available in German, too. The names of the fields refer to the assignment of the strings which are delivered by the interface.

When using CTIconnect for Sparkassen FI ISP, the following additional data is delivered with the protocol:

- *ID of the call center*
- *ID of the call from Genesys*
- *Login name of the customer*
- *Name of the customer*
- *Employee number of the customer*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.

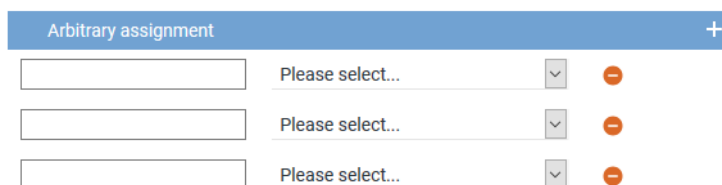



Fig. 221: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*
- *End time*
- *Duration*
- *Calling Party Phone Number*
- *Called Party Phone Number*

- *Conversation Direction*
- 2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
- 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
- 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
- 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.



To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.


Configure add-on for OpenScape Contact Center (optional)

The add-on refers to the usage of the OpenScape Contact Center and must only be configured if a OpenScape Contact Center is used.

The integration runs in combination with a Unify PBX which is responsible for recording. The CTIconnect service receives the conversation events of the agents via a SDK link in the OpenScape Contact Center and sends the additional data to the EVOIPneo recording service.

For information about the configuration of the OpenScape Contact Center, see [chapter "Configure OpenScape Contact Center \(optional\)", p. 394](#).

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on OpenScape Contact Center in the detail view.

Step: Configure Add-on

Details

Select add-on
☐ None
☒ OpenScape Contact Center

CTIconnect Module

TypeCTIconnect passive
Grammar name*Unify OpenScape Contact Center
Grammar version*1.00.04

Connection Data

Connection data

6000@192.168.170.29

Add Edit Delete

Additional Data

Business UnitBusiness Unit
DepartmentDepartment
Department KeyDepartment Key
Call IDUniversal Call ID
To PartyTo Party
ACD Group NumberACD Group Number

Arbitrary assignment

Please select...

Please select...

Save Cancel

Fig. 222: Configure add-on for OSCC

Group field CTIconnect Module

- Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 53: Configure CTIconnect module

Group field Connection Data

In the table Connection Data, you can enter one or several sets of connection data.

If you are configuring several connections, several connections to different business units are established simultaneously in the recording solution with OpenScape Contact Center.

- In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

Configure Connection
✕

Link name*

Business unit*

User name*

Password*

Add Cancel

Fig. 223: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Link name</i>	Enter the link to the OSCC server in the format <i>osccport@ascserver</i> . The default value for the OSCC port is 6000 and the name of the OSCC server is usually spelled in minor letters. A valid link can look like this: 6000@osccv7r3. Ensure that the server name (e. g. osccv7r3) can be resolved to an IP address. Check whether the address can be reached via the ping command. Alternatively, you can also enter the IP address.
<i>Business unit</i>	The default name of a business unit is <i>default</i> . This is a predefined name for the business unit after a new OSCC server installation. Enter the business unit's actual name you would like to use in the future.
<i>User name</i>	Create a valid user for the business unit that you have created on the OSCC server, so the CTI <u>connect</u> service can establish the connection to the OSCC server. See chapter "Create user for CTIconnect", p. 394 .
<i>Password</i>	Enter the password for the user of the business unit.

Tab. 54: Configure connection data

3. Click on the button *Add* to save the entries and to close the window.
4. To configure additional connections, repeat the configuration steps accordingly.

Group field Additional Data

When using CTIconnect for Unify OpenScope Contact Center, the following additional data is delivered with the protocol by default:

- *Business unit*
- *Department*
- *Department Key*
- *Call ID*
- *To Party*

- *ACD Group Number*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must have been configured and made available in the Additional Data module previously.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.

Here, you can map the database fields for the additional data which is delivered by the [OSCC](#). The contact data of the processed contacts of the OpenScape Contact Center provides a list of key pairs/value pairs. The keyword of this key pair/value pair can be chosen arbitrarily and adjusted customer-specifically. If you would like to use more than one word, avoid spaces. Use underscores instead of spaces, e. g. *ACD_group*.

1. In the group field headline *Additional Data*, click on the arrow ▶ to expand the group field and to assign the additional data to the data fields of the search and replay applications.

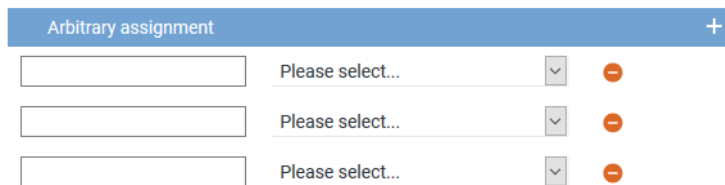




Fig. 224: Arbitrary assignment of the additional data

2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
3. From the drop-down list, select a configured display name of the additional data type which is supposed to appear as column headline in the players. Here, you can only select the display names for the additional data that you have configured and made available in the Additional Data module.
4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
⇒ An additional row appears to assign another additional data type.
5. To delete an assignment, click on the icon  in the respective row.
6. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

Configure add-on for Genesys T-Server (optional)

The add-on refers to the usage of Genesys T-Servers and must only be configured if you use Genesys T-Servers.

The integration runs in combination with the PBX and the recording server. The CTI~~connect~~ service receives the information which Genesys T-Server the monitor points have been assigned to from the Genesys Configuration Server. The monitor points must register on the respective Genesys T-Server. Upon successful registration, the respective Genesys T-Server sends all conversation events and additional data of the agents to the recording server.

CTIconnect for Genesys T-Server

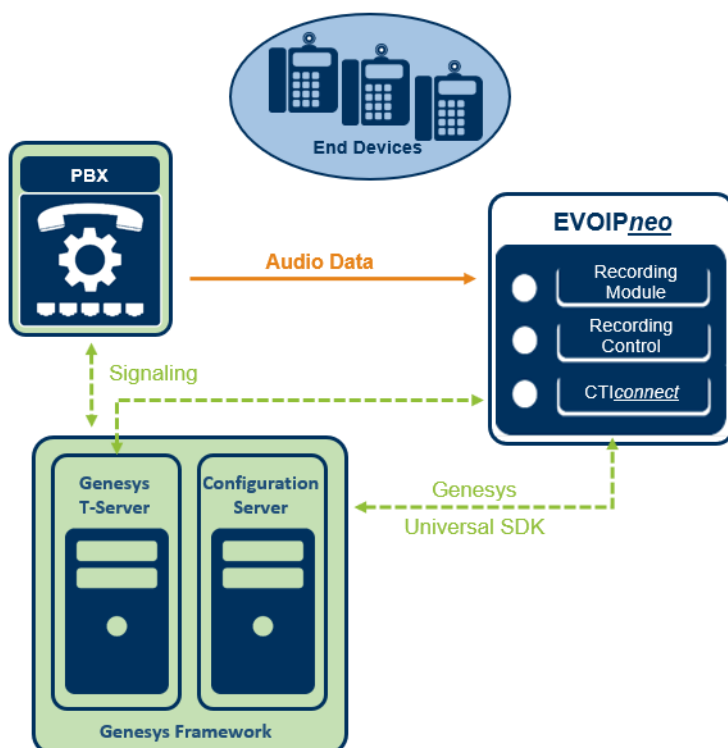


Fig. 225: Overview of the add on of Genesys T-Server

CTIconnect for Genesys T-Server

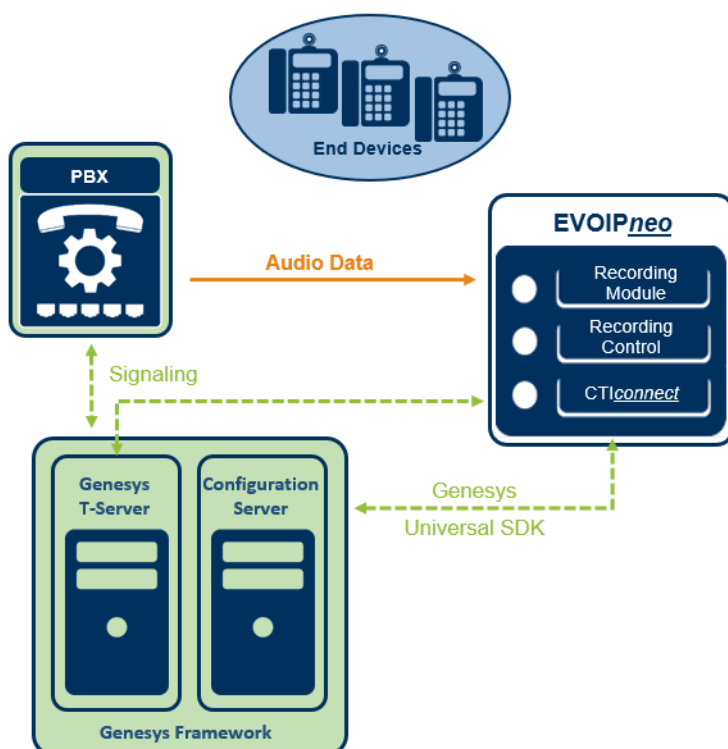


Fig. 226: Overview of the add-on of Genesys T-Server



For further information about the configuration of Genesys T-Servers, see [chapter "Configure Genesys T-Server \(optional\)", p. 395](#).

The Genesys add-on uses either a unique call ID or the extension to unambiguously identify the conversations to be recorded.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

When using a CTIconnect for Genesys T-Server, a Genesys Framework with T-Servers and Genesys Configuration Servers are required.


By default, the Genesys data field *CallID* has been selected as identifier. If a different data field is supposed to be used for internal control, this can be changed in the configuration file *basic.pif.properties*.

Adjust configuration file for Genesys add-on

The data field which is supposed to be used by the Genesys add-on is selected by means of the parameter *pifgenesys.call_identifier*.

1. To adjust the identifier, change to the path
C:\ASC Product Suite\data\CTIConnectForGenesysT.
2. Open the file *basic.pif.properties*.
3. Enter the respective data field for the parameter *pifgenesys.call_identifier*.
4. Save the changes in the file.
5. Restart the recording architecture after completing the change.

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. In the detail view, select the add-on *Genesys T-Server*.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Genesys T-Server

CTIconnect Module

Type
Grammar name*
Grammar version*
T-server redundancy*
Config server redundancy*
T-Server application name
T-Server password

CTIconnect passive
standard
1.15.00
HAconnect
Warm standby

Connection Data

Configuration server name
192.168.169.178
Add Edit Delete

Additional Data

Arbitrary assignment
Please select...

Save Cancel

Fig. 227: Configure add-on for Genesys T-Server

Group field CTIconnect Module

1. Enter the following parameters:

Parameter	Value/Description
Type	Here, the type of the CTI <u>connect</u> module is displayed.
Grammar name	Select the respective grammar.
Grammar version	Select the respective grammar version.
T-server redundancy	Select the redundancy which is used from the drop-down list. <ul style="list-style-type: none"> • No redundancy • HAconnect - for High Availability Connection • Warm Standby - for a connectable redundancy
Config server redundancy	From the drop-down list, select the redundancy which is used for the Configuration Server of Genesys. <ul style="list-style-type: none"> • No redundancy • HAconnect - for High Availability Connection • Warm Standby - for a connectable redundancy

Parameter	Value/Description
<i>T-Server application name</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the application name that the CTI<u>connect</u> module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>
<i>T-Server password</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the password that the CTI<u>connect</u> module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>

Tab. 55: Configure add-on for Genesys T-Server

Group field Connection Data

In this group field, you can enter one or several sets of connection data.

1. In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

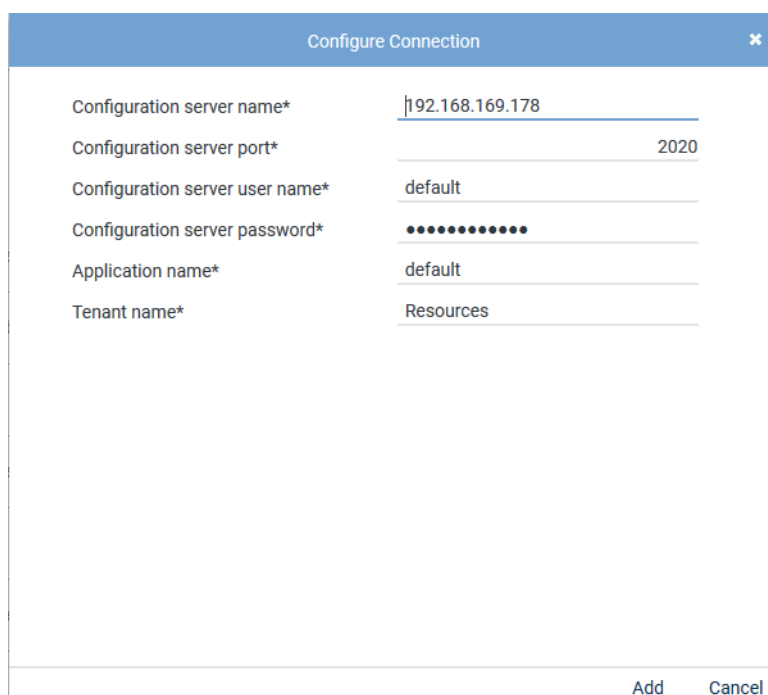


Fig. 228: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Configuration Server: Name</i>	Enter the IP address or the name of the computer that the Genesys Configuration Server runs on.
<i>Configuration Server: Port</i>	Enter the port of the Genesys Configuration Server.
<i>Configuration Server: User name</i>	Enter the user name to log in to the Genesys Configuration Server.
<i>Configuration Server: Password</i>	Enter the password to log in to the Genesys Configuration Server.

Parameter	Value/Description
<i>Application name</i>	Enter the application name that the recording servers uses to log in to the Genesys Configuration Server. Default is <i>default</i> .
<i>Tenant name</i>	Enter the name of the Genesys tenant(s) that are supposed to request the configuration data. Default is <i>Resources</i> . Several tenants can be added separated by commas.

Tab. 56: Configure connection data

Group field Additional Data

The following additional data is delivered by default in the protocol when using Genesys T-Server:

- *CallID*
- *ANI*
- *CallUuid*
- *DNIS*



Further additional data depend on the configuration of the Genesys T-Servers. Check the list *AttributeUserData* in the trace files to find out which further additional data have been delivered by the Genesys T-Servers. Put the addition *UserData* in front of the additional data type when configuring customer-specific additional data, e. g. for *RTargetAgentGroup* you have to configure *UserDataRTargetAgentGroup*.

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

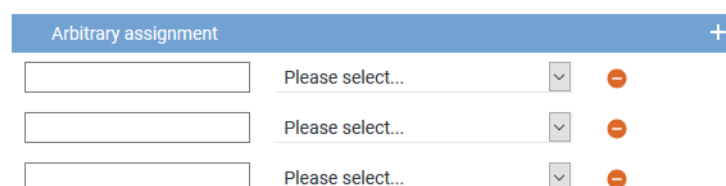
For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.




Arbitrary assignment			+
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–

Fig. 229: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*

- *End time*
 - *Duration*
 - *Calling Party Phone Number*
 - *Called Party Phone Number*
 - *Conversation Direction*
2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.




To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.

Configure miscellaneous settings

1. Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Miscellaneous Settings* appears.

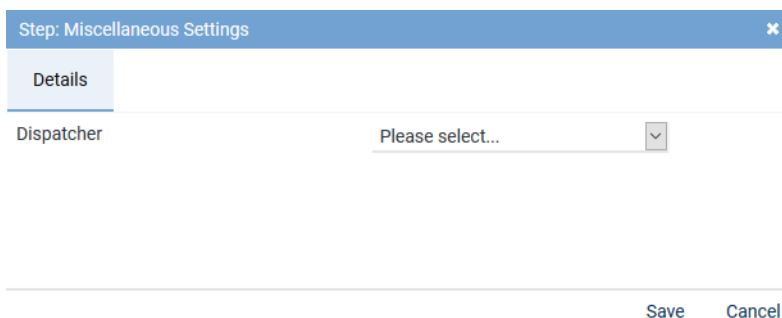


Fig. 230: Configure miscellaneous settings

2. Enter the following parameter:


Parameters	Description
<i>Dispatcher</i>	From the drop-down list, select the previously created additional data field that the participant information is supposed to be connected with.





Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

Activate integration

The integration can only be activated after the configuration is complete.

If not all configuration steps have been carried out completely, the icon  (*Incomplete*) will appear in the main view, in the line of the created integration, in the column *Status*.

If the configuration has been carried out completely, the icon  (*Complete*) will appear in the line of the respective step, in the column *Configuration*.

If all settings are complete, the icon  (*OK*) will appear in the main view, in the line of the created integration, in the column *Status*.














SIPREC		SIP active		
Step		Configuration		
Configure recording architecture				
Global recording settings				
Configure recording servers				
Configure add-on				
Configure miscellaneous settings				

Fig. 231: Activate integration

1. Mark the integration in the main view, so that the icon  (*Activate*) becomes active in the toolbar.
2. To activate the integration, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.






+ ×   Integration ▾ General			
Name ▾	Type ▾	Active ▾	Status ▾
 SIPREC	SIP active		

Fig. 232: Activated integration



If you use several PBXs, you can create and activate several integrations with the same recording architecture.



If you take advantage of the grace period and there is no valid license file in the system after its expiration, all integrations are deactivated. After uploading a valid license file, you have to activate the integrations again.





Upon activating the standard configuration, a bulk recording will start.

To restrict the recording to particular end devices, the tenant can configure the Recording Planner in the System Configuration accordingly.

Deactivate/Delete integration

To be able to delete an integration, it has to be deactivated.

1. To deactivate the integration, click on the icon  (*Deactivate*) in the toolbar.

- ⇒ In the column *Active*, the icon  (*Inactive*) appears.
- ⇒ The icon  (*Delete*) becomes active in the toolbar.










     Integration ▾ General			
Name ▾	Type ▾	Active ▾	Status ▾
 SIPREC	SIP active		

Fig. 233: Deactivate integration

2. Click on the icon  (*Delete*) and confirm the security prompt to delete the integration.

7.1.2.4 Configure recording solution Multi-Server Recording

7.1.2.4.1 Create recording architecture

Start the configuration in the Recording Architectures module because an activated recording architecture is required for further configuration.

The recording servers, recording types, and the integration types are assigned in the Recording Architectures module.

1. Select the menu item *Setup > Recording Architectures* in the navigation bar.
 - ⇒ The following window appears:













 System Configuration	     General ▾			
	Name ▾	Type ▾	Active ▾	Standby active ▾
No records found				
Rows per page 50 ▾ 0 - 0 of 0 < << >> >				


Fig. 234: Recording architectures - main view

Name	Name of the recording architecture
Type	Type of the recording architecture
Active	Shows whether the recording architecture has been activated and is ready to be used for the recording.  = Recording architecture is active and ready to be used for recording. It can be deactivated by clicking on the icon  (<i>Deactivate</i>) in the toolbar.  = Recording architecture is not active. It can be activated by clicking on the icon  (<i>Activate</i>) in the toolbar.
Standby Active	Shows whether the standby server is active for one or several recording components in the recording architecture.  = At least 1 standby server is active.  = No standby server is active or no standby server has been defined.

<i>Creation Date</i>	Date on which the recording architecture was installed.
<i>Updated</i>	Date on which the settings of the recording architecture were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Add integration type

- Click on the icon  (*Add*) in the toolbar of the list *Integration Type*.
⇒ The window *Integration Type* appears.

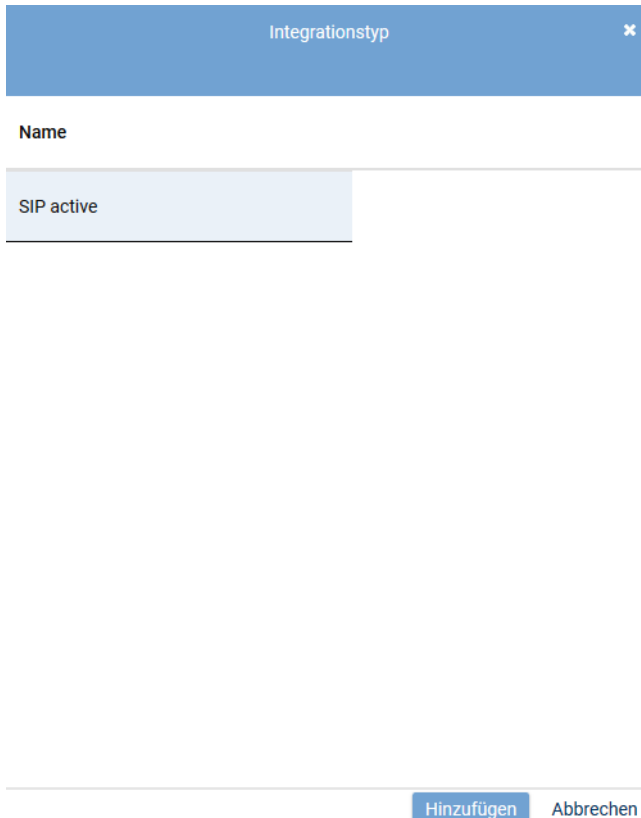


Fig. 235: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.




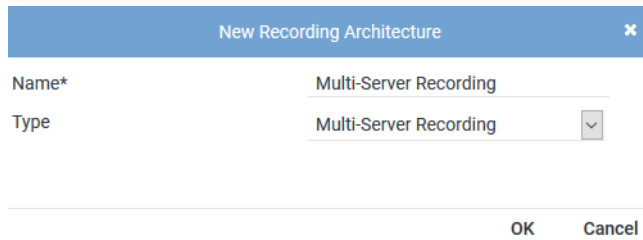
Any number of integration types can be assigned to a recording architecture.

- Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Create recording architecture Multi-Server Recording

If there are several recording servers which are supposed to record different tracks, you have to create a recording architecture of the type *Multi-Server Recording*.

- To create a new recording architecture, click on the icon  (*Create*) in the toolbar of the main view.
⇒ The window *New Recording Architecture* appears.



New Recording Architecture

Name* Multi-Server Recording

Type Multi-Server Recording

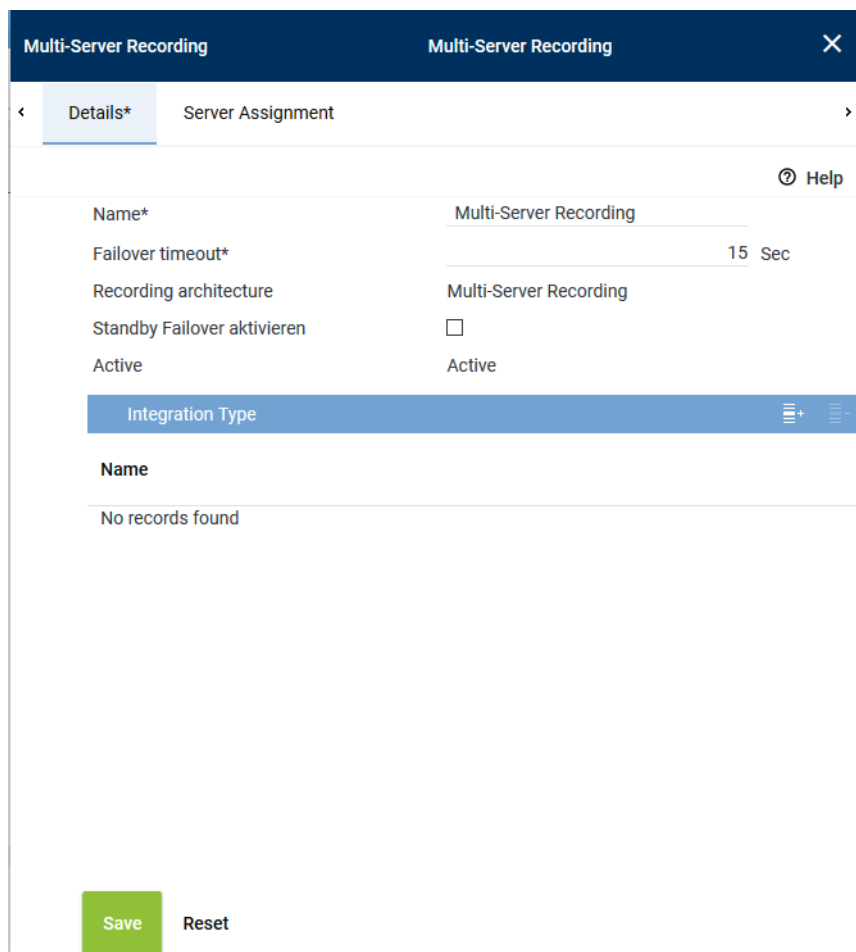
OK Cancel

Fig. 236: Create recording architecture - Multi-Server Recording

2. In the entry field *Name*, enter a descriptive name for the recording architecture.
3. From the drop-down list *Type*, select the recording architecture type *Multi-Server Recording*.

NOTICE! The drop-down list only displays the supported recording architecture types.

4. Click on the button *OK*.
⇒ Your entries now appear in the detail view.



Multi-Server Recording Multi-Server Recording

< Details* Server Assignment >

Help

Name* Multi-Server Recording

Failover timeout* 15 Sec

Recording architecture Multi-Server Recording

Standby Failover aktivieren ☐

Active Active

Integration Type

Name

No records found


Save Reset

Fig. 237: Recording architecture - tab Details - Multi-Server Recording

As standby components may have been configured for the different active recording servers, a failover timeout may be configured in this recording architecture.

5. Enter a failover timeout of a minimum of 15 seconds after which the failover process is supposed to start. Depending on the system architecture it may make sense to configure a longer timeout period. The timeout defines the elapse time until the failover process starts. If the status returns to *OK* within this time, then the failover process is not triggered.

Add integration type

- Click on the icon  (Add) in the toolbar of the list *Integration Type*.
⇒ The window *Integration Type* appears.

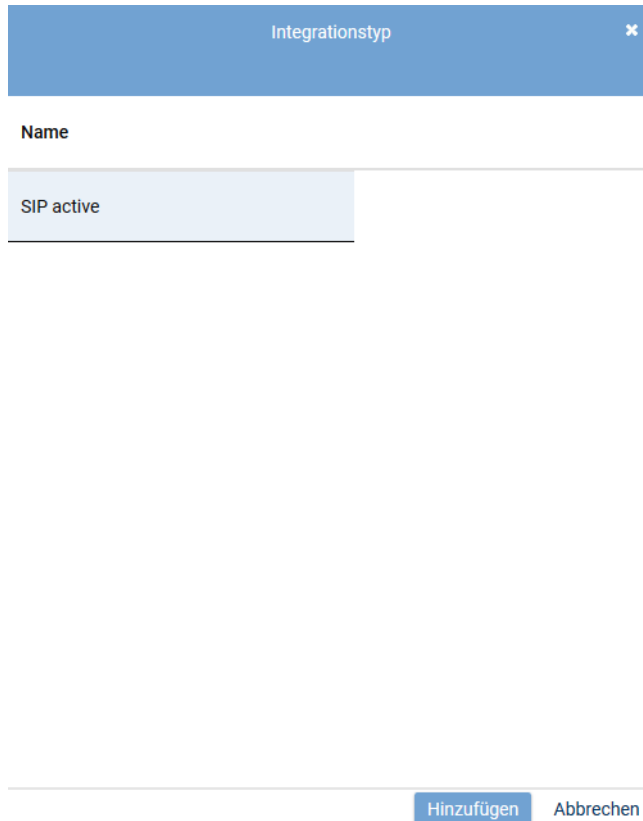


Fig. 238: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.



Any number of integration types can be assigned to a recording architecture.

- Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Assign servers for Multi-Server Recording

- Click on the tab *Server Assignment* to configure the distribution of the recording components for the *Multi-Server Recording* recording architecture.

Group field Recording Control and CTIconnect

In this group field, you can configure recording control. You can configure two different servers for this purpose or select the same server.

Multi-Server Recording
Multi-Server Recording

Details*
Server Assignment*

Recording Control and CTIconnect

Recording Control*	RC-01	+	-
Used in activated architecture	No		
CTIconnect*	CTI-01	+	-
Used in activated architecture	No		

Recording Server


Recording Server

Server
Standby

REC-01	REC-02
--------	--------

Save
Reset

Fig. 239: Recording Architecture - tab Server Assignment


- Click on the button  behind the entry field *Recording control*.
⇒ The window *Servers* appears.

Servers		
Name	IP Address	Path
RC-02	192.168.173.176	C:\
REC-01	192.168.173.171	C:\
REC-04	192.168.173.174	C:\
REC-02	192.168.173.172	C:\
RC-01	192.168.173.175	C:\
CTI-01	192.168.173.177	C:\
CTI-02	192.168.173.178	C:\

Rows per page 20 1 - 8 of 8

Add Cancel

Fig. 240: Recording Architecture - assign server - example


2. Select the server for the *recording control module*.
3. Click on the button *Add*.
⇒ The name of the server now appears in the detail view.
4. To delete an assignment, click on the button .

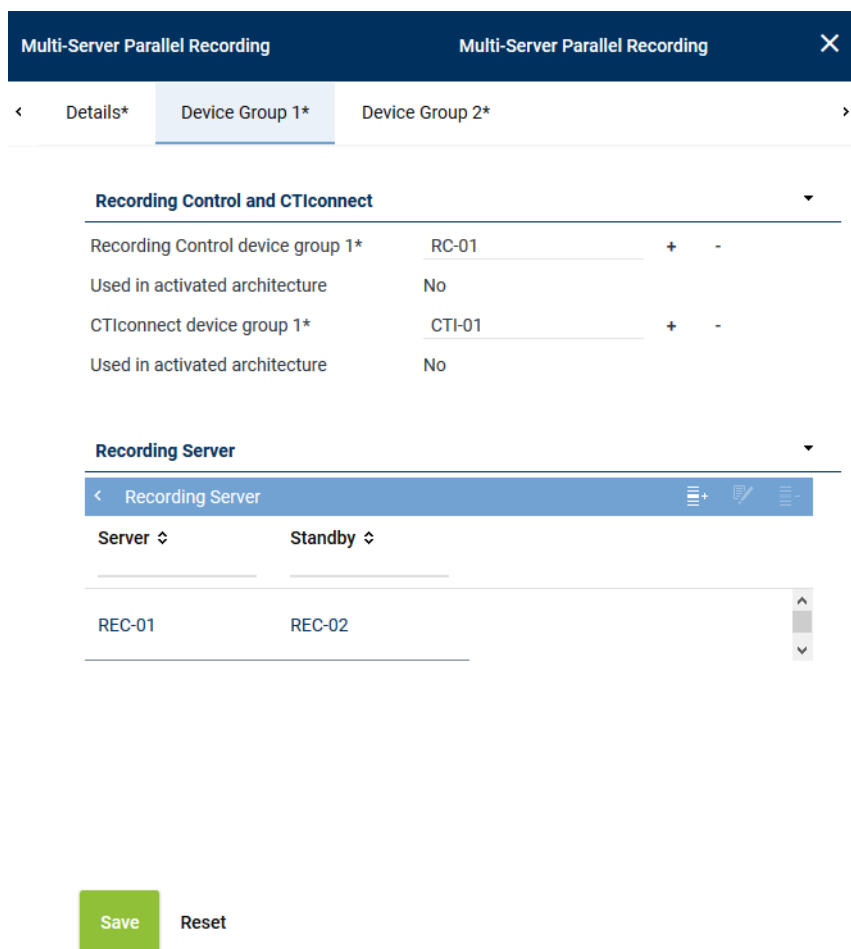


A server can be configured in several recording architectures, but you cannot activate several recording architectures with the same server at the same time.
If you would like to activate several recording architectures at the same time, you have to use different servers to do so.

5. Repeat the steps and select the server for the *CTIconnect module* in the entry field *CTIconnect*.



Group field Recording Server



1. In the table headline *Recording Server*, click on the icon .
- ⇒ The following window appears:






Multi-Server Parallel Recording			
Multi-Server Parallel Recording			
<div> Details* Device Group 1* Device Group 2* </div>			
Recording Control and CTIconnect			
Recording Control device group 1*	RC-01	+	-
Used in activated architecture	No		
CTIconnect device group 1*	CTI-01	+	-
Used in activated architecture	No		
Recording Server			
<div> Recording Server </div>			
Server	Standby		
REC-01	REC-02		
<div> Save Reset </div>			

Fig. 241: Add Recording Server

2. As described in the previous steps, go to the entry field *Primary server* and click on the icon  to select the primary server on which the recording is supposed to run.
3. In the entry field *Standby server*, click on the icon  to select the standby server which is supposed to take over recording in case of an error.

4. Select the recording type you would like to use for these servers by activating the check box.
NOTICE! You can activate several recording types if the integration has been designed for this and if you have installed the respective licenses.
5. Click on the button *OK* to close the window.
 ⇒ The name of the server now appears in the detail view.
6. To edit the assignment subsequently, click on the icon .
 To delete an assignment, click on the icon .
7. If you would like to add further recording servers, repeat the steps described above.

Activate recording architecture

1. Once all servers have been assigned, click on the button *Save*.
2. Select the recording architecture in the main view so that the icon  (*Activate*) in the tool-bar becomes active.
3. To activate the recording architecture, click on the icon  (*Activate*).
 ⇒ In the column *Active*, the icon  (*Active*) appears.










     Recording Architecture ▾ General ▾			
Name ▾	Type ▾	Active ▾	Standby active ▾
Multi-Server Recording	Multi-Server Recording		

Fig. 242: Recording architecture - activate recording architecture

4. To deactivate the recording architecture, if required, click on the icon  (*Deactivate*).
 ⇒ In the column *Active*, the icon  (*Inactive*) appears.



The recording architecture must have been activated so that the integration can be configured.



For updates, the recording architecture is stopped and deactivated. Once the update has been completed, check that the recording architecture has been activated again.



If you install an extension for the integration subsequently, you must deactivate the recording architecture and activate it again after having installed the license.

7.1.2.4.2 Configure servers

Every server in your network that the *neo* software has been installed on is automatically identified as a server of the recording system and displayed in the main view of the Servers module. In the Servers module, you can configure the usage of the servers in your recording system.

1. Select the menu item *Setup > Servers* in the navigation bar.
 ⇒ The following window appears:

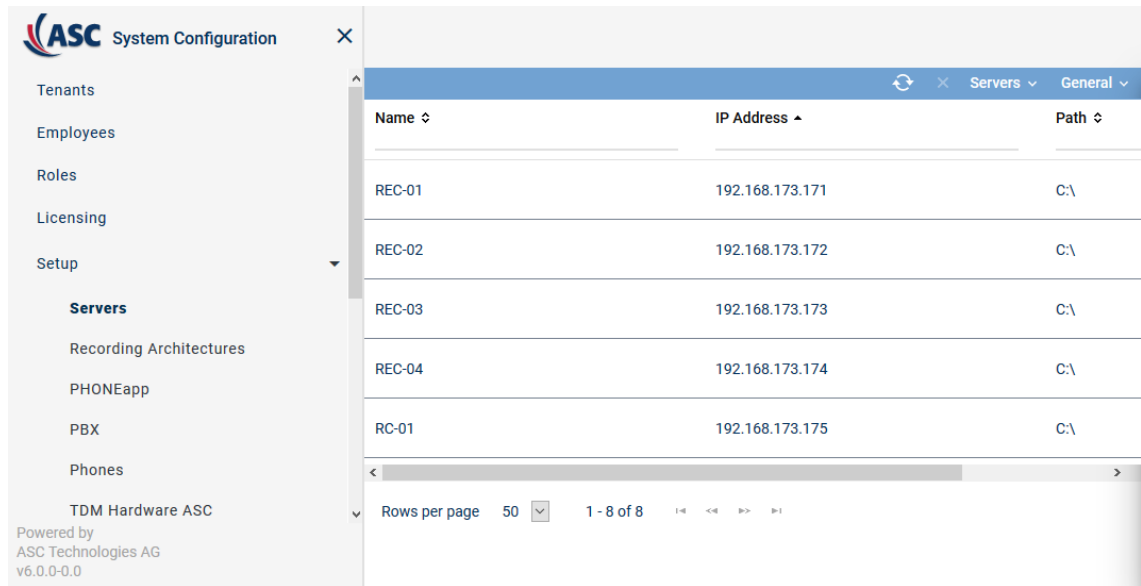


Fig. 243: Servers - main view

Depending on the configuration of the columns, the following information is displayed in the main view:

<i>Name</i>	Shows the name of the server.
<i>IP Address</i>	Shows the IP address of the server.
<i>Path</i>	Shows the path of the server.
<i>Creation Date</i>	Date on which the server was installed.
<i>Updated</i>	Date on which the settings of the server were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Servers module

The toolbar offers the following functions.

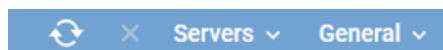




Fig. 244: Toolbar Servers module

	<i>Refresh</i>	Refreshes the main view.
	<i>Delete</i>	Deletes the selected server configuration. This function is meant to delete the server configuration if the hardware of a server has been removed and there is no connection to the <i>neo</i> system.
<i>Servers</i>	<i>Administrate Server Locations</i>	Opens a window in which you can create and administrate locations of the servers, see chapter "Administrate server locations" , p. 207.
	<i>Administrate NTP Server</i>	Opens a window in which you can administrate the servers for the time synchronization, see chapter "Administrate NTP server" , p. 223.
	<i>Manage Synchronization Configurations</i>	Opens a window in which you can manage the synchronization configurations.
<i>General</i>	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view:

	<ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
<i>Reset Search</i>	Resets all search filters so that all sets of data are displayed in the main view again.
<i>General Help</i>	Opens the online help.
<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Administrate server locations

You can create and manage a list of server locations. In the tab *Details*, you can assign locations to the servers.

Add server locations

- Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.

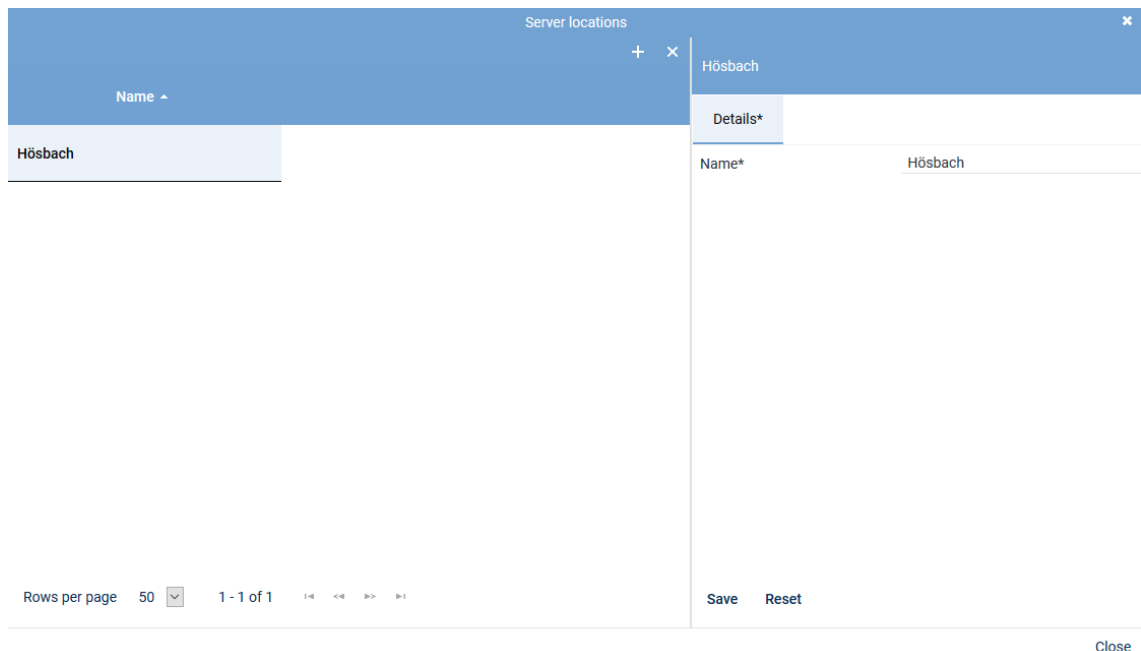



Fig. 245: Add server locations

- Click on the icon  (*Create*) in the toolbar of the window *Server Locations*.
- Enter the name of the location on the right side in the tab *Details*.
- To save the entry, click on the button *Save*.
To discard the entry, click on the button *Reset*.
- To add further locations, repeat the last 3 steps.

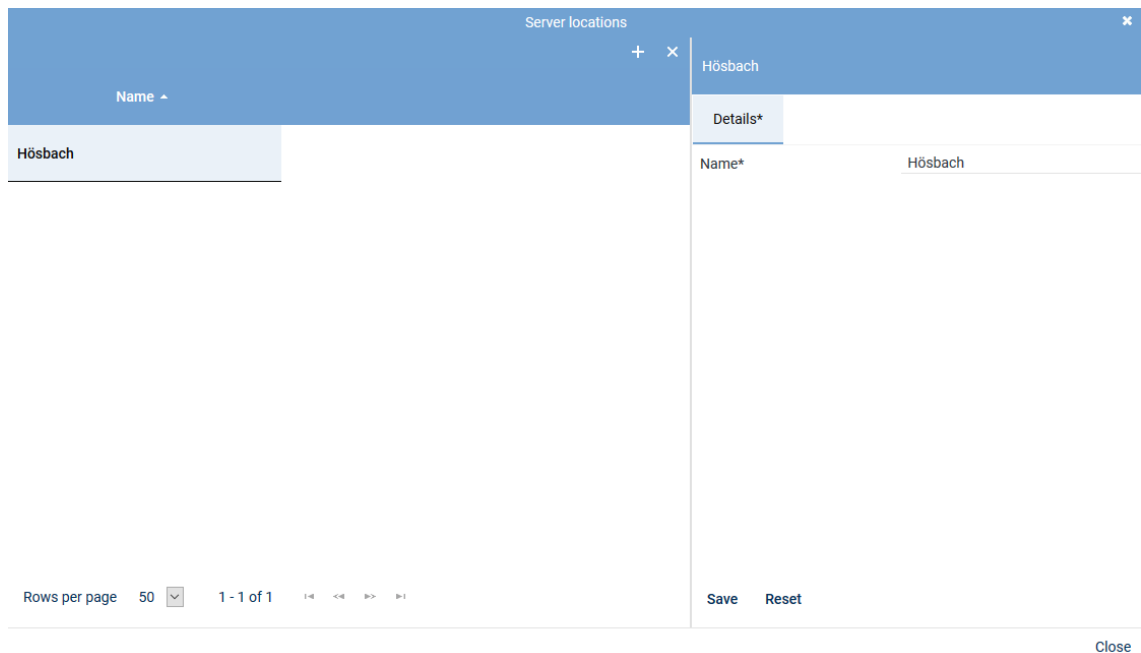
6. To close the window, click on the button *Close*.

Delete server location




A server location can only be deleted when it has not been assigned. To be able to delete a server location, you must first delete possible assignments.

1. Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.
2. Select the location you would like to delete.



The screenshot shows a window titled "Server locations" with a close button (x) in the top right corner. Below the title bar is a toolbar with a "+" icon and a "x" icon. The main area is divided into two panes. The left pane contains a table with a single row: "Hösbach". The right pane has a tab labeled "Details*" and a form with a label "Name*" and a text input field containing "Hösbach". At the bottom of the window, there is a footer with "Rows per page 50", "1 - 1 of 1", and navigation icons. On the right side of the footer, there are "Save" and "Reset" buttons. A "Close" button is located at the bottom right of the window.

Fig. 246: Delete server location

3. Click on the icon  (*Delete*) in the toolbar of the window.
4. To delete further locations, repeat the last 2 steps.
5. To close the window, click on the button *Close*.

Tab Details

1. To configure the server, select the entry of the corresponding server in the main view.
⇒ In the detail view, the tab *Details* appears.
The information *Name* and *Configured IP address* has already been entered during the installation and is displayed for your information only.

<
Details*
Usage*
Media Streamer
Replay Server Address Mapping
Key Ma >

? Help

Name	REC-01
Configured IP address	192.168.173.171
IP address*	192.168.173.171 <input type="button" value="v"/>
Server location	Hörsbach <input type="button" value="v"/>

Fig. 247: Servers - tab Details

- From the drop-down list, select the IP address which is supposed to be used as default address of the server in the system.
- Select the *Server location* in the drop-down list. The drop-down list displays all locations which have been created in the location management.
- Click on the button **Save** if the entries are correct.

Tab Usage

- Click on the tab *Usage* to configure the purpose of usage.



Since a server can be used for several recording solutions, all purposes of use are listed. Note that some purposes of use do not apply for some recording solutions. As an example: You cannot use audio analysis or replay via phone in a chat recording.

<
Details*
Usage*
Media Streamer*
Replay Server Address Mapping
Key M. >

API Server	▶
Audio Analysis	▶
Recording Control/Key Management	▶
Data Processing	▶
Replay	▶
Virtualization	▶

Fig. 248: Servers - tab Usage

Group field API Server

API Server ▼

☒ API server

API server name*

Storage expansions

Path ↕	Server ↕
<input type="text"/>	<input type="text"/>



No records found

☒ Replay via phone

Fig. 249: Group field API Server


The API server is a service in the *neo* software. It contains the interface for the client applications. Once the service has been started, the client applications can communicate with the *neo* system via this interface by means of defined commands.

The API server is responsible for replay via the web browser, too. The API server has to be started before the replay server can be activated and the API server assigned for replay via the web applications.

Parameter	Value/Description
<i>API server</i>	<p>Tick the check box to start the API server.</p> <p><input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>API server</i>.</p> <p><input type="checkbox"/> = Function has not been activated.</p> <p>In order to be able to reach the API server from a public network and with configured port forwarding, too, you have to adjust the settings in the tab <i>Replay Server Address Mapping</i>, see chapter "Tab Replay Server Address Mapping", p. 219.</p>
<i>API server name</i>	<p>Enter the name which is supposed to denote the server in the system. The displayed name can be selected arbitrarily and is a kind of pseudonym.</p> <p>The displayed name is meant to make it easier for users to select a server as different API servers may be used across the system by different tenants. When selecting the API server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p>
<i>List</i> <i>Storage expansions</i>	<p>Here, you can add storage expansions for replay. If a recording which is supposed to be replayed cannot be found on the server, the search is continued on the storage expansions which have been entered here. That way, even recordings can be replayed which have not been transferred to the server.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the storage expansions, see chapter "Add storage expansion for replay", p. 211. By clicking on the icon  (<i>Remove</i>), you can remove the storage expansions from the list. <p>If you use several recording servers in your system for which storage expansions have been configured, you can add any storage expansion of any recording server on every API server of the system.</p>

Parameter	Value/Description
<i>Replay via phone</i>	<p>Activate this function if you would like to use the functions <i>Replay via phone</i> or <i>Last Call Repeat</i>.</p> <p><input checked="" type="checkbox"/> = Function has been activated. <input type="checkbox"/> = Function has not been activated.</p> <p>NOTICE! The function <i>Replay via phone</i> has been implemented in the following <i>neo</i> components:</p> <ul style="list-style-type: none"> • Application POWERplay Pro • Application POWERplay Instant • Replay module <p>In order to enable a client to use the functionality <i>Replay via phone</i>, you have to assign this client an identifier either in the Employees module or in the Phones module which allows the system to clearly identify the phone.</p> <p>NOTICE! In the tab <i>Media Streamer</i>, you have to assign this function to a PBX, see chapter "Tab Media Streamer", p. 218. To be able to do so, at least 1 PBX must have been configured in the system.</p>

Add storage expansion for replay

1. Click on the icon  (*Add*) in the toolbar of the list.
2. Select 1 or several storage expansions.
If you would like to select several storage expansions or revoke a selection, click on the respective line while holding the [Ctrl] key down.

Storage Expansion for Replay				
Device Type ↕	Name ↕	Path ↕	Free Disk Space ↕	Server ↕
NAS	NAS 2	NAS 2	<div></div>	REC-02

Rows per page: 20 ☐ 1 - 1 of 1

Add Cancel

Fig. 250: Select storage expansion

3. To apply the selected storage expansions, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Audio Analysis

Audio Analysis ▼

☒ Audio analysis (SAES mode)

Stream audio data from* + -

☐ Emotion detection

Stream audio data from* + -

Fig. 251: Group field Audio Analysis

Parameters	Value/Description
<i>Audio analysis</i>	<p>Activate this check box to use the server for audio analysis. The audio data is then streamed for audio analysis from the configured server to this server.</p> <ul style="list-style-type: none"> Stream audio data from From the list of available servers, select the server from which the audio data is supposed to be streamed for audio analysis via the button +.
<i>Emotion detection</i>	<p>Activate this check box to activate emotion detection for the audio analysis.</p> <p><input checked="" type="checkbox"/> = Function has been activated. Tenants can use the emotion detection function.</p> <p><input type="checkbox"/> = Function has not been activated.</p>

Tab. 57: Configure audio analysis

Group field Recording Control/Key Management

Recording Control/Key Management ▼

☒ Recording control/Monitoring

Recording architecture ▼

☒ neo key management

Fig. 252: Group field Recording Control/Key Management

Parameters	Value/Description
<i>Recording control/Monitoring</i>	<p>Activate the check box if you would like to use <u>CLIENT</u><i>command</i> or an API recording control or if you would like to use <i>Monitoring</i>. This feature is only available if a recording architecture has been configured and activated.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the respective recording architecture you would like to use for the control.
- <i>neo key management</i>	<p>The function allows customer-specific encryption of the recordings. To be able to configure the key management, you have to activate the check box <i>Key management</i>.</p> <p>This function can only be activated if the license <code>ASC_KEY_MANAGEMENT</code> is available.</p>

Parameters	Value/Description
	For further information about the configuration of the key management refer to the administration manual <i>Configuration of servers and recording architectures</i> and to the installation manual <i>Installation Dongle Manager</i> .

Tab. 58: Configure Recording Control/Key Management

Group field Data Processing

Data Processing ▼

☒ Data storage

☒ Transfer data for replay

Target Server

Name	IP Address
No records found	

☒ Transfer data for data storage

Target Server

Name	IP Address
No records found	

Activate period of time ☒

from 11:59:36

to 11:59:36

Receives data from

Name	Only Replay
No records found	



☒ Archiving





☒ Export

☒ Import

Recording architecture Please choose... ▼


Fig. 253: Group field Data Processing

Parameter	Value/Description
<i>Data storage</i>	Activate the check box to allow the modification of the additional functions of data processing.
<i>Transfer data for replay</i>	<p>Activate the check box if you would like to transfer data only for replay to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for replay. The data is not stored on the target server but deposited in a cache temporarily in order to be replayed.</p> <ul style="list-style-type: none"> By clicking on the icon  (Add), you can add the target server, see chapter "Add target server to a list", p. 215. By clicking on the icon  (Remove), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which an API server and a replay server have been configured.</p>

Parameter	Value/Description
<i>Transfer data for data storage</i>	<p>Activate the check box if you would like to transfer data for storage to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for data storage purposes. In the drop-down list, all servers are displayed on which the function <i>Data Storage</i> has been activated. The data is copied to the target server and stored there.</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the target server, see chapter "Add target server to a list", p. 215. By clicking on the icon  (<i>Remove</i>), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which the function <i>Data Storage</i> has been activated.</p> <p>If the function has been activated, you can activate the transfer for a certain period of time.</p> <ul style="list-style-type: none"> Activate period of time <input checked="" type="checkbox"/> = Function has been activated. The fields for entering the time become active. Select the time via the rotating field for the period from – to. Active period of time <input type="checkbox"/> = Function has not been activated. <p>NOTICE! In distributed systems with slow network connections, the storage interval for the data transfer can be adjusted. The storage interval for the data transfer has to be configured by an ASC service technician or by an authorized partner company.</p>
<i>Receives data from</i>	<p>This table contains those servers which transfer data to this server.</p> <p>In the column <i>Name</i>, the name of the server appears from which data has been transferred.</p> <p>In the column <i>Only Replay</i>, the purpose of the transfer is displayed:</p> <p> = Data is transferred only for replay.</p> <p> = Data is transferred for data storage.</p>
<i>Archiving</i>	Activate the check box <i>Archiving</i> if you would like to use the server for archiving purposes.
<i>Export</i>	Activate the check box <i>Export</i> to allow the export from this server.
<i>Import</i>	<p>Activate the check box <i>Import</i> so that the imported data can be stored on this server.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the recording architecture that fulfills this function. In the drop-down list, all recording architectures are displayed which enable this function as well. <p>NOTICE! If you would like to use a server for the import function on which no recording is supposed to take place, you can configure an architecture exclusively for the import.</p>

Tab. 59: Configure data storage

Add target server to a list

1. In the toolbar of the list *Target Server*, click on the icon  (Add).
2. Select the server from the list to which you would like to transfer the data.
If you would like to select several servers or revoke a selection, click on the respective line while holding the [Ctrl] key down.



Name	IP Address
RC-02	192.168.173.176
REC-04	192.168.173.174
RC-01	192.168.173.175
REC-02	192.168.173.172
CTI-01	192.168.173.177
REC-03	192.168.173.173

Rows per page: 20 | 1 - 6 of 6 | << < > >>

Add Cancel

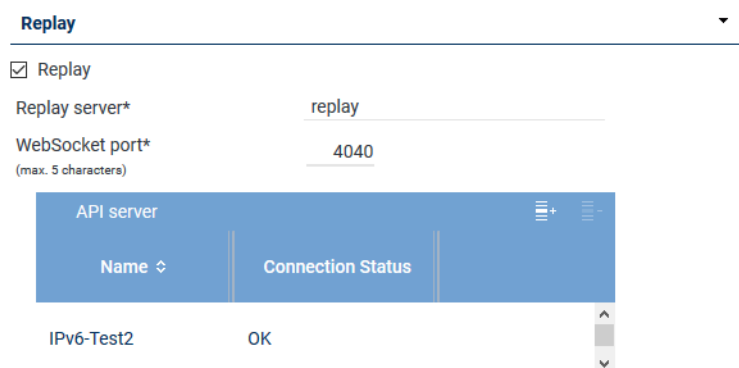
Fig. 254: Select server



Only those servers are available on which the function *Data storage* has been activated.

3. To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Replay



Replay

☒ Replay



Replay server* replay

WebSocket port* 4040
(max. 5 characters)

API server	
Name	Connection Status
IPv6-Test2	OK

Fig. 255: Group field Replay

Parameter	Value/Description
Replay	A replay server can replay recordings via the integrated <i>Replay Feature</i> . Only data which has either been recorded directly on this server or which has been transferred to this server for data storage or only for replay purposes can be replayed. The client computers of the system can connect to a replay server for replay purposes.

Parameter	Value/Description
	<p>Activate the check box <i>Replay</i> to be able to use the replay function of the players and the phones.</p> <p><input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>Replay server</i>.</p> <p><input type="checkbox"/> = Function has not been activated.</p>
<i>Replay server</i>	<p>If the function has been activated, you can enter a displayed name which is supposed to denote the server as the replay server in the system in the entry field <i>Replay server</i>. The displayed name can be selected arbitrarily and is a kind of pseudonym. As the replay server and the API server must not be identical, you can select different pseudonyms.</p> <p>The displayed name is meant to make it easier for users to select a server as different replay servers may be used across the system by different tenants. When selecting the replay server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p> <p>In order to be able to reach the server activated for replay from a public network and with configured port forwarding, you have to set the configuration in the tab <i>Replay Server Address Mapping</i>. For further details about the configuration refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>
<i>WebSocket port</i> (maximum of 5 characters)	Enter the port via which the data to be replayed in POWERplay Web are supposed to be transmitted.
<i>List</i> <i>API server</i>	<p>Here, you can add API servers that the replay server may use. If a recording which is supposed to be replayed cannot be found on a server, the search is continued on the API servers which have been entered here.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the API server, see chapter "Add API server to a list", p. 216. By clicking on the icon  (<i>Remove</i>), you can remove selected API servers from the list.

Tab. 60: Configure replay

Search and replay functions



To be able to use the search and replay functions via [LCR](#) as well as to use replay via phone, you have to create the users with the respective access rights in the application System Configuration in the Employees module. For information about the configuration refer to the administration manual *User management* for tenants.

Add API server to a list

The replay server required the services of an [API](#) server. The configuration must be as follows:

- If the replay server runs on a server with a local [API](#) server, it must not necessarily be assigned as the replay server always addresses the local [API](#) server first.
- If the replay server runs on a separate server, you must assign at least one [API](#) server that the replay server can address.


- If several **API** servers are available in the network, you can assign further **API** servers in addition to the local **API** server. The assigned **API** servers are addressed in order. For this reason, the local **API** server should always be first in the list.
1. To assign an **API** server, click on the icon  (*Add*) in the toolbar of the list *API Server*.
 2. Select the server from the list on which the **API** service is running.



Fig. 256: Select server



Only those servers are available on which the **API** service has been installed and activated. See [chapter "Group field API Server", p. 210](#).

3. To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Virtualization



Fig. 257: Group field Virtualization

Parameter	Value/Description
<i>VM support</i>	<p>Activate the check box <i>VM support</i> to be able to use the licensing for several VM installations.</p> <p>This function can only be activated if the system has been installed in a VMware and no <i>TRUSTED_VIRTUALIZATION</i> license has been imported to the system.</p> <p>When activating the function <i>VM support</i>, you have to configure the respective settings in the tab <i>Keystore/VM Licensing</i>. For further details about the configuration of this function refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>

Tab. 61: Configure virtualization



For the *virtualization* without Internet connection, a dongle is required which contains the system information. The application *Dongle Manager*, required to read the dongle, has to be installed on the server that the dongle has been connected to.

1. To save the entries, click on the button *Save* in the detail view.
To reset the entries, click on the button *Reset* in the detail view.

Tab Media Streamer

1. Click on the tab *Media Streamer* in the detail view.

In this tab, you can configure the Media Streamer for the functionalities *Replay via phone* and *Last Call Repeat Facility*.



The tab *Media Streamer* is only active if the function *Replay via phone* has been activated in the tab *Usage*.

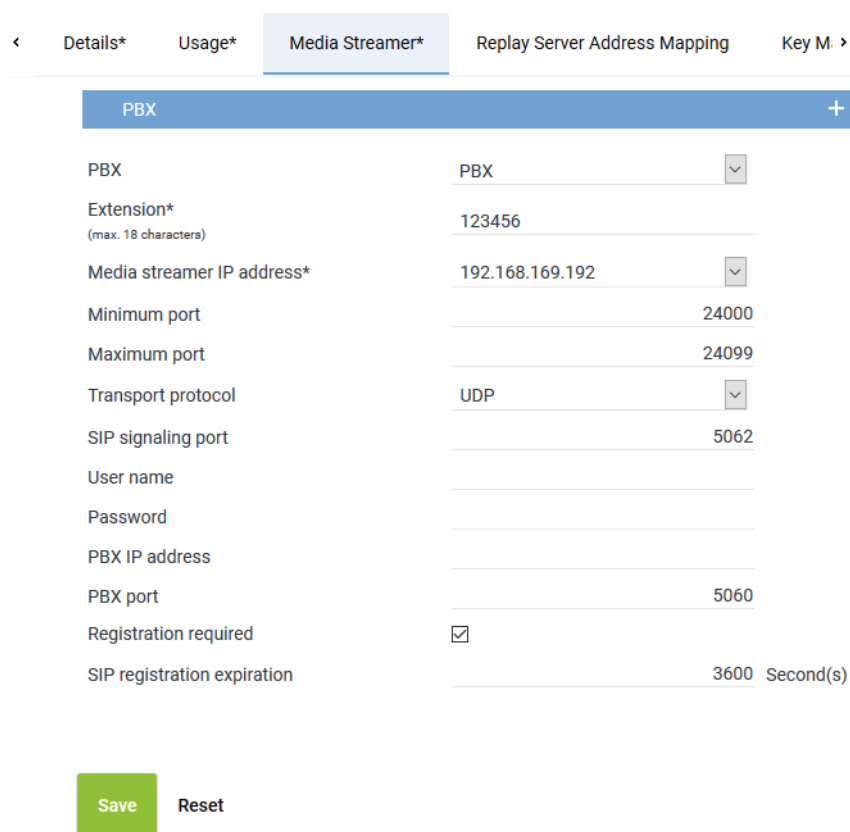


Fig. 258: Servers module - tab Media Streamer

2. Enter the following parameters:

PBX	<p>PBX that the Media Streamer is supposed to be mapped to.</p> <p>Select a PBX from the drop-down list. The drop-down list displays all PBXs which have been created in the system.</p> <p>If no PBX has been created in the system yet, you can create a PBX via the blue bar PBX, see chapter "Create PBX", p. 224.</p>
Extension	<p>Extension which is supposed to be mapped to the Media Streamer. This is a mandatory field; the configuration cannot be saved if this information is missing.</p> <p>If an external analog gateway has been integrated, enter the value 8000.</p>

<i>Media streamer IP address</i>	<p>IP address which is supposed to be used for the exchange of the audio data and for the SIP communication.</p> <p>Select an IP address from the drop-down list. In the drop-down list, all IP addresses of the server are displayed.</p> <p>If an external analog gateway has been integrated, select the IP address 169.254.254.100 in the drop-down list.</p>
<i>Minimum port</i>	Enter the minimum port which is supposed to be used for the audio data exchange.
<i>Maximum port</i>	<p>Enter the maximum port which is supposed to be used for the audio data exchange.</p> <p>A port range of 100 (e. g. 24000-24099) is sufficient for 50 licenses. The port range should be twice as wide as the number of available licenses.</p>
<i>Transport protocol</i>	<p>Select the transport protocol type you would like to use for the SIP communication from the drop-down list.</p> <p>TCP = unencrypted</p> <p>UDP = unencrypted</p> <p>TLS = encrypted</p> <p>If an external analog gateway has been integrated, select UDP in the drop-down list.</p>
<i>SIP signaling port</i>	<p>Enter the port for the SIP communication.</p> <p>Port for data exchange: 5062</p>
<i>User name</i>	Enter the user name for the authentication on the SIP server.
<i>Password</i>	Enter the password for the authentication on the SIP server.
<i>PBX IP address</i>	<p>Enter the IP address of the SIP registrar of the PBX.</p> <p>If an external analog gateway has been integrated, enter the IP address 169.254.254.101.</p>
<i>PBX port</i>	<p>Enter the port of the SIP registrar of the PBX.</p> <p>If an external analog gateway has been integrated, enter the value 5060.</p>
<i>Registration required</i>	<p>Select whether the SIP extension has to be registered with the SIP registrar of the PBX.</p> <p><input checked="" type="checkbox"/> = SIP extension has to be registered.</p> <p><input type="checkbox"/> = SIP extension does not have to be registered.</p> <p>If an external analog gateway has been integrated, deactivate the check box Registration required.</p>
<i>SIP registration expiration</i>	Enter the time interval after which the registration has to be repeated.

Tab Replay Server Address Mapping

1. Click on the tab *Replay Server Address Mapping* in the detail view.

In this tab, you can configure the replay server address mapping. Servers which have been activated for replay require this address mapping so that they can be reached from a public network and with configured port forwarding.



The tab *Replay Server Address Mapping* is only active if the function *Replay* has been enabled in the tab *Usage*.

[Details*](#)
[Usage*](#)
[Media Streamer*](#)
[Replay Server Address Mapping](#)
[Key M. >](#)

Replay Server Addresses
✖

Internal IP address/ port of the replay server
 : 4000

External address/ port of the replay server
 : 4000

Save
Reset

Fig. 259: Servers Module - tab Replay Server Address Mapping

Group field Replay Server Addresses

1. Enter the following parameters:

<i>Internal IP address/ port of the replay server</i>	Enter the destination IP address and the port of the replay server at which the Replay module can be reached internally.
<i>External address / Port of the replay server</i>	Enter the URL or the IP address and the port at which the Replay module can be reached via the browser from outside. When entering the external address consider whether the SSL certificate has been created for an IP address or for a DNS address. In the latter case, it is imperative to enter the DNS name! Otherwise the certificate check in the replay applications will fail.

If you would like to remove the addresses, click on the icon ✖ in the title bar of the group field.



If address mapping has been configured, the Replay module receives the configured address and the configured port.

If address mapping has not been configured, the Replay module receives the IP address and the default port 4040 as entered in the tab *Details*.



To allow the users of the respective tenant to access the replay server via the browser, an internal address and/or an external IP address or a DNS name must be configured in the *Tenants* module.



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Key Management

1. Click on the tab *Key Management* in the detail view.

In this tab, you can configure the settings for the *neo* key management. This tab is only active if you have installed the corresponding license and enabled the function *neo Key Management* in the tab *Usage*.

< Usage* Media Streamer* Replay Server Address Mapping Key Management >

Key creation interval

☒ All
365 Day(s)

☐ Create key manually

Delay usage

until 0 Day(s) 0 Hour(s)

☐ Key expiration date

after 0 Day(s)

☒ In case of an error switch to simple key management automatically

Save Reset

Fig. 260: Servers module - tab Key Management

<i>Key creation interval</i>	<p>Select whether a key is supposed to be generated automatically or manually. Select one of the following options:</p> <ul style="list-style-type: none"> • <i>All</i> Select the intervals in which a new key is supposed to be generated automatically. Possible time interval: 1 to 365 days Default value: 365 days • <i>Create key manually</i> Select that a key is supposed to be generated manually. <p>Old keys which are no longer used for encryption become inactive for the time being. They remain in the database, though, since they are still required for the decryption of old recordings.</p>
<i>Delay usage</i>	<p>If required, enter a time interval during which the new key is not supposed to be used yet after having been created. Not until after this time interval has passed can the key be actually used for encryption.</p> <p>Possible time interval: 0 to 14 days Default value: 0 days (new keys are immediately used for encryption)</p> <p>A delay guarantees that the key has been captured by a database backup before it will actually be used.</p>
<i>Key expiration date</i>	<p>Select whether an inactive key is supposed to become invalid after the expiration of the time interval defined here.</p> <p><input type="checkbox"/> = Key never becomes invalid.</p> <p><input checked="" type="checkbox"/> = Key becomes invalid. In the entry field, enter the time interval after which the key loses its validity. Once this time interval has passed, the key cannot be used anymore. If recording data must be deleted after a certain period of time, this option offers additional security on top of the configured date of deletion. This especially applies to the case when recording data has been transferred manually to a storage location where the deletion mechanism of the system cannot find it.</p>

CAUTION! All recordings which have been encrypted with a key which has meanwhile become invalid are useless and cannot be replayed anymore.

In case of an error ... automatically

Select whether simple key management is supposed to be used if the neo key management does not work (e. g. if the service *DongleMan* fails). If you have not activated the option, no recording takes place as long as the neo key management has been activated but does not work.

☒ = In case of an error, simple key management is used as replacement.

☐ = In case of an error, no recording takes place as long as the neo key management has been activated. In this case, disable key management in the tab *Usage*.



On top of the settings in this tab, each tenant who would like to use the neo key management has to define individual settings in his own user management (Tenants module).



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Keystore/Virtualization

1. Click on the tab *Keystore/Virtualization* in the detail view.

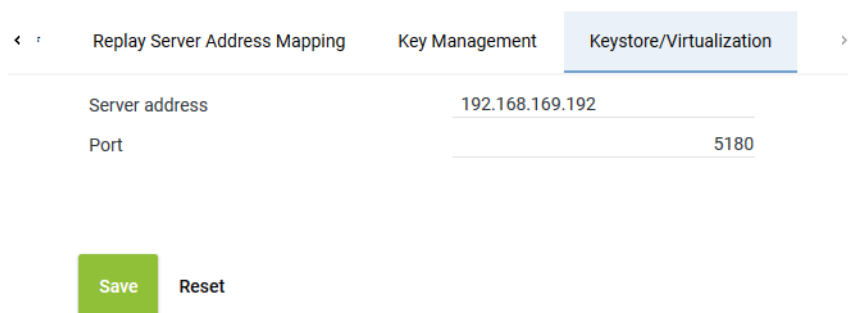
In this tab, you can configure the connection data for the service *DongleMan* for the neo key management and for the authentication of the VM.



If your system has been installed in a virtual environment, the application Dongle Manager must have been installed and started locally outside the VM so that the access to the dongle works. The dongle must have been connected to the server on which the VM has been installed.



For detailed information about neo key management refer to the administration manual *Encryption of recordings*.



Navigation: < Replay Server Address Mapping Key Management **Keystore/Virtualization** >

Server address	192.168.169.192
Port	5180

Buttons: Save Reset

Fig. 261: Servers module - tab Keystore/Virtualization

Server address

Enter the address of the server for this connection.

- If you use the neo key management as well as the virtualization:
IP address of the server that the service *DongleMan* has been installed on.
- If you use only virtualization, you can authenticate the VM via the ASC License Management System, too. In this case, enter the following address:
licensing.asc.de

	<ul style="list-style-type: none"> If you use only the ASC key management: IP address of the server with the master password database
Port	Enter the port for the connection. Default value: 5180

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

Administrate NTP server

The recording system works with an **NTP**-based time synchronization. The function *Administrate NTP server* allows defining several **NTP** servers. Every server in the system identifies all **NTP** servers configured within the system and can use any **NTP** server for time synchronization. That way, every server can connect immediately to another **NTP** server if its current **NTP** server connection breaks down.

Add NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.

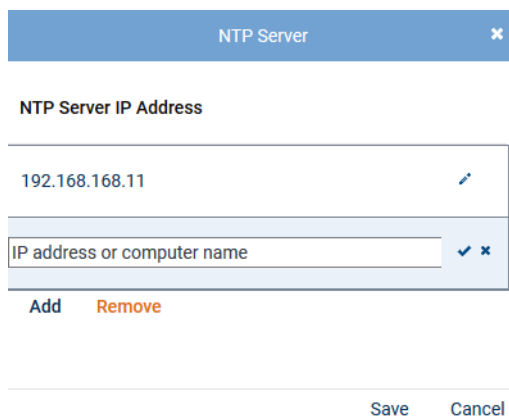





Fig. 262: Add NTP server

The list displays all NTP servers that have been configured during the installation.

- To add a server, click on the button *Add*.
- In the newly added row, click on the icon  (*Edit*).
- Enter the **IP** address or the name of the **NTP** server in the entry field.
- To save the entry in the row, click on the icon  (*Save*).
To discard the entry in the row, click on the icon  (*Discard*).
- To save all changes in the list, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.

Edit IP address

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



NTP Server




NTP Server IP Address

192.168.168.11	
IP address or computer name	 

Add Remove

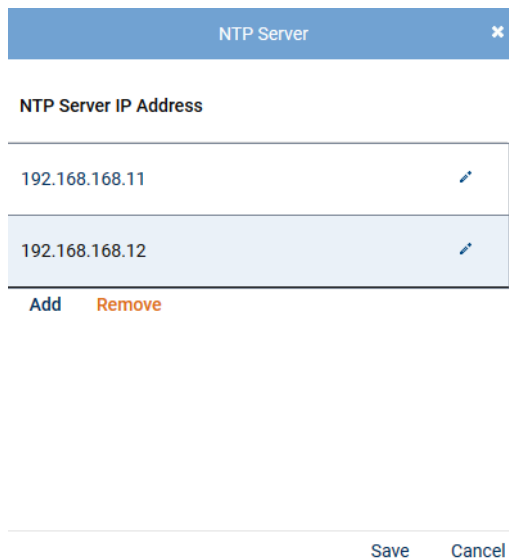
Save Cancel

Fig. 263: Edit IP address

- Click on the icon  (*Edit*) in the row with the IP address that you would like to edit.
- Change the entry in the entry field.
- To save the change, click on the icon  (*Save*).
To discard the change, click on the icon  (*Discard*).
- To save the changes, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.



Remove NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



NTP Server

NTP Server IP Address

192.168.168.11	
192.168.168.12	

Add Remove

Save Cancel

Fig. 264: Remove NTP server

- In the list, select the NTP server that you would like to remove.
- Click on the button *Remove*.
⇒ The NTP server is removed from the list.
- To save the change, click on the button *Save*.
To discard the change and close the window, click on the button *Cancel*.

7.1.2.4.3 Create PBX

The PBX can either be configured via the PBX module or via the Integrations module.

In this configuration step, the parameters for the PBX are configured, e. g. the name, the area code and the net code.

1. Select the menu item *Setup > PBX* in the navigation bar.

⇒ The following window appears:

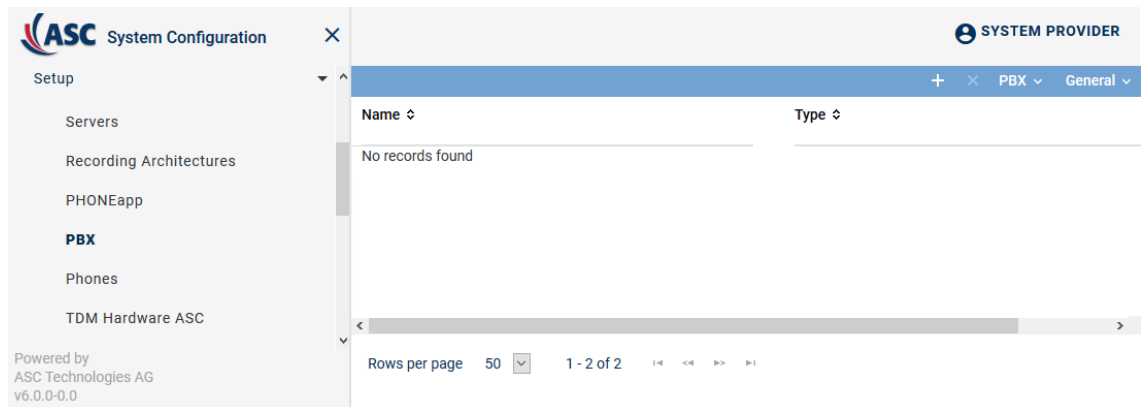




Fig. 265: Create new PBX

Toolbar of the PBX module

The toolbar offers the following functions.



Fig. 266: Toolbar PBX module

	<i>Create</i>	In the detail view, you can enter the parameters of the new PBX.
	<i>Delete</i>	Deletes the selected PBX configuration. A PBX can only be deleted if it is not used in any configuration.
<i>PBX</i>	<i>Phone Configuration</i>	Opens a window in which you can create and configure phones.
	<i>Administrate Unused Extensions</i>	Opens a window in which you can delete extensions that are not used in any configuration.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create new PBX

1. Click on the icon  (*Create*) in the toolbar of the main view of the PBX module.

⇒ In the detail view, the tab *Details* appears.

×

<
Details*
PHONEapp Configuration
Web Service
>

Name*

SIPREC

PBX type*

Universal VoIP ▼

Maximum length of extensions

4 ▼

Country code

☒ Select from list

United States (1)
▼

☐ Enter manually

Area code*

6021

Net code*

5963

Non Phone IPs

No records found

Add
Delete

IPs to be Ignored

No records found

Add
Delete

MACs to be Ignored

No records found

Add
Delete

Save

Reset

Fig. 267: Create new PBX - tab Details

2. Set the following parameters in the detail view:

Parameter	Value/Description
Name	This <i>name</i> serves as the identifier of this PBX.
PBX type	Select the type of the PBX from the drop-down list.
Maximum length of the extensions	Enter the number of digits of the extensions, e. g. 4.
Country code	Select the option for the country code: <ul style="list-style-type: none"> <i>Select from list</i> Select the country code from the drop-down list. <i>Enter manually</i> If the corresponding country code is not available in the drop-down list, you can enter the 3-digit code manually. e. g. for Sri Lanka 094.
Area code	Enter the area code without the preceding 0, e. g. 6021.
Net code	Enter the net code, e. g. 5963. Do not enter an extension here.

Tab. 62: Create PBX

If you would like to display the complete phone number, e. g. if you use more than one PBX, several area codes, or if you would like to record mobile phones, you have to configure the value 0 in the following parameters:

Parameter	Value/Description
<i>Maximum length of the extensions</i>	Enter the number 0 in the field maximum length of the extensions to display the complete phone number.
<i>Area code</i>	Enter the number 0 as area code to display the complete phone number.
<i>Net code</i>	Enter the number 0 as net code to display the complete phone number.

Tab. 63: PBX parameters with complete phone number

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

7.1.2.4.4 Assign recording resources

In multi-tenant systems, you have to assign each tenant its own recording resources.

Depending on the recording type, agents can be assigned to the recording resource via the extension, via the PBX Agent ID or via the chat ID. Within one tenant, you can configure all three possibilities.

Assign extensions to tenants

If you would like to make an assignment based on extensions, you can assign the respective tenant the extension designated for recording in the Tenants module.



In 1-tenant systems, all extensions are automatically assigned to the tenant who has been created by the system (1st tenant). Extensions are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the extensions manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of extensions is not possible until a PBX has been created since extensions are assigned in relation to the PBX.

- Select the menu item *Tenants* in the navigation bar.

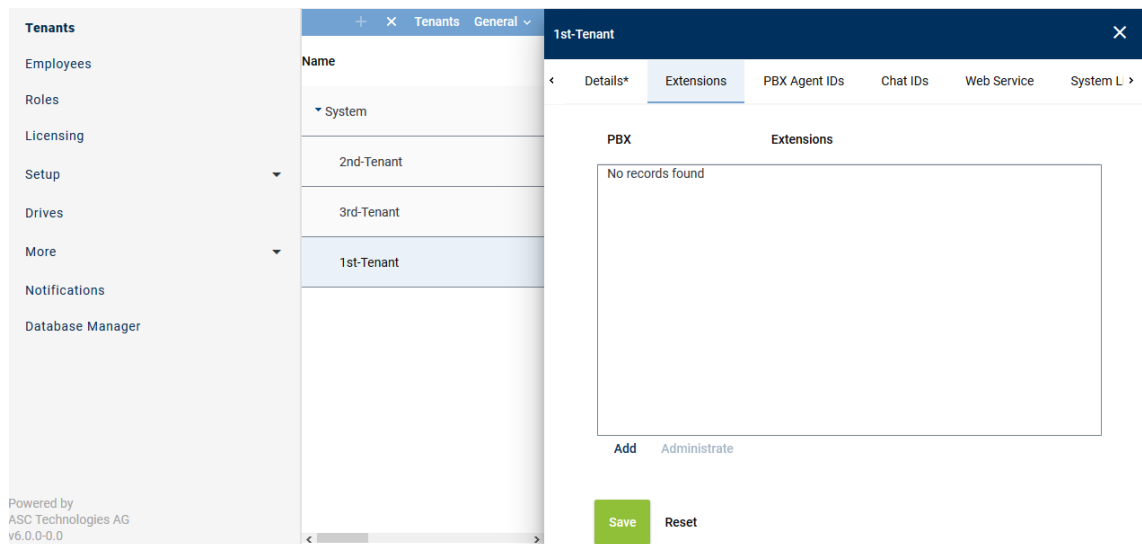


Fig. 268: Tenants - main view - tab Extensions

Add extensions

1. In the main view, select the tenant to whom you would like to assign extensions.
2. Click on the tab *Extensions*.
3. Click on the button *Add*.
⇒ The following window appears:

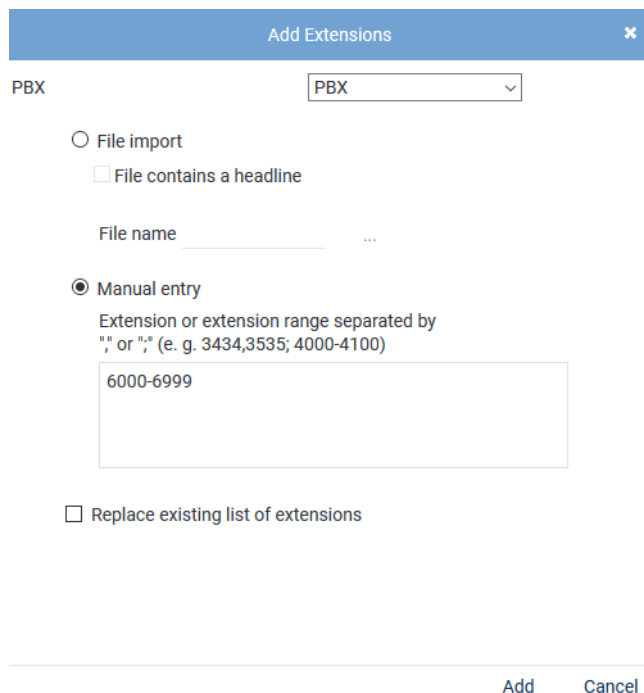




Fig. 269: Assign extensions to tenants

4. From the drop-down list, select the PBX in which the extensions for this tenant have been configured.

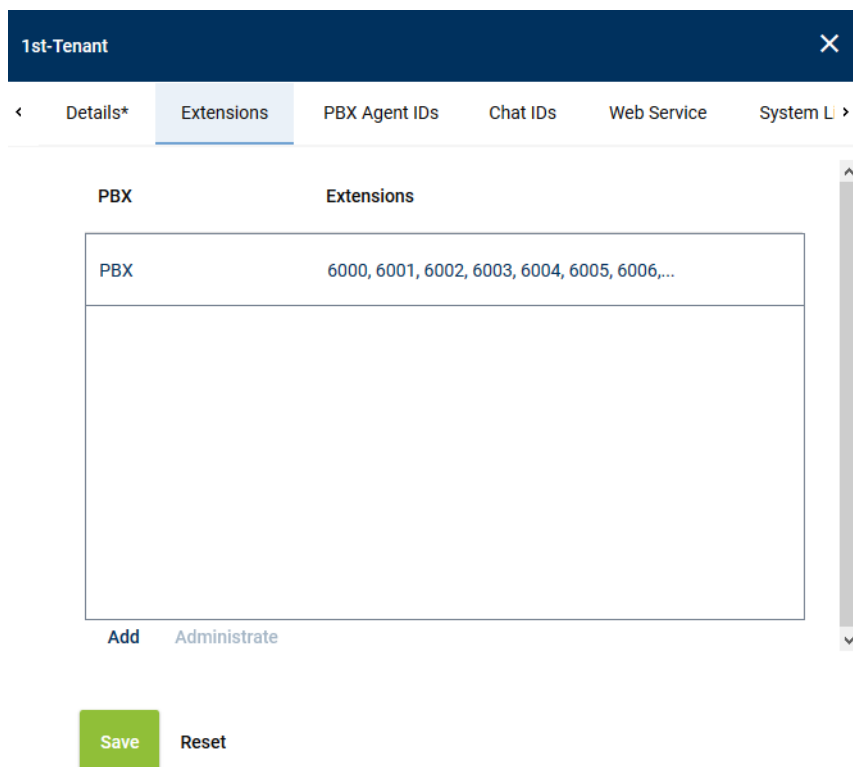
File import	Select this option to import extensions from an existing CSV file and add them to the table of extensions.
File contains a headline	

	<p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CSV file, you have to pack it in a ZIP file.</p> <p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> • Click on the button  behind the field <i>File name</i>. • Click on the button <i>Choose File</i>. • Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. • Click on the button  <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter extensions or extension ranges manually.</p> <p>Enter the extension range that is reserved for this tenant using a hyphen, e. g. from 6000 to 6999. Alphanumerical entries with a hyphen are not detected as a range, they must be entered individually.</p> <p>You can separate the different extensions and extension ranges by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of extensions</i>	<p>Activate the check box to replace the list of extensions.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the extensions of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured extensions of all PBXs are kept and the new extensions are added to the selected PBX.</p>

- Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
- If errors have been detected, the window *Result* appears.
 - Click on the button *Display Error Report* to open the window *Error Report*.
 - To close the window *Error Report*, click on the button *Close*.
 - To close the window *Result*, click on the button *Close*.
- The configured extensions now appear in the detail view.
- Click on the button *Save* in the detail view to save the entries.

Remove extensions

- In the list, select the **PBX** for which you would like to remove the assigned extensions.



1st-Tenant

< Details* Extensions PBX Agent IDs Chat IDs Web Service System L >

PBX	Extensions
PBX	6000, 6001, 6002, 6003, 6004, 6005, 6006,...

Add Administrate

Save Reset

Fig. 270: Remove extensions

- Click the button *Administrate*.
- Select one or several extensions you would like to remove from the assignment.
To select several extensions or to revoke the selection, click on the respective line while holding the [Ctrl] key down.



Administrate Extensions

6993
6994
6995
6996
6997
6998
6999

Remove Cancel

Fig. 271: Select extensions

- To remove the selected extensions, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

Assign PBX Agent IDs to tenants

If the information about PBX Agent IDs is delivered by the PBX, you can make an assignment by means of the PBX Agent IDs. In this case, you can assign the respective tenant the PBX Agent IDs designated for recording in the Tenants module.



In 1-tenant systems, the PBX Agent IDs are automatically assigned to the tenant who has been created by the system (1st tenant). PBX Agent IDs are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the PBX Agent IDs manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of PBX Agent IDs is not possible until a PBX has been created since the assignment is PBX-related.

1. Select the menu item *Tenants* in the navigation bar.

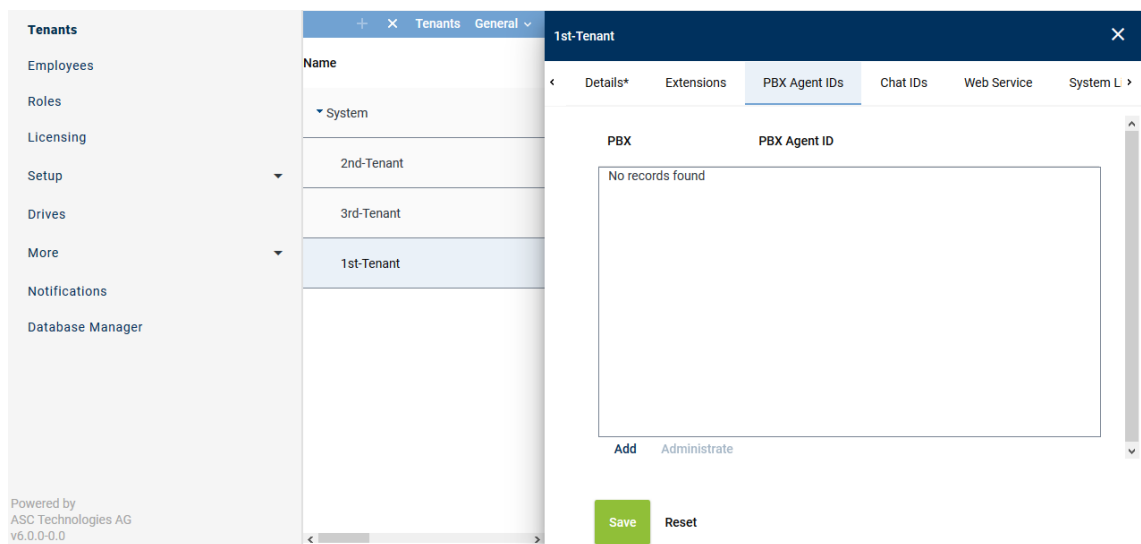


Fig. 272: Tenants - main view - tab PBX Agent ID

Add PBX Agent ID

1. In the main view, select the tenant to whom you would like to assign the PBX Agent IDs.
2. Click on the tab *PBX Agent IDs*.
3. Click on the button *Add*.
⇒ The following window appears:

Add PBX Agent IDs
✕

PBX

PBX
▼

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

PBX Agent IDs separated by ";" or ","

427agent1,427agent2

☐ Replace existing list of PBX Agent IDs

Add
Cancel

Fig. 273: Assign PBX Agent IDs to tenants

4. From the drop-down list, select the PBX in which the PBX Agent IDs for this tenant have been configured.

<i>File import</i>	<p>Select this option to import the PBX Agent IDs from an existing CSV file and add them to the table of PBX Agent IDs.</p>
	<p><i>File contains a headline</i></p> <p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CVS file, you have to pack it in a ZIP file.</p>
	<p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> Click on the button ... behind the field <i>File name</i>. Click on the button <i>Choose File</i>. Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. Click on the button ↗ <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter PBX Agent IDs manually.</p> <p>You can separate the individual PBX Agent IDs by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of PBX Agent IDs</i>	<p>Activate the check box to replace the list of PBX Agent IDs.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the PBX Agent IDs of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured PBX Agent IDs of all PBXs are kept and the new PBX Agent IDs are added to the selected PBX.</p>

5. Click on the button *Add*.
⇒ The PBX Agent IDs are added to the table of PBX Agent IDs.
6. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
7. The configured PBX Agent IDs now appear in the detail view.
8. Click on the button *Save* in the detail view to save the entries.

Remove PBX Agent ID

1. In the list, select the **PBX** for which you would like to remove the assigned PBX Agent IDs.
2. Click the button *Administrate*.
3. Select one or several PBX Agent IDs you would like to remove from the assignment.
To select several PBX Agent IDs or to revoke the selection, click on the respective line while holding the [Ctrl] key down.

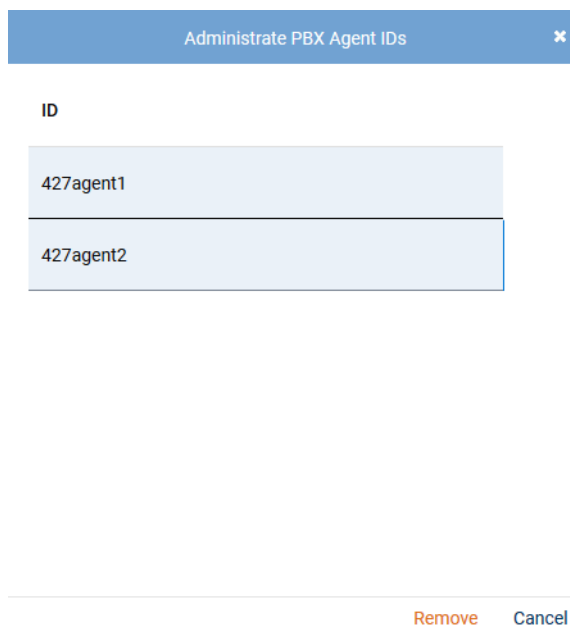


Fig. 274: Select PBX Agent IDs

4. To remove the selected PBX Agent IDs, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

7.1.2.4.5 Configure additional data

In the Additional Data module, you can configure the additional data which is delivered for a conversation with a protocol.



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured here in the Additional Data module. Only then can you map the additional data in the integration under the Global Recording Settings in the tab *SIP Header Tagging*.

For selection fields to appear in the drop-down list, they have to be configured in the Additional Data module.

1. Select the menu item *Setup > Additional Data* in the navigation bar.

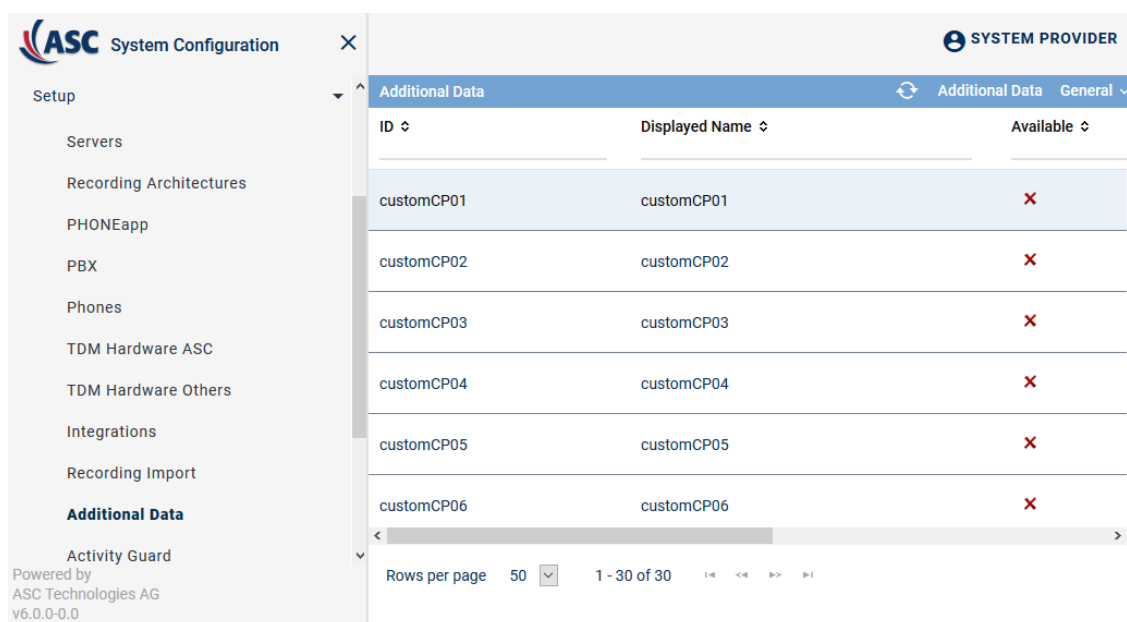


Fig. 275: Additional Data module main view

2. Select a set of data.
 - ⇒ The detail view displays the information you can configure.

Change display name







Change Display Name		
Language	Content	
ar_SA	customCP01	
bg_BG	customCP01	
de_DE	Universal Call ID	
en_GB	customCP01	
en_US	Universal Call ID	 

Fig. 276: Configure additional data

1. To change the display name, click on the pen in the line of the language you would like to change.
2. Enter a display name and click on the check mark at the end of the line to confirm the entry.

Availability

Availability	
Available	<input checked="" type="checkbox"/>
Editable	<input checked="" type="checkbox"/>
External recording control	<input checked="" type="checkbox"/>

Save
Reset

Fig. 277: Additional data - configure availability

1. To make the data field available to the entire system, activate the check box of the option *Available*.
2. To make the data field in the search and replay applications editable later on, activate the check box of the option *Editable*.
3. To be able to use the data field for external recording control, activate the check box of the option *External recording control*. This option is only available if recording control has been activated in the *Servers module* in the tab *Usage*.
4. Click on the button *Save* to save the settings.



For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



Additional data which is not delivered along with the protocol is not available for further use.

7.1.2.4.6 Create integration for Multi-Server Recording

In the Integrations module, the PBX-related recording settings are configured.

You first have to create and activate a recording architecture to be able to create a integration and to assign it here.

Depending on the recording solution, you additionally have to configure IP addresses, ports, protocols, sniffer cards, CTI connection data, phones, monitor points, and, where required, add-ons.

1. In the navigation bar, select the menu item *Setup > Integrations*.
⇒ The following window appears:

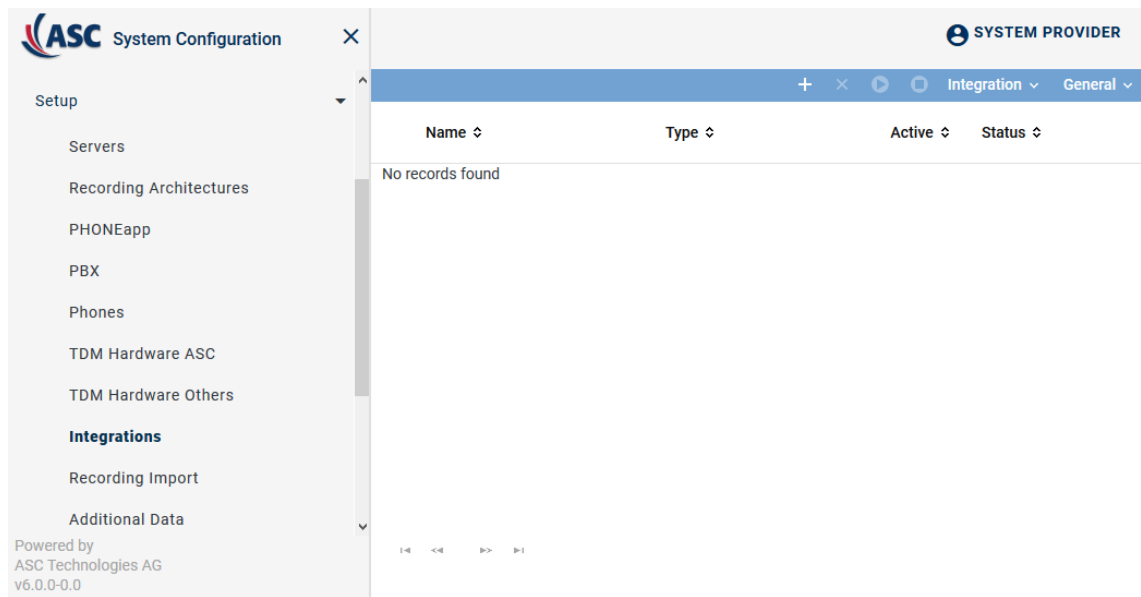




Fig. 278: Integrations - main view

In the table in the main view, the following information is displayed:





Name	Name of the integration
Type	Type of the integration
Active	Shows whether the integration has been activated and is used for the recording. <div> ✓ = Integration is active, can be deactivated in the toolbar via the icon . ✗ = Integration is not active, can be activated in the toolbar via the icon . </div>
Status	Shows whether the configuration has been carried out completely. <div> ✓ = Configuration is complete. ✗ = Configuration is incomplete. </div>

Toolbar of the Integrations module

The toolbar offers the following functions.



Fig. 279: Toolbar Integrations module

	Create	Opens the detail view so that you can create a new integration.
	Delete	Deletes the selected integration. The integration can only be deleted if it has been deactivated.
	Activate	Activates the selected integration. The integration can only be activated if it has been configured completely.
	Deactivate	Deactivates the selected integration. This stops running recordings.
Integration	Import Grammar	By clicking on this menu item, you can import a customized grammar which you can then configure in the configuration step for the CTI connection data.
General	General Help	Opens the online help.
	Module Help	Opens the module-specific online help.

Import grammar

Depending on the deployed PBX, conversation events are signaled differently.

A grammar recognizes and processes the events occurring during a call such as ringing, answering, consultation, hanging up. A grammar contains rules which are required to correctly translate PBX-specific call information and call states into a PBX-neutral format.

1. To import a new grammar, click on the menu item *Integration > Import Grammar* in the toolbar of the main view.
⇒ The window *Upload File* appears.

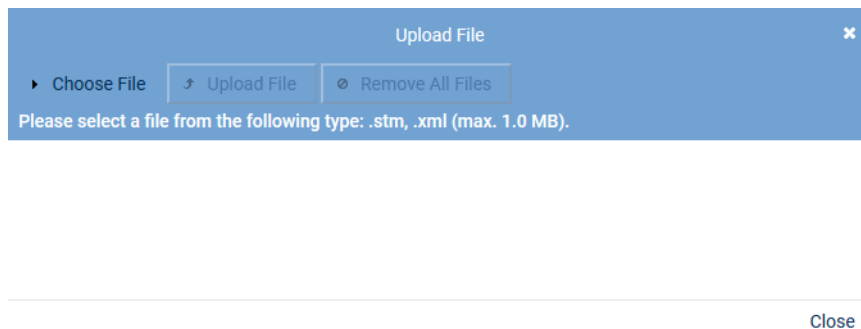


Fig. 280: Choose file

2. Click on the button *Choose File*.
3. Select the respective grammar of the file type *.stm* or *.xml* via the Explorer.
4. Click on the button *Open*.
⇒ The selected file appears in the window *Upload File*.

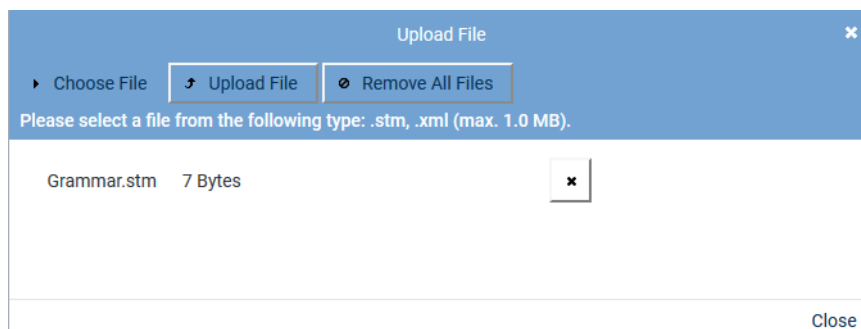



Fig. 281: Upload grammar

5. To remove a selected file from the list, click on the button  (*Remove file*) next to the respective file.
To upload the file, click on the button *Upload File*.
⇒ The window closes and a notification appears in the main view that the file has been uploaded successfully.

Assign integration type


1. Click on the icon  (*Create*) in the toolbar of the main view to create a new integration.
⇒ In the detail view, the tab *Integration Type* appears.



Fig. 282: Create integration type

2. Enter the following parameters:

Parameter	Value
<i>Name</i>	In the entry field, enter a descriptive name for the integration. This name is used as the identifier of this integration in the system.
<i>Integration type</i>	Select the entry <i>SIP active</i> from the drop-down list <i>Integration type</i> .

Tab. 64: Create integration type

3. To assign the PBX, click on the button **+** behind the field *PBX*.
⇒ The window *PBX* appears.



Fig. 283: Select PBX

4. Select the respective *PBX* from the list of available PBXs.
5. Click on the button *Add*.

Assign recording architecture for Multi-Server Recording

1. In the detail view on the bottom right, click on the button *Next*.
⇒ The tab *Recording Architecture* appears.

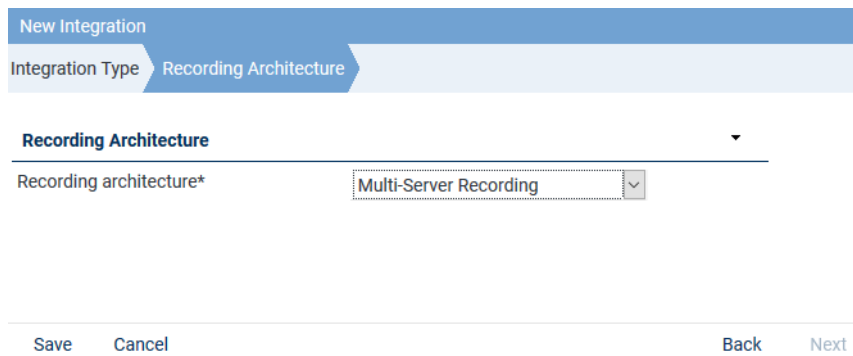


Fig. 284: Assign recording architecture - Multi-Server Recording

2. Select the respective recording architecture from the drop-down list *Recording architecture*.




Only activated recording architectures in which the appropriate integration type has been configured appear in the drop-down list.

3. Click on the button *Save*.
⇒ The integration now appears in the main view.



When using a recording architecture with parallel recording, the tab *Parallel Recording* appears in the detail view. In this tab, you can adjust the settings for the duplicate detection of parallel configured servers, see [chapter "Duplicates in parallel recording architectures", p. 386](#).

Configuration steps

1. To complete the configuration of the integration, click on the icon  in front of the name of the new integration.
⇒ The following configuration steps appear:







SIPREC		SIP active	X	
Step	Configuration			
Configure recording architecture	✓			
Global recording settings	X			
Configure recording servers	X			
Configure add-on	✓			
Configure miscellaneous settings	✓			

Fig. 285: Configuration steps of the integration

Configure recording architecture

The section *Configure recording architecture* has already been configured in previous steps.

1. Click on the button  (*Edit configuration step*) in the line *Configure recording architecture* in the main view to show the configuration.
⇒ In the detail view, the configuration step appears with the information of the assigned recording architecture.

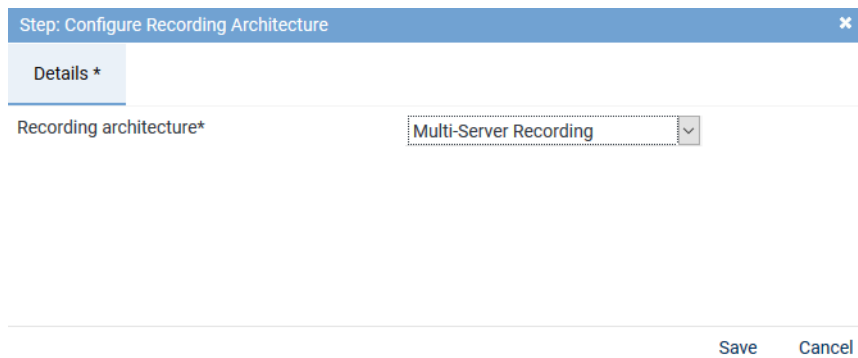



Fig. 286: Configuration step - Configure Recording Architecture

2. Click on the button *Save* to save changes and to finish the configuration step.
3. Click on the button *Cancel* to cancel the configuration step without applying changes.

Global recording settings for Multi-Server Recording

1. Click on the button  (*Edit configuration step*) in the line *Global recording settings* in the main view.
 - ⇒ The window *Step: Global Recording Settings* appears.

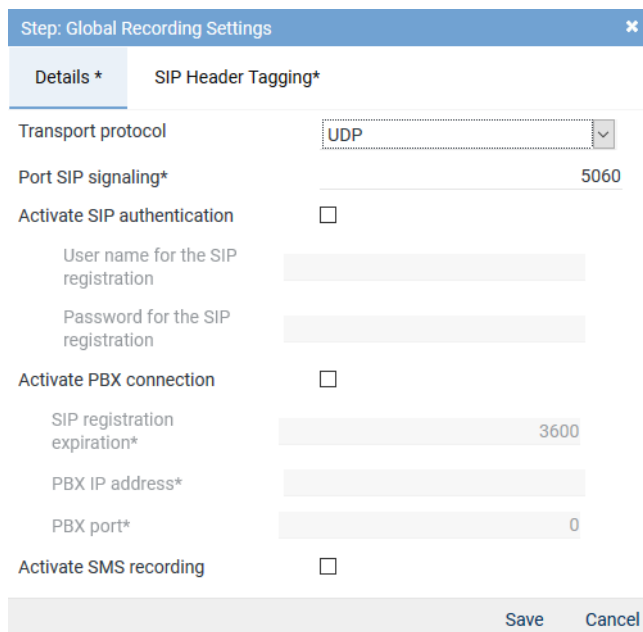


Fig. 287: Configuration step - Global Recording Settings - All-in-one Basic Recording

2. Set the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Transport protocol</i>	Select the transport protocol <i>UDP</i> for the SIP signaling between the recording server and the PBX.
<i>Port SIP signaling</i>	Enter the port for the <i>SIP</i> signaling, where the recording server is expecting the signaling. Default value for <i>UDP</i> and <i>TCP</i> is <i>5060</i> . Default value with <i>TLS</i> encryption is <i>5061</i> .
<i>Activate SIP authentication</i>	Deactivate this option for this recording solution.

Parameter	Value/Description
Activate SMS recording	This function is not supported in this recording solution.

Tab. 65: Global recording settings

- To save the entries, click on the button *Save*.
To discard entries, click on the button *Cancel*.

Tab SIP Header Tagging



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured in the Additional Data module and subsequently mapped in the tab SIP Header Tagging.

- Select the tab *SIP Header Tagging*.

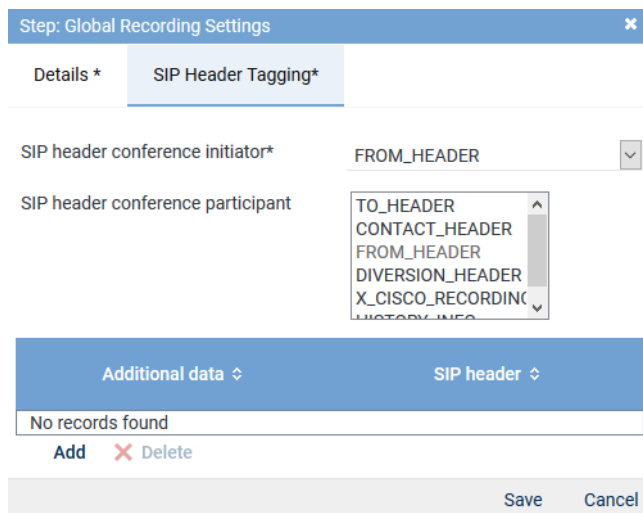


Fig. 288: Tab SIP Header Tagging Configure sources

- If you would like to configure individual additional data that you have defined previously in the Additional Data module, click on the button *Add* in the section *Additional data*.
⇒ The window *SIP Additional Data* appears.

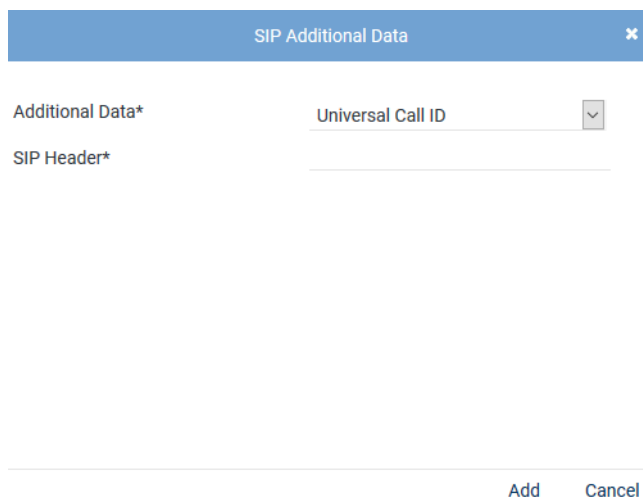


Fig. 289: SIP Additional Data



Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

- Enter the following parameters:

Parameter	Value/Description
<i>Additional Data</i>	In the drop-down list, select the display name of the field in which the information of the SIP header is supposed to be released.
<i>SIP Header</i>	<p>If you would like to use additional data, the mapping of the tag name must have been configured in the file <i>siprecmapping.xml</i>. Then you can enter the tag name from where the information is to be extracted.</p> <p>To have ASC configure the mapping file, contact your distribution partner.</p>


Tab. 66: Configure SIP conversation parameters

- Click on the button **Save** to close the window.
- Click on the button **Save** to finish the configuration in this step.

Configure recording server for Multi-Server Recording

In case of several recording servers, you have to define the port range for each recording server. The range may be the same for all recording servers. Make sure, though, that the port range lies within the range of ports activated in the firewall, refer to the installation manual *Installation requirements* in chapter *Communication matrix*.

This configuration takes place in the configuration step *Configure recording servers*.

- Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Configure Recording Servers* appears.

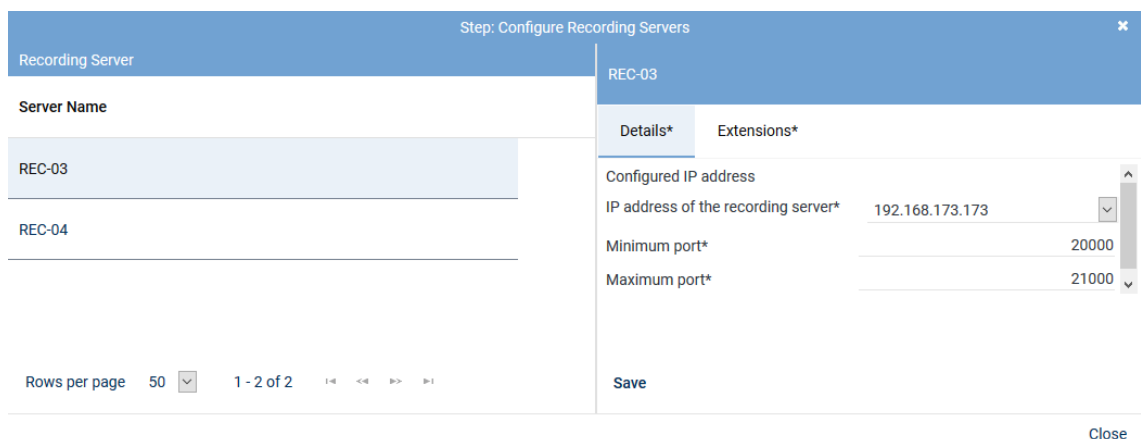


Fig. 290: Configuration step - Configure recording servers

- Enter the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Configured IP address</i>	Here, the IP address is displayed which has been configured for this recording server and via which the data to be recorded are received.
<i>IP address of the recording server</i>	From the drop-down list, select one of the available IP addresses of the recording server for the recording data.

Parameter	Value/Description
<i>Minimum port</i>	Enter the lowest port of the port range configured on the PBX that is used to receive the RTP data from the recording server, e. g. 20000.
<i>Maximum port</i>	Enter the highest port configured on the PBX that is used to receive the RTP data from the recording server, e. g. 21000.

Tab. 67: Configure recording servers



This recording solutions allows recording data streams in stereo. For stereo recording, reckon with 4 ports as only even ports are used to receive **RTP**.

Stereo recording requires more storage space, too.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.

Tab Extensions

1. Click on the tab *Extensions*.

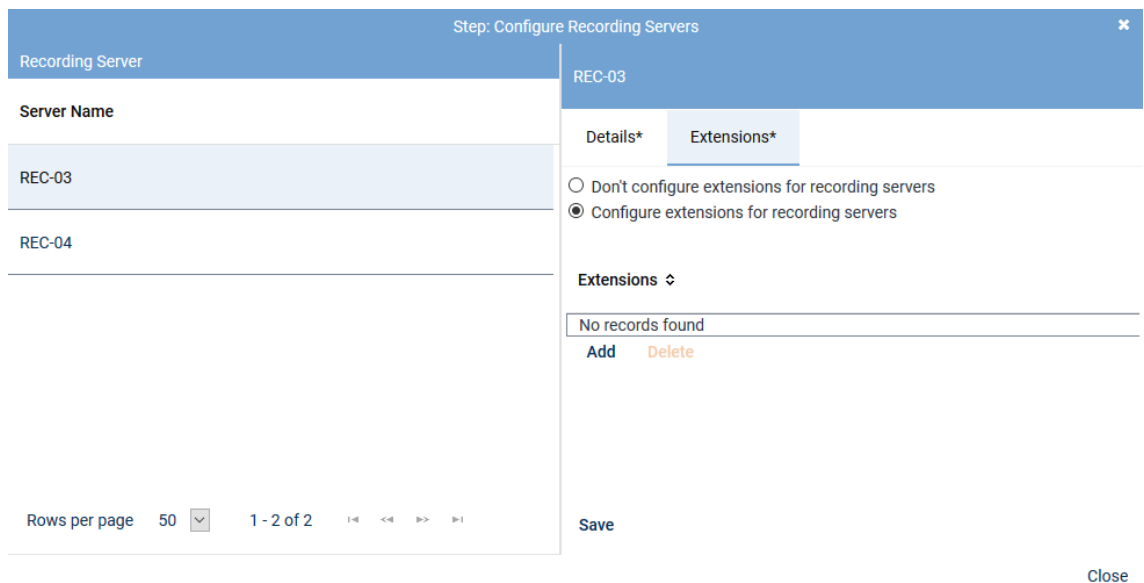


Fig. 291: Tab Extensions

The following options are available:

<i>Configure no extensions for recording servers</i>	Activate this option if you have not configured the extensions for the recording server in the PBX.
<i>Configure extensions of the recording server</i>	Activate this option if you have configured extensions for the recording server in the PBX and add the extensions.

2. To add extensions, click on the button *Add* in the table *Extensions*.
⇒ The window *Add Extensions* appears.

Add Extensions ✕

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

Extension or extension range separated by
",", or ";", (e. g. 3434,3535; 4000-4100)

9999

☐ Replace existing list of extensions

[Add](#) [Cancel](#)

Fig. 292: Add extensions

3. In the window *Add Extensions*, enter either a single extension or an extension range that the recording server is to use when registering on the PBX.
4. Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
5. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
6. The configured extensions now appear in the detail view.

Step: Configure Recording Servers ✕

Recording Server	REC-03
Server Name	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-03</div>
REC-03	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-04</div>
REC-04	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-05</div>

Rows per page 50 1 - 2 of 2 << >>

REC-03

Details* Extensions*

☐ Don't configure extensions for recording servers

☒ Configure extensions for recording servers

Extensions ⇅

9999

[Add](#) [Delete](#)

[Save](#)

[Close](#)

Fig. 293: Added extensions

7. Repeat the steps for additional servers. For each server, configure its own extension or extension range depending on how it can be reached.
8. Click on the button *Save*.

9. Click on the button *Close* to finish this configuration step.

Configure add-on



The use of the add-on in the integration is optional. The status of this configuration step has been set to *No selection* by default and is considered to be completely configured that way. You can activate and use the integration without an add-on, too.

If you use an application with add-on, you can select the required grammar in the corresponding version in this configuration step. Additionally, you can configure the connection data and the additional data.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

Configure add-on for Sparkassen FI ISP (optional)

The add-on refers to the usage of CTIconnect for Sparkassen FI ISP in the DACH region and only has to be configured if the add-on is used.



The add-on cannot be used in a failover architecture. The application Sparkassen FI ISP cannot connect to more than one IP address.

The integration runs in combination with a PBX and the recording server. The service CTIconnect for Sparkassen FI ISP receives the additional data from the PBX and sends them to the recording server. In addition, the recording decision which is initiated by the user on the end device is processed via CTIconnect for Sparkassen FI ISP and sent to the recording server.

Sparkassen FI Interaktive Service Plattform

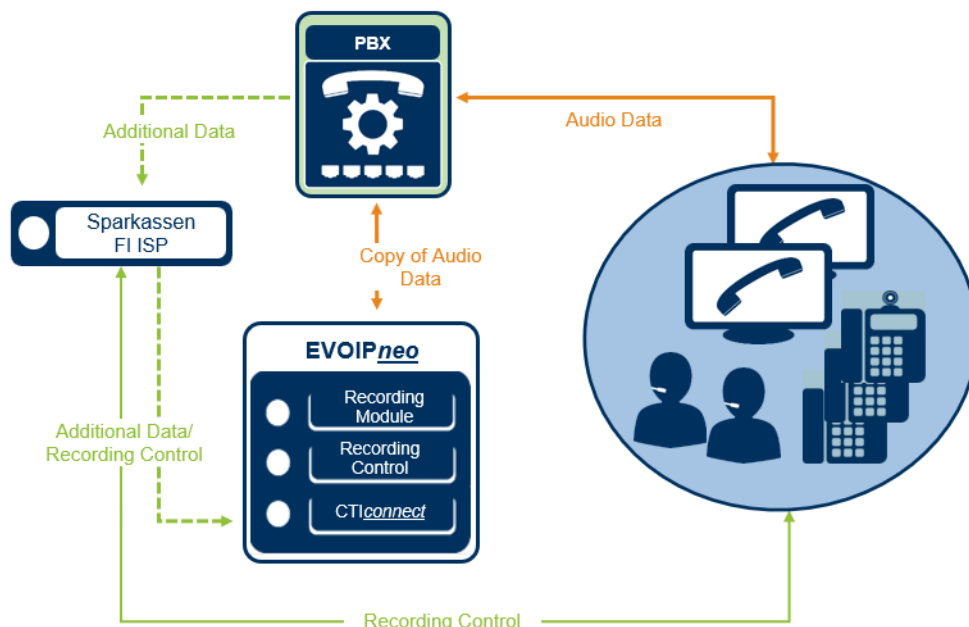



Fig. 294: Overview of Sparkassen FI ISP

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on *Sparkassen FI ISP* in the detail view.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Sparkassen FI ISP

CTIconnect Module

TypeCTIconnect passive
Grammar name*ISP Sparkassen FI
Grammar version*1.00.05

Connection Data

Listener port*3468

Additional Data

ID des Call CentersCall Center ID
ID des Calls aus GenesysUniversal Call ID
Anmeldename des KundenUser name
Name des KundenCustomer name
Personennummer des KundenCustomer ID

Arbitrary assignment

Please select...
Please select...
Please select...

SaveCancel

Fig. 295: Configure add-on for Sparkassen FI ISP

Group field CTIconnect Module

- Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 68: Configure CTIconnect module



For recording control via the add-on of the Sparkassen FI ISP, grammar version 1.00.05 or higher is required. If the grammar in the respective version is not available yet, you can import it. See [chapter "Import grammar", p. 237](#).

Group field Connection Data

Set the following parameter in the group field *Connection Data*; the IP address for the PBX does not have to be entered, since the PBX connects to our recording server:

Parameter	Value/Description
<i>Listener port</i>	Enter the port that the add-on connects to, e. g. 3468.

Tab. 69: Configure connection data

Group field Additional Data



This add-on is used exclusively in the DACH region; for this reason the additional data is only available in German, too. The names of the fields refer to the assignment of the strings which are delivered by the interface.

When using CTIconnect for Sparkassen FI ISP, the following additional data is delivered with the protocol:

- *ID of the call center*
- *ID of the call from Genesys*
- *Login name of the customer*
- *Name of the customer*
- *Employee number of the customer*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.

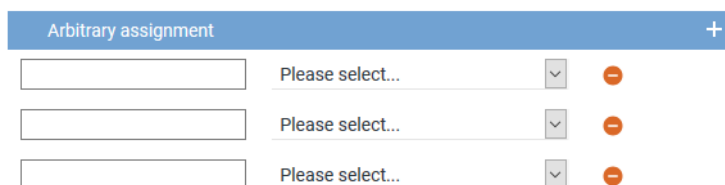



Fig. 296: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*
- *End time*
- *Duration*
- *Calling Party Phone Number*
- *Called Party Phone Number*

- *Conversation Direction*
- 2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
- 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
- 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
- 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.



To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.


Configure add-on for OpenScape Contact Center (optional)

The add-on refers to the usage of the OpenScape Contact Center and must only be configured if a OpenScape Contact Center is used.

The integration runs in combination with a Unify PBX which is responsible for recording. The CTIconnect service receives the conversation events of the agents via a SDK link in the OpenScape Contact Center and sends the additional data to the EVOIPneo recording service.

For information about the configuration of the OpenScape Contact Center, see [chapter "Configure OpenScape Contact Center \(optional\)", p. 394](#).

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on OpenScape Contact Center in the detail view.

Step: Configure Add-on

Details

Select add-on
☐ None
☒ OpenScape Contact Center

CTIconnect Module

TypeCTIconnect passive
Grammar name*Unify OpenScape Contact Center
Grammar version*1.00.04

Connection Data

Connection data

6000@192.168.170.29

Add Edit Delete

Additional Data

Business UnitBusiness Unit
DepartmentDepartment
Department KeyDepartment Key
Call IDUniversal Call ID
To PartyTo Party
ACD Group NumberACD Group Number

Arbitrary assignment

Please select...

Please select...

Save Cancel

Fig. 297: Configure add-on for OSCC

Group field CTIconnect Module

- Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 70: Configure CTIconnect module

Group field Connection Data

In the table Connection Data, you can enter one or several sets of connection data.

If you are configuring several connections, several connections to different business units are established simultaneously in the recording solution with OpenScape Contact Center.

- In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

Configure Connection
✕

Link name*

Business unit*

User name*

Password*

Add
Cancel

Fig. 298: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Link name</i>	Enter the link to the OSCC server in the format <i>osccport@ascserver</i> . The default value for the OSCC port is 6000 and the name of the OSCC server is usually spelled in minor letters. A valid link can look like this: 6000@osccv7r3. Ensure that the server name (e. g. osccv7r3) can be resolved to an IP address. Check whether the address can be reached via the ping command. Alternatively, you can also enter the IP address.
<i>Business unit</i>	The default name of a business unit is <i>default</i> . This is a predefined name for the business unit after a new OSCC server installation. Enter the business unit's actual name you would like to use in the future.
<i>User name</i>	Create a valid user for the business unit that you have created on the OSCC server, so the CTI connect service can establish the connection to the OSCC server. See chapter "Create user for CTIconnect", p. 394 .
<i>Password</i>	Enter the password for the user of the business unit.

Tab. 71: Configure connection data

3. Click on the button *Add* to save the entries and to close the window.
4. To configure additional connections, repeat the configuration steps accordingly.

Group field Additional Data

When using CTI**connect** for Unify OpenScope Contact Center, the following additional data is delivered with the protocol by default:

- *Business unit*
- *Department*
- *Department Key*
- *Call ID*
- *To Party*

- *ACD Group Number*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must have been configured and made available in the Additional Data module previously.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.

Here, you can map the database fields for the additional data which is delivered by the [OSCC](#). The contact data of the processed contacts of the OpenScape Contact Center provides a list of key pairs/value pairs. The keyword of this key pair/value pair can be chosen arbitrarily and adjusted customer-specifically. If you would like to use more than one word, avoid spaces. Use underscores instead of spaces, e. g. *ACD_group*.

1. In the group field headline *Additional Data*, click on the arrow ▶ to expand the group field and to assign the additional data to the data fields of the search and replay applications.

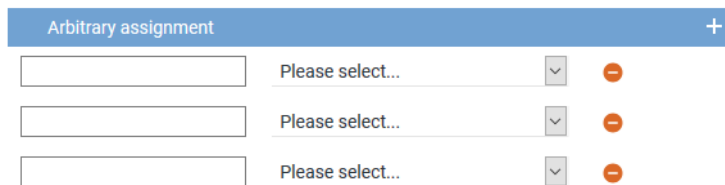




Fig. 299: Arbitrary assignment of the additional data

2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
3. From the drop-down list, select a configured display name of the additional data type which is supposed to appear as column headline in the players. Here, you can only select the display names for the additional data that you have configured and made available in the Additional Data module.
4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
⇒ An additional row appears to assign another additional data type.
5. To delete an assignment, click on the icon  in the respective row.
6. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

Configure add-on for Genesys T-Server (optional)

The add-on refers to the usage of Genesys T-Servers and must only be configured if you use Genesys T-Servers.

The integration runs in combination with the PBX and the recording server. The CTIconnect service receives the information which Genesys T-Server the monitor points have been assigned to from the Genesys Configuration Server. The monitor points must register on the respective Genesys T-Server. Upon successful registration, the respective Genesys T-Server sends all conversation events and additional data of the agents to the recording server.

CTIconnect for Genesys T-Server

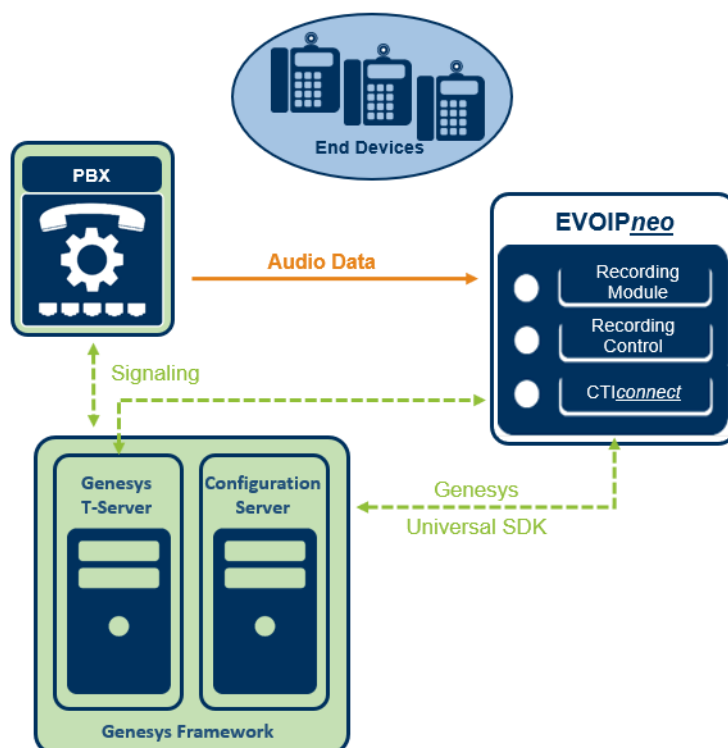


Fig. 300: Overview of the add on of Genesys T-Server

CTIconnect for Genesys T-Server

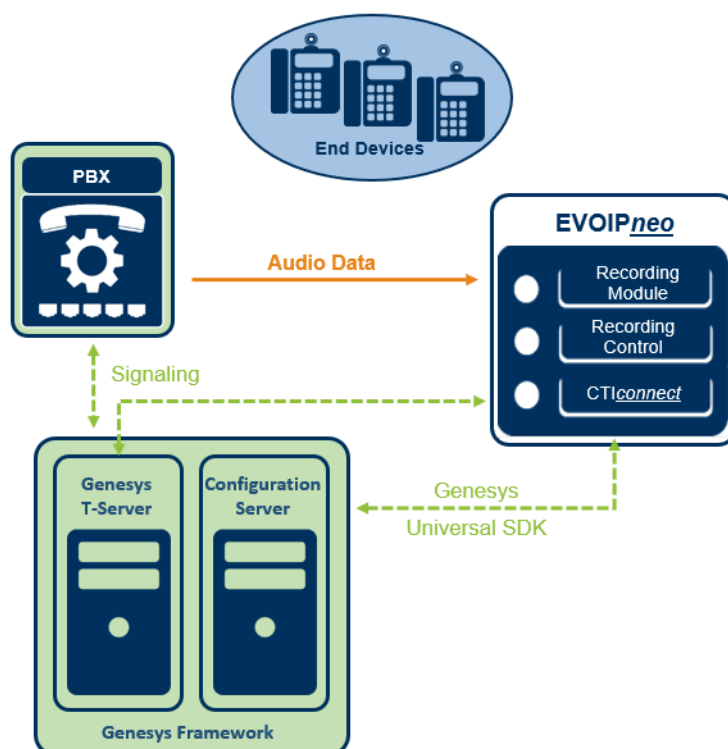


Fig. 301: Overview of the add-on of Genesys T-Server



For further information about the configuration of Genesys T-Servers, see [chapter "Configure Genesys T-Server \(optional\)", p. 395](#).

The Genesys add-on uses either a unique call ID or the extension to unambiguously identify the conversations to be recorded.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

When using a CTIconnect for Genesys T-Server, a Genesys Framework with T-Servers and Genesys Configuration Servers are required.


By default, the Genesys data field *CallID* has been selected as identifier. If a different data field is supposed to be used for internal control, this can be changed in the configuration file *basic.pif.properties*.

Adjust configuration file for Genesys add-on

The data field which is supposed to be used by the Genesys add-on is selected by means of the parameter *pifgenesys.call_identifier*.

1. To adjust the identifier, change to the path
C:\ASC Product Suite\data\CTIConnectForGenesysT.
2. Open the file *basic.pif.properties*.
3. Enter the respective data field for the parameter *pifgenesys.call_identifier*.
4. Save the changes in the file.
5. Restart the recording architecture after completing the change.

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. In the detail view, select the add-on *Genesys T-Server*.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Genesys T-Server

CTIconnect Module

Type CTIconnect passive
Grammar name* standard
Grammar version* 1.15.00
T-server redundancy* HAconnect
Config server redundancy* Warm standby
T-Server application name
T-Server password

Connection Data

Configuration server name
192.168.169.178
Add Edit Delete

Additional Data

Arbitrary assignment
Please select...

Save Cancel

Fig. 302: Configure add-on for Genesys T-Server

Group field CTIconnect Module

- Enter the following parameters:

Parameter	Value/Description
Type	Here, the type of the CTI <u>connect</u> module is displayed.
Grammar name	Select the respective grammar.
Grammar version	Select the respective grammar version.
T-server redundancy	Select the redundancy which is used from the drop-down list. <ul style="list-style-type: none"> No redundancy HAconnect - for High Availability Connection Warm Standby - for a connectable redundancy
Config server redundancy	From the drop-down list, select the redundancy which is used for the Configuration Server of Genesys. <ul style="list-style-type: none"> No redundancy HAconnect - for High Availability Connection Warm Standby - for a connectable redundancy

Parameter	Value/Description
<i>T-Server application name</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the application name that the CTIconnect module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>
<i>T-Server password</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the password that the CTIconnect module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>

Tab. 72: Configure add-on for Genesys T-Server

Group field Connection Data

In this group field, you can enter one or several sets of connection data.

- In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

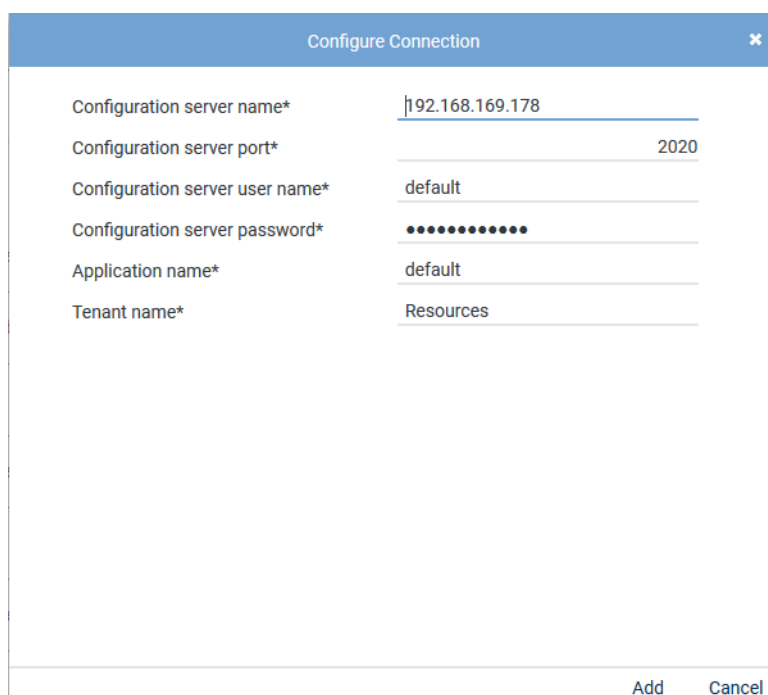


Fig. 303: Configure connection data

- Enter the following parameters:

Parameter	Value/Description
<i>Configuration Server: Name</i>	Enter the IP address or the name of the computer that the Genesys Configuration Server runs on.
<i>Configuration Server: Port</i>	Enter the port of the Genesys Configuration Server.
<i>Configuration Server: User name</i>	Enter the user name to log in to the Genesys Configuration Server.
<i>Configuration Server: Password</i>	Enter the password to log in to the Genesys Configuration Server.

Parameter	Value/Description
<i>Application name</i>	Enter the application name that the recording servers uses to log in to the Genesys Configuration Server. Default is <i>default</i> .
<i>Tenant name</i>	Enter the name of the Genesys tenant(s) that are supposed to request the configuration data. Default is <i>Resources</i> . Several tenants can be added separated by commas.

Tab. 73: Configure connection data

Group field Additional Data

The following additional data is delivered by default in the protocol when using Genesys T-Server:

- *CallID*
- *ANI*
- *CallUuid*
- *DNIS*



Further additional data depend on the configuration of the Genesys T-Servers. Check the list *AttributeUserData* in the trace files to find out which further additional data have been delivered by the Genesys T-Servers. Put the addition *UserData* in front of the additional data type when configuring customer-specific additional data, e. g. for *RTargetAgentGroup* you have to configure *UserDataRTargetAgentGroup*.

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

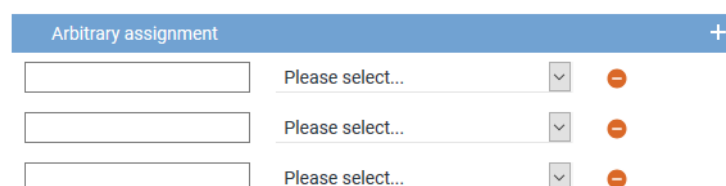
For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.




Arbitrary assignment			+
<input type="text"/>	Please select...	▼	⊖
<input type="text"/>	Please select...	▼	⊖
<input type="text"/>	Please select...	▼	⊖

Fig. 304: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*

- *End time*
 - *Duration*
 - *Calling Party Phone Number*
 - *Called Party Phone Number*
 - *Conversation Direction*
2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.




To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.

Configure miscellaneous settings

1. Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Miscellaneous Settings* appears.

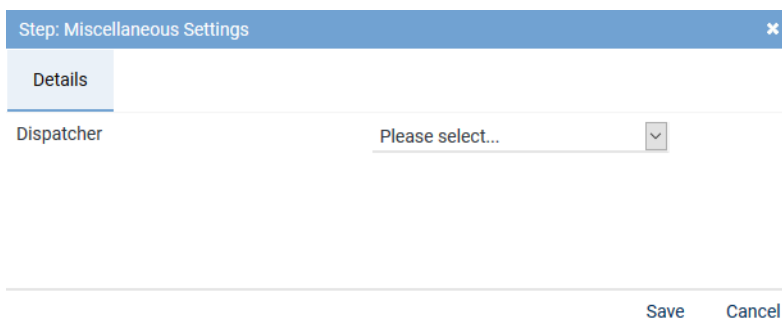


Fig. 305: Configure miscellaneous settings

2. Enter the following parameter:


Parameters	Description
<i>Dispatcher</i>	From the drop-down list, select the previously created additional data field that the participant information is supposed to be connected with.





Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

Activate integration

The integration can only be activated after the configuration is complete.

If not all configuration steps have been carried out completely, the icon  (*Incomplete*) will appear in the main view, in the line of the created integration, in the column *Status*.

If the configuration has been carried out completely, the icon  (*Complete*) will appear in the line of the respective step, in the column *Configuration*.

If all settings are complete, the icon  (*OK*) will appear in the main view, in the line of the created integration, in the column *Status*.












SIPREC		SIP active		
Step		Configuration		
Configure recording architecture				
Global recording settings				
Configure recording servers				
Configure add-on				
Configure miscellaneous settings				

Fig. 306: Activate integration

1. Mark the integration in the main view, so that the icon  (*Activate*) becomes active in the toolbar.
2. To activate the integration, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.






+ ×   Integration ▾ General			
Name ▾	Type ▾	Active ▾	Status ▾
 SIPREC	SIP active		

Fig. 307: Activated integration



If you use several PBXs, you can create and activate several integrations with the same recording architecture.



If you take advantage of the grace period and there is no valid license file in the system after its expiration, all integrations are deactivated. After uploading a valid license file, you have to activate the integrations again.





Upon activating the standard configuration, a bulk recording will start.

To restrict the recording to particular end devices, the tenant can configure the Recording Planner in the System Configuration accordingly.

Deactivate/Delete integration

To be able to delete an integration, it has to be deactivated.

1. To deactivate the integration, click on the icon  (*Deactivate*) in the toolbar.

- ⇒ In the column *Active*, the icon  (*Inactive*) appears.
- ⇒ The icon  (*Delete*) becomes active in the toolbar.





+ × ⏮ ⏭ Integration ▾ General			
Name ↕	Type ↕	Active ↕	Status ↕
 SIPREC	SIP active		

Fig. 308: Deactivate integration

2. Click on the icon  (*Delete*) and confirm the security prompt to delete the integration.

7.1.2.5 Configure recording solution Multi-Server Failover

7.1.2.5.1 Create recording architecture

Start the configuration in the Recording Architectures module because an activated recording architecture is required for further configuration.

The recording servers, recording types, and the integration types are assigned in the Recording Architectures module.

1. Select the menu item *Setup > Recording Architectures* in the navigation bar.
 - ⇒ The following window appears:













 System Configuration Tenants Employees Roles Licensing Setup ▾ Servers Recording Architectures PHONEapp PBX Phones TDM Hardware ASC Powered by ASC Technologies AG v6.0.0-0.0	<div>      General ▾ </div>			
	Name ↕	Type ↕	Active ↕	Standby active ↕
No records found				
Rows per page 50 ▾ 0 - 0 of 0 < << >> >				


Fig. 309: Recording architectures - main view

Name	Name of the recording architecture
Type	Type of the recording architecture
Active	Shows whether the recording architecture has been activated and is ready to be used for the recording.  = Recording architecture is active and ready to be used for recording. It can be deactivated by clicking on the icon  (<i>Deactivate</i>) in the toolbar.  = Recording architecture is not active. It can be activated by clicking on the icon  (<i>Activate</i>) in the toolbar.
Standby Active	Shows whether the standby server is active for one or several recording components in the recording architecture.  = At least 1 standby server is active.  = No standby server is active or no standby server has been defined.

<i>Creation Date</i>	Date on which the recording architecture was installed.
<i>Updated</i>	Date on which the settings of the recording architecture were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Add integration type

- Click on the icon  (*Add*) in the toolbar of the list *Integration Type*.
⇒ The window *Integration Type* appears.

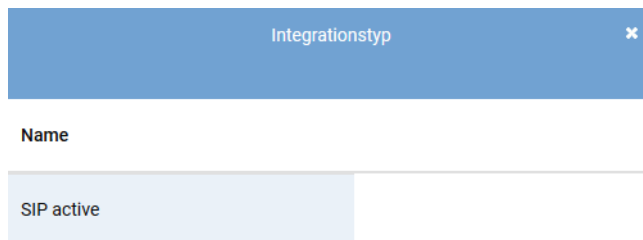



Fig. 310: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.




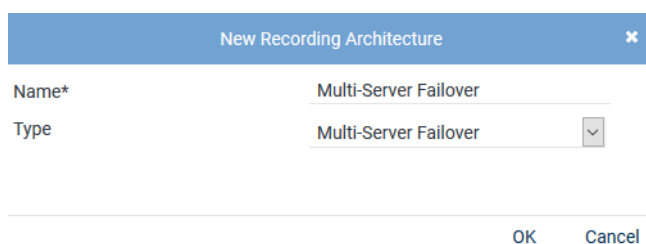
Any number of integration types can be assigned to a recording architecture.

- Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Create recording architecture Multi-Server Failover

If there are several recording servers which are supposed to take over the tasks of another recording server in case of an error, you have to create a recording architecture of the type *Multi-Server Failover*.

- To create a new recording architecture, click on the icon  (*Create*) in the toolbar of the main view.
⇒ The window *New Recording Architecture* appears.



New Recording Architecture

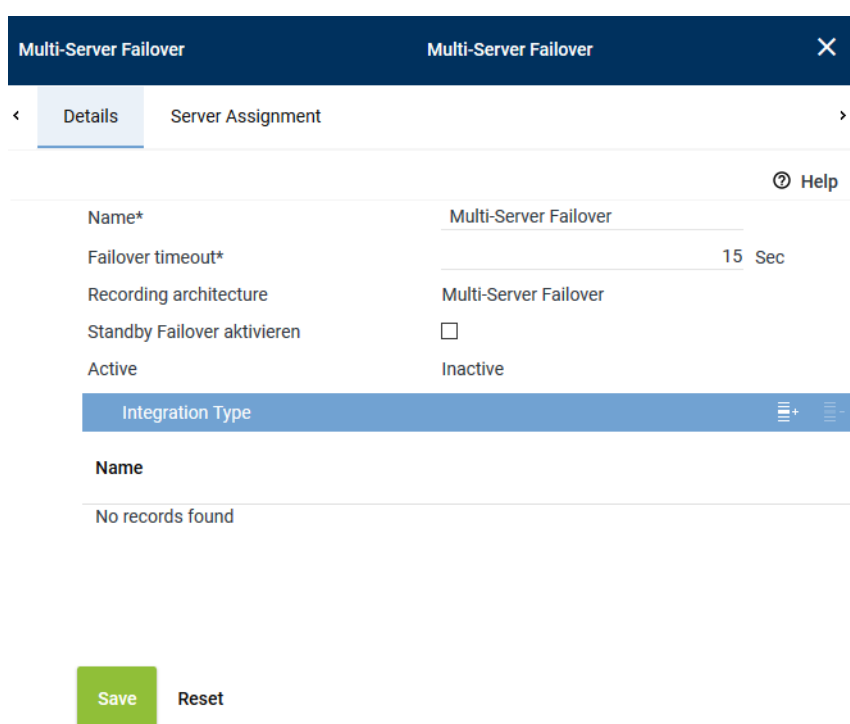
Name* Multi-Server Failover

Type Multi-Server Failover

OK Cancel

Fig. 311: Create recording architecture - Multi-Server Failover

2. In the entry field *Name*, enter a descriptive name for the recording architecture.
3. From the drop-down list *Type*, select the recording architecture type *Multi-Server Failover*. **NOTICE!** The drop-down list only displays the supported recording architecture types.
4. Click on the button *OK*.
⇒ Your entries now appear in the detail view.



Multi-Server Failover Multi-Server Failover

< Details Server Assignment >

ⓘ Help

Name* Multi-Server Failover

Failover timeout* 15 Sec

Recording architecture Multi-Server Failover

Standby Failover aktivieren ☐

Active Inactive

Integration Type

Name

No records found

Save Reset

Fig. 312: Recording architecture - tab Details - Multi-Server Failover

As standby components may have been configured for the different active recording servers, a failover timeout may be configured in this recording architecture. For further information about the configuration of failover architectures, see [chapter "Standby management for failover architectures", p. 390](#).

<i>Failover timeout</i>	Enter a timeout of a minimum of 15 seconds after which the failover process is supposed to start. Depending on the system architecture it may make sense to configure a longer timeout period. The timeout defines the elapse time until the failover process starts. If the status returns to <i>OK</i> within this time, then the failover process is not triggered. NOTICE! Check these parameters after an update and set the timeout to 15 seconds, if required.
<i>Activate standby failover</i>	Activate this option if you would like to ensure that the system switches back to the primary server in case of an error of the standby server.


NOTICE! There is no check whether the primary database is working properly before switching back. As a result it is possible that both databases are in an undefined state.

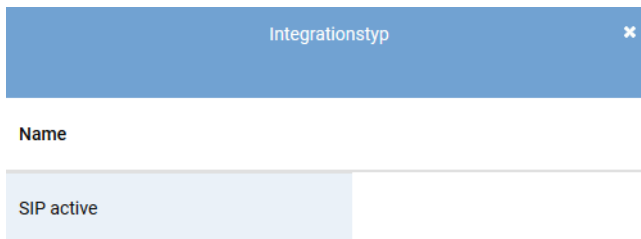
NOTICE! After switching back to the original primary server from the standby server, this option is deactivated. If the switching process is supposed to be carried out automatically in the event of a new error, you must activate this option again.

Active

Shows the status of the recording architecture.

Add integration type

- Click on the icon  (Add) in the toolbar of the list *Integration Type*.
⇒ The window *Integration Type* appears.



Hinzufügen

Abbrechen

Fig. 313: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.



Any number of integration types can be assigned to a recording architecture.

- Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Assign servers for Multi-Server Failover

- Click on the tab *Server Assignment* to assign the recording components to the corresponding recording servers for the *Multi-Server Failover* recording architecture.

Group field Recording Control and CTIconnect

In this group field, you can configure recording control. You can configure two different servers for this purpose or select the same server.

Multi-Server Failover
Multi-Server Failover
X

Details*
Server Assignment*

Recording Control and CTIconnect

Recording Control*	RC-01	+	-
Used in activated architecture	No		
CTIconnect*	CTI-01	+	-
Used in activated architecture	No		

Standby Server

Recording Control standby*	RC-02	+	-
Used in activated architecture	No		
CTIconnect standby*	CTI-02	+	-
Used in activated architecture	No		

Recording Server

Recording Server
+

Server ↕	Standby ↕
REC-01	REC-02

Save
Reset

Fig. 314: Recording Architecture - tab Server Assignment


- Click on the button **+** behind the entry field *Recording control*.
⇒ The window *Servers* appears.

Servers		
Name ↕	IP Address ↕	Path ↕
RC-02	192.168.173.176	C:\
REC-01	192.168.173.171	C:\
REC-04	192.168.173.174	C:\
REC-02	192.168.173.172	C:\
RC-01	192.168.173.175	C:\
CTI-01	192.168.173.177	C:\
CTI-02	192.168.173.178	C:\

Rows per page 20 1 - 8 of 8

Add Cancel

Fig. 315: Recording Architecture - assign server - example



2. Select the server for the *recording control module*.
3. Click on the button *Add*.
⇒ The name of the server now appears in the detail view.
4. To delete an assignment, click on the button .




A server can be configured in several recording architectures, but you cannot activate several recording architectures with the same server at the same time. If you would like to activate several recording architectures at the same time, you have to use different servers to do so.

5. Repeat the steps and select the server for the *CTIconnect module* in the entry field *CTIconnect*.

Group field Standby Server

1. Click on the button  behind the entry field *Recording control*.
2. Select the standby server for the *recording control module*.
3. Click on the button *Add*.
⇒ The name of the server now appears in the detail view.
4. Click on the button  behind the entry field *CTIconnect*.
5. Select the standby server for the *CTIconnect module*.
6. Click on the button *Add*.
⇒ The name of the server now appears in the detail view.

Group field Recording Server

1. In the table headline *Recording Server*, click on the icon .
- ⇒ The following window appears:

Multi-Server Parallel Recording

Multi-Server Parallel Recording

×

<

Details*

Device Group 1*

Device Group 2*

>

Recording Control and CTIconnect

▼

Recording Control device group 1*	RC-01	+	-
Used in activated architecture	No		
CTIconnect device group 1*	CTI-01	+	-
Used in activated architecture	No		

Recording Server

▼

<

Recording Server

+

✎



⋮

Server ↕	Standby ↕
REC-01	REC-02

Save



Reset

Fig. 316: Add Recording Server




- As described in the previous steps, go to the entry field *Primary server* and click on the icon  to select the primary server on which the recording is supposed to run.
- In the entry field *Standby server*, click on the icon  to select the standby server which is supposed to take over recording in case of an error.
- Select the recording type you would like to use for these servers by activating the check box.



You can activate several recording types if the integration has been designed for this and if you have installed the respective licenses.



- Click on the button *OK* to close the window.
 - ⇒ The name of the server now appears in the detail view.
- To edit the assignment subsequently, click on the icon . To delete an assignment, click on the icon .
- If you would like to add further recording servers, repeat the steps described above.

Activate recording architecture

- Once all servers have been assigned, click on the button *Save*.
- Select the recording architecture in the main view so that the icon  (*Activate*) in the toolbar becomes active.
- To activate the recording architecture, click on the icon  (*Activate*).
 - ⇒ In the column *Active*, the icon  (*Active*) appears.

Recording Architecture ▾ General ▾			
Name ▾	Type ▾	Active ▾	Standby active ▾
Multi-Server Failover	Multi-Server Failover	✓	✗

Fig. 317: Recording architecture - activate recording architecture

- To deactivate the recording architecture, if required, click on the icon  (Deactivate).
⇒ In the column *Active*, the icon  (*Inactive*) appears.



The recording architecture must have been activated so that the integration can be configured.



For updates, the recording architecture is stopped and deactivated. Once the update has been completed, check that the recording architecture has been activated again.



For all recording architectures with failover components, you can manage to the standby components via standby management. This holds true for Multi-Server Recording and Multi-Server Parallel Recording systems if redundancy options are available for these systems. See [chapter "Standby management for failover architectures"](#), p. 390.



If you install an extension for the integration subsequently, you must deactivate the recording architecture and activate it again after having installed the license.

7.1.2.5.2 Configure servers

Every server in your network that the *neo* software has been installed on is automatically identified as a server of the recording system and displayed in the main view of the Servers module. In the Servers module, you can configure the usage of the servers in your recording system.

- Select the menu item *Setup > Servers* in the navigation bar.
⇒ The following window appears:

ASC System Configuration × Servers ▾ General ▾			
Name ▾	IP Address ▾	Path ▾	
REC-01	192.168.173.171	C:\	
REC-02	192.168.173.172	C:\	
REC-03	192.168.173.173	C:\	
REC-04	192.168.173.174	C:\	
RC-01	192.168.173.175	C:\	
<div> <div>Rows per page 50 ▾</div> <div>1 - 8 of 8</div> </div>			

Fig. 318: Servers - main view

Depending on the configuration of the columns, the following information is displayed in the main view:

Name Shows the name of the server.

IP Address Shows the [IP](#) address of the server.

<i>Path</i>	Shows the path of the server.
<i>Creation Date</i>	Date on which the server was installed.
<i>Updated</i>	Date on which the settings of the server were updated for the last time.



NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Servers module

The toolbar offers the following functions.



Fig. 319: Toolbar Servers module

	<i>Refresh</i>	Refreshes the main view.
	<i>Delete</i>	Deletes the selected server configuration. This function is meant to delete the server configuration if the hardware of a server has been removed and there is no connection to the <i>neo</i> system.
<i>Servers</i>	<i>Administrate Server Locations</i>	Opens a window in which you can create and administrate locations of the servers, see chapter "Administrate server locations" , p. 267.
	<i>Administrate NTP Server</i>	Opens a window in which you can administrate the servers for the time synchronization, see chapter "Administrate NTP server" , p. 284.
	<i>Manage Synchronization Configurations</i>	Opens a window in which you can manage the synchronization configurations.
<i>General</i>	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
	<i>Reset Search</i>	Resets all search filters so that all sets of data are displayed in the main view again.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Administrate server locations

You can create and manage a list of server locations. In the tab *Details*, you can assign locations to the servers.

Add server locations

- Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.

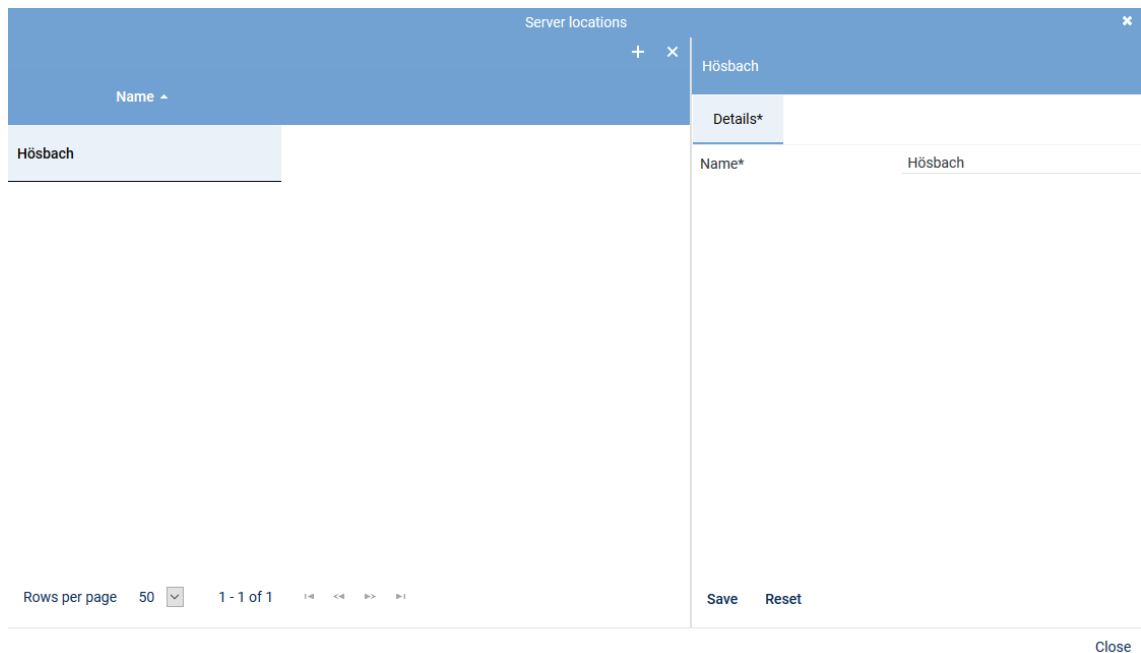



Fig. 320: Add server locations

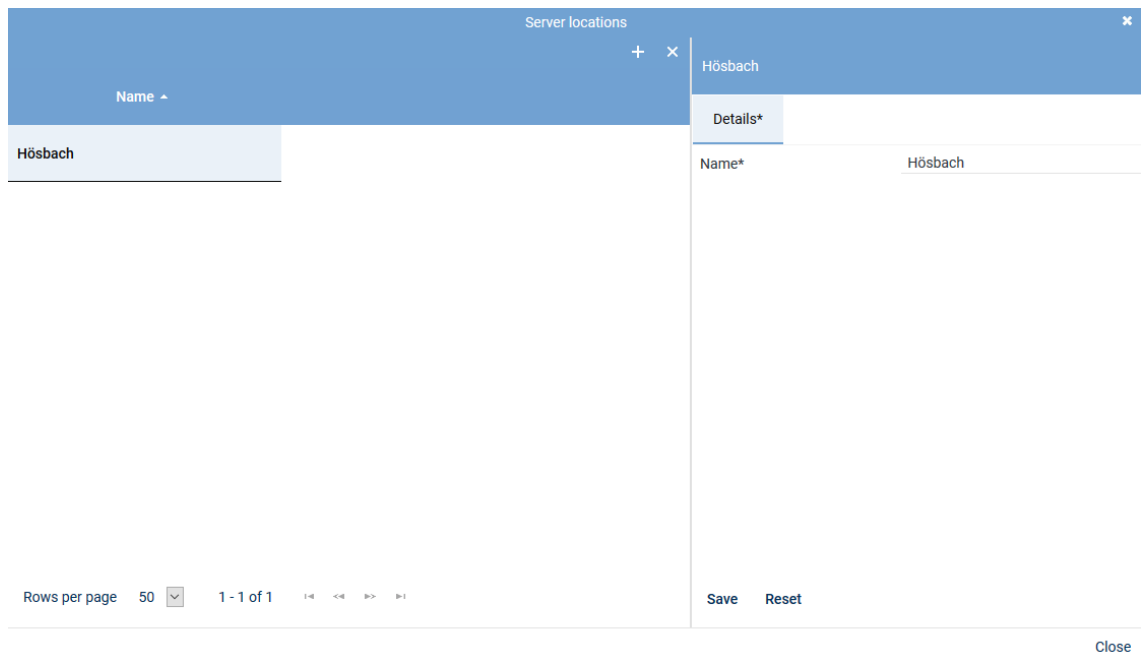
- Click on the icon  (*Create*) in the toolbar of the window *Server Locations*.
- Enter the name of the location on the right side in the tab *Details*.
- To save the entry, click on the button *Save*.
To discard the entry, click on the button *Reset*.
- To add further locations, repeat the last 3 steps.
- To close the window, click on the button *Close*.

Delete server location



A server location can only be deleted when it has not been assigned. To be able to delete a server location, you must first delete possible assignments.

- Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.
- Select the location you would like to delete.



Server locations

Name
Hörsbach

Details*


Name* Hörsbach

Rows per page 50 1 - 1 of 1

Save Reset

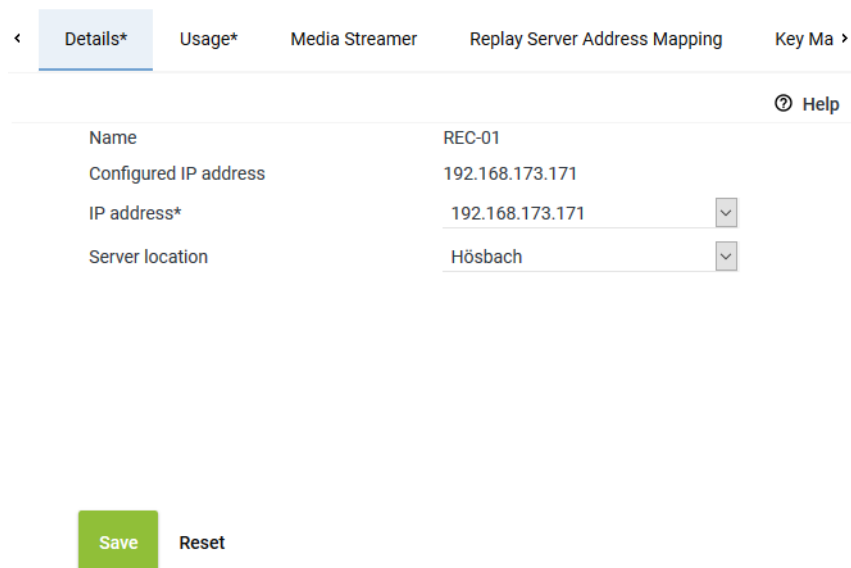
Close

Fig. 321: Delete server location

- Click on the icon  (*Delete*) in the toolbar of the window.
- To delete further locations, repeat the last 2 steps.
- To close the window, click on the button *Close*.

Tab Details

- To configure the server, select the entry of the corresponding server in the main view.
 - ⇒ In the detail view, the tab *Details* appears.
 - The information *Name* and *Configured IP address* has already been entered during the installation and is displayed for your information only.



Details* Usage* Media Streamer Replay Server Address Mapping Key Ma >

Help

Name	REC-01
Configured IP address	192.168.173.171
IP address*	192.168.173.171
Server location	Hörsbach

Save Reset

Fig. 322: Servers - tab Details

- From the drop-down list, select the IP address which is supposed to be used as default address of the server in the system.
- Select the *Server location* in the drop-down list. The drop-down list displays all locations which have been created in the location management.

- Click on the button **Save** if the entries are correct.

Tab Usage

- Click on the tab **Usage** to configure the purpose of usage.



Since a server can be used for several recording solutions, all purposes of use are listed. Note that some purposes of use do not apply for some recording solutions. As an example: You cannot use audio analysis or replay via phone in a chat recording.

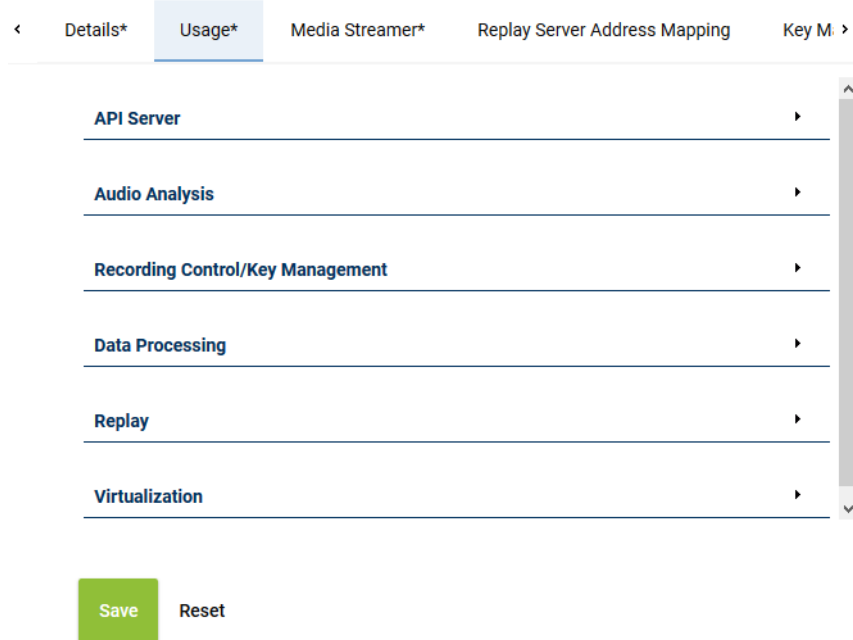


Fig. 323: Servers - tab Usage

Group field API Server

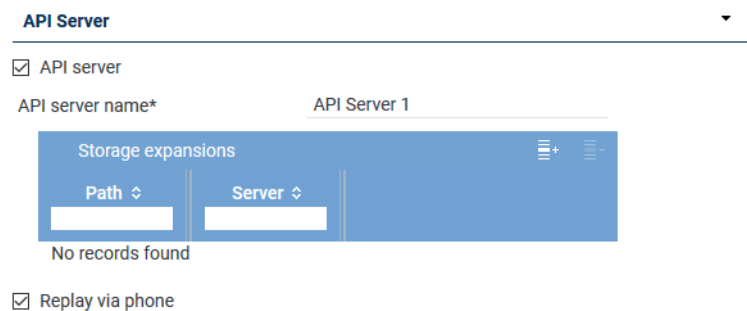




Fig. 324: Group field API Server


The API server is a service in the neo software. It contains the interface for the client applications. Once the service has been started, the client applications can communicate with the neo system via this interface by means of defined commands.

The API server is responsible for replay via the web browser, too. The API server has to be started before the replay server can be activated and the API server assigned for replay via the web applications.

Parameter	Value/Description
API server	Tick the check box to start the API server. <input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>API server</i> .

Parameter	Value/Description
	<p><input type="checkbox"/> = Function has not been activated.</p> <p>In order to be able to reach the API server from a public network and with configured port forwarding, too, you have to adjust the settings in the tab <i>Replay Server Address Mapping</i>, see chapter "Tab Replay Server Address Mapping", p. 280.</p>
<i>API server name</i>	<p>Enter the name which is supposed to denote the server in the system. The displayed name can be selected arbitrarily and is a kind of pseudonym.</p> <p>The displayed name is meant to make it easier for users to select a server as different API servers may be used across the system by different tenants. When selecting the API server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p>
<i>List Storage expansions</i>	<p>Here, you can add storage expansions for replay. If a recording which is supposed to be replayed cannot be found on the server, the search is continued on the storage expansions which have been entered here. That way, even recordings can be replayed which have not been transferred to the server.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> • By clicking on the icon  (<i>Add</i>), you can add the storage expansions, see chapter "Add storage expansion for replay", p. 272. • By clicking on the icon  (<i>Remove</i>), you can remove the storage expansions from the list. <p>If you use several recording servers in your system for which storage expansions have been configured, you can add any storage expansion of any recording server on every API server of the system.</p>
<i>Replay via phone</i>	<p>Activate this function if you would like to use the functions <i>Replay via phone</i> or <i>Last Call Repeat</i>.</p> <p><input checked="" type="checkbox"/> = Function has been activated.</p> <p><input type="checkbox"/> = Function has not been activated.</p> <p>NOTICE! The function <i>Replay via phone</i> has been implemented in the following <i>neo</i> components:</p> <ul style="list-style-type: none"> • Application POWERplay Pro • Application POWERplay Instant • Replay module <p>In order to enable a client to use the functionality <i>Replay via phone</i>, you have to assign this client an identifier either in the Employees module or in the Phones module which allows the system to clearly identify the phone.</p> <p>NOTICE! In the tab <i>Media Streamer</i>, you have to assign this function to a PBX, see chapter "Tab Media Streamer", p. 279. To be able to do so, at least 1 PBX must have been configured in the system.</p>

Add storage expansion for replay

1. Click on the icon  (Add) in the toolbar of the list.
2. Select 1 or several storage expansions.
If you would like to select several storage expansions or revoke a selection, click on the respective line while holding the [Ctrl] key down.

Storage Expansion for Replay				
Device Type	Name	Path	Free Disk Space	Server
NAS	NAS 2	NAS 2	<div></div>	REC-02

Rows per page 20 1 - 1 of 1

Add Cancel

Fig. 325: Select storage expansion

3. To apply the selected storage expansions, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Audio Analysis

Audio Analysis


☒ Audio analysis (SAES mode)

Stream audio data from* API Server 1 + -

☐ Emotion detection

Stream audio data from* + -

Fig. 326: Group field Audio Analysis

Parameters	Value/Description
<i>Audio analysis</i>	<p>Activate this check box to use the server for audio analysis. The audio data is then streamed for audio analysis from the configured server to this server.</p> <ul style="list-style-type: none"> Stream audio data from From the list of available servers, select the server from which the audio data is supposed to be streamed for audio analysis via the button .
<i>Emotion detection</i>	<p>Activate this check box to activate emotion detection for the audio analysis.</p> <p><input checked="" type="checkbox"/> = Function has been activated. Tenants can use the emotion detection function.</p>

Parameters	Value/Description
	<input type="checkbox"/> = Function has not been activated.

Tab. 74: Configure audio analysis

Group field Recording Control/Key Management

Recording Control/Key Management ▼

☒ Recording control/Monitoring

Recording architecture Please choose... ▼

☒ neo key management

Fig. 327: Group field Recording Control/Key Management

Parameters	Value/Description
<i>Recording control/Monitoring</i>	<p>Activate the check box if you would like to use <i>CLIENT</i><u>command</u> or an API recording control or if you would like to use <i>Monitoring</i>. This feature is only available if a recording architecture has been configured and activated.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the respective recording architecture you would like to use for the control.
- <i>neo key management</i>	<p>The function allows customer-specific encryption of the recordings. To be able to configure the key management, you have to activate the check box <i>Key management</i>.</p> <p>This function can only be activated if the license <i>ASC_KEY_MANAGEMENT</i> is available.</p> <p>For further information about the configuration of the key management refer to the administration manual <i>Configuration of servers and recording architectures</i> and to the installation manual <i>Installation Dongle Manager</i>.</p>

Tab. 75: Configure Recording Control/Key Management

Group field Data Processing

Data Processing ▼

☒ Data storage

☒ Transfer data for replay

Target Server

Name	IP Address ↕
No records found	

☒ Transfer data for data storage

Target Server

Name	IP Address ↕
No records found	

Activate period of time ☒

from 11:59:36 ↕

to 11:59:36 ↕

Receives data from

Name	Only Replay
No records found	



☒ Archiving





☒ Export

☒ Import

Recording architecture Please choose... ▼


Fig. 328: Group field Data Processing


Parameter	Value/Description
<i>Data storage</i>	Activate the check box to allow the modification of the additional functions of data processing.
<i>Transfer data for replay</i>	<p>Activate the check box if you would like to transfer data only for replay to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for replay. The data is not stored on the target server but deposited in a cache temporarily in order to be replayed.</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the target server, see chapter "Add target server to a list", p. 275. By clicking on the icon  (<i>Remove</i>), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which an API server and a replay server have been configured.</p>
<i>Transfer data for data storage</i>	<p>Activate the check box if you would like to transfer data for storage to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for data storage purposes. In the drop-down list, all servers are displayed on which the function <i>Data Storage</i> has been activated. The data is copied to the target server and stored there.</p>

Parameter	Value/Description
	<ul style="list-style-type: none"> By clicking on the icon  (Add), you can add the target server, see chapter "Add target server to a list", p. 275. By clicking on the icon  (Remove), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which the function <i>Data Storage</i> has been activated.</p> <p>If the function has been activated, you can activate the transfer for a certain period of time.</p> <ul style="list-style-type: none"> Activate period of time <input checked="" type="checkbox"/> = Function has been activated. The fields for entering the time become active. Select the time via the rotating field for the period from – to. Active period of time <input type="checkbox"/> = Function has not been activated. <p>NOTICE! In distributed systems with slow network connections, the storage interval for the data transfer can be adjusted. The storage interval for the data transfer has to be configured by an ASC service technician or by an authorized partner company.</p>
<i>Receives data from</i>	<p>This table contains those servers which transfer data to this server.</p> <p>In the column <i>Name</i>, the name of the server appears from which data has been transferred.</p> <p>In the column <i>Only Replay</i>, the purpose of the transfer is displayed:</p> <p> = Data is transferred only for replay.</p> <p> = Data is transferred for data storage.</p>
<i>Archiving</i>	Activate the check box <i>Archiving</i> if you would like to use the server for archiving purposes.
<i>Export</i>	Activate the check box <i>Export</i> to allow the export from this server.
<i>Import</i>	<p>Activate the check box <i>Import</i> so that the imported data can be stored on this server.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the recording architecture that fulfills this function. In the drop-down list, all recording architectures are displayed which enable this function as well. <p>NOTICE! If you would like to use a server for the import function on which no recording is supposed to take place, you can configure an architecture exclusively for the import.</p>

Tab. 76: Configure data storage

Add target server to a list

- In the toolbar of the list *Target Server*, click on the icon  (Add).
- Select the server from the list to which you would like to transfer the data.
If you would like to select several servers or revoke a selection, click on the respective line while holding the [Ctrl] key down.



Target Server

Name ↕	IP Address ↕
RC-02	192.168.173.176
REC-04	192.168.173.174
RC-01	192.168.173.175
REC-02	192.168.173.172
CTI-01	192.168.173.177
REC-03	192.168.173.173

Rows per page 20 1 - 6 of 6

Add Cancel

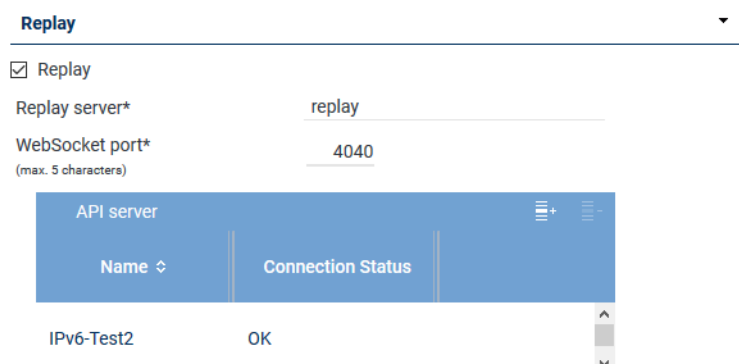
Fig. 329: Select server



Only those servers are available on which the function *Data storage* has been activated.

- To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Replay



Replay

☒ Replay



Replay server* replay

WebSocket port* 4040
(max. 5 characters)

API server	
Name ↕	Connection Status
IPv6-Test2	OK

Fig. 330: Group field Replay

Parameter	Value/Description
<i>Replay</i>	<p>A replay server can replay recordings via the integrated <i>Replay Feature</i>. Only data which has either been recorded directly on this server or which has been transferred to this server for data storage or only for replay purposes can be replayed. The client computers of the system can connect to a replay server for replay purposes.</p> <p>Activate the check box <i>Replay</i> to be able to use the replay function of the players and the phones.</p> <p><input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>Replay server</i>.</p> <p><input type="checkbox"/> = Function has not been activated.</p>

Parameter	Value/Description
<i>Replay server</i>	<p>If the function has been activated, you can enter a displayed name which is supposed to denote the server as the replay server in the system in the entry field <i>Replay server</i>. The displayed name can be selected arbitrarily and is a kind of pseudonym. As the replay server and the API server must not be identical, you can select different pseudonyms.</p> <p>The displayed name is meant to make it easier for users to select a server as different replay servers may be used across the system by different tenants. When selecting the replay server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p> <p>In order to be able to reach the server activated for replay from a public network and with configured port forwarding, you have to set the configuration in the tab <i>Replay Server Address Mapping</i>. For further details about the configuration refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>
<i>WebSocket port (maximum of 5 characters)</i>	Enter the port via which the data to be replayed in <i>POWERplay</i> Web are supposed to be transmitted.
<i>List API server</i>	<p>Here, you can add API servers that the replay server may use. If a recording which is supposed to be replayed cannot be found on a server, the search is continued on the API servers which have been entered here.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the API server, see chapter "Add API server to a list", p. 277. By clicking on the icon  (<i>Remove</i>), you can remove selected API servers from the list.

Tab. 77: Configure replay

Search and replay functions



To be able to use the search and replay functions via [LCR](#) as well as to use replay via phone, you have to create the users with the respective access rights in the application System Configuration in the Employees module. For information about the configuration refer to the administration manual *User management* for tenants.

Add API server to a list

The replay server required the services of an [API](#) server. The configuration must be as follows:


- If the replay server runs on a server with a local [API](#) server, it must not necessarily be assigned as the replay server always addresses the local [API](#) server first.
 - If the replay server runs on a separate server, you must assign at least one [API](#) server that the replay server can address.
 - If several [API](#) servers are available in the network, you can assign further [API](#) servers in addition to the local [API](#) server. The assigned [API](#) servers are addressed in order. For this reason, the local [API](#) server should always be first in the list.
- To assign an [API](#) server, click on the icon  (*Add*) in the toolbar of the list *API Server*.
 - Select the server from the list on which the [API](#) service is running.



Fig. 331: Select server



Only those servers are available on which the [API](#) service has been installed and activated. See [chapter "Group field API Server", p. 270](#).

- To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Virtualization



Fig. 332: Group field Virtualization

Parameter	Value/Description
<i>VM support</i>	<p>Activate the check box <i>VM support</i> to be able to use the licensing for several VM installations.</p> <p>This function can only be activated if the system has been installed in a VMware and no <i>TRUSTED_VIRTUALIZATION</i> license has been imported to the system.</p> <p>When activating the function <i>VM support</i>, you have to configure the respective settings in the tab <i>Keystore/VM Licensing</i>. For further details about the configuration of this function refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>

Tab. 78: Configure virtualization



For the *virtualization* without Internet connection, a dongle is required which contains the system information. The application *Dongle Manager*, required to read the dongle, has to be installed on the server that the dongle has been connected to.

- To save the entries, click on the button *Save* in the detail view.
To reset the entries, click on the button *Reset* in the detail view.

Tab Media Streamer

1. Click on the tab *Media Streamer* in the detail view.

In this tab, you can configure the Media Streamer for the functionalities *Replay via phone* and *Last Call Repeat Facility*.



The tab *Media Streamer* is only active if the function *Replay via phone* has been activated in the tab *Usage*.

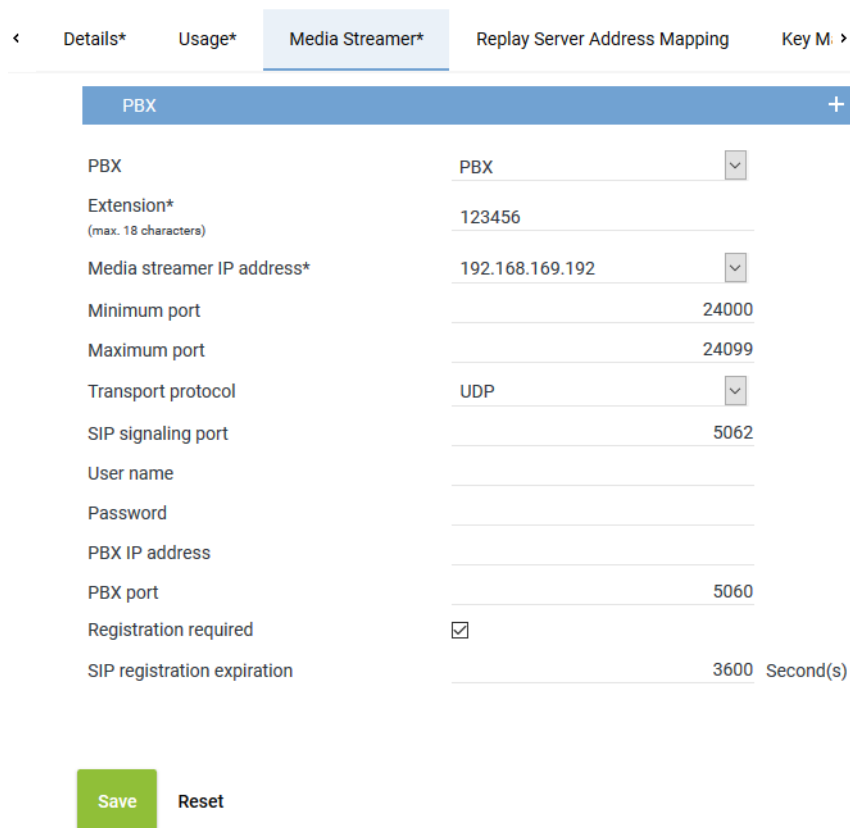


Fig. 333: Servers module - tab Media Streamer

2. Enter the following parameters:

PBX	<p>PBX that the Media Streamer is supposed to be mapped to.</p> <p>Select a PBX from the drop-down list. The drop-down list displays all PBXs which have been created in the system.</p> <p>If no PBX has been created in the system yet, you can create a PBX via the blue bar PBX, see chapter "Create PBX", p. 285.</p>
Extension	<p>Extension which is supposed to be mapped to the Media Streamer. This is a mandatory field; the configuration cannot be saved if this information is missing.</p> <p>If an external analog gateway has been integrated, enter the value 8000.</p>
Media streamer IP address	<p>IP address which is supposed to be used for the exchange of the audio data and for the SIP communication.</p> <p>Select an IP address from the drop-down list. In the drop-down list, all IP addresses of the server are displayed.</p> <p>If an external analog gateway has been integrated, select the IP address 169.254.254.100 in the drop-down list.</p>

<i>Minimum port</i>	Enter the minimum port which is supposed to be used for the audio data exchange.
<i>Maximum port</i>	Enter the maximum port which is supposed to be used for the audio data exchange. A port range of 100 (e. g. 24000-24099) is sufficient for 50 licenses. The port range should be twice as wide as the number of available licenses.
<i>Transport protocol</i>	Select the transport protocol type you would like to use for the SIP communication from the drop-down list. TCP = unencrypted UDP = unencrypted TLS = encrypted If an external analog gateway has been integrated, select UDP in the drop-down list.
<i>SIP signaling port</i>	Enter the port for the SIP communication. Port for data exchange: 5062
<i>User name</i>	Enter the user name for the authentication on the SIP server.
<i>Password</i>	Enter the password for the authentication on the SIP server.
<i>PBX IP address</i>	Enter the IP address of the SIP registrar of the PBX . If an external analog gateway has been integrated, enter the IP address 169.254.254.101.
<i>PBX port</i>	Enter the port of the SIP registrar of the PBX . If an external analog gateway has been integrated, enter the value 5060.
<i>Registration required</i>	Select whether the SIP extension has to be registered with the SIP registrar of the PBX . <input checked="" type="checkbox"/> = SIP extension has to be registered. <input type="checkbox"/> = SIP extension does not have to be registered. If an external analog gateway has been integrated, deactivate the check box <i>Registration required</i> .
<i>SIP registration expiration</i>	Enter the time interval after which the registration has to be repeated.

Tab Replay Server Address Mapping

1. Click on the tab *Replay Server Address Mapping* in the detail view.

In this tab, you can configure the replay server address mapping. Servers which have been activated for replay require this address mapping so that they can be reached from a public network and with configured port forwarding.



The tab *Replay Server Address Mapping* is only active if the function *Replay* has been enabled in the tab *Usage*.

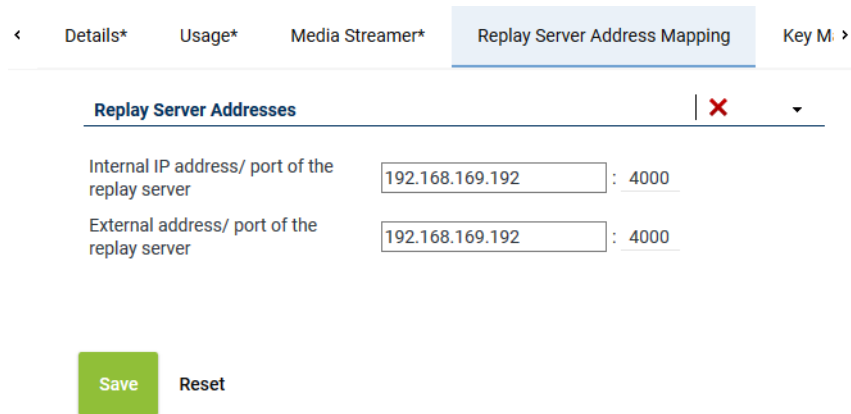


Fig. 334: Servers Module - tab Replay Server Address Mapping

Group field Replay Server Addresses

1. Enter the following parameters:

<i>Internal IP address/ port of the replay server</i>	Enter the destination IP address and the port of the replay server at which the Replay module can be reached internally.
<i>External address / Port of the replay server</i>	Enter the URL or the IP address and the port at which the Replay module can be reached via the browser from outside. When entering the external address consider whether the SSL certificate has been created for an IP address or for a DNS address. In the latter case, it is imperative to enter the DNS name! Otherwise the certificate check in the replay applications will fail.

If you would like to remove the addresses, click on the icon  in the title bar of the group field.



If address mapping has been configured, the Replay module receives the configured address and the configured port.

If address mapping has not been configured, the Replay module receives the IP address and the default port **4040** as entered in the tab *Details*.



To allow the users of the respective tenant to access the replay server via the browser, an internal address and/or an external IP address or a DNS name must be configured in the *Tenants* module.



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Key Management

1. Click on the tab *Key Management* in the detail view.

In this tab, you can configure the settings for the *neo* key management. This tab is only active if you have installed the corresponding license and enabled the function *neo Key Management* in the tab *Usage*.

< Usage* Media Streamer* Replay Server Address Mapping
Key Management >

Key creation interval

☒ All

365 Day(s)

☐ Create key manually

Delay usage

until

0 Day(s)

0 Hour(s)

☐ Key expiration date

after

0 Day(s)

☒ In case of an error switch to simple key management automatically

Save

Reset

Fig. 335: Servers module - tab Key Management

<i>Key creation interval</i>	<p>Select whether a key is supposed to be generated automatically or manually. Select one of the following options:</p> <ul style="list-style-type: none"> • <i>All</i> Select the intervals in which a new key is supposed to be generated automatically. Possible time interval: 1 to 365 days Default value: 365 days • <i>Create key manually</i> Select that a key is supposed to be generated manually. <p>Old keys which are no longer used for encryption become inactive for the time being. They remain in the database, though, since they are still required for the decryption of old recordings.</p>
<i>Delay usage</i>	<p>If required, enter a time interval during which the new key is not supposed to be used yet after having been created. Not until after this time interval has passed can the key be actually used for encryption.</p> <p>Possible time interval: 0 to 14 days Default value: 0 days (new keys are immediately used for encryption)</p> <p>A delay guarantees that the key has been captured by a database backup before it will actually be used.</p>
<i>Key expiration date</i>	<p>Select whether an inactive key is supposed to become invalid after the expiration of the time interval defined here.</p> <p><input type="checkbox"/> = Key never becomes invalid.</p> <p><input checked="" type="checkbox"/> = Key becomes invalid. In the entry field, enter the time interval after which the key loses its validity. Once this time interval has passed, the key cannot be used anymore. If recording data must be deleted after a certain period of time, this option offers additional security on top of the configured date of deletion. This especially applies to the case when recording data has been transferred manually to a storage location where the deletion mechanism of the system cannot find it.</p>

CAUTION! All recordings which have been encrypted with a key which has meanwhile become invalid are useless and cannot be replayed anymore.

In case of an error ... automatically

Select whether simple key management is supposed to be used if the neo key management does not work (e. g. if the service *DongleMan* fails). If you have not activated the option, no recording takes place as long as the neo key management has been activated but does not work.

☒ = In case of an error, simple key management is used as replacement.

☐ = In case of an error, no recording takes place as long as the neo key management has been activated. In this case, disable key management in the tab *Usage*.



On top of the settings in this tab, each tenant who would like to use the neo key management has to define individual settings in his own user management (Tenants module).



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Keystore/Virtualization

1. Click on the tab *Keystore/Virtualization* in the detail view.

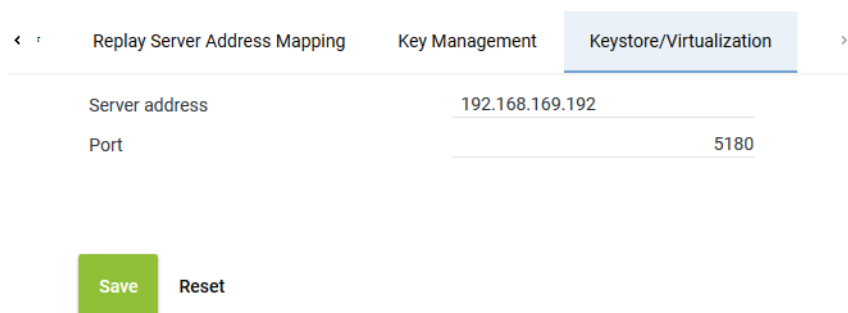
In this tab, you can configure the connection data for the service *DongleMan* for the neo key management and for the authentication of the VM.



If your system has been installed in a virtual environment, the application Dongle Manager must have been installed and started locally outside the VM so that the access to the dongle works. The dongle must have been connected to the server on which the VM has been installed.



For detailed information about neo key management refer to the administration manual *Encryption of recordings*.



	Replay Server Address Mapping	Key Management	Keystore/Virtualization
Server address			192.168.169.192
Port			5180

Save Reset

Fig. 336: Servers module - tab Keystore/Virtualization

Server address

Enter the address of the server for this connection.

- If you use the neo key management as well as the virtualization:
IP address of the server that the service *DongleMan* has been installed on.
- If you use only virtualization, you can authenticate the VM via the ASC License Management System, too. In this case, enter the following address:
licensing.asc.de

	<ul style="list-style-type: none"> If you use only the ASC key management: IP address of the server with the master password database
Port	Enter the port for the connection. Default value: 5180

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

Administrate NTP server

The recording system works with an **NTP**-based time synchronization. The function *Administrate NTP server* allows defining several **NTP** servers. Every server in the system identifies all **NTP** servers configured within the system and can use any **NTP** server for time synchronization. That way, every server can connect immediately to another **NTP** server if its current **NTP** server connection breaks down.

Add NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.

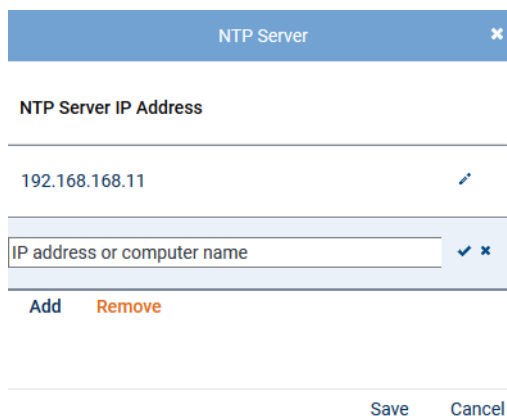





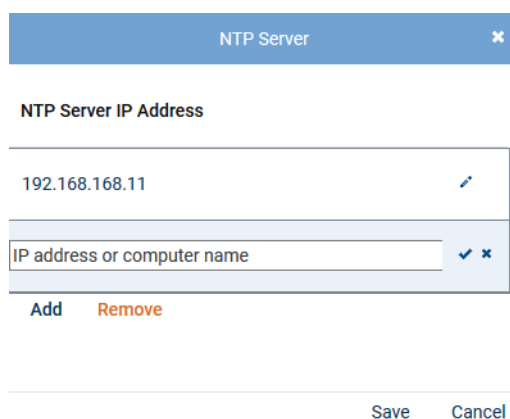
Fig. 337: Add NTP server

The list displays all NTP servers that have been configured during the installation.

- To add a server, click on the button *Add*.
- In the newly added row, click on the icon  (*Edit*).
- Enter the **IP** address or the name of the **NTP** server in the entry field.
- To save the entry in the row, click on the icon  (*Save*).
To discard the entry in the row, click on the icon  (*Discard*).
- To save all changes in the list, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.




Edit IP address

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



NTP Server




NTP Server IP Address

192.168.168.11	
IP address or computer name	 

Add Remove

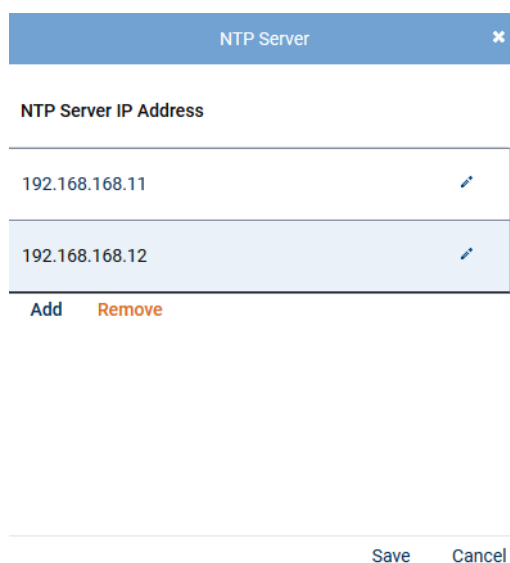
Save Cancel

Fig. 338: Edit IP address

- Click on the icon  (*Edit*) in the row with the IP address that you would like to edit.
- Change the entry in the entry field.
- To save the change, click on the icon  (*Save*).
To discard the change, click on the icon  (*Discard*).
- To save the changes, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.



Remove NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



NTP Server

NTP Server IP Address

192.168.168.11	
192.168.168.12	

Add Remove

Save Cancel

Fig. 339: Remove NTP server

- In the list, select the NTP server that you would like to remove.
- Click on the button *Remove*.
⇒ The NTP server is removed from the list.
- To save the change, click on the button *Save*.
To discard the change and close the window, click on the button *Cancel*.

7.1.2.5.3 Create PBX

The PBX can either be configured via the PBX module or via the Integrations module.

In this configuration step, the parameters for the PBX are configured, e. g. the name, the area code and the net code.

1. Select the menu item *Setup > PBX* in the navigation bar.

⇒ The following window appears:

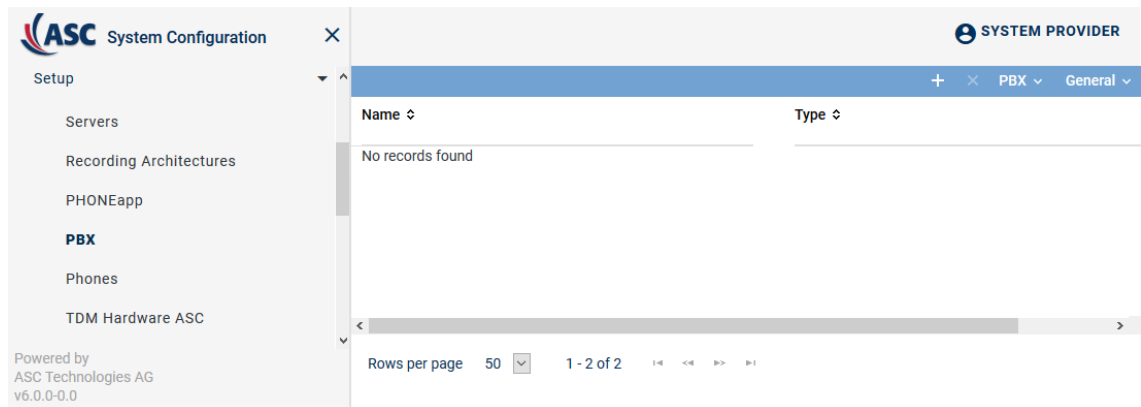


Fig. 340: Create new PBX

Toolbar of the PBX module

The toolbar offers the following functions.

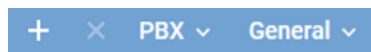




Fig. 341: Toolbar PBX module

	<i>Create</i>	In the detail view, you can enter the parameters of the new PBX.
	<i>Delete</i>	Deletes the selected PBX configuration. A PBX can only be deleted if it is not used in any configuration.
<i>PBX</i>	<i>Phone Configuration</i>	Opens a window in which you can create and configure phones.
	<i>Administrate Unused Extensions</i>	Opens a window in which you can delete extensions that are not used in any configuration.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create new PBX

1. Click on the icon  (*Create*) in the toolbar of the main view of the PBX module.

⇒ In the detail view, the tab *Details* appears.

×

<
Details*
PHONEapp Configuration
Web Service
>

Name*

SIPREC

PBX type*

Universal VoIP ▼

Maximum length of extensions

4 ▼

Country code

☒ Select from list

United States (1)
▼

☐ Enter manually

Area code*

6021

Net code*

5963

Non Phone IPs

No records found

Add
Delete

IPs to be Ignored

No records found

Add
Delete

MACs to be Ignored

No records found

Add
Delete

Save

Reset

Fig. 342: Create new PBX - tab Details

2. Set the following parameters in the detail view:

Parameter	Value/Description
<i>Name</i>	This <i>name</i> serves as the identifier of this PBX.
<i>PBX type</i>	Select the type of the PBX from the drop-down list.
<i>Maximum length of the extensions</i>	Enter the number of digits of the extensions, e. g. 4.
<i>Country code</i>	Select the option for the country code: <ul style="list-style-type: none"> <i>Select from list</i> Select the country code from the drop-down list. <i>Enter manually</i> If the corresponding country code is not available in the drop-down list, you can enter the 3-digit code manually. e. g. for Sri Lanka 094.
<i>Area code</i>	Enter the area code without the preceding 0, e. g. 6021.
<i>Net code</i>	Enter the net code, e. g. 5963. Do not enter an extension here.

Tab. 79: Create PBX

If you would like to display the complete phone number, e. g. if you use more than one PBX, several area codes, or if you would like to record mobile phones, you have to configure the value 0 in the following parameters:

Parameter	Value/Description
<i>Maximum length of the extensions</i>	Enter the number 0 in the field maximum length of the extensions to display the complete phone number.
<i>Area code</i>	Enter the number 0 as area code to display the complete phone number.
<i>Net code</i>	Enter the number 0 as net code to display the complete phone number.

Tab. 80: PBX parameters with complete phone number

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

7.1.2.5.4 Assign recording resources

In multi-tenant systems, you have to assign each tenant its own recording resources.

Depending on the recording type, agents can be assigned to the recording resource via the extension, via the PBX Agent ID or via the chat ID. Within one tenant, you can configure all three possibilities.

Assign extensions to tenants

If you would like to make an assignment based on extensions, you can assign the respective tenant the extension designated for recording in the Tenants module.



In 1-tenant systems, all extensions are automatically assigned to the tenant who has been created by the system (1st tenant). Extensions are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the extensions manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of extensions is not possible until a PBX has been created since extensions are assigned in relation to the PBX.

- Select the menu item *Tenants* in the navigation bar.

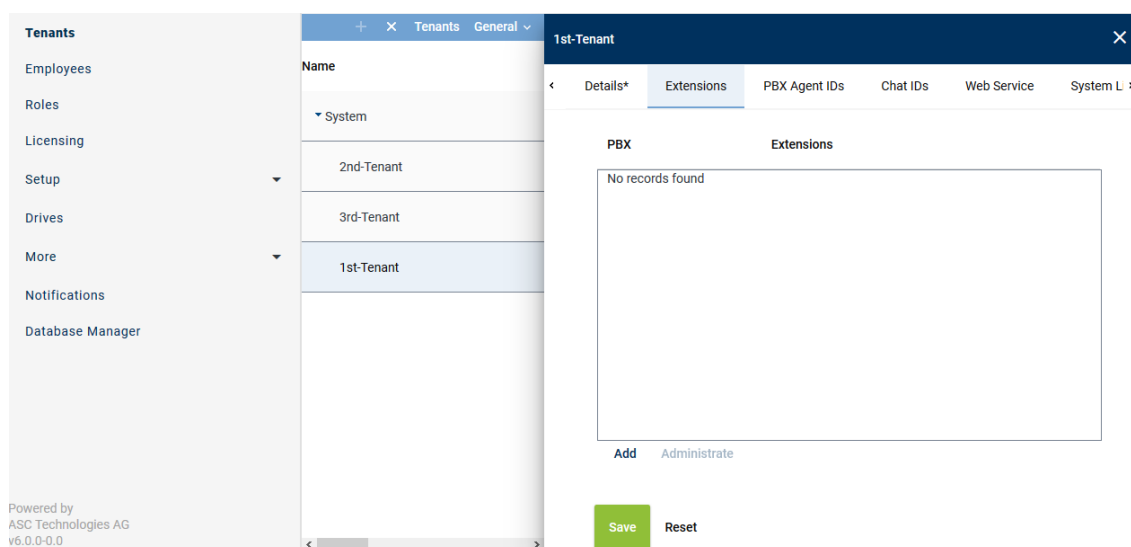


Fig. 343: Tenants - main view - tab Extensions

Add extensions

1. In the main view, select the tenant to whom you would like to assign extensions.
2. Click on the tab *Extensions*.
3. Click on the button *Add*.

⇒ The following window appears:

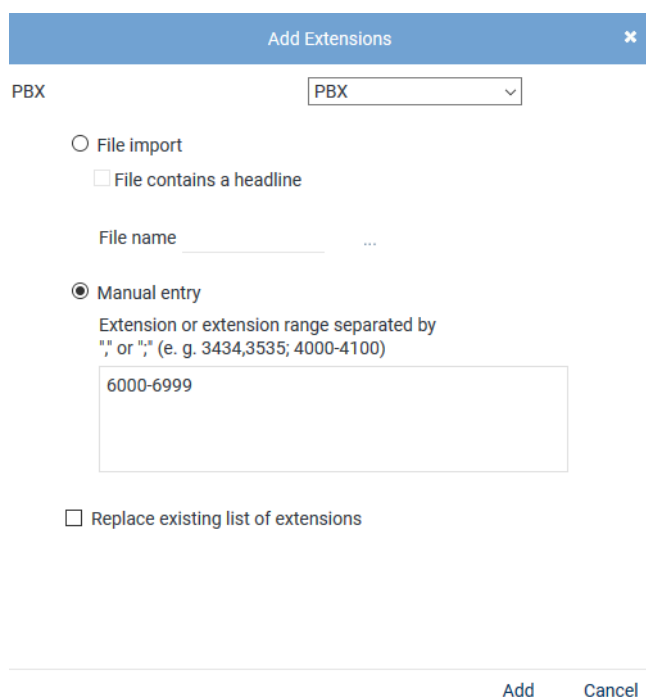




Fig. 344: Assign extensions to tenants

4. From the drop-down list, select the PBX in which the extensions for this tenant have been configured.

File import

Select this option to import extensions from an existing [CSV](#) file and add them to the table of extensions.

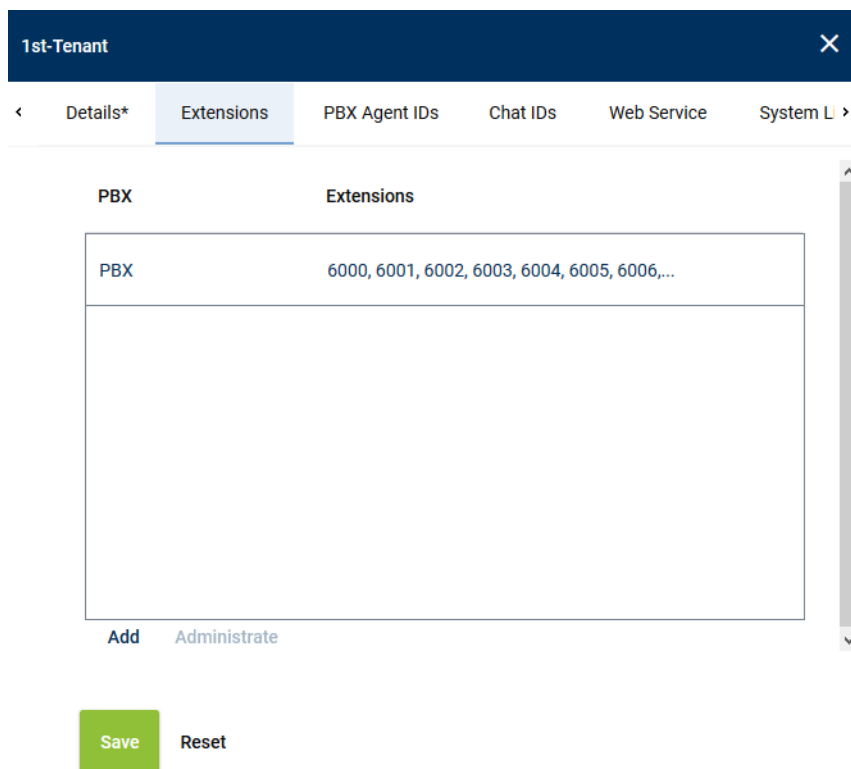
File contains a headline

	<p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CSV file, you have to pack it in a ZIP file.</p> <p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> • Click on the button  behind the field <i>File name</i>. • Click on the button <i>Choose File</i>. • Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. • Click on the button  <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter extensions or extension ranges manually.</p> <p>Enter the extension range that is reserved for this tenant using a hyphen, e. g. from 6000 to 6999. Alphanumerical entries with a hyphen are not detected as a range, they must be entered individually.</p> <p>You can separate the different extensions and extension ranges by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of extensions</i>	<p>Activate the check box to replace the list of extensions.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the extensions of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured extensions of all PBXs are kept and the new extensions are added to the selected PBX.</p>

- Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
- If errors have been detected, the window *Result* appears.
 - Click on the button *Display Error Report* to open the window *Error Report*.
 - To close the window *Error Report*, click on the button *Close*.
 - To close the window *Result*, click on the button *Close*.
- The configured extensions now appear in the detail view.
- Click on the button *Save* in the detail view to save the entries.

Remove extensions

- In the list, select the **PBX** for which you would like to remove the assigned extensions.



1st-Tenant

< Details* Extensions PBX Agent IDs Chat IDs Web Service System L >

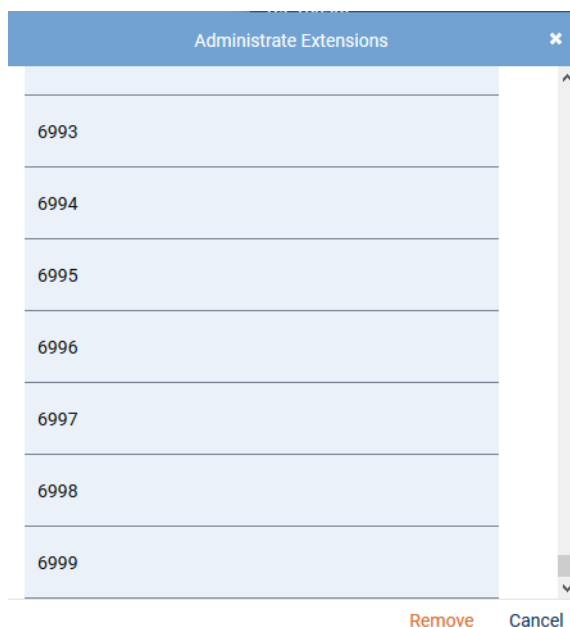
PBX	Extensions
PBX	6000, 6001, 6002, 6003, 6004, 6005, 6006,...

Add Administrate

Save Reset

Fig. 345: Remove extensions

- Click the button *Administrate*.
- Select one or several extensions you would like to remove from the assignment.
To select several extensions or to revoke the selection, click on the respective line while holding the [Ctrl] key down.



Administrate Extensions

6993
6994
6995
6996
6997
6998
6999

Remove Cancel

Fig. 346: Select extensions

- To remove the selected extensions, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

Assign PBX Agent IDs to tenants

If the information about PBX Agent IDs is delivered by the PBX, you can make an assignment by means of the PBX Agent IDs. In this case, you can assign the respective tenant the PBX Agent IDs designated for recording in the Tenants module.



In 1-tenant systems, the PBX Agent IDs are automatically assigned to the tenant who has been created by the system (1st tenant). PBX Agent IDs are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the PBX Agent IDs manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of PBX Agent IDs is not possible until a PBX has been created since the assignment is PBX-related.

1. Select the menu item *Tenants* in the navigation bar.

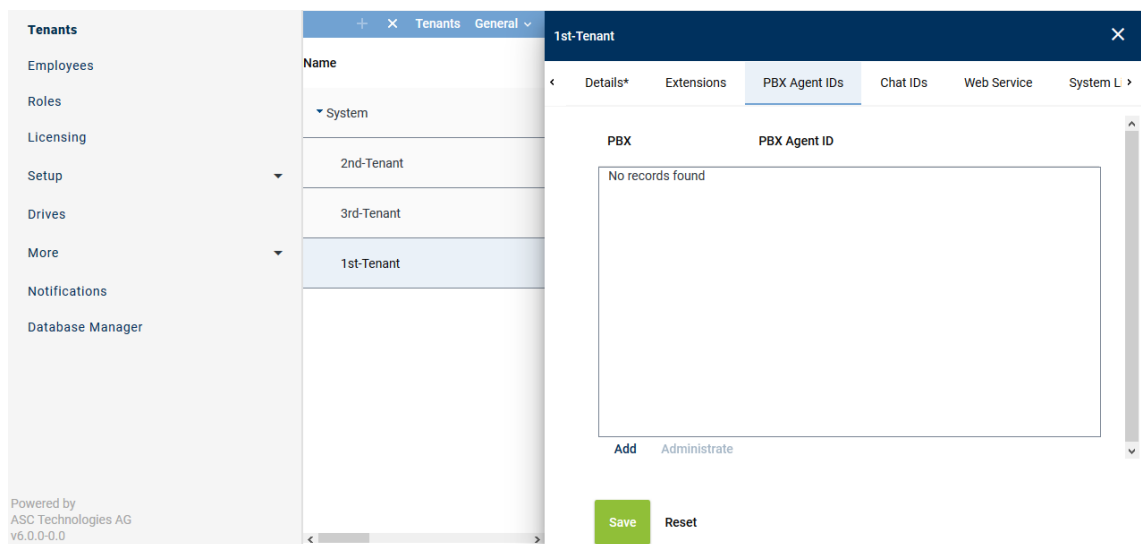


Fig. 347: Tenants - main view - tab PBX Agent ID

Add PBX Agent ID

1. In the main view, select the tenant to whom you would like to assign the PBX Agent IDs.
2. Click on the tab *PBX Agent IDs*.
3. Click on the button *Add*.
⇒ The following window appears:

Add PBX Agent IDs ✕

PBX

PBX

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

PBX Agent IDs separated by ";" or ","

427agent1,427agent2

☐ Replace existing list of PBX Agent IDs

Add
Cancel

Fig. 348: Assign PBX Agent IDs to tenants

4. From the drop-down list, select the PBX in which the PBX Agent IDs for this tenant have been configured.

<i>File import</i>	<p>Select this option to import the PBX Agent IDs from an existing CSV file and add them to the table of PBX Agent IDs.</p>
	<p><i>File contains a headline</i></p> <p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CVS file, you have to pack it in a ZIP file.</p>
	<p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> Click on the button ... behind the field <i>File name</i>. Click on the button <i>Choose File</i>. Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. Click on the button ↗ <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter PBX Agent IDs manually.</p> <p>You can separate the individual PBX Agent IDs by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of PBX Agent IDs</i>	<p>Activate the check box to replace the list of PBX Agent IDs.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the PBX Agent IDs of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured PBX Agent IDs of all PBXs are kept and the new PBX Agent IDs are added to the selected PBX.</p>

5. Click on the button *Add*.
⇒ The PBX Agent IDs are added to the table of PBX Agent IDs.
6. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
7. The configured PBX Agent IDs now appear in the detail view.
8. Click on the button *Save* in the detail view to save the entries.

Remove PBX Agent ID

1. In the list, select the **PBX** for which you would like to remove the assigned PBX Agent IDs.
2. Click the button *Administrate*.
3. Select one or several PBX Agent IDs you would like to remove from the assignment.
To select several PBX Agent IDs or to revoke the selection, click on the respective line while holding the [Ctrl] key down.

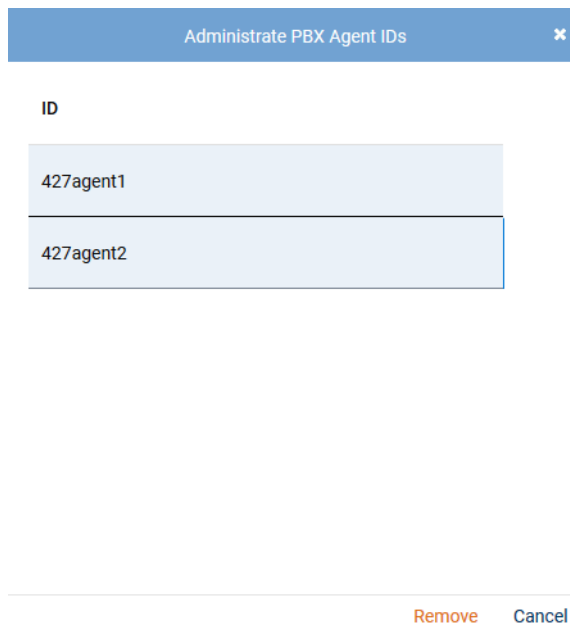


Fig. 349: Select PBX Agent IDs

4. To remove the selected PBX Agent IDs, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

7.1.2.5.5 Configure additional data

In the Additional Data module, you can configure the additional data which is delivered for a conversation with a protocol.



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured here in the Additional Data module. Only then can you map the additional data in the integration under the Global Recording Settings in the tab *SIP Header Tagging*.

For selection fields to appear in the drop-down list, they have to be configured in the Additional Data module.

1. Select the menu item *Setup > Additional Data* in the navigation bar.

ASC

System Configuration

Setup

Servers

Recording Architectures

PHONEapp

PBX

Phones

TDM Hardware ASC

TDM Hardware Others

Integrations

Recording Import

Additional Data

Activity Guard

SYSTEM PROVIDER

Additional Data

Additional Data

General

ID	Displayed Name	Available
customCP01	customCP01	
customCP02	customCP02	
customCP03	customCP03	
customCP04	customCP04	
customCP05	customCP05	
customCP06	customCP06	

Rows per page

50

1 - 30 of 30

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v6.0.0-0.0

Fig. 350: Additional Data module main view

- Select a set of data.
⇒ The detail view displays the information you can configure.

Change display name

Change Display Name		
Language	Content	
ar_SA	customCP01	✎
bg_BG	customCP01	✎
de_DE	Universal Call ID	✎
en_GB	customCP01	✎
en_US	Universal Call ID	✓ ✕

Fig. 351: Configure additional data

- To change the display name, click on the pen in the line of the language you would like to change.
- Enter a display name and click on the check mark at the end of the line to confirm the entry.

Availability

Availability	
Available	<input checked="" type="checkbox"/>
Editable	<input checked="" type="checkbox"/>
External recording control	<input checked="" type="checkbox"/>

Save
Reset

Fig. 352: Additional data - configure availability

1. To make the data field available to the entire system, activate the check box of the option *Available*.
2. To make the data field in the search and replay applications editable later on, activate the check box of the option *Editable*.
3. To be able to use the data field for external recording control, activate the check box of the option *External recording control*. This option is only available if recording control has been activated in the *Servers module* in the tab *Usage*.
4. Click on the button *Save* to save the settings.



For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



Additional data which is not delivered along with the protocol is not available for further use.

7.1.2.5.6 Create integration for Multi-Server Failover

In the Integrations module, the PBX-related recording settings are configured.

You first have to create and activate a recording architecture to be able to create a integration and to assign it here.

Depending on the recording solution, you additionally have to configure IP addresses, ports, protocols, sniffer cards, CTI connection data, phones, monitor points, and, where required, add-ons.

1. In the navigation bar, select the menu item *Setup > Integrations*.
⇒ The following window appears:

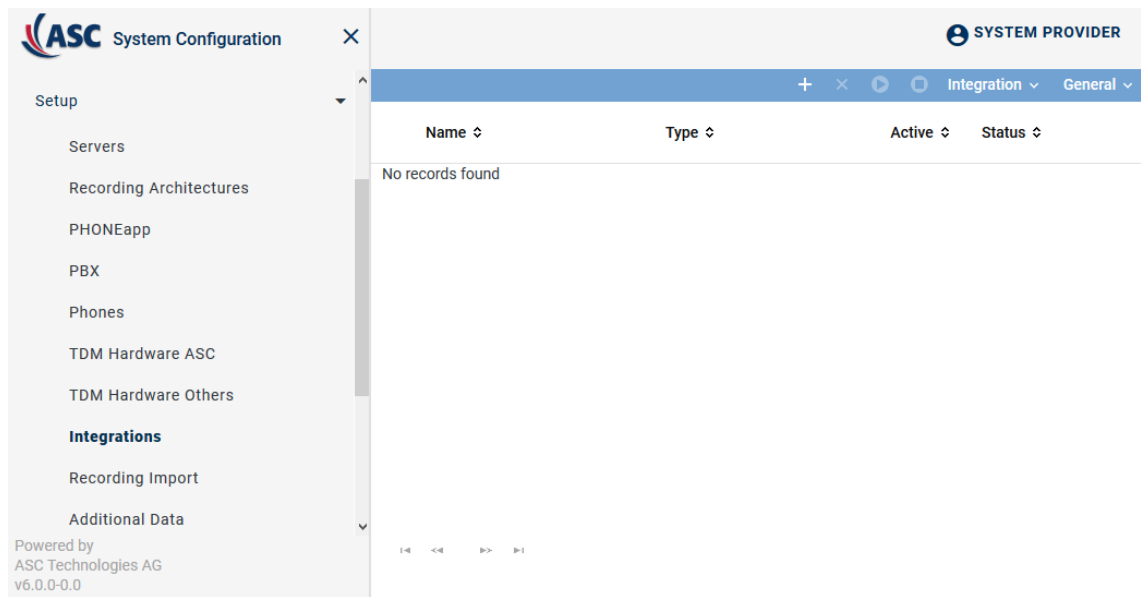




Fig. 353: Integrations - main view

In the table in the main view, the following information is displayed:





Name	Name of the integration
Type	Type of the integration
Active	Shows whether the integration has been activated and is used for the recording. <div> ✓ = Integration is active, can be deactivated in the toolbar via the icon . ✗ = Integration is not active, can be activated in the toolbar via the icon . </div>
Status	Shows whether the configuration has been carried out completely. <div> ✓ = Configuration is complete. ✗ = Configuration is incomplete. </div>

Toolbar of the Integrations module

The toolbar offers the following functions.



Fig. 354: Toolbar Integrations module

	Create	Opens the detail view so that you can create a new integration.
	Delete	Deletes the selected integration. The integration can only be deleted if it has been deactivated.
	Activate	Activates the selected integration. The integration can only be activated if it has been configured completely.
	Deactivate	Deactivates the selected integration. This stops running recordings.
Integration	Import Grammar	By clicking on this menu item, you can import a customized grammar which you can then configure in the configuration step for the CTI connection data.
General	General Help	Opens the online help.
	Module Help	Opens the module-specific online help.

Import grammar

Depending on the deployed PBX, conversation events are signaled differently.

A grammar recognizes and processes the events occurring during a call such as ringing, answering, consultation, hanging up. A grammar contains rules which are required to correctly translate PBX-specific call information and call states into a PBX-neutral format.

1. To import a new grammar, click on the menu item *Integration > Import Grammar* in the toolbar of the main view.
⇒ The window *Upload File* appears.

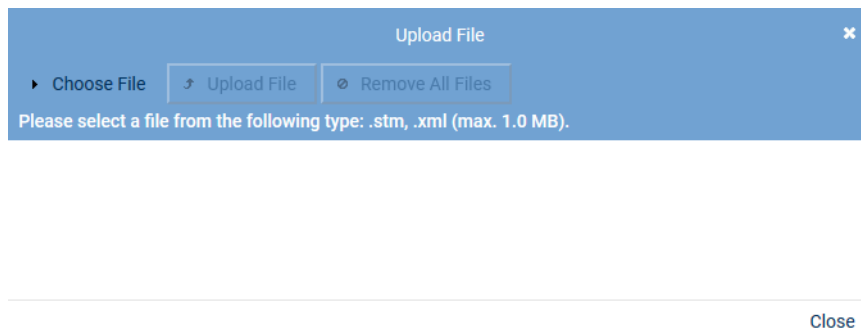


Fig. 355: Choose file

2. Click on the button *Choose File*.
3. Select the respective grammar of the file type *.stm* or *.xml* via the Explorer.
4. Click on the button *Open*.
⇒ The selected file appears in the window *Upload File*.

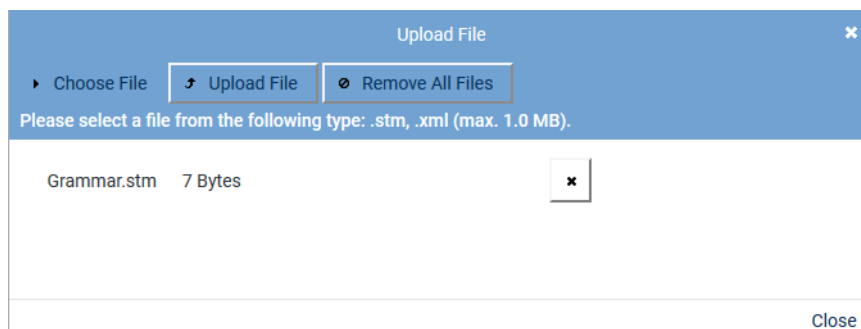



Fig. 356: Upload grammar

5. To remove a selected file from the list, click on the button  (*Remove file*) next to the respective file.
To upload the file, click on the button *Upload File*.
⇒ The window closes and a notification appears in the main view that the file has been uploaded successfully.

Assign integration type


1. Click on the icon  (*Create*) in the toolbar of the main view to create a new integration.
⇒ In the detail view, the tab *Integration Type* appears.



Fig. 357: Create integration type

2. Enter the following parameters:

Parameter	Value
<i>Name</i>	In the entry field, enter a descriptive name for the integration. This name is used as the identifier of this integration in the system.
<i>Integration type</i>	Select the entry <i>SIP active</i> from the drop-down list <i>Integration type</i> .

Tab. 81: Create integration type

3. To assign the PBX, click on the button **+** behind the field *PBX*.
⇒ The window *PBX* appears.

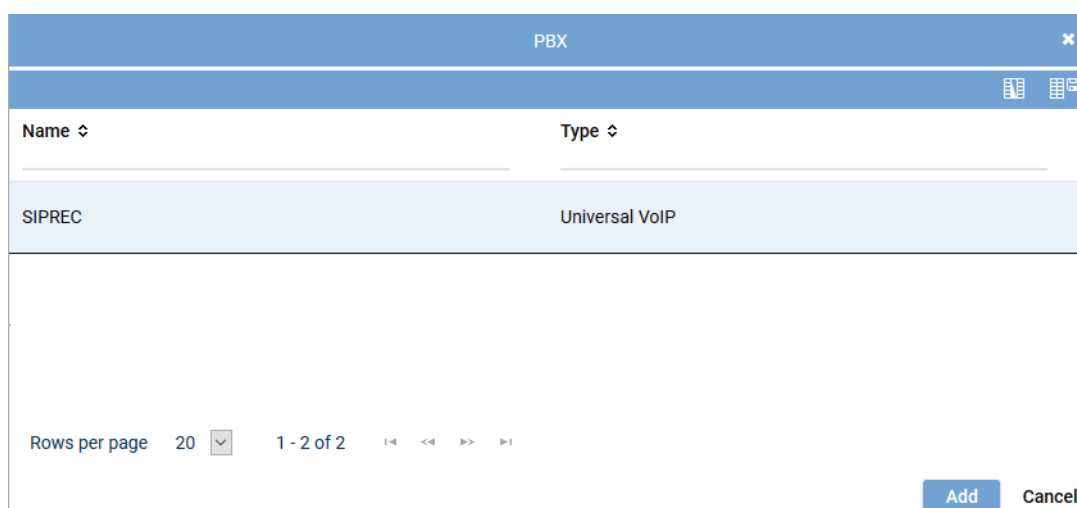


Fig. 358: Select PBX

4. Select the respective *PBX* from the list of available PBXs.
5. Click on the button *Add*.

Assign recording architecture for Multi-Server Failover

1. In the detail view on the bottom right, click on the button *Next*.
⇒ The tab *Recording Architecture* appears.

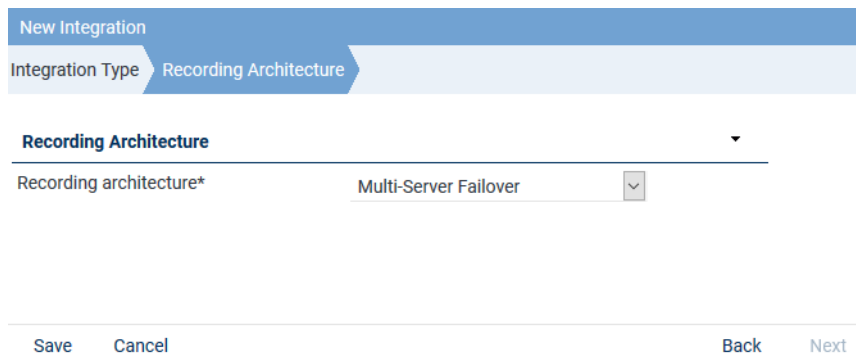


Fig. 359: Assign recording architecture - Multi-Server Failover


2. Select the respective recording architecture from the drop-down list *Recording architecture*.



Only activated recording architectures in which the appropriate integration type has been configured appear in the drop-down list.

3. Click on the button *Save*.
⇒ The integration now appears in the main view.

Configuration steps

1. To complete the configuration of the integration, click on the icon  in front of the name of the new integration.
⇒ The following configuration steps appear:






SIPREC		SIP active		
			✗	⚙️
Step	Configuration			
Configure recording architecture		✓		
Global recording settings		✗		
Configure recording servers		✗		
Configure add-on		✓		
Configure miscellaneous settings		✓		

Fig. 360: Configuration steps of the integration

Configure recording architecture

The section *Configure recording architecture* has already been configured in previous steps.



1. Click on the button  (*Edit configuration step*) in the line *Configure recording architecture* in the main view to show the configuration.
⇒ In the detail view, the configuration step appears with the information of the assigned recording architecture.



Fig. 361: Configuration step - Configure Recording Architecture

2. Click on the button *Save* to save changes and to finish the configuration step.
3. Click on the button *Cancel* to cancel the configuration step without applying changes.

Global recording settings for Multi-Server Failover

1. Click on the button  (*Edit configuration step*) in the line *Global recording settings* in the main view.
⇒ The window *Step: Global Recording Settings* appears.

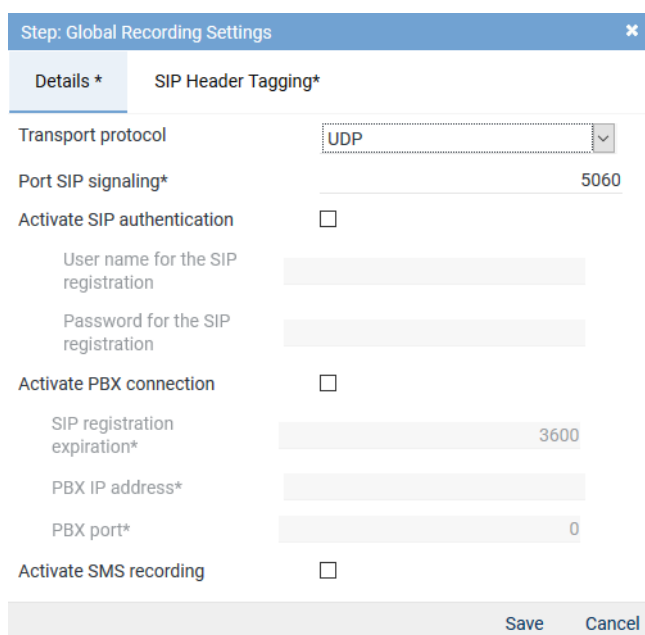


Fig. 362: Configuration step - Global Recording Settings - All-in-one Basic Recording

2. Set the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Transport protocol</i>	Select the transport protocol <i>UDP</i> for the SIP signaling between the recording server and the PBX.
<i>Port SIP signaling</i>	Enter the port for the <i>SIP</i> signaling, where the recording server is expecting the signaling. Default value for <i>UDP</i> and <i>TCP</i> is <i>5060</i> . Default value with <i>TLS</i> encryption is <i>5061</i> .
<i>Activate SIP authentication</i>	Deactivate this option for this recording solution.

Parameter	Value/Description
Activate SMS recording	This function is not supported in this recording solution.

Tab. 82: Global recording settings

- To save the entries, click on the button *Save*.
To discard entries, click on the button *Cancel*.

Tab SIP Header Tagging



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured in the Additional Data module and subsequently mapped in the tab SIP Header Tagging.

- Select the tab *SIP Header Tagging*.

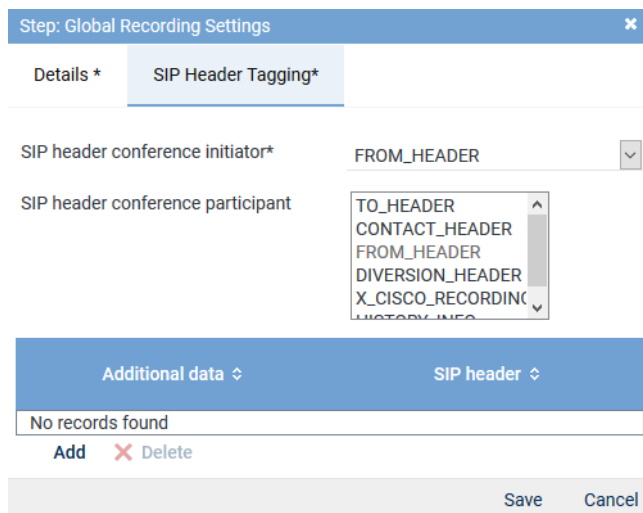


Fig. 363: Tab SIP Header Tagging Configure sources

- If you would like to configure individual additional data that you have defined previously in the Additional Data module, click on the button *Add* in the section *Additional data*.
⇒ The window *SIP Additional Data* appears.

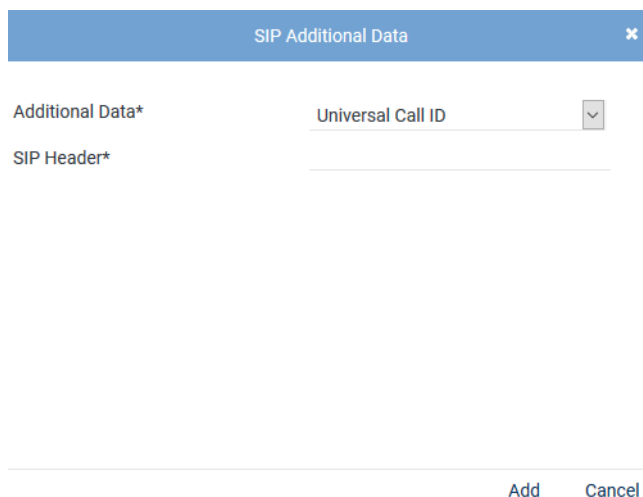


Fig. 364: SIP Additional Data



Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

- Enter the following parameters:

Parameter	Value/Description
<i>Additional Data</i>	In the drop-down list, select the display name of the field in which the information of the SIP header is supposed to be released.
<i>SIP Header</i>	<p>If you would like to use additional data, the mapping of the tag name must have been configured in the file <i>siprecmapping.xml</i>. Then you can enter the tag name from where the information is to be extracted.</p> <p>To have ASC configure the mapping file, contact your distribution partner.</p>


Tab. 83: Configure SIP conversation parameters

- Click on the button **Save** to close the window.
- Click on the button **Save** to finish the configuration in this step.

Configure recording server for Multi-Server Failover

To guarantee that recording works properly when switching servers in case of failover with several servers, you must configure a port range for each recording server. The range may be the same for all recording servers. Make sure, though, that the port range lies within the range of ports activated in the firewall, refer to the installation manual Installation requirements in chapter Communication matrix.

This configuration takes place in the configuration step *Configure recording servers*.

- Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Configure Recording Servers* appears.

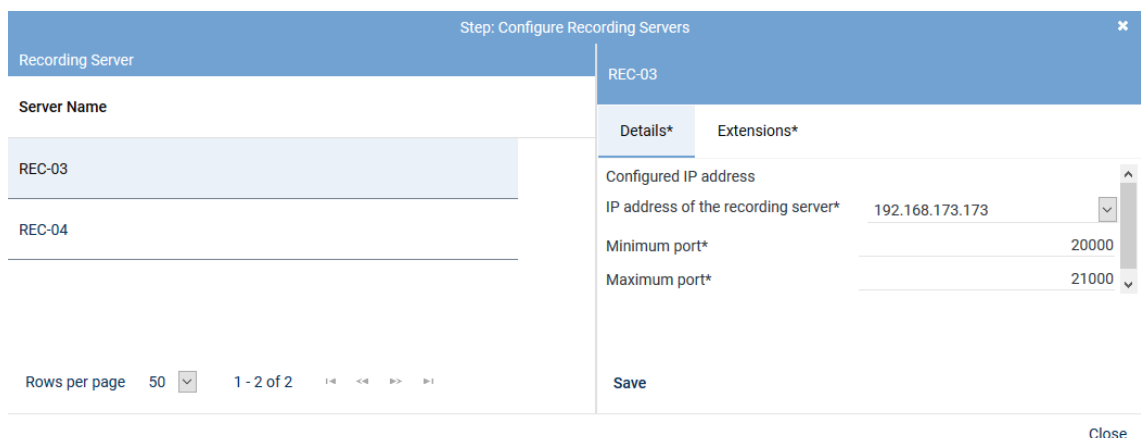


Fig. 365: Configuration step - Configure recording servers

- Enter the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Configured IP address</i>	Here, the IP address is displayed which has been configured for this recording server and via which the data to be recorded are received.

Parameter	Value/Description
<i>IP address of the recording server</i>	From the drop-down list, select one of the available IP addresses of the recording server for the recording data.
<i>Minimum port</i>	Enter the lowest port of the port range configured on the PBX that is used to receive the RTP data from the recording server, e. g. <i>20000</i> .
<i>Maximum port</i>	Enter the highest port configured on the PBX that is used to receive the RTP data from the recording server, e. g. <i>21000</i> .

Tab. 84: Configure recording servers



This recording solutions allows recording data streams in stereo. For stereo recording, reckon with 4 ports as only even ports are used to receive **RTP**.

Stereo recording requires more storage space, too.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.

Tab Extensions

1. Click on the tab *Extensions*.

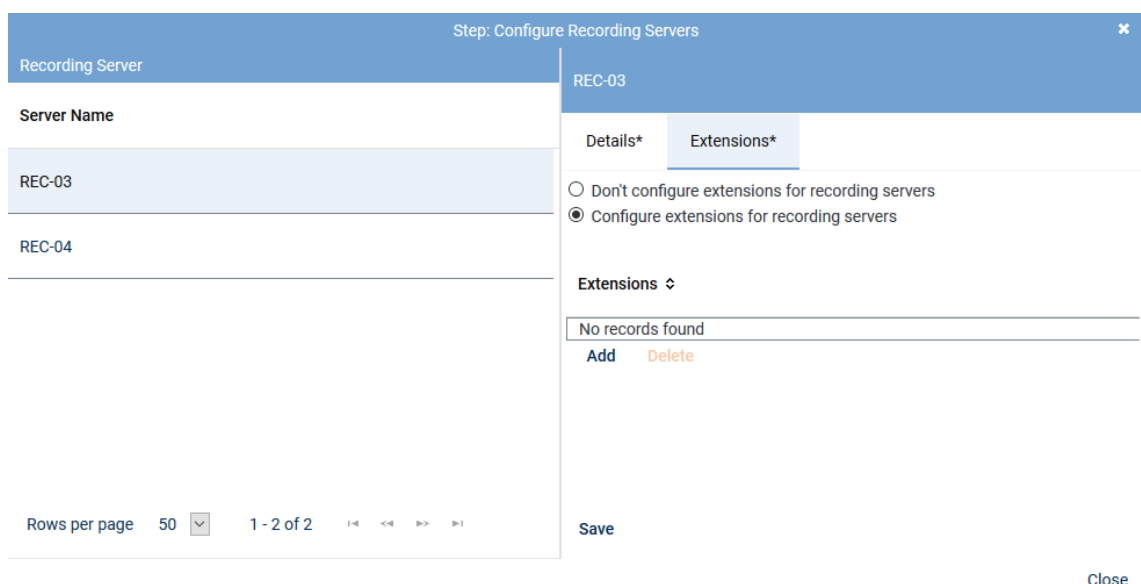


Fig. 366: Tab Extensions

The following options are available:

Configure no extensions for recording servers Activate this option if you have not configured the extensions for the recording server in the PBX.

Configure extensions of the recording server Activate this option if you have configured extensions for the recording server in the PBX and add the extensions.

2. To add extensions, click on the button *Add* in the table *Extensions*.
⇒ The window *Add Extensions* appears.

Add Extensions ✕

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

Extension or extension range separated by
",", or ";", (e. g. 3434,3535; 4000-4100)

9999

☐ Replace existing list of extensions

[Add](#) [Cancel](#)

Fig. 367: Add extensions

3. In the window *Add Extensions*, enter either a single extension or an extension range that the recording server is to use when registering on the PBX.
4. Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
5. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
6. The configured extensions now appear in the detail view.

Step: Configure Recording Servers ✕

Recording Server	REC-03
Server Name	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-03</div>
REC-03	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-04</div>
REC-04	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-05</div>

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REC-03

Details* Extensions*

☐ Don't configure extensions for recording servers

☒ Configure extensions for recording servers

Extensions ⌵

9999

Add Delete

Save

[Close](#)

Fig. 368: Added extensions

7. Repeat the steps for additional servers. For each server, configure its own extension or extension range depending on how it can be reached.
8. Click on the button *Save*.

9. Click on the button *Close* to finish this configuration step.

Configure add-on



The use of the add-on in the integration is optional. The status of this configuration step has been set to *No selection* by default and is considered to be completely configured that way. You can activate and use the integration without an add-on, too.

If you use an application with add-on, you can select the required grammar in the corresponding version in this configuration step. Additionally, you can configure the connection data and the additional data.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

Configure add-on for Sparkassen FI ISP (optional)

The add-on refers to the usage of CTIconnect for Sparkassen FI ISP in the DACH region and only has to be configured if the add-on is used.



The add-on cannot be used in a failover architecture. The application Sparkassen FI ISP cannot connect to more than one IP address.

The integration runs in combination with a PBX and the recording server. The service CTIconnect for Sparkassen FI ISP receives the additional data from the PBX and sends them to the recording server. In addition, the recording decision which is initiated by the user on the end device is processed via CTIconnect for Sparkassen FI ISP and sent to the recording server.

Sparkassen FI Interaktive Service Plattform

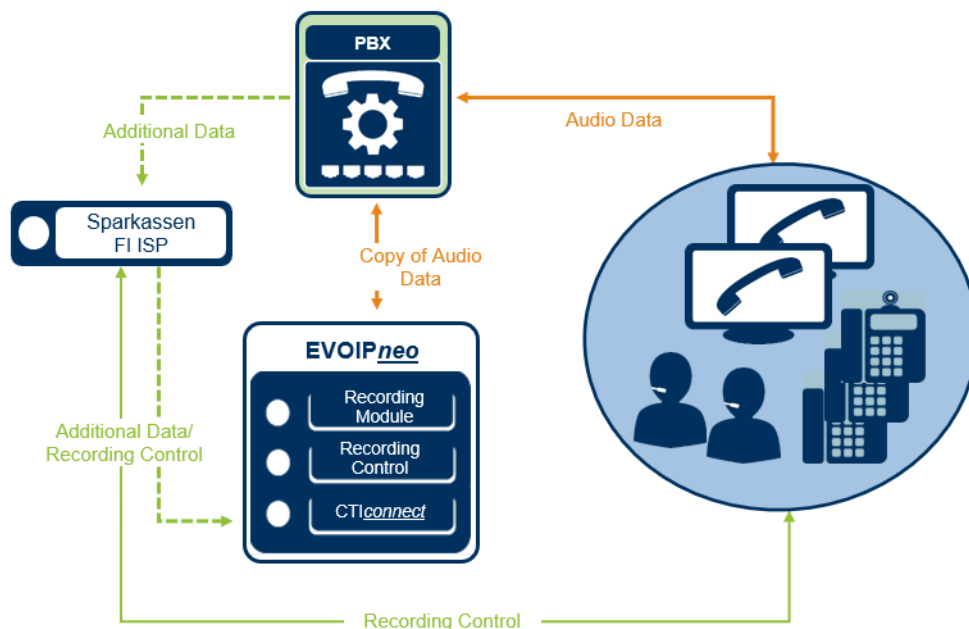



Fig. 369: Overview of Sparkassen FI ISP

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on *Sparkassen FI ISP* in the detail view.

Step: Configure Add-on
✕

Details *

Select add-on

☐ None

☒ Sparkassen FI ISP

CTIconnect Module

Type	CTIconnect passive	
Grammar name*	ISP Sparkassen FI	▼
Grammar version*	1.00.05	▼

Connection Data ▼

Listener port*	3468
----------------	------

Additional Data ▼

ID des Call Centers	Call Center ID	▼
ID des Calls aus Genesys	Universal Call ID	▼
Anmeldename des Kunden	User name	▼
Name des Kunden	Customer name	▼
Personennummer des Kunden	Customer ID	▼

Arbitrary assignment
+

<input style="width: 90%;" type="text"/>	Please select...	▼	⊖
<input style="width: 90%;" type="text"/>	Please select...	▼	⊖
<input style="width: 90%;" type="text"/>	Please select...	▼	⊖

Save Cancel

Fig. 370: Configure add-on for Sparkassen FI ISP

Group field CTIconnect Module

1. Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 85: Configure CTIconnect module



For recording control via the add-on of the Sparkassen FI ISP, grammar version 1.00.05 or higher is required. If the grammar in the respective version is not available yet, you can import it. See [chapter "Import grammar", p. 298](#).

Group field Connection Data

Set the following parameter in the group field *Connection Data*; the IP address for the PBX does not have to be entered, since the PBX connects to our recording server:

Parameter	Value/Description
<i>Listener port</i>	Enter the port that the add-on connects to, e. g. 3468.

Tab. 86: Configure connection data

Group field Additional Data



This add-on is used exclusively in the DACH region; for this reason the additional data is only available in German, too. The names of the fields refer to the assignment of the strings which are delivered by the interface.

When using CTIconnect for Sparkassen FI ISP, the following additional data is delivered with the protocol:

- *ID of the call center*
- *ID of the call from Genesys*
- *Login name of the customer*
- *Name of the customer*
- *Employee number of the customer*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.

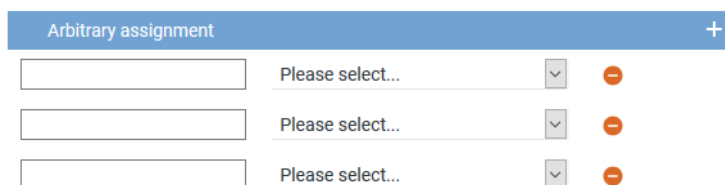



Fig. 371: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*
- *End time*
- *Duration*
- *Calling Party Phone Number*
- *Called Party Phone Number*

- *Conversation Direction*
- 2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
- 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
- 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
- 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.



To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.


Configure add-on for OpenScape Contact Center (optional)

The add-on refers to the usage of the OpenScape Contact Center and must only be configured if a OpenScape Contact Center is used.

The integration runs in combination with a Unify PBX which is responsible for recording. The CTIconnect service receives the conversation events of the agents via a SDK link in the OpenScape Contact Center and sends the additional data to the EVOIPneo recording service.

For information about the configuration of the OpenScape Contact Center, see [chapter "Configure OpenScape Contact Center \(optional\)", p. 394](#).

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on OpenScape Contact Center in the detail view.

Step: Configure Add-on

Details

Select add-on
☐ None
☒ OpenScape Contact Center

CTIconnect Module

TypeCTIconnect passive
Grammar name*Unify OpenScape Contact Center
Grammar version*1.00.04

Connection Data

Connection data

6000@192.168.170.29

Add Edit Delete

Additional Data

Business UnitBusiness Unit
DepartmentDepartment
Department KeyDepartment Key
Call IDUniversal Call ID
To PartyTo Party
ACD Group NumberACD Group Number

Arbitrary assignment

Please select...

Please select...

Save Cancel

Fig. 372: Configure add-on for OSCC

Group field CTIconnect Module

- Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 87: Configure CTIconnect module

Group field Connection Data

In the table Connection Data, you can enter one or several sets of connection data.

If you are configuring several connections, several connections to different business units are established simultaneously in the recording solution with OpenScape Contact Center.

- In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

Configure Connection
✕

Link name*

Business unit*

User name*

Password*

Add Cancel

Fig. 373: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Link name</i>	Enter the link to the OSCC server in the format <i>osccport@ascserver</i> . The default value for the OSCC port is 6000 and the name of the OSCC server is usually spelled in minor letters. A valid link can look like this: 6000@osccv7r3. Ensure that the server name (e. g. osccv7r3) can be resolved to an IP address. Check whether the address can be reached via the ping command. Alternatively, you can also enter the IP address.
<i>Business unit</i>	The default name of a business unit is <i>default</i> . This is a predefined name for the business unit after a new OSCC server installation. Enter the business unit's actual name you would like to use in the future.
<i>User name</i>	Create a valid user for the business unit that you have created on the OSCC server, so the CTI <u>connect</u> service can establish the connection to the OSCC server. See chapter "Create user for CTIconnect", p. 394 .
<i>Password</i>	Enter the password for the user of the business unit.

Tab. 88: Configure connection data

3. Click on the button *Add* to save the entries and to close the window.
4. To configure additional connections, repeat the configuration steps accordingly.

Group field Additional Data

When using CTIconnect for Unify OpenScope Contact Center, the following additional data is delivered with the protocol by default:

- *Business unit*
- *Department*
- *Department Key*
- *Call ID*
- *To Party*

- *ACD Group Number*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must have been configured and made available in the Additional Data module previously.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.

Here, you can map the database fields for the additional data which is delivered by the [OSCC](#). The contact data of the processed contacts of the OpenScape Contact Center provides a list of key pairs/value pairs. The keyword of this key pair/value pair can be chosen arbitrarily and adjusted customer-specifically. If you would like to use more than one word, avoid spaces. Use underscores instead of spaces, e. g. *ACD_group*.

1. In the group field headline *Additional Data*, click on the arrow ▶ to expand the group field and to assign the additional data to the data fields of the search and replay applications.

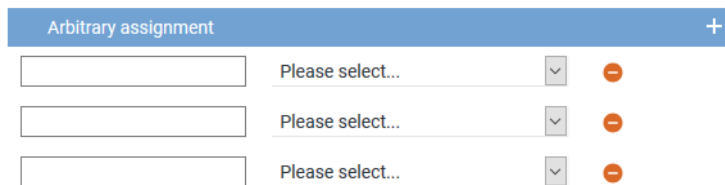




Fig. 374: Arbitrary assignment of the additional data

2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
3. From the drop-down list, select a configured display name of the additional data type which is supposed to appear as column headline in the players. Here, you can only select the display names for the additional data that you have configured and made available in the Additional Data module.
4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
⇒ An additional row appears to assign another additional data type.
5. To delete an assignment, click on the icon  in the respective row.
6. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

Configure add-on for Genesys T-Server (optional)

The add-on refers to the usage of Genesys T-Servers and must only be configured if you use Genesys T-Servers.

The integration runs in combination with the PBX and the recording server. The CTI~~connect~~ service receives the information which Genesys T-Server the monitor points have been assigned to from the Genesys Configuration Server. The monitor points must register on the respective Genesys T-Server. Upon successful registration, the respective Genesys T-Server sends all conversation events and additional data of the agents to the recording server.

CTIconnect for Genesys T-Server

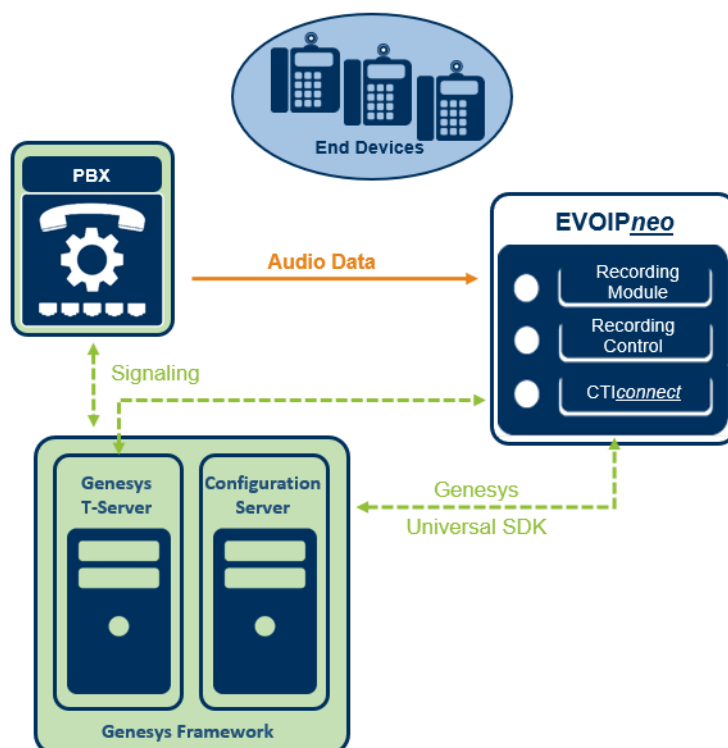


Fig. 375: Overview of the add on of Genesys T-Server

CTIconnect for Genesys T-Server

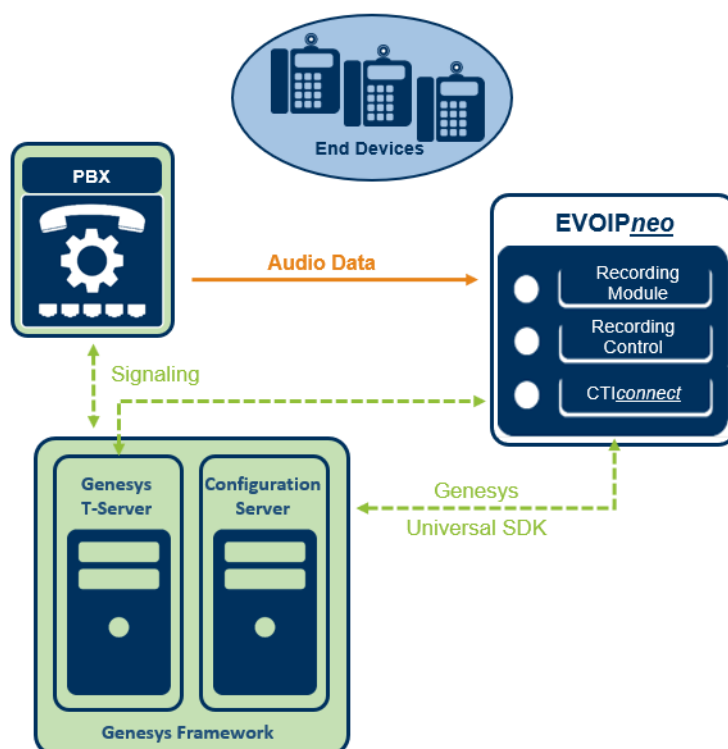


Fig. 376: Overview of the add-on of Genesys T-Server



For further information about the configuration of Genesys T-Servers, see [chapter "Configure Genesys T-Server \(optional\)", p. 395](#).

The Genesys add-on uses either a unique call ID or the extension to unambiguously identify the conversations to be recorded.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

When using a CTIconnect for Genesys T-Server, a Genesys Framework with T-Servers and Genesys Configuration Servers are required.


By default, the Genesys data field *CallID* has been selected as identifier. If a different data field is supposed to be used for internal control, this can be changed in the configuration file *basic.pif.properties*.

Adjust configuration file for Genesys add-on

The data field which is supposed to be used by the Genesys add-on is selected by means of the parameter *pifgenesys.call_identifier*.

1. To adjust the identifier, change to the path
C:\ASC Product Suite\data\CTIConnectForGenesysT.
2. Open the file *basic.pif.properties*.
3. Enter the respective data field for the parameter *pifgenesys.call_identifier*.
4. Save the changes in the file.
5. Restart the recording architecture after completing the change.

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. In the detail view, select the add-on *Genesys T-Server*.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Genesys T-Server

CTIconnect Module

TypeCTIconnect passive
Grammar name*standard
Grammar version*1.15.00
T-server redundancy*HAconnect
Config server redundancy*Warm standby
T-Server application name
T-Server password

Connection Data

Configuration server name
192.168.169.178
Add Edit Delete

Additional Data

Arbitrary assignment
Please select...

Save Cancel

Fig. 377: Configure add-on for Genesys T-Server

Group field CTIconnect Module

1. Enter the following parameters:

Parameter	Value/Description
Type	Here, the type of the CTI <u>connect</u> module is displayed.
Grammar name	Select the respective grammar.
Grammar version	Select the respective grammar version.
T-server redundancy	Select the redundancy which is used from the drop-down list. <ul style="list-style-type: none"> • No redundancy • HAconnect - for High Availability Connection • Warm Standby - for a connectable redundancy
Config server redundancy	From the drop-down list, select the redundancy which is used for the Configuration Server of Genesys. <ul style="list-style-type: none"> • No redundancy • HAconnect - for High Availability Connection • Warm Standby - for a connectable redundancy

Parameter	Value/Description
<i>T-Server application name</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the application name that the CTI<u>connect</u> module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>
<i>T-Server password</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the password that the CTI<u>connect</u> module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>

Tab. 89: Configure add-on for Genesys T-Server

Group field Connection Data

In this group field, you can enter one or several sets of connection data.

1. In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

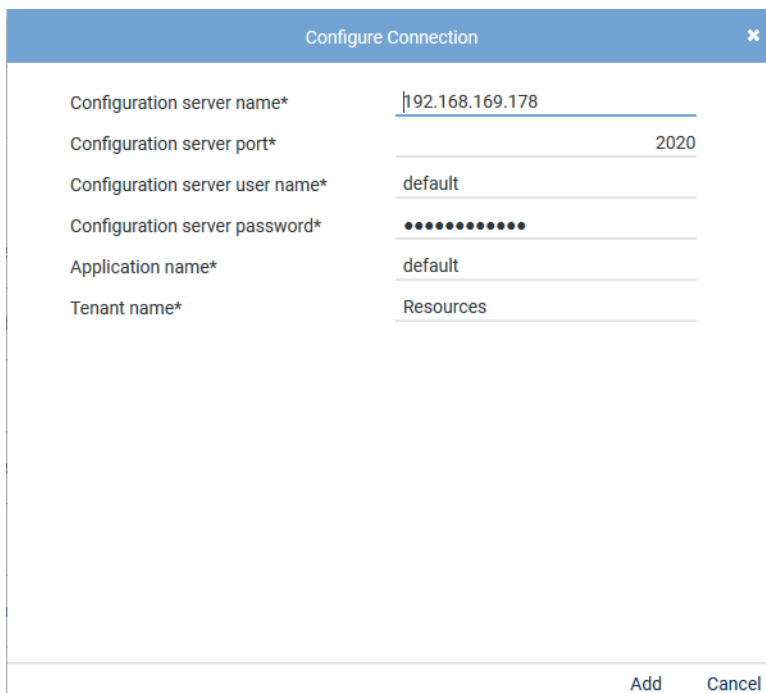


Fig. 378: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Configuration Server: Name</i>	Enter the IP address or the name of the computer that the Genesys Configuration Server runs on.
<i>Configuration Server: Port</i>	Enter the port of the Genesys Configuration Server.
<i>Configuration Server: User name</i>	Enter the user name to log in to the Genesys Configuration Server.
<i>Configuration Server: Password</i>	Enter the password to log in to the Genesys Configuration Server.

Parameter	Value/Description
<i>Application name</i>	Enter the application name that the recording servers uses to log in to the Genesys Configuration Server. Default is <i>default</i> .
<i>Tenant name</i>	Enter the name of the Genesys tenant(s) that are supposed to request the configuration data. Default is <i>Resources</i> . Several tenants can be added separated by commas.

Tab. 90: Configure connection data

Group field Additional Data

The following additional data is delivered by default in the protocol when using Genesys T-Server:

- *CallID*
- *ANI*
- *CallUuid*
- *DNIS*



Further additional data depend on the configuration of the Genesys T-Servers. Check the list *AttributeUserData* in the trace files to find out which further additional data have been delivered by the Genesys T-Servers. Put the addition *UserData* in front of the additional data type when configuring customer-specific additional data, e. g. for *RTargetAgentGroup* you have to configure *UserDataRTargetAgentGroup*.

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

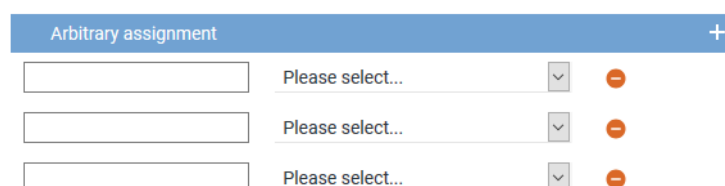
For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.




Arbitrary assignment			+
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–

Fig. 379: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*

- *End time*
 - *Duration*
 - *Calling Party Phone Number*
 - *Called Party Phone Number*
 - *Conversation Direction*
2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.




To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.

Configure miscellaneous settings

1. Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Miscellaneous Settings* appears.

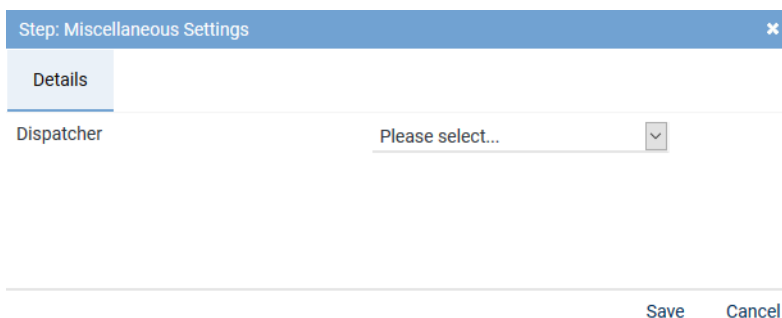


Fig. 380: Configure miscellaneous settings

2. Enter the following parameter:


Parameters	Description
<i>Dispatcher</i>	From the drop-down list, select the previously created additional data field that the participant information is supposed to be connected with.





Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

Activate integration

The integration can only be activated after the configuration is complete.

If not all configuration steps have been carried out completely, the icon  (*Incomplete*) will appear in the main view, in the line of the created integration, in the column *Status*.

If the configuration has been carried out completely, the icon  (*Complete*) will appear in the line of the respective step, in the column *Configuration*.

If all settings are complete, the icon  (*OK*) will appear in the main view, in the line of the created integration, in the column *Status*.














SIPREC		SIP active		
Step		Configuration		
Configure recording architecture				
Global recording settings				
Configure recording servers				
Configure add-on				
Configure miscellaneous settings				

Fig. 381: Activate integration

1. Mark the integration in the main view, so that the icon  (*Activate*) becomes active in the toolbar.
2. To activate the integration, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.






+ ×   Integration ▾ General			
Name ▾	Type ▾	Active ▾	Status ▾
 SIPREC	SIP active		

Fig. 382: Activated integration



If you use several PBXs, you can create and activate several integrations with the same recording architecture.



If you take advantage of the grace period and there is no valid license file in the system after its expiration, all integrations are deactivated. After uploading a valid license file, you have to activate the integrations again.





Upon activating the standard configuration, a bulk recording will start.

To restrict the recording to particular end devices, the tenant can configure the Recording Planner in the System Configuration accordingly.

Deactivate/Delete integration

To be able to delete an integration, it has to be deactivated.

1. To deactivate the integration, click on the icon  (*Deactivate*) in the toolbar.

- ⇒ In the column *Active*, the icon  (*Inactive*) appears.
- ⇒ The icon  (*Delete*) becomes active in the toolbar.









    Integration ▾ General ▾			
Name ▾	Type ▾	Active ▾	Status ▾
 SIPREC	SIP active		

Fig. 383: Deactivate integration

2. Click on the icon  (*Delete*) and confirm the security prompt to delete the integration.

7.1.2.6 Configure recording solution Multi-Server Parallel Recording

7.1.2.6.1 Create recording architecture

Start the configuration in the Recording Architectures module because an activated recording architecture is required for further configuration.

The recording servers, recording types, and the integration types are assigned in the Recording Architectures module.

1. Select the menu item *Setup > Recording Architectures* in the navigation bar.
 - ⇒ The following window appears:












 System Configuration	    General ▾			
	Name ▾	Type ▾	Active ▾	Standby active ▾
No records found				
<div> <div> <div>Tenants</div> <div>Employees</div> <div>Roles</div> <div>Licensing</div> <div>Setup ▾</div> <div>Servers</div> <div>Recording Architectures</div> <div>PHONEapp</div> <div>PBX</div> <div>Phones</div> <div>TDM Hardware ASC</div> </div> <div> <div>Powered by</div> <div>ASC Technologies AG</div> <div>v6.0.0-0.0</div> </div> </div>				
<div> <div>Rows per page</div> <div>50 ▾</div> <div>0 - 0 of 0</div> <div> <div><<</div> <div>>></div> </div> </div>				


Fig. 384: Recording architectures - main view

Name	Name of the recording architecture
Type	Type of the recording architecture
Active	Shows whether the recording architecture has been activated and is ready to be used for the recording.  = Recording architecture is active and ready to be used for recording. It can be deactivated by clicking on the icon  (<i>Deactivate</i>) in the toolbar.  = Recording architecture is not active. It can be activated by clicking on the icon  (<i>Activate</i>) in the toolbar.
Standby Active	Shows whether the standby server is active for one or several recording components in the recording architecture.  = At least 1 standby server is active.  = No standby server is active or no standby server has been defined.

<i>Creation Date</i>	Date on which the recording architecture was installed.
<i>Updated</i>	Date on which the settings of the recording architecture were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Add integration type

- Click on the icon  (Add) in the toolbar of the list *Integration Type*.
⇒ The window *Integration Type* appears.

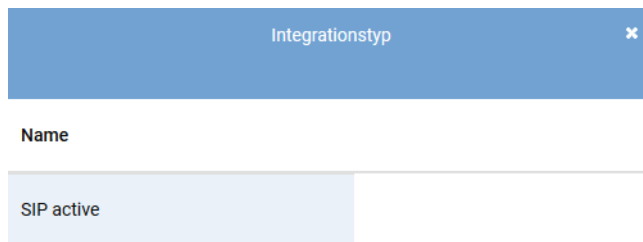



Fig. 385: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.




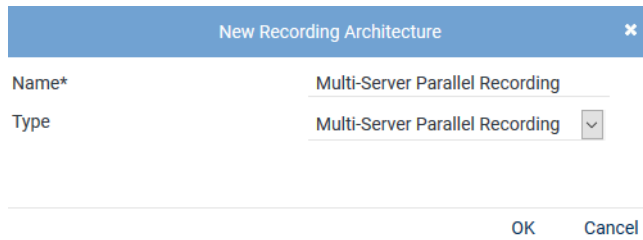
Any number of integration types can be assigned to a recording architecture.

- Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Create recording architecture Multi-Server Parallel Recording

If there are several recording servers which are supposed to record the same tracks in parallel, you have to create a recording architecture of the type *Multi-Server Parallel Recording*.

- To create a new recording architecture, click on the icon  (Create) in the toolbar of the main view.
⇒ The window *New Recording Architecture* appears.



New Recording Architecture

Name* Multi-Server Parallel Recording

Type Multi-Server Parallel Recording

OK Cancel

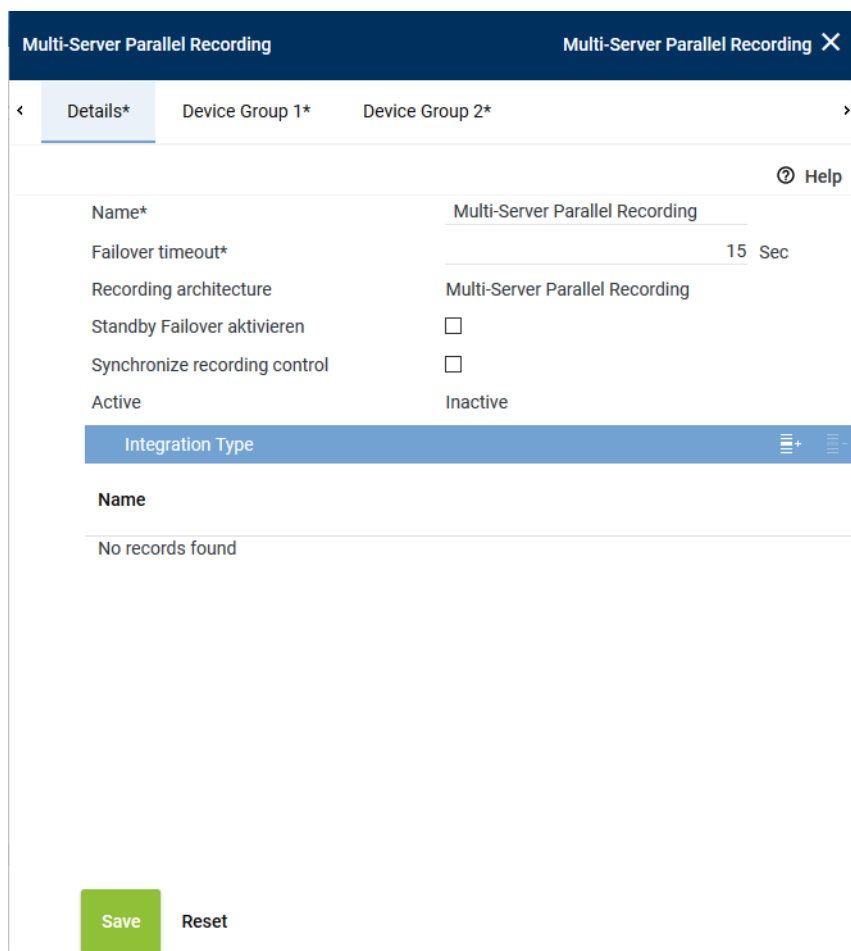
Fig. 386: Create recording architecture - Multi-Server Parallel Recording

2. In the entry field *Name*, enter a descriptive name for the recording architecture.
3. From the drop-down list *Type*, select the recording architecture type *Multi-Server Parallel Recording*.

NOTICE! The drop-down list only displays the supported recording architecture types.

4. Click on the button *OK*.

⇒ Your entries now appear in the detail view.



Multi-Server Parallel Recording

Multi-Server Parallel Recording

< Details* Device Group 1* Device Group 2* >

Help

Name* Multi-Server Parallel Recording

Failover timeout* 15 Sec

Recording architecture Multi-Server Parallel Recording

Standby Failover aktivieren ☐

Synchronize recording control ☐

Active Inactive

Integration Type

Name

No records found

Save Reset

Fig. 387: Recording architecture - tab Details - Multi-Server Parallel Recording


As standby components may have been configured for the different active recording servers, a failover timeout may be configured in this recording architecture. For further information about the configuration of failover architectures, see [chapter "Standby management for failover architectures", p. 390](#).

5. Enter a failover timeout of a minimum of 15 seconds after which the failover process is supposed to start. Depending on the system architecture it may make sense to configure a longer timeout period. The timeout defines the elapse time until the failover process starts. If the status returns to *OK* within this time, then the failover process is not triggered.

6. Activate the check box *Synchronize recording control* so that the Recording Control services can be synchronized and only one service controls recording for the two recording servers, see [chapter "Synchronizing recording control", p. 383](#).

NOTICE! Activating the option *Synchronize recording control* avoids double recordings. That way, you do not have to configure duplicate detection. If you do not want to synchronize recording control, you can configure duplicate detection, see [chapter "Duplicates in parallel recording architectures", p. 386](#).

Add integration type

1. Click on the icon  (Add) in the toolbar of the list *Integration Type*.
⇒ The window *Integration Type* appears.

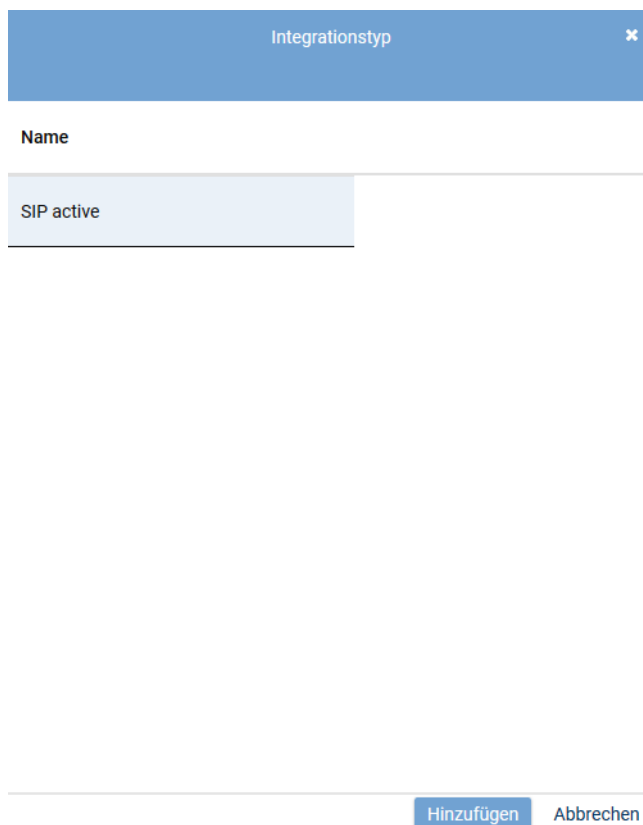


Fig. 388: Select integration type



Only those integration types are displayed which have a license in the system and which support the selected architecture type.



Any number of integration types can be assigned to a recording architecture.

2. Select *SIP active* from the list of the available integration types and click on the button *Add*.
⇒ The name of the integration type now appears in the list in the detail window.

Assign servers for Multi-Server Parallel Recording

In the architecture type *Multi-Server Parallel Recording* one tab appears for each device group where you can configure the different servers.

Tab Device Group 1

1. Click on the tab *Device Group 1* to configure the distribution of the recording components for the first device group.

Group field Recording Control and CTIconnect

In this group field, you can configure recording control. You can configure two different servers for this purpose or select the same server.

Multi-Server Parallel Recording

Multi-Server Parallel Recording

×

<

Details*

Device Group 1*

Device Group 2*

>

Recording Control and CTIconnect

▼

Recording Control device group 1*	RC-01	+	-
Used in activated architecture	No		
CTIconnect device group 1*	CTI-01	+	-
Used in activated architecture	No		

Recording Server

▼

<

Recording Server

+

+

+

Server ↕	Standby ↕
REC-01	REC-02

Save

Reset

Fig. 389: Recording architecture - server assignment device group 1


- Click on the button **+** behind the entry field *Recording control* to assign a server.
⇒ The window *Servers* appears.

Servers		
Name ↕	IP Address ↕	Path ↕
RC-02	192.168.173.176	C:\
REC-01	192.168.173.171	C:\
REC-04	192.168.173.174	C:\
REC-02	192.168.173.172	C:\
RC-01	192.168.173.175	C:\
CTI-01	192.168.173.177	C:\
CTI-02	192.168.173.178	C:\

Rows per page 20 1 - 8 of 8

Add Cancel

Fig. 390: Recording Architecture - assign server - example


2. Select the server for the *recording control module*.
3. Click on the button *Add*.
⇒ The name of the server now appears in the detail view.
4. To delete an assignment, click on the button .



A server can be configured in several recording architectures, but you cannot activate several recording architectures with the same server at the same time. If you would like to activate several recording architectures at the same time, you have to use different servers to do so.

5. Repeat the steps and select the server for the *CTIconnect module* in the entry field *CTIconnect*.

Group field Recording Server

1. In the table headline Recording Server, click on the icon  to add a recording server and a standby server.
⇒ The following window appears:

Multi-Server Parallel Recording
Multi-Server Parallel Recording
×

< Details*
Device Group 1*
Device Group 2*
>

Recording Control and CTIconnect

Recording Control device group 1*	RC-01	+	-	
Used in activated architecture	No			
CTIconnect device group 1*	CTI-01	+	-	
Used in activated architecture	No			

Recording Server

< Recording Server
⌵
⌵
⌵

Server ⌵	Standby ⌵	
REC-01	REC-02	⌵

Save

Reset

Fig. 391: Add Recording Server

2. As described in the previous steps, go to the entry field *Primary server* and click on the icon + to select the primary server on which the recording is supposed to run.
3. In the entry field *Standby server*, click on the icon + to select the standby server which is supposed to take over recording in case of an error.
4. Select the recording type you would like to use for these servers by activating the check box.
NOTICE! You can activate several recording types if the integration has been designed for this and if you have installed the respective licenses.
5. Click on the button *OK* to close the window.
 ⇒ The name of the server now appears in the detail view.
6. To edit the assignment subsequently, click on the icon ⌵.
 To delete an assignment, click on the icon ⌵.
7. If you would like to add further recording servers, repeat the steps described above.




Tab Device Group 2

1. Click on the tab *Device Group 2* to configure the distribution of the recording components for the second device group.
2. Proceed as described in the configuration of tab *Device Group 1*.



In the same device group, you can select the same server for both recording components. For device group 2, you cannot use a server which is already used in device group 1.

Activate recording architecture

1. Once all servers have been assigned, click on the button **Save**.
2. Select the recording architecture in the main view so that the icon  (*Activate*) in the tool-bar becomes active.
3. To activate the recording architecture, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.










     Recording Architecture ▾ General ▾			
Name ▾	Type ▾	Active ▾	Standby active ▾
Multi-Server Parallel Recording	Multi-Server Parallel Recording		

Fig. 392: Recording architecture - activate recording architecture - example

4. To deactivate the recording architecture, if required, click on the icon  (*Deactivate*).
⇒ In the column *Active*, the icon  (*Inactive*) appears.



The recording architecture must have been activated so that the integration can be configured.



For updates, the recording architecture is stopped and deactivated. Once the update has been completed, check that the recording architecture has been activated again.



Parallel recording results in redundant recording data in the system. To make sure that this data does not remain in the system permanently, you can configure duplicate detection so that duplicate sets of data are deleted, see [chapter "Configure duplicate detection", p. 387](#).



If you install an extension for the integration subsequently, you must deactivate the recording architecture and activate it again after having installed the license.

7.1.2.6.2 Configure servers

Every server in your network that the *neo* software has been installed on is automatically identified as a server of the recording system and displayed in the main view of the Servers module. In the Servers module, you can configure the usage of the servers in your recording system.

1. Select the menu item *Setup > Servers* in the navigation bar.
⇒ The following window appears:

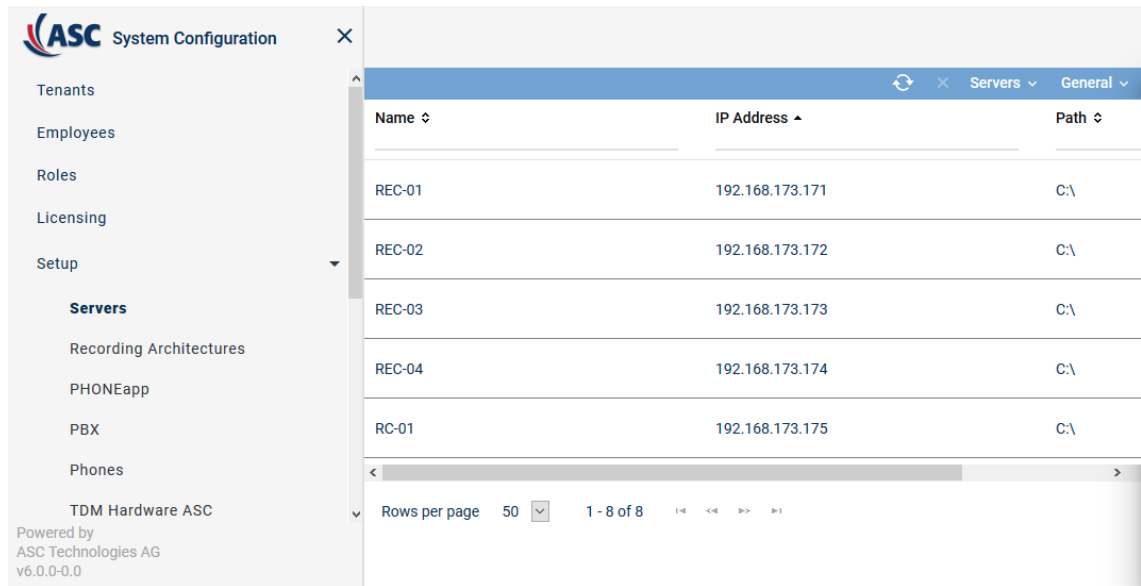


Fig. 393: Servers - main view

Depending on the configuration of the columns, the following information is displayed in the main view:

<i>Name</i>	Shows the name of the server.
<i>IP Address</i>	Shows the IP address of the server.
<i>Path</i>	Shows the path of the server.
<i>Creation Date</i>	Date on which the server was installed.
<i>Updated</i>	Date on which the settings of the server were updated for the last time.

NOTICE! Hidden columns can be added by clicking on the menu item *General > Adjust Table*.

Toolbar of the Servers module

The toolbar offers the following functions.

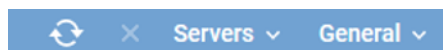




Fig. 394: Toolbar Servers module

	<i>Refresh</i>	Refreshes the main view.
	<i>Delete</i>	Deletes the selected server configuration. This function is meant to delete the server configuration if the hardware of a server has been removed and there is no connection to the <i>neo</i> system.
<i>Servers</i>	<i>Administrate Server Locations</i>	Opens a window in which you can create and administrate locations of the servers, see chapter "Administrate server locations" , p. 329.
	<i>Administrate NTP Server</i>	Opens a window in which you can administrate the servers for the time synchronization, see chapter "Administrate NTP server" , p. 345.
	<i>Manage Synchronization Configurations</i>	Opens a window in which you can manage the synchronization configurations.
<i>General</i>	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view:

	<ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria.
<i>Reset Search</i>	Resets all search filters so that all sets of data are displayed in the main view again.
<i>General Help</i>	Opens the online help.
<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Administrate server locations

You can create and manage a list of server locations. In the tab *Details*, you can assign locations to the servers.

Add server locations

- Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.

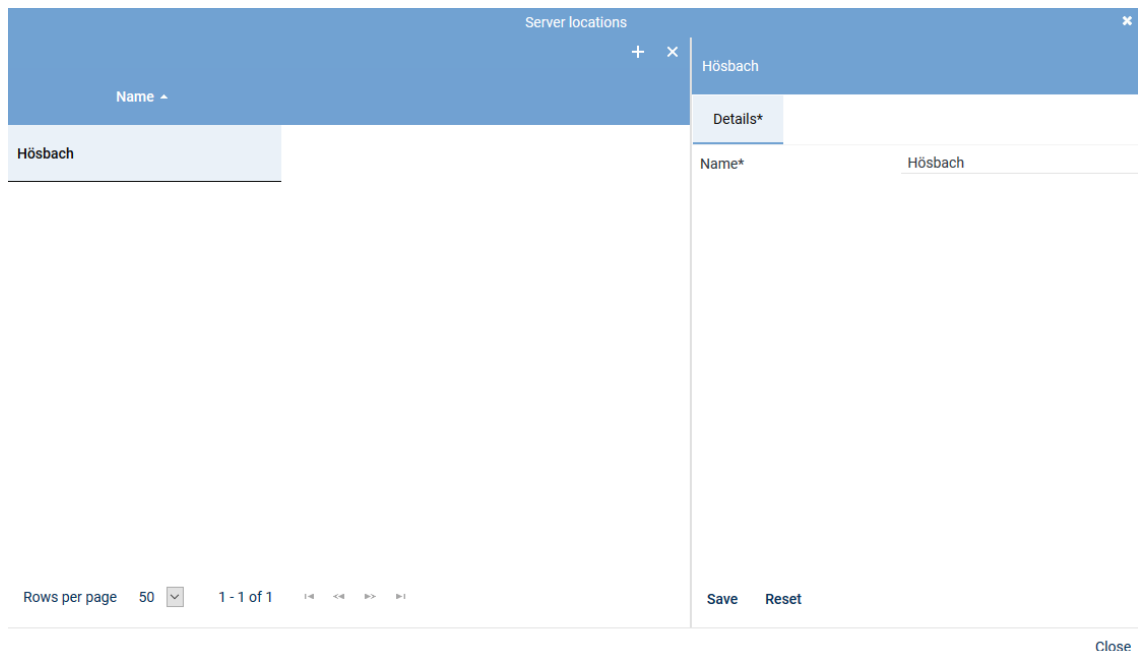



Fig. 395: Add server locations

- Click on the icon  (*Create*) in the toolbar of the window *Server Locations*.
- Enter the name of the location on the right side in the tab *Details*.
- To save the entry, click on the button *Save*.
To discard the entry, click on the button *Reset*.
- To add further locations, repeat the last 3 steps.

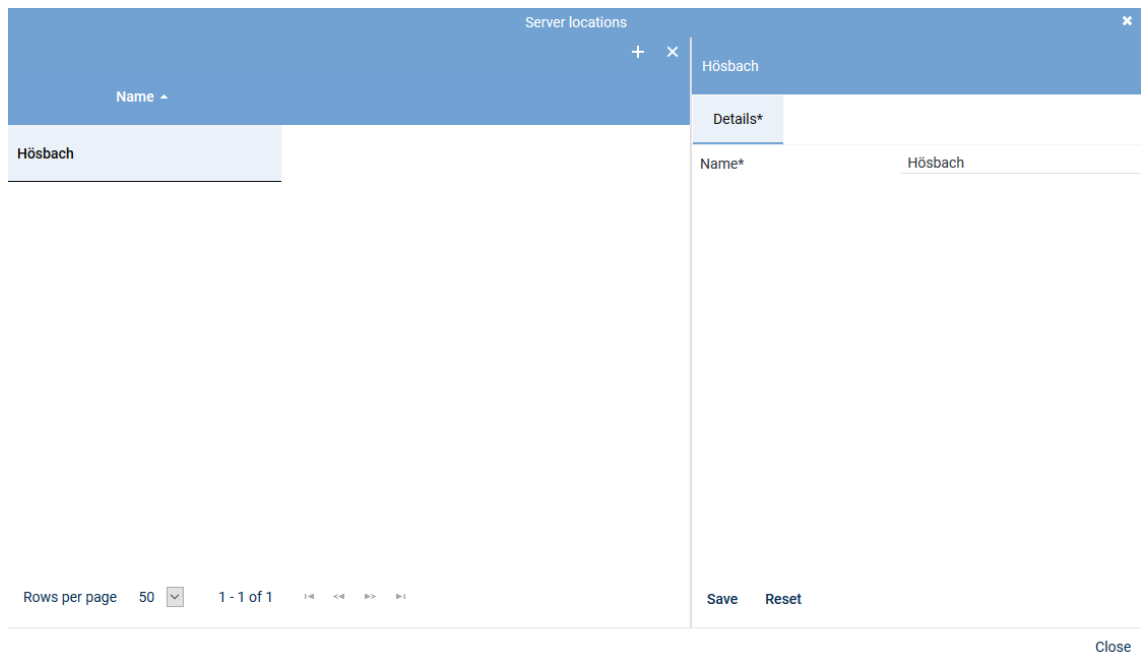
6. To close the window, click on the button *Close*.

Delete server location




A server location can only be deleted when it has not been assigned. To be able to delete a server location, you must first delete possible assignments.

1. Click on the menu item *Servers > Administrate Server Locations* in the toolbar of the main view.
⇒ The window *Server Locations* appears.
2. Select the location you would like to delete.



The screenshot shows a window titled "Server locations" with a close button (X) in the top right corner. Below the title bar is a toolbar with a "+" icon and a "Name" dropdown menu. The main area contains a table with one row: "Hösbach". To the right of the table is a "Details*" tab. Below the table, there is a pagination bar showing "Rows per page 50" and "1 - 1 of 1". At the bottom right of the window, there are "Save" and "Reset" buttons, and a "Close" button at the very bottom right.

Fig. 396: Delete server location

3. Click on the icon  (*Delete*) in the toolbar of the window.
4. To delete further locations, repeat the last 2 steps.
5. To close the window, click on the button *Close*.

Tab Details

1. To configure the server, select the entry of the corresponding server in the main view.
⇒ In the detail view, the tab *Details* appears.
The information *Name* and *Configured IP address* has already been entered during the installation and is displayed for your information only.

<
Details*
Usage*
Media Streamer
Replay Server Address Mapping
Key Ma >

? Help

Name	REC-01
Configured IP address	192.168.173.171
IP address*	192.168.173.171 <input type="button" value="v"/>
Server location	Hörsbach <input type="button" value="v"/>

Fig. 397: Servers - tab Details

- From the drop-down list, select the IP address which is supposed to be used as default address of the server in the system.
- Select the *Server location* in the drop-down list. The drop-down list displays all locations which have been created in the location management.
- Click on the button **Save** if the entries are correct.

Tab Usage

- Click on the tab *Usage* to configure the purpose of usage.



Since a server can be used for several recording solutions, all purposes of use are listed. Note that some purposes of use do not apply for some recording solutions. As an example: You cannot use audio analysis or replay via phone in a chat recording.

<
Details*
Usage*
Media Streamer*
Replay Server Address Mapping
Key M. >

API Server	▶
Audio Analysis	▶
Recording Control/Key Management	▶
Data Processing	▶
Replay	▶
Virtualization	▶

Fig. 398: Servers - tab Usage

Group field API Server

API Server ▾

☒ API server

API server name*

Storage expansions

Path ▾	Server ▾
<input type="text"/>	<input type="text"/>



No records found

☒ Replay via phone

Fig. 399: Group field API Server


The API server is a service in the *neo* software. It contains the interface for the client applications. Once the service has been started, the client applications can communicate with the *neo* system via this interface by means of defined commands.

The API server is responsible for replay via the web browser, too. The API server has to be started before the replay server can be activated and the API server assigned for replay via the web applications.


Parameter	Value/Description
<i>API server</i>	<p>Tick the check box to start the API server.</p> <p><input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>API server</i>.</p> <p><input type="checkbox"/> = Function has not been activated.</p> <p>In order to be able to reach the API server from a public network and with configured port forwarding, too, you have to adjust the settings in the tab <i>Replay Server Address Mapping</i>, see chapter "Tab Replay Server Address Mapping", p. 341.</p>
<i>API server name</i>	<p>Enter the name which is supposed to denote the server in the system. The displayed name can be selected arbitrarily and is a kind of pseudonym.</p> <p>The displayed name is meant to make it easier for users to select a server as different API servers may be used across the system by different tenants. When selecting the API server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p>
<i>List Storage expansions</i>	<p>Here, you can add storage expansions for replay. If a recording which is supposed to be replayed cannot be found on the server, the search is continued on the storage expansions which have been entered here. That way, even recordings can be replayed which have not been transferred to the server.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the storage expansions, see chapter "Add storage expansion for replay", p. 333. By clicking on the icon  (<i>Remove</i>), you can remove the storage expansions from the list. <p>If you use several recording servers in your system for which storage expansions have been configured, you can add any storage expansion of any recording server on every API server of the system.</p>

Parameter	Value/Description
<i>Replay via phone</i>	<p>Activate this function if you would like to use the functions <i>Replay via phone</i> or <i>Last Call Repeat</i>.</p> <p><input checked="" type="checkbox"/> = Function has been activated. <input type="checkbox"/> = Function has not been activated.</p> <p>NOTICE! The function <i>Replay via phone</i> has been implemented in the following <i>neo</i> components:</p> <ul style="list-style-type: none"> • Application POWERplay Pro • Application POWERplay Instant • Replay module <p>In order to enable a client to use the functionality <i>Replay via phone</i>, you have to assign this client an identifier either in the Employees module or in the Phones module which allows the system to clearly identify the phone.</p> <p>NOTICE! In the tab <i>Media Streamer</i>, you have to assign this function to a PBX, see chapter "Tab Media Streamer", p. 340. To be able to do so, at least 1 PBX must have been configured in the system.</p>

Add storage expansion for replay

1. Click on the icon  (*Add*) in the toolbar of the list.
2. Select 1 or several storage expansions.
If you would like to select several storage expansions or revoke a selection, click on the respective line while holding the [Ctrl] key down.

Storage Expansion for Replay				
Device Type ↕	Name ↕	Path ↕	Free Disk Space ↕	Server ↕
NAS	NAS 2	NAS 2	<div></div>	REC-02

Rows per page 20  1 - 1 of 1 < << >> >

Add Cancel

Fig. 400: Select storage expansion

3. To apply the selected storage expansions, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Audio Analysis

Audio Analysis ▼

☒ Audio analysis (SAES mode)

Stream audio data from* + -

☐ Emotion detection

Stream audio data from* + -

Fig. 401: Group field Audio Analysis

Parameters	Value/Description
<i>Audio analysis</i>	<p>Activate this check box to use the server for audio analysis. The audio data is then streamed for audio analysis from the configured server to this server.</p> <ul style="list-style-type: none"> Stream audio data from From the list of available servers, select the server from which the audio data is supposed to be streamed for audio analysis via the button +.
<i>Emotion detection</i>	<p>Activate this check box to activate emotion detection for the audio analysis.</p> <p><input checked="" type="checkbox"/> = Function has been activated. Tenants can use the emotion detection function.</p> <p><input type="checkbox"/> = Function has not been activated.</p>

Tab. 91: Configure audio analysis

Group field Recording Control/Key Management

Recording Control/Key Management ▼

☒ Recording control/Monitoring

Recording architecture ▼

☒ neo key management

Fig. 402: Group field Recording Control/Key Management

Parameters	Value/Description
<i>Recording control/Monitoring</i>	<p>Activate the check box if you would like to use <u>CLIENT</u><i>command</i> or an API recording control or if you would like to use <i>Monitoring</i>. This feature is only available if a recording architecture has been configured and activated.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the respective recording architecture you would like to use for the control.
- <i>neo key management</i>	<p>The function allows customer-specific encryption of the recordings. To be able to configure the key management, you have to activate the check box <i>Key management</i>.</p> <p>This function can only be activated if the license <code>ASC_KEY_MANAGEMENT</code> is available.</p>

Parameters	Value/Description
	For further information about the configuration of the key management refer to the administration manual <i>Configuration of servers and recording architectures</i> and to the installation manual <i>Installation Dongle Manager</i> .

Tab. 92: Configure Recording Control/Key Management

Group field Data Processing

Data Processing

☒ Data storage

☒ Transfer data for replay

Target Server

Name	IP Address
No records found	

☒ Transfer data for data storage

Target Server

Name	IP Address
No records found	

Activate period of time ☒

from 11:59:36

to 11:59:36

Receives data from

Name	Only Replay
No records found	



☒ Archiving





☒ Export

☒ Import

Recording architecture Please choose...


Fig. 403: Group field Data Processing

Parameter	Value/Description
<i>Data storage</i>	Activate the check box to allow the modification of the additional functions of data processing.
<i>Transfer data for replay</i>	<p>Activate the check box if you would like to transfer data only for replay to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for replay. The data is not stored on the target server but deposited in a cache temporarily in order to be replayed.</p> <ul style="list-style-type: none"> By clicking on the icon  (Add), you can add the target server, see chapter "Add target server to a list", p. 337. By clicking on the icon  (Remove), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which an API server and a replay server have been configured.</p>

Parameter	Value/Description
<i>Transfer data for data storage</i>	<p>Activate the check box if you would like to transfer data for storage to another server.</p> <p>If the function has been activated, you can select a server from the list <i>Target Server</i> to which the recorded data is supposed to be transferred for data storage purposes. In the drop-down list, all servers are displayed on which the function <i>Data Storage</i> has been activated. The data is copied to the target server and stored there.</p> <ul style="list-style-type: none"> By clicking on the icon  (<i>Add</i>), you can add the target server, see chapter "Add target server to a list", p. 337. By clicking on the icon  (<i>Remove</i>), you can remove the target server from the list. <p>NOTICE! Only those servers are displayed on which the function <i>Data Storage</i> has been activated.</p> <p>If the function has been activated, you can activate the transfer for a certain period of time.</p> <ul style="list-style-type: none"> Activate period of time <input checked="" type="checkbox"/> = Function has been activated. The fields for entering the time become active. Select the time via the rotating field for the period from – to. Active period of time <input type="checkbox"/> = Function has not been activated. <p>NOTICE! In distributed systems with slow network connections, the storage interval for the data transfer can be adjusted. The storage interval for the data transfer has to be configured by an ASC service technician or by an authorized partner company.</p>
<i>Receives data from</i>	<p>This table contains those servers which transfer data to this server.</p> <p>In the column <i>Name</i>, the name of the server appears from which data has been transferred.</p> <p>In the column <i>Only Replay</i>, the purpose of the transfer is displayed:</p> <p> = Data is transferred only for replay.</p> <p> = Data is transferred for data storage.</p>
<i>Archiving</i>	<p>Activate the check box <i>Archiving</i> if you would like to use the server for archiving purposes.</p>
<i>Export</i>	<p>Activate the check box <i>Export</i> to allow the export from this server.</p>
<i>Import</i>	<p>Activate the check box <i>Import</i> so that the imported data can be stored on this server.</p> <ul style="list-style-type: none"> Recording architecture From the drop-down list, select the recording architecture that fulfills this function. In the drop-down list, all recording architectures are displayed which enable this function as well. <p>NOTICE! If you would like to use a server for the import function on which no recording is supposed to take place, you can configure an architecture exclusively for the import.</p>

Tab. 93: Configure data storage

Add target server to a list

1. In the toolbar of the list *Target Server*, click on the icon  (Add).
2. Select the server from the list to which you would like to transfer the data.
If you would like to select several servers or revoke a selection, click on the respective line while holding the [Ctrl] key down.



Name	IP Address
RC-02	192.168.173.176
REC-04	192.168.173.174
RC-01	192.168.173.175
REC-02	192.168.173.172
CTI-01	192.168.173.177
REC-03	192.168.173.173

Rows per page: 20 | 1 - 6 of 6 | << < > >>

Add Cancel

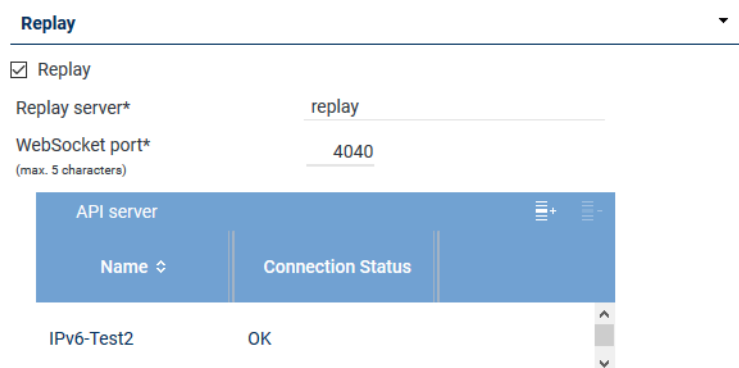
Fig. 404: Select server



Only those servers are available on which the function *Data storage* has been activated.

3. To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Replay



Replay

☒ Replay



Replay server* replay

WebSocket port* 4040
(max. 5 characters)

Name	Connection Status
IPv6-Test2	OK

Fig. 405: Group field Replay

Parameter	Value/Description
Replay	A replay server can replay recordings via the integrated <i>Replay Feature</i> . Only data which has either been recorded directly on this server or which has been transferred to this server for data storage or only for replay purposes can be replayed. The client computers of the system can connect to a replay server for replay purposes.

Parameter	Value/Description
	<p>Activate the check box <i>Replay</i> to be able to use the replay function of the players and the phones.</p> <p><input checked="" type="checkbox"/> = Function has been activated. You have to complete the entry field <i>Replay server</i>.</p> <p><input type="checkbox"/> = Function has not been activated.</p>
<i>Replay server</i>	<p>If the function has been activated, you can enter a displayed name which is supposed to denote the server as the replay server in the system in the entry field <i>Replay server</i>. The displayed name can be selected arbitrarily and is a kind of pseudonym. As the replay server and the API server must not be identical, you can select different pseudonyms.</p> <p>The displayed name is meant to make it easier for users to select a server as different replay servers may be used across the system by different tenants. When selecting the replay server, these pseudonyms are displayed on the client computers instead of the real server name or the IP address.</p> <p>In order to be able to reach the server activated for replay from a public network and with configured port forwarding, you have to set the configuration in the tab <i>Replay Server Address Mapping</i>. For further details about the configuration refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>
<i>WebSocket port</i> (maximum of 5 characters)	Enter the port via which the data to be replayed in POWERplay Web are supposed to be transmitted.
<i>List</i> <i>API server</i>	<p>Here, you can add API servers that the replay server may use. If a recording which is supposed to be replayed cannot be found on a server, the search is continued on the API servers which have been entered here.</p> <p>If the function <i>Replay</i> has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> • By clicking on the icon  (<i>Add</i>), you can add the API server, see chapter "Add API server to a list", p. 338. • By clicking on the icon  (<i>Remove</i>), you can remove selected API servers from the list.

Tab. 94: Configure replay

Search and replay functions



To be able to use the search and replay functions via [LCR](#) as well as to use replay via phone, you have to create the users with the respective access rights in the application System Configuration in the Employees module. For information about the configuration refer to the administration manual *User management* for tenants.

Add API server to a list

The replay server required the services of an [API](#) server. The configuration must be as follows:

- If the replay server runs on a server with a local [API](#) server, it must not necessarily be assigned as the replay server always addresses the local [API](#) server first.
- If the replay server runs on a separate server, you must assign at least one [API](#) server that the replay server can address.


- If several **API** servers are available in the network, you can assign further **API** servers in addition to the local **API** server. The assigned **API** servers are addressed in order. For this reason, the local **API** server should always be first in the list.
1. To assign an **API** server, click on the icon  (*Add*) in the toolbar of the list *API Server*.
 2. Select the server from the list on which the **API** service is running.



Fig. 406: Select server



Only those servers are available on which the **API** service has been installed and activated. See [chapter "Group field API Server", p. 332](#).

3. To apply the selected servers, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

Group field Virtualization



Fig. 407: Group field Virtualization

Parameter	Value/Description
<i>VM support</i>	<p>Activate the check box <i>VM support</i> to be able to use the licensing for several VM installations.</p> <p>This function can only be activated if the system has been installed in a VMware and no <i>TRUSTED_VIRTUALIZATION</i> license has been imported to the system.</p> <p>When activating the function <i>VM support</i>, you have to configure the respective settings in the tab <i>Keystore/VM Licensing</i>. For further details about the configuration of this function refer to the administration manual <i>Configuration of servers and recording architectures</i>.</p>

Tab. 95: Configure virtualization



For the *virtualization* without Internet connection, a dongle is required which contains the system information. The application *Dongle Manager*, required to read the dongle, has to be installed on the server that the dongle has been connected to.

1. To save the entries, click on the button *Save* in the detail view.
To reset the entries, click on the button *Reset* in the detail view.

Tab Media Streamer

1. Click on the tab *Media Streamer* in the detail view.

In this tab, you can configure the Media Streamer for the functionalities *Replay via phone* and *Last Call Repeat Facility*.



The tab *Media Streamer* is only active if the function *Replay via phone* has been activated in the tab *Usage*.

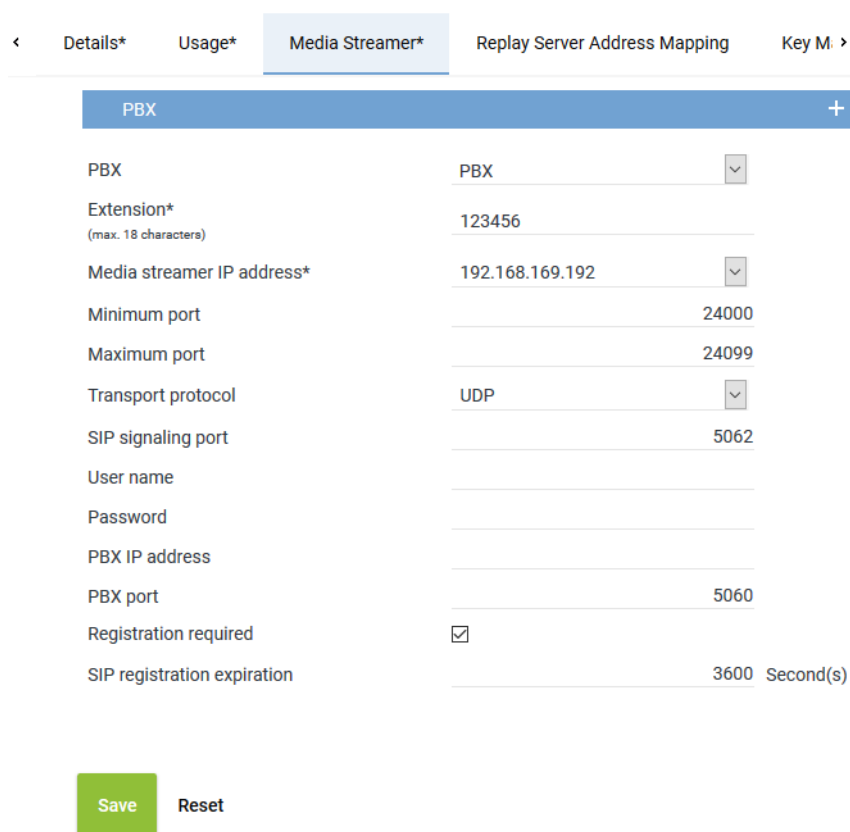


Fig. 408: Servers module - tab Media Streamer

2. Enter the following parameters:

PBX	<p>PBX that the Media Streamer is supposed to be mapped to.</p> <p>Select a PBX from the drop-down list. The drop-down list displays all PBXs which have been created in the system.</p> <p>If no PBX has been created in the system yet, you can create a PBX via the blue bar PBX, see chapter "Create PBX", p. 346.</p>
Extension	<p>Extension which is supposed to be mapped to the Media Streamer. This is a mandatory field; the configuration cannot be saved if this information is missing.</p> <p>If an external analog gateway has been integrated, enter the value 8000.</p>

<i>Media streamer IP address</i>	<p>IP address which is supposed to be used for the exchange of the audio data and for the SIP communication.</p> <p>Select an IP address from the drop-down list. In the drop-down list, all IP addresses of the server are displayed.</p> <p>If an external analog gateway has been integrated, select the IP address 169.254.254.100 in the drop-down list.</p>
<i>Minimum port</i>	Enter the minimum port which is supposed to be used for the audio data exchange.
<i>Maximum port</i>	<p>Enter the maximum port which is supposed to be used for the audio data exchange.</p> <p>A port range of 100 (e. g. 24000-24099) is sufficient for 50 licenses. The port range should be twice as wide as the number of available licenses.</p>
<i>Transport protocol</i>	<p>Select the transport protocol type you would like to use for the SIP communication from the drop-down list.</p> <p>TCP = unencrypted UDP = unencrypted TLS = encrypted</p> <p>If an external analog gateway has been integrated, select UDP in the drop-down list.</p>
<i>SIP signaling port</i>	<p>Enter the port for the SIP communication.</p> <p>Port for data exchange: 5062</p>
<i>User name</i>	Enter the user name for the authentication on the SIP server.
<i>Password</i>	Enter the password for the authentication on the SIP server.
<i>PBX IP address</i>	<p>Enter the IP address of the SIP registrar of the PBX.</p> <p>If an external analog gateway has been integrated, enter the IP address 169.254.254.101.</p>
<i>PBX port</i>	<p>Enter the port of the SIP registrar of the PBX.</p> <p>If an external analog gateway has been integrated, enter the value 5060.</p>
<i>Registration required</i>	<p>Select whether the SIP extension has to be registered with the SIP registrar of the PBX.</p> <p><input checked="" type="checkbox"/> = SIP extension has to be registered. <input type="checkbox"/> = SIP extension does not have to be registered.</p> <p>If an external analog gateway has been integrated, deactivate the check box Registration required.</p>
<i>SIP registration expiration</i>	Enter the time interval after which the registration has to be repeated.

Tab Replay Server Address Mapping

1. Click on the tab *Replay Server Address Mapping* in the detail view.

In this tab, you can configure the replay server address mapping. Servers which have been activated for replay require this address mapping so that they can be reached from a public network and with configured port forwarding.



The tab *Replay Server Address Mapping* is only active if the function *Replay* has been enabled in the tab *Usage*.

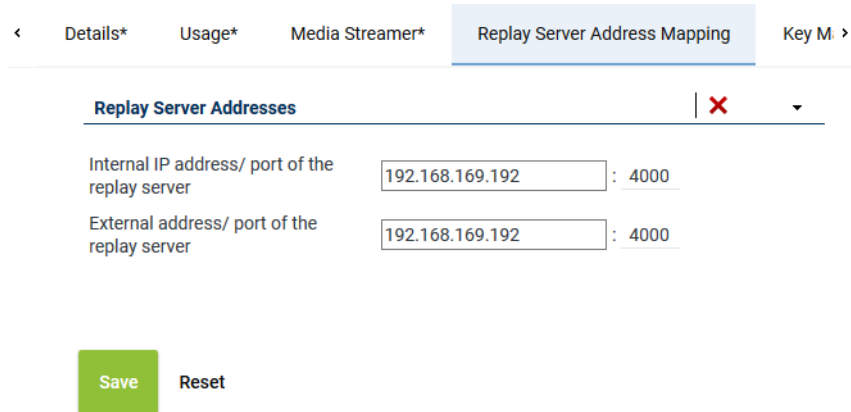


Fig. 409: Servers Module - tab Replay Server Address Mapping

Group field Replay Server Addresses

1. Enter the following parameters:

<i>Internal IP address/ port of the replay server</i>	Enter the destination IP address and the port of the replay server at which the Replay module can be reached internally.
<i>External address / Port of the replay server</i>	Enter the URL or the IP address and the port at which the Replay module can be reached via the browser from outside. When entering the external address consider whether the SSL certificate has been created for an IP address or for a DNS address. In the latter case, it is imperative to enter the DNS name! Otherwise the certificate check in the replay applications will fail.

If you would like to remove the addresses, click on the icon  in the title bar of the group field.



If address mapping has been configured, the Replay module receives the configured address and the configured port.

If address mapping has not been configured, the Replay module receives the IP address and the default port *4040* as entered in the tab *Details*.



To allow the users of the respective tenant to access the replay server via the browser, an internal address and/or an external IP address or a DNS name must be configured in the Tenants module.



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Key Management

1. Click on the tab *Key Management* in the detail view.

In this tab, you can configure the settings for the *neo* key management. This tab is only active if you have installed the corresponding license and enabled the function *neo Key Management* in the tab *Usage*.

< Usage* Media Streamer* Replay Server Address Mapping Key Management >

Key creation interval

☒ All

365 Day(s)

☐ Create key manually

Delay usage

until

0 Day(s)

0 Hour(s)

☐ Key expiration date

after

0 Day(s)

☒ In case of an error switch to simple key management automatically

Save

Reset

Fig. 410: Servers module - tab Key Management

<i>Key creation interval</i>	<p>Select whether a key is supposed to be generated automatically or manually. Select one of the following options:</p> <ul style="list-style-type: none"> • <i>All</i> Select the intervals in which a new key is supposed to be generated automatically. Possible time interval: 1 to 365 days Default value: 365 days • <i>Create key manually</i> Select that a key is supposed to be generated manually. <p>Old keys which are no longer used for encryption become inactive for the time being. They remain in the database, though, since they are still required for the decryption of old recordings.</p>
<i>Delay usage</i>	<p>If required, enter a time interval during which the new key is not supposed to be used yet after having been created. Not until after this time interval has passed can the key be actually used for encryption.</p> <p>Possible time interval: 0 to 14 days Default value: 0 days (new keys are immediately used for encryption)</p> <p>A delay guarantees that the key has been captured by a database backup before it will actually be used.</p>
<i>Key expiration date</i>	<p>Select whether an inactive key is supposed to become invalid after the expiration of the time interval defined here.</p> <p><input type="checkbox"/> = Key never becomes invalid.</p> <p><input checked="" type="checkbox"/> = Key becomes invalid. In the entry field, enter the time interval after which the key loses its validity. Once this time interval has passed, the key cannot be used anymore. If recording data must be deleted after a certain period of time, this option offers additional security on top of the configured date of deletion. This especially applies to the case when recording data has been transferred manually to a storage location where the deletion mechanism of the system cannot find it.</p>

CAUTION! All recordings which have been encrypted with a key which has meanwhile become invalid are useless and cannot be replayed anymore.

In case of an error ... automatically

Select whether simple key management is supposed to be used if the neo key management does not work (e. g. if the service *DongleMan* fails). If you have not activated the option, no recording takes place as long as the neo key management has been activated but does not work.

☒ = In case of an error, simple key management is used as replacement.

☐ = In case of an error, no recording takes place as long as the neo key management has been activated. In this case, disable key management in the tab *Usage*.



On top of the settings in this tab, each tenant who would like to use the neo key management has to define individual settings in his own user management (Tenants module).



For information about the configuration refer to the administration manual for tenants *User management tenant*.

Tab Keystore/Virtualization

1. Click on the tab *Keystore/Virtualization* in the detail view.

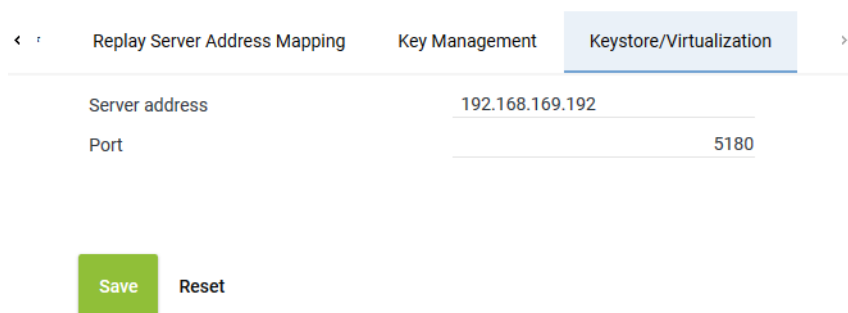
In this tab, you can configure the connection data for the service *DongleMan* for the neo key management and for the authentication of the VM.



If your system has been installed in a virtual environment, the application Dongle Manager must have been installed and started locally outside the VM so that the access to the dongle works. The dongle must have been connected to the server on which the VM has been installed.



For detailed information about neo key management refer to the administration manual *Encryption of recordings*.



Navigation: < Replay Server Address Mapping | Key Management | **Keystore/Virtualization** >

Server address	192.168.169.192
Port	5180

Buttons: **Save** Reset

Fig. 411: Servers module - tab Keystore/Virtualization

Server address

Enter the address of the server for this connection.

- If you use the neo key management as well as the virtualization:
IP address of the server that the service *DongleMan* has been installed on.
- If you use only virtualization, you can authenticate the VM via the ASC License Management System, too. In this case, enter the following address:
licensing.asc.de

	<ul style="list-style-type: none"> If you use only the ASC key management: IP address of the server with the master password database
Port	Enter the port for the connection. Default value: 5180

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

Administrate NTP server

The recording system works with an **NTP**-based time synchronization. The function *Administrate NTP server* allows defining several **NTP** servers. Every server in the system identifies all **NTP** servers configured within the system and can use any **NTP** server for time synchronization. That way, every server can connect immediately to another **NTP** server if its current **NTP** server connection breaks down.

Add NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.

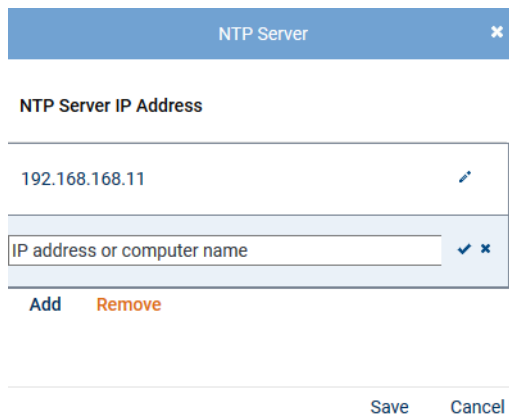





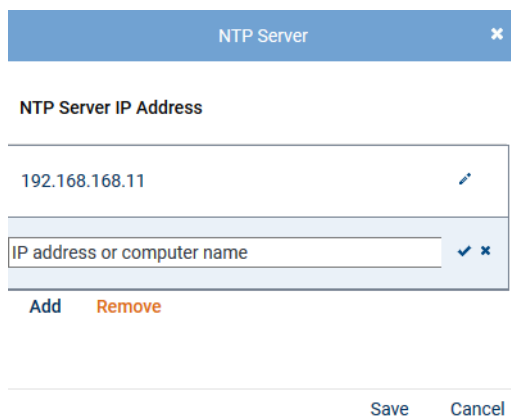
Fig. 412: Add NTP server

The list displays all NTP servers that have been configured during the installation.

- To add a server, click on the button *Add*.
- In the newly added row, click on the icon  (*Edit*).
- Enter the **IP** address or the name of the **NTP** server in the entry field.
- To save the entry in the row, click on the icon  (*Save*).
To discard the entry in the row, click on the icon  (*Discard*).
- To save all changes in the list, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.




Edit IP address

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



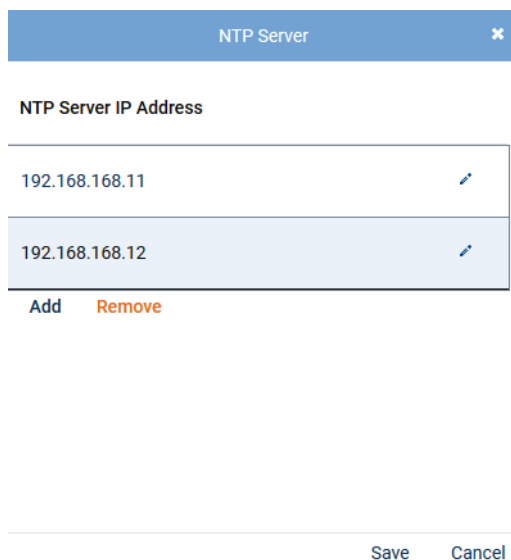
The screenshot shows a window titled "NTP Server" with a close button (X). Below the title bar, the text "NTP Server IP Address" is displayed. A table contains one row with the IP address "192.168.168.11" and an edit icon (pencil). Below the table is a text input field with the placeholder "IP address or computer name" and check/cancel icons. At the bottom left are "Add" and "Remove" buttons. At the bottom right are "Save" and "Cancel" buttons.

Fig. 413: Edit IP address

- Click on the icon  (*Edit*) in the row with the IP address that you would like to edit.
- Change the entry in the entry field.
- To save the change, click on the icon  (*Save*).
To discard the change, click on the icon  (*Discard*).
- To save the changes, click on the button *Save*.
To discard the changes and close the window, click on the button *Cancel*.

Remove NTP server

- Select the menu item *Servers > Administrate NTP Server* in the toolbar of the main view.
⇒ The window *NTP Server* appears.



The screenshot shows a window titled "NTP Server" with a close button (X). Below the title bar, the text "NTP Server IP Address" is displayed. A table contains two rows: the first with "192.168.168.11" and an edit icon, and the second with "192.168.168.12" and an edit icon. Below the table are "Add" and "Remove" buttons. At the bottom right are "Save" and "Cancel" buttons.

Fig. 414: Remove NTP server

- In the list, select the NTP server that you would like to remove.
- Click on the button *Remove*.
⇒ The NTP server is removed from the list.
- To save the change, click on the button *Save*.
To discard the change and close the window, click on the button *Cancel*.

7.1.2.6.3 Create PBX

The PBX can either be configured via the PBX module or via the Integrations module.

In this configuration step, the parameters for the PBX are configured, e. g. the name, the area code and the net code.

1. Select the menu item *Setup > PBX* in the navigation bar.

⇒ The following window appears:

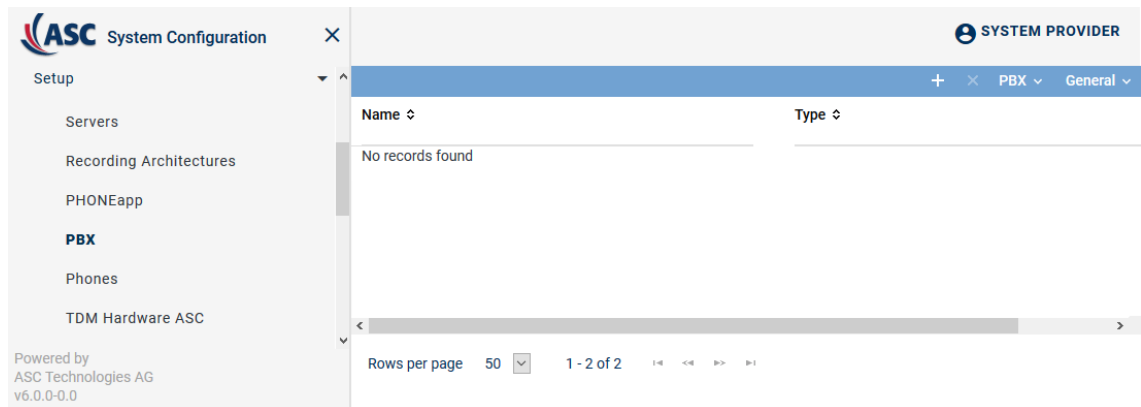




Fig. 415: Create new PBX

Toolbar of the PBX module

The toolbar offers the following functions.



Fig. 416: Toolbar PBX module

	<i>Create</i>	In the detail view, you can enter the parameters of the new PBX.
	<i>Delete</i>	Deletes the selected PBX configuration. A PBX can only be deleted if it is not used in any configuration.
<i>PBX</i>	<i>Phone Configuration</i>	Opens a window in which you can create and configure phones.
	<i>Administrate Unused Extensions</i>	Opens a window in which you can delete extensions that are not used in any configuration.
<i>General</i>	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	Opens a window in which you can adjust the following settings for the main view: <ul style="list-style-type: none"> • <i>Displayed information</i> • <i>Order of the displayed columns</i> • <i>Number of rows per page</i>
	<i>Save Table Configuration</i>	Saves the current table configuration of the main view as default view of the user.
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed information on default functions such as *Print*, *Adjust table*, or *Help* refer to the user manual for administrators *System Configuration - General Information*.

Create new PBX

1. Click on the icon  (*Create*) in the toolbar of the main view of the PBX module.

⇒ In the detail view, the tab *Details* appears.

×

<
Details*
PHONEapp Configuration
Web Service
>

Name*

SIPREC

PBX type*

Universal VoIP ▼

Maximum length of extensions

4 ▼

Country code

☒ Select from list

United States (1)
▼

☐ Enter manually

Area code*

6021

Net code*

5963

Non Phone IPs

No records found

Add
Delete

IPs to be Ignored

No records found

Add
Delete

MACs to be Ignored

No records found

Add
Delete

Save

Reset

Fig. 417: Create new PBX - tab Details

2. Set the following parameters in the detail view:

Parameter	Value/Description
Name	This <i>name</i> serves as the identifier of this PBX.
PBX type	Select the type of the PBX from the drop-down list.
Maximum length of the extensions	Enter the number of digits of the extensions, e. g. 4.
Country code	Select the option for the country code: <ul style="list-style-type: none"> <i>Select from list</i> Select the country code from the drop-down list. <i>Enter manually</i> If the corresponding country code is not available in the drop-down list, you can enter the 3-digit code manually. e. g. for Sri Lanka 094.
Area code	Enter the area code without the preceding 0, e. g. 6021.
Net code	Enter the net code, e. g. 5963. Do not enter an extension here.

Tab. 96: Create PBX

If you would like to display the complete phone number, e. g. if you use more than one PBX, several area codes, or if you would like to record mobile phones, you have to configure the value 0 in the following parameters:

Parameter	Value/Description
<i>Maximum length of the extensions</i>	Enter the number 0 in the field maximum length of the extensions to display the complete phone number.
<i>Area code</i>	Enter the number 0 as area code to display the complete phone number.
<i>Net code</i>	Enter the number 0 as net code to display the complete phone number.

Tab. 97: PBX parameters with complete phone number

- To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

7.1.2.6.4 Assign recording resources

In multi-tenant systems, you have to assign each tenant its own recording resources.

Depending on the recording type, agents can be assigned to the recording resource via the extension, via the PBX Agent ID or via the chat ID. Within one tenant, you can configure all three possibilities.

Assign extensions to tenants

If you would like to make an assignment based on extensions, you can assign the respective tenant the extension designated for recording in the Tenants module.



In 1-tenant systems, all extensions are automatically assigned to the tenant who has been created by the system (1st tenant). Extensions are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the extensions manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of extensions is not possible until a PBX has been created since extensions are assigned in relation to the PBX.

- Select the menu item *Tenants* in the navigation bar.

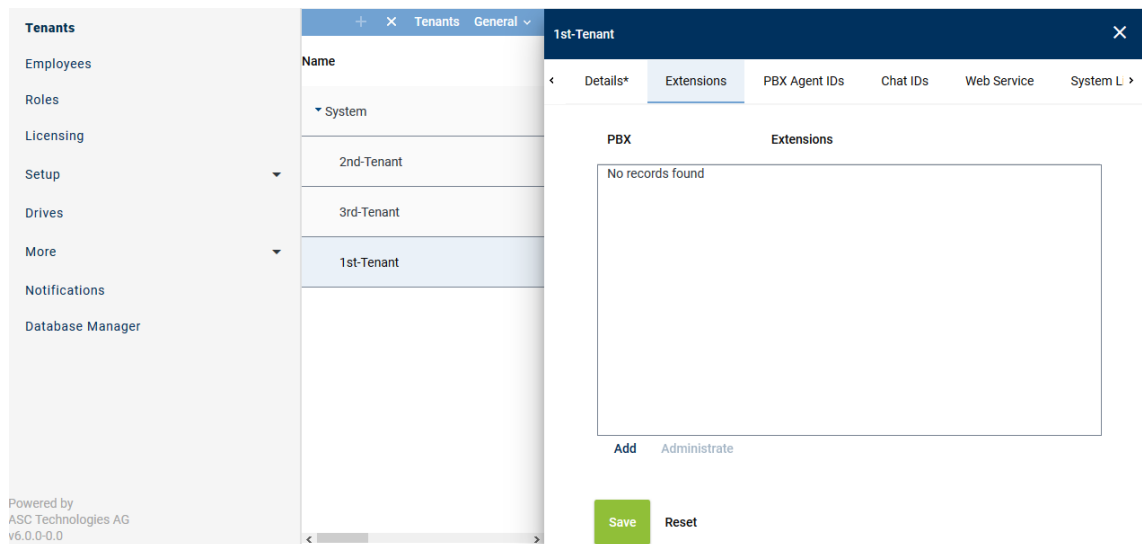


Fig. 418: Tenants - main view - tab Extensions

Add extensions

1. In the main view, select the tenant to whom you would like to assign extensions.
2. Click on the tab *Extensions*.
3. Click on the button *Add*.
⇒ The following window appears:

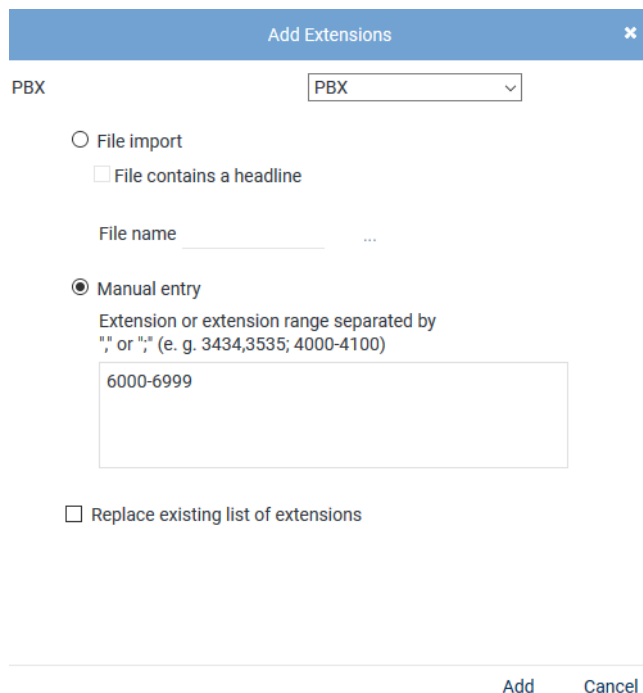




Fig. 419: Assign extensions to tenants

4. From the drop-down list, select the PBX in which the extensions for this tenant have been configured.

File import

Select this option to import extensions from an existing [CSV](#) file and add them to the table of extensions.

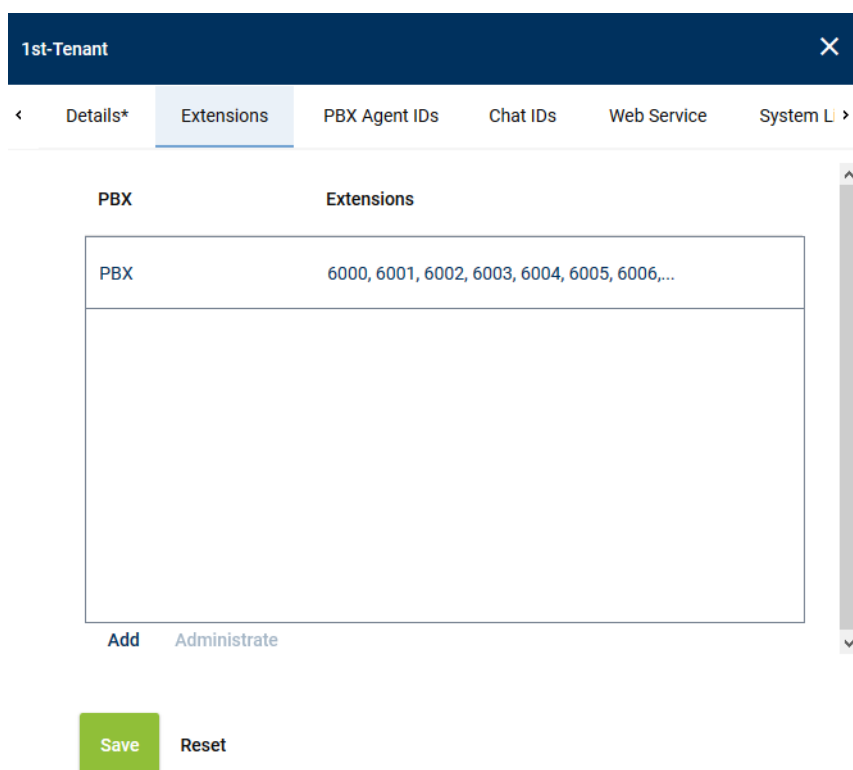
File contains a headline

	<p>Activate this option so that this structure is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CSV file, you have to pack it in a ZIP file.</p> <p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> • Click on the button  behind the field <i>File name</i>. • Click on the button <i>Choose File</i>. • Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. • Click on the button  <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter extensions or extension ranges manually.</p> <p>Enter the extension range that is reserved for this tenant using a hyphen, e. g. from 6000 to 6999. Alphanumeric entries with a hyphen are not detected as a range, they must be entered individually.</p> <p>You can separate the different extensions and extension ranges by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of extensions</i>	<p>Activate the check box to replace the list of extensions.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the extensions of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured extensions of all PBXs are kept and the new extensions are added to the selected PBX.</p>

- Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
- If errors have been detected, the window *Result* appears.
 - Click on the button *Display Error Report* to open the window *Error Report*.
 - To close the window *Error Report*, click on the button *Close*.
 - To close the window *Result*, click on the button *Close*.
- The configured extensions now appear in the detail view.
- Click on the button *Save* in the detail view to save the entries.

Remove extensions

- In the list, select the **PBX** for which you would like to remove the assigned extensions.



1st-Tenant

< Details* Extensions PBX Agent IDs Chat IDs Web Service System L >


PBX	Extensions
PBX	6000, 6001, 6002, 6003, 6004, 6005, 6006,...

Add Administrate

Save Reset

Fig. 420: Remove extensions

- Click the button *Administrate*.
- Select one or several extensions you would like to remove from the assignment.
To select several extensions or to revoke the selection, click on the respective line while holding the [Ctrl] key down.



Administrate Extensions

6993
6994
6995
6996
6997
6998
6999

Remove Cancel

Fig. 421: Select extensions

- To remove the selected extensions, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

Assign PBX Agent IDs to tenants

If the information about PBX Agent IDs is delivered by the PBX, you can make an assignment by means of the PBX Agent IDs. In this case, you can assign the respective tenant the PBX Agent IDs designated for recording in the Tenants module.



In 1-tenant systems, the PBX Agent IDs are automatically assigned to the tenant who has been created by the system (1st tenant). PBX Agent IDs are assigned to the user in the Employees module.

When installing a 1-tenant system, you can skip this chapter.



In multi-tenant systems, you have to assign the PBX Agent IDs manually to each tenant who is supposed to be able to use them. There are multi-tenant systems, too, in which only 1 tenant has been set up.

The manual assignment of PBX Agent IDs is not possible until a PBX has been created since the assignment is PBX-related.

1. Select the menu item *Tenants* in the navigation bar.

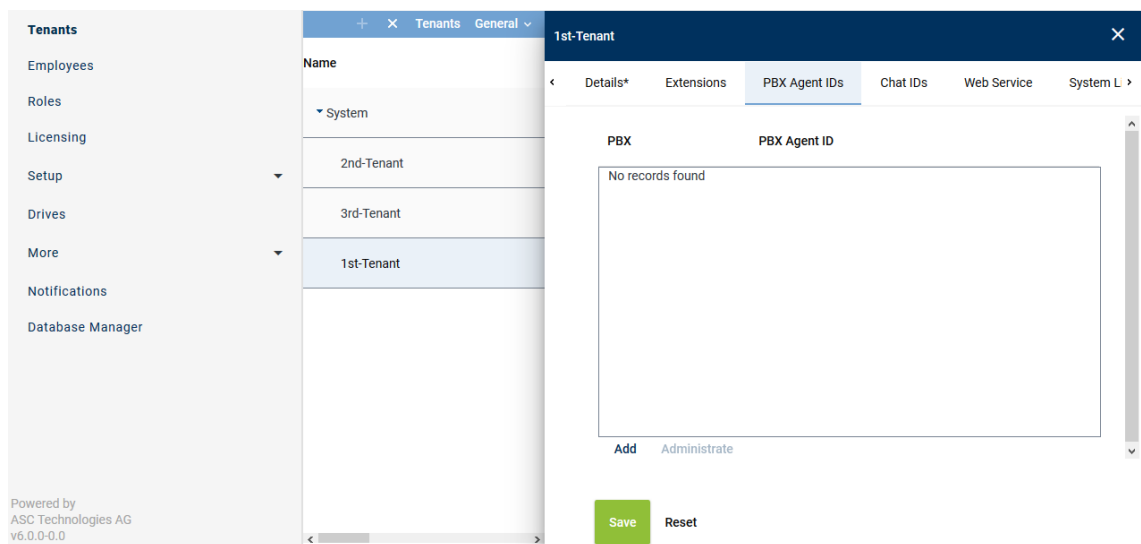


Fig. 422: Tenants - main view - tab PBX Agent ID

Add PBX Agent ID

1. In the main view, select the tenant to whom you would like to assign the PBX Agent IDs.
2. Click on the tab *PBX Agent IDs*.
3. Click on the button *Add*.
⇒ The following window appears:

Add PBX Agent IDs
✕

PBX

PBX

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

PBX Agent IDs separated by ";" or ":"

427agent1,427agent2

☐ Replace existing list of PBX Agent IDs

Add
Cancel

Fig. 423: Assign PBX Agent IDs to tenants

4. From the drop-down list, select the PBX in which the PBX Agent IDs for this tenant have been configured.

<i>File import</i>	<p>Select this option to import the PBX Agent IDs from an existing CSV file and add them to the table of PBX Agent IDs.</p>
	<p><i>File contains a headline</i></p> <p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The CSV file may not contain more than 1 column. If commas or other column delimiters are found in the CSV file, then the file is not valid and an error message appears.</p> <p>Only ZIP files are supported as file format. To be able to import a CVS file, you have to pack it in a ZIP file.</p>
	<p><i>File name</i></p> <p>To import the file, proceed as follows:</p> <ul style="list-style-type: none"> • Click on the button ... behind the field <i>File name</i>. • Click on the button <i>Choose File</i>. • Select the respective ZIP file via the Explorer and click on the button <i>Open</i>. • Click on the button ↗ <i>Upload File</i>.
<i>Manual entry</i>	<p>Select this option to enter PBX Agent IDs manually.</p> <p>You can separate the individual PBX Agent IDs by the delimiters indicated in the screenshot.</p> <p>NOTICE! Wildcards cannot be used!</p>
<i>Replace existing list of PBX Agent IDs</i>	<p>Activate the check box to replace the list of PBX Agent IDs.</p> <p><input checked="" type="checkbox"/> = Function has been activated; the entry replaces the PBX Agent IDs of the selected PBX.</p> <p><input type="checkbox"/> = Function has not been activated; the configured PBX Agent IDs of all PBXs are kept and the new PBX Agent IDs are added to the selected PBX.</p>

5. Click on the button *Add*.
⇒ The PBX Agent IDs are added to the table of PBX Agent IDs.
6. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
7. The configured PBX Agent IDs now appear in the detail view.
8. Click on the button *Save* in the detail view to save the entries.

Remove PBX Agent ID

1. In the list, select the **PBX** for which you would like to remove the assigned PBX Agent IDs.
2. Click the button *Administrate*.
3. Select one or several PBX Agent IDs you would like to remove from the assignment.
To select several PBX Agent IDs or to revoke the selection, click on the respective line while holding the [Ctrl] key down.

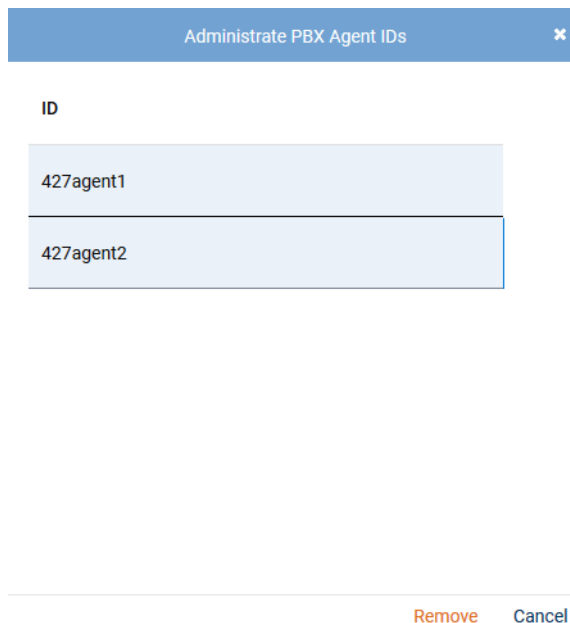


Fig. 424: Select PBX Agent IDs

4. To remove the selected PBX Agent IDs, click on the button *Remove*.
To cancel the process and close the window, click on the button *Cancel*.

7.1.2.6.5 Configure additional data

In the Additional Data module, you can configure the additional data which is delivered for a conversation with a protocol.



In this recording solution, no additional data is extracted from the *SIP header*. The **SIPREC** meta data is provided by means of an **XML** document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured here in the Additional Data module. Only then can you map the additional data in the integration under the Global Recording Settings in the tab *SIP Header Tagging*.

For selection fields to appear in the drop-down list, they have to be configured in the Additional Data module.

1. Select the menu item *Setup > Additional Data* in the navigation bar.

ASC

System Configuration

Setup

Servers

Recording Architectures

PHONEapp

PBX

Phones

TDM Hardware ASC

TDM Hardware Others

Integrations

Recording Import

Additional Data

Activity Guard

SYSTEM PROVIDER

Additional Data

Additional Data

General

ID	Displayed Name	Available
customCP01	customCP01	
customCP02	customCP02	
customCP03	customCP03	
customCP04	customCP04	
customCP05	customCP05	
customCP06	customCP06	

Rows per page

50

1 - 30 of 30

Powered by

ASC Technologies AG

v6.0.0-0.0

Fig. 425: Additional Data module main view

- Select a set of data.
⇒ The detail view displays the information you can configure.

Change display name

Change Display Name		
Language	Content	
ar_SA	customCP01	✎
bg_BG	customCP01	✎
de_DE	Universal Call ID	✎
en_GB	customCP01	✎
en_US	Universal Call ID	✓ ✕

Fig. 426: Configure additional data

- To change the display name, click on the pen in the line of the language you would like to change.
- Enter a display name and click on the check mark at the end of the line to confirm the entry.

Availability

Availability	
Available	<input checked="" type="checkbox"/>
Editable	<input checked="" type="checkbox"/>
External recording control	<input checked="" type="checkbox"/>

Save
Reset

Fig. 427: Additional data - configure availability

1. To make the data field available to the entire system, activate the check box of the option *Available*.
2. To make the data field in the search and replay applications editable later on, activate the check box of the option *Editable*.
3. To be able to use the data field for external recording control, activate the check box of the option *External recording control*. This option is only available if recording control has been activated in the *Servers module* in the tab *Usage*.
4. Click on the button *Save* to save the settings.



For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



Additional data which is not delivered along with the protocol is not available for further use.

7.1.2.6.6 Create integration for Multi-Server Parallel Recording

In the Integrations module, the PBX-related recording settings are configured.

You first have to create and activate a recording architecture to be able to create a integration and to assign it here.

Depending on the recording solution, you additionally have to configure IP addresses, ports, protocols, sniffer cards, CTI connection data, phones, monitor points, and, where required, add-ons.

1. In the navigation bar, select the menu item *Setup > Integrations*.
⇒ The following window appears:

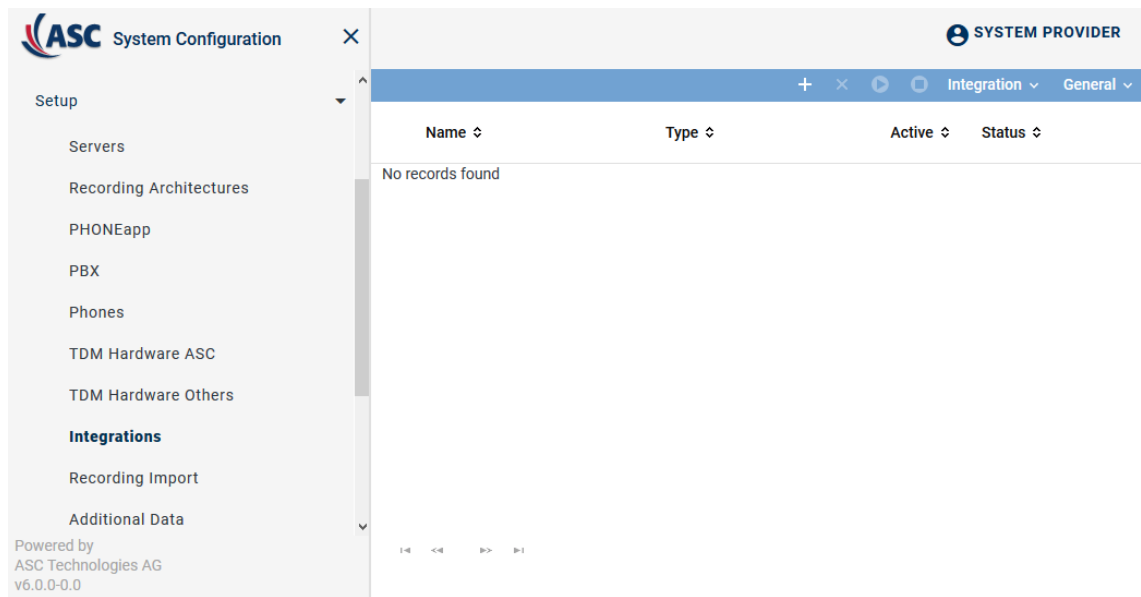




Fig. 428: Integrations - main view

In the table in the main view, the following information is displayed:





Name	Name of the integration
Type	Type of the integration
Active	Shows whether the integration has been activated and is used for the recording. <div> ✓ = Integration is active, can be deactivated in the toolbar via the icon . ✗ = Integration is not active, can be activated in the toolbar via the icon . </div>
Status	Shows whether the configuration has been carried out completely. <div> ✓ = Configuration is complete. ✗ = Configuration is incomplete. </div>

Toolbar of the Integrations module

The toolbar offers the following functions.



Fig. 429: Toolbar Integrations module

	Create	Opens the detail view so that you can create a new integration.
	Delete	Deletes the selected integration. The integration can only be deleted if it has been deactivated.
	Activate	Activates the selected integration. The integration can only be activated if it has been configured completely.
	Deactivate	Deactivates the selected integration. This stops running recordings.
Integration	Import Grammar	By clicking on this menu item, you can import a customized grammar which you can then configure in the configuration step for the CTI connection data.
General	General Help	Opens the online help.
	Module Help	Opens the module-specific online help.

Import grammar

Depending on the deployed PBX, conversation events are signaled differently.

A grammar recognizes and processes the events occurring during a call such as ringing, answering, consultation, hanging up. A grammar contains rules which are required to correctly translate PBX-specific call information and call states into a PBX-neutral format.

1. To import a new grammar, click on the menu item *Integration > Import Grammar* in the toolbar of the main view.
⇒ The window *Upload File* appears.

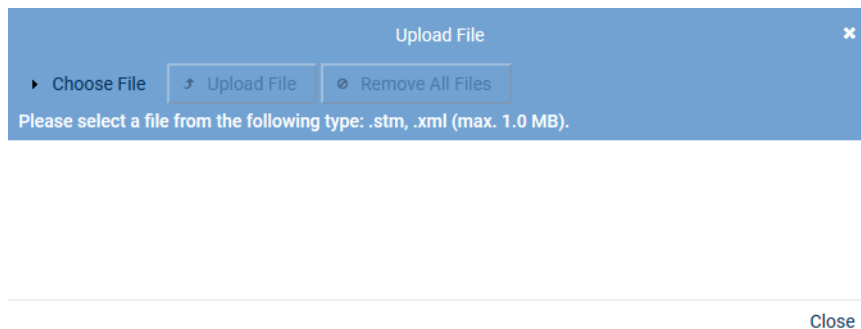


Fig. 430: Choose file

2. Click on the button *Choose File*.
3. Select the respective grammar of the file type *.stm* or *.xml* via the Explorer.
4. Click on the button *Open*.
⇒ The selected file appears in the window *Upload File*.

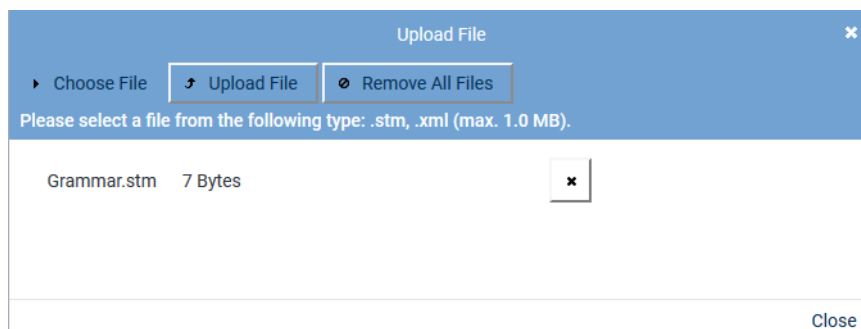




Fig. 431: Upload grammar

5. To remove a selected file from the list, click on the button  (*Remove file*) next to the respective file.
To upload the file, click on the button *Upload File*.
⇒ The window closes and a notification appears in the main view that the file has been uploaded successfully.

Assign integration type

1. Click on the icon  (*Create*) in the toolbar of the main view to create a new integration.
⇒ In the detail view, the tab *Integration Type* appears.




Fig. 432: Create integration type

2. Enter the following parameters:

Parameter	Value
<i>Name</i>	In the entry field, enter a descriptive name for the integration. This name is used as the identifier of this integration in the system.
<i>Integration type</i>	Select the entry <i>SIP active</i> from the drop-down list <i>Integration type</i> .

Tab. 98: Create integration type

3. To assign the PBX, click on the button **+** behind the field *PBX*.
⇒ The window *PBX* appears.



Fig. 433: Select PBX

4. Select the respective *PBX* from the list of available PBXs.
5. Click on the button *Add*.

Assign recording architecture for Multi-Server Parallel Recording

1. In the detail view on the bottom right, click on the button *Next*.
⇒ The tab *Recording Architecture* appears.

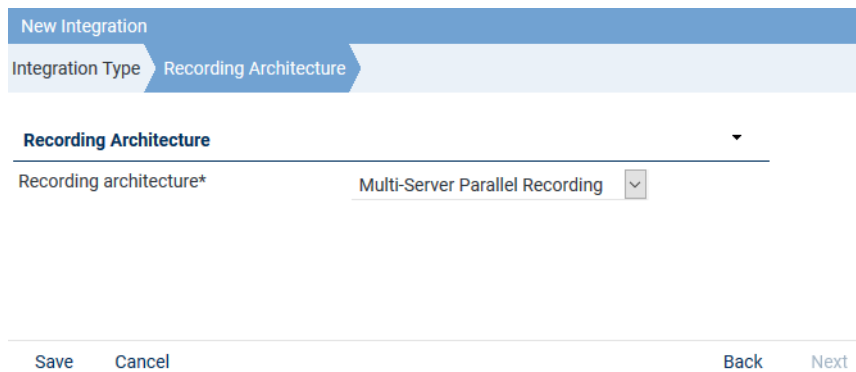


Fig. 434: Assign recording architecture - Multi-Server Parallel

2. Select the respective recording architecture from the drop-down list *Recording architecture*.




Only activated recording architectures in which the appropriate integration type has been configured appear in the drop-down list.

3. Click on the button **Save**.
⇒ The integration now appears in the main view.



When using a recording architecture with parallel recording, the tab *Parallel Recording* appears in the detail view. In this tab, you can adjust the settings for the duplicate detection of parallel configured servers, see [chapter "Duplicates in parallel recording architectures", p. 386](#).

Configuration steps

1. To complete the configuration of the integration, click on the icon  in front of the name of the new integration.
⇒ The following configuration steps appear:








SIPREC		SIP active	X	
Step	Configuration			
Configure recording architecture	✓			
Global recording settings	X			
Configure recording servers	X			
Configure add-on	✓			
Configure miscellaneous settings	✓			

Fig. 435: Configuration steps of the integration

Configure recording architecture

The section *Configure recording architecture* has already been configured in previous steps.

1. Click on the button  (*Edit configuration step*) in the line *Configure recording architecture* in the main view to show the configuration.
⇒ In the detail view, the configuration step appears with the information of the assigned recording architecture.

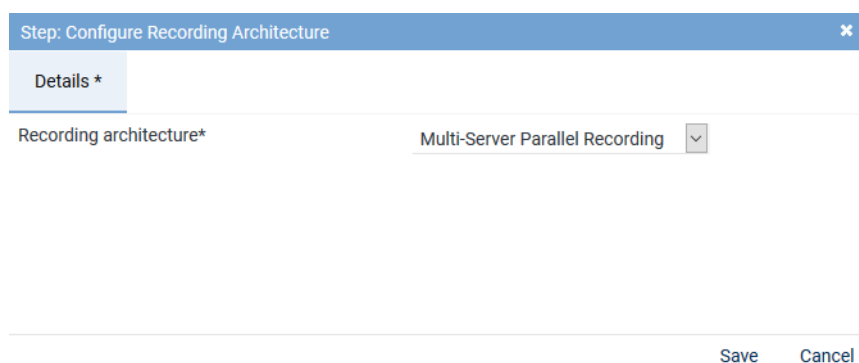



Fig. 436: Configuration step - Configure Recording Architecture

2. Click on the button *Save* to save changes and to finish the configuration step.
3. Click on the button *Cancel* to cancel the configuration step without applying changes.

Global recording settings for Multi-Server Parallel Recording

1. Click on the button  (*Edit configuration step*) in the line *Global recording settings* in the main view.
 ⇒ The window *Step: Global Recording Settings* appears.

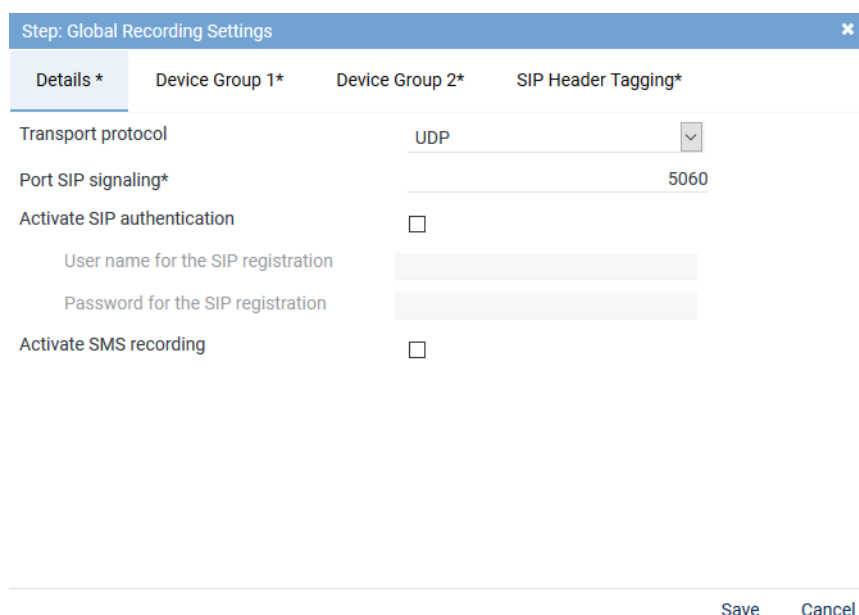


Fig. 437: Configuration step - Global Recording Settings - Multi-Server Parallel Recording

2. Set the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Transport protocol</i>	Select the transport protocol <i>UDP</i> for the SIP signaling between the recording server and the PBX.
<i>Port SIP signaling</i>	Enter the port for the <i>SIP</i> signaling, where the recording server is expecting the signaling. Default value for <i>UDP</i> and <i>TCP</i> is <i>5060</i> . Default value with <i>TLS</i> encryption is <i>5061</i> .
<i>Activate SIP authentication</i>	Deactivate this option for this recording solution.
<i>Activate SMS recording</i>	This function is not supported in this recording solution.

Tab. 99: Global recording settings

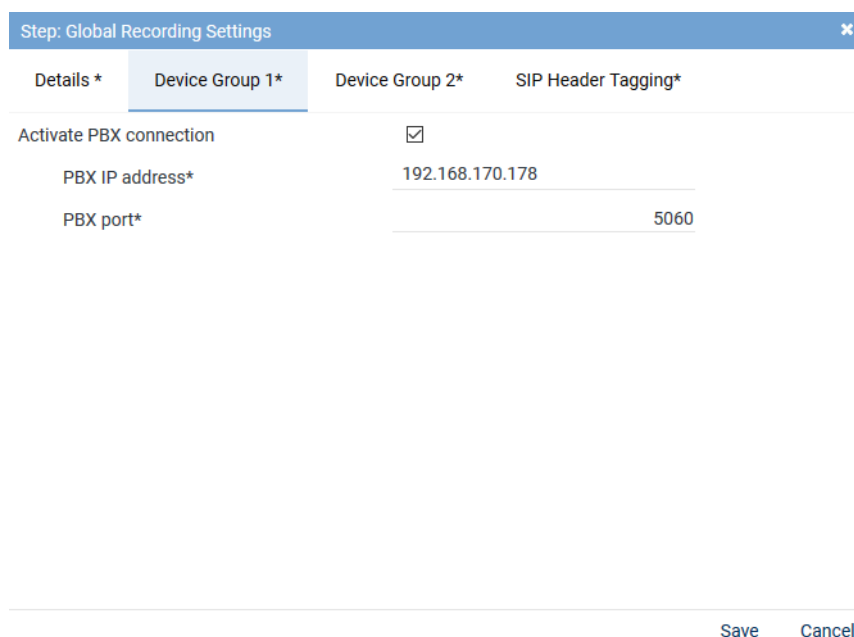
NOTICE! In parallel recording architectures, the PBX connection is activated in the tabs *Device Group 1* and *Device Group 2*

- To save the entries, click on the button *Save*.
To discard entries, click on the button *Cancel*.

Tab Device Groups

In parallel recording, you can configure connections to different PBXs.

- Select the tab *Device Group 1* to configure the connection to PBX 1.



Step: Global Recording Settings

Details * **Device Group 1*** Device Group 2* SIP Header Tagging*

Activate PBX connection ☒

PBX IP address* 192.168.170.178

PBX port* 5060

Save Cancel

Fig. 438: Configure device group 1

Parameter	Description
<i>Activate PBX connection</i>	Activate the check box to configure the connection data. If the option has been activated, the entry fields for the IP address and the port become active.
<i>PBX IP address</i>	Enter the IP address of the PBX for the first device group.
<i>PBX port</i>	Enter the port of the PBX which is used to communicate with the PBX.

- Select the tab *Device Group 2* to configure the connection to PBX 2.

Step: Global Recording Settings

Details *
Device Group 1*
Device Group 2*
SIP Header Tagging*

Activate PBX connection
☒

PBX IP address*
192.168.170.178

PBX port*
5060

Save
Cancel

Fig. 439: Configure device group 2

Parameter	Description
<i>Activate PBX connection</i>	Activate the check box to configure the connection data. If the option has been activated, the entry fields for the IP address and the port become active.
<i>PBX IP address</i>	Enter the IP address of the PBX for the second device group.
<i>PBX port</i>	Enter the port of the PBX which is used to communicate with the PBX.

- To save the entries, click on the button *Save* in the detail view.
To reset the entries, click on the button *Reset* in the detail view.

Tab SIP Header Tagging



In this recording solution, no additional data is extracted from the *SIP header*. The [SIPREC](#) meta data is provided by means of an [XML](#) document. To have ASC configure the mapping file, contact your distribution partner. The individual additional data which can then be read out from the file can be configured in the Additional Data module and subsequently mapped in the tab SIP Header Tagging.

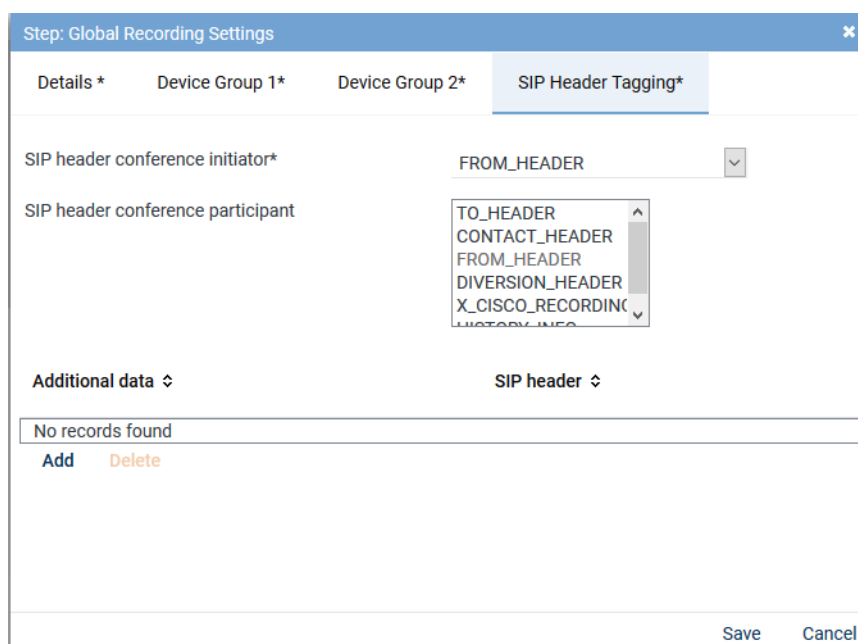


Fig. 440: Tab SIP Header Tagging Configure sources

1. If you would like to configure individual additional data that you have defined previously in the Additional Data module, click on the button *Add* in the section *Additional data*.
⇒ The window *SIP Additional Data* appears.

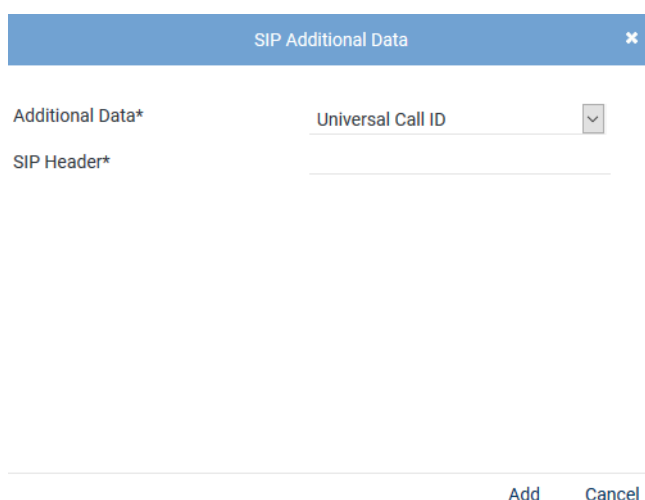


Fig. 441: SIP Additional Data



Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

2. Enter the following parameters:

Parameter	Value/Description
<i>Additional Data</i>	In the drop-down list, select the display name of the field in which the information of the SIP header is supposed to be released.
<i>SIP Header</i>	If you would like to use additional data, the mapping of the tag name must have been configured in the file <i>siprecmapping.xml</i> . Then you can enter the tag name from where the information is to be extracted.

Parameter	Value/Description
	To have ASC configure the mapping file, contact your distribution partner.


Tab. 100: Configure SIP conversation parameters

- Click on the button **Save** to close the window.
- Click on the button **Save** to finish the configuration in this step.

Configure recording server for Multi-Server Parallel

In case of several recording servers, you have to define the port range for each recording server. The range may be the same for all recording servers. Make sure, though, that the port range lies within the range of ports activated in the firewall, refer to the installation manual Installation requirements in chapter Communication matrix.

This configuration takes place in the configuration step *Configure recording servers*.

- Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
⇒ The window *Step: Configure Recording Servers* appears.

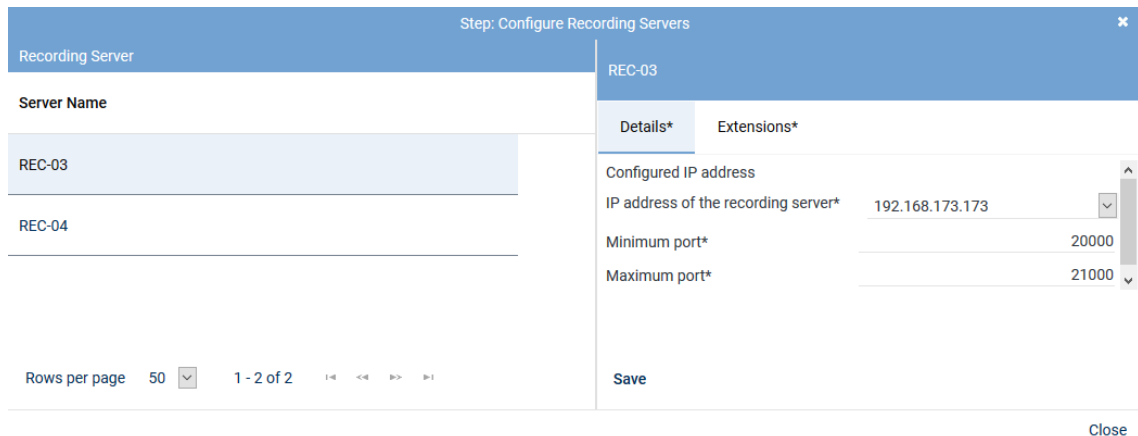


Fig. 442: Configuration step - Configure recording servers

- Enter the following parameters in the tab *Details*:

Parameter	Value/Description
<i>Configured IP address</i>	Here, the IP address is displayed which has been configured for this recording server and via which the data to be recorded are received.
<i>IP address of the recording server</i>	From the drop-down list, select one of the available IP addresses of the recording server for the recording data.
<i>Minimum port</i>	Enter the lowest port of the port range configured on the PBX that is used to receive the RTP data from the recording server, e. g. 20000 .
<i>Maximum port</i>	Enter the highest port configured on the PBX that is used to receive the RTP data from the recording server, e. g. 21000 .

Tab. 101: Configure recording servers



This recording solutions allows recording data streams in stereo. For stereo recording, reckon with 4 ports as only even ports are used to receive **RTP**.

Stereo recording requires more storage space, too.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.



If you use several active integrations in one recording architecture, you must configure different port ranges for each integration in the configuration step *Configure recording servers*.

Tab Extensions

1. Click on the tab *Extensions*.

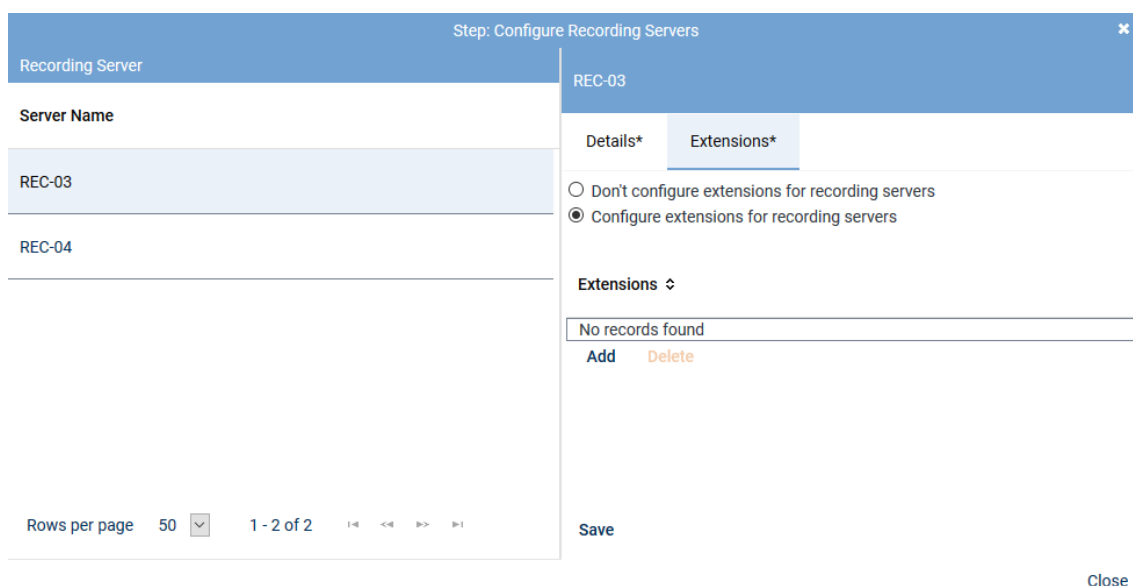


Fig. 443: Tab Extensions

The following options are available:

Configure no extensions for recording servers Activate this option if you have not configured the extensions for the recording server in the PBX.

Configure extensions of the recording server Activate this option if you have configured extensions for the recording server in the PBX and add the extensions.

2. To add extensions, click on the button *Add* in the table *Extensions*.
⇒ The window *Add Extensions* appears.

Add Extensions ✕

☐ File import

☐ File contains a headline

File name ...

☒ Manual entry

Extension or extension range separated by
", " or "; " (e. g. 3434,3535; 4000-4100)

9999

☐ Replace existing list of extensions

[Add](#) [Cancel](#)

Fig. 444: Add extensions

3. In the window *Add Extensions*, enter either a single extension or an extension range that the recording server is to use when registering on the PBX.
4. Click on the button *Add*.
 - ⇒ The extensions are added in the table of extensions.
5. If errors have been detected, the window *Result* appears.
Click on the button *Display Error Report* to open the window *Error Report*.
To close the window *Error Report*, click on the button *Close*.
To close the window *Result*, click on the button *Close*.
6. The configured extensions now appear in the detail view.

Step: Configure Recording Servers ✕

Recording Server	REC-03
Server Name	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-03</div>
REC-03	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-04</div>
REC-04	<div style="background-color: #4f81bd; color: white; padding: 2px; text-align: center;">REC-05</div>

Rows per page 50 1 - 2 of 2 << >>

REC-03

Details* Extensions*

☐ Don't configure extensions for recording servers

☒ Configure extensions for recording servers

Extensions ⚙

9999

[Add](#) [Delete](#)

[Save](#)

[Close](#)

Fig. 445: Added extensions

7. Repeat the steps for additional servers. For each server, configure its own extension or extension range depending on how it can be reached.
8. Click on the button *Save*.

9. Click on the button *Close* to finish this configuration step.

Configure add-on



The use of the add-on in the integration is optional. The status of this configuration step has been set to *No selection* by default and is considered to be completely configured that way. You can activate and use the integration without an add-on, too.

If you use an application with add-on, you can select the required grammar in the corresponding version in this configuration step. Additionally, you can configure the connection data and the additional data.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

Configure add-on for Sparkassen FI ISP (optional)

The add-on refers to the usage of CTIconnect for Sparkassen FI ISP in the DACH region and only has to be configured if the add-on is used.



The add-on cannot be used in a failover architecture. The application Sparkassen FI ISP cannot connect to more than one IP address.

The integration runs in combination with a PBX and the recording server. The service CTIconnect for Sparkassen FI ISP receives the additional data from the PBX and sends them to the recording server. In addition, the recording decision which is initiated by the user on the end device is processed via CTIconnect for Sparkassen FI ISP and sent to the recording server.

Sparkassen FI Interaktive Service Plattform

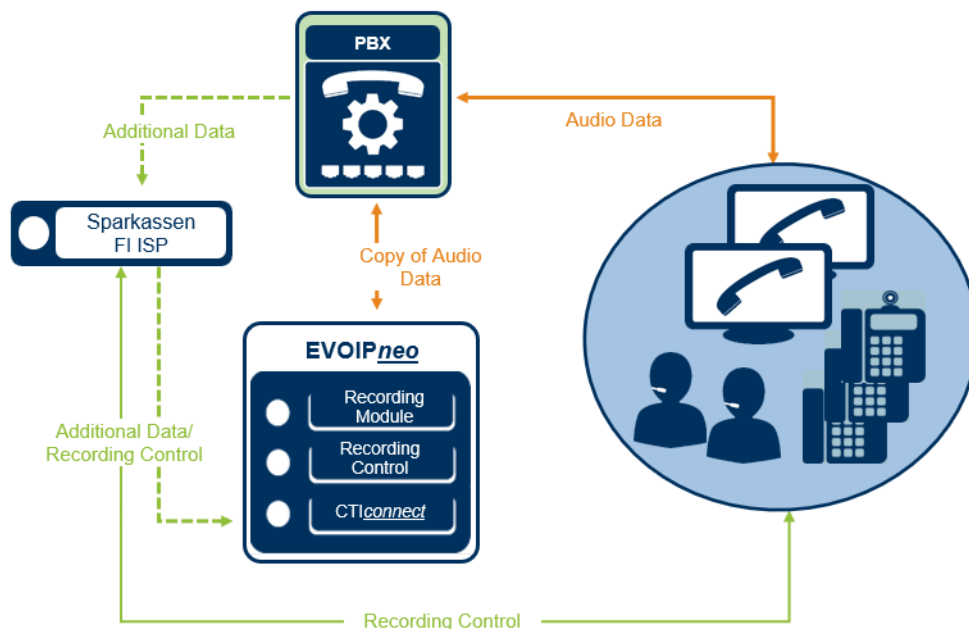



Fig. 446: Overview of Sparkassen FI ISP

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on *Sparkassen FI ISP* in the detail view.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Sparkassen FI ISP

CTIconnect Module

TypeCTIconnect passive
Grammar name*ISP Sparkassen FI
Grammar version*1.00.05

Connection Data

Listener port*3468

Additional Data

ID des Call CentersCall Center ID
ID des Calls aus GenesysUniversal Call ID
Anmeldename des KundenUser name
Name des KundenCustomer name
Personennummer des KundenCustomer ID

Arbitrary assignment

Please select...
Please select...
Please select...

SaveCancel

Fig. 447: Configure add-on for Sparkassen FI ISP

Group field CTIconnect Module

1. Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 102: Configure CTIconnect module



For recording control via the add-on of the Sparkassen FI ISP, grammar version 1.00.05 or higher is required. If the grammar in the respective version is not available yet, you can import it. See [chapter "Import grammar", p. 359](#).

Group field Connection Data

Set the following parameter in the group field *Connection Data*; the IP address for the PBX does not have to be entered, since the PBX connects to our recording server:

Parameter	Value/Description
<i>Listener port</i>	Enter the port that the add-on connects to, e. g. 3468.

Tab. 103: Configure connection data

Group field Additional Data



This add-on is used exclusively in the DACH region; for this reason the additional data is only available in German, too. The names of the fields refer to the assignment of the strings which are delivered by the interface.

When using CTIconnect for Sparkassen FI ISP, the following additional data is delivered with the protocol:

- *ID of the call center*
- *ID of the call from Genesys*
- *Login name of the customer*
- *Name of the customer*
- *Employee number of the customer*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

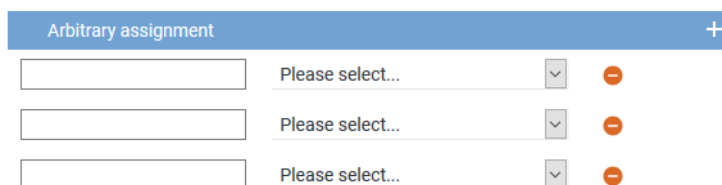
For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.




Arbitrary assignment			+
<input type="text"/>	Please select...	▼	➖
<input type="text"/>	Please select...	▼	➖
<input type="text"/>	Please select...	▼	➖

Fig. 448: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*
- *End time*
- *Duration*
- *Calling Party Phone Number*
- *Called Party Phone Number*

- *Conversation Direction*
- 2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
- 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
- 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
- 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.



To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.


Configure add-on for OpenScape Contact Center (optional)

The add-on refers to the usage of the OpenScape Contact Center and must only be configured if a OpenScape Contact Center is used.

The integration runs in combination with a Unify PBX which is responsible for recording. The CTIconnect service receives the conversation events of the agents via a SDK link in the OpenScape Contact Center and sends the additional data to the EVOIPneo recording service.

For information about the configuration of the OpenScape Contact Center, see [chapter "Configure OpenScape Contact Center \(optional\)", p. 394](#).

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. Select the add-on OpenScape Contact Center in the detail view.

Step: Configure Add-on

Details

Select add-on
☐ None
☒ OpenScape Contact Center

CTIconnect Module

TypeCTIconnect passive
Grammar name*Unify OpenScape Contact Center
Grammar version*1.00.04

Connection Data

Connection data

6000@192.168.170.29

Add Edit Delete

Additional Data

Business UnitBusiness Unit
DepartmentDepartment
Department KeyDepartment Key
Call IDUniversal Call ID
To PartyTo Party
ACD Group NumberACD Group Number

Arbitrary assignment

Please select...

Please select...

Save Cancel

Fig. 449: Configure add-on for OSCC

Group field CTIconnect Module

- Enter the following parameters for the grammar:

Parameter	Value/Description
Type	Is filled automatically.
Grammar name	Select the name of the grammar from the drop-down list.
Grammar version	Select the current version of the grammar from the drop-down list.

Tab. 104: Configure CTIconnect module

Group field Connection Data

In the table Connection Data, you can enter one or several sets of connection data.

If you are configuring several connections, several connections to different business units are established simultaneously in the recording solution with OpenScape Contact Center.

- In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

Configure Connection
✕

Link name*
6000@192.168.170.29

Business unit*
BU1

User name*
master

Password*
•••••

Add Cancel

Fig. 450: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Link name</i>	Enter the link to the OSCC server in the format <i>osccport@ascserver</i> . The default value for the OSCC port is 6000 and the name of the OSCC server is usually spelled in minor letters. A valid link can look like this: 6000@osccv7r3. Ensure that the server name (e. g. osccv7r3) can be resolved to an IP address. Check whether the address can be reached via the ping command. Alternatively, you can also enter the IP address.
<i>Business unit</i>	The default name of a business unit is <i>default</i> . This is a predefined name for the business unit after a new OSCC server installation. Enter the business unit's actual name you would like to use in the future.
<i>User name</i>	Create a valid user for the business unit that you have created on the OSCC server, so the CTI <u>connect</u> service can establish the connection to the OSCC server. See chapter "Create user for CTIconnect", p. 394 .
<i>Password</i>	Enter the password for the user of the business unit.

Tab. 105: Configure connection data

3. Click on the button *Add* to save the entries and to close the window.
4. To configure additional connections, repeat the configuration steps accordingly.

Group field Additional Data

When using CTIconnect for Unify OpenScope Contact Center, the following additional data is delivered with the protocol by default:

- *Business unit*
- *Department*
- *Department Key*
- *Call ID*
- *To Party*

- *ACD Group Number*

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must have been configured and made available in the Additional Data module previously.

For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.

Here, you can map the database fields for the additional data which is delivered by the [OSCC](#). The contact data of the processed contacts of the OpenScape Contact Center provides a list of key pairs/value pairs. The keyword of this key pair/value pair can be chosen arbitrarily and adjusted customer-specifically. If you would like to use more than one word, avoid spaces. Use underscores instead of spaces, e. g. *ACD_group*.

1. In the group field headline *Additional Data*, click on the arrow ▶ to expand the group field and to assign the additional data to the data fields of the search and replay applications.

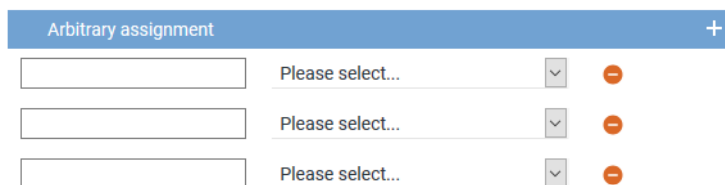




Fig. 451: Arbitrary assignment of the additional data

2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
3. From the drop-down list, select a configured display name of the additional data type which is supposed to appear as column headline in the players. Here, you can only select the display names for the additional data that you have configured and made available in the Additional Data module.
4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
⇒ An additional row appears to assign another additional data type.
5. To delete an assignment, click on the icon  in the respective row.
6. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

Configure add-on for Genesys T-Server (optional)

The add-on refers to the usage of Genesys T-Servers and must only be configured if you use Genesys T-Servers.

The integration runs in combination with the PBX and the recording server. The CTIconnect service receives the information which Genesys T-Server the monitor points have been assigned to from the Genesys Configuration Server. The monitor points must register on the respective Genesys T-Server. Upon successful registration, the respective Genesys T-Server sends all conversation events and additional data of the agents to the recording server.

CTIconnect for Genesys T-Server

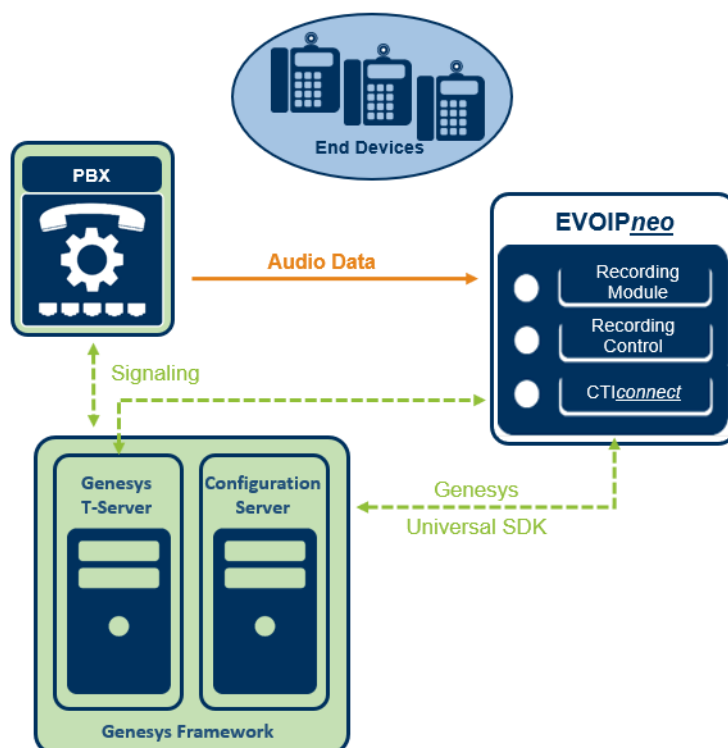


Fig. 452: Overview of the add on of Genesys T-Server

CTIconnect for Genesys T-Server

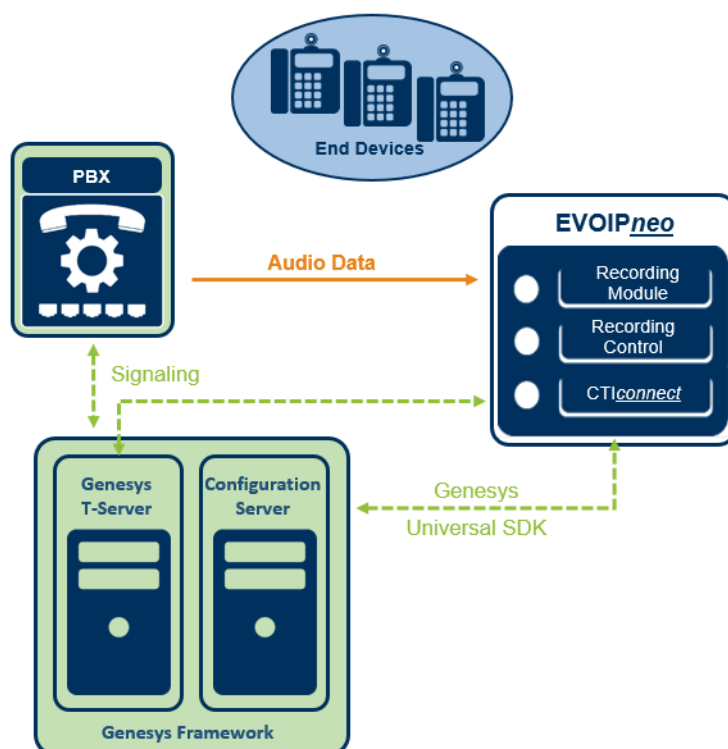


Fig. 453: Overview of the add-on of Genesys T-Server



For further information about the configuration of Genesys T-Servers, see [chapter "Configure Genesys T-Server \(optional\)", p. 395](#).

The Genesys add-on uses either a unique call ID or the extension to unambiguously identify the conversations to be recorded.



The additional data delivered by an add-on supplements the additional data which is delivered by the CTIconnect module of the integration.

When using a CTIconnect for Genesys T-Server, a Genesys Framework with T-Servers and Genesys Configuration Servers are required.


By default, the Genesys data field *CallID* has been selected as identifier. If a different data field is supposed to be used for internal control, this can be changed in the configuration file *basic.pif.properties*.

Adjust configuration file for Genesys add-on

The data field which is supposed to be used by the Genesys add-on is selected by means of the parameter *pifgenesys.call_identifier*.

1. To adjust the identifier, change to the path
C:\ASC Product Suite\data\CTIConnectForGenesysT.
2. Open the file *basic.pif.properties*.
3. Enter the respective data field for the parameter *pifgenesys.call_identifier*.
4. Save the changes in the file.
5. Restart the recording architecture after completing the change.

Configure add-on in the integration

1. To configure the add-on, click on the button  (*Edit configuration step*) in the main view in the line *Configure add-on*.
2. In the detail view, select the add-on *Genesys T-Server*.

Step: Configure Add-on

Details *

Select add-on
☐ None
☒ Genesys T-Server

CTIconnect Module

TypeCTIconnect passive
Grammar name*standard
Grammar version*1.15.00
T-server redundancy*HAconnect
Config server redundancy*Warm standby
T-Server application name
T-Server password

Connection Data

Configuration server name
192.168.169.178
Add Edit Delete

Additional Data

Arbitrary assignment
Please select...

Save Cancel

Fig. 454: Configure add-on for Genesys T-Server

Group field CTIconnect Module

- Enter the following parameters:

Parameter	Value/Description
Type	Here, the type of the CTI <u>connect</u> module is displayed.
Grammar name	Select the respective grammar.
Grammar version	Select the respective grammar version.
T-server redundancy	Select the redundancy which is used from the drop-down list. <ul style="list-style-type: none"> No redundancy HAconnect - for High Availability Connection Warm Standby - for a connectable redundancy
Config server redundancy	From the drop-down list, select the redundancy which is used for the Configuration Server of Genesys. <ul style="list-style-type: none"> No redundancy HAconnect - for High Availability Connection Warm Standby - for a connectable redundancy

Parameter	Value/Description
<i>T-Server application name</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the application name that the CTI<u>connect</u> module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>
<i>T-Server password</i>	<p>This parameter must only be entered, if authentication on the Genesys T-Server is required.</p> <p>Enter the password that the CTI<u>connect</u> module is supposed to use to log in to the Genesys T-Server.</p> <p>If you use several Genesys T-Servers, the login data must be identical for all servers.</p>

Tab. 106: Configure add-on for Genesys T-Server

Group field Connection Data

In this group field, you can enter one or several sets of connection data.

1. In the group field *Connection Data* in the table, click on the button *Add*.
⇒ The following window appears:

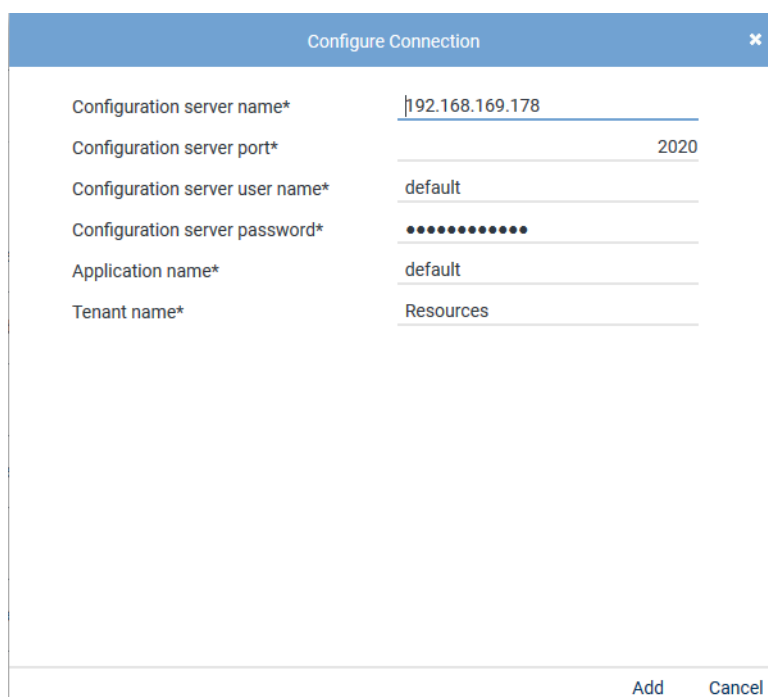


Fig. 455: Configure connection data

2. Enter the following parameters:

Parameter	Value/Description
<i>Configuration Server: Name</i>	Enter the IP address or the name of the computer that the Genesys Configuration Server runs on.
<i>Configuration Server: Port</i>	Enter the port of the Genesys Configuration Server.
<i>Configuration Server: User name</i>	Enter the user name to log in to the Genesys Configuration Server.
<i>Configuration Server: Password</i>	Enter the password to log in to the Genesys Configuration Server.

Parameter	Value/Description
<i>Application name</i>	Enter the application name that the recording servers uses to log in to the Genesys Configuration Server. Default is <i>default</i> .
<i>Tenant name</i>	Enter the name of the Genesys tenant(s) that are supposed to request the configuration data. Default is <i>Resources</i> . Several tenants can be added separated by commas.

Tab. 107: Configure connection data

Group field Additional Data

The following additional data is delivered by default in the protocol when using Genesys T-Server:

- *CallID*
- *ANI*
- *CallUuid*
- *DNIS*



Further additional data depend on the configuration of the Genesys T-Servers. Check the list *AttributeUserData* in the trace files to find out which further additional data have been delivered by the Genesys T-Servers. Put the addition *UserData* in front of the additional data type when configuring customer-specific additional data, e. g. for *RTargetAgentGroup* you have to configure *UserDataRTargetAgentGroup*.

Arbitrary assignment

In the section *Arbitrary assignment*, you can configure the additional data which is additionally delivered by the PBX or by an add-on but which is not listed yet. Upon assigning the delivered additional data, it appears in the search and replay applications.



The names of the column headlines which are supposed to appear in the players must be configured and made available in the Additional Data module first.

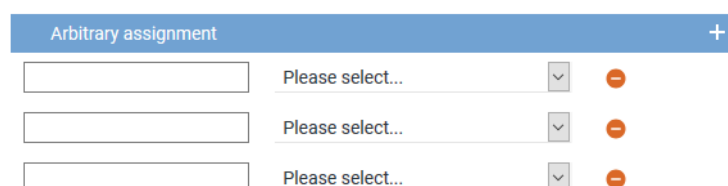
For further information about the configuration of the additional data refer to the administration manual *Additional Data module*.



The drop-down list only contains those additional data that you have configured and made available in the Additional Data module. The display name then appears in the column headlines in the players.

For more information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

1. In the group field headline *Additional Data*, click on the arrow ► to expand the group field and to assign the additional data to the data fields of the search and replay applications.




Arbitrary assignment			+
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–
<input type="text"/>	Please select...	▼	–

Fig. 456: Arbitrary assignment of the additional data

The following additional data are always available:

- *Start time*

- *End time*
 - *Duration*
 - *Calling Party Phone Number*
 - *Called Party Phone Number*
 - *Conversation Direction*
2. In the entry field on the left, enter the description of the additional data type from the protocol. Observe the same spelling as it is used in the protocol. The information which is read out of the protocol is displayed in the columns in the players.
 3. From the drop-down list, select the respective display name that you have configured in the Additional Data module. Only those display names are displayed for which the option *Available* has been activated in the Additional Data module.
 4. To add a new assignment, click on the icon  (*Create*) in the toolbar of the table.
 - ⇒ An additional row appears to assign another additional data type.
 5. Click on the button *Save* in the detail view to save the entries and finish this configuration step.

The add-on provides additional data that can be tagged in customer-specific additional data fields (customCP fields). By means of these additional data fields, the respective recording behavior can be reached by means of the recording planner, e. g. recording start beginning with tagging or threat call scenario.




To allow users to control the recording by means of keys, you must configure the recording profile accordingly in the Recording Planner module.



For information about the Recording Planner module refer to the administration manual for tenants *Recording Planner*.

Configure miscellaneous settings

1. Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.
 - ⇒ The window *Step: Miscellaneous Settings* appears.

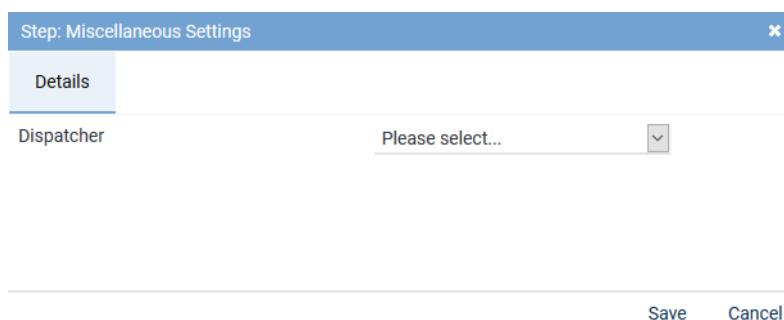


Fig. 457: Configure miscellaneous settings

2. Enter the following parameter:


Parameters	Description
<i>Dispatcher</i>	From the drop-down list, select the previously created additional data field that the participant information is supposed to be connected with.





Only those entries appear in the drop-down list which have been configured in the application System Configuration in the Additional Data module. For further information refer to the administration manual *Additional Data module*.

Activate integration

The integration can only be activated after the configuration is complete.

If not all configuration steps have been carried out completely, the icon  (*Incomplete*) will appear in the main view, in the line of the created integration, in the column *Status*.

If the configuration has been carried out completely, the icon  (*Complete*) will appear in the line of the respective step, in the column *Configuration*.

If all settings are complete, the icon  (*OK*) will appear in the main view, in the line of the created integration, in the column *Status*.













SIPREC		SIP active		
Step		Configuration		
Configure recording architecture				
Global recording settings				
Configure recording servers				
Configure add-on				
Configure miscellaneous settings				

Fig. 458: Activate integration

1. Mark the integration in the main view, so that the icon  (*Activate*) becomes active in the toolbar.
2. To activate the integration, click on the icon  (*Activate*).
⇒ In the column *Active*, the icon  (*Active*) appears.






+ ×   Integration ▾ General			
Name ▾	Type ▾	Active ▾	Status ▾
 SIPREC	SIP active		

Fig. 459: Activated integration



If you use several PBXs, you can create and activate several integrations with the same recording architecture.



If you take advantage of the grace period and there is no valid license file in the system after its expiration, all integrations are deactivated. After uploading a valid license file, you have to activate the integrations again.





Upon activating the standard configuration, a bulk recording will start.

To restrict the recording to particular end devices, the tenant can configure the Recording Planner in the System Configuration accordingly.

Deactivate/Delete integration

To be able to delete an integration, it has to be deactivated.

1. To deactivate the integration, click on the icon  (*Deactivate*) in the toolbar.

- ⇒ In the column *Active*, the icon  (*Inactive*) appears.
- ⇒ The icon  (*Delete*) becomes active in the toolbar.








+    Integration ▾ General			
Name ↕	Type ↕	Active ↕	Status ↕
 SIPREC	SIP active		

Fig. 460: Deactivate integration

2. Click on the icon  (*Delete*) and confirm the security prompt to delete the integration.

7.1.2.7 Synchronization options

There are 2 different types of synchronization:

- Synchronization of the Recording Control service for recording control
- Synchronization of the system storage to compare recording data

7.1.2.7.1 Synchronizing recording control

Recording Control services

In parallel recording servers which have been installed and configured in the same system architecture, you can configure the synchronization of recording control.



DANGER!

Before the configuration, contact your ASC support to ensure that this function is suitable for your recording solution and to avoid a possible loss of recordings!

For information about which recording solutions support this function refer to the file [neo](#) Integration Overview.

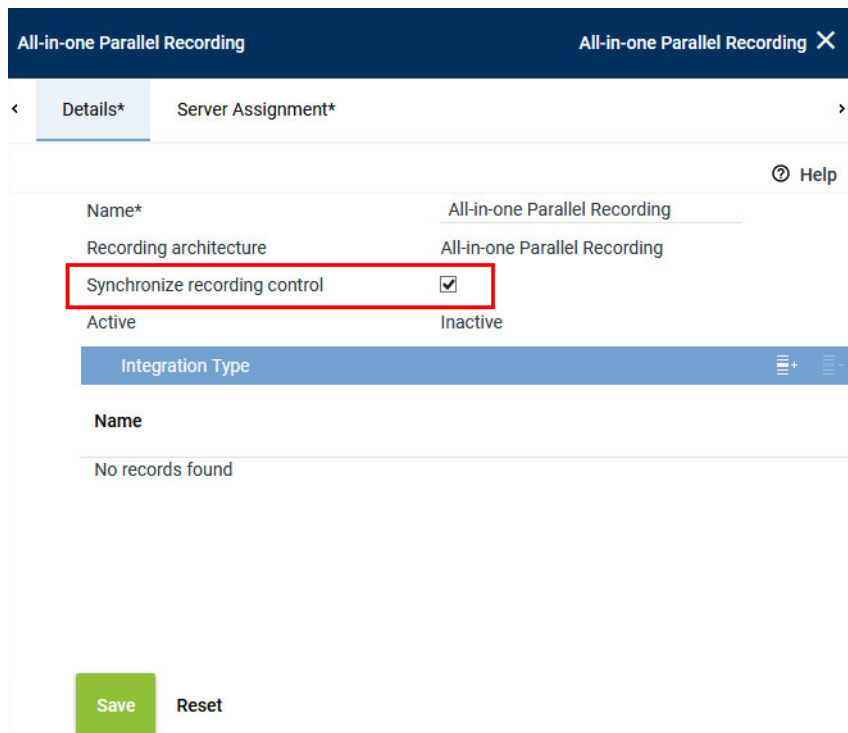
If recording control is supposed to take place by means of external applications such as *CLIENTcommand*, *PHONEapp*, or *SCREENrec* scan, a synchronization of the Recording Control services of the parallel recording servers must be set up.

Primarily, recording control is carried out by the 1st Recording Control service. The Recording Control service guarantees that the conversations are recorded by both recording servers.

If the 1st Recording Control service fails, the 2nd Recording Control service takes over the task of recording control for both recording servers, both of which will record the conversations then.

Synchronization of recording control is configured in the Recording Architectures module. In parallel recording architectures, the check box *Synchronize recording control* appears in the tab *Details*.

1. Activate the check box *Synchronize recording control* so that the Recording Control services can be synchronized and only one service controls recording for the two recording servers.



The screenshot shows the 'All-in-one Parallel Recording' configuration interface. At the top, there's a dark blue header with the title and a close button. Below it, a navigation bar shows 'Details*' and 'Server Assignment*'. The main form area contains several fields: 'Name*' (All-in-one Parallel Recording), 'Recording architecture' (All-in-one Parallel Recording), 'Synchronize recording control' (checked, highlighted with a red box), and 'Active' (Inactive). Below the form is a table with the header 'Integration Type' and a 'Name' column. The table is currently empty, showing 'No records found'. At the bottom, there are 'Save' and 'Reset' buttons.

Fig. 461: Synchronize recording control

2. To save the settings, click on the button *Save*.
To discard the settings, click on the button *Reset*.

If you subsequently activate or deactivate this synchronization options, you have to carry out the following configuration steps again before the changes take effect:

1. Set the requested state of the recording control:
 - ☒ = *recording control is synchronized*
 - ☐ = *recording control is not synchronized*
2. Deactivate the integration.
3. Deactivate the recording architecture.
4. Check that the following services have been stopped.
 - *ASC RecordingControl*
 - *ASC RecordingModule*
 - *ASC CTIconnect(integration name)*
5. Activate the recording architecture.

WARNING! In this status, all services have received the updated configuration, but may be in a conflict status.

Therefore, you have to carry out the following steps again:

6. Deactivate the recording architecture again.
 7. Check that the following services have been stopped.
 8. Activate the recording architecture again.
 9. Activate the integration.
- ⇒ Now, the changes have been applied.

7.1.2.7.2 Synchronization of system storage

In recording architectures with 2 system storages, you can configure a synchronization for comparing the recordings.

A synchronization configuration is always created for 2 system storages. All recordings which are added to one system storage are copied to the other system storage, too, and vice versa. That way, all recordings of both system storages are available on the 2 system storages simultaneously. If one of the two system storages fails, you can thus access the recordings of the failed system storage via the other system storage.

Synchronization of system storage is configured in the Servers module.

1. To create a synchronization configuration, click on the menu item *Servers > Manage synchronization configuration* in the toolbar of the main view.



Fig. 462: Menu item Manage synchronization configuration

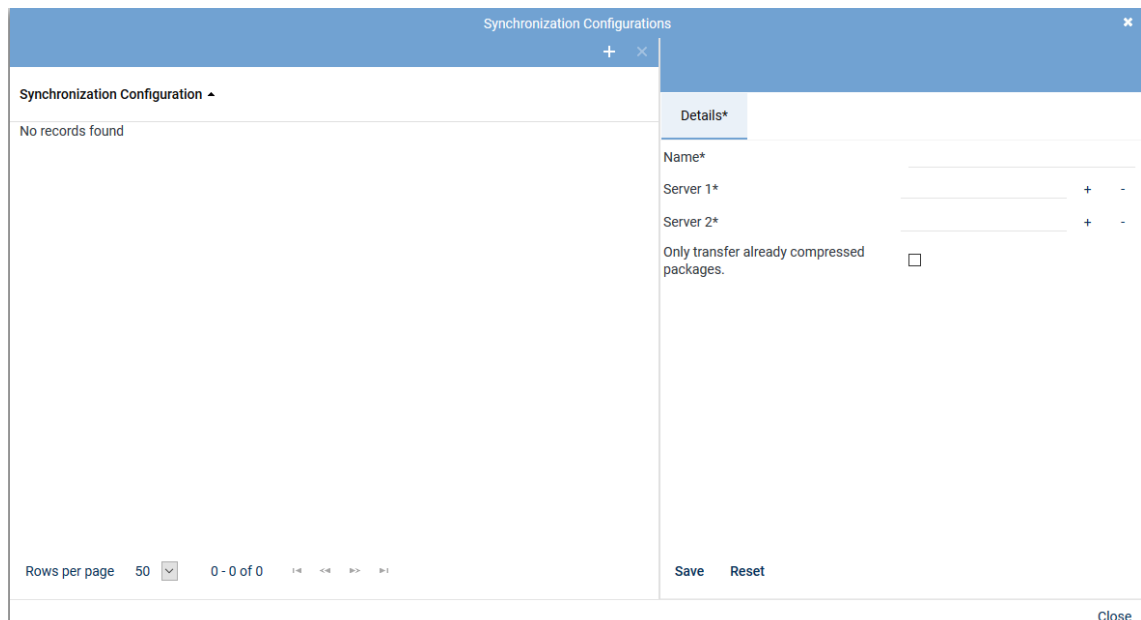




Fig. 463: Configure synchronization configurations

The following options are available:

	Create	Creates a new synchronization configuration (see chapter "Create synchronization configuration", p. 385).
	Delete	Deletes the selected synchronization configuration (see chapter "Delete synchronization configuration", p. 386).

A synchronization configuration becomes active upon saving it and continues running until it is deleted. During this period both system storages are regularly checked for new content and synchronized.

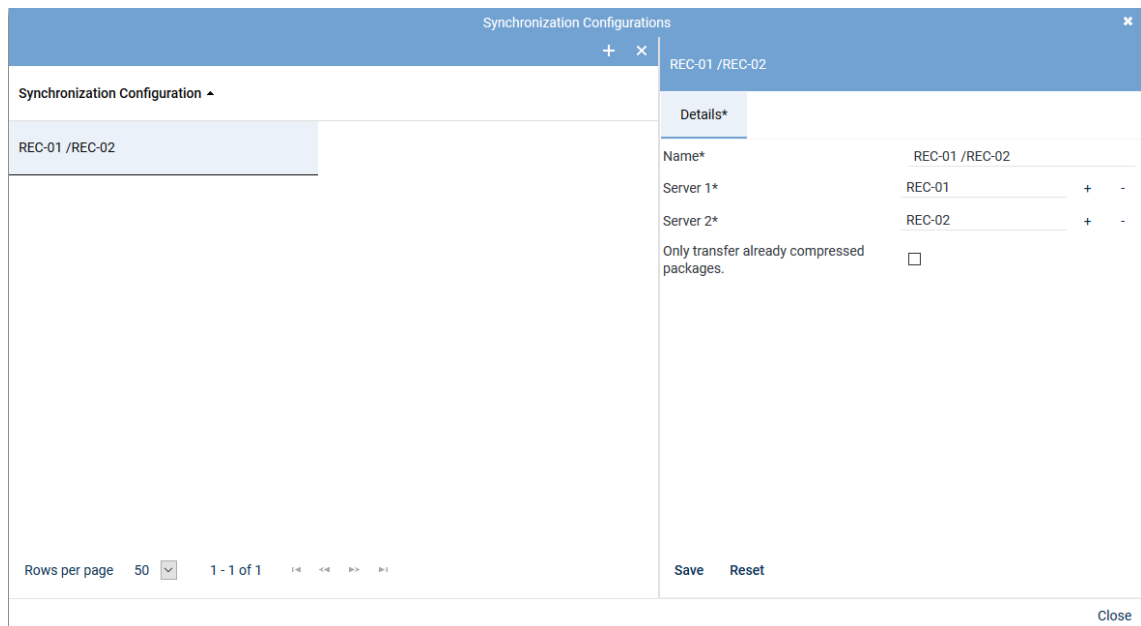


A server which is already used in a synchronization configuration cannot be used in another synchronization configuration.

Create synchronization configuration

1. In the window *Administrate Synchronization Configuration*, click on the icon  (*Create*).

⇒ The tab *Details* becomes active.



The screenshot shows a window titled "Synchronization Configurations" with a close button (X) in the top right corner. The window has a sidebar on the left with a "Synchronization Configuration" dropdown and a list of configurations, with "REC-01 / REC-02" selected. The main area is divided into two tabs: "Details*" (active) and another tab. The "Details*" tab contains the following fields:

- Name***: REC-01 / REC-02
- Server 1***: REC-01, with a "+" button to the right and a "-" button to the left.
- Server 2***: REC-02, with a "+" button to the right and a "-" button to the left.
- Only transfer already compressed packages.**: An unchecked checkbox.

At the bottom of the window, there are "Save" and "Reset" buttons, and a "Close" button in the bottom right corner. The sidebar also shows "Rows per page" set to 50 and "1 - 1 of 1" items.


Fig. 464: Create synchronization configuration

2. Complete all fields for the new synchronization configuration:

Name	Enter a name for the synchronization configuration.
Server 1 / Server 2	Click on the button + next to the entry field to select the respective server for the synchronization of the system storage from the list of available servers. If you would like to delete an entry in one of the entry fields, click on the button - next to the respective entry field.
Only transfer already compressed packages	Select whether data which has not yet been compressed is supposed to be transferred, too. <input checked="" type="checkbox"/> = Uncompressed data is transferred, too. <input type="checkbox"/> = Only compressed data is transferred. NOTICE! This option is not available until you have entered and saved the two servers.

- Click on the button *Save* to apply the configuration.
- Click on the button *Close* to finish this configuration step and close the window.

Delete synchronization configuration

- In the window *Administrate synchronization configurations*, select the synchronization configuration you would like to delete.
 - Click on the icon  (*Delete*) in the toolbar of the window.
- ⇒ The synchronization of the two entered system storages is finished.
- ⇒ The selected synchronization configuration is deleted.

7.1.2.8

Duplicates in parallel recording architectures



In parallel recording architectures in which recording control is synchronized, no duplicates are created which could be deleted. Both recordings are merged in one package and thus cannot be deleted separately. Keep in mind that more storage space must thus be available for the recordings.

A parallel recording without synchronization results in redundant recording data in the system. To avoid that conversations are displayed twice in the replay applications (e. g. *POWERplay Web*) because the database contains them twice, you can delete duplicates so that only one of the double recordings remains.

Conversations with the following characteristics are considered identical:

- Identical start and end times

You can define an allowed difference for the start and end times so that the conversations are still considered duplicates despite a differing start or end time, see [chapter "Configure duplicate detection", p. 387](#).

The start and end times of complete conversations as well as the start and end times of the individual recordings belonging to a conversation are checked.

- Identical call participants
- Identical additional data

Duplicate detection is configured in the Integrations module. There, you can configure for each integration individually under which circumstances conversations are supposed to be considered identical. Upon selecting an architecture for an integration which is based on parallel recording, the tab *Parallel Recording* is displayed which allows adjusting the required settings, see [chapter "Configure duplicate detection", p. 387](#).

The shorter one of the two identical recordings is deleted. To calculate the total recording length, the recording lengths of all sections of a conversation are added. The additional data as well as the audio data of the duplicate are deleted. On which of the two recording servers a duplicate is deleted thus depends on the location where the shorter recording has been saved. If the recording length is the same, the recording which has been checked second is considered a duplicate and deleted.

Duplicate detection is executed regularly for all new recordings from the moment on it has been activated but not for past recordings. This means Recordings which already exist when duplicate detection is activated are not checked for duplicates.



For information about the status of a job refer to the Jobs module in the application System Monitoring, see user manual *Usage System Monitoring*.



If you would like to delete duplicates but nevertheless want that all conversations exist on both recording servers, you can create a synchronization configuration in the Servers module which synchronizes the system storages of the two recording servers.

7.1.2.8.1 Configure duplicate detection

In the Integrations module, you can configure for each integration separately under which circumstances 2 conversations are supposed to be considered identical. Upon selecting an architecture for an integration which is based on parallel recording, the tab *Parallel Recording* is displayed which allows adjusting the required settings.

1. In the main view of the Integrations module, select the integration for which you would like to configure duplicate detection.
2. Select the tab *Parallel Recording* in the detail view and adjust the following settings:

Details*

Parallel Recording

☒ Delete duplicates if the participants of the conversations are identical and the following criteria are met:
 The start times differ in a maximum of Milliseconds
 *
 The end times differ in a maximum of Milliseconds
 *
 Additional settings
 Time after which conversations are to be checked at the earliest * minutes
 Interval in which the check is to take place * minutes

Additional Data



ID ↕	Displayed Name ↕
customCP01	Kommentar
customCP02	Universal Call ID

Save

Reset

Fig. 465: Tab Parallel Recording (integration)

<i>Delete duplicates,....</i>	<p>When activating this option, you can define by means of the displayed criteria when 2 recordings are supposed to be identified as identical.</p> <p><input checked="" type="checkbox"/> = Duplicate detection has been activated. Duplicates are deleted according to the defined criteria.</p> <p><input type="checkbox"/> = Duplicate detection has been deactivated.</p>
<i>The start times differ in a maximum of</i>	<p>Enter the maximum difference with regards to the start time. The start times of complete conversations as well as the start times of the individual recordings belonging to a conversation are checked.</p> <p>Example: <i>1000 milliseconds</i></p> <p>If one conversation started at 2:20:15 PM and a second conversation started at 2:20:16 PM, and if the start times of the individual recordings of those two conversations differ less than 1000 milliseconds, then these conversations are considered possible duplicates with regards to their start time.</p>
<i>The end times differ in a maximum of</i>	<p>Enter the maximum difference with regards to the end time. The end times of complete conversations as well as the end times of the individual recording sections belonging to a conversation are checked.</p> <p>Example: <i>1000 milliseconds</i></p> <p>If one conversation ended at 2:20:15 PM and a second conversation ended at 2:20:16 PM, and if the end times of the individual recordings of those two conversations differ less than 1000 milliseconds, then these conversations are considered possible duplicates with regards to their end time.</p>
<i>Time after which conversations are to be checked at the earliest</i>	<p>Enter the time interval which is supposed to pass before a recording is checked for duplicates.</p>

	<p>Example: 3 minutes</p> <p>If one conversation ended at 2:20 PM, i. e. the recording has been saved at 2:20 PM, then the recording is not check for duplicates before 2:23 PM.</p>
<i>Interval in which the check is to take place</i>	<p>Select the intervals in which the job for duplicate detection is supposed to be executed.</p> <p>Example: 2 minutes</p> <p>The job for duplicate detection is started over again every 2 minutes to search for new recordings and possible duplicates and to delete duplicates.</p>
<i>List Additional Data</i>	<p>Add all additional data to the list which are supposed to be used as criteria. When searching for duplicates, only those recordings are considered which contain an additional data type from the list. If an additional data type is empty in both conversations, this is considered identical, too, and one of the conversations is deleted.</p> <p> = Add additional data to the list, see chapter "Map additional data", p. 389.</p> <p> = Remove additional data from the list, see chapter "Delete additional data assignment", p. 390.</p>

3. To save the settings, click on the button **Save**.
- ⇒ Upon activating the option *Delete duplicates...* the recordings are checked for duplicates and the detected duplicates are deleted.

7.1.2.8.2 Map additional data

In addition to the start time and the end time, you can configure more additional data which is supposed to be used for checking for duplicates.

1. In the list *Additional data*, click on the icon  (*Add*) to configure more additional data.

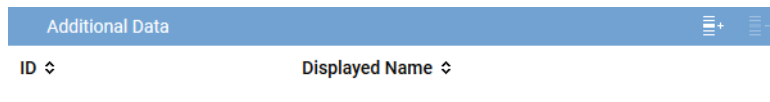


Fig. 466: Map additional data

2. Select the respective additional data from the list which are supposed to be used additionally to check for duplicates.
To select several entries or revoke a selection, click on the respective line while holding the [Ctrl] key down.

Additional Data			
Displayed Name ↕	Available ↕	Editable ↕	External Recording Control ↕
Kommentar	✓	✓	✗
Universal Call ID	✓	✓	✗

Rows per page 20 1 - 2 of 2

Add Cancel

Fig. 467: Select additional data


NOTICE! The list contains only additional data which have been configured in the Additional Data module previously.



For information about the configuration of additional data refer to the administration manual for system providers *Additional Data module*

- To apply the selection, click on the button *Add*.
To discard the selection and close the window, click on the button *Cancel*.

7.1.2.8.3 Delete additional data assignment

- Select the tab *Parallel Recording*.
- Select the additional data that you would like to remove in the list *Additional Data*.
- Click on the icon  (*Delete*).

Additional Data	
ID ↕	Displayed Name ↕
customCP01	Kommentar
customCP02	Universal Call ID

Fig. 468: Delete additional data assignment

7.1.2.9 Standby management for failover architectures

For architectures with failover concepts, you can go to the standby management to manually select which server with which components is supposed to be active.

For architectures of the type *Parallel Recording*, you can also use the standby management if you have provided for the respective resources.

Using the standby management makes sense in the following cases:

- You would like to switch back to the primary server, e. g. when the standby server has automatically taken over and the primary server is now available again.

- You would like to switch to the standby server manually, e. g. during maintenance of the primary server.



You can only edit the standby management if the corresponding architecture has been activated.

7.1.2.9.1 Standby management for All-in-one Failover

For failover recording architectures, the menu *Recording Architectures* appears in the toolbar of the main view. If you have installed the required redundancy options on different servers, you can switch from primary to standby server and vice versa by clicking on the menu item *Standby Management*.

The menu item *Standby Management* is only active if the selected recording architecture has been activated.

1. In the main view, select the recording architecture the standby management of which you would like to call up.
2. Click on the menu *Recording Architectures* in the toolbar of the main view.
 - ⇒ If the selected recording architecture has been activated, the menu item *Standby Management* is active.

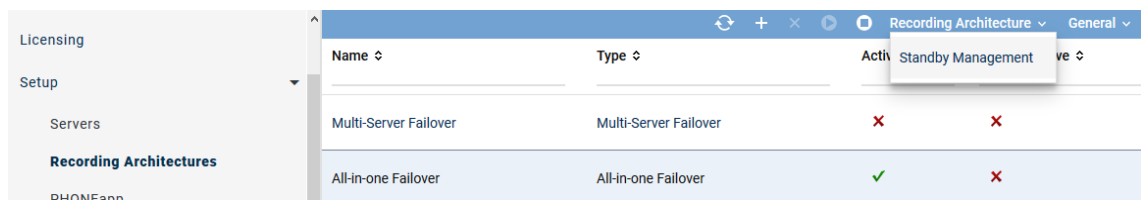



Fig. 469: Configure standby management

3. Click on the menu item *Standby Management*.
 - ⇒ The window *Standby Management* appears.

Standby Management				
Server Name	Status	Oldest Running Activity	Running Activities	Version
RC - REC-01 / REC-02				
REC-01	Active		Activities: 0	60.01.00
REC-02	In Standby		Activities: 0	
RIA - REC-01 / REC-02				
REC-01	Active		Activities: 0	60.01.00
REC-02	In Standby		Activities: 0	
RM - REC-01 / REC-02				
REC-01	Active		Activities: 0	60.00.00
REC-02	In Standby		Activities: 0	

Fig. 470: Switch server

Here, you see the assignment of the deployed components.
In the column *Status*, you can see which component is currently active.



4. To activate a standby server, select the respective server in the list.
 5. Click on the icon  (*Activate*) in the toolbar.
- ⇒ The status of the standby server changes from *In Standby* to *Active*.

Activate shutdown mode for maintenance purposes

If you would like to shut down a server for maintenance purposes, you can activate shutdown mode for this server



This function is not useful for architectures for All-in-one Failover as no additional server can be activated in shutdown mode in this architecture.


1. To activate shutdown mode for a server, select the respective server in the list.
 2. Click on the icon  (*Activate shutdown mode*) in the toolbar.
- ⇒ The status of the server changes from *Active* to *Shutdown Mode*.
3. To deactivate shutdown mode again, click on the icon  in the toolbar again.
- ⇒ The status of the server changes from *Shutdown Mode* to *Active*.



In shutdown mode, the standby components are not activated automatically. Only those conversations which are already running are continued to be recorded. Once you make manual configurations in the standby management, you must make sure that one of the respective components relevant for recording has been activated. New recordings will not be accepted before another server has been activated manually.

Activate failover components

For another standby server to take over the recording of new conversations, you must activate it manually.

1. To activate a standby server, select the respective server in the list.
 2. Click on the icon  (*Activate*) in the toolbar.
- ⇒ The status of the standby server changes from *In Standby* to *Active*.
Only now can this server record new conversations.

7.1.2.9.2 Standby management for Multi-Server Failover

For failover recording architectures, the menu *Recording Architectures* appears in the toolbar of the main view. If you have installed the required redundancy options on different servers, you can switch from primary to standby server and vice versa by clicking on the menu item *Standby Management*.

The menu item *Standby Management* is only active if the selected recording architecture has been activated.

1. In the main view, select the recording architecture the standby management of which you would like to call up.
 2. Click on the menu *Recording Architectures* in the toolbar of the main view.
- ⇒ If the selected recording architecture has been activated, the menu item *Standby Management* is active.

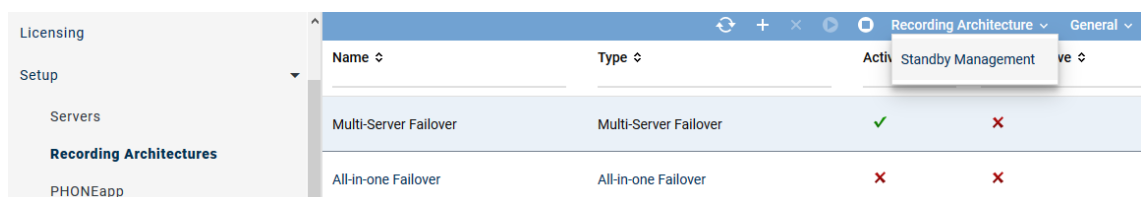


Fig. 471: Menu of the standby management

3. Click on the menu item *Standby Management*.
⇒ The window *Standby Management* appears.

Standby Management				
Server Name	Status	Oldest Running Activity	Running Activities	Version
RC - RC-01 / RC-02				
RC-01	Active		Activities: 0	60.01.00
RC-02	In Standby		Activities: 0	60.00.00
RM - REC-01 / REC-02				
REC-01	Active		Activities: 0	60.00.00
REC-02	In Standby		Activities: 0	
RIA - CTI-01 / CTI-02				
CTI-01	Active		Activities: 0	60.01.00
CTI-02	In Standby		Activities: 0	60.00.00


Fig. 472: Switch server

If you have installed the required redundancy options on different servers, you can use standby management for the following components:

- **RC** (*Recording Control Standby Management*) to secure recording control
- **RM** (*Recorder Standby Management*) to secure recording
- **RIA** (*CTIconnect Standby Management*) to secure the additional data of the recordings

Here, you see the assignment of the deployed components.

In the column *Status*, you can see which component is currently active.



4. To activate a standby server, select the respective server in the list.
5. Click on the icon  (*Activate*) in the toolbar.
⇒ The status of the standby server changes from *In Standby* to *Active*.

Activate shutdown mode for maintenance purposes

If you would like to shut down a server for maintenance purposes, you can activate shutdown mode for this server



This function is not useful for architectures for All-in-one Failover as no additional server can be activated in shutdown mode in this architecture.


1. To activate shutdown mode for a server, select the respective server in the list.
2. Click on the icon  (*Activate shutdown mode*) in the toolbar.
⇒ The status of the server changes from *Active* to *Shutdown Mode*.
3. To deactivate shutdown mode again, click on the icon  in the toolbar again.
⇒ The status of the server changes from *Shutdown Mode* to *Active*.



In shutdown mode, the standby components are not activated automatically. Only those conversations which are already running are continued to be recorded. Once you make manual configurations in the standby management, you must make sure that one of the respective components relevant for recording has been activated. New recordings will not be accepted before another server has been activated manually.

Activate failover components

For another standby server to take over the recording of new conversations, you must activate it manually.

1. To activate a standby server, select the respective server in the list.
 2. Click on the icon  (*Activate*) in the toolbar.
- ⇒ The status of the standby server changes from *In Standby* to *Active*.
Only now can this server record new conversations.

7.1.3 Adjust ASC configuration files

Some parameters cannot be configured via the graphic interface but have to be adjusted in the configuration files.

7.1.3.1 Adjust recording control

1. Open the Windows Explorer.
2. Change to the installation directory of the recording software `\Program Files (x86)\ASC\ASC Product Suite\data\RecordingControl`.
3. Open the configuration file `ASC.RecordingControl.ini` with the Editor.

Configure merging

4. Set the following parameter to 0 so that the conversations are not merged via the URI or the phone number.

Section [SimSettings]

- `simRMergeViaParticipants=0`
5. Save the changes in the configuration file.
 6. Restart the service `ASC RecordingControl` so that the changes are applied.



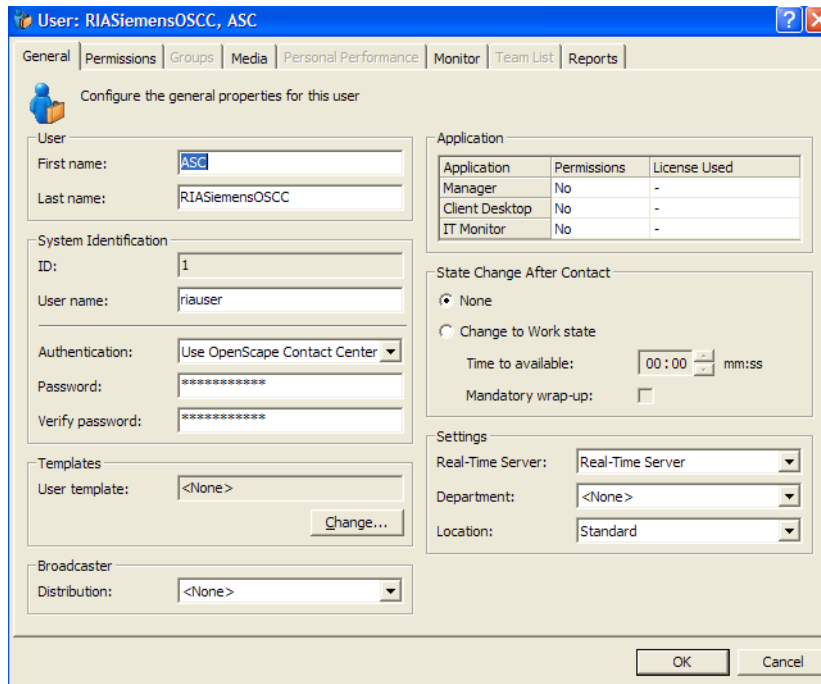
For further information about how to adjust the configuration files contact your local ASC support or call ASC support at +49 700 27278776.

7.2 Configure CTIconnect add-on

7.2.1 Configure OpenScape Contact Center (optional)

7.2.1.1 Create user for CTIconnect

Create a user in [OSCC](#) server administration.



Application	Permissions	License Used
Manager	No	-
Client Desktop	No	-
IT Monitor	No	-

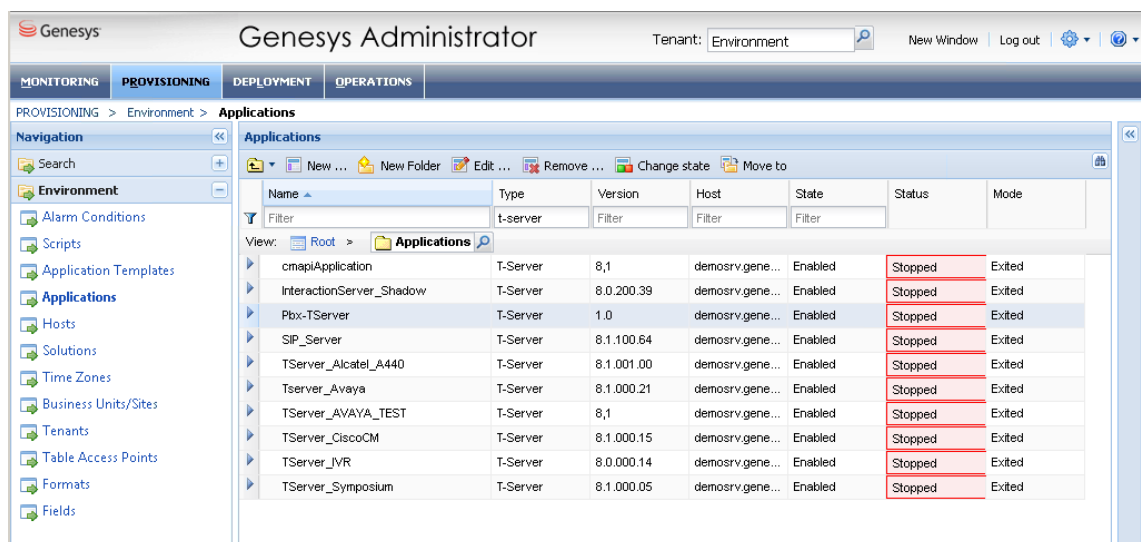
Fig. 473: Create a user for CTIconnect service

This user does not need other special authorizations. All other settings can remain on default values.

7.2.2 Configure Genesys T-Server (optional)

7.2.2.1 Configure IP address and port of the Genesys T-Server

1. Log in to the Genesys Administrator.
2. Click on the menu item *Environment > Applications* in the navigation bar.



Name	Type	Version	Host	State	Status	Mode
cmapiApplication	T-Server	8,1	demosrv.gene...	Enabled	Stopped	Exited
InteractionServer_Shadow	T-Server	8.0.200.39	demosrv.gene...	Enabled	Stopped	Exited
Pbx-TServer	T-Server	1.0	demosrv.gene...	Enabled	Stopped	Exited
SIP_Server	T-Server	8.1.100.64	demosrv.gene...	Enabled	Stopped	Exited
TServer_Alcatel_A440	T-Server	8.1.001.00	demosrv.gene...	Enabled	Stopped	Exited
Tserver_Avaya	T-Server	8.1.000.21	demosrv.gene...	Enabled	Stopped	Exited
TServer_AVAYA_TEST	T-Server	8,1	demosrv.gene...	Enabled	Stopped	Exited
TServer_CiscoCM	T-Server	8.1.000.15	demosrv.gene...	Enabled	Stopped	Exited
TServer_IVR	T-Server	8.0.000.14	demosrv.gene...	Enabled	Stopped	Exited
TServer_Symposium	T-Server	8.1.000.05	demosrv.gene...	Enabled	Stopped	Exited

Fig. 474: Genesys Administrator - select T-Server

3. Double-click on the entry T-Server which has been connected to the switch instance to be monitored.
⇒ The window *Configuration* appears.
4. Expand the area *Server Info*.

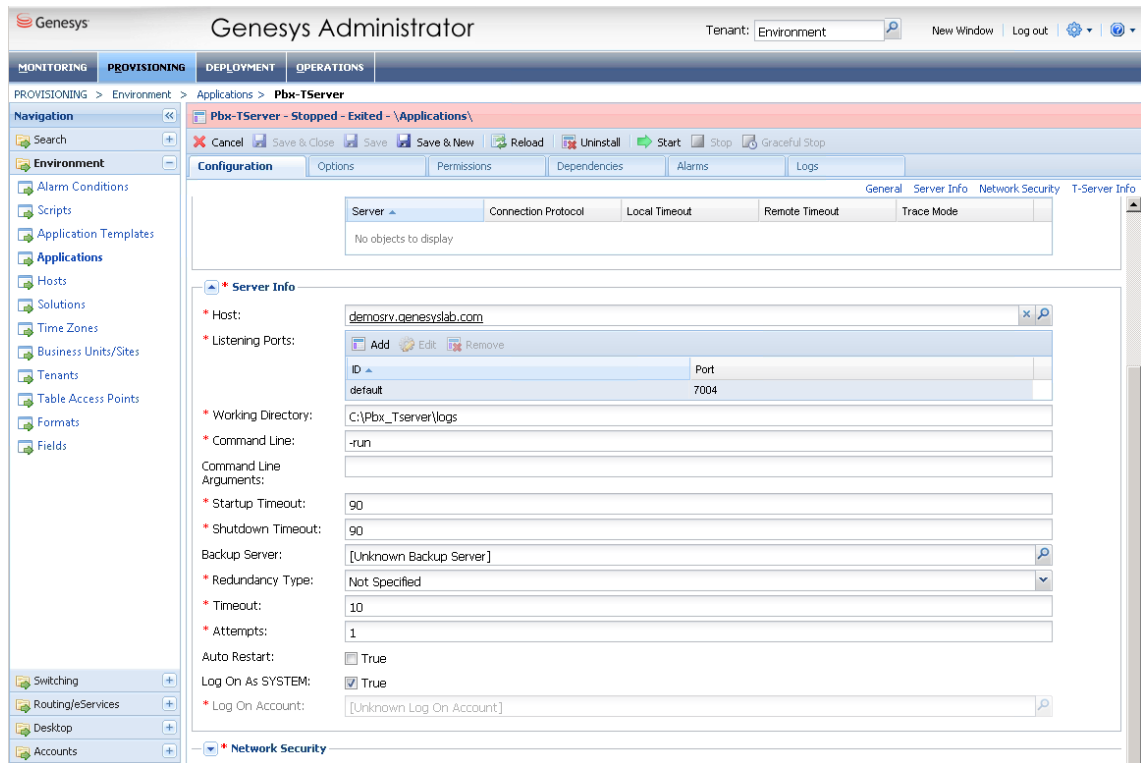


Fig. 475: Genesys Administrator - configure T-Server

5. In the field *Host*, enter the IP address or the computer name of the T-Server, e. g. *demosrv8.genesyslab.com*.
6. In the field *Listening Port*, enter the port of the T-Server, e. g.

7.2.2.2

Configure IP address and port of the Genesys Configuration Server

1. Click on the menu item *Environment > Applications* in the navigation bar.

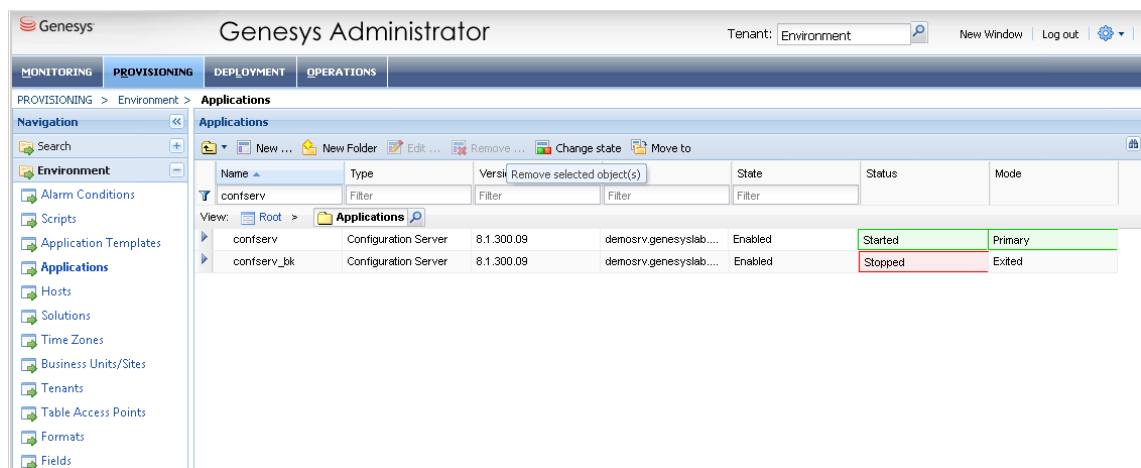


Fig. 476: Genesys Administrator - select configuration server

2. Double-click on the entry Configuration Server, e. g. *confserv*.
⇒ The window *Configuration* appears.
3. Expand the area *Server Info*.

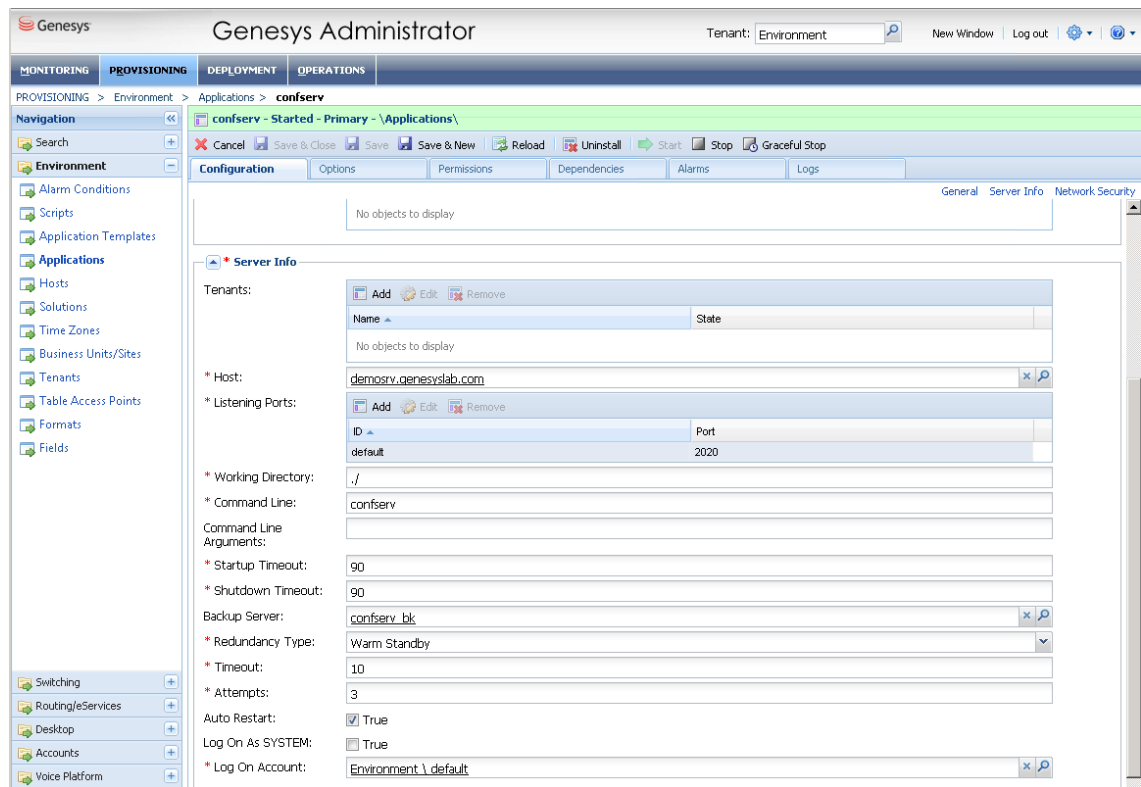


Fig. 477: Genesys Administrator - configure configuration server

4. In the field *Host*, enter the IP address or the computer name of the configuration server, e. g. *demosrv8.genesyslab.com*.
5. In the field *Listening Port*, enter the port of the configuration server, e. g. *2020*.

7.2.2.3 Configure switch instance in the Genesys Configuration Server

1. Click on the menu item *Switching > Switches* in the navigation bar.

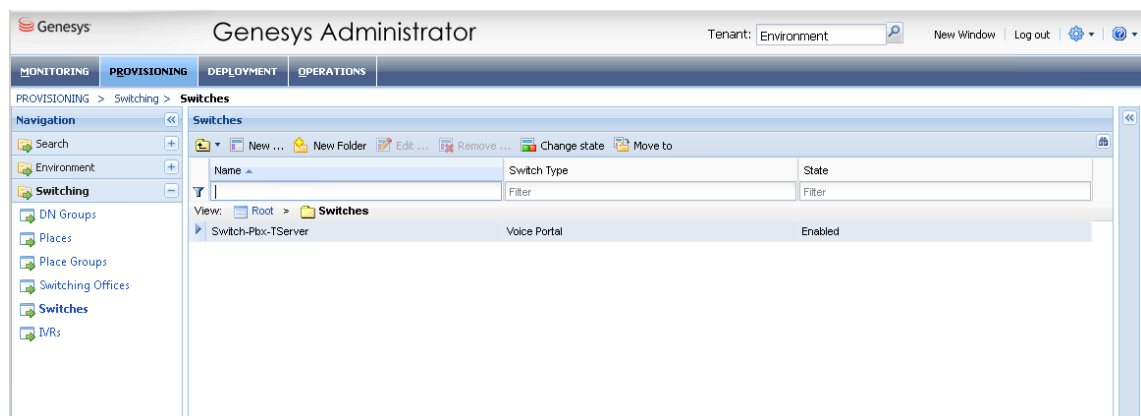
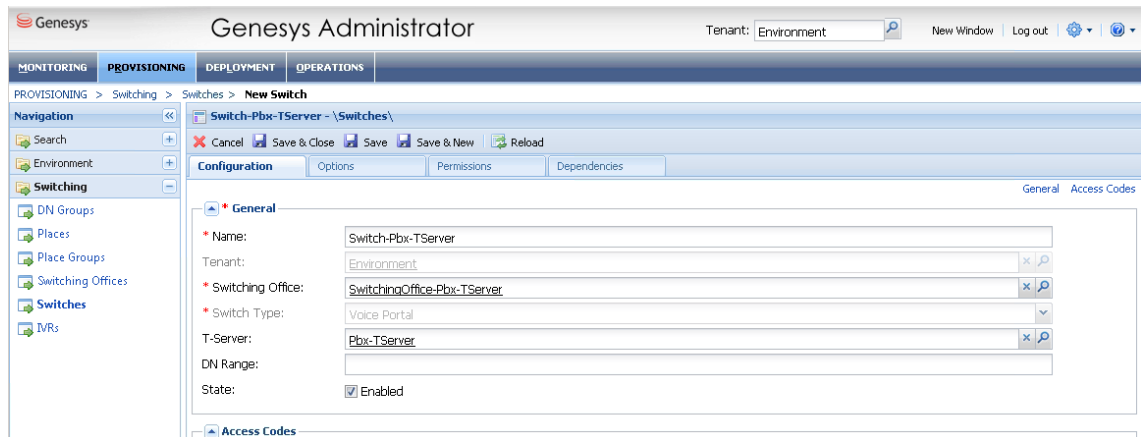


Fig. 478: Genesys Administrator - switch instances

2. Double-click on the entry of the switch instance.
⇒ The window *Configuration > General* appears.



The screenshot shows the Genesys Administrator web interface. The top navigation bar includes tabs for MONITORING, PROVISIONING, DEPLOYMENT, and OPERATIONS. The left sidebar shows a tree view with categories like Environment, Switching, and IVRs. The main content area is titled 'New Switch' and shows the configuration for a switch named 'Switch-Pbx-TServer'. The 'General' tab is active, displaying fields for Name, Tenant, Switching Office, Switch Type, T-Server, DN Range, and State. The 'State' checkbox is checked and labeled 'Enabled'.

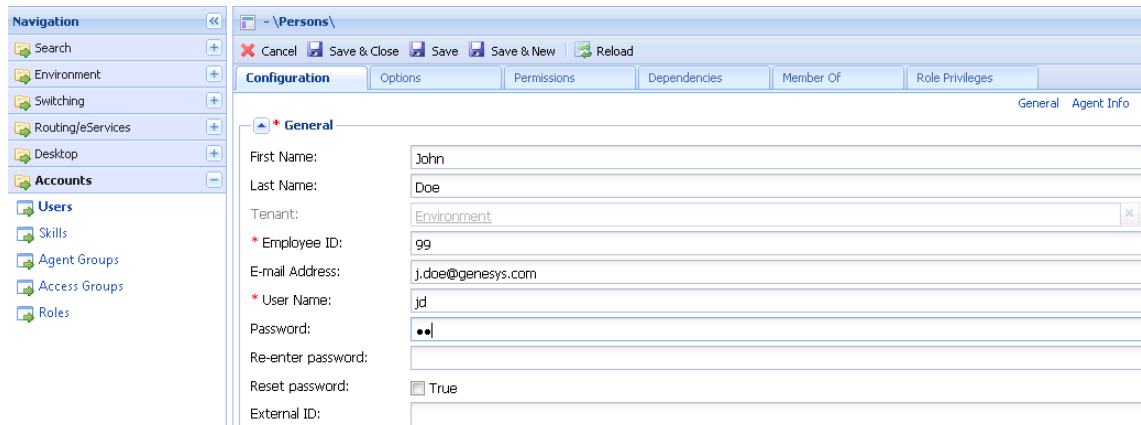
Fig. 479: Genesys Administrator - configure switch instance

3. Enter the same name in the configuration as in the Genesys T-Server.
4. Check whether the T-Server is identical to the T-Server configured in the Genesys T-Server.
5. Click on the button **Save** to save the entries.

7.2.2.4 Create users for the Genesys Configuration Server

To access the Genesys Configuration Server, you have to create a user.

1. Click on the menu item *Account > Users* in the navigation bar.
2. Click on the button **New**.
⇒ The window *Configuration > General* appears.



The screenshot shows the Genesys Administrator web interface for creating a new user. The left sidebar shows the 'Accounts' category expanded, with 'Users' selected. The main content area is titled 'New User' and shows the configuration for a user named 'John Doe'. The 'General' tab is active, displaying fields for First Name, Last Name, Tenant, Employee ID, E-mail Address, User Name, Password, Re-enter password, Reset password, and External ID. The 'Password' field is masked with dots.

Fig. 480: Genesys administrator - create user

3. Complete the mandatory fields *Employee ID*, *User Name*, and *Password*.
4. Assign the user the rights to the created switch instance.
5. Click on the button **Save** to save the entries.

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Glossary

API

Application Programming Interface

API server

Server on which the API service runs. (API=Application Programming Interface)

CSV

Comma-separated values is a file format which stores tabular data in plain text form.

DTMF

Dialed Dual Tone Multi Frequency keys represent dialing signals on the analog connecting cable of the telephone. This is a method to transmit the phone number to the telephone network or to a PBX.

IP

Internet Protocol, basic protocol for Internet communication

LCR

Last Conversation Repeat

NTP

Network Time Protocol NTP is a standard for the synchronization of clocks in computer systems via packet-based communication networks. NTP uses the connectionless transport protocol UDP. It has been developed with the objective to guarantee reliable time verification across networks with variable packet runtime. (Source: Wikipedia 12th June 2018)

OSCC

OpenScape Contact Center

PBX

Private Branch Exchange

RTP

Real-time Transport Protocol is a protocol to continuously transmit audio and video files via the IP protocol within the network.

SDES

Session Description Protocol Security Descriptions

SDK

Software Development Kit

SDP

The Session Description Protocol describes properties of multimedia data streams. It serves to manage communication sessions and is used together with SIP and H.323 for instance within the IP telephony to deal codecs, transport protocols and addresses as well as for the transmission of meta data. (Source: Wikipedia 4th May 2017)

SIP

Session Initiation Protocol

SIPREC

Session Initiation Protocol Recording

SRTP

Secure real-time protocol

TCP

Transmission Control Protocol, controlled connection establishment, secure data transmission, controlled connection termination

TDM

Time Division Multiplexing is an umbrella term for time-slot-oriented interfaces, ITU G.703 defined. The term is used ASC-wide representative for conventional telephony.

TLS

Transport Layer Security; previously known as Secure Sockets Layer (SSL), is a hybrid encryption protocol for safe data transmission in the Internet. Since version 3.0, the SSL protocol is developed under the new name TLS.

UDP

User Datagram Protocol UDP is a minimal, connectionless network protocol which belongs to the core members of the Internet protocol suite. Its purpose is to make sure that data transmitted via the Internet reach the designated application. There is no destination check.

URL

Uniform resource locator. Identifies and locates a resource (e. g. a website) about the used access method (e. g. the used network protocol as HTTP or FTP) and the location of the resource in the computer network. (Source: Wikipedia 20th November 2013)

VM

Virtual machine

VoIP

Voice over IP

XML

Extensible Markup Language is a human-readable and machine-readable language which defines a set of rules for encoding documents.