

# Video Communication Recording for SIP active



## Administration manual for system providers

1/22/2020

### 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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## 1 General information

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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 Video Communications Recording for SIP active is based on the software EVOIP<sub>neo</sub> active for SIP which provides the functionality which is necessary for the active IP recording of unencrypted and encrypted video conversations in a SIP environment.

To record conversations, the recording server is added to the conference as participant. This can either be done automatically if configured that way on the phone or on the PBX or initiated manually by the participant.

The recording server receives the conversation data which is supposed to be recorded as a mixed RTP data stream. The additional data is extracted from the SIP signaling.

The video conversations are encrypted in the ASC proprietary file format and stored in the CallPool.

Since the recording is started by a conference call, the recording server does not receive the phone numbers of the other communication participants. To obtain this information nonetheless, different SIP headers can be configured as information source.

### Video Communications Recording for SIP active

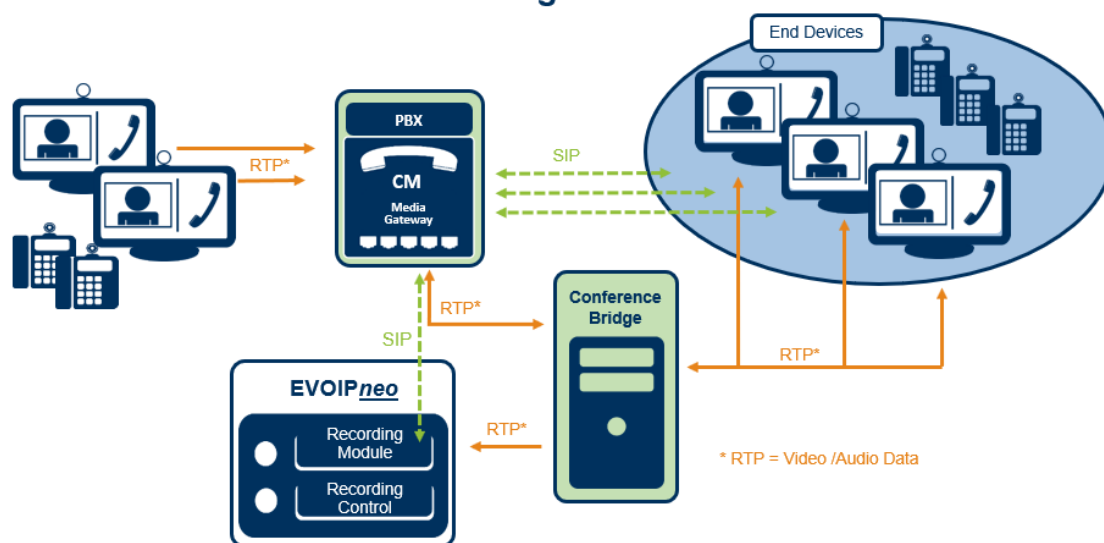


Fig. 1: Overview of the recording solution

### 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

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

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 7145 ([RDMA](#))
- RFC 7865 ([SIPREC](#) Recording Metadata)
- RFC 7866 ([SIPREC](#) protocol)



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

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

### 3.3.3 Additional requirements and restrictions

- Early Media must be deactivated.
- Voice Activity Detection ([VAD](#)) or silence suppression must be deactivated.
- The SIP authentication methods *basic* and *auth* are supported.

### 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 <sup>neo</sup> Base license - active	1 license per recording server
EVOIP <sup>neo</sup> active for SIP	1 license per concurrent recording
Video Communications Recording for SIP active	1 license per agent to be recorded

Tab. 1: Licenses of ASC

#### 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.



## 5

## Overview install and configure product

The following steps have to be carried out:

1. Install *neo* software
2. Configure PBX and conference bridge
  - 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.
  - Create, configure, and activate integration
    - Configure recording architecture  
Link the integration to the previously created recording architecture.
    - 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, incoming port for RTP, and extensions.

#### Additional configuration steps for video recording

- Activate video support
  - For a working recording of video conversations, you have to activate the parameter for the support of video in the configuration file of the Recording module. See Activate video support.
- Configure employees
  - To be able to record the video conversations of agents, you have to configure the respective employees as agents in the Employees module and configure their *extension* or their *PBX Agent ID* in the agent data in the group field *Telephony* as well as activate the option *Video recording* in the group field *Miscellaneous Settings*.  
For this configuration you have to log in to the application System Configuration as 1st-tenant-admin.
- Configure Recording Planner
  - To be able to record the video conversations, you have to activate the option *Record video* in the Recording Planner module in the Quality Management module.  
For this configuration you have to log in to the application System Configuration as 1st-tenant-admin.
- 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*.

## 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.*

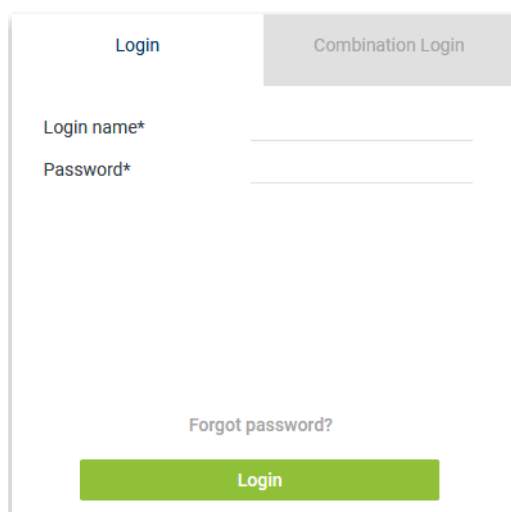


Fig. 2: System Configuration - web interface

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 $\geq 6.3$ , 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 $\geq 6.3$ , the changed password remains.
<i>neo</i> version $\geq 6.3$	
Default password:	<i>A\$c123</i>

Tab. 2: Login data - system provider

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

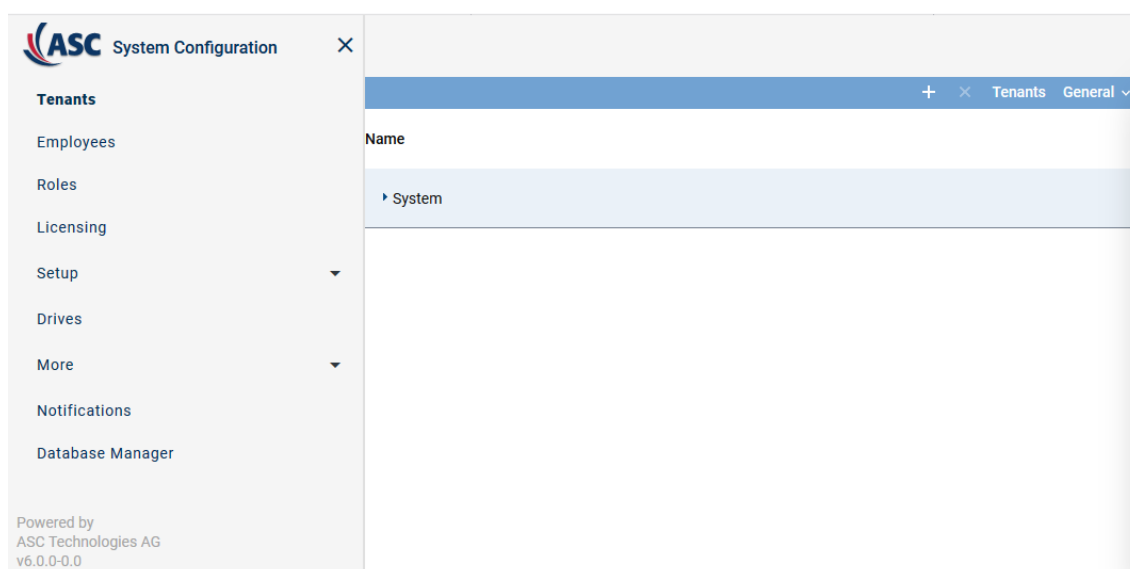


Fig. 3: System Configuration - main view:

## 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:

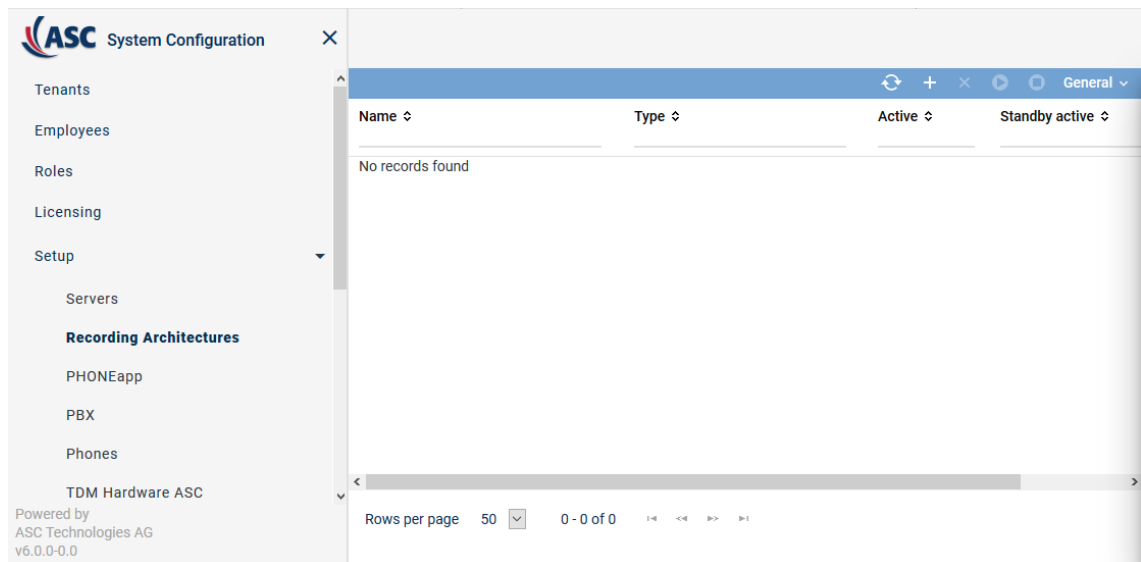




Fig. 4: Recording architectures - main view

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

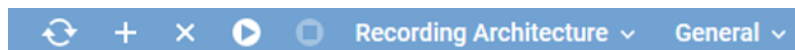







Fig. 5: Toolbar Recording Architectures module

	<b>Refresh</b>	Refreshes the main view.
	<b>Create</b>	Creates a new recording architecture.
	<b>Delete</b>	Deletes the selected recording architecture. The recording architecture is removed from the list of the main view. <b>NOTICE!</b> 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. <b>NOTICE!</b> 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"> <li>• <i>Displayed information</i></li> <li>• <i>Order of the displayed columns</i></li> <li>• <i>Number of rows per page</i></li> </ul>
	<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.

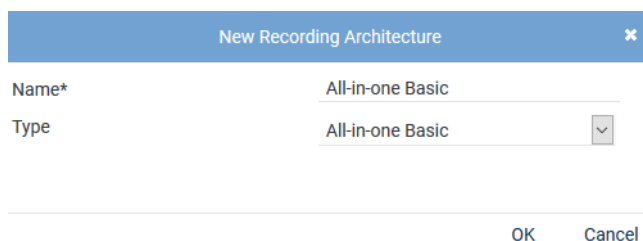
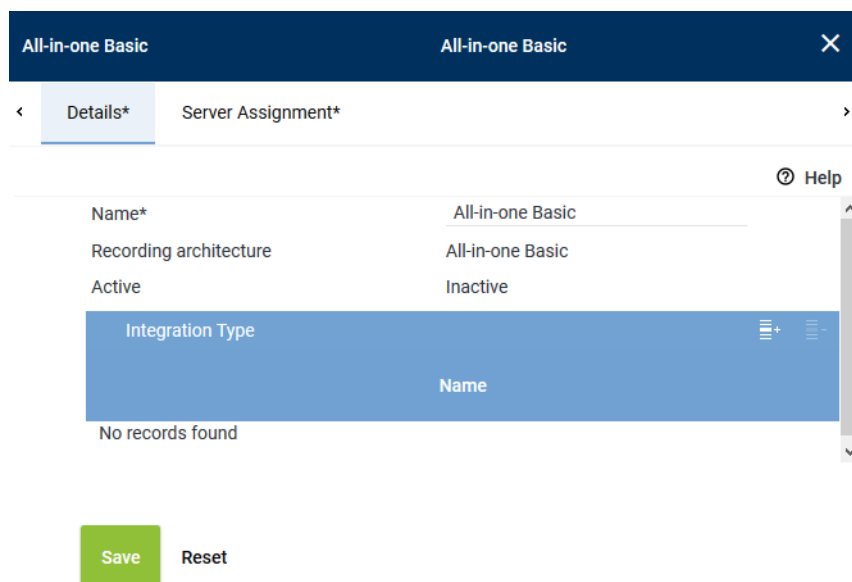


Fig. 6: Create recording architecture - All-in-one Basic Recording

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, and a message 'No records found' is displayed at the bottom of the table. To the right of the table is a vertical scrollbar. At the bottom of the window are two buttons: 'Save' (green) and 'Reset' (grey).

Fig. 7: 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. 8: 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. 9: 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. 10: 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. 11: 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. 12: 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			
<b>Servers</b>			
Recording Architectures			
PHONEapp			
PBX			
Phones			
TDM Hardware ASC			
Powered by ASC Technologies AG v6.0.0-0.0			

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

Rows per page 50 1 - 8 of 8

Fig. 13: 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 <a href="#">IP</a> 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.

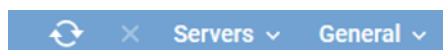




Fig. 14: Toolbar Servers module

	<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 <a href="#">chapter "Administrate server locations", p. 19</a> .
	<i>Administrate NTP Server</i>	Opens a window in which you can administrate the servers for the time synchronization, see <a href="#">chapter "Administrate NTP server", p. 36</a> .
	<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"> <li>• <i>Displayed information</i></li> <li>• <i>Order of the displayed columns</i></li> <li>• <i>Number of rows per page</i></li> </ul>
	<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.

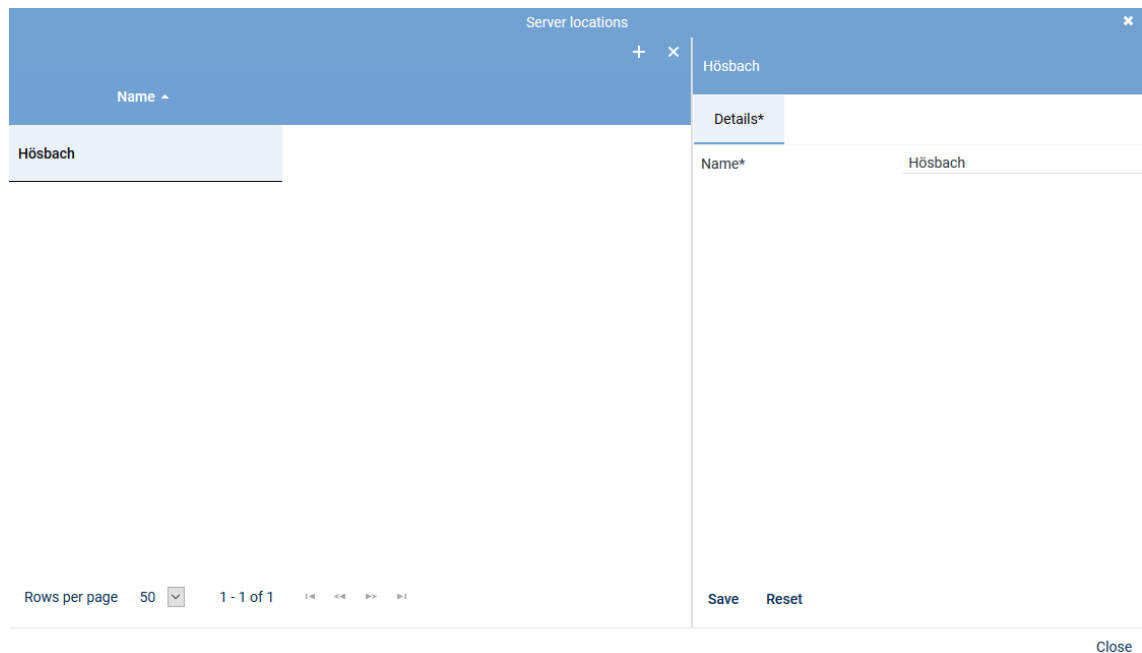



Fig. 15: Add server locations

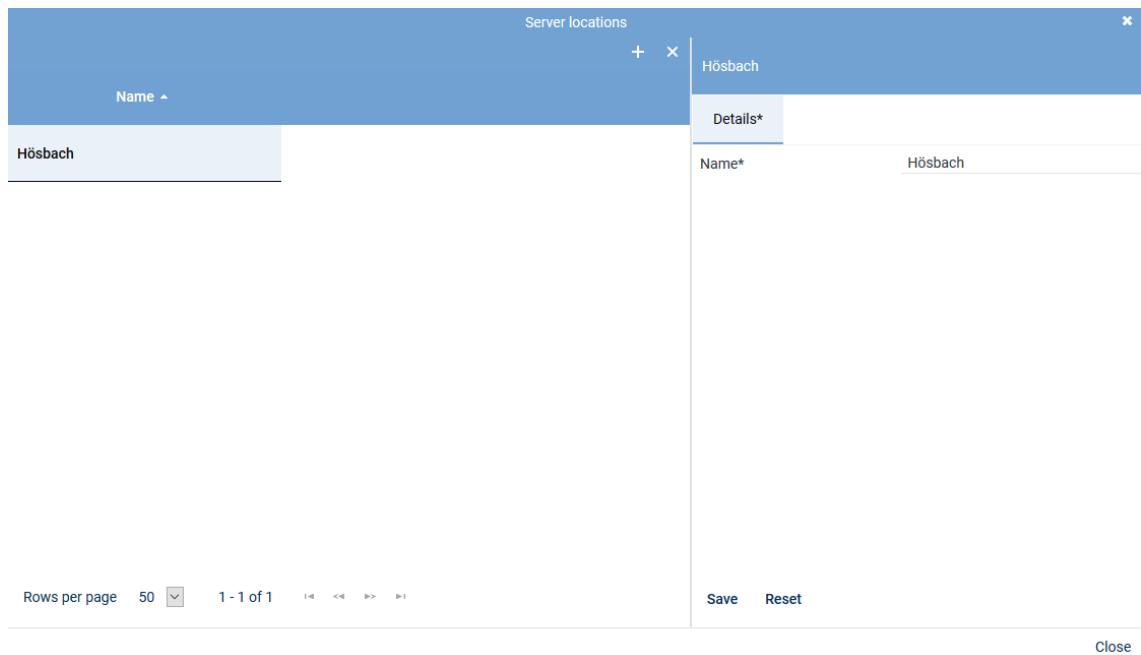
- Click on the icon  (*Create*) in the toolbar of the window *Server Locations*.
- Enter the name of the location on the right side in the tab *Details*.
- To save the entry, click on the button *Save*.  
To discard the entry, click on the button *Reset*.
- To add further locations, repeat the last 3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



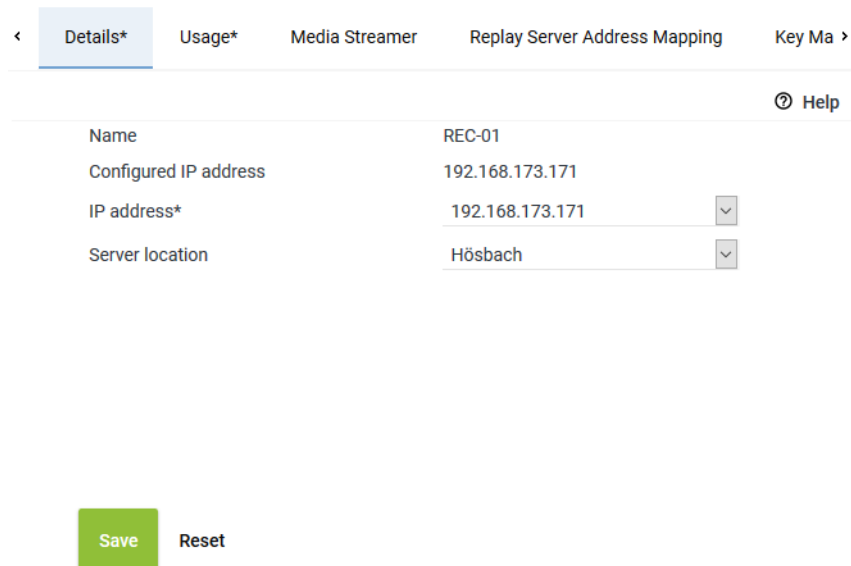
The screenshot shows a window titled "Server locations" with a close button (x) in the top right. Below the title bar is a table with one row containing the text "Hörsbach". To the right of the table is a tab labeled "Details\*". Below the tab is a form with a label "Name\*" and a text input field containing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

Fig. 16: 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	Hörsbach 

At the bottom of the window, there is a "Save" button (green) and a "Reset" button (grey).

Fig. 17: 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.

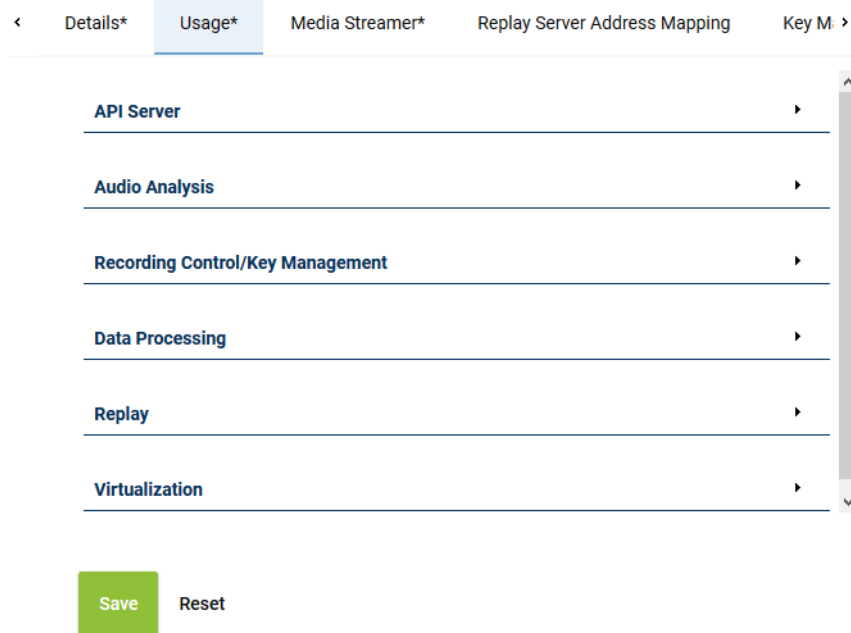


Fig. 18: Servers - tab Usage

### Group field API Server

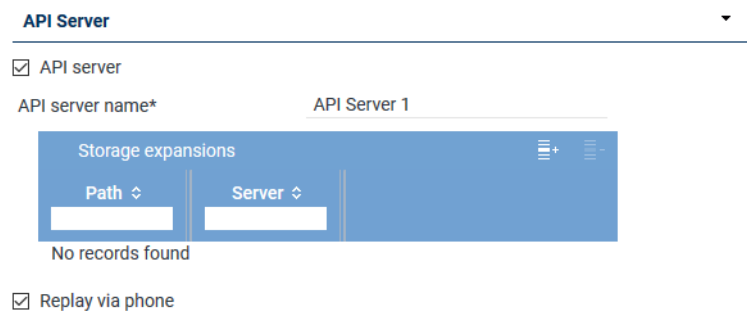




Fig. 19: Group field API Server


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.

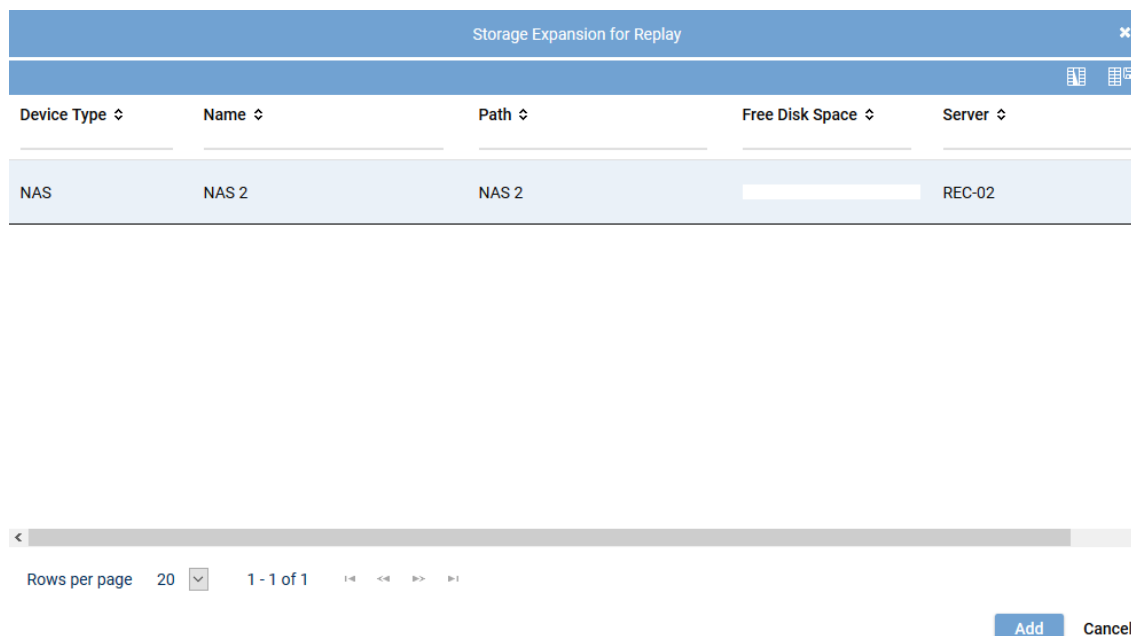
The API server is responsible for replay via the web browser, too. The API server has to be started before the replay server can be activated and the API server assigned for replay via the web applications.

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 <a href="#">chapter "Tab Replay Server Address Mapping"</a>, p. 32.</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"> <li>By clicking on the icon  (<i>Add</i>), you can add the storage expansions, see <a href="#">chapter "Add storage expansion for replay"</a>, p. 24.</li> <li>By clicking on the icon  (<i>Remove</i>), you can remove the storage expansions from the list.</li> </ul> <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><b>NOTICE!</b> The function <i>Replay via phone</i> has been implemented in the following <i>neo</i> components:</p> <ul style="list-style-type: none"> <li>Application POWERplay Pro</li> <li>Application POWERplay Instant</li> <li>Replay module</li> </ul> <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><b>NOTICE!</b> In the tab <i>Media Streamer</i>, you have to assign this function to a PBX, see <a href="#">chapter "Tab Media Streamer"</a>, p. 31. 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

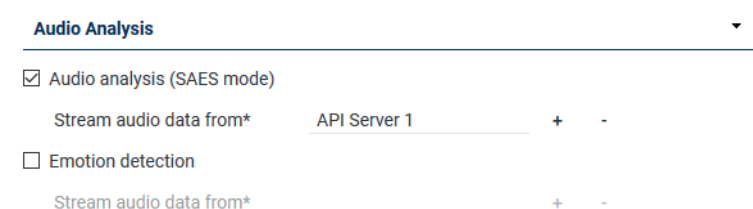
Rows per page 20 1 - 1 of 1

Add Cancel

Fig. 20: 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. 21: 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"> <li>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 .</li> </ul>
<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. 3: Configure audio analysis

### Group field Recording Control/Key Management

**Recording Control/Key Management** ▼

---

☒ Recording control/Monitoring

Recording architecture      Please choose... ▼

☒ neo key management

Fig. 22: 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<del>command</del></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"> <li>Recording architecture From the drop-down list, select the respective recording architecture you would like to use for the control.</li> </ul>
- <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. 4: 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. 23: 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"> <li>By clicking on the icon  (<i>Add</i>), you can add the target server, see <a href="#">chapter "Add target server to a list", p. 27</a>.</li> <li>By clicking on the icon  (<i>Remove</i>), you can remove the target server from the list.</li> </ul> <p><b>NOTICE!</b> 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"> <li>By clicking on the icon  (Add), you can add the target server, see <a href="#">chapter "Add target server to a list", p. 27</a>.</li> <li>By clicking on the icon  (Remove), you can remove the target server from the list.</li> </ul> <p><b>NOTICE!</b> 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"> <li>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.</li> <li>Active period of time <input type="checkbox"/> = Function has not been activated.</li> </ul> <p><b>NOTICE!</b> 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"> <li>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.</li> </ul> <p><b>NOTICE!</b> 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. 5: 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

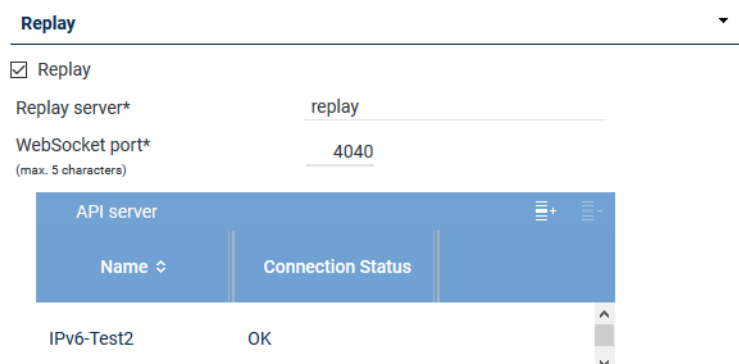
Fig. 24: Select server



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. 25: 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 <a href="#">API</a> 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 <a href="#">API servers</a> 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 <a href="#">API servers</a> 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"> <li>By clicking on the icon  (<i>Add</i>), you can add the <a href="#">API server</a>, see <a href="#">chapter "Add API server to a list"</a>, p. 29.</li> <li>By clicking on the icon  (<i>Remove</i>), you can remove selected <a href="#">API servers</a> from the list.</li> </ul>

Tab. 6: 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. 26: Select server



Only those servers are available on which the [API](#) service has been installed and activated. See [chapter "Group field API Server", p. 22](#).

- 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. 27: 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. 7: 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.

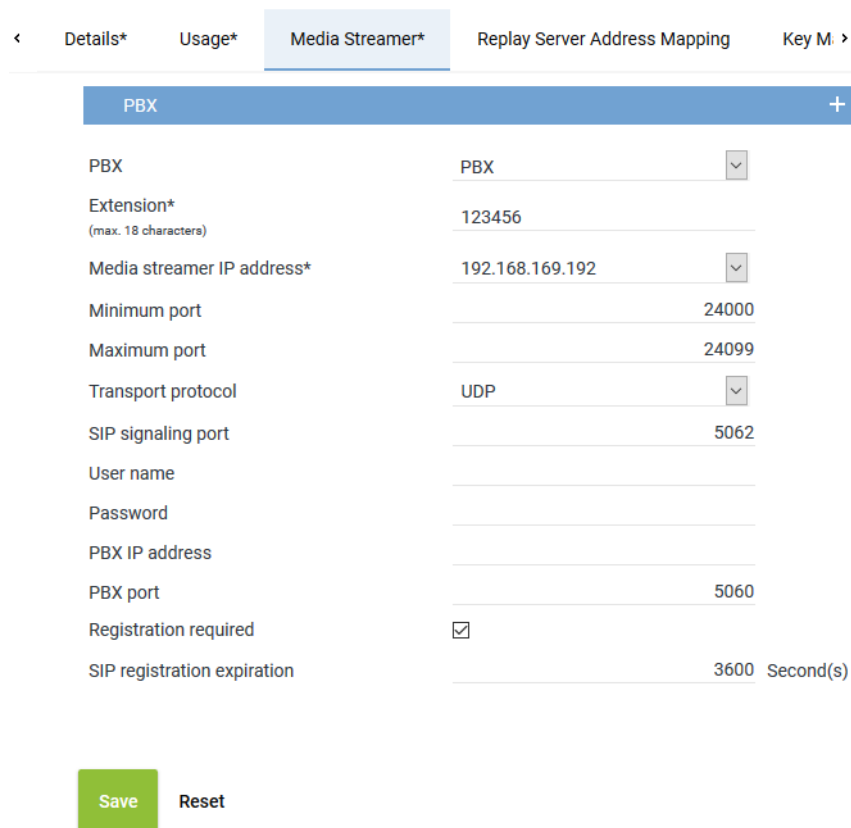
### Tab Media Streamer

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. 28: Servers module - tab Media Streamer

2. Enter the following parameters:

<b>PBX</b>	<p><b>PBX</b> that the Media Streamer is supposed to be mapped to.</p> <p>Select a <b>PBX</b> from the drop-down list. The drop-down list displays all <b>PBXs</b> which have been created in the system.</p> <p>If no <b>PBX</b> has been created in the system yet, you can create a <b>PBX</b> via the blue bar <b>PBX</b>, see <a href="#">chapter "Create PBX"</a>, p. 37.</p>
<b>Extension</b>	<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 <b>8000</b>.</p>
<b>Media streamer IP address</b>	<p>IP address which is supposed to be used for the exchange of the audio data and for the <b>SIP</b> 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 <b>169.254.254.100</b> 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 <b>SIP</b> communication from the drop-down list.  <b>TCP</b> = unencrypted <b>UDP</b> = unencrypted <b>TLS</b> = encrypted  If an external analog gateway has been integrated, select <b>UDP</b> in the drop-down list.
<i>SIP signaling port</i>	Enter the port for the <b>SIP</b> communication. Port for data exchange: 5062
<i>User name</i>	Enter the user name for the authentication on the <b>SIP</b> server.
<i>Password</i>	Enter the password for the authentication on the <b>SIP</b> server.
<i>PBX IP address</i>	Enter the IP address of the <b>SIP</b> registrar of the <b>PBX</b> .  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 <b>SIP</b> registrar of the <b>PBX</b> .  If an external analog gateway has been integrated, enter the value 5060.
<i>Registration required</i>	Select whether the <b>SIP</b> extension has to be registered with the <b>SIP</b> registrar of the <b>PBX</b> .  <input checked="" type="checkbox"/> = <b>SIP</b> extension has to be registered. <input type="checkbox"/> = <b>SIP</b> 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

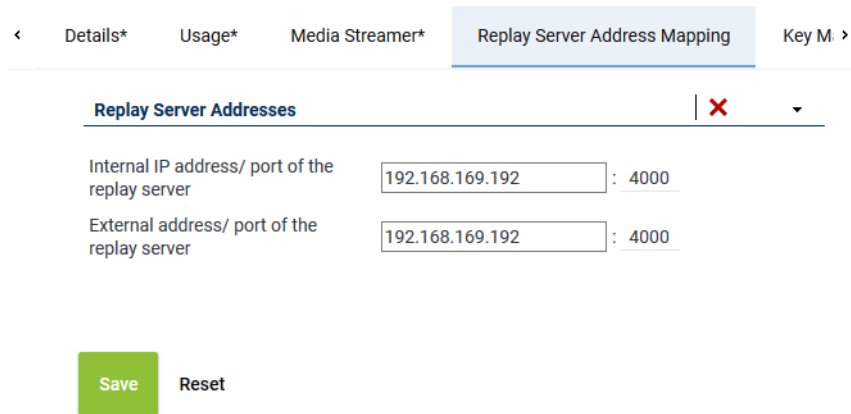
1. Click on the tab *Replay Server Address Mapping* in the detail view.

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: 192.168.169.192 : 4000

External address/ port of the replay server: 192.168.169.192 : 4000

Save Reset

Fig. 29: 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 <b>IP</b> 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 <b>URL</b> or the <b>IP</b> 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. 30: 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"> <li>• <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</li> <li>• <i>Create key manually</i> Select that a key is supposed to be generated manually.</li> </ul> <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.

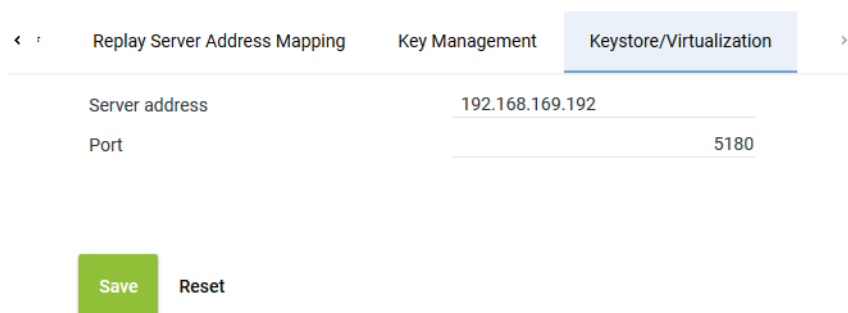
In this tab, you can configure the connection data for the service *DongleMan* for the neo key management and for the authentication of the VM.



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*.



The screenshot shows a configuration interface with three tabs: 'Replay Server Address Mapping', 'Key Management', and 'Keystore/Virtualization'. The 'Keystore/Virtualization' tab is active. It contains two input fields: 'Server address' with the value '192.168.169.192' and 'Port' with the value '5180'. Below these fields are two buttons: 'Save' (green) and 'Reset' (grey).

Fig. 31: 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"> <li>If you use only the ASC key management: IP address of the server with the master password database</li> </ul>
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.

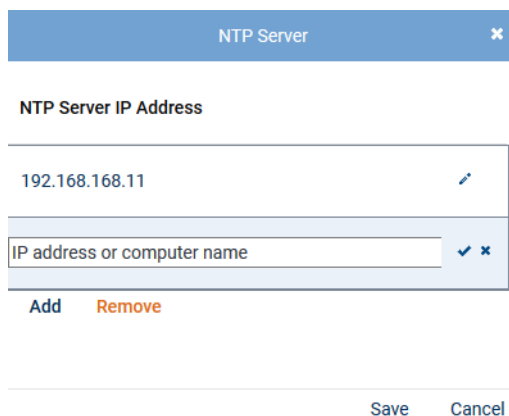





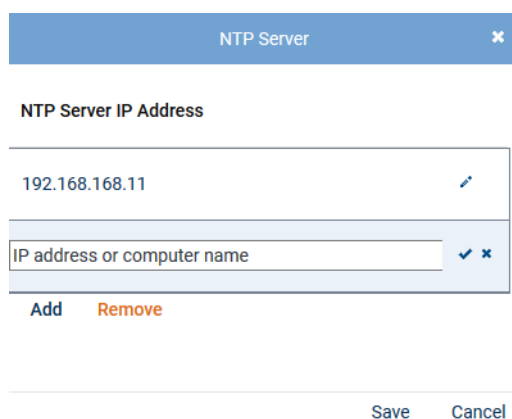
Fig. 32: Add NTP server

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

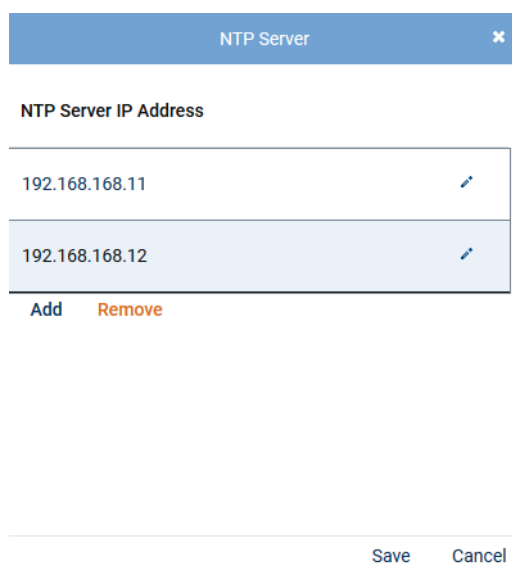
Save Cancel

Fig. 33: 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. 34: 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:

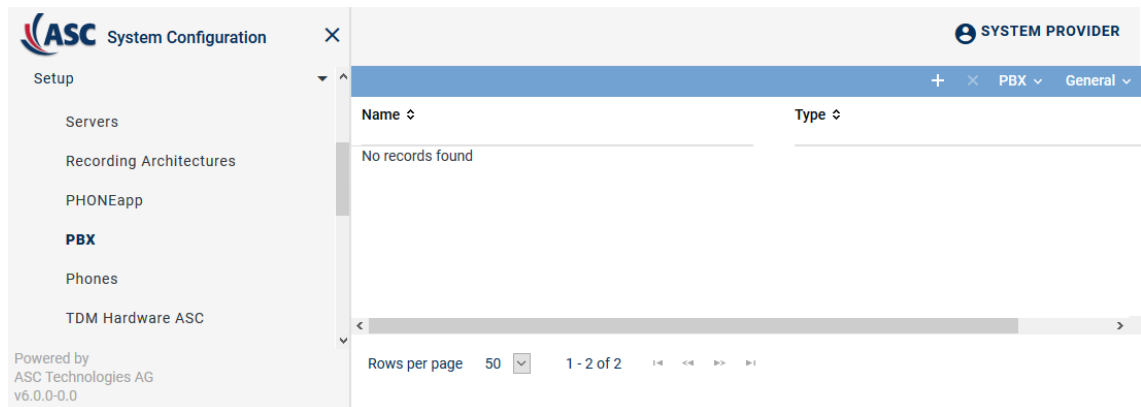




Fig. 35: Create new PBX

### Toolbar of the PBX module

The toolbar offers the following functions.



Fig. 36: 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"> <li>• <i>Displayed information</i></li> <li>• <i>Order of the displayed columns</i></li> <li>• <i>Number of rows per page</i></li> </ul>
	<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.

SIP
×

<
Details\*
PHONEapp Configuration
Web Service
>

Name\*

PBX type

Maximum length of extensions

Country code ☒ Select from list

☐ Enter manually

Area code\*

Net code\*

**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. 37: 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 <a href="#">PBX</a> 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"> <li><i>Select from list</i> Select the country code from the drop-down list.</li> <li><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 <i>094</i>.</li> </ul>
<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. 8: 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. 9: 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.



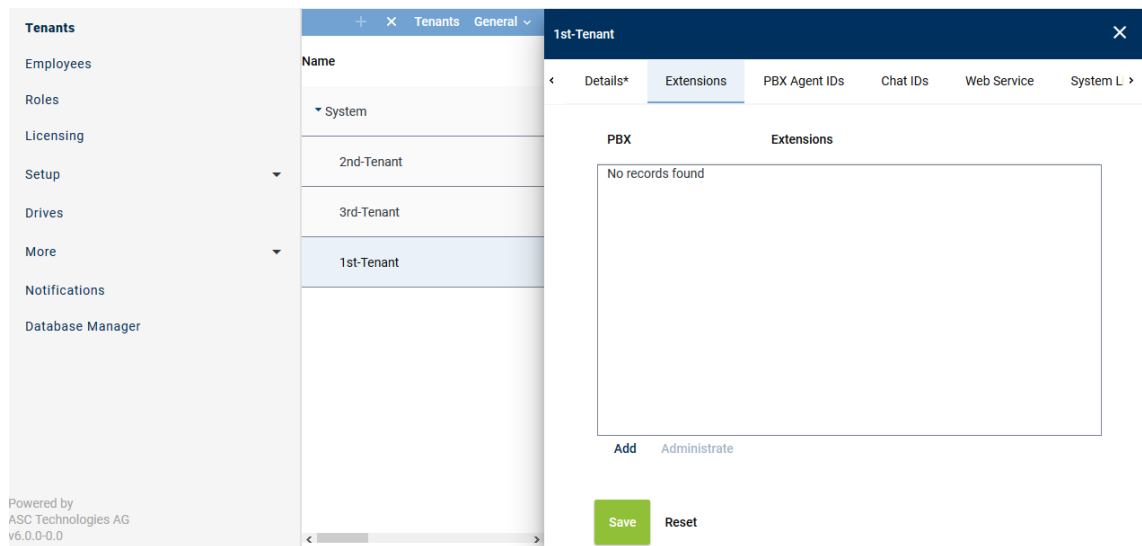


Fig. 38: Tenants - main view - tab Extensions

### 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:

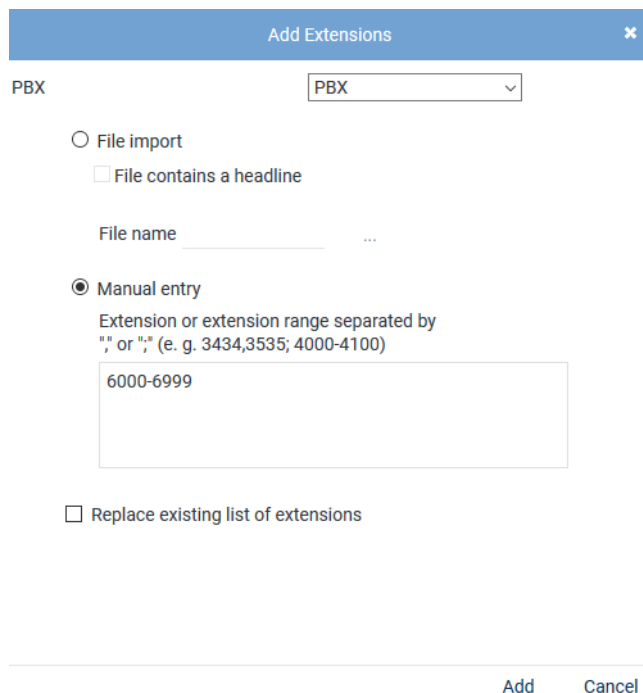




Fig. 39: Assign extensions to tenants

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 <a href="#">CSV</a> 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 <b>CSV</b> file may not contain more than 1 column. If commas or other column delimiters are found in the <b>CSV</b> 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 <b>CSV</b> 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"> <li>• Click on the button  behind the field <i>File name</i>.</li> <li>• Click on the button <i>Choose File</i>.</li> <li>• Select the respective ZIP file via the Explorer and click on the button <i>Open</i>.</li> <li>• Click on the button  <i>Upload File</i>.</li> </ul>
<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><b>NOTICE! Wildcards cannot be used!</b></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.

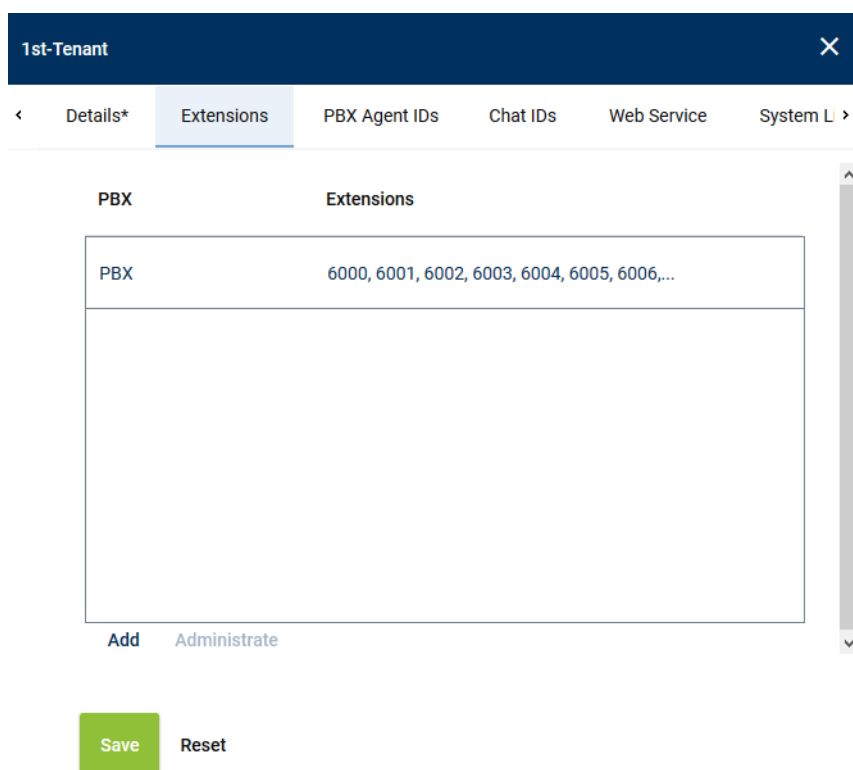


Fig. 40: Remove extensions

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.

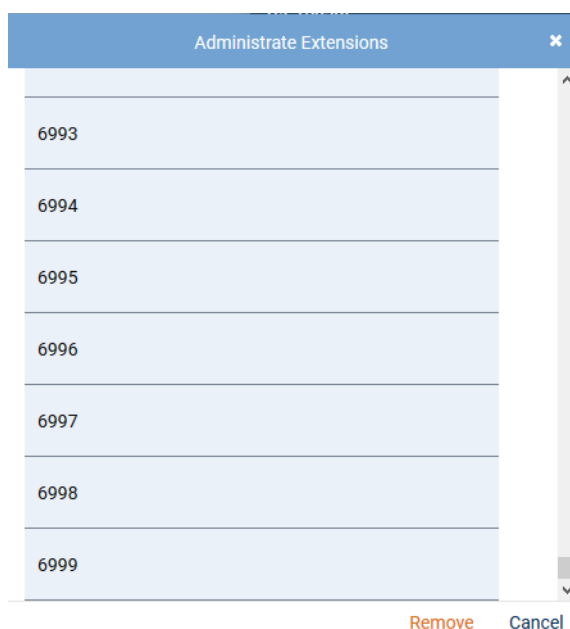


Fig. 41: Select extensions

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.

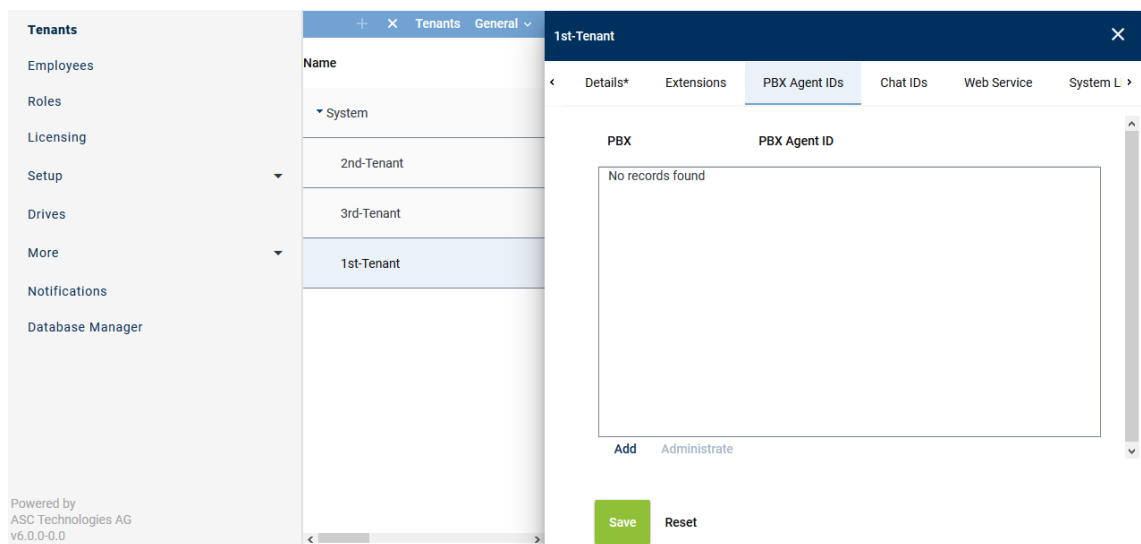


Fig. 42: Tenants - main view - tab PBX Agent ID

### 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. 43: 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 <a href="#">CSV</a> 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 <a href="#">CSV</a> file may not contain more than 1 column. If commas or other column delimiters are found in the <a href="#">CSV</a> 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 <a href="#">CVS</a> 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"> <li>Click on the button <span style="border: 1px solid #ccc; padding: 0 5px;">...</span> behind the field <i>File name</i>.</li> <li>Click on the button <i>Choose File</i>.</li> <li>Select the respective ZIP file via the Explorer and click on the button <i>Open</i>.</li> <li>Click on the button <span style="background-color: #007bff; color: white; padding: 0 5px;">↗</span> <i>Upload File</i>.</li> </ul>
<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><b>NOTICE! Wildcards cannot be used!</b></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.

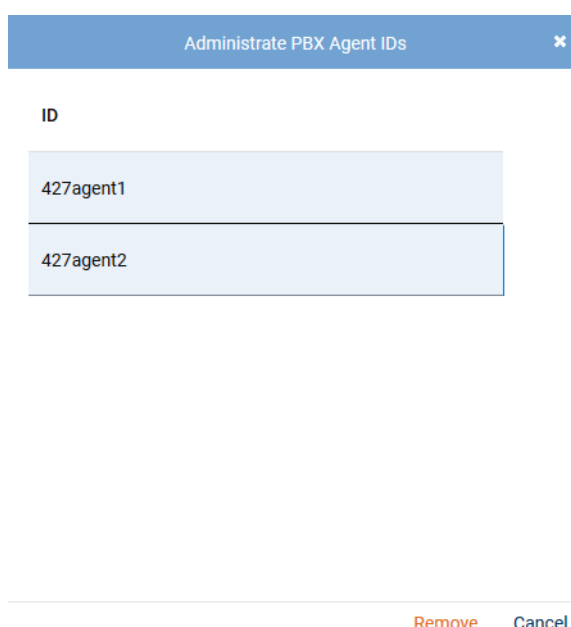


Fig. 44: Select PBX Agent IDs

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*.

### Assign chat IDs to tenants

For chat recording, chat identifiers are used for the assignment. The assignment to the respective tenant can be done in the Tenants module.



In 1-tenant systems, the chat IDs are automatically assigned to the tenant who has been created by the system (1st tenant). Chat 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 chat 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 chat IDs is not possible until a chat system has been created in the PBX module since the assignment is PBX-related.

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

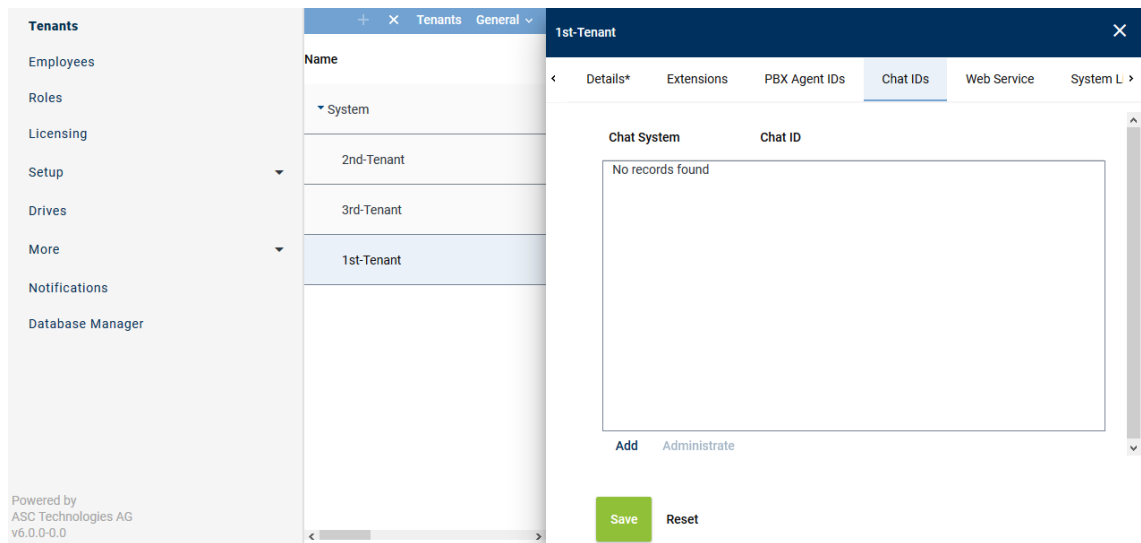


Fig. 45: Tenants - main view - tab Chat Identifier

### Add chat ID

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

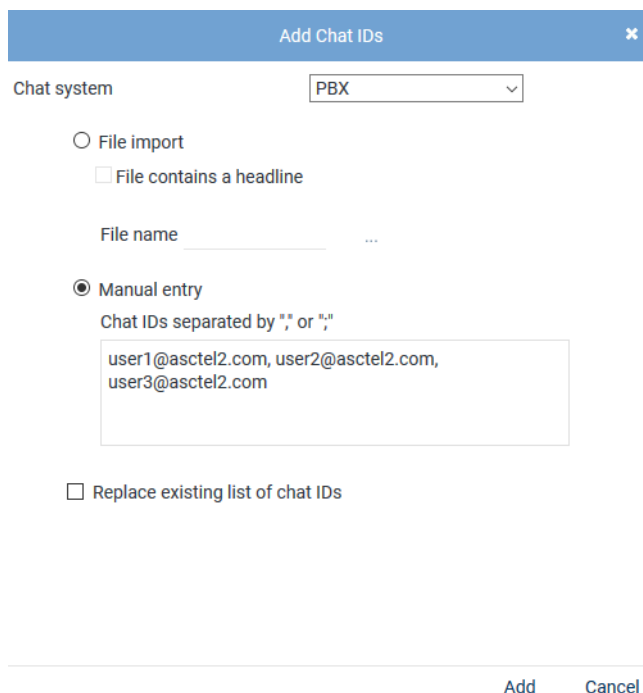




Fig. 46: Assign chat IDs to tenants

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

<b>File import</b>	Select this option to import the chat IDs from an existing <a href="#">CSV</a> file and add them to the table of chat IDs.
<b>File contains a headline</b>	

	<p>Activate this option so that this structured is recognized correctly when importing the file.</p> <p>The <b>CSV</b> file may not contain more than 1 column. If commas or other column delimiters are found in the <b>CSV</b> 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 <b>CSV</b> 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"> <li>Click on the button  behind the field <i>File name</i>.</li> <li>Click on the button <i>Choose File</i>.</li> <li>Select the respective ZIP file via the Explorer and click on the button <i>Open</i>.</li> <li>Click on the button  (<i>Upload file</i>).</li> </ul>
<i>Manual entry</i>	<p>Select this option to enter chat IDs manually.</p> <p>You can separate the individual chat IDs by means of the delimiters displayed in the screenshot. The chat address must be identical to the entries in the agent data in the Employees module and must contain the name of the corresponding domain. The configuration must be identical to the entries in the Skype for Business Monitor.</p> <p><b>NOTICE! Wildcards cannot be used!</b></p>
<i>Replace existing list of chat IDs</i>	<p>Activate the check box to overwrite existing chat IDs.</p>

- Click on the button *Add*.  
⇒ The chat IDs are added to the table of chat IDs.
- 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 chat IDs now appear in the detail view.
- Click on the button *Save* in the detail view to save the entries.

### **Remove chat ID**

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



Administrate Chat IDs
×

ID

---

user1@asctel2.com

---

user2@asctel2.com

---

user3@asctel2.com

---

Remove   Cancel

Fig. 47: Select chat IDs

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

#### 7.1.2.1.5 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:

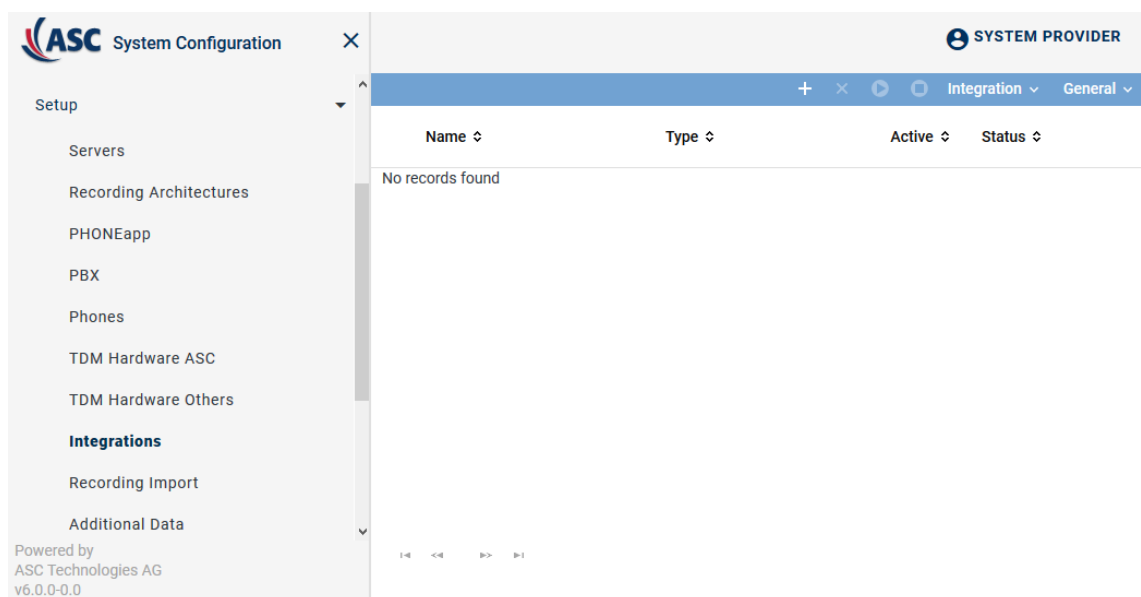




Fig. 48: Integrations - main view

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





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

### Toolbar of the Integrations module


The toolbar offers the following functions.



Fig. 49: Toolbar Integrations module

	<i>Create</i>	Opens the detail view so that you can create a new integration.
	<i>Delete</i>	Deletes the selected integration. The integration can only be deleted if it has been deactivated.
	<i>Activate</i>	Activates the selected integration. The integration can only be activated if it has been configured completely.
	<i>Deactivate</i>	Deactivates the selected integration. This stops running recordings.
<i>Integration</i>	<i>Import Grammar</i>	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.
<i>General</i>	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.

### 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.

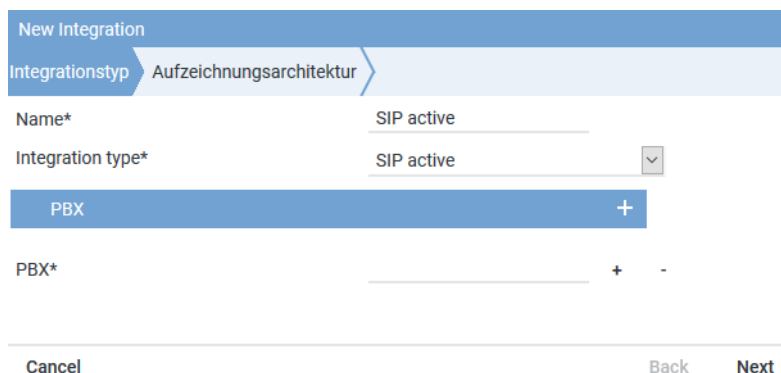


Fig. 50: Create integration type

- 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. 10: Create integration type

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

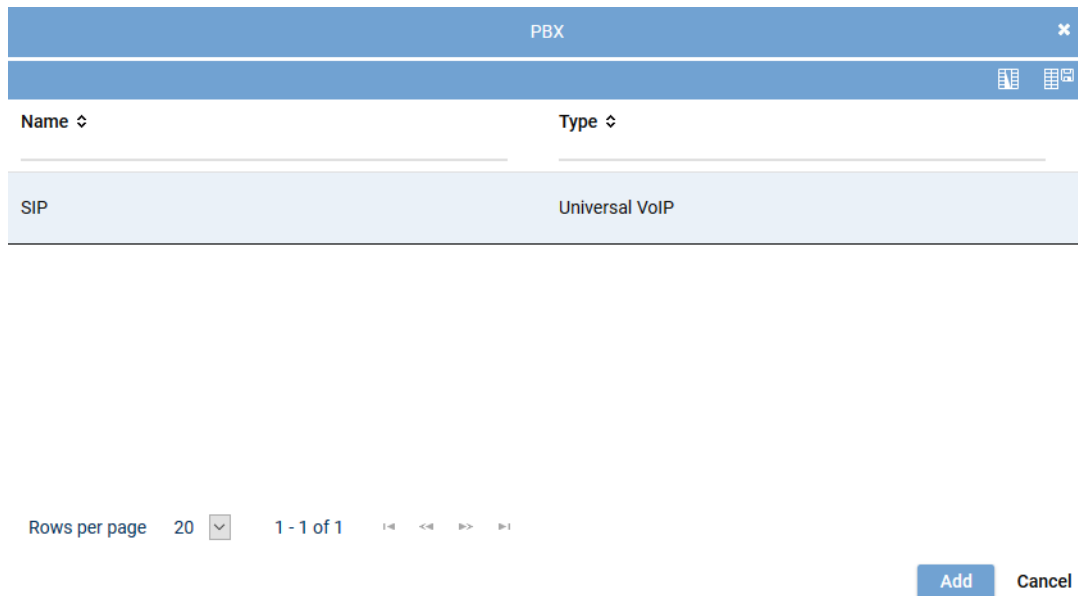


Fig. 51: Select PBX

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

### Assign recording architecture for All-in-one Basic

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



Fig. 52: Assign recording architecture - All-in-one Basic


- 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:








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

Fig. 53: 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.

Step: Configure Recording Architecture
✕

Details \*

Recording architecture\*
All-in-one Basic


▼

Save
Cancel

Fig. 54: 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 Basic

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.

Step: Global Recording Settings ✕

Details \*

SIP Header Tagging\*

Transport protocol

UDP

▼

Port SIP signaling\*

5060

Activate SIP authentication

☒

User name for the SIP registration

123456

Password for the SIP registration

••••••

Activate PBX connection

☒

SIP registration expiration\*

3600

PBX IP address\*

192.168.170.178

PBX port\*

5060

Activate SMS recording

☒

Save

Cancel

Fig. 55: Configuration step - Global Recording Settings

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: <a href="#">TCP</a> = unencrypted <a href="#">UDP</a> = unencrypted <a href="#">TLS</a> = encrypted
<i>Port SIP signaling</i>	Enter the port for the <a href="#">SIP</a> signaling, where the recording server is expecting the signaling. Default value for <a href="#">UDP</a> and <a href="#">TCP</a> is 5060. Default value with <a href="#">TLS</a> encryption is 5061. <b>NOTICE!</b> If you would like to use several integrations, you have to configure a separate <a href="#">SIP</a> port for each integration. <b>NOTICE!</b> If you would like to use a media streamer for replay, configure another <a href="#">SIP</a> port for it, too. In case of communication issues with the media streamer, this could otherwise affect the recording.
<i>Activate SIP authentication</i>	Activate this option if you would like to use <a href="#">SIP Digest Authentication</a> .
<i>User name of the SIP registration</i>	Enter the user name for the <a href="#">SIP</a> registration, e. g. 123456.
<i>Password of the SIP registration</i>	Enter the password, if an authentication for the <a href="#">SIP</a> registration is used.
<i>Activate PBX connection</i>	Activate this check box if the recording server is supposed to register itself on the PBX.
<i>SIP registration expiration</i>	Enter the time in seconds after which the <a href="#">SIP</a> registration runs out, e. g. 3600.
<i>PBX IP address</i>	Enter the IP address of the PBX.
<i>PBX port</i>	Enter the port on which the SIP signaling is sent to the <a href="#">PBX</a> . The default value is 5060.

Parameter	Value/Description
<i>Activate SMS recording</i>	Activate the check box if you would like to use <a href="#">SMS</a> recording.

Tab. 11: Global recording settings

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

### Tab SIP Header Tagging

- If you would like to configure the SIP header tagging, click on the tab *SIP Header Tagging*.

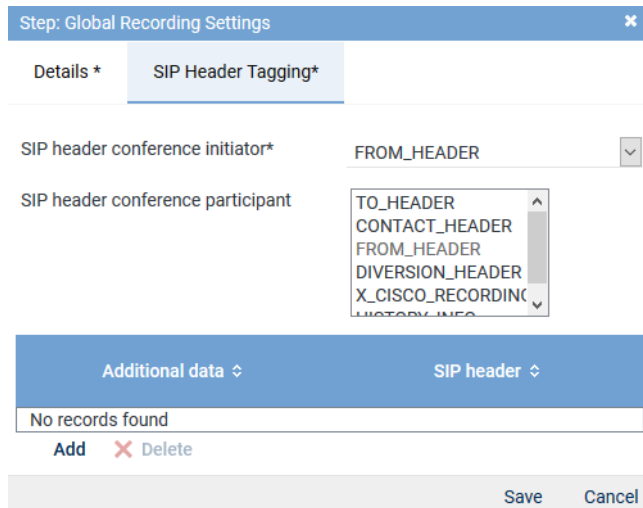


Fig. 56: Tab SIP Header Tagging Configure sources

- Enter the following parameters:

Parameter	Value/Description
<i>SIP header conference initiator</i>	Select the SIP header which contains the extension of the conference initiator.
<i>SIP header conference participant</i>	Select the SIP header which contains the extension of the additional conference participants.

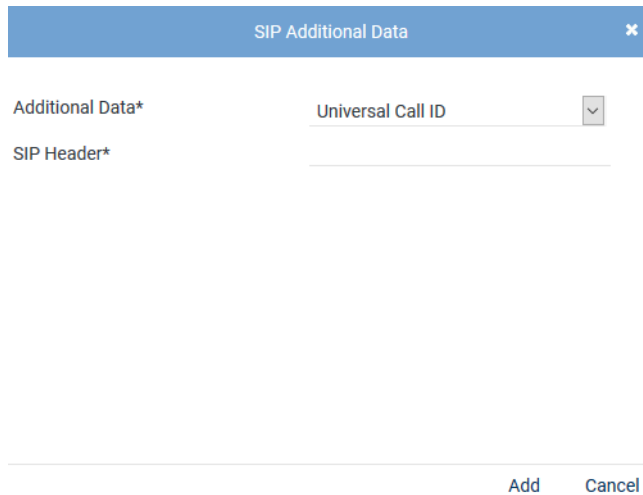
Tab. 12: Configure SIP header tagging



It is possible to select several entries; the information is then displayed one after the other in the respective replay application.

To select several entries, highlight the respective entries while holding the [Ctrl] key down.  
To deselect an entry, click on it again without releasing the [Ctrl] key.

- 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.



The window is titled "SIP Additional Data" with a close button (X). It contains two input fields: "Additional Data\*" with a dropdown menu currently showing "Universal Call ID", and "SIP Header\*" with an empty text field. At the bottom right, there are "Add" and "Cancel" buttons.

Fig. 57: 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*.


4. Enter the following parameters:

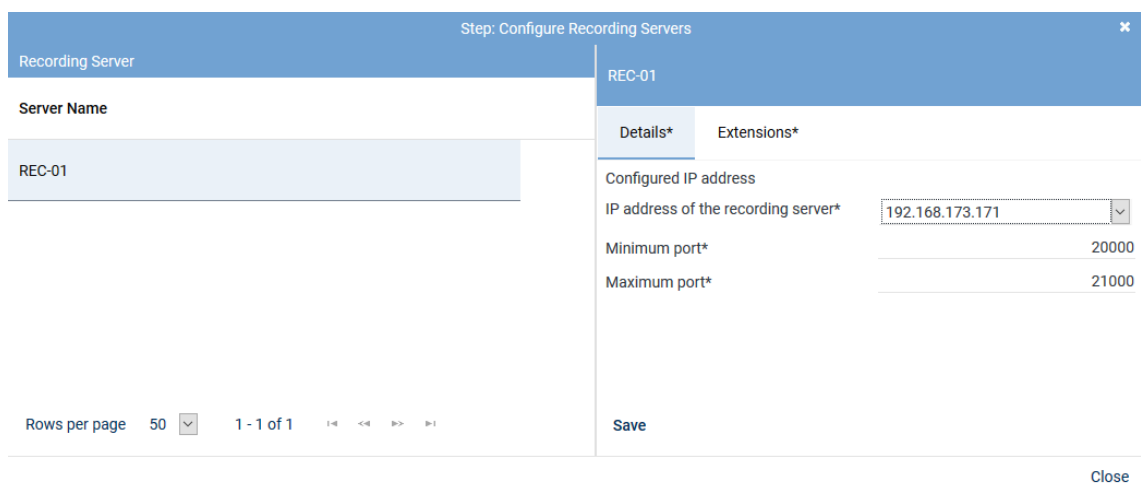
Parameter	Value/Description
<i>Additional Data</i>	In the drop-down list, select the display name of the field in which the information of the SIP header is supposed to be released.
<i>SIP Header</i>	Enter the source from the SIP header from where the information is to be extracted. Observe the correct spelling.

Tab. 13: Configure SIP conversation parameters

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

### Configure recording server for All-in-one Basic

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.



The window is titled "Step: Configure Recording Servers" with a close button (X). It has a tabbed interface with "Details\*" and "Extensions\*" tabs. On the left, there is a list of recording servers with "REC-01" selected. The main area shows configuration for "REC-01": "Configured IP address" is "192.168.173.171", "Minimum port\*" is "20000", and "Maximum port\*" is "21000". At the bottom left, there is a "Rows per page" dropdown set to "50" and "1 - 1 of 1". At the bottom right, there is a "Save" button. A "Close" button is located at the bottom right of the window.

Fig. 58: Configuration step - Configure recording servers

2. Set 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>	Select from the drop-down list one of the available IP addresses of the recording server for the data to be recorded.
<i>Minimum port</i>	Enter the lowest port of the port range configured on the PBX that is used to receive the <b>RTP</b> 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 <b>RTP</b> data from the recording server, e. g. <i>21000</i> .

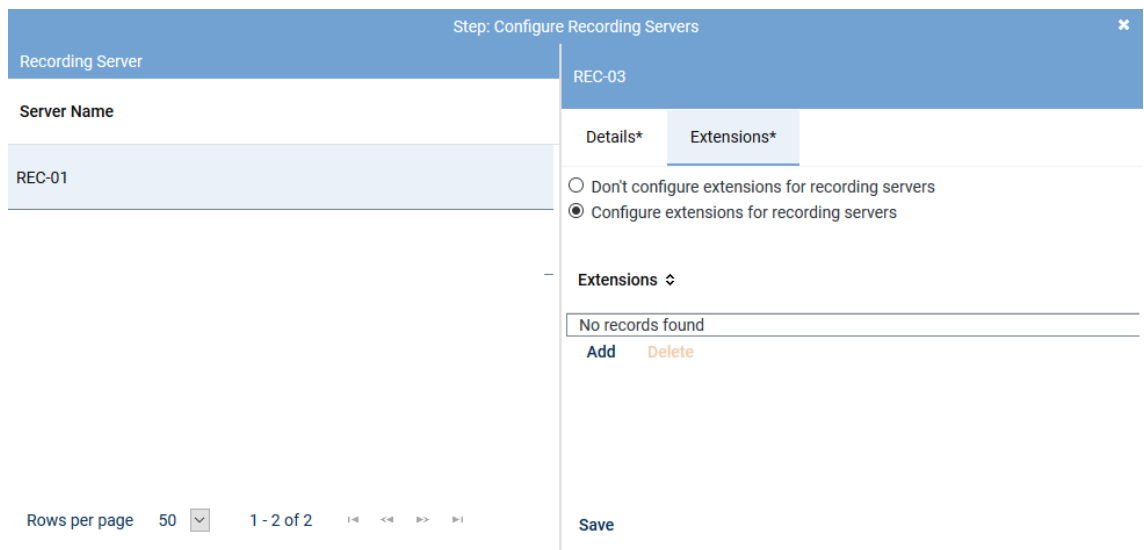
Tab. 14: Configure recording servers



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*.



Close

Fig. 59: 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. 60: 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
<div style="background-color: #d9e1f2; padding: 5px;">Server Name</div> <div style="background-color: #d9e1f2; padding: 5px;">REC-01</div>	<div style="background-color: #d9e1f2; padding: 5px;">Details*</div> <div style="background-color: #d9e1f2; padding: 5px;">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;"> <a href="#">Add</a> <a href="#">Delete</a> </p> <p style="text-align: center;">Save</p>

Rows per page 50 ▼

1 - 2 of 2
 |<
<<
>>
|>

[Close](#)

Fig. 61: Added extensions

7. Click on the button *Save*.
8. 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.



Add-ons are not supported in this recording solution.

### Configure miscellaneous settings

- Click on the button  (*Edit configuration step*) in the line *Configure recording servers* in the main view.

⇒ The window *Step: Miscellaneous Settings* appears.

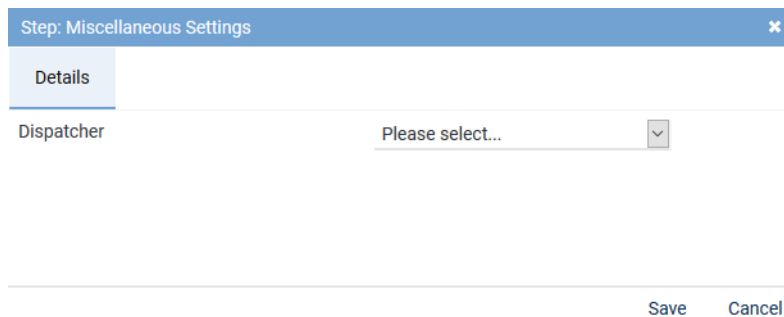


Fig. 62: Configure miscellaneous settings

- 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*.

+ × ⏮ ⏭ Integration ▾ General ▾			
Name ▾	Type ▾	Active ▾	Status ▾
☑ SIP active	SIP active	✗	✓
Step		Configuration	
Configure recording architecture		✓	✎
Global recording settings		✓	✎
Configure recording servers		✓	✎
Configure add-on		✓	✎
Configure miscellaneous settings		✓	✎

Fig. 63: 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 ▾
☑ SIP active	SIP active	✓	✓

Fig. 64: 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
SIP active	SIP active	X	✓

Fig. 65: Deactivate integration

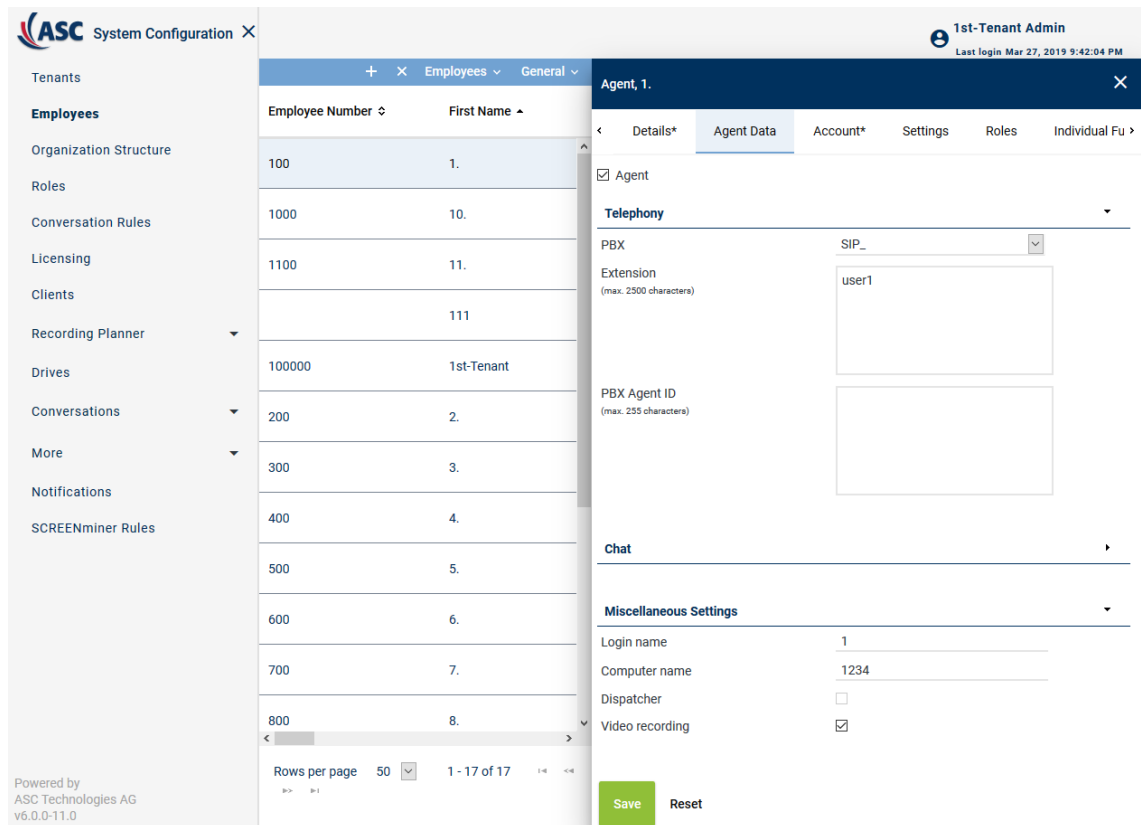
- Click on the icon  (*Delete*) and confirm the security prompt to delete the integration.

#### 7.1.2.1.6 Additional configuration steps for video recording

##### Configure employees

To be able to record the video conversations of agents, you have to configure the respective employees as agents in the Employees module and configure their *extension* or their *PBX Agent ID* in the agent data in the group field *Telephony* as well as activate the option *Video recording* in the group field *Miscellaneous Settings*.

- Log in to the application System Configuration as *1st-tenant-admin*.



The screenshot shows the ASC System Configuration interface. On the left is a sidebar with navigation options: Tenants, Employees, Organization Structure, Roles, Conversation Rules, Licensing, Clients, Recording Planner, Drives, Conversations, More, Notifications, and SCREENminer Rules. The main area displays a table of employees with columns for Employee Number and First Name. The table lists 17 employees, with the first one having Employee Number 100 and First Name 1. Below the table, there are pagination controls showing 'Rows per page 50' and '1 - 17 of 17'. On the right, a configuration panel for 'Agent, 1.' is open, showing tabs for Details\*, Agent Data, Account\*, Settings, Roles, and Individual Fu. The Agent Data tab is active, showing fields for PBX, Extension (max. 2500 characters), PBX Agent ID (max. 255 characters), Chat, and Miscellaneous Settings. The Miscellaneous Settings section includes fields for Login name (1), Computer name (1234), Dispatcher (checkbox), and Video recording (checkbox, checked). There are Save and Reset buttons at the bottom.

Fig. 66: Main view Employees

- Click on the tab *Agent Data*.

##### Group field Telephony

- Enter the following parameters:

<b>PBX</b>	Enter the name of the PBX in which the extensions has been configured.
<b>Extension</b>	Enter the extension if an extension has been configured in the PBX.
<b>PBX Agent ID</b>	Enter the PBX Agent ID if it has been configured in the PBX for this purpose.

### Group field Miscellaneous Settings

1. Enter the agent's data.

<b>User name</b>	Enter the user name that has been configured for this agent.
<b>Computer name</b>	Enter the computer name that has been configured for this agent.
<b>Video recording</b>	Activate the check box so that the video conversations can be recorded.

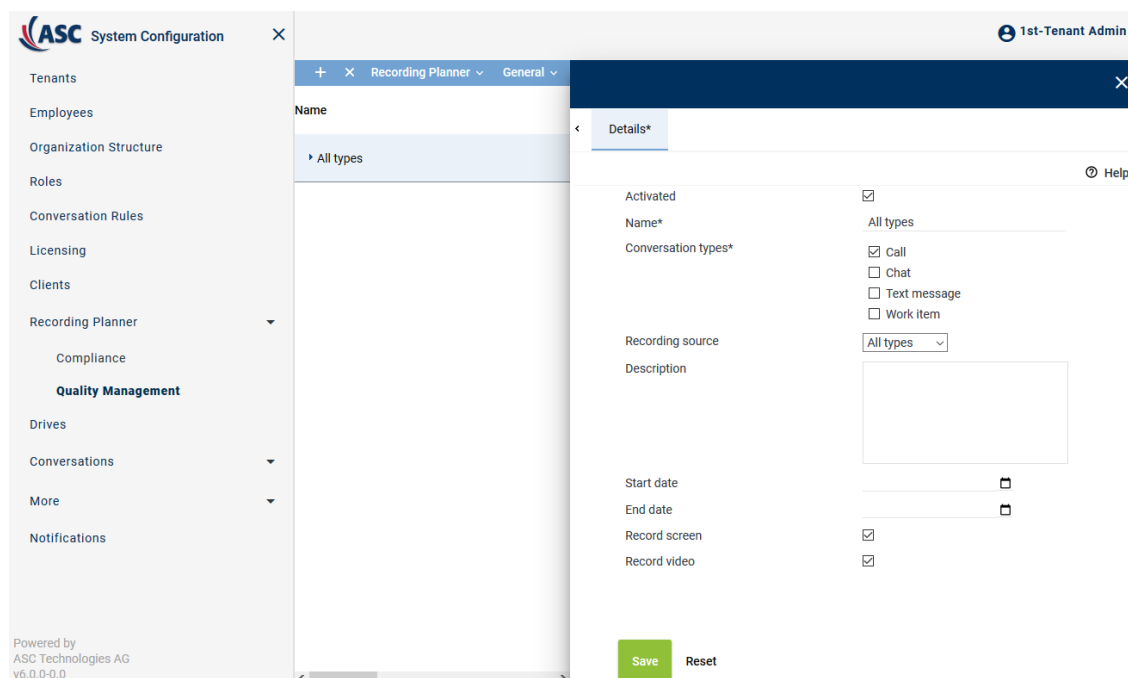


For information about the configuration refer to the administration manual for tenants *User management tenant*.

### Configure Recording Planner

To be able to record the video conversations, you have to configure the Recording Planner module.

1. Log in to the application System Configuration as *1st-tenant-admin*.



The screenshot shows the 'ASC System Configuration' window with the 'Recording Planner' module selected. The 'General' tab is active, displaying the 'Details\*' section. The configuration includes:

- Activated:** ☒
- Name\*:** All types
- Conversation types\*:**
  - ☒ Call
  - ☐ Chat
  - ☐ Text message
  - ☐ Work item
- Recording source:** All types
- Description:** (Empty text area)
- Start date:** (Calendar icon)
- End date:** (Calendar icon)
- Record screen:** ☒
- Record video:** ☒

Buttons for 'Save' and 'Reset' are at the bottom right. The left sidebar shows the navigation menu with 'Recording Planner' expanded.

Fig. 67: Main view Recording Planner

2. Activate the following options for video recording:

<b>Conversation types</b>	Activate the following option so that video conversations can be recorded.
	<input checked="" type="checkbox"/> <i>Call</i>
<b>Record screen</b>	Activate the option so that video conversations can be recorded. This option is activated automatically upon activating the conversation type <i>Call</i> .
<b>Record video</b>	Activate the option so that video conversations can be recorded. This option is activated automatically upon activating the conversation type <i>Call</i> .



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

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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.

### Digest Authentication

In Digest Access Authentication (also RFC 2617) the server sends a random string of characters (nonce) created specifically for this purpose along with the WWW-Authenticate-Header. The browser calculates the hashcode (usually MD5) of a combination of user name, password, contained string of characters, HTTP method, and requested URI. It sends it back to the server in the authentication header along with the user name and the random string of characters. The server then calculates the hash total for comparison purposes. This method resembles Message Authentication Code. Provided that the used hash function is safe in terms of the cryptographic construction, attackers do not profit from sniffing the communication since the hash function prevents a reconstruction of the access data and because the access data are different for the next request due to using a nonce. (Especially the widespread hash function MD5 is not considered safe anymore.) The remaining data transmission is not protected, though. To achieve this Hypertext Transfer Protocol Secure (HTTPS) can be used. Translation of the German-language source: Wikipedia (20/02/2017)

### 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)

### PBX

Private Branch Exchange

### RDMA

Internet Small Computer System Interface (iSCSI) Extensions for the Remote Direct Memory Access

---

**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

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**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

---

**SMS**

Short Message Service, text message (GSM, landline)

---

**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)

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**VAD**

Voice Activity Detection or silence suppression

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**VM**

Virtual machine

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**VoIP**

Voice over IP