

System Configuration

Configuration drives



Administration manual

for system providers

5/24/2022

Product line Neo, version 7.x

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

EVOIP^{neo}

EVOLUTION^{neo} / XXL / eco

INSPIRATION^{neo}

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 <https://www.asctechnologies.com>.

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1 General information

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2 Introduction

This manual describes how to configure drives in the ASC recording system.

The drives are configured in the Drives module of the application System Configuration.

Upon starting the application System Configuration, all drives which have been connected directly to a server or a recorder are automatically recognized and displayed in the main view of the Drives module. Network drives have to be configured in the system by the administrator by means of the function *Create*. To add a new drive, click on the button  (*Create*); to configure an existing drive, select the drive in the main view and adjust the necessary settings in the detail view, see [chapter "Configure drives", p. 55](#).

Open the Drives module by clicking on the menu item *Drives* in the navigation bar of 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*.



Only the system provider can install new drives.

3 Drive categories

During their configuration, drives must be assigned to a category. This category defines what purpose the drive is to serve.

There are the following different categories:

1. System storage

Drives that are used as system storage are created and configured during the installation. System storages are used exclusively for the recording of conversations. A system storage can neither be used for archiving nor for export or as storage expansion.

There is exactly 1 system storage per server. All other drives can only be configured as storage expansion or data drive.

You can save recordings in the system storage in compressed form.

2. Storage expansion

Storage expansions serve to expand the system storage.

For every server, one active storage expansions can be configured. To share a storage expansion to be used, you must first assign at least 1 tenant to the storage expansion.

The recordings of all tenants assigned to a storage expansion are copied to this storage expansion. That way, the availability of the recordings continues to be given for this tenant even if recordings are deleted from the system storage for capacity reasons. The recordings of tenants not assigned to a storage expansion are saved exclusively in the system storage.

You can assign any number of tenants to a storage expansion.

A storage expansion can neither be used for archiving nor for import or export.

3. Data drive

A data drive is not used for the recording of conversations. Data drives can be used exclusively for archiving, import, and export.

You can configure any number of data drives.

4. Database drive

Exclusively the database has been installed on the database drive. You cannot install any other software components on this drive. The database drive is configured during the installation of the Neo software if you are not using an external database. A maximum of 1 database drive can be configured per server.

5. Application drive

The Neo software has been installed in the application drive. The drive where Windows has been installed is considered an application drive, too. Application drives can be used as source drive for the import or for the export of conversations.

6. Recording Insights Transfer

The drive that is used for export and import of data from Azure Blob Storage where the recordings from Recording Insights are saved.

7. Cisco Webex drive

This virtual drive is used to save and transfer recordings from Cisco Webex. **NOTICE!** For this drive, the license Drive for Webex must have been installed in the system.



In virtual environments, you can exclusively use network drives for archiving, import, and export of data. Internal or **USB** drives are not supported as performance issues may occur when trying to access a drive that is no longer available.

4 Supported device types



Partitions of a drive are considered as a logical drive and can be used like one.

Network storage drives

- **NAS**

This drive can be used as data drive or as storage expansion.

Supported protocol [SMB/CIFS](#)

The user supposed to connect to the network drive is required full access to the network drive. It includes rights to read, write, delete, and change files and folders within the share.

For [NAS](#) as storage expansion, WORM mode is supported.

- **Cloud Storage Amazon S3 Storage**

This drive can be used as data drive or as storage expansion.

- **Cloud storage Microsoft Azure Blob Storage**

This drive can be used as data drive or as storage expansion or for the transfer from and to Recording Insights.

- **Cloud Storage Google Cloud Storage**

This drive can be used as data drive or as storage expansion.

- **EMC Centera Server** (only for updates and migrations from V10)

This drive can be used as storage expansion only.

Supported versions: CentraStar 3, CentraStar 4

Deployed interface: Centera SDK 3.2.661

NOTICE! The user supposed to connect to the Centera server is required the rights to read (r), write (w), and delete (d) as well as to check whether files exist (e) on the Centera server.

NOTICE! All data written on the Centera server obtains a *retention period* of 0. Therefore, no *minimum retention* must have been selected on the Centera server.

- **iCAS Storage**

This drive can be used as storage expansion only.

NOTICE! iCAS Storage may only be configured as Windows share.

Drives for special applications

- **Google Stackdriver**

This virtual drive is required to establish a connection between Neo and the Stackdriver service. Stackdriver is a Google service to manage cloud computing systems and serves to diagnose issues with your Migrate for Compute Engine environment. It collects performance and diagnosis data (by means of monitoring, logging, tracking, error reports, and warning notifications) for public cloud users and saves them as log data and events to analyze them in real time and send reports. Stackdriver is a multi-cloud solution supporting the Google Cloud as well as [AWS](#) cloud environments.

- **Collaboration**

This virtual drive is required for the Cisco Webex Integration to transfer recordings from Cisco Webex.

NOTICE! For this drive, the license Drive for Webex must have been installed in the system.

NOTICE! For more information refer to the administration manual for tenants *Cisco Webex Integration*.

- **FTP drive**

This virtual drive is required to export audio recording files to Bloomberg Vault and notification data from Bloomberg Vault.

Bloomberg Vault is an integrated compliance and surveillance solution designed to help financial services providers meet their regulatory compliance obligations and business standards. Bloomberg Vault enables companies to capture, control, export, reconstruct, and analyze their digital communication, trade, and audio data.

Physical removable drives

- **DVD-ROM**

- **DVD-RAM IV (Fa. Teac)**

(drive with ASC-specific firmware, 2.0G USB)

Supported media capacities: 4.7 GB

- **DVD-RAM V (Fa. Samsung)**

Supported media capacities: 4.7 GB

- **DVD-RAM VI (Fa. ASUS)**

Supported media capacities: 4.7 GB

- **RDX**

- **RDX (RDX QuikStor, Fa. Tandberg Data GmbH)**

Supported media capacities: 160 GB, 320 GB, 500 GB

Always eject media by using the function in the Drives module in the application System Configuration.



Once an Neo software has been installed on the system, ejecting the medium via the Windows Explorer is not recognized properly. When ejecting the medium via the Windows Explorer, an update will not be completed and new media cannot be read in as a consequence.

This restriction applies to external drives as well.

Supported drives



For the drives mentioned below, all external models are supported, too.

- **USB devices**

- [USB](#) hard disks
- [USB](#) flash disks

4.1

Supported file systems

For different drive types, different file systems can be used. Exceptions are storage expansions and [NAS](#) drives. The following table shows possible combinations:

Drive	File system			
	ASCFS	NTFS	FAT32	exFAT
Internal drives	-	X	X	-
External drives	-	X	X	X
RDX	-	X	-	X
DVD RAM	X	-	-	-



ASCFS is a proprietary file system of ASC for DVD-RAM media. In Microsoft Windows Explorer, media in **ASCFS** format are displayed as empty. You can check the contained data and the available storage capacity on the medium via the application System Configuration.



If you use FAT32, the medium must not exceed a size of 32 GB. Otherwise, it cannot be formatted.

For larger media use NTFS or exFAT.

5 Licenses

ASC

License name	Number
Drive for Webex	1 license per system for drives of the type Collaboration
Storage Expansion Manager	1 license per system for drives of the type Storage Expansion
Storage Expansion for EMC Centera	1 license per system for drives of the type Storage Expansion for EMC Centera
Amazon S3 Storage	1 license for cloud storage Amazon S3 Storage (included in the delivery)
Azure Storage	1 license for cloud storage Microsoft Azure Blob Storage (included in the delivery)

Tab. 1: Licenses

6













Export options and deletion after TTL has expired

Depending on the type of drive, different options are available to export or delete data once the retention period (TTL) has expired.

Drive type Feature	Neo call pool	Neo archive	Neo storage expansion	Imported V10 archive (legacy archive migration)	Imported V10 online storage (legacy storage migration)	Imported V10 recordings (legacy integration)
WAVE Export	Yes	Yes (since 6.3)	Yes (since 6.3)	No	No	Yes
Neo-to-Neo export	Yes (if imported to call pool -> No)	Yes (since 6.3)	Yes (since 6.3, but not for replay-only storage expansions)	No	No	Yes
Export to RI	Yes	Yes	Yes	No	No	No
TTL deletion	Yes	Yes since 6.4 for NAS and RDX archives	Yes	Yes from 6.4 for NAS archives	Yes since 6.4	Yes

Fig. 1: Export options and deletion after TTL has expired










Click on the menu item *Drives* in the navigation bar of the application System Configuration to open the table of the main view. The main view displays all connected drives.







Category	Device Type	Active	Connected	Name	Path	Free Disk Space	Serial
	NAS	✓	✓	NAS1	NAS 1		R
	NAS	—	✓	NAS 2	NAS 2		R
	DVD-ROM	✓	✗	DVD-ROM drive	G:\		R
	Internal hard disk	—	✓	Internal hard disk	E:\		C
	DVD-ROM	✓	✓	DVD-ROM drive	D:\		C
	Internal hard disk	—	✓	Internal hard disk	C:\		C
	DVD-ROM	✓	✓	DVD-ROM drive	D:\		C
	Internal hard disk	—	✓	Internal hard disk	C:\		C
	Internal hard disk	—	✓	Internal hard disk	E:\		C
	Internal hard disk	—	✓	Internal hard disk	E:\		R
	DVD-ROM	✓	✓	DVD-ROM drive	D:\		R
	Internal hard disk	—	✓	Internal hard disk	C:\		R

Rows per page 50 1 - 31 of 31

Fig. 2: Drives - main view

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

Category	Shows the category of the drive and for which functions it is thus available. <ol style="list-style-type: none">  = data drive  = storage expansion  = system storage  = database drive  = application drive For information about the drives categories, see chapter "Drive categories", p. 7 .
Device type	Shows the drive type.
Active	Shows for data drives whether the drive has been released to be used. Possible statuses for data drives ():  = Drive is active; configuration of the drive has been released.  = Drive is inactive; configuration of the drive has not been released. NOTICE! Data drives can only be used when they have both the status <i>Active</i> and the status <i>Connected</i> . All other drives have no activity status as these drives are always active and cannot be deactivated.  = no activity status

<i>Connected</i>	Shows the technical state of the drive. Only drives with both the statuses <i>Active</i> and <i>Connected</i> can be used.  = Drive has been connected.  = Drive has not been connected.
<i>Name</i>	Name of the drive. During the configuration, the name of the drive can be chosen freely.
<i>Path</i>	Path of the drive.
<i>Free Disk Space</i>	Shows how much free disk space remains on the drive.
<i>Server</i>	Name of the server that the drive has been connected to hardware- or software-wise. The server can be an EVOIP ^{neo} server or a recorder of the product line EVOLUTION ^{neo} .
<i>Usage</i>	Displays how the drive is used: <ul style="list-style-type: none">  = archiving  = export  = import  = storage expansion
<i>Tenant</i>	Name of the tenant whom the drive has been mapped to. Only this tenant has access to the drive.
<i>Creation Date</i>	Date on which the drive has been configured, i. e. recognized automatically by the system.
<i>Updated</i>	Date on which the settings for the drive were updated for the last time.

See also

 Drive categories [► 7]






7.1



Toolbar

The toolbar offers the following functions.



Fig. 3: Toolbar Drives

	<i>Refresh</i>	Refreshes the main view.
	<i>Search</i>	Opens the window of the search function. The search function allows searching systematically for sets of data which meet certain criteria, see chapter "Search", p. 15 . The icon  is displayed whenever the search has been adjusted by means of a filter.
	<i>Reset search</i>	Resets all manually entered search criteria.
	<i>Create</i>	Creates a new network drive in the recording system. Drives which are connected directly to a system component are recognized automatically as soon as they have been connected. These drives can be selected from the list in the main view and configured directly. See chapter "Configure drives", p. 55 .



Drives	 <i>Delete</i>	<p>Deletes the selected drive. The configuration of the drive is deleted. The drive is removed from the list in the main view.</p> <p>You can only delete drives with the status <i>Inactive</i>.</p>
	<i>Disconnect Network Drive</i>	<p>Disconnects the selected drive from the system and deletes the configuration of the drive. Upon refreshing the view () , the drive is deleted from the main view.</p> <p>This function is only available for drives which have been connected to the recording system via network connection and which have the job status <i>Deactivate</i>.</p>
	<i>Eject Medium</i>	<p>Ejects the medium of the selected drive.</p> <p>The function is available for DVD and RDX drives only.</p>
	<i>Detach Drive</i>	<p>Detaches the selected drive from the recording system. The configuration of the drive remains. The drive merely receives the status <i>Not connected</i>. It can be connected again at any moment and used immediately.</p> <p>The function is only available on external drives (with the exception of NAS drives) which have not been mapped to a tenant.</p>
	<i>Format</i>	<p>Formats the selected medium.</p> <p>Drives for which a write protection has been activated cannot be formatted. Exception: write protection on the file system, see chapter "Group field Write Protection", p. 36.</p> <p>The function is available for DVD and RDX drives only.</p>
General	<i>Print</i>	Prints the table of the main view.
	<i>Adjust Table</i>	<p>Opens a window where you can adjust the following settings for the main view:</p> <ul style="list-style-type: none"> • Displayed information • Order of the displayed columns. • Number of rows per page
	<i>General Help</i>	Opens the online help.
	<i>Module Help</i>	Opens the module-specific online help.



For detailed descriptions of the default functions such as *Search*, *Print*, *Adjust table* or *Help* refer to the user manual for system providers *General information - System Configuration*.

7.1.1 Search

The search function allows searching systematically for sets of data which meet certain criteria.

1. In the toolbar, click on the icon  or  (*Search*).
⇒ The window *Search Criteria* appears.

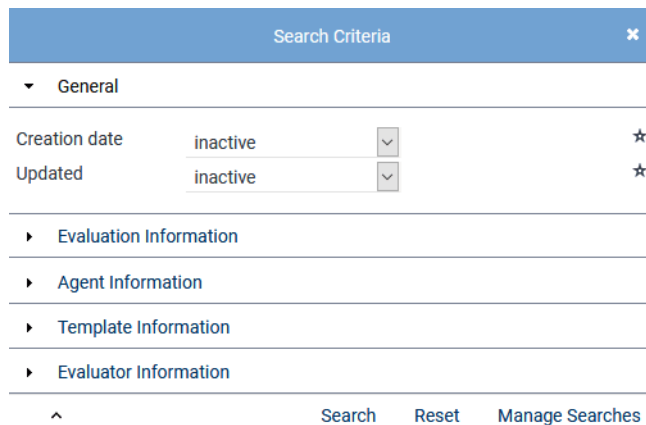





Fig. 4: Window Search Criteria (example)

2. Set the respective search criteria.
NOTICE! It depends on the respective module which search criteria are available.
3. To start the search, click on the button *Search*.
To reset all manually entered search criteria, click on the button *Reset*.
⇒ After running the search, only those sets of data are displayed in the main view which meet the set search criteria.
4. To display all original sets of data in the main view again, i. e. to reset the manually entered search criteria, click on the icon  (*Reset search*) in the toolbar.

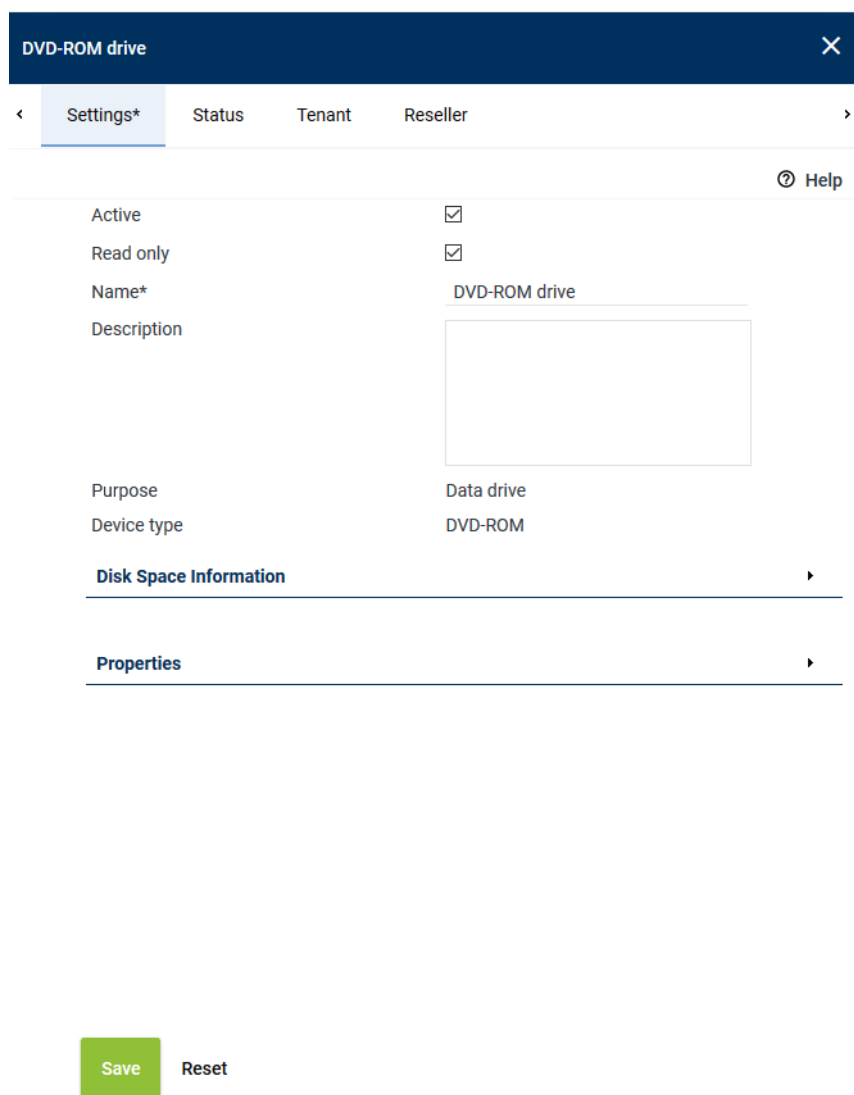
By clicking on the button *Manage Searches*, you can save the defined search criteria under an unambiguous name, load saved search criteria or delete them.

By clicking on the icon , you can tag the search criterion as favorite. Criteria tagged as favorite are displayed additionally in the upper area of the window *Search Criteria* and marked with the icon .



A detailed description of the search function can be found in the user manual *System Configuration - General information*.

Click on an element in the table of the main view to display additional information about as well as functions of the selected drive in the detail view.



DVD-ROM drive

Settings*

Status

Tenant

Reseller

Active

Read only

Name*

Description

Purpose

Device type

☒

☒

DVD-ROM drive

Data drive

DVD-ROM

Disk Space Information

Properties

Save

Reset

Fig. 5: Drives - detail view (example)

The detail view can consist of the following tabs:

- **Settings**

Here, you can display and edit general settings of the drive.

See [chapter "Tab Settings", p. 18](#).

- **Status**

Here, you can see different statuses of the drive. This tab is mostly relevant for removable drives.

See [chapter "Tab Status", p. 33](#).

- **Network**

Here, you can display and edit information about the network connection of the drive.

See [chapter "Tab Network", p. 37](#).

- **Archiving**

Here, you can display and edit the settings of the individual volumes for archiving.

See [chapter "Tab Archiving", p. 47.](#)

- *Write Protection*

Here, you can display and edit the settings of the write protection for the drive.

See [chapter "Tab Write Protection", p. 48.](#)

- *Tenant*

Here, you can display and select for which tenant the drive is supposed to be available.

See [chapter "Tab Tenant", p. 49.](#)

- *Post-Compression*

Here, you can display and edit the settings for the post-compression of the recordings.

See [chapter "Tab Post-Compression", p. 52.](#)

- *Reseller*

Here, you can map resellers to the drive.

See [chapter "Tab Reseller", p. 51.](#)



It depends on the type and the purpose of usage of the selected drive which tabs and configuration possibilities are available.

8.1

Tab Settings

It depends on the selected drive type and on the selected usage which settings are displayed here and can be edited.

8.1.1

Tab Settings System storage



Fig. 6: Tab Settings System storage

<i>Name</i>	Name of the drive
<i>Description</i>	Here, you can enter a description of the drive.
<i>Purpose</i>	Shows the purpose the drive is to serve. In this case, the purpose of the drive has been preset and cannot be changed. For information about drives categories, see chapter "Drive categories", p. 7.
<i>Device type</i>	Shows the drive type.

See also

 [Drive categories \[► 7\]](#)

8.1.1.1 Group field Disk Space Information for system storage

Disk Space Information	
Used space	0.06 GB
Free space	19.94 GB
Capacity	20.0 GB
<input type="radio"/> Stop saving recordings when error level is reached <input checked="" type="radio"/> Delete oldest recordings, if disk space is running out	
Capacity level	10.0GB
Warning level	7.5GB
Error level	5.0GB

Fig. 7: Group field Disk Space Information system storage Centera

<i>Used space</i>	Shows how much disk space is already occupied on the drive.
<i>Free space</i>	Shows how much free disk space remains on the drive.
<i>Capacity</i>	Shows how much disk space is available on the drive in total.
<i>Stop recordings when error level is reached</i>	<p>Select what is supposed to happen if the disk space is lower than the value entered in the field <i>Error level</i>.</p> <ul style="list-style-type: none"> Activate this option if no new recordings are supposed to be saved once the value entered in the field <i>Error level</i> has been reached. <p>As soon as the defined warning level or error level has been reached, the system issues a corresponding warning.</p>
<i>Delete oldest recordings, if disk space is running out</i>	<p>Select what is supposed to happen if the disk space is lower than the value entered in the field <i>Capacity level</i>.</p> <ul style="list-style-type: none"> Activate this option if old recordings are supposed to be deleted once the value entered in the field <i>Capacity level</i> has been reached. The oldest secured recordings are deleted so that there is memory space for new recordings again. Old recordings which have already been saved on another server via data transfer or transmitted to the storage expansion are deleted.
<i>Capacity level</i>	<p>Select the level of the remaining memory space of the medium which has to be reached before the oldest secured recordings are supposed to be deleted if the respective option has been activated in the radio button for the write protection.</p> <p>NOTICE! It is advisable to select a value of 15 % of the drive capacity as capacity level.</p>
<i>Warning level</i>	<p>Select the level of the remaining memory space of the medium at which a warning is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 10 % of the drive capacity as warning level.</p> <p>In the Notifications module, you can select who is supposed to be informed when a drives reaches the warning level.</p>
<i>Error level</i>	<p>Select the level of the remaining memory space of the medium at which an error message is supposed to be issued.</p> <p>NOTICE! When reaching the error level, also unsecured recordings are deleted.</p> <p>NOTICE! It is advisable to select a value of 5 % of the drive capacity as error level.</p> <p>In the Notifications module, you can select who is supposed to be informed when a drives reaches the error level.</p>



For basic information about the Notifications module refer to the administration manual for tenants *Notifications module*.



In single-server systems without a configured storage expansion or archiving, it is highly recommended to configure a retention time (**TTL**) for the recordings in the recording plan in the Recording Planner module so that old recordings are deleted before the error level is reached and an error message issued.



For information about the configuration of recording plans refer to the administration manual for tenants *System Configuration - Recording Planner*.

8.1.1.2

Group field Properties of directly connected drives

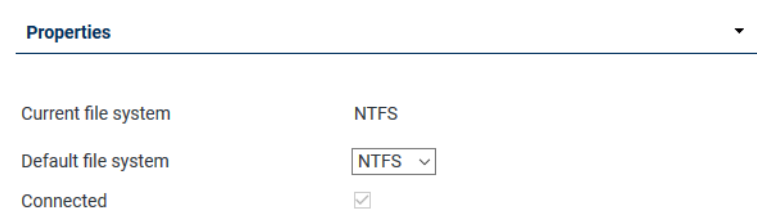


Fig. 8: Tab Settings - Properties of directly connected drives

Current file system	File system on which the medium has been mounted.
Default file system	File system which is created when the medium is formatted. Select the file system from the drop-down list. It depends on the type of the drive which file systems are available.
Connected	Shows the technical status of the drive. Only drives with the status <i>Active</i> and the status <i>Connected</i> can be used. <input checked="" type="checkbox"/> = Drive has been connected. <input type="checkbox"/> = Drive has not been connected.

8.1.2

Tab Settings NAS

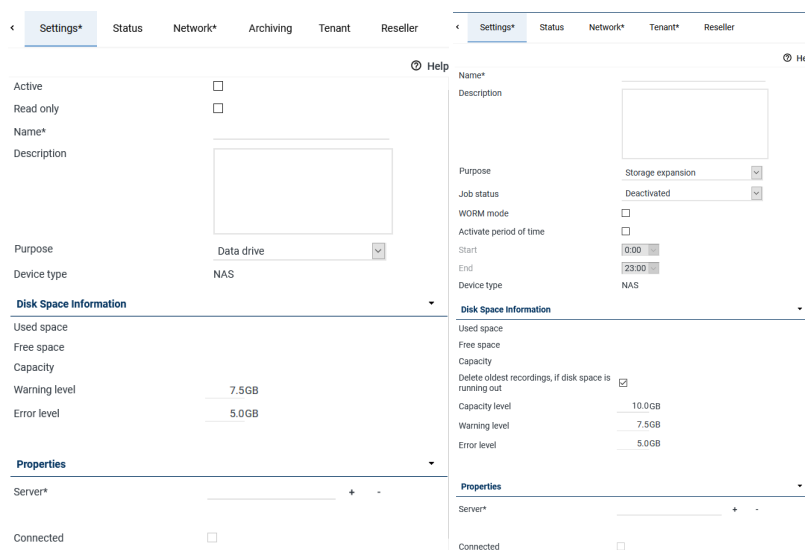


Fig. 9: Tab Settings NAS

<i>Active</i>	<p>NOTICE! This option is only available for data drives.</p> <p>Shows for data drives whether the drive has been released to be used.</p> <p>Select whether the configuration of the drive is supposed to be released and can be used.</p> <p><input checked="" type="checkbox"/> = Drive is active; configuration of the drive has been released.</p> <p><input type="checkbox"/> = Drive is inactive.</p>
<i>Only for replay</i>	<p>NOTICE! This option is only available for data drives.</p> <p>Shows whether the drive can be used for the replay of recordings only.</p> <p>Select whether the drive is supposed to be used for the replay of recordings only.</p> <p><input checked="" type="checkbox"/> = Read-only drive.</p> <p><input type="checkbox"/> = Read-and-write drive.</p>
<i>Name</i>	Name of the drive.
<i>Description</i>	Here, you can enter a description of the drive.
<i>Purpose</i>	<p>Shows the purpose the drive is to serve.</p> <p>For NAS drives which are not used as system drives, you can select 2 different categories:</p> <ul style="list-style-type: none"> • <i>Data drive</i> The drive can be used for archiving, import, and export. • <i>Storage expansion</i> The drive can only be used as storage expansion. It can neither be used for archiving nor for import or export. At least one tenant must be mapped, see chapter "Tab Tenant", p. 49. <p>NOTICE! To use the drive as a storage expansion, the license <i>Storage Expansion Manager</i> must have been installed in the system.</p> <p>Select the category for the drive from the drop-down list.</p> <p>For more information about drives categories, see chapter "Drive categories", p. 7.</p>
<i>Job status</i>	<p>NOTICE! This option is only available for storage expansions.</p> <p>Select whether the storage expansion is supposed to be released or deactivated.</p> <p>Select the respective setting from the drop-down list.</p> <ul style="list-style-type: none"> • <i>Released</i> The storage expansion may be used to its full extent by the system. The recordings are transferred to the storage expansion.▪ • <i>Deactivated</i> The storage expansion may be used to a limited extent by the system. No recordings are transferred to the storage expansion. This is a precondition to be able to disconnect the storage expansion from the recording system (menu item Disconnect network drive). A deactivated storage expansion continues to be available for the following functions: <ul style="list-style-type: none"> – Searching conversations – Replaying conversations – Deletion job (deleting recordings after the retention period (TTL) is over)

<i>WORM mode</i>	<p>NOTICE! This option is only available for storage expansions.</p> <p>Select whether WORM mode is supposed to be activated for the drive.</p> <p><input checked="" type="checkbox"/> = WORM mode has been activated for the drive.</p> <p><input type="checkbox"/> = WORM mode has not been activated for the drive.</p> <p>NOTICE! This option cannot be revoked once it has been activated!</p>
<i>Activate period of time</i>	<p>NOTICE! This option is only available for storage expansions.</p> <p>Select the period of time during which the data is supposed to be transferred to the storage expansion.</p> <p><input checked="" type="checkbox"/> = Period of time has been activated.</p> <p><input type="checkbox"/> = Period of time has not been activated.</p> <p>Tick the check box so that the selection boxes become active by means of which you can enter the start and the end time of the period during which the data is supposed to be transferred. That way, you can guarantee that data is only transferred when there is sufficient network bandwidth.</p>
<i>Device type</i>	Shows the drive type.

8.1.2.1 Group field Disk Space Information for data drive

Disk Space Information	
Used space	20.63 GB
Free space	19.03 GB
Capacity	39.66 GB
Warning level	7.5GB
Error level	5.0GB

Fig. 10: Group field Disk Space Information NAS

<i>Used space</i>	Shows how much disk space is already occupied on the drive.
<i>Free space</i>	Shows how much free disk space remains on the drive.
<i>Capacity</i>	Shows how much disk space is available on the drive in total.
<i>Warning level</i>	<p>Select the level of the remaining memory space of the medium at which a warning is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 10 % of the drive capacity as warning level.</p> <p>In the Notifications module, you can select who is notified when a drive has reached its warning level.</p>
<i>Error level</i>	<p>Select the level of the remaining memory space of the medium at which an error message is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 5 % of the drive capacity as error level.</p> <p>In the Notifications module, you can select who is notified when a drive has reached its error level.</p>



For basic information about the Notifications module refer to the administration manual for tenants *Notifications module*.

8.1.2.2 Group field Disk Space Information for storage expansions

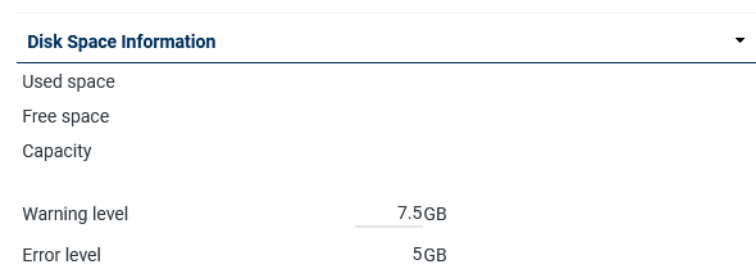


Fig. 11: Group field Disk space information storage expansions

<i>Used space</i>	Shows how much disk space is already occupied on the drive.
<i>Free space</i>	Shows how much free disk space remains on the drive.
<i>Capacity</i>	Shows how much disk space is available on the drive in total.
<i>Warning level</i>	<p>Select the level of the remaining memory space of the medium at which a warning is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 10 % of the drive capacity as warning level.</p> <p>In the Notifications module, you can select who is notified when a drive has reached its warning level.</p>
<i>Error level</i>	<p>Select the level of the remaining memory space of the medium at which an error message is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 5 % of the drive capacity as error level.</p> <p>In the Notifications module, you can select who is notified when a drive has reached its error level.</p>

ATTENTION!

Ensure that, when reaching the warning level, immediate action is taken to check post processing jobs (archiving/transfer) and to possibly increase storage capacity. Otherwise, recording loss is imminent as archived or transferred recordings will **not** be deleted automatically once the error level is reached.



For basic information about the Notifications module refer to the administration manual for tenants *Notifications module*.

8.1.2.3 Group field Properties of network drives

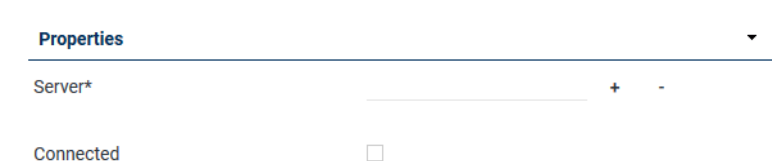



Fig. 12: Tab Settings - Properties of network drives

<i>Server</i>	<p>Name of the server that the drive has been connected to hardware- or software-wise.</p> <p>Select the server by means of the button + behind the entry field, see Assign server.</p>
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	<p>If you would like to delete the entry in the entry field, click on the button  behind the entry field.</p> <p>The server can be an EVOIP^{neo} server or a recorder of the product line EVOLUTION^{neo}.</p>
<i>Connected</i>	<p>Shows the technical status of the drive. Only drives with the status <i>Active</i> and the status <i>Connected</i> can be used.</p> <p><input checked="" type="checkbox"/> = Drive has been connected.</p> <p><input type="checkbox"/> = Drive has not been connected.</p>

8.1.3 Tab Settings iCAS Storage



Fig. 13: Tab Settings iCAS Storage

<i>Name</i>	Name of the drive.
<i>Description</i>	Here, you can enter a description of the drive.
<i>Purpose</i>	<p>Shows the purpose the drive is to serve. In this case, the purpose of the drive has been preset and cannot be changed.</p> <p>Drives which serve as storage expansion can neither be used for archiving nor for import or export. At least one tenant must be mapped to them, see chapter "Tab Tenant", p. 49.</p> <p>NOTICE! To use the drive as a storage expansion, the license <i>Storage Expansion Manager</i> must have been installed in the system.</p> <p>For information about drives categories, see chapter "Drive categories", p. 7.</p>
<i>Job status</i>	<p>Select whether the storage expansion is supposed to be released or deactivated.</p> <p>Select the respective setting from the drop-down list.</p> <ul style="list-style-type: none"> • <i>Released</i> <p>The storage expansion may be used to its full extent by the system. The recordings are transferred to the storage expansion.▪</p> • <i>Deactivated</i> <p>The storage expansion may be used to a limited extent by the system. No recordings are transferred to the storage expansion. This is a precondition to be able to disconnect the storage expansion from the recording system (menu item Disconnect network drive).</p> <p>A deactivated storage expansion continues to be available for the following functions:</p> <ul style="list-style-type: none"> – Searching conversations – Replaying conversations – Deletion job (deleting recordings after the retention period (TTL) is over)
<i>Compliance mode</i>	For files stored on this storage expansion, a write protection is set until the end of the defined retention period (TTL) so that the files cannot be deleted or changed, neither by Neo nor by means of any other application. After the

	<p>end of the originally set retention period and the associated write protection, the files will be deleted by Neo automatically in the course of the TTL deletion process.</p> <p>NOTICE! For iCAS Storage, compliance mode has been activated by default and cannot be deactivated.</p>
<i>Activate period of time</i>	<p>Tick the check box so that the selection boxes become active by means of which you can enter the start and the end time of the period during which the data is supposed to be transferred. That way, you can guarantee that data is only transferred when there is sufficient network bandwidth.</p>
<i>Device type</i>	Shows the drive type.

When selection periods of time, please keep in mind that due to technical reasons those periods can only be configured on the top of the hour; half-hours are adjusted upward. This has an impact if the server containing the data to be exported is located in a time zone which differs from Coordinated Universal Time (UTC) by $x \frac{1}{2}$ hours.



Example: Recorded data is supposed to be transferred from the export server in India (UTC + 5 1/2) to a target server in Germany during 8 pm and 10 pm Indian local time. This corresponds to 2:30 pm and 4:30 pm UTC. By adjusting the half-hour upward, the period for the export is translated into 3 pm to 5 pm which corresponds to Indian local time of 8:30 pm to 10:30 pm.

8.1.3.1

Group field Disk Space Information for storage expansions

Disk Space Information	
Used space	
Free space	
Capacity	
Warning level	7.5GB
Error level	5GB

Fig. 14: Group field Disk space information storage expansions

<i>Used space</i>	Shows how much disk space is already occupied on the drive.
<i>Free space</i>	Shows how much free disk space remains on the drive.
<i>Capacity</i>	Shows how much disk space is available on the drive in total.
<i>Warning level</i>	<p>Select the level of the remaining memory space of the medium at which a warning is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 10 % of the drive capacity as warning level.</p> <p>In the Notifications module, you can select who is notified when a drive has reached its warning level.</p>
<i>Error level</i>	<p>Select the level of the remaining memory space of the medium at which an error message is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 5 % of the drive capacity as error level.</p> <p>In the Notifications module, you can select who is notified when a drive has reached its error level.</p>

ATTENTION!

Ensure that, when reaching the warning level, immediate action is taken to check post processing jobs (archiving/transfer) and to possibly increase storage capacity. Otherwise, recording loss is imminent as archived or transferred recordings will **not** be deleted automatically once the error level is reached.



For basic information about the Notifications module refer to the administration manual for tenants *Notifications module*.

8.1.3.2

Group field Properties of network drives



Fig. 15: Tab Settings - Properties of network drives

Server	<p>Name of the server that the drive has been connected to hardware- or software-wise.</p> <p>Select the server by means of the button + behind the entry field, see Assign server.</p> <p>If you would like to delete the entry in the entry field, click on the button - behind the entry field.</p> <p>The server can be an EVOIP^{neo} server or a recorder of the product line EVOLUTION^{neo}.</p>
Connected	<p>Shows the technical status of the drive. Only drives with the status <i>Active</i> and the status <i>Connected</i> can be used.</p> <p><input checked="" type="checkbox"/> = Drive has been connected.</p> <p><input type="checkbox"/> = Drive has not been connected.</p>

8.1.4

Tab Settings Azure Blob Storage, Google Cloud Storage, Centera



Fig. 16: Tab Settings Azure Blob Storage (example)

Name	Name of the drive.
Description	Here, you can enter a description of the drive.
Purpose	<p>Shows the purpose the drive is to serve. For Centera, the purpose of the drive has been preset and cannot be changed. For Google Cloud Storage and Azure Blob Storage, you can select one of the following categories:</p> <ul style="list-style-type: none"> Data drive The drive can be used for import and export but not for archiving purposes, though. Storage expansion

	<p>Drives which serve as storage expansion can neither be used for archiving nor for import or export. At least one tenant must be mapped to them, see chapter "Tab Tenant", p. 49.</p> <p>NOTICE! To use the drive as a storage expansion, the license <i>Storage Expansion Manager</i> must have been installed in the system.</p> <ul style="list-style-type: none"> Additionally for Azure Blob Storage: <i>Recording Insights Transfer</i> <p>The drive can be used to transfer recordings from Recording Insights. For information about drives categories, see chapter "Drive categories", p. 7.</p>
<i>Job status</i>	<p>Select whether the storage expansion is supposed to be released or deactivated.</p> <p>Select the respective setting from the drop-down list.</p> <ul style="list-style-type: none"> <i>Released</i> The storage expansion may be used to its full extent by the system. The recordings are transferred to the storage expansion.▪ <i>Deactivated</i> The storage expansion may be used to a limited extent by the system. No recordings are transferred to the storage expansion. This is a precondition to be able to disconnect the storage expansion from the recording system (menu item Disconnect network drive). A deactivated storage expansion continues to be available for the following functions: <ul style="list-style-type: none"> – Searching conversations – Replaying conversations – Deletion job (deleting recordings after the retention period (TTL) is over)
<i>Activate period of time</i>	<p>Tick the check box so that the selection boxes become active by means of which you can enter the start and the end time of the period during which the data is supposed to be transferred. That way, you can guarantee that data is only transferred when there is sufficient network bandwidth.</p>
<i>Device type</i>	<p>Shows the drive type.</p>

When selection periods of time, please keep in mind that due to technical reasons those periods can only be configured on the top of the hour; half-hours are adjusted upward. This has an impact if the server containing the data to be exported is located in a time zone which differs from Coordinated Universal Time (UTC) by x 1/2 hours.



Example: Recorded data is supposed to be transferred from the export server in India (UTC + 5 1/2) to a target server in Germany during 8 pm and 10 pm Indian local time. This corresponds to 2:30 pm and 4:30 pm UTC. By adjusting the half-hour upward, the period for the export is translated into 3 pm to 5 pm which corresponds to Indian local time of 8:30 pm to 10:30 pm.

8.1.4.1 Group field Disk Space Information for storage expansions

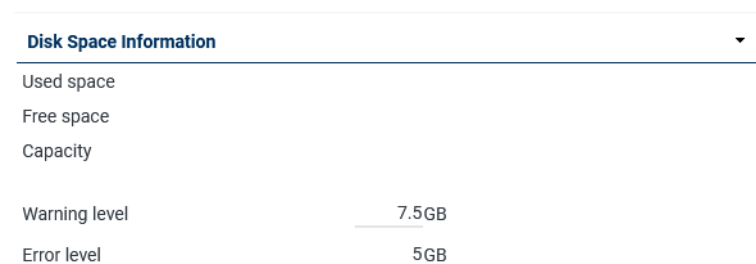


Fig. 17: Group field Disk space information storage expansions

<i>Used space</i>	Shows how much disk space is already occupied on the drive.
<i>Free space</i>	Shows how much free disk space remains on the drive.
<i>Capacity</i>	Shows how much disk space is available on the drive in total.
<i>Warning level</i>	<p>Select the level of the remaining memory space of the medium at which a warning is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 10 % of the drive capacity as warning level.</p> <p>In the Notifications module, you can select who is notified when a drive has reached its warning level.</p>
<i>Error level</i>	<p>Select the level of the remaining memory space of the medium at which an error message is supposed to be issued.</p> <p>NOTICE! It is advisable to select a value of 5 % of the drive capacity as error level.</p> <p>In the Notifications module, you can select who is notified when a drive has reached its error level.</p>

ATTENTION!

Ensure that, when reaching the warning level, immediate action is taken to check post processing jobs (archiving/transfer) and to possibly increase storage capacity. Otherwise, recording loss is imminent as archived or transferred recordings will **not** be deleted automatically once the error level is reached.



For basic information about the Notifications module refer to the administration manual for tenants *Notifications module*.

8.1.4.2 Group field Properties of network drives

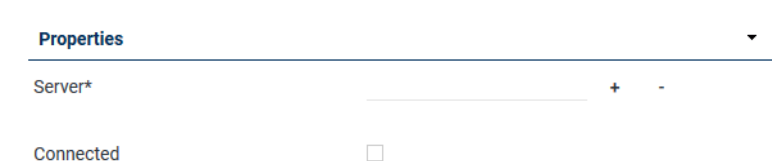



Fig. 18: Tab Settings - Properties of network drives

<i>Server</i>	<p>Name of the server that the drive has been connected to hardware- or software-wise.</p> <p>Select the server by means of the button + behind the entry field, see Assign server.</p>
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	<p>If you would like to delete the entry in the entry field, click on the button  behind the entry field.</p> <p>The server can be an EVOIP^{neo} server or a recorder of the product line EVOLUTION^{neo}.</p>
<i>Connected</i>	<p>Shows the technical status of the drive. Only drives with the status <i>Active</i> and the status <i>Connected</i> can be used.</p> <p><input checked="" type="checkbox"/> = Drive has been connected.</p> <p><input type="checkbox"/> = Drive has not been connected.</p>

8.1.5 Tab Settings Google Stackdriver

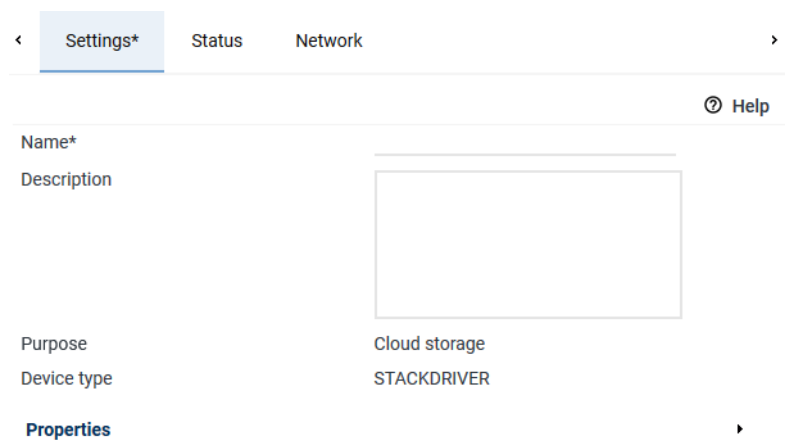


Fig. 19: Tab Settings Google Stackdriver

<i>Name</i>	Name of the drive.
<i>Description</i>	Here, you can enter a description of the drive.
<i>Purpose</i>	Shows the purpose the drive is to serve. In this case, the purpose of the drive has been preset and cannot be changed. For more information about drives categories, see chapter "Drive categories", p. 7 .
<i>Device type</i>	Shows the drive type.



For information about assigning a Stackdriver recipient refer to the administration manuals for system providers and tenants *System Configuration - Notifications module*.

For information about the installation refer to the installation manual for system provider *Installation Google Stackdriver*.

See also

 [Drive categories](#) [► 7]

8.1.5.1 Group field Properties of network drives

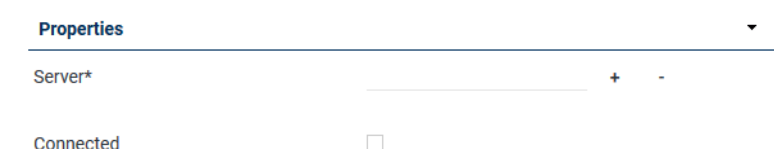




Fig. 20: Tab Settings - Properties of network drives

<i>Server</i>	<p>Name of the server that the drive has been connected to hardware- or software-wise.</p> <p>Select the server by means of the button  behind the entry field, see Assign server.</p> <p>If you would like to delete the entry in the entry field, click on the button  behind the entry field.</p> <p>The server can be an EVOIP^{neo} server or a recorder of the product line EVOLUTION^{neo}.</p>
<i>Connected</i>	<p>Shows the technical status of the drive. Only drives with the status <i>Active</i> and the status <i>Connected</i> can be used.</p> <p><input checked="" type="checkbox"/> = Drive has been connected.</p> <p><input type="checkbox"/> = Drive has not been connected.</p>

8.1.6 Tab Settings S3 storage



Fig. 21: Tab Settings S3 storage

<i>Name</i>	Name of the drive.
<i>Description</i>	Here, you can enter a description of the drive.
<i>Purpose</i>	<p>Shows the purpose the drive is to serve. You can select one of 2 different categories:</p> <ul style="list-style-type: none"> • <i>Data drive</i> The drive can be used for import and export. • <i>Storage expansion</i> Drives which serve as storage expansion can neither be used for archiving nor for import or export. At least one tenant must be mapped to them, see chapter "Tab Tenant", p. 49. <p>NOTICE! To use the drive as a storage expansion, the license <i>Storage Expansion Manager</i> must have been installed in the system.</p> <p>For more information about drives categories, see chapter "Drive categories", p. 7.</p>
<i>Job status</i>	<p>Select whether the storage expansion is supposed to be released or deactivated.</p> <p>Select the respective setting from the drop-down list.</p> <ul style="list-style-type: none"> • <i>Released</i> The storage expansion may be used to its full extent by the system. The recordings are transferred to the storage expansion.▪ • <i>Deactivated</i> The storage expansion may be used to a limited extent by the system. No recordings are transferred to the storage expansion. This is a precondition to be able to disconnect the storage expansion from the recording system (menu item Disconnect network drive). A deactivated storage expansion continues to be available for the following functions:

	<ul style="list-style-type: none"> – Searching conversations – Replaying conversations – Deletion job (deleting recordings after the retention period (TTL) is over)
Compliance mode	<p>For files stored on this storage expansion, a write protection is set until the end of the defined retention period (TTL) so that the files cannot be deleted or changed, neither by Neo nor by means of any other application. After the end of the originally set retention period and the associated write protection, the files will be deleted by Neo automatically in the course of the TTL deletion process.</p> <p><input checked="" type="checkbox"/> = Compliance mode has been activated; write protection during TTL has been set.</p> <p><input type="checkbox"/> = Compliance mode has not been activated; no write protection has been set.</p> <p>NOTICE! Keep in mind that once compliance mode has been saved for this drive, this setting cannot be undone anymore.</p>
Activate period of time	<p>Tick the check box so that the selection boxes become active by means of which you can enter the start and the end time of the period during which the data is supposed to be transferred. That way, you can guarantee that data is only transferred when there is sufficient network bandwidth.</p>
Device type	Shows the drive type.

When selection periods of time, please keep in mind that due to technical reasons those periods can only be configured on the top of the hour; half-hours are adjusted upward. This has an impact if the server containing the data to be exported is located in a time zone which differs from Coordinated Universal Time (UTC) by x 1/2 hours.



Example: Recorded data is supposed to be transferred from the export server in India (UTC + 5 1/2) to a target server in Germany during 8 pm and 10 pm Indian local time. This corresponds to 2:30 pm and 4:30 pm UTC. By adjusting the half-hour upward, the period for the export is translated into 3 pm to 5 pm which corresponds to Indian local time of 8:30 pm to 10:30 pm.

8.1.6.1

Group field Properties of network drives

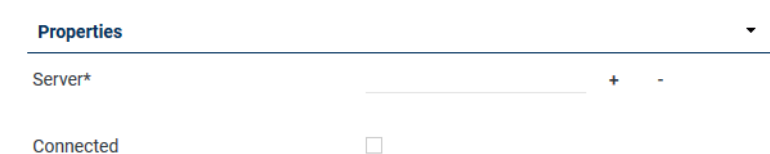




Fig. 22: Tab Settings - Properties of network drives

Server	<p>Name of the server that the drive has been connected to hardware- or software-wise.</p> <p>Select the server by means of the button  behind the entry field, see Assign server.</p> <p>If you would like to delete the entry in the entry field, click on the button  behind the entry field.</p> <p>The server can be an EVOIP^{neo} server or a recorder of the product line EVOLUTION^{neo}.</p>
Connected	Shows the technical status of the drive. Only drives with the status <i>Active</i> and the status <i>Connected</i> can be used.

- ☒ = Drive has been connected.
☐ = Drive has not been connected.

8.1.7 Tab Settings FTP Bloomberg



Fig. 23: Tab Settings FTP Bloomberg

Active	Shows for data drives whether the drive has been released to be used. Select whether the configuration of the drive is supposed to be released and can be used. <input checked="" type="checkbox"/> = Drive is active; configuration of the drive has been released. <input type="checkbox"/> = Drive is inactive. NOTICE! This option is only available for data drives.
Name	Name of the drive.
Description	Here, you can enter a description of the drive.
Purpose	Shows the purpose the drive is to serve.
Device type	Shows the drive type.

8.1.7.1 Group field Disk Space Information FTP Bloomberg



Fig. 24: Group field Disk Space Information FTP Bloomberg (example)



Used space	Shows how much storage capacity is already used on the drive.
Free space	Shows how much storage capacity remains free on the drive.
Capacity	Shows the overall storage capacity of the drive.

8.1.7.2 Group field Properties for FTP Bloomberg



Fig. 25: Group field Properties FTP Bloomberg (example)

Server	Name of the server that the drive has been connected to hardware- or software-wise.
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	<p>Select the server by means of the button  behind the entry field, see Assign server.</p> <p>If you would like to delete the entry in the entry field, click on the button  behind the entry field.</p> <p>The server can be an EVOIP^{neo} server or a recorder of the product line EVOLUTION^{neo}.</p>
<i>Protocol</i>	Select the protocol to be used.
<i>Connected</i>	<p>Shows the technical state of the drive. Only drives with both the statuses <i>Active</i> and <i>Connected</i> can be used.</p> <p><input checked="" type="checkbox"/> = Drive has been connected.</p> <p><input type="checkbox"/> = Drive has not been connected.</p>

8.2 Tab Status

Here, you can see different statuses of the drive in an overview.

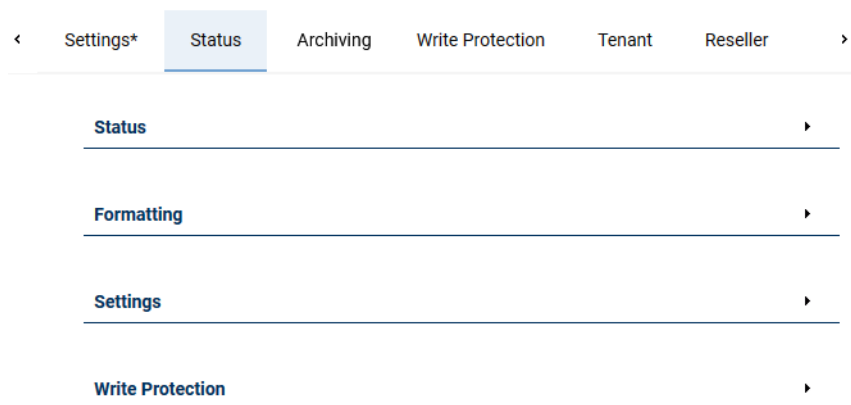


Fig. 26: Tab Status

The tab contains the following group fields:

- *Status*
Contains information about the availability of data on the drive.
- *Formatting*
Contains information about the last formatting of the drive.
NOTICE! This group field is only displayed for drives which can be formatted.
- *Settings*
Contains information about the manageability of the drive.
- *Write Protection*
Contains information about dependencies when formatting the drive and about the possibilities to overwrite existing data.

8.2.1 Group field Status

Contains information about the availability of data on the drive.

Status ▼	
Name	Value
Drive status	Empty
Medium status	
Volume status	

Fig. 27: Tab Status - Status

Possible values for *drive status* are:

<i>Eject</i>	Medium is being ejected.
<i>Remove</i>	Drive is being detached from the system.
<i>Error</i>	Data of the medium cannot be read.
<i>Load</i>	Drive is being checked.
<i>Empty</i>	No medium has been inserted.
<i>Not connected</i>	Drive is not connected.
<i>Available</i>	Drive can be used.
(no entry)	Status is unknown. No drive available.

Possible values for *medium status* are:

<i>Available</i>	Medium can be used.
<i>Empty</i>	No data available on the medium.
<i>Finished</i>	Medium has been finished.
<i>Wrong format</i>	Contains data but it cannot be read. The data format does not coincide with the expected format.
<i>Update inserted</i>	Drive contains an update medium.
<i>Load</i>	Medium is being checked.
<i>Save</i>	Data is being saved.
<i>Terminate</i>	Medium is being terminated.
<i>Is formatting</i>	Medium is being formatted.
<i>Error</i>	An error occurred on the medium.
<i>Unknown format</i>	The format of the medium is unknown. The medium cannot be used.
<i>Unknown data</i>	Contains data which has not been created by the recording system, though. Data on this medium is not overwritten.
<i>Recovery not possible</i>	Data of the medium cannot be recovered.
(no entry)	Status is unknown. No medium available.

Possible values for *volume status* are:

<i>Available</i>	Volume can be used.
<i>Finished</i>	Volume has been finished.
<i>Load</i>	Volume is being checked.
<i>Save</i>	Data is being saved on the volume.
<i>Terminate</i>	Volume is being terminated.

<i>Error</i>	An error occurred in the volume.
<i>Recovery not possible</i>	Data on the volume cannot be recovered. The medium has not been formatted.
(no entry)	Status is unknown. No volume available.

8.2.2 Group field Formatting



This group field is only displayed for drives which can be formatted.

Contains information about the last formatting of the drive.

Formatting	
Status	Not started
Last execution	

Fig. 28: Tab Status - Formatting

Status	Status of the formatting. <ul style="list-style-type: none"> <i>Not started</i> No formatting has been carried out on this drive. <i>In progress</i> The drive is being formatted. <i>Finished</i> The last formatting of the drive has been finished successfully. <i>Error</i> An error occurred during the last formatting of the drive. The drive has not been formatted correctly.
Last execution	Date on which the formatting was finished.

8.2.3 Group field Settings

Contains information about the generally possible manageability of the drive hardware-wise.

Settings	
Name	Value
Detachable	✗
Ejectable	✗
Formattable	✗
Terminable	✗

Fig. 29: Tab Status - Settings

Detachable	Shows whether the drive can be detached from the recording system by means of the function <i>Detach medium</i> . ✓ = Drive can be detached.
-------------------	---

	<p>✗ = Drive cannot be detached.</p>
<i>Ejectable</i>	<p>Shows whether the drive can contain a medium which can be ejected by means of the function <i>Eject medium</i>.</p> <p>✓ = Medium can be ejected.</p> <p>✗ = Medium cannot be ejected.</p>
<i>Formattable</i>	<p>Shows whether the medium or the drive can be formatted by means of the function <i>Format</i>.</p> <p>✓ = Can be formatted.</p> <p>✗ = Cannot be formatted.</p>
<i>Terminable</i>	<p>Shows whether the medium or the drive can be terminated in the tab <i>Volumes</i>.</p> <p>✓ = Can be terminated.</p> <p>✗ = Cannot be terminated.</p>



It depends on the current status of the medium whether the respective functions, such as *Eject medium*, are actually available, see [chapter "Group field Status", p. 33](#).

See also

 [Group field Status](#) [p. 33]

8.2.4

Group field Write Protection

Contains information about the write protection of the drive.

If there is a write protection, either data cannot be written on the medium or the medium cannot be formatted; this depends on the kind of the write protection.

Write Protection	
Name	Value
Invalid tenant	✗
File system	✗
Drive configuration	✗
Medium configuration	✗
Volume configuration	✗
Hardware	✗

Fig. 30: Tab Status - write protection

<i>Invalid tenant</i>	<p>Shows whether the systems accepts the medium as a valid medium for the tenant. If the medium contains data which cannot be mapped to the tenant whose drive this is, the write protection is activated automatically. In this case, the medium cannot be formatted.</p> <p>✓ = Write protection is active. Medium cannot be formatted.</p> <p>✗ = Medium has no write protection.</p>
-----------------------	--

<i>File system</i>	<p>Shows whether the file system of the medium can be used to write data to the medium. If the file system of the medium is not the same as the file system configured for the drive, then the write protection is activated automatically. If no other write protection has been activated to prevent this, the medium can be formatted.</p> <p>✓ = Write protection is active.</p> <p>✗ = Medium has no write protection.</p>
<i>Configuration drive</i>	<p>Shows whether the drive type (see chapter "Drive categories", p. 7) allows writing data to the drive for archiving, export, etc. Only storage expansions and data drives can be used for these job types. Other drives (system storages, database drives, ...) have been disabled for these tasks and must thus be considered as write-protected.</p> <p>✓ = Drive type does not allow writing data to the drive. Write protection is active. Medium cannot be formatted.</p> <p>✗ = Drive has no write protection.</p>
<i>Configuration medium</i>	<p>Shows whether the volume has been terminated and whether it has an active write protection.</p> <p>✓ = Write protection is active. Medium cannot be formatted.</p> <p>✗ = Medium has no write protection.</p>
<i>Configuration volume</i>	<p>Shows whether the volume has been terminated.</p> <p>✓ = Write protection is active.</p> <p>✗ = Volume has no write protection.</p>
<i>Hardware</i>	<p>Shows whether the medium or the drive has an active hardware write protection.</p> <p>✓ = Write protection is active. Medium cannot be formatted.</p> <p>✗ = Write protection is not active.</p>

In the following cases, formatting the medium is not possible:

- The drive type does not allow formatting (e. g. [NAS](#), Centera, DVD-ROM).
- No medium has been inserted.
- The currently inserted, terminated medium has an active write protection.
- The medium is hardware-write-protected.
- The drive is a system drive.
- The tenant who owns the medium or the volume is not the same as the one who owns the drive.
- The drive is used in an active job.
- The drive is not connected.
- If the drive has been mapped to a tenant, only this tenant may format the drive.

See also

 [Drive categories](#) [► 7]

8.3

Tab Network



This tab is only available for network drives.

Here, you can display and edit the information about the network connection of the drive.

Which settings are required depends on the type of the network drive.

8.3.1 Network settings for NAS drives

It depends on the selected authentication type which settings for the network connection are necessary. The following options can be selected:

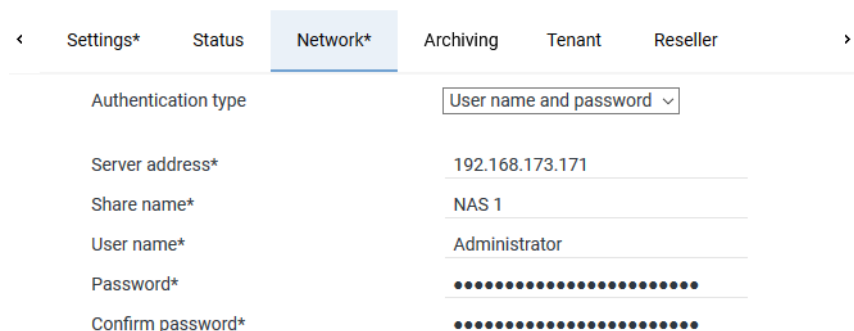
- *User name and password*

Authentication takes place by means of the data entered in the fields *User name* and *Password*.

- *None*

Authentication is not required.

Authentication via user name and password

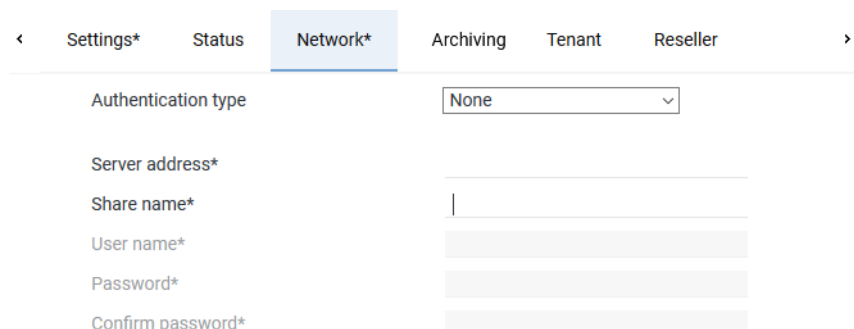


The screenshot shows the 'Network*' tab selected in a configuration interface. The 'Authentication type' dropdown is set to 'User name and password'. Below it, the 'Server address*' field contains '192.168.173.171', 'Share name*' contains 'NAS 1', 'User name*' contains 'Administrator', and both 'Password*' and 'Confirm password*' fields are filled with masked characters (dots).

Fig. 31: Tab Network - NAS drives (User name and password)

Authentication type	Select the entry <i>User name and password</i> from the drop-down list.
Server address	IP address of the server or of the recorder to which the drive has been connected. Enter the IP address for the connection to the drive.
Share name	Name under which the drive is displayed in the network. Enter the share name of the drive.
User name	User name which allows accessing the drive.
Password	Password required for the authentication.
Confirm Password	Repeat the password required for the authentication.

No authentication



The screenshot shows the 'Network*' tab selected in a configuration interface. The 'Authentication type' dropdown is set to 'None'. The 'Server address*', 'Share name*', 'User name*', 'Password*', and 'Confirm password*' fields are all empty.

Fig. 32: Tab Network - NAS drives (no authentication)

Authentication type	Select the entry <i>None</i> from the drop-down list.
Server address	IP address of the server or of the recorder to which the drive has been connected. Enter the IP address for the connection to the drive.
Share name	Name under which the drive is displayed in the network. Enter the share name of the drive.

8.3.2 Network settings for Centera

It depends on the selected authentication type which settings for the network connection are necessary. The following options can be selected:

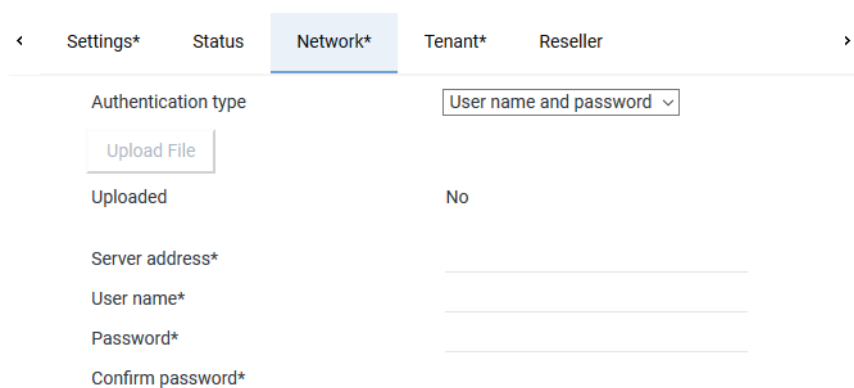
- *User name and password*

Authentication takes place by means of the data entered in the fields *User name* and *Password*.

- *File*

Authentication takes place via a file.

Authentication via user name and password



< Settings* Status **Network*** Tenant* Reseller >

Authentication type: User name and password ▾

Upload File

Uploaded: No

Server address*

User name*

Password*

Confirm password*

Fig. 33: Tab Network - Centera (User name and password)

Authentication type	Select the entry <i>User name and password</i> from the drop-down list.
Server address	IP address of the server or of the recorder to which the drive has been connected. Enter the IP address for the connection to the drive.
User name	User name which allows accessing the drive.
Password	Password required for the authentication.
Confirm Password	Repeat the password required for the authentication.

Authentication via file

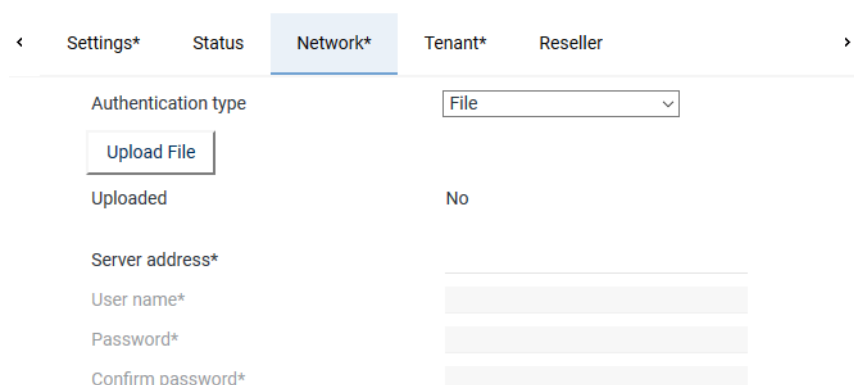


Fig. 34: Tab Network - Centera (Upload file)

Authentication type	Select the entry <i>File</i> from the drop-down list.
Upload File	Starts a dialog which allows uploading the authentication file. See chapter "Upload File", p. 40 .
Uploaded	Shows whether an authentication file has already been uploaded.
Server address	IP address of the server or of the recorder to which the drive has been connected. Enter the IP address for the connection to the drive.



The fields *User name*, *Password* and *Confirm password* are only active if the authentication type *User name and password* has been selected.



The button *Upload File* is only active if the authentication type *File* has been selected.

8.3.2.1

Upload File

1. Click on the button *Upload File*.

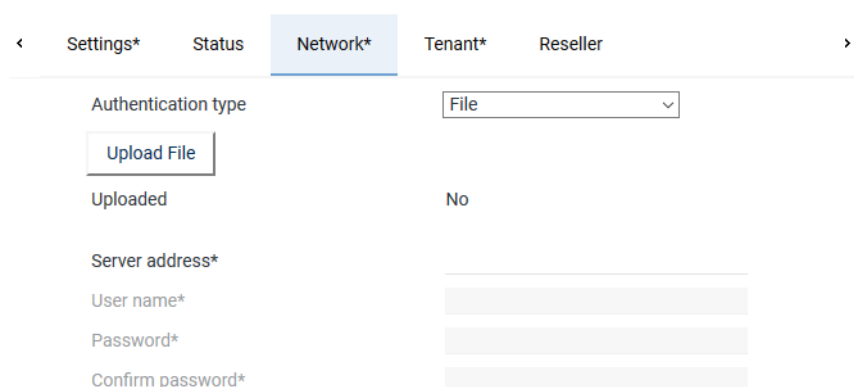


Fig. 35: Upload authentication file

⇒ The window *Upload File* appears.

2. Click on the button *Choose File*.

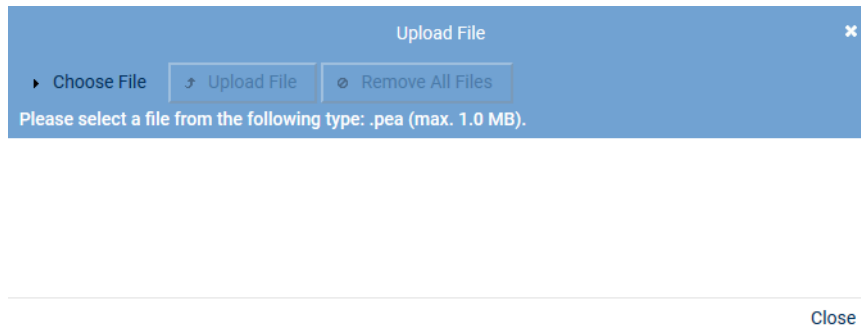



Fig. 36: Select authentication file (example)

3. Select the respective file via the Explorer and click on the button *Open*.



If required, you can repeat the last two steps several times and thus select several files. However, you can only upload one of the selected files.

4. To upload the file, click on the button *Upload File*.
To remove a selected file from the list, click on the button  next to the respective file.
5. Upon clicking on the button *Upload file*, the respective file is uploaded.

8.3.3 Network settings S3 storage

It depends on the selected authentication type which settings for the network connection are necessary. The following options can be selected:

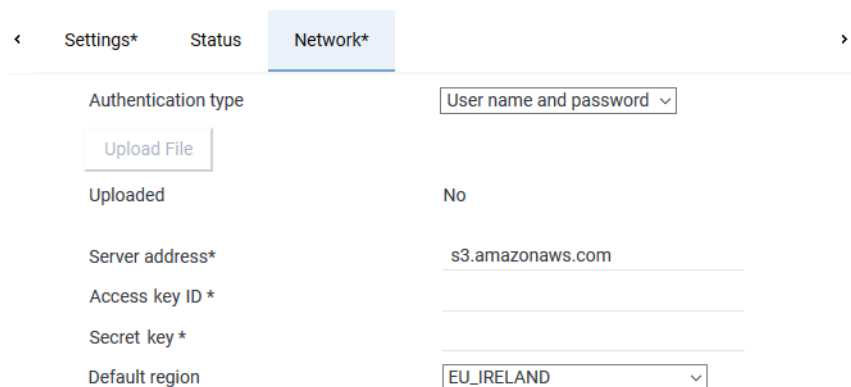
- *User name and password*

Authentication takes place by means of the data entered in the fields *User name* and *Password*.

- *File*

Authentication takes place via a file.

Authentication via user name and password



Settings* Status **Network***

Authentication type: User name and password

Upload File

Uploaded: No

Server address*: s3.amazonaws.com

Access key ID *

Secret key *

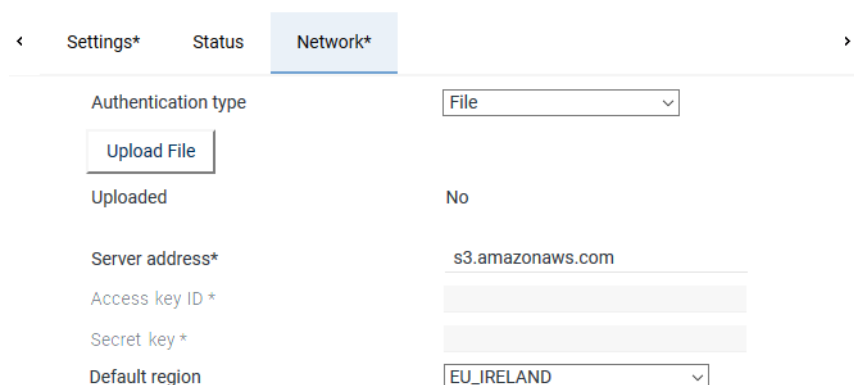
Default region: EU_IRELAND

Fig. 37: Tab Network - Amazon S3 (User name and password)

Authentication type	Select the entry <i>User name and password</i> from the drop-down list.
Server address	URL of the Amazon S3 server. When using Amazon S3 , enter the following URL: s3.amazonaws.com

	When connecting EMC ECS as Amazon S3 drive, enter the host name (case-sensitive!) including the port: e. g. <code>ecs.asc.de:9021</code>
<i>Access key ID</i>	Alphanumeric ID which allows accessing your Cloud storage area. This ID coincides with the name of the user (e. g. AKIAITOAWBN4D-HD3573A) who is allowed to access the Cloud storage area.
<i>Secret key</i>	Password required for the authentication to the Amazon S3 server.
<i>Default region</i>	Select the Amazon S3 server location that you would like to access. Select the server location from the drop-down list.

Authentication via file



< Settings* Status **Network*** >

Authentication type: File

Upload File

Uploaded: No

Server address*: s3.amazonaws.com

Access key ID *

Secret key *

Default region: EU_IRELAND

Fig. 38: Tab Network - S3 storage (Upload File)

<i>Authentication type</i>	Select the entry <i>File</i> from the drop-down list.
<i>Upload File</i>	Starts a dialog which allows uploading the authentication file. See chapter "Upload File", p. 40 .
<i>Uploaded</i>	Shows whether an authentication file has already been uploaded.
<i>Server address</i>	URL of the Amazon S3 server. When using Amazon S3 , enter the following URL : <code>s3.amazonaws.com</code> When connecting EMC ECS as Amazon S3 drive, enter the host name (case-sensitive!) including the port: e. g. <code>ecs.asc.de:9021</code>
<i>Default region</i>	Select the Amazon S3 server location that you would like to access. Select the server location from the drop-down list.



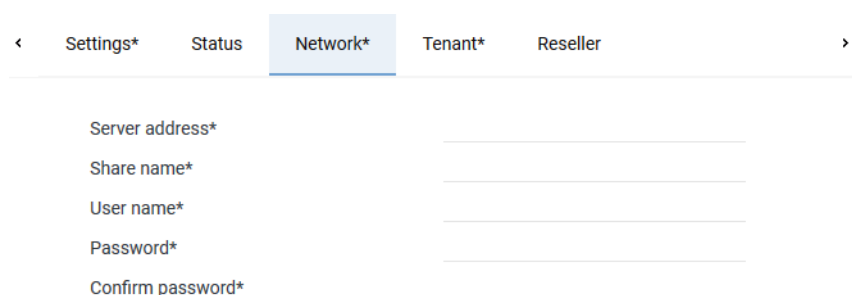
The button *Upload File* is only active if the authentication type *File* has been selected.



When connecting EMC ECS as [Amazon S3](#) drive, the correct spelling (case-sensitivity!) **must be observed** when entering the host name in the field *Server address*.

Furthermore, the port must be indicated behind the host name: e. g. `ecs.asc.de:9021` (port 9021 for HTTPS unless other user-specific setting apply.)

8.3.4 Network settings for iCAS drives



Settings* Status **Network*** Tenant* Reseller

Server address* _____

Share name* _____

User name* _____

Password* _____

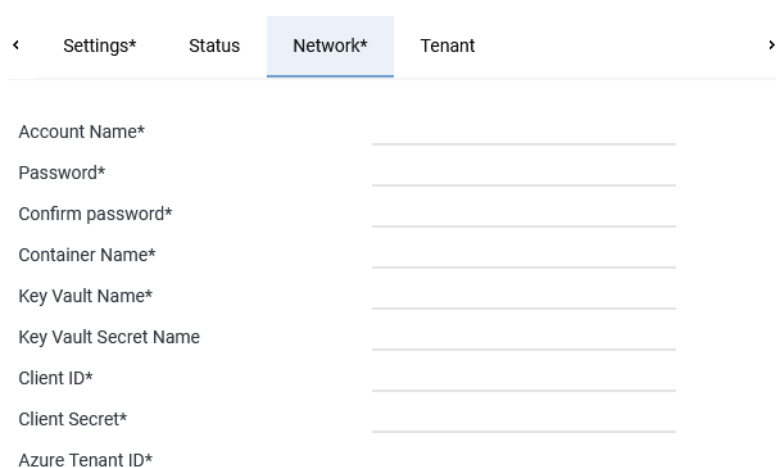
Confirm password* _____

Fig. 39: Tab Network - iCAS drives

Server address	IP address of the server or of the recorder to which the drive has been connected. Enter the IP address for the connection to the drive.
Share name	Name under which the drive is displayed in the network. Enter the share name of the drive.
User name	User name which allows accessing the drive. Enter the user name.
Password	Password for the access to the drive. Enter the password.
Confirm Password	Repeat the password for the access to the drive. Repeat the password.

8.3.5 Network settings for Azure Blob Storage

The displayed options depend on the selected *Usage* in the tab *Settings* ab.



Settings* Status **Network*** Tenant

Account Name* _____

Password* _____

Confirm password* _____

Container Name* _____

Key Vault Name* _____

Key Vault Secret Name _____

Client ID* _____

Client Secret* _____

Azure Tenant ID* _____

Fig. 40: Tab Network (example Azure Blob Storage - Recording Insights Transfer)

Account Name	Name of the account with which you access the drive. Enter the name of the account of the Azure Blob Storage user which is used for export and import. NOTICE! For more information see https://docs.microsoft.com/en-us/azure/storage/common/storage-account-create?toc=%2Fazure%2Fstorage%2Fblobs%2Ftoc.json&tabs=azure-portal
---------------------	--

<i>Password</i>	<p>Password for the account of the Azure Blob Storage user which is used for export and import.</p> <p>Enter the password.</p>
<i>Confirm password</i>	<p>Repeat the password for the account of the Azure Blob Storage user.</p> <p>Enter the password again.</p>
<i>Container Name</i>	<p>NOTICE! This option is only available for drives of the category <i>Recording Insights Transfer</i>.</p> <p>Container name within the Azure Blob Storage for export and import. When defining a Container Name observe the following restrictions:</p> <p>The Container Name must be a valid DNS name conforming to the following naming rules:</p> <ul style="list-style-type: none"> • The Container Name can contain only letters, numbers, and the dash (-) character. • The Container Name must start or end with a letter or number. • All letters in the Container Name must be lowercase. • Consecutive dashes are not permitted. Every dash (-) character must be immediately preceded and followed by a letter or number. • The Container Name must be from 3 through 63 characters long. <p>NOTICE! For more information see https://docs.microsoft.com/en-us/azure/storage/blobs/storage-blobs-introduction</p>
<i>Key Vault Name</i>	<p>NOTICE! This option is only available for drives of the category <i>Recording Insights Transfer</i>.</p> <p>Name of the key vault which contains the key encryption key.</p> <p>NOTICE! For more information see https://docs.microsoft.com/en-us/azure/security/fundamentals/encryption-atrest</p>
<i>Key Vault Secret Name</i>	<p>NOTICE! This option is only available for drives of the category <i>Recording Insights Transfer</i>.</p> <p>In the Key Vault Secret Name of your Azure system, you find the name of the secret containing the key encryption key.</p>
<i>Client ID</i>	<p>NOTICE! This option is only available for drives of the category <i>Recording Insights Transfer</i>.</p> <p>Client ID of the service accessing the key vault.</p> <p>NOTICE! For more information see https://docs.microsoft.com/en-us/azure/key-vault/general/authentication</p>
<i>Client Secret</i>	<p>NOTICE! This option is only available for drives of the category <i>Recording Insights Transfer</i>.</p> <p>Password of the client of the service accessing the key vault.</p> <p>Enter the password.</p>
<i>Azure Tenant ID</i>	<p>NOTICE! This option is only available for drives of the category <i>Recording Insights Transfer</i>.</p> <p>ID of the tenant to access the key vault.</p> <p>NOTICE! For more information see https://docs.microsoft.com/en-us/azure/active-directory/develop/howto-create-service-principal-portal</p>

8.3.6 Network settings for Google Cloud Storage

<
Settings*
Status
Network
Tenant*
Reseller
>

Upload File

Uploaded

No

Server address

Cloud storage class

☒ Multi-regional
☐ Regional
☐ Nearline
☐ Coldline
☐ Default

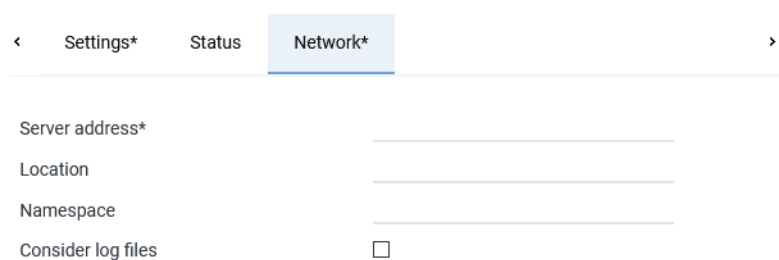
Cloud region

Data centers in the European Union ▼

Fig. 41: Tab Network - Google Cloud Storage

<div>Upload File</div>	<p>Starts a dialog to upload a JSON authentication file with a service account key for authentication purposes.</p> <p>See chapter "Upload File", p. 40.</p> <p>For Neo, the service account key is the only authentication method supported by the FileMan. The following preconditions apply for a Google service account:</p> <ul style="list-style-type: none"> • The service account must be created within the project in the Google Cloud. • The service account must be assigned the role <i>Storage Transfer Admin</i>. • The following permissions must be granted: <ul style="list-style-type: none"> – <i>storage.buckets.create</i> – <i>storage.buckets.get</i> – <i>storage.buckets.list</i> – <i>storage.objects.create</i> – <i>storage.objects.delete</i> – <i>storage.objects.list</i> <p>NOTICE! For information about creating a service account key refer to https://cloud.google.com/iam/docs/creating-managing-service-account-keys.</p> <p>NOTICE! For information about managing roles and permissions refer to https://cloud.google.com/iam/docs/granting-changing-revoking-access.</p>
Uploaded	Shows whether an authentication file has already been uploaded.
Server address	URL of the Google Storage server. Enter www.googleapis.com for the Google Cloud.
Cloud Storage Class	Select the cloud storage class. NOTICE! For information about cloud storage classes refer to https://cloud.google.com/storage/docs/storage-classes?hl=de .
Cloud region	<p>From the drop-down list, select the cloud region where the data is supposed to be stored.</p> <p>The availability of this setting depends on the selection you have made under <i>Cloud Storage Class</i>.</p>

8.3.7 Network settings for Google Stackdriver



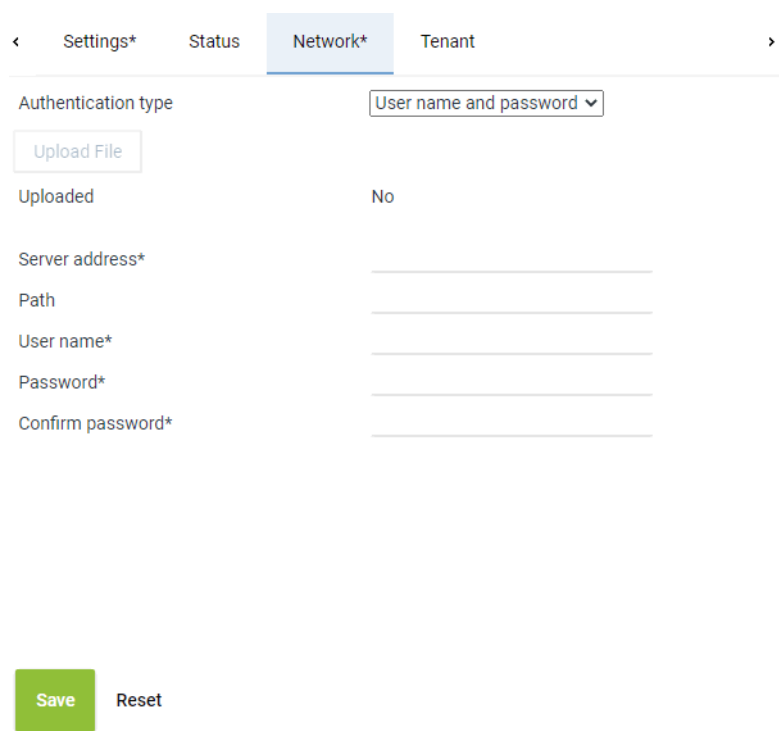
< Settings* Status **Network*** >

Server address*
 Location
 Namespace
 Consider log files ☐

Fig. 42: Tab Network - Google Stackdriver

<i>Server address</i>	<p>IP address of the server or of the recorder to which the drive has been connected.</p> <p>Enter the IP address for the connection to the drive.</p>
<i>Location</i>	<p>Enter the Stackdriver location. The Stackdriver location is the server address of the Stackdriver Agent; in standard installations <i>localhost:9880</i>.</p>
<i>Namespace</i>	<p>Enter the Stackdriver namespace. The Stackdriver namespace is a namespace identifier such as a cluster name.</p>
<i>Consider log files</i>	<p>Select whether log files are supposed to be considered.</p> <p><input type="checkbox"/> = Log files are not considered.</p> <p><input checked="" type="checkbox"/> = Log files are considered.</p>

8.3.8 Network settings for FTP Bloomberg




< Settings* Status **Network*** Tenant >

Authentication type

Uploaded No

Server address*
 Path
 User name*
 Password*
 Confirm password*

Fig. 43: Tab Network FTP Bloomberg (example)

Authentication type	<p>From the drop-down list, select the entry <i>User name and password</i>. The entry fields <i>User name</i>, <i>Password</i>, and <i>Confirm password</i> can be completed.</p> <p>From the drop-down list, select the entry <i>PRIVATE_KEY</i>. The button to upload a file becomes active. The entry fields <i>User name</i>, <i>Password</i>, and <i>Confirm password</i> can be completed.</p> <p>From the drop-down list, select the entry <i>PUBLIC_KEY</i>. The button to upload a file becomes active.</p>
	<p>Starts a dialog to upload the authentication file.</p> <p>See chapter "Upload File", p. 40.</p>
Uploaded	Shows whether an authentication file has already been uploaded.
Server address	IP address of the server to which the drive has been connected. Enter the IP address for the connection to the drive.
Path	Path of the server to which the drive has been connected. Enter the path for the connection to the drive.
User name	<p>Name of the user with which you can access the drive.</p> <p>Enter the user name.</p>
Password	<p>Enter the password to access the drive.</p> <p>Enter the password.</p>
Confirm password	<p>Repeat the password to access the drive.</p> <p>Enter the password again.</p>

8.4

Tab Archiving



This tab is only available for data drives with the exception of DVD-ROM drives and DVD-RAM drives, though.

Here, you can display and edit the settings of the individual volumes for archiving.

<
Settings*
Status
Network*
Archiving
Tenant
Reseller
>

☒ Sub-archive size
150 GB

☐ Terminate after time
0 Year(s) 0 Month(s) 0 Day(s)

☐ Terminate according to data
☐ Weekly
☒ Monthly
☐ Yearly

Please remember that for technical reasons there is an upper limit of 150 GB for volumes for archiving. This upper limit is valid for time-based configuration, too.

Fig. 44: Tab Archiving

Select how volumes are supposed to be installed.

Select one of the following options:

Sub-archive size	Volumes are being created. As soon as a volume has reached the entered size, it is terminated and a new volume is configured.
-------------------------	---

	Configure the volume size by entering the respective value directly via the keyboard into the entry field. As an upper limit 150 GB have been preset by default; if the drive is smaller than 150 GB, the value is reduced to the respective size.
<i>Terminate after time</i>	<p>Volumes are being created. After the entered time the volume is terminated and a new volume is configured. The entered time starts as soon as new data is archived on the volume.</p> <p>Configure the time by entering the value directly via the keyboard into the entry fields.</p>
<i>Terminate according to data</i>	<p>Volumes are being created. The volume is terminated periodically, depending on the start time of the conversation, and a new volume is created.</p> <p>Configure the time by activating the respective radio button.</p> <ul style="list-style-type: none"> • <i>Weekly</i>: the volume is terminated one week after data has been archived on it for the first time. • <i>Monthly</i>: the volume is terminated one month after data has been archived on it for the first time. • <i>Yearly</i>: the volume is terminated one year after data has been archived on it for the first time.

8.5

Tab Write Protection



This tab is not available for all drives.

<
Settings*
Status
Archiving
Write Protection
Tenant
Reseller
>

☒ Keep always
☐ Remove after

Year(s)
 Month(s)
 Day(s)

☐ No write protection

Fig. 45: Tab Write Protection

Select whether and under which conditions the medium may be overwritten.

NOTICE!

If the drive has been mapped to a tenant, you cannot change any settings in this tab.

<i>Keep always</i>	<p>The medium may never be overwritten.</p> <p>When the medium has been terminated, another medium has to be used.</p>
<i>Remove after</i>	<p>The medium may be overwritten after the time entered here.</p> <p>When the medium has been terminated, it is protected for the time being. After the entered time the medium can be formatted manually and used for archiving again.</p> <p>Configure the time by entering the respective value directly via the keyboard into the fields <i>Year(s)</i>, <i>Month(s)</i>, <i>Day(s)</i>.</p>
<i>No write protection</i>	<p>The medium may be overwritten immediately.</p> <p>When the medium has been terminated, it can be formatted manually immediately and used for archiving again.</p>

ATTENTION!

Possible loss of data!

When using the setting *No write protection*, loss of data can occur if you use the drive for archiving! A medium terminated under this setting can be formatted manually immediately and used for archiving again.

8.6

Tab Tenant



This tab is exclusively available for the following drives:

- Data drives which are not used for import purposes
- Storage expansions

Here, you can display and select the tenant mapping of a drive. The way a drive is mapped depends on the drive's purpose of usage.

- Data drive

Only 1 tenant is mapped to a data drive. Only this tenant may use the drive, e. g. to archive recordings.

- Storage expansion

You can map several tenants to a storage expansion. The storage expansion is used for all mapped tenants. All recordings of the mapped tenants are copied to the storage expansion.

8.6.1

Map tenant for data drives

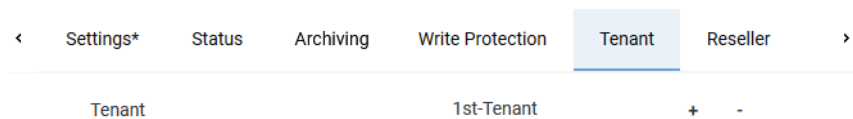


Fig. 46: Tab Tenant - data drive

+	Opens a window in which you can select and add a tenant.
-	Deletes the entry from the entry field.

1. Click on the button + next to the entry field.
2. Select a tenant from the list.

Tenant	
Tenant	Type
▼ System	System provider
1st-Tenant	Tenant
3rd-Tenant	Tenant
2nd-Tenant	Tenant

Add Cancel

Fig. 47: Add tenant - data drive

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

ATTENTION!

Possible loss of recordings!

When deleting a tenant mapping while the tenant is using the drive actively, then the job which is actively running on the drive is canceled. With immediate effect, the drive is not available anymore for the tenant or the jobs which have been defined.

Check back with the affected tenant before deleting a mapping to avoid the loss of data on part of the tenant.

8.6.2

Map tenant for storage expansions

<
Settings*
Status
Network*
Tenant*
Reseller
>



Tenants*


Tenant ↕

Contact Person ↕

1st-Tenant

Fig. 48: Tab Tenant - storage expansion

	Add	Opens a window in which you can select and add tenants.
	Remove	Deletes the selected entry from the list.

- Click on the icon  (*Add*).
- Select one or several tenants from the list.
To select several tenants or to revoke a selection, click on the respective line while holding the [Ctrl] key down.

Tenant			
Tenant		Type	
▼ System		System provider	
1st-Tenant		Tenant	
3rd-Tenant		Tenant	
2nd-Tenant		Tenant	

Add Cancel

Fig. 49: Add tenant - storage expansion

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



If you delete a tenant mapping while a copy job is writing data to the storage expansion, the current execution of the copy job is finished regularly. Starting with the next execution of the copy job, the recordings of the tenant are no longer copied to the storage expansion.

8.7

Tab Reseller



This tab is exclusively available for the following drives:

- Data drives which are not used for import purposes
- Storage expansions

Here, you can map resellers to the drive. From the perspective of the system provider, resellers are a kind of tenant who do not use the drive themselves but maps it to their own tenants or to other resellers.

<

Settings*

Status

Network*

Tenant*

Reseller

>

Tenant

Tenant ↕

Contact Person ↕

No records found

Fig. 50: Tab Reseller (example storage expansion)

- Data drive


Only 1 reseller can be mapped to data drives. Resellers who have been mapped a data drive cannot map this drive to more than one tenant.

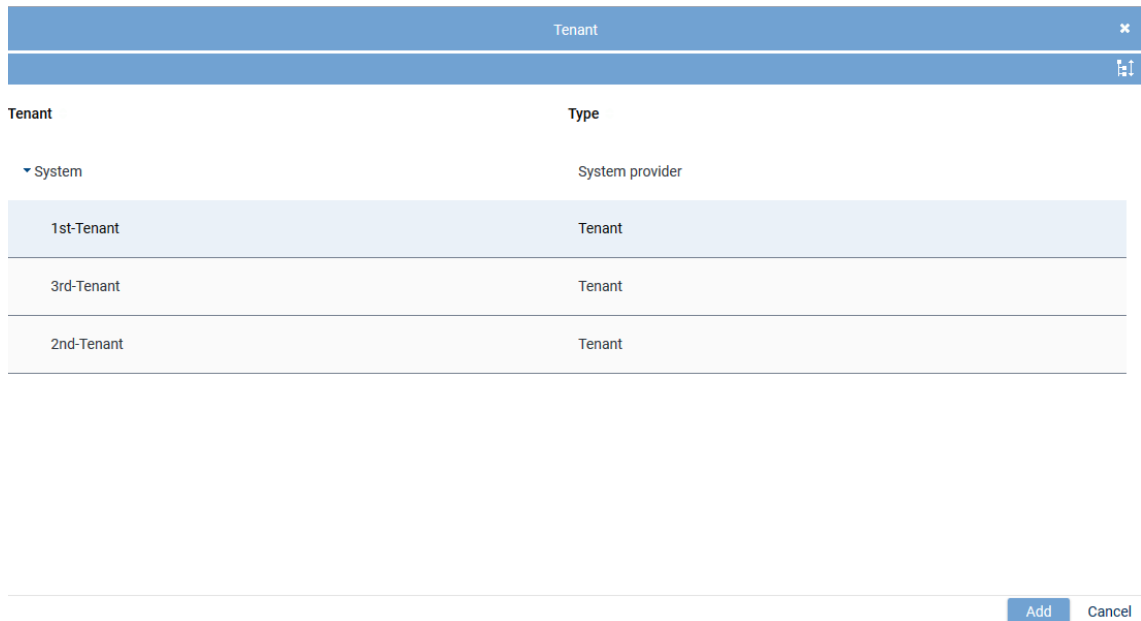
- Storage expansion

Drives which are used as storage expansions can be mapped to several resellers. Resellers who have been mapped a storage expansion can map this storage expansion to several of their own tenants. The storage expansion is used by all tenants that the storage expansion has been mapped to.

8.7.1 Map reseller

Depending on whether the drive is a data drive or a storage expansion, the buttons to add the tenant (reseller) differ.

1. To map a tenant (reseller) to the drive, click on the button **+** on the right of the entry field in case of a data drive or on the button  in the header of the group field in case of a storage expansion.
⇒ The window *Tenant* opens.
2. Select a tenant (reseller) from the list.



Tenant	Type
1st-Tenant	Tenant
3rd-Tenant	Tenant
2nd-Tenant	Tenant

Fig. 51: Add tenant - data drive

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

ATTENTION!

Possible loss of recordings!

When deleting a reseller mapping while a tenant of the reseller is using the drive actively, then the job which is actively running on the drive is canceled. With immediate effect, the drive is not available anymore for the reseller, its tenants or the jobs which have been defined.

Check back with the affected reseller before deleting a mapping to avoid the loss of data on part of the tenant.

8.8 Tab Post-Compression



This tab is only available for system storages.



To be able to use post-compression, you need one license of the type *Data Compression* for each channel which is supposed to be compressed.

Here, you can display and edit the settings for the post-compression of the recordings.

Compressing the saved conversations allows increasing the number of recordings which can be saved. In addition, the network bandwidth necessary for a possible transfer of recording data is decreased.

The standardized algorithm [G.729A](#) is used to compress the recordings. [G.729A](#) compresses audio data in stereo and in mono calls from 128 kbit/s to a data rate of 16 kbit/s and from 64 kbit/s to 8 kbit/s respectively. The precondition for using post-compression is that the conversations are available in G.711 or G.722 format (A-law or μ -law).

<
Settings*
Status
Post-Compression
>

☒ Active

☒ Without delay
☐ Delay

Month(s)
 Day(s)
 Hour(s)

Minute(s)

☐ Delay until exports have been finished

Compression type G729A

Tenants with Post-Compression
>

Fig. 52: Tab Post-Compression

Active	Select whether the recorded conversations are supposed to be compressed. <input checked="" type="checkbox"/> = Recordings are compressed. <input type="checkbox"/> = Recordings are not compressed.
Radio button for delay	Select whether the recorded conversations are supposed to be compressed directly during the saving process or after a delay period which can be entered freely. <ul style="list-style-type: none"> <i>Without delay</i> Recordings are compressed directly during the saving process. <i>Delay</i> Recordings are compressed after a delay period which can be entered freely. This makes sense, for instance, if you would like to use the recordings for audio analysis. Since the recording data has to be available in its uncompressed state if it is supposed to be used for audio analysis, it must not be compressed before the audio analysis has been completed. Configure the delay by entering the respective value directly via the keyboard into the 4 entry fields.
Delay until exports have been finished	Select whether the recorded conversations are supposed to be compressed directly during the saving process or after they have been exported successfully. NOTICE! Activate this check box if you would like to use the recording for audio analysis.
Compression type	The compression type is displayed here.



If the compression has been activated, data is only transferred to the storage expansion once it has been compressed.

A compression delay thus delays the transfer to the storage expansion, too.



Data which has already been compressed is not decompressed in the event of a data transfer even if no compression has been selected for the target drive. This means that compressed data is not decompressed neither when transferred between different system storages nor from one system storage to a storage expansion.



When activating the compression subsequently, i. e. when recordings already exist, then all recordings stored in the system storage are compressed retroactively. Recordings which have already been transferred to the storage expansion are **not** compressed retroactively.

Only new recordings which have directly been stored in compressed form are also transferred to the storage expansion in compressed form.

8.8.1

Group field Tenants with post-compression

Shows for which tenants a post-compression has been activated. This table is for your information only and cannot be edited. The tenant-specific activation of post-compression can be carried out by the system provider in the Tenants module and requires the respective license. For information about the Tenants module refer to the administration manual *System Configuration - User management (for system providers)*.

Tenants with Post-Compression

Name

1st-tenant

Fig. 53: Tenants with post-compression

Configure drives

Before you can configure a drive, you have to configure the server to which the drive has been connected in the Setup module so that the respective functions are activated on the drive.

1. In the Setup module, select the menu item *Servers*.
2. In the main view, select the server that the drive has been connected to.
3. Click on the tab *Usage* in the detail view.

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 ☒

Start ▾

End ▾

Receives data from

Name	Only Replay
No records found	

☐ Archiving

☒ Export

Replay server ▾





☒ Import

Recording architecture ▾

Fig. 54: Configure drive usage

4. Enter the following parameters:

Data storage	<p>Activate the function <i>Data storage</i> if recording data is supposed to be stored on this server.</p> <p>As soon as the function <i>Data storage</i> has been activated, all other optional functions of the group field are released for editing.</p> <p><input checked="" type="checkbox"/> = Function has been activated.</p> <p><input type="checkbox"/> = Function has not been activated.</p> <p>NOTICE! As long as the server is used in a running recording architecture, you can neither activate nor deactivate the data storage. If the data storage has been activated, you can only configure the remaining functions of the group field. To be able to activate or deactivate the function <i>Data storage</i>, you have to deactivate the recording architecture in which this server is used.</p>
---------------------	--

<i>Transfer data for replay</i>	<p>Here, you can enter servers to which the recorded data is supposed to be transferred for replay. The data is not stored on the target servers but deposited in a cache temporarily in order to be replayed.</p> <p>You can only configure this function if additional servers have been configured for replay and are available.</p> <p><input checked="" type="checkbox"/> = Function has been activated. <input type="checkbox"/> = Function has not been activated.</p> <p>If the function has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> • Add servers for replay to the list by clicking on the icon  (Add), see chapter "Add target server to a list", p. 57. In the function, all servers are displayed on which the function <i>Replay</i> has been activated. • Remove servers from the list by clicking on the icon  (Remove).
<i>Transfer data for data storage</i>	<p>Here, you can enter servers to which the recorded data is supposed to be transferred for data storage. The data is copied to the target server and stored there.</p> <p><input checked="" type="checkbox"/> = Function has been activated. <input type="checkbox"/> = Function has not been activated.</p> <p>If the function has been activated, you can adjust the following settings:</p> <ul style="list-style-type: none"> • Add servers for data storage to the list by clicking on the icon  (Add), see chapter "Add target server to a list", p. 57. • Remove servers from the list by clicking on the icon  (Remove). • Activate a certain period of time for transferring the data. <i>Activate period of time</i> <input checked="" type="checkbox"/>: Via the entry fields <i>from</i> and <i>to</i> you can define a period of time during which data is supposed to be transferred on a daily basis. <i>Activate period of time</i> <input type="checkbox"/>: Data is transferred permanently. <p>NOTICE! In distributed systems with slow network connections, the storage interval for the data transfer can be adjusted. The storage interval for the data transfer has to be configured by an ASC service technician or by an authorized partner company.</p>
<i>Receives data from</i>	<p>This table contains those servers which transfer data to this server.</p> <p>In the column <i>Name</i>, the name of the server appears from which data has been transferred.</p> <p>In the column <i>Only Replay</i>, the purpose of the transfer is displayed:</p> <p><input checked="" type="checkbox"/> = Data is transferred only for replay. <input checked="" type="checkbox"/> = Data is transferred for data storage.</p>
<i>Archiving</i>	<p>Select whether archiving recording data on the server is supposed to be possible.</p> <p><input checked="" type="checkbox"/> = Function has been activated. <input type="checkbox"/> = Function has not been activated.</p>
<i>Export</i>	<p>Select whether the manual export of recording data from the server is supposed to be possible.</p> <p><input checked="" type="checkbox"/> = Function has been activated. <input type="checkbox"/> = Function has not been activated.</p>

Import

Select whether the manual import of recording data to the server is supposed to be possible.


☒ = Function has been activated. From the drop-down list, select the recording architecture which is supposed to be used for import.

☐ = Function has not been activated.

5. Activate the function *Data storage* to allow storing recording data on the system storage drive of this server and activate the other functions.
6. If required, activate the functions for the transfer of the recording data to another server.




The transfer of recording data from one server to another server can only take place from system storage to system storage.

7. Activate all or individual functions *Archiving, Export, Import* - depending on which functions you would like to activate for the drives of the server.
8. Click on the button **Save** to save the settings.
9. Open the Drives module to configure the drive.
10. In the main view, select the drive you would like to configure.
If the drive has not been created yet, click on the icon  (*Create*) in the toolbar in the Drives module to create it.
11. Adjust all necessary settings in the tabs of the detail view.
You can change tabs without buffering without risking the loss of your settings.
12. To save the settings, click on the button **Save** in the detail view of the Drives module.
To discard all settings which have not yet been saved, click on the button *Reset*.

9.1

Add target server to a list

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

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

Fig. 55: Select server



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

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



10

Create job for FTP Bloomberg

To export voice recordings to Bloomberg Vault, an export job for an **FTP** drive must be created. Make sure that the following information is available:

- Bloomberg Vault user ID, e. g. *vr99xxx*
- The IP address of the Neo server must be registered by Bloomberg. Check with a GUI file transfer client such as WinSCP that you can access the **SFTP** server. **NOTICE!** The IP addresses of the servers which are supposed to connect with the **SFTP** site are whitelisted by the Bloomberg Vault SFTP Administration (BVTF) Tool.
- Access data (user name and password) for the **SFTP** site must be available.

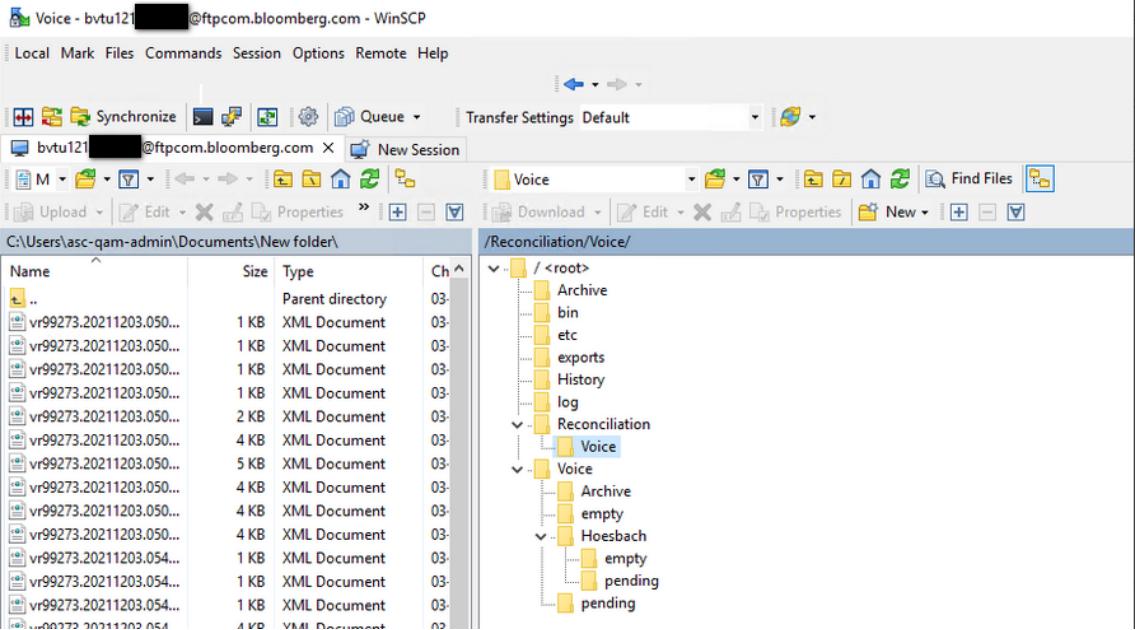


Fig. 56: WinSCP

1. Configure the following parameters in the .ini file *ASC.FileMan.ini* in *%ASC_INSTALL_PATH%\data\FileMan*:

<i>[BloombergVault] WorkingDirectory</i>	Working directory where the voice recordings are processed. Please note that the directory cannot be changed once the job has been started. The directory must be a local drive (no network drive) and be large enough to save a minimum of 7 days of voice recording files.	Default: <i>%ASC_ASCDATA%\Export</i> , e.g. <i>E:/ASCDATA/Export</i>
<i>[BloombergVault] MaxSendTime</i>	Time during which the zipped recording files must have been uploaded after having been created.	Default value: <i>3600 seconds/1 hour</i>
<i>[BloombergVault] ExpiryDuration</i>	It is recommended to keep the voice recording files on the recording server for a minimum of 7 days in case the files must be processed again. After this	Default value: <i>7 days</i>

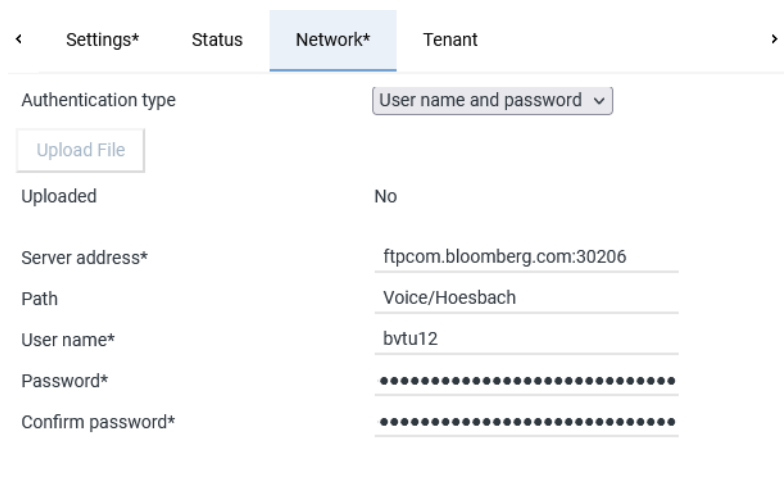
time, the voice files are automatically deleted from the recording server.

Create drives

For the Bloomberg Vault integration, 2 sFTP drives must be created: 1 for the voice files which are supposed to be uploaded from Neo to Bloomberg Vault, and 1 for the Reconciliation files generated by Bloomberg to check whether the upload was successful.

Create voice drive

1. In the detail view in the tab *Settings*, open the group field *Properties* and select the protocol *sFTP*.
2. In the detail view in the tab *Network*, enter the server address. The server address contains the port of the *sFTP* server delimited by a colon, e. g. *ftpc.com.bloomberg.com:30206*.
3. In the detail view in the tab *Network*, enter the path to the folder to which the voice recordings are uploaded, e. g. *Voice/Hoesbach*.



The screenshot shows the 'Create voice drive' configuration form with the 'Network' tab selected. The form includes the following fields and controls:

- Authentication type:** A dropdown menu set to 'User name and password'.
- Upload File:** A button.
- Uploaded:** A status indicator showing 'No'.
- Server address*:** A text input field containing 'ftpc.com.bloomberg.com:30206'.
- Path:** A text input field containing 'Voice/Hoesbach'.
- User name*:** A text input field containing 'bvtu12'.
- Password*:** A text input field with masked characters (dots).
- Confirm password*:** A text input field with masked characters (dots).

Fig. 57: Create voice drive - tab Network

Create reconciliation drive

The path indicates the folder where the reconciliation files generated by Bloomberg are saved. The recording server downloads these files to check whether the export was successful and to repeat failed exports.

1. In the detail view in the tab *Network*, enter the server address. The server address contains the port of the *sFTP* server delimited by a colon, e. g. *ftpc.com.bloomberg.com:30206*.
2. In the detail view in the tab *Network*, enter the path to the folder where the reconciliation files are supposed to be saved, e. g. *Reconciliation/Voice*.

Settings*	Status	Network*	Tenant
Authentication type		User name and password ▾	
Upload File			
Uploaded		No	
Server address*		ftpcbm.bloomberg.com:30206	
Path		Reconciliation/Voice	
User name*		bvtu12	
Password*		
Confirm password*		

Fig. 58: Create reconciliation drive - tab Network

Create export job

1. Create an export job in the application System Configuration in the Export module.
2. Enter the user ID.

NOTICE! Observe that the maximum file size for uploaded zipped files is 100 MB. The zipped recording files are uploaded within the period configured in the .ini file *ASC.FileMan.ini* (default value *3600 seconds/1 hour*) as long as the maximum file size is not exceeded.

Details*	Schedule	Criteria	Drives*
Help			
Name*	Bloomberg		
Description			
Status	Released ▾		
Export format	Bloomberg ▾		
User ID*	vr99xxx		
File size for upload	100 MB		
Codec	Linear PCM16 ▾		
Date format in xml	yyyy-MM-dd'T'HH:mm:ss.SSS'Z' ▾		

Fig. 59: Create export job: Export module tab Details

The export job must contain 2 drives: 1 for the voice recordings to be uploaded and 1 for the reconciliation files.

Bloomberg			
Details*	Schedule	Criteria	Drives*
Audio*		Voice	+
Reconciliation *		Reconciliation	+

Fig. 60: Create export job: Export module tab Drives



For more information about creating export jobs refer to the administration manual for tenants
System Configuration - Export of recordings.

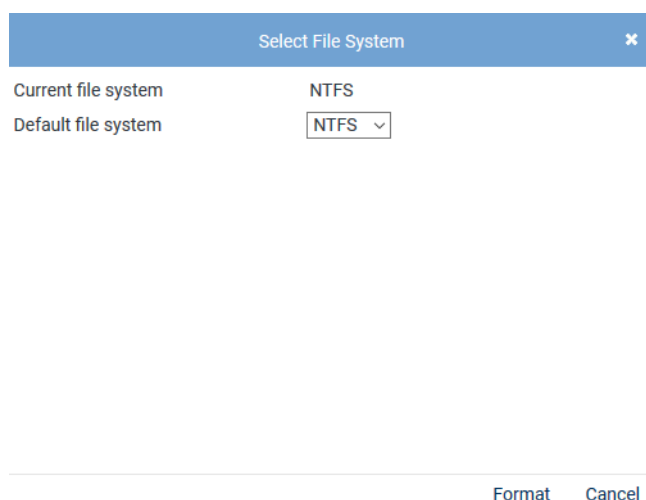
11 Formatting media (DVD and RDX drives)

NOTICE! If you would like to format media, the following preconditions apply:

- There must not be a hardware write protection for the medium.
- The drive and the medium must have been mapped to the same tenant.
- As long as a drive has been mapped to a tenant, only this tenant may eject, remove or format the medium, not the system provider, though.
- It may not be a system drive or a database drive.
- The currently inserted medium may not have an active overwrite protection.

If a job is active on the drive, the inserted medium may only be formatted if the medium:

- has been terminated or
 - is empty but the format is not identical with the preset format or
 - contains third-party or unknown data.
1. In the main view, select the drive the medium of which you would like to format.
 2. Click on the menu item *Drives > Format* in the toolbar.
 3. From the drop-down list *Default file system*, select the file system with which the medium is supposed to be formatted.



Select File System

Current file system NTFS

Default file system NTFS

Format Cancel

Fig. 61: Format drive manually

4. To format the medium with the selected file system, click on the button *Format*. To cancel the process and not format the medium, click on the button *Cancel*.

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Glossary

Amazon S3

Amazon Simple Storage Service; Cloud storage

ASCFS

ASC File System. A proprietary file system of ASC for DVD-RAM media.

AWS

Amazon Web Services is a cloud platform providing different services that offer diversified functions and are provided in globally distributed data centers.

CIFS

Common Internet File System stands for network share. The term was introduced by Microsoft in 1996 and describes an advanced version of SMB (Server Message Block). CIFS builds on NetBIOS over TCP/IP and SMB and, in addition to file and printer sharing, offers additional services such as Windows's RPC and NT domain service. Name resolution continues to be carried out via NBT broadcast message or in general via the NBT Name Service or via DNS if NBT is not available. (Source: Wikipedia 4th May 2017)

DNS

Domain Name System is a worldwide directory service which administrates the name domain of the Internet. Its main task is to answer the queries regarding name resolutions. (Source: Wikipedia 5th April 2017)

FTP

File Transfer Protocol: Network protocol for file transfer

G.729A

G.729 Annex A is a codec for the compressing of audio into digital signals with low complexity, fixed point arithmetic and a data rate of 8 kbit/s.

ID

Identifier, ID

NAS

Network Attached Storage is a file-level computer data storage server connected to a computer network providing data access to other devices on the network. NAS is usually used to provide independent storage capacity in a computer network without major effort. (Source: Wikipedia 4th May 2017)

SFTP

Secure File Transfer Protocol (SFTP) has been created for Secure Shell (SSH) as an alternative to the File Transfer Protocol (FTP) allowing encryption.

SMB

Server Message Block is a network communication protocol for providing shared access to files, printers, and serial ports between nodes on a network. It also provides an authenticated inter-process communication mechanism. (Source: Wikipedia 24th October 2019)

TTL

Time to live is the retention period indicating for how long a recording is supposed to be held available in the system.

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)

USB

Universal Serial Bus