

# ReDAT

Recording Systems

ReDAT eXperience  
Release notes v 2.37.2



RETIA, a.s.  
Pražská 341, 530 02 Pardubice  
Czech Republic

[retia.eu](http://retia.eu)

MEMBER OF  CSG  
aerospace

Issued: 10/2023 v 2.37.2 rev. 1

Producer:

RETIA, a.s.  
Pražská 341  
530 02 Pardubice  
Czech Republic



with certified system of quality control by ISO 9001 and member of AOBP



# Contents

---

<b>1. TECHNICAL SPECIFICATIONS</b>	<b>4</b>
1.1 HARDWARE	4
1.2 SOFTWARE	4
1.2.1 PC with ReDAT eXperience	4
1.2.2 User computer requirements	4
1.2.3 Browsers	4
<b>2. NEW FUNCTIONS AND MODIFICATIONS</b>	<b>5</b>
2.1 INSTALLATION ON DB OF THE SPECIFIED NAME	5
2.2 CATALOG – EXPORT HID RECORDS	5
2.2.1 Single export HID records	5
2.2.2 Synchronous export of HID records	6
2.3 CATALOG – EXPORT OF AUDIO RECORDS	7
2.4 CATALOG – PLAYER – PAUSE PLAYBACK	8
2.5 CATALOG – PLAYER – SKIP SILENCE	8
2.6 CATALOG – NEW KEYBOARD LAYOUT	8
2.7 CATALOG – EXPORT SYNCHRONIZED RECORD	9
2.7.1 Online export of synchronized record	9
2.7.2 Offline export of synchronized record	10
2.8 CATALOG – BULK EXPORT FROM TIMELINE	11
2.8.1 Online export from Timeline	11
2.8.2 Offline export from Timeline	12
2.9 MONITORING – EXPORT TO CSV	13
2.10 AUDIT – SWITCH ACCESS	14
2.11 AUDIT – LANGUAGE IN THE COLUMN DETAILS	14
2.12 LDAP	14
2.13 SYSTEM – VOX MODE FOR CHANNEL TYPE A.H323	15
2.14 SET REDUNDANT CHANNEL	15
2.15 SUPPORT FOR GSM-R IP RECORDING	15
2.16 STORAGE MANAGER - MEDIA	16
2.16.1 Formatting USB and RDX media	16
2.16.2 Eject USB drive on Windows OS	16
2.17 OS LINUX - EXPORT SCREEN/AUDIO	16
<b>3. NEW FEATURES OF REDAT CLIENT 2.37.2</b>	<b>17</b>
3.1 LIMIT OF THE MAXIMUM NUMBER OF USER LOGINS IN ONE TIME	17
3.2 EXTENSION MODULES	17
<b>4. NEW FEATURES OF REDAT RECORDER 3.11</b>	<b>17</b>
4.1 REDAT RECORDER – BASIC REDAT RECORDER GUI FEATURES	17
<b>5. KNOWN INCOMPATIBILITIES</b>	<b>18</b>

# Version 2.37.2 - November 10, 2023

## Released for OS Windows, OS Linux

## 1. Technical specifications

---

### 1.1 Hardware

In the technical specifications, the minimum requirements for the HW PC where the eXperience system is installed have been modified and increased:

- Processor min. 3,7 GHz, 4 cores
- RAM 16 GB (plus 1 GB RAM for every million records in a DB)

### 1.2 Software

#### 1.2.1 PC with ReDAT eXperience

- Windows Server 2016, Windows Server 2019, Windows Server 2022 (not supported for Alcatel-Lucent TSAPI Premium Server).
- Only the Windows Server operating system, not older than 8 years from its first release, is supported.
- It is also possible to install eXperience on virtual servers. Virtualization platforms with the operation system according to the technical conditions are supported.
- Installing eXperience introduces the following components:
  - OpenJDK 1.8 or 17
  - Microsoft .NET Framework 3.5 a 4

#### 1.2.2 User computer requirements

**User computer requirements for connection to ReDAT eXperience and installation on the user computer**

- Windows OS: Microsoft-supported operating systems. (Windows 7 and earlier versions are not supported.)
- Some limitations for Linux OS (Mac OS) versions
- For the ReDAT Inspector application that is installed on the user PC, the same conditions as for eXperience must be guaranteed, see chapter [HARDWARE](#).

#### 1.2.3 Browsers

This eXperience version has been released for the following browser versions:

- Google Chrome: 117.0.5938.132
- Microsoft Edge: 117.0.2045.47
- Firefox ESR: 102.14.0esr
- Firefox: 118.0.1

More information in the manual **RD 044 001 Technical specifications**.

## 2. New functions and modifications

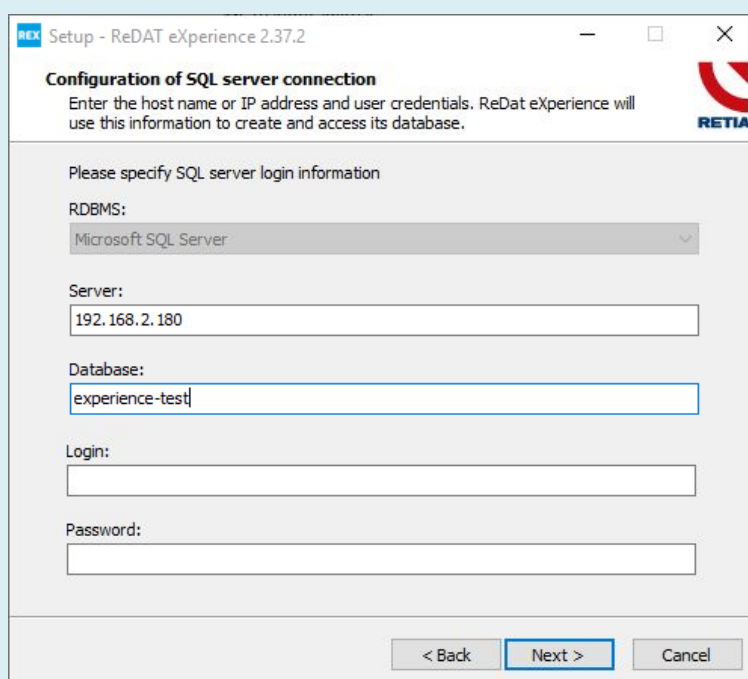
### 2.1 Installation on DB of the specified name

The option to select a database name has been added to the installer. The application can work with a database having a name other than "experience".

This feature allows to connect two eXperience systems to one SQL server (e.g., experience-production and experience-test).

Sufficient server performance is required; therefore, MS SQL Express is not supported. (The MS SQL Express check service can be installed but will not work for a database name other than experience).

Example: When installing eXperience, the *Database* field is offered to enter the name of the DB where the application will be installed. (e.g. *experience-test*)



Setup - ReDAT eXperience 2.37.2

**Configuration of SQL server connection**  
Enter the host name or IP address and user credentials. ReDat eXperience will use this information to create and access its database.

Please specify SQL server login information

RDBMS:  
Microsoft SQL Server

Server:  
192.168.2.180

Database:  
experience-test

Login:  
[Empty field]

Password:  
[Empty field]

< Back   Next >   Cancel


**Note:** A secondary database is created using the SQL install script. Creating a database by transferring from another DB and renaming it is not excluded but is not supported.

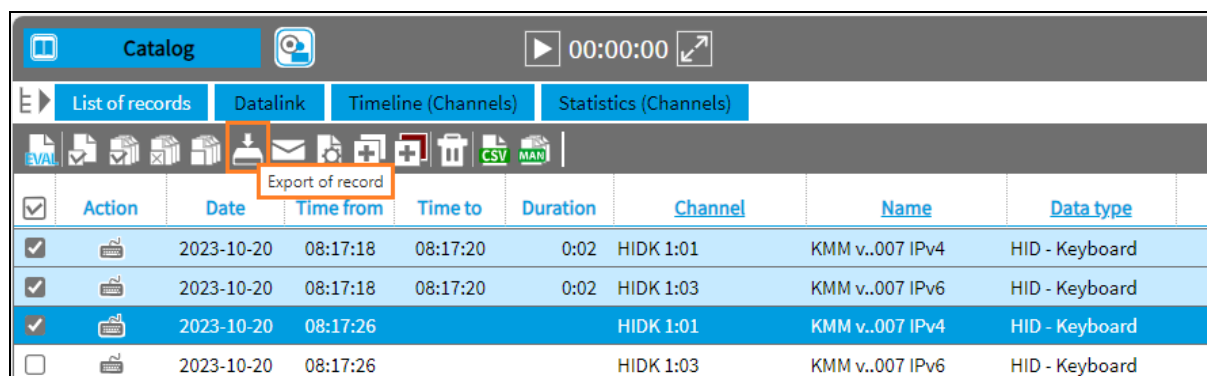
### 2.2 Catalog – Export HID records

Exporting of HID records is enabled starting with version 2.37.2:

- [SINGLE EXPORT HID RECORDS](#)
- [SYNCHRONOUS EXPORT OF HID RECORDS](#)

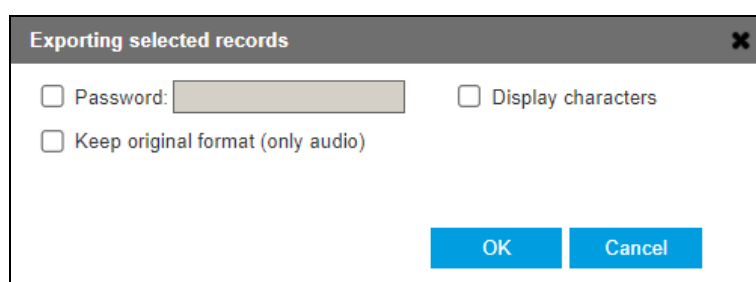
#### 2.2.1 Single export HID records

Export of HID single records (including HIDK, HIDM, HIDT types) can be invoked by **right-clicking** on the selected HID record or using the  **Export of record** icon.



Action	Date	Time from	Time to	Duration	Channel	Name	Data type
<input checked="" type="checkbox"/>	2023-10-20	08:17:18	08:17:20	0:02	HIDK 1:01	KMM v..007 IPv4	HID - Keyboard
<input checked="" type="checkbox"/>	2023-10-20	08:17:18	08:17:20	0:02	HIDK 1:03	KMM v..007 IPv6	HID - Keyboard
<input checked="" type="checkbox"/>	2023-10-20	08:17:26			HIDK 1:01	KMM v..007 IPv4	HID - Keyboard
<input type="checkbox"/>	2023-10-20	08:17:26			HIDK 1:03	KMM v..007 IPv6	HID - Keyboard

The *Exporting selected records* window appears. Confirm the export selection by clicking OK.



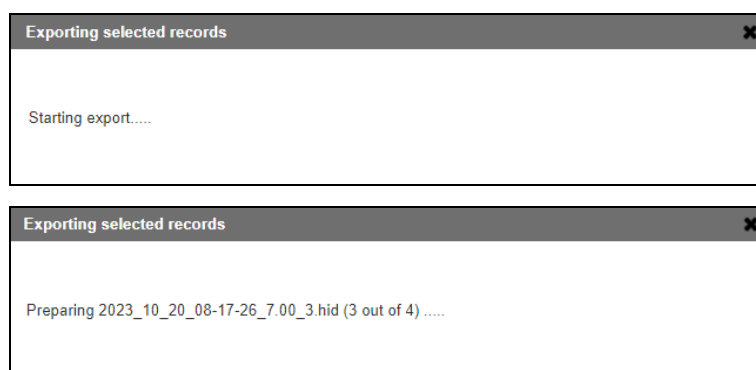
**Exporting selected records** [X]

Password:   Display characters

Keep original format (only audio)

OK Cancel

The export progress is displayed.



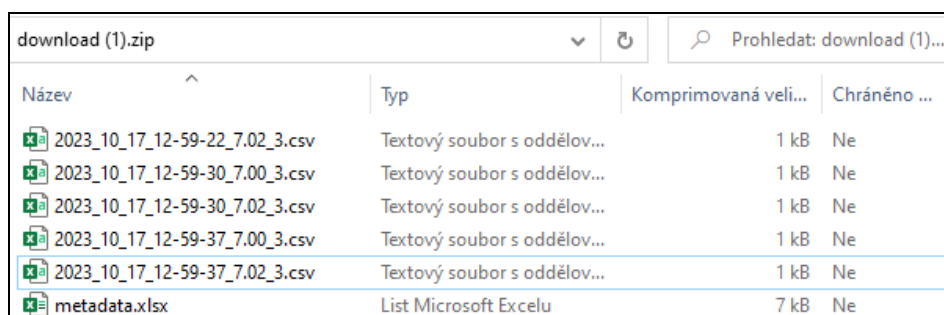
**Exporting selected records** [X]

Starting export.....

**Exporting selected records** [X]


Preparing 2023\_10\_20\_08-17-26\_7.00\_3.hid (3 out of 4).....

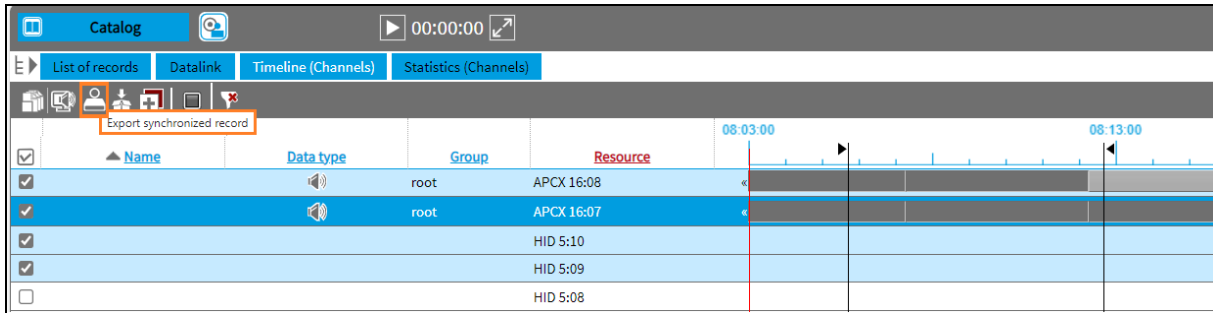
The selected records are exported to the local disk. One or more records can be exported to the local disk as a ZIP file. Each HID stream is saved as a separate CSV file.



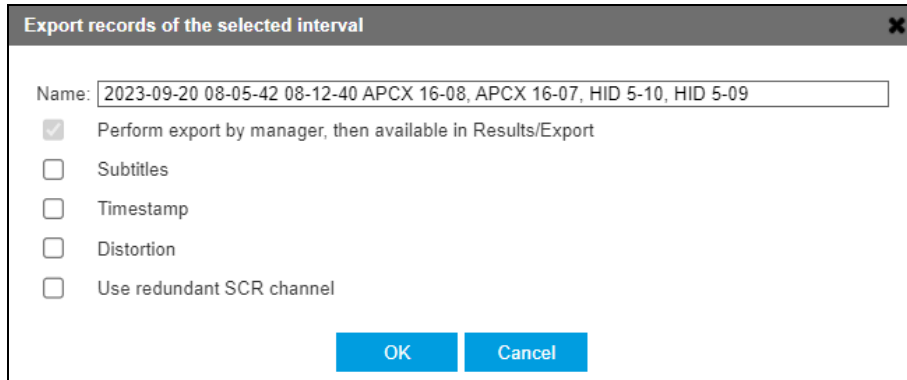
Název	Typ	Komprimovaná veli...	Chráněno ...
2023_10_17_12-59-22_7.02_3.csv	Textový soubor s oddělov...	1 kB	Ne
2023_10_17_12-59-30_7.00_3.csv	Textový soubor s oddělov...	1 kB	Ne
2023_10_17_12-59-30_7.02_3.csv	Textový soubor s oddělov...	1 kB	Ne
2023_10_17_12-59-37_7.00_3.csv	Textový soubor s oddělov...	1 kB	Ne
2023_10_17_12-59-37_7.02_3.csv	Textový soubor s oddělov...	1 kB	Ne
metadata.xlsx	List Microsoft Excelu	7 kB	Ne

## 2.2.2 Synchronous export of HID records

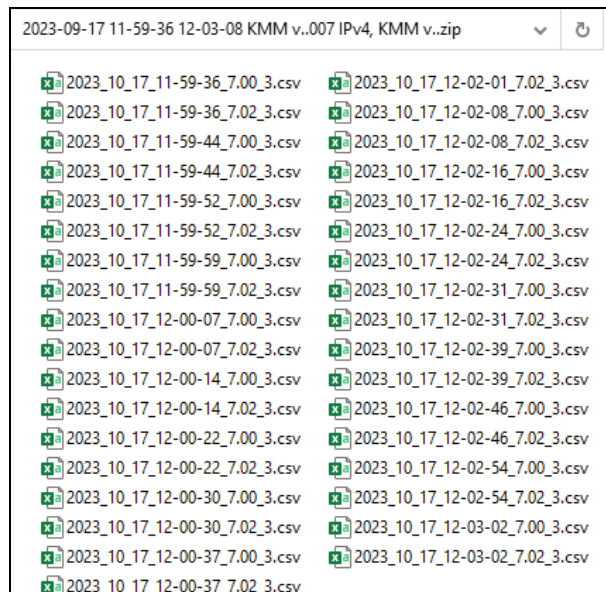
To export HID records synchronously, select them in the Catalog - Timeline agenda and enable export from the toolbox using the  **Export synchronised record** icon.



The *Export records of the selected interval* window appears. Confirm the export with the OK button.

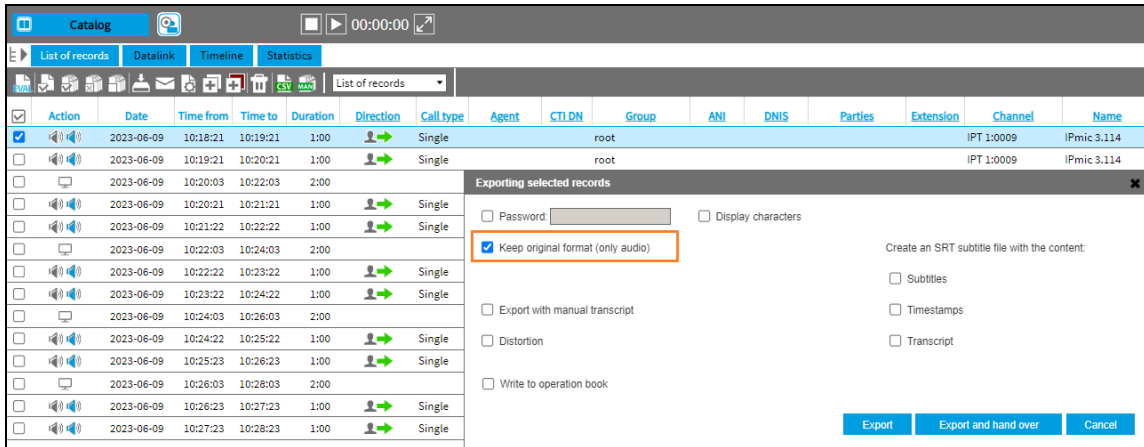


The selected records are exported to the local disk as a zip file. Each HID stream is saved in a separate CSV file.

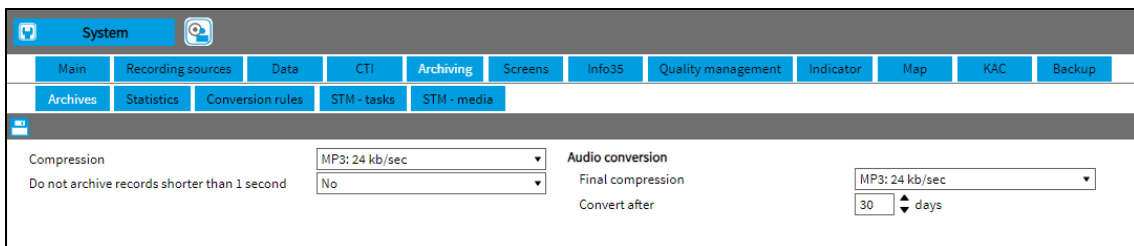


## 2.3 Catalog – Export of audio records

If you select *Keep original format (only audio)*, the record is exported as it is stored in the archive. The new option will appear as if the record has been archived, even if the record is to be archived but the export has been requested at a time when the record has not yet been archived.



The exported file will be determined by the global compression request (*System/Archiving/Archives*) or the compression request for the channel (which has higher priority).



## 2.4 Catalog – PLAYER – PAUSE playback



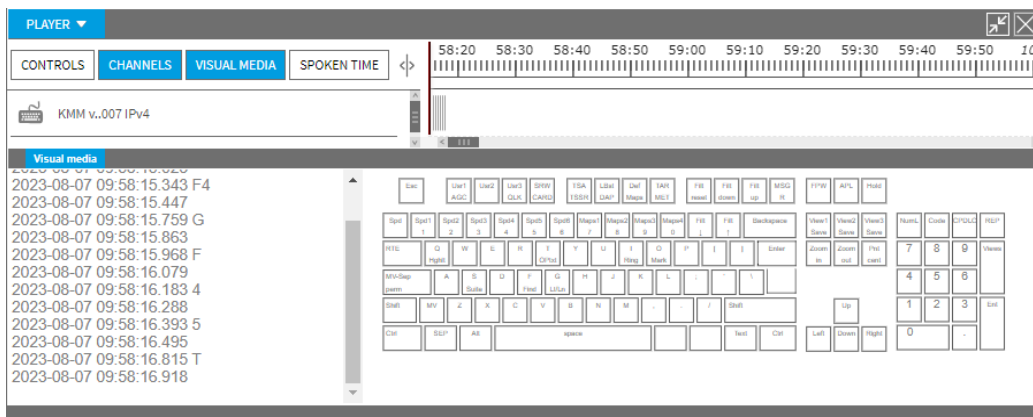
The default **playback timeout limit** is set to 3600 seconds (1 hour). This means that the user can pause playback (PAUSE button) for up to one hour. If the user returns to playback and then resumes listening, playback will continue from where it was interrupted.

## 2.5 Catalog – PLAYER – Skip silence

A new setting *voice\_setting\_reset* has been introduced to **deactivate the "Skip silence"** option set during the previous playback. A setting set as *voice\_setting\_reset* = 1 on a new playback will deactivate the "Skip silence" option.

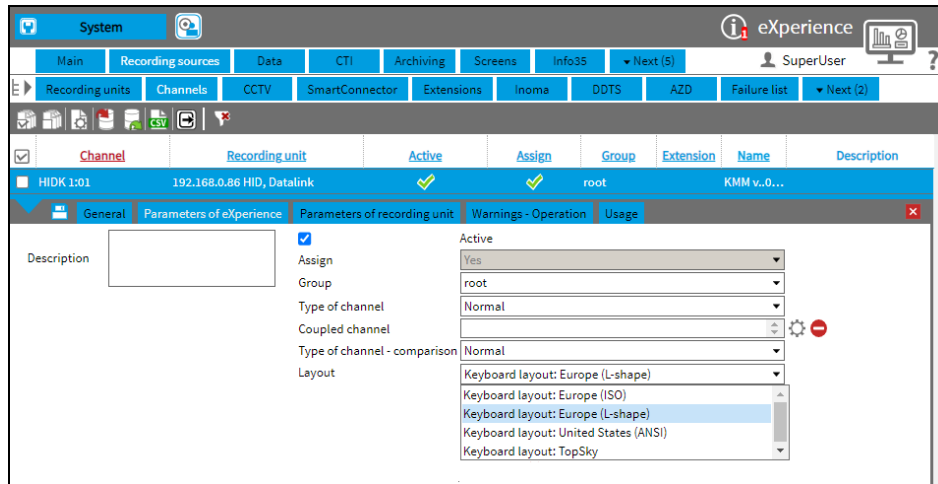
## 2.6 Catalog – New keyboard layout

A new **TopSky** keyboard type has been added to the keyboard layout.





Newly introduced automatic keyboard layout selection according to channel settings. In the System - Recording Sources - Channels menu, the **Layout** parameter (for HIDK channels only) is displayed for selecting the keyboard type in the player.



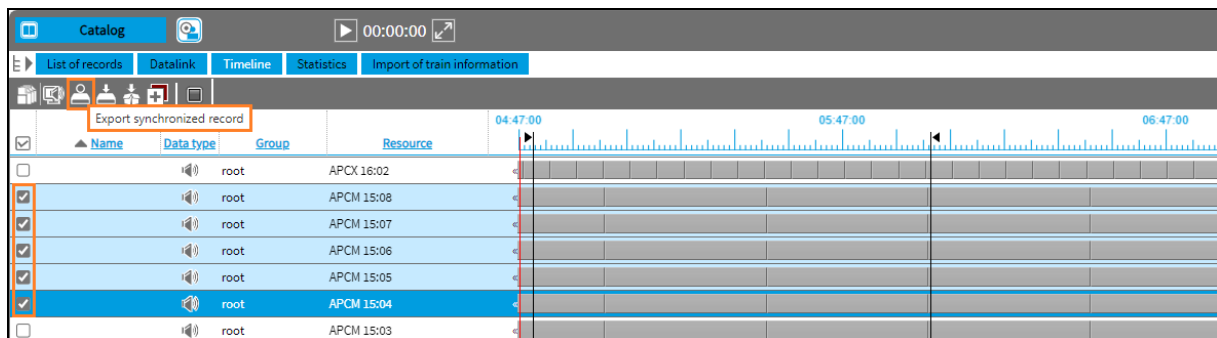
## 2.7 Catalog – export synchronized record


The export of a synchronised record is now divided into online and offline export.

- [ONLINE EXPORT OF A SYNCHRONISED RECORD](#)
- [OFFLINE EXPORT OF A SYNCHRONISED RECORD](#)

The export dialogue has been adapted accordingly. The dialogue shows the field *Name* of the exported file, the user can edit the file name.

The **Timeline (Channels)** tab offers the option to export the synchronized recording in the mode **Channels**.



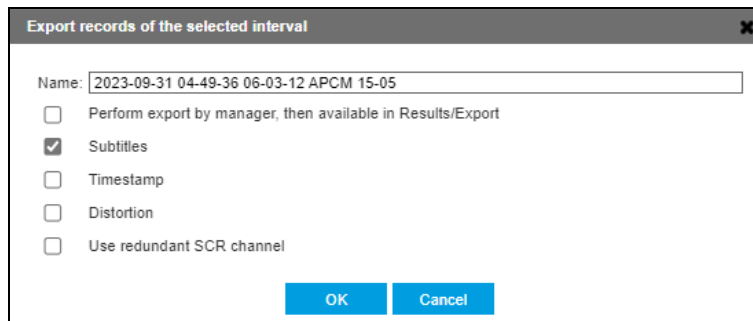
The icon **Export synchronized record**  is in the top panel and exports the records of the selected interval. Depending on the number and the type of channel selected, the following dialogues will open according to the following limits:

**Limits:** max. 2 audio channels, interval up to 20 min - online  
3 or more audio channels, screen channels, interval longer than 20 min - offline

### 2.7.1 Online export of synchronized record

Online export is limited to a maximum of 2 audio channels and a total recording length of up to 20 minutes.

The *Export records of the selected interval* dialog box is displayed. A check box in the window allows you to switch from online export to offline export (*Perform export by manager*). The file name is editable and can be changed by the user. You can choose to include subtitles and timestamps (both merged as a single merge.srt file), or to distort recordings and use a redundant SCR channel.

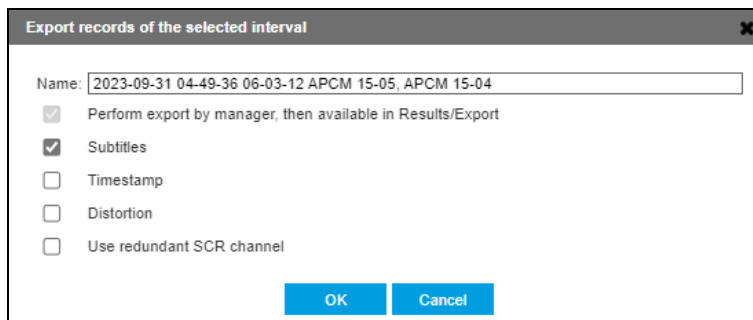


The **Name** field sets a default file name consisting of the interval parameters and the included channels (a media file flv or wav saved in a zip file will have the same file name). The file name in the Name field can be edited by the user.

If the recordings exceed the online download limit, i.e. 3 or more channels have been selected, an interval longer than 20 minutes or a screen channel, an offline export will be forced.

## 2.7.2 Offline export of synchronized record

If the limit is exceeded (3 or more channels or an interval of more than 20 minutes or the selection of the screen channel), the offline export will be forced.



The downloaded files are available in **Results/Export**.

Results									
Incidents Selections Evaluations Export									
✓	Action	Name	State	Type	Done	Group	Created by	Created at	
<input type="checkbox"/>		2023-09-17 11:57:00 13:56:59 K...	Waiting (Filled)	Synchronized record	0%	root	SuperUser,	2023-10-17 13:58:36	
<input type="checkbox"/>		export_2023-08-14 09:35-24	Done	FILE	100%	root	SuperUser,	2023-08-14 09:39:36	
<input type="checkbox"/>		export_2023-10-30 12:21-45	Done	FILE	100%	root	SuperUser,	2023-10-30 12:22:59	
<input type="checkbox"/>		export_2023-10-30 12:25-37	Done	FILE	100%	root	SuperUser,	2023-10-30 12:26:53	
<input type="checkbox"/>		export_2023-10-30 14:34-39	Done	FILE	100%	root	SuperUser,	2023-10-30 14:34:49	
<input type="checkbox"/>		export_2023-10-31 08:11-15	Done	FILE	100%	root	SuperUser,	2023-10-31 08:11:24	
<input type="checkbox"/>		pkg_2023-08-07_11-14-01	Done	Package	100%	root	SuperUser,	2023-08-07 11:14:04	

In the following cases, the export will not be done to the ZIP file, but will continue to be exported:


- Screen and Screen with Audio to **.FLV**
- Audio to **.WAV**

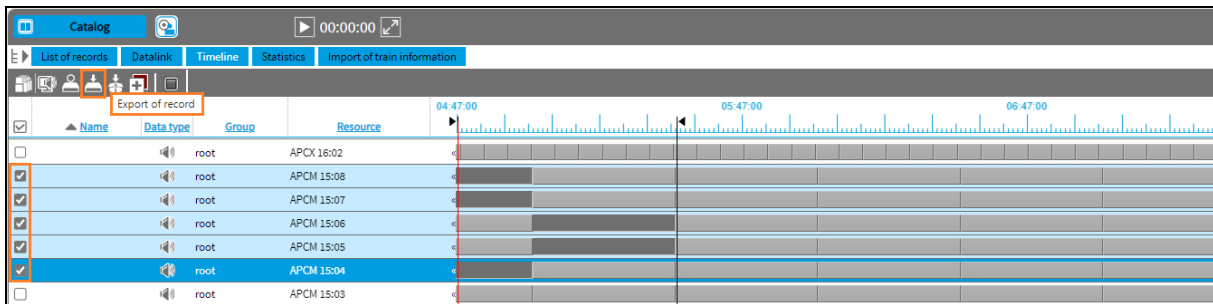
Offline export can also be exported from the player.

## 2.8 Catalog – Bulk export from Timeline

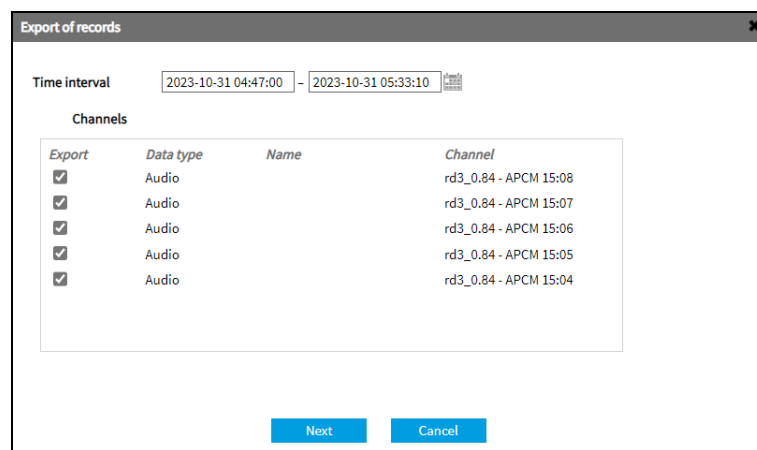
A new bulk export function from Timeline has been introduced. A new export icon has been added to the toolbox, which is the same as in the List of records. It supports both online and offline export.

- [ONLINE BULK EXPORT FROM TIMELINE](#)
- [OFFLINE BULK EXPORT FROM TIMELINE](#)

The **Timeline (Channels)** tab provides the option to bulk export records in the *Channels* mode. Use the **Export of records**  icon that is in the top panel to export the selected records in Timeline. The function downloads all records in the .zip file (metadata, verification files, records) that belong to the interval.



The list of channels selected for export is displayed.



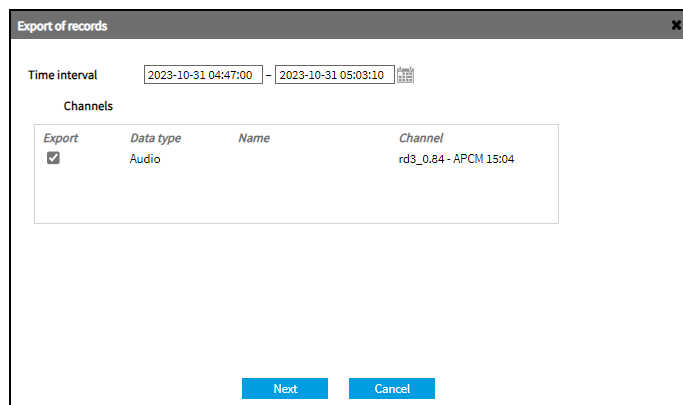
Depending on the number and type of channels selected, the following dialogues will open according to the following limits:

**Limits:** max. 2 audio channels, interval up to 20 min - online

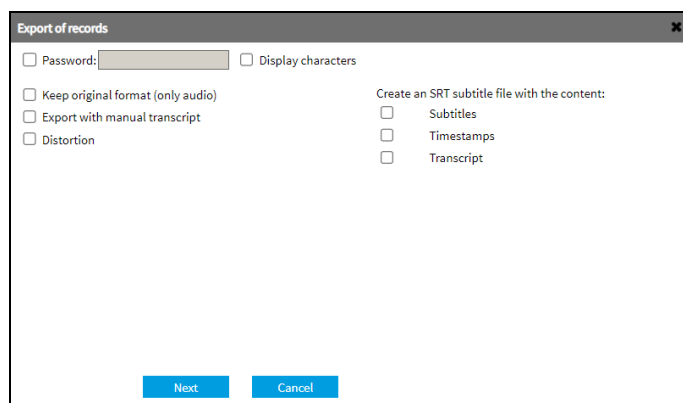
more than 2 audio channels, screen channels, interval longer than 20 min - offline

### 2.8.1 Online export from Timeline

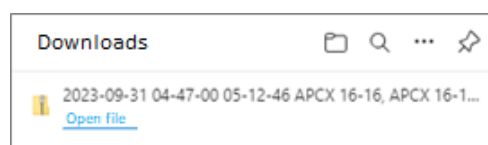
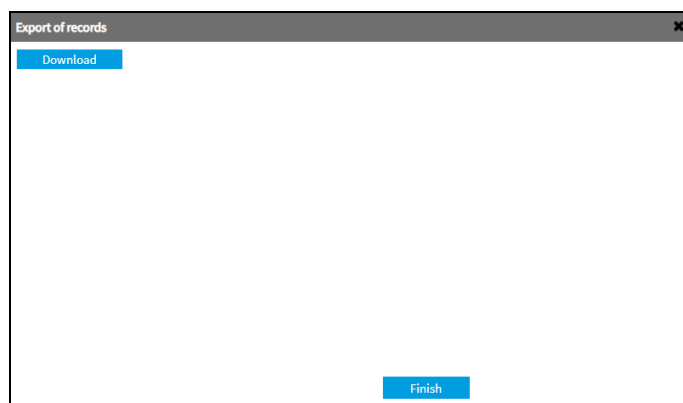
The limit is set to 1 or 2 audio channels and a total recording length of up to 20 minutes. If the number of selected records is less than this limit, the *Export of records* window appears, listing the channels to be exported and the time interval.



The **Next** button displays a dialog box with options to enter a password, keep original format (audio only), export files with manual transcript, or select the distortion. There is also an option to decide whether to export a \*.srt file containing subtitles and timestamps. If the records contain transcripts, they can be included into a common \*.srt file.

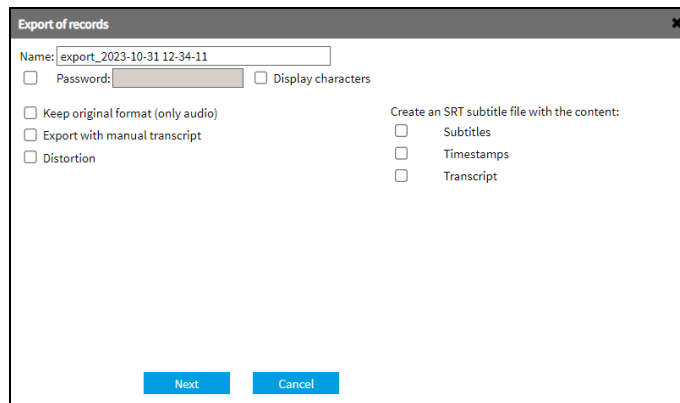


The data (zip file) is downloaded to the user's PC by clicking the **Download** button, which completes the export. The **Finish** button closes the dialog box.

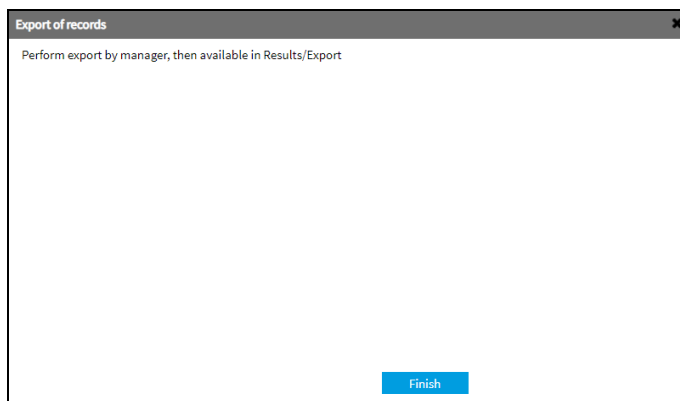


## 2.8.2 Offline export from Timeline

If 3 or more channels, an interval greater than 20 minutes or a screen channel are selected, the package will automatically be forced to be exported offline. Continue with the **Next** button.




Continue and confirm **Perform export by manager** which will export the records offline. The records will be then be available in the **Results/Export** agenda. The button **Finish** closes the dialog box.



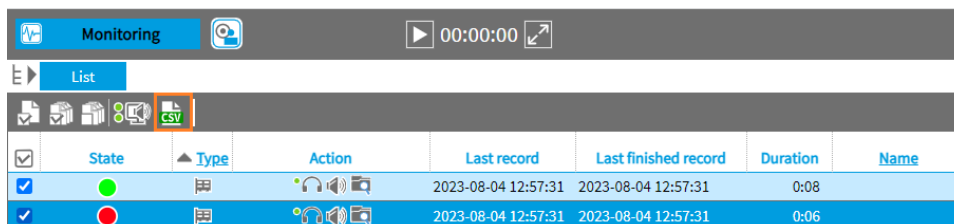
The downloaded files will then be available in **Results/Export**.

Akce	Název	Stav	Typ	Hotovo	Skupina	Vytvořil	Vytvořeno
<input type="checkbox"/>	2023-09-17 11:57:00 13:56:59 K... Čekající (Naplněná)	Čekající (Naplněná)	Synchronized record	0%	root	SuperUser,	2023-10-17 13:56:58
<input type="checkbox"/>	export_2023-08-14 09:35-24	Hotovo	FILE	100%	root	SuperUser,	2023-08-14 09:39:36
<input type="checkbox"/>	export_2023-10-30 12-21-45	Hotovo	FILE	100%	root	SuperUser,	2023-10-30 12:22:59
<input type="checkbox"/>	export_2023-10-30 12-25-57	Hotovo	FILE	100%	root	SuperUser,	2023-10-30 12:28:53
<input type="checkbox"/>	export_2023-10-30 14-34-59	Hotovo	FILE	100%	root	SuperUser,	2023-10-30 14:34:49
<input type="checkbox"/>	export_2023-10-31 08-11-15	Čekající	FILE	0%	root	SuperUser,	2023-10-31 08:11:24
<input type="checkbox"/>	pkg_2023-08-07_11-14-01	Hotovo	Package	100%	root	SuperUser,	2023-08-07 11:14:04

## 2.9 Monitoring – Export to CSV

A new icon  has been added to the top panel of the Monitoring agenda.

In the **Monitoring** agenda it is possible to **export the displayed columns to CSV**, similarly to the Catalog agenda. The function is freely accessible - it is not tied to any role permissions.



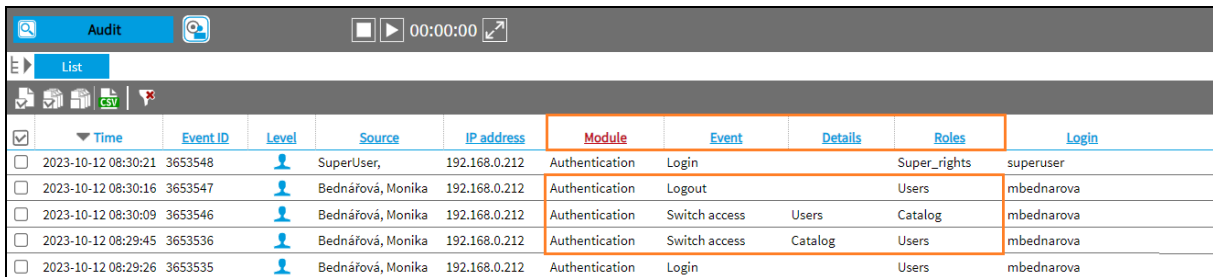
The result is a downloaded monitoring.csv file saved to the local disk. The Status column is not exported and does not appear in the exported table.









## 2.10 Audit – Switch access

We have implemented a new event in the **Audit** agenda called **Switch access**.

If a user is assigned multiple roles and during the work course of using with eXperience system they switch and log in to a different role, this event will be displayed as a **Switch access** event. The role to which the user has switched is entered in the **Details** column. This means that the user's next actions will already be logged with this role. At the same time, the original role before the switch is listed in the **Roles** column.



Time	Event ID	Level	Source	IP address	Module	Event	Details	Roles	Login
2023-10-12 08:30:21	3653548		SuperUser,	192.168.0.212	Authentication	Login		Super_rights	superuser
2023-10-12 08:30:16	3653547		Bednářová, Monika	192.168.0.212	Authentication	Logout		Users	mbednarova
2023-10-12 08:30:09	3653546		Bednářová, Monika	192.168.0.212	Authentication	Switch access	Users	Catalog	mbednarova
2023-10-12 08:29:45	3653536		Bednářová, Monika	192.168.0.212	Authentication	Switch access	Catalog	Users	mbednarova
2023-10-12 08:29:26	3653535		Bednářová, Monika	192.168.0.212	Authentication	Login		Users	mbednarova

The other columns for this event are displayed in the same way as for login/logout: **Level** =  User action, **Module** = Authentication.

## 2.11 Audit – Language in the column Details

Due to the unclear eXperience language settings and the ability to change the language for the Audit agenda, we have added instructions and clarifications to the documentation (RD 044 010 Audit, RD 044 004 Installation).

In the Audit agenda, the text language in the Details column is controlled by 2 options:

- 1) only EN is used – it applies to most strings
- 2) the default language is used - the default language can be only EN or CZ

The system language is set in the **config\_rex.php** configuration file (in the path: C:\appserv\www\experience\app). It is the item **CFG\_LANGUAGE** and the choice is cz / en.

Set the default language to English: `define("CFG_LANGUAGE", "en");`

Set the default language to Czech: `define("CFG_LANGUAGE", "cz");`

For the installation that does not use the EN user language:

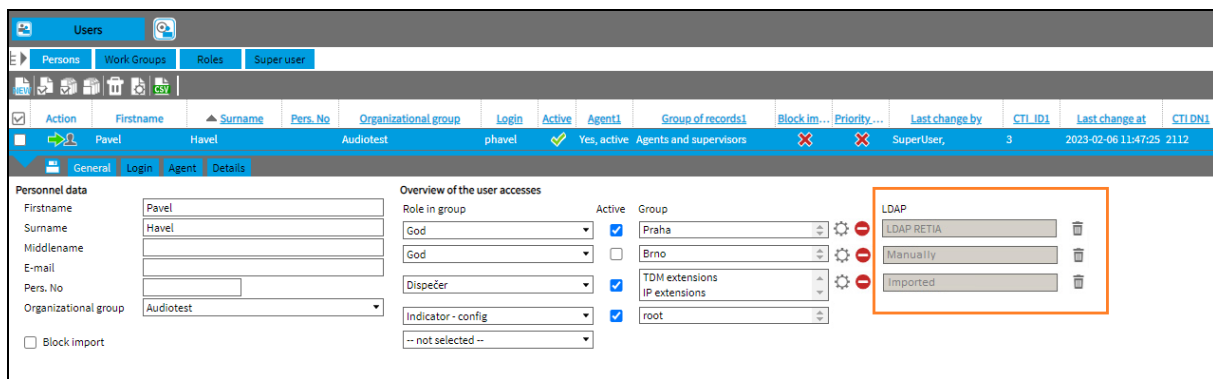
- for Spain - keep EN set by the installation

## 2.12 LDAP

Since version 2.37.2, the identification of the LDAP server from which the person was imported is stored in the person configuration, and it is possible to use several LDAP servers at the same time.

New parameters and columns related to LDAP have been added to the **System** agenda.

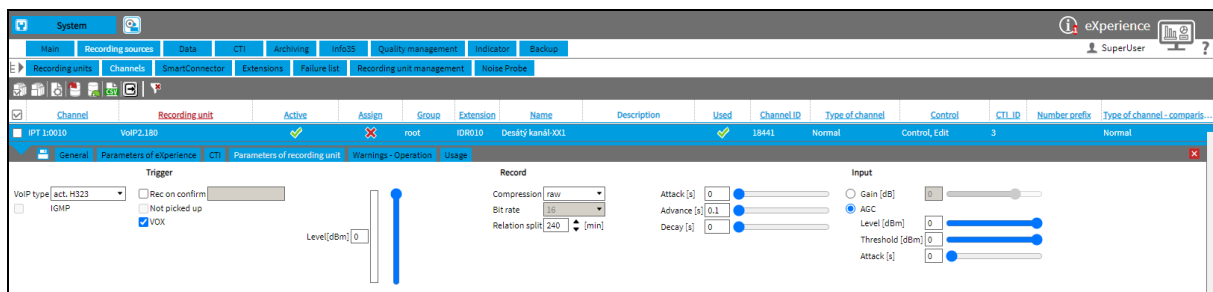
The logic for importing persons from an LDAP server when they are in multiple LDAP servers has been redesigned. In the **Users** agenda, the Main tab where the edit form (LDAP section) is displayed has been modified.



The configuration of importing people from the LDAP server is done on the **System - Import** tab.

## 2.13 System – VOX mode for channel type a.H323

VOX settings are now available for the act.H323 channel. Channel settings are made in the **System - Recording sources - Channels** menu.



## 2.14 Set redundant channel

The function of automatic saving to the associated channel has been extended. If the channel is set as a redundant channel, the parameters are automatically copied to the redundant channel. However, you can remove the *Group* parameter from this setting using the *dont\_share\_redundant\_wg* parameter, so that this value is not transferred.

This setting defines whether the group value should also be copied or whether the redundant channel should have a different group.

### Setting table - Parameter: *dont\_share\_redundant\_wg*

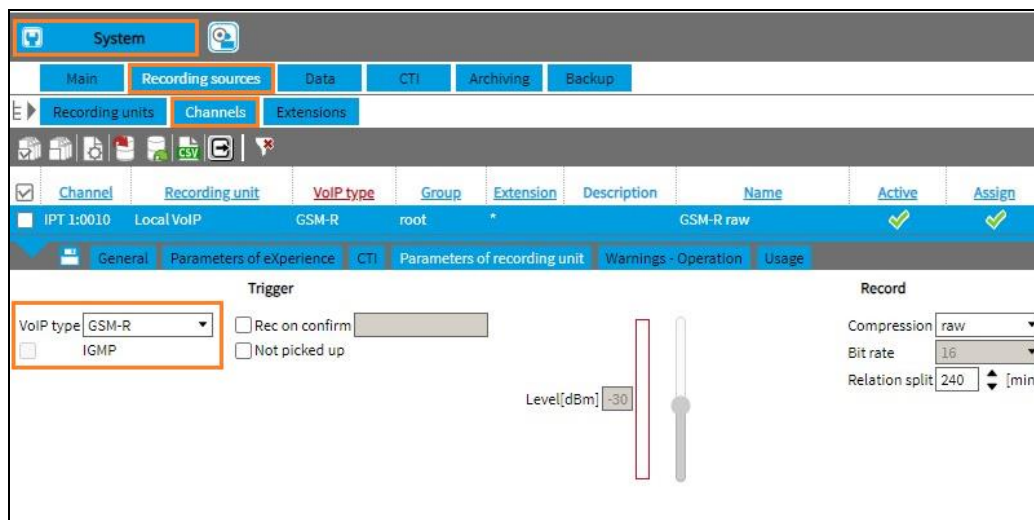
0 = Default, the group is automatically set on the redundant channel.

1 = Group is not automatically set on a redundant channel - both channels can have different groups

Detailed description is in the manual **RD 044 080 Redundant recording**.

## 2.15 Support for GSM-R IP Recording

A new VoIP type for **GSM-R** recording has been introduced in the **System - Recording Sources - Channels** section.



## 2.16 Storage Manager - Media

### 2.16.1 Formatting USB and RDX media

The following information has been added to the documentation - A single partition must be set up for writing to these media. The partition must be set to one of the file systems listed below:

- for eXperience installed on **Windows OS**: FAT, FAT32, NTFS, exFAT
- for eXperience installed on **Linux OS**: ext4, exFAT

Detailed description is in the manual **RD 044 042 Storage Manager**.

### 2.16.2 Eject USB drive on Windows OS

In the **Audit** agenda, in the column Event, there is new information *STM – Medium eject, Ejecting medium finished ok*.



Time	Event ID	IP address	Source	Level	Event	Module	Details	Event code
2023-10-03 13:22:02	6177929	192.168.2.180	System	Info	STM - Ejecting medium finished ok	Storage Manager	Medium is ejected(R1T26M174)	213665
2023-10-03 13:22:00	6177928	192.168.6.72	SuperAdmin,	Info	STM - Medium eject	Storage Manager	R1T26M174	

## 2.17 OS Linux - Export screen/audio

When installing ReDAT eXperience on Linux OS, the formats .AVI and .WMA are not supported. These options do not appear in the export dialogues.

You can export to the following formats:

- Screen and Screen with Audio to **.FLV**
- Audio to **.WAV**

Detailed description is in the manual **RD 044 001 Technical specifications** and **RD 044 021 ATC - ATM**.



## 3. New features of ReDAT Client 2.37.2

---

### 3.1 Limit of the maximum number of user logins in one time

Changes have been made to the maximum number of users logged into the ReDAT Client application at the same time.

- Logged in users are **counted by login + IP address**. If the same user is logged in from 2 computers, the limit is counted twice.
- User authentication using the API function is not counted in the limit (i.e., it is unlimited).
- Other settings are not changed:
  - Limit = 4, fixed
  - SuperAdmin – He can log in over the limit. His session is not counted into the limit.
  - Local login – max. limit is one. His session is counted into the limit. He can log in only if there is not any other local login in one time.
  - Others – They cannot log in over the limit. Their login is counted into the limit.

### 3.2 Extension modules

Additional extension modules have been added to the documentation, offering ReDAT Client in addition to concurrency with the SNMP licence:

- **API**

If a valid licence is activated, the ReDAT Client also provides an **interface (API) for integrating the functions of the recording system into the environment of other applications** (e.g., CRM customer service systems).

This is done by calling URL functions - http communication. The integration enables direct reproduction of the paired record on the button from the CRM system and, for example, display of the list of records of the selected customer and reproduction of his records from the CRM environment. The functions are bound to the licence of the CRM integration module.

- **Storage Manager**

The **Storage Manager** module can be integrated by adding a valid licence. The module periodically backs up selected data outside the default archive. When you add a licence to activate the Storage Manager features in *license\_storage.php*, the agenda Archiving will be displayed:

- Archiving/STM – tasks
- Archiving/STM – media

## 4. New features of ReDAT Recorder 3.11

---

### 4.1 ReDAT Recorder – Basic ReDAT Recorder GUI features

The ReDAT Recorder GUI application and its components are no longer actively supported, although they remain part of the installation.

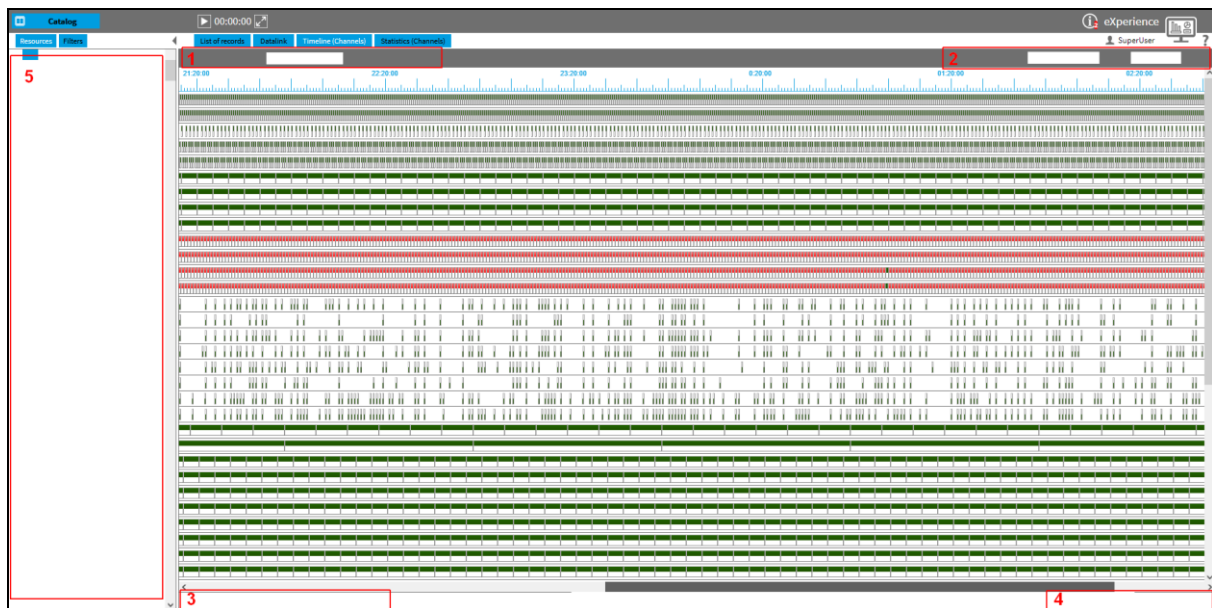
Control of individual channels and work with data (such as sorting and searching for records) is implemented via the ReDAT eXperience platform under **System - Recording sources**.

## 5. Known incompatibilities

- Audio live monitoring in **Chrome and Firefox** web browser:
  - Start listening is delayed for about 3 seconds.
  - Online delay of about 3 seconds.
- Older versions of Firefox, from version 68 ESR (resp. 66 standard edition), had non-functional audio control of the channels in the player. From the version 78.8.0 ESR, this problem no longer occurs.
- The frequency of the video updates during playback of screen records can depend on several synchronously replayed channels.

### Newly discovered Firefox incompatibility and possible solution:

- Firefox cannot handle too many elements on a page.
  - If a page contains too many elements (especially many short records), horizontal scrolling may hide some parts of the page, such as
    - 1 – Toolbox with icons
    - 2 – Time and range settings
    - 3 – Page area
    - 4 – Number of rows and number of selected rows
    - 5 – Left panel (the error appears after changing the width of the left panel, when some parts of the page are already hidden)



- If this situation occurs:
  - It is possible to click on the location of the hidden items to restore their display. This is probably only a temporary fix - it will be restored the next time you scroll.
  - It is recommended that you select a shorter time or limit the number of rows displayed to 20, which will sufficiently reduce the number of items on the page.



Take-back, processing, utilization and disposal of discarded electrical equipment is ensured through the collective systems ASEKOL (electrical equipment) and ECOBAT (batteries/accumulators). Hand over used products to collection yards or to the last retailer. More information at [www.retia.cz](http://www.retia.cz), [www.asekol.cz](http://www.asekol.cz), [www.ecobat.cz](http://www.ecobat.cz). The take-back and use of packaging waste is ensured based on a take-back contract concluded with the company EKO-KOM, a.s. (Client number EK-F06022669).