Purpose

The purpose of this document is to provide guidance configuring the exacq Commend integration. This is a guide to a working example of the integration. The configuration settings across the different systems work together.

NOTE : It is possible to receive ICX messages from the Commend server into ExacqVision via serial data over a TCP port without the need to record the RTP Audio. In this case, there is **no need** to install the **evRTPshim plugin**.

For more information on Serial Data setup in exacqVision, see our Serial Integration User's Guide.

Software/Hardware Requirements

Exacq

1. exacqVision server 7.7.101.94311 (dev build - to be provided)
2. exacqVision client 7.6 or later
3. exacqVision Enterprise or professional license
4. admin account access on the exacqVision system (default credentials admin/admin256)
5. exacqVision evRTPshim (software plugin found here)

Commend

6. Software package version PRO2.1 or higher
7. RTP recording interface via Intercom Station or IP subscriber
8. Commend CCT800 utility 5.0 (as tested)
9. Commend Intercom Server (GE300, IS300, GE800, SIS) and Intercom Stations
10. Central time synchronization server for Commend server(s), intercom stations
11. ICX License to enable data interface
12. D Level subscriber port per recording channel
13. L-IP-REC-1 license per recording channel

Overview

1. Configure Commend system via CCT800
2. Install and configure exacqVision evRTPshim
3. Update and configure exacqVision

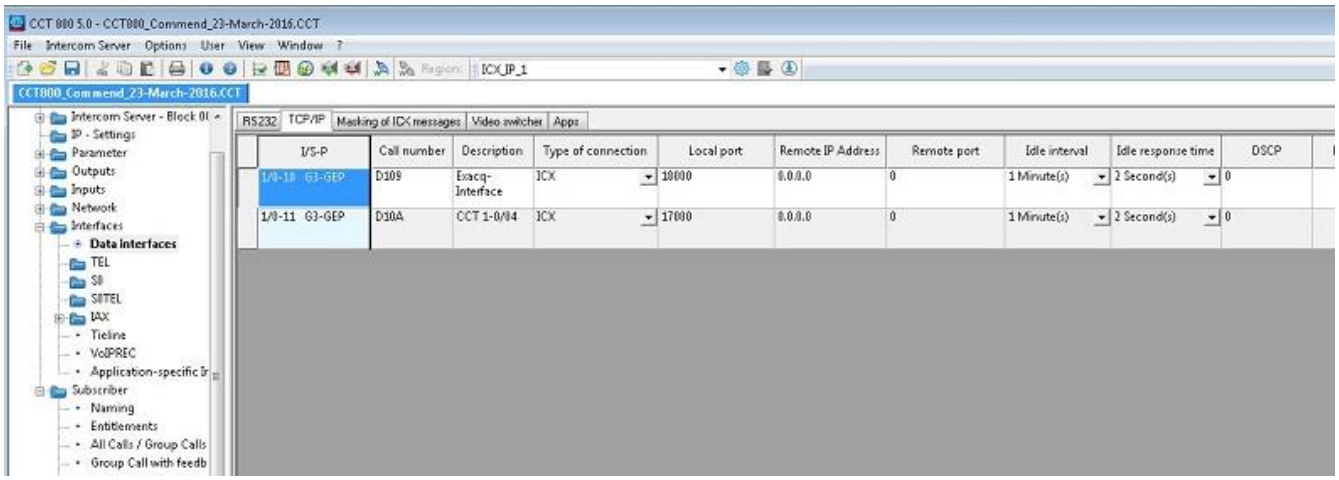
Commend Configuration

The following information and screenshots illustrate some of the settings in the Commend system. A Commend expert would be helpful here as this guide lacks specific detail in this section at this time.

Commend System End Goals:

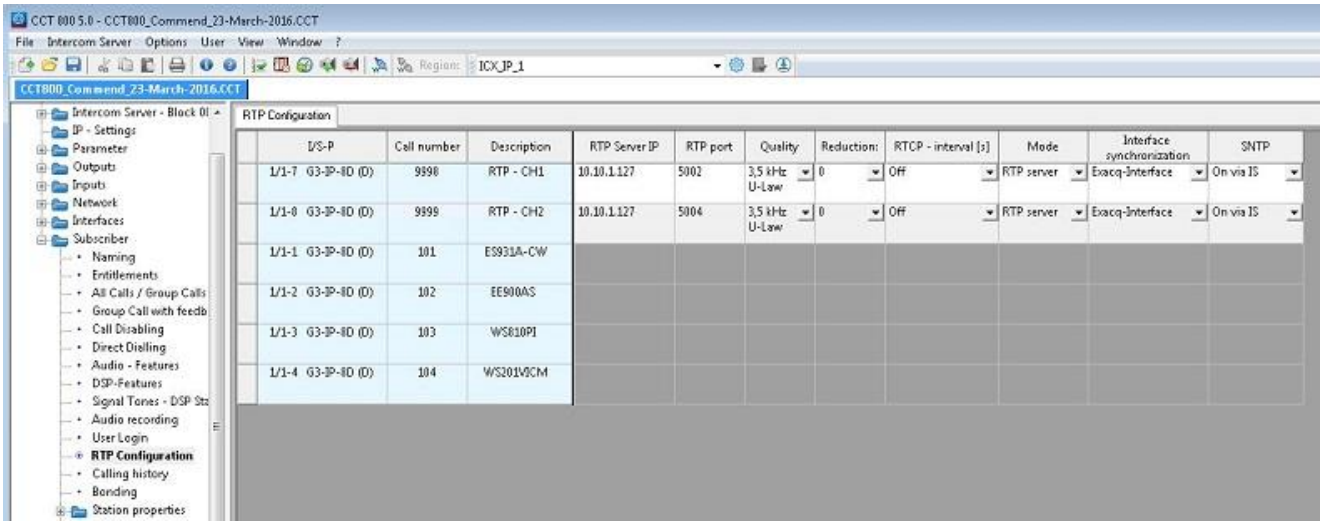
1. The Commend system needs to have one or more RTP channels configured to transfer audio to exacqVision in a pooled fashion.
2. The total number of Commend modules should be known and assigned numerical values such as 101, 102, 103 and so on.
3. Each RTP channel shall stream both sides of any given conversation between two Commend modules (full duplex)

Data Interfaces (TCP/IP tab)



14. I/S-P - 1/0-10 G3-GEP
15. Call Number - D109
16. Description - Exacq-Interface
17. Type of connection - ICX
18. Local Port - 18000
19. Remote IP Address - 0.0.0.0
20. Remote Port - 0
21. Idle Interval - 1 Minute
22. Idle Response Time - 2 Seconds

RTP Configuration



The following audio protocol configuration on the Commend System was:

a. RTP Server IP - exacq server IP address where to stream audio
b. RTP Port 5002 (starting) - port on exacq which will be listening for incoming audio data. Increment by two for each additional audio channel (RTCP is usually the odd port value)
c. Quality = 3,5 kHz U-law
d. Reduction = 0
e. RTCP = Off
f. Mode = RTP server
g. Interface Synchronization = Exacq-Interface (if this is not correctly configured Exacq will not be informed to record audio)
h. SNTP = On via IS

Commend Support

(Technical Support, Training tools, and more)

Website: https://www.commend.com/en-us/commend-inc/tech-support-desk.html
Phone: 1-201-529-2425

evRTP Shim

This plugin is optional in *some* cases. Depending on your configuration needs, messages from the ICX server can be received by exacqVision as serial data and used for event linking purposes if recording audio is not required. (see note on page 1 of this document)

Log in to exacqVision server using admin account

1. Log out of the user account
2. Log in using admin account (default credentials admin/admin256)

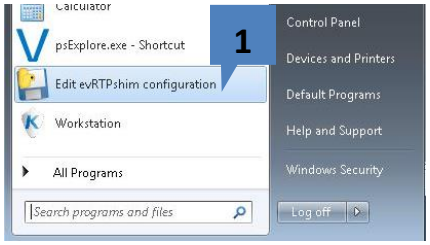
Install evRTP Shim

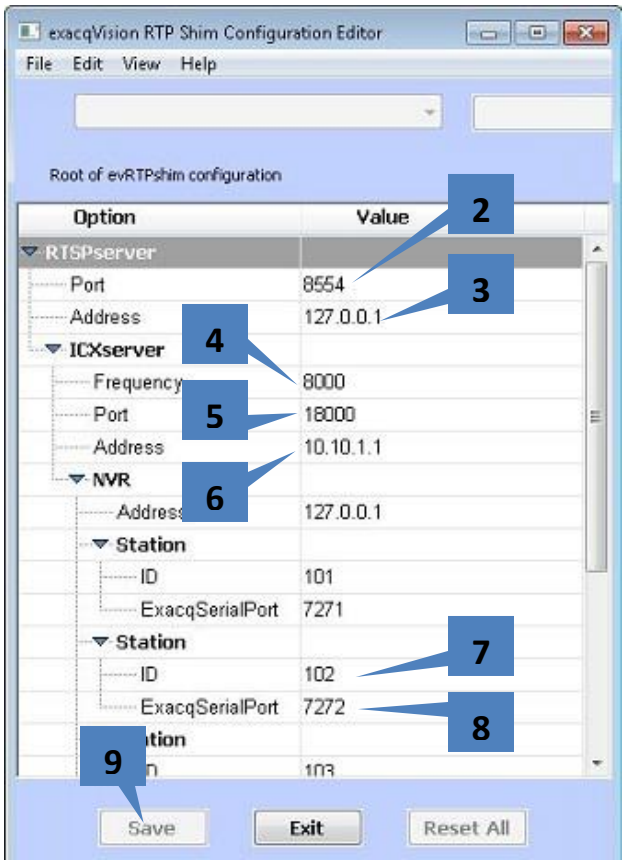
3. Copy the evRTP Shim to the exacqVision server
4. Run the **evRTPShim.exe** installer on the exacqVision server.
5. Click **Run** when prompted by the Security Warning

6. Click Next and follow the prompts through the install

Configure evRTP Shim

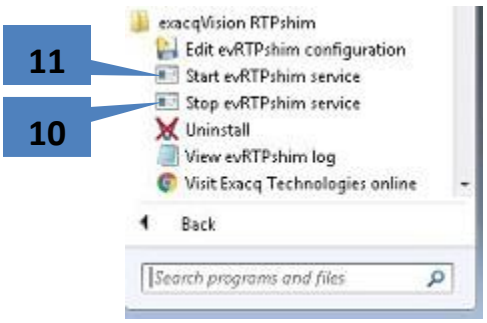
Click **Edit evRTP shim configuration** from the Start menu





2. **Port** - this is the port which you will use to create RTSP connections from exacqVision
3. **Address** - The IP address which you will use to establish an RTSP connect from exacqVision
4. **Frequency** - PCM Frequency that is set in Commend and exacq. This is usually 8000.
5. **Port** - Commend's ICX communications port.
6. **Address** - IP address of Commend system
7. **ID** - The station ID of the Commend system. Commend ICX server will report all of its station IDs to exacq. Specify those station IDs here in this field for each station.
8. **ExacqSerialPort** - This is the port that is defined for delivering serial data specific to each station to exacqVision.
9. **Save** - Click Save

10. Restart the **evRTP shim** by using the Stop evRTPshim service shortcut
11. The click on the Start **evRTP shim** service shortcut



Alternatively you can use **services.msc**

Exacq Configuration

Update exacqVision server to 7.7.101.94311

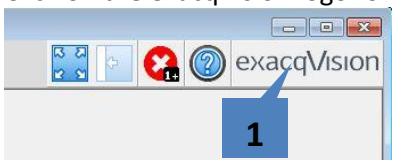
This is a *development build* of exacqVision server and can be downloaded here, 32bit or 64bit:

- https://crm.exacq.com/release/Vision%20Server/7.7.x/exacqVisionServerDev-7_7_101_94311.exe
- https://crm.exacq.com/release/Vision%20Server/7.7.x/exacqVisionServerDev-7_7_101_94311_x64.exe

Once downloaded run the installer and accept defaults through the installation process.

Update exacqVision client to 7.6

Click on the exacqVision logo for client update



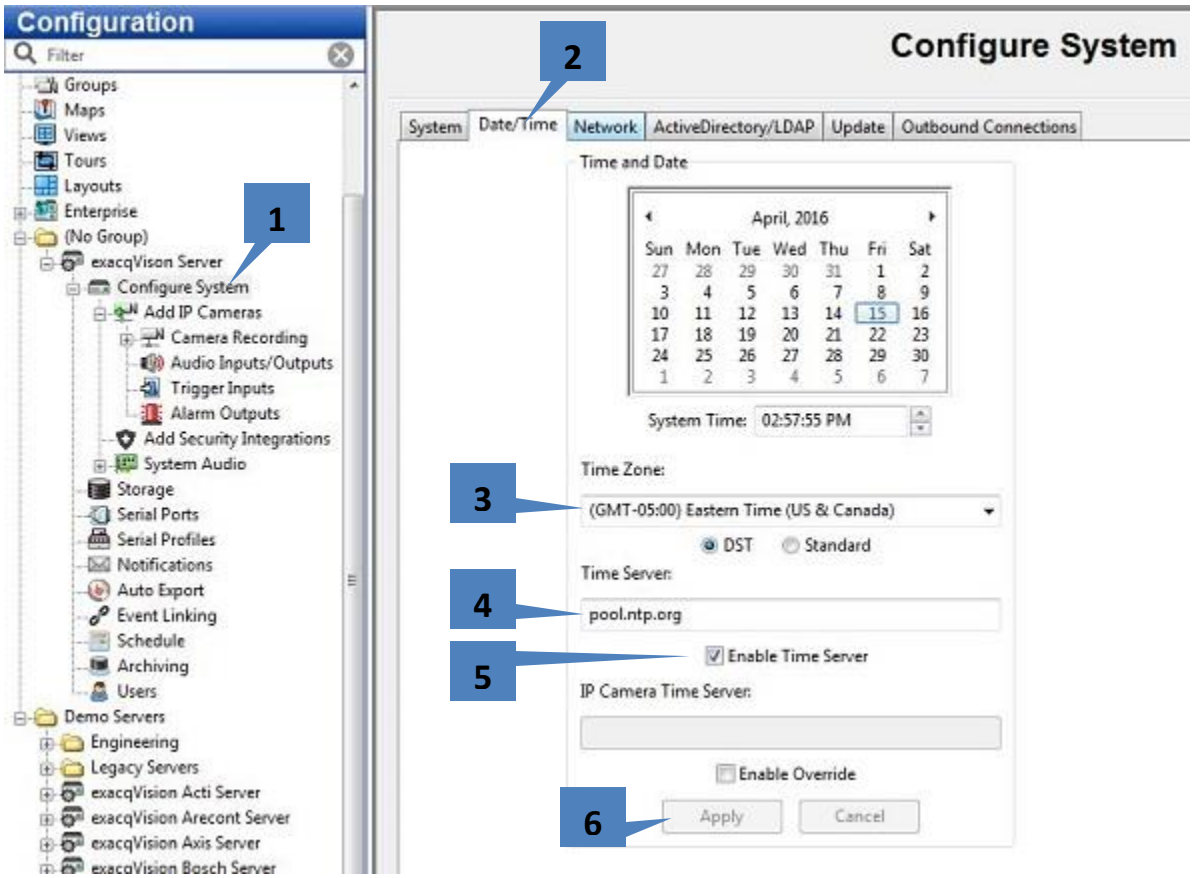
Alternatively you can download the latest client application here, 32bit or 64bit:

- http://cdnpublic.exacq.com/7.6/exacqVisionClient-7.6.4.94409.exe
- http://cdnpublic.exacq.com/7.6/exacqVisionClient-7.6.4.94409_x64.exe

Once downloaded run the installer and accept defaults through the installation process.

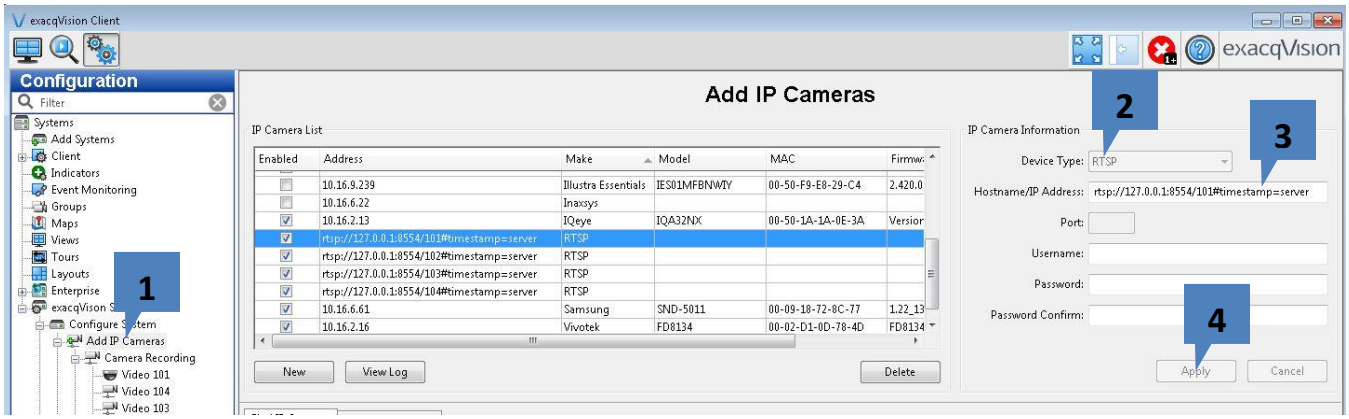
Update and Verify Date/Time Configuration

It is critical that all cameras be synchronized to the same time as the exacqVision server. If cameras are not synchronized then recorded video may not align with recorded audio when looking at Search results. Perform these following steps:



1. Select **Configure System**
2. Select **Date/Time** tab
3. Set your **Time Zone** and **DST** setting
4. Enter time server of your choice, **pool.ntp.org** is used in this example. This is the time source that exacqVision recorder will synchronize with. If the recorder does not have access to the internet you may have an alternative time source within the network that you can use. Or just set the time manually.
5. Check **Enable Time Server -** This is will cause the exacqVision recorder to advertise itself as an NTP server. Please set your cameras' configurations to use exacqVision as their NTP server.
6. Click **Apply**

Add IP Cameras

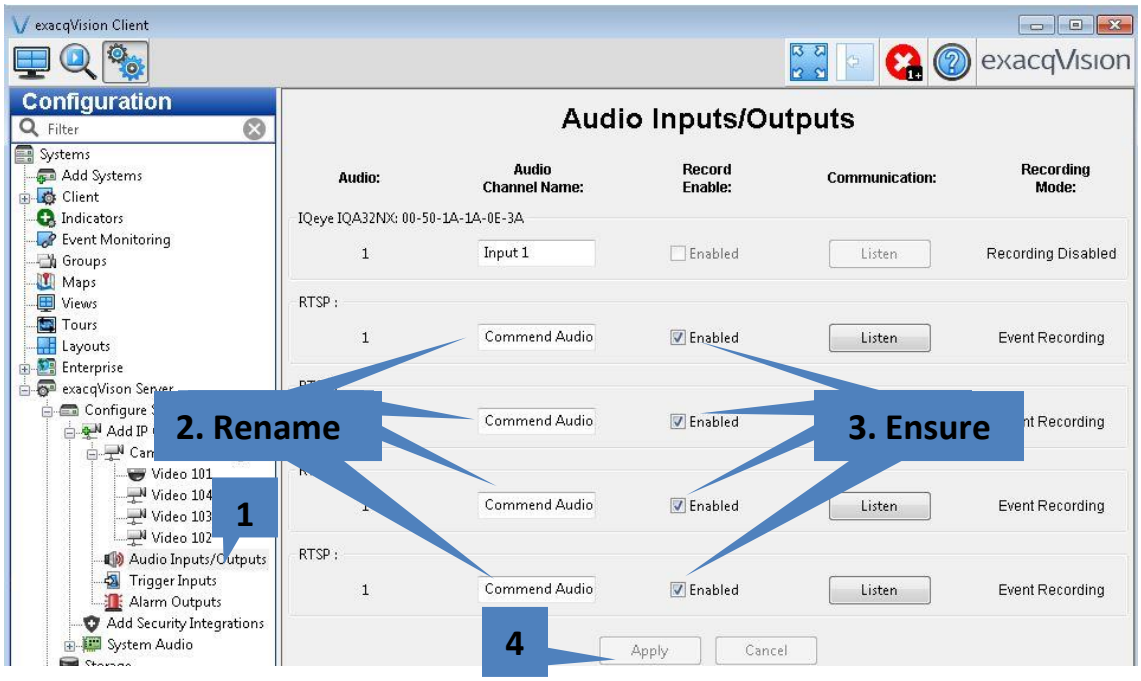


1. Select RTSP
2. Enter **rtsp://127.0.0.1:8554/101#timestamp=server**
3. No username or password required
4. Click Apply

Repeat this for each module on the Commend System that you want to receive audio from, substituting 101 for 102, 103, and so on. Ensure they are in a Connected state. (scroll to the right).

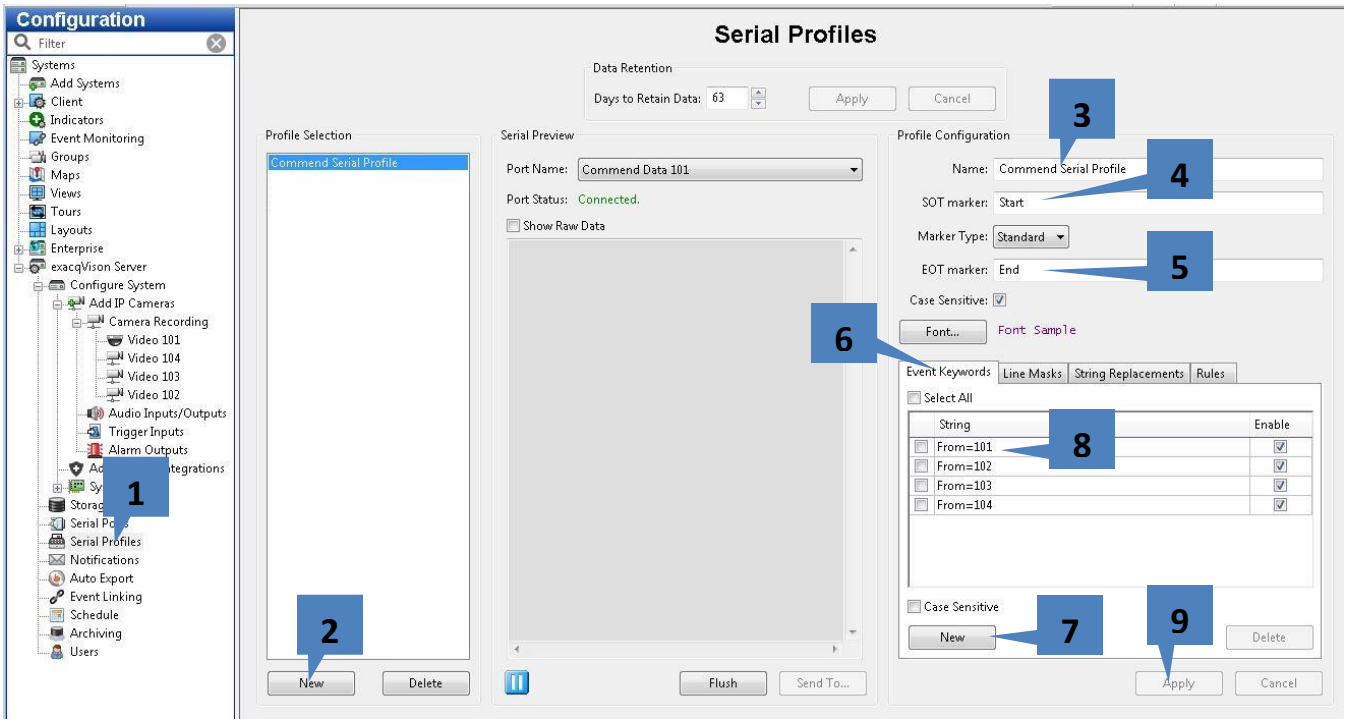
Audio Inputs/Outputs

Verify the audio channels have been created and are enabled



1. Select **Audio Input/Output**
2. Rename each RTSP Audio Channel to **Commend Audio 101** and so on for 102, 103, etc.
3. Ensure each channel is enabled
4. Click **Apply**

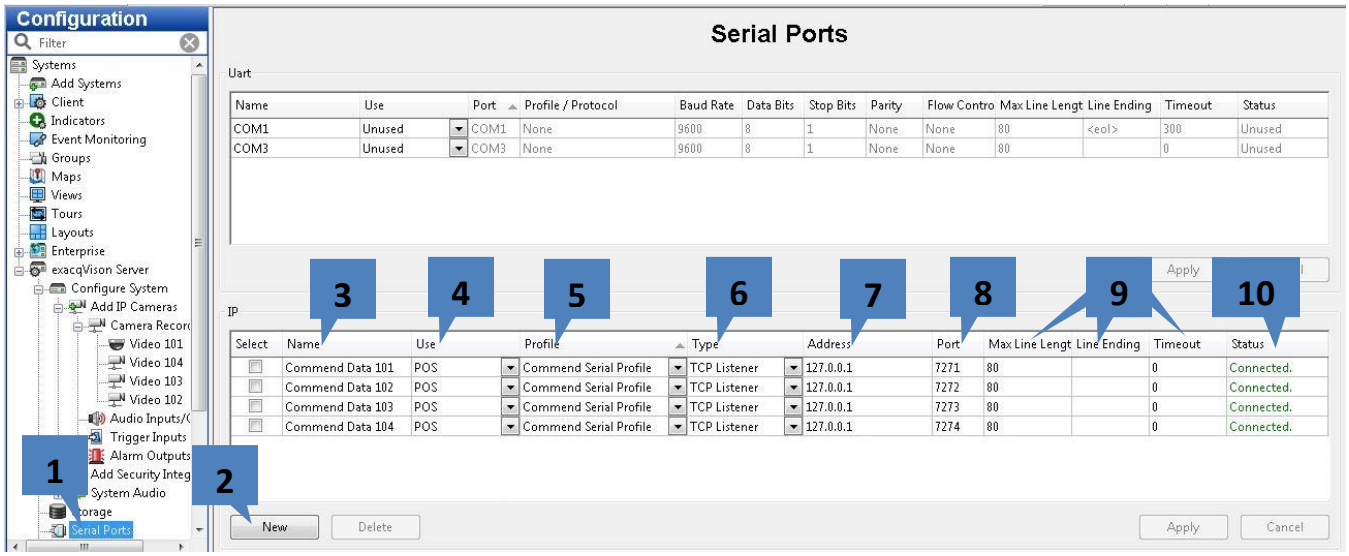
Serial Profile



1. Select Serial Profile from the Configuration Tree
2. Click New
3. Enter name, i.e. **Commend Serial Profile**
4. Enter **Start**
5. Enter **End**
6. Click **New**
7. Select **Event Keywords**
8. Enter **From=101** in Event Keywords
9. Click **Apply**

Repeat steps 6 - 8 for 102, 103, and so on.

Serial Ports

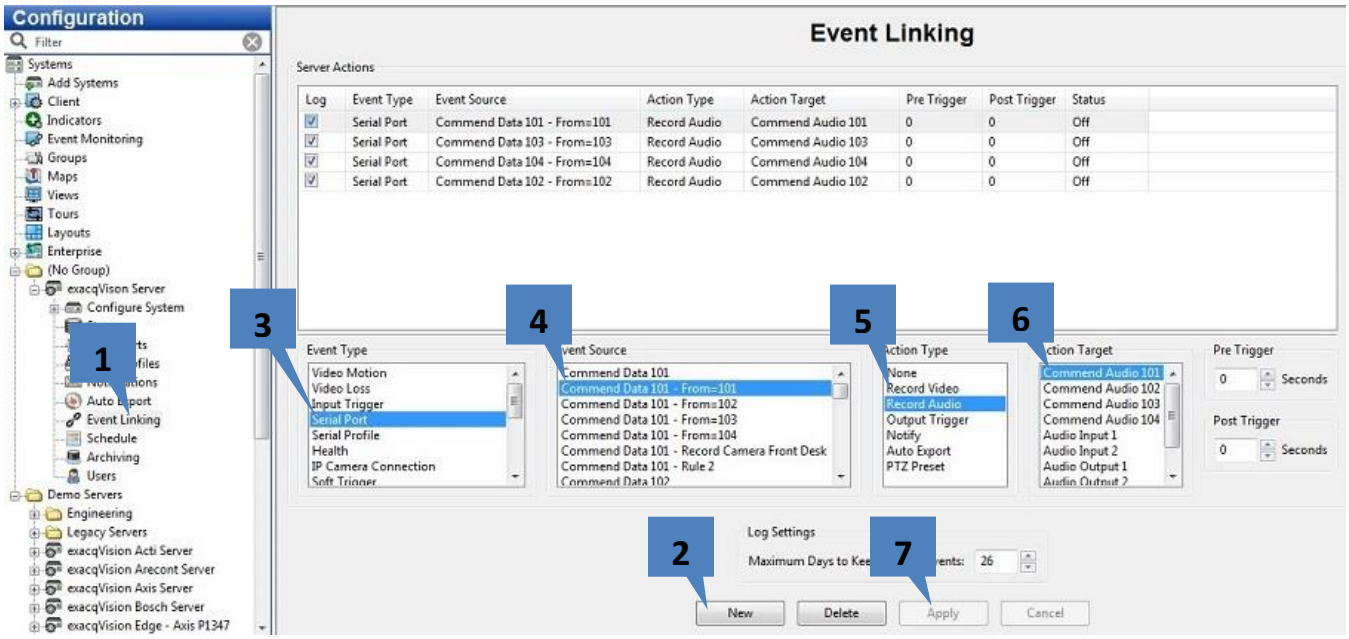


1. Click Serial Ports
2. Click New
3. Type a meaningful name i.e. **Commend Data 101**
4. Select the “Use”. (This selection has no functional bearing. It is used to change the icon that appears on the Live View page of exacqVision)
5. Select the Serial Profile you just created, i.e. **Commend Serial Profile**
6. Select TCP Listener
7. Enter 127.0.0.1
8. Enter port that was configured in the **exacqVision RTP Shim** configuration, i.e. 7272 in this case
9. Max Line Length, Line Ending and Timeout can remain unchanged
10. Ensure Connected status

Event Links

The exacq Commend integration will require two event links per Commend module for recording audio and video.

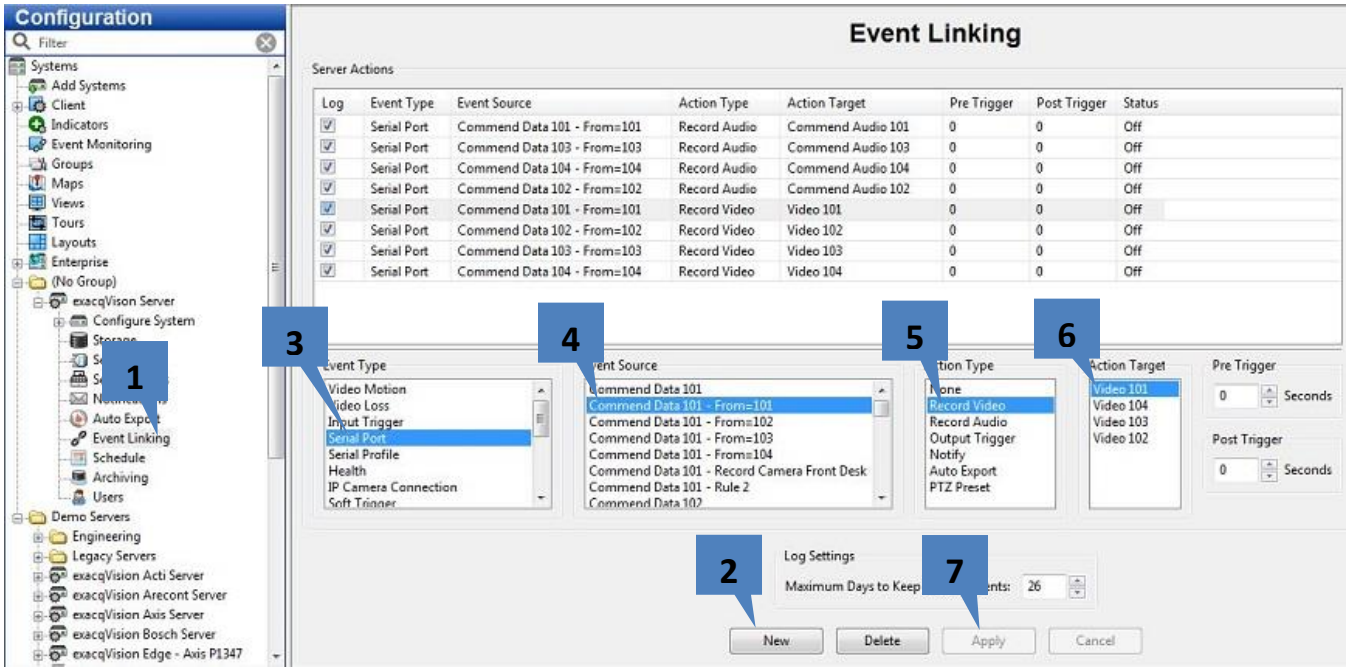
Create Audio Recording Event Links



1. Select **Event Linking**
2. Click **New**
3. Select **Serial Port**
4. Select **Commend Data 101 - From 101**
5. Select **Record Audio**
6. Select **Commend Audio 101**
7. Click **Apply**

Repeat this process for modules 102, 103 and so on.

Create Video Recording Event Links



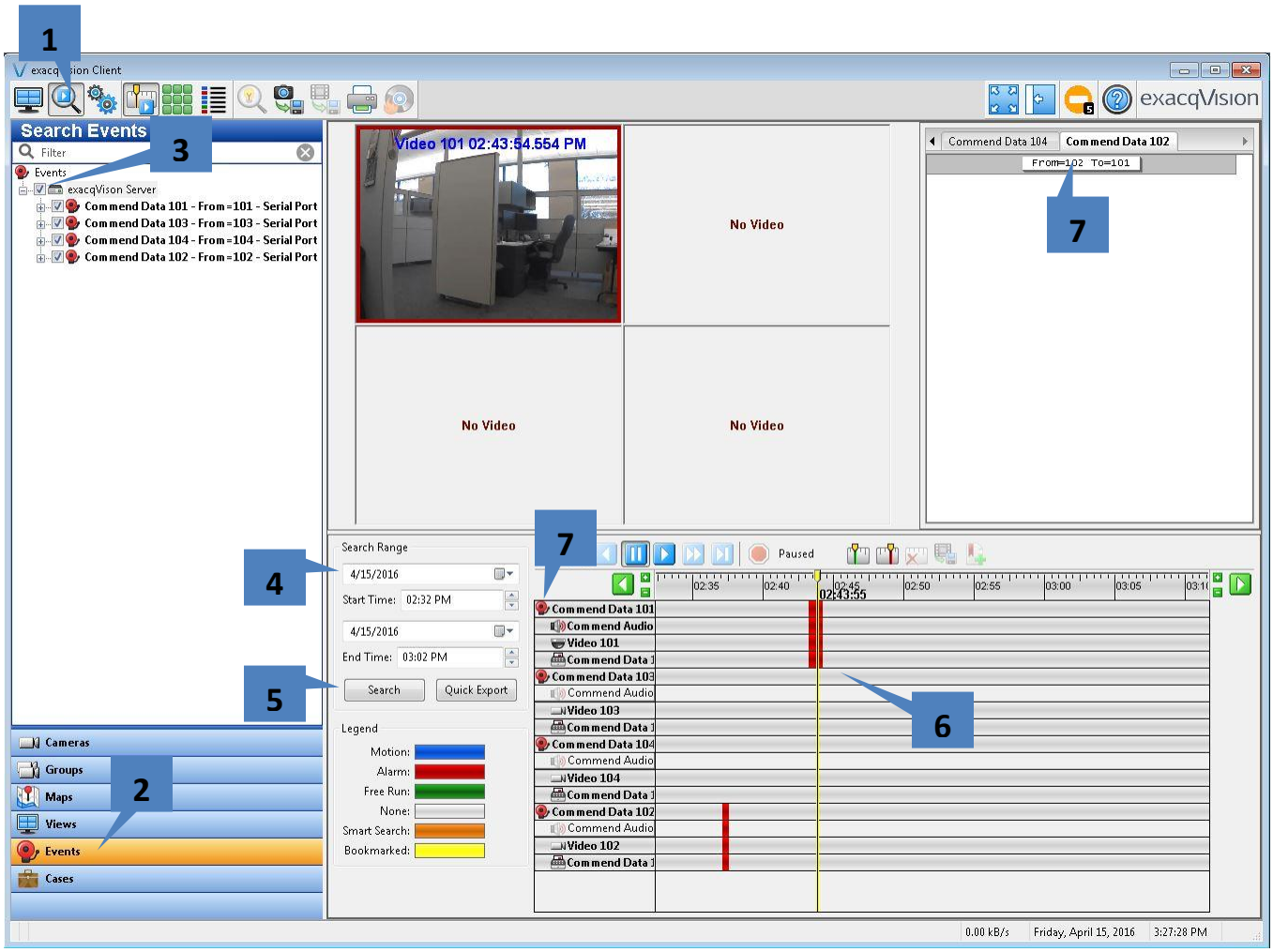
1. Select **Event Linking**
2. Click **New**
3. Select **Serial Port**
4. Select **Commend Data 101 - From 101**
5. Select **Record Video**
6. Select **Video 101**

Repeat this process for modules 102, 103 and so on.

Search and Playback

Timeline Search

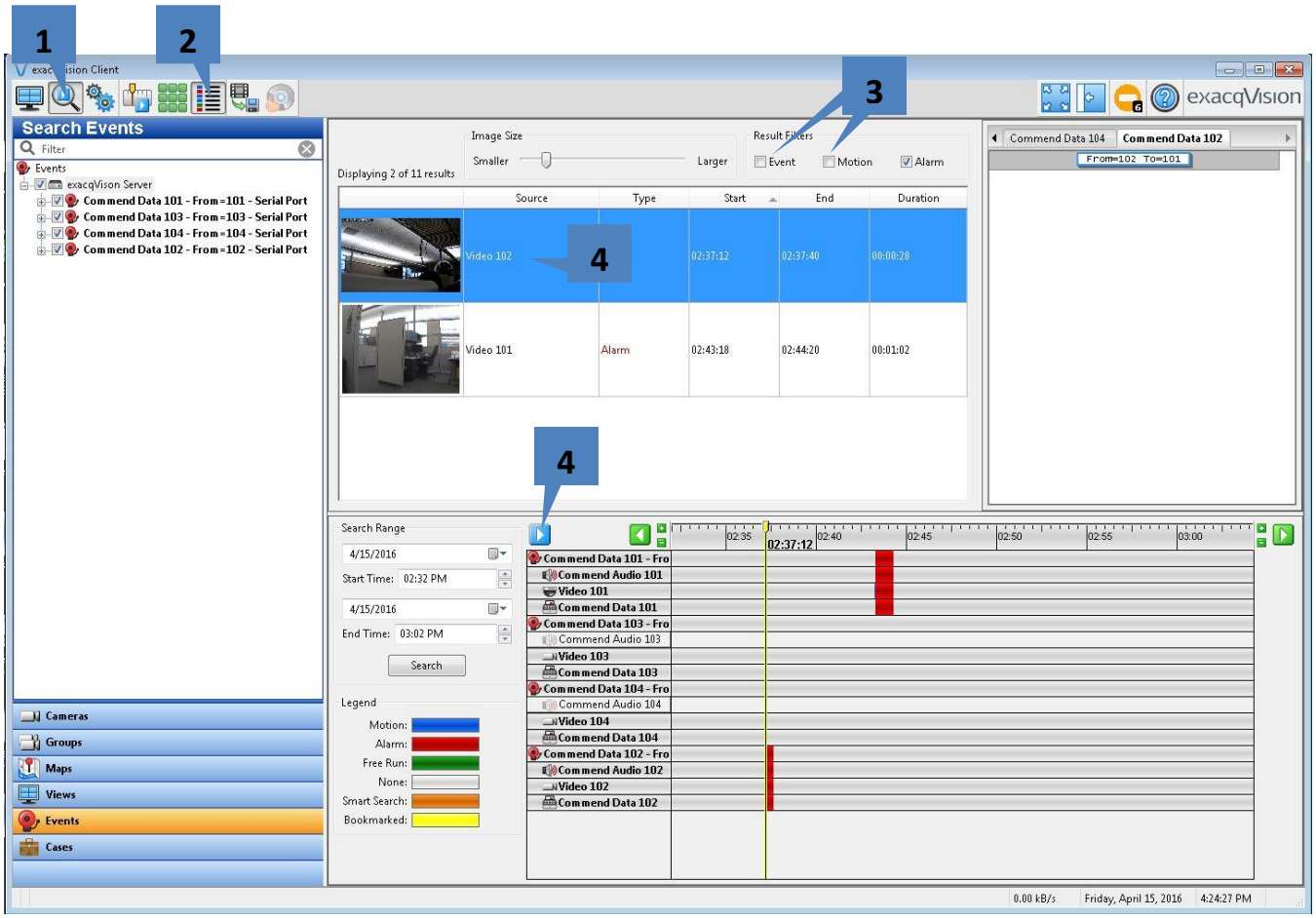
Make a few calls between the modules you have configured in exacqVision and then do a search.



1. Click the **Search** button
2. Click **Events**
3. Select the top level checkbox to select all Events
4. Enter time range
5. Click **Search**
6. View and playback results
7. To hear the audio for a particular event group select the group by clicking on the Even Link Group Name. Notice the other event groups' audio channels are disabled for playback. You can only have one audio channel play back at a time. To listen to a different audio select the event group for which you want to play back and hear the audio.
8. Selecting the serial data here will place the cursor at the beginning of the associated recorded segment..

Event Search

Event Search is useful with this integration.



1. Select **Search**
2. Select **Event Search**
3. De-select **Event** and **Motion** from the Results Filter leaving **Alarm** checked

Perform the same search tasks as in the previous step by entering time range and clicking the search button. Now the results will show up grouped as Alarm based events in the search window. Event Link triggers are considered Alarms in exacq.

4. You can highlight the Alarm based recording by clicking on it
5. Then click Play. The Search window will change back to the timeline search style to play back the recordings.

exacqVision Support

(Technical Support, Training tools, and more)

Website: https://exacq.com/support/