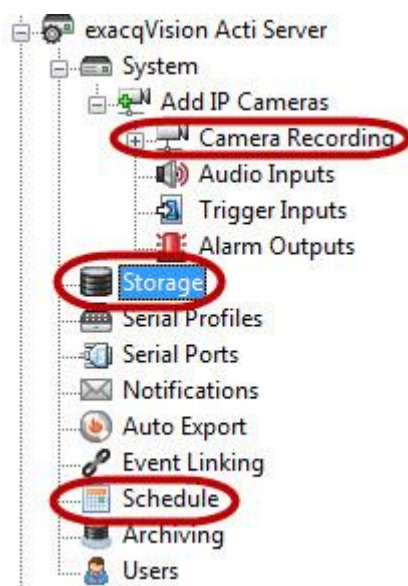


Troubleshooting Record Content Age Event

Record Content Age is available when the Health event type is selected on the Event Linking page in exacqVision Client. Record Content Age is triggered when the configuration setting for the Desired Content Age (which is configurable on the Storage configuration page) is greater than Oldest Content as reported on the Storage page. Oldest Content reported does not account for any "At Least" storage rules or bookmarked video/data.

Troubleshooting Goal

Ensure that your actual system configuration is comparable with the configuration provided to the Exacq Configuration Calculator (<https://exacq.com/config/>). If your actual configuration exceeds the planned configuration, it is expected to have a reduced capacity for recorded data. The pages required in this goal can be accessed in the exacqVision Client tree as shown here:

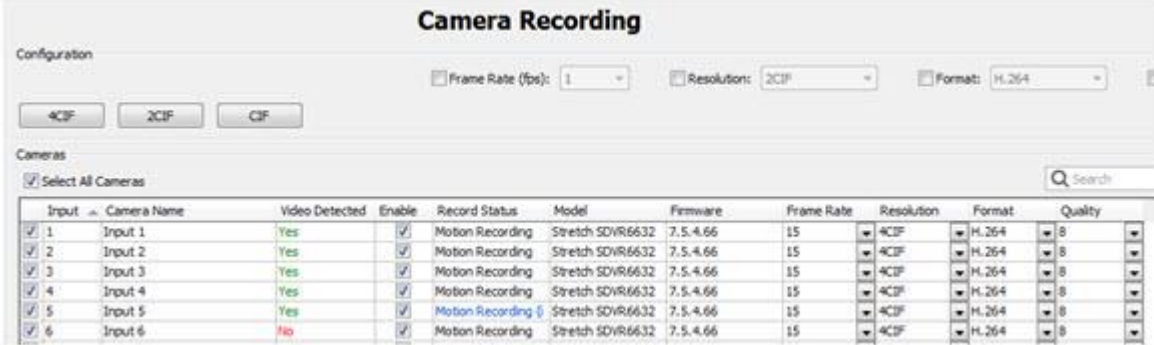


Days Stored: Ensure that the Days Stored provided to the calculator is greater than the Oldest Content reported by the system on the Storage page of exacqVision client.

Number of connected cameras: How many cameras are connected to your system? Make sure it is fewer than what is specified on the calculator. Connecting more cameras will result in reduced age in overall content.

Frame Rate: Check the value of Frame Rate for all your cameras and video inputs on the Camera Recording page. Higher frame rates result in more disk usage per

unit of time. A frame rate of 10-15 fps is considered sufficient for most customer's needs.

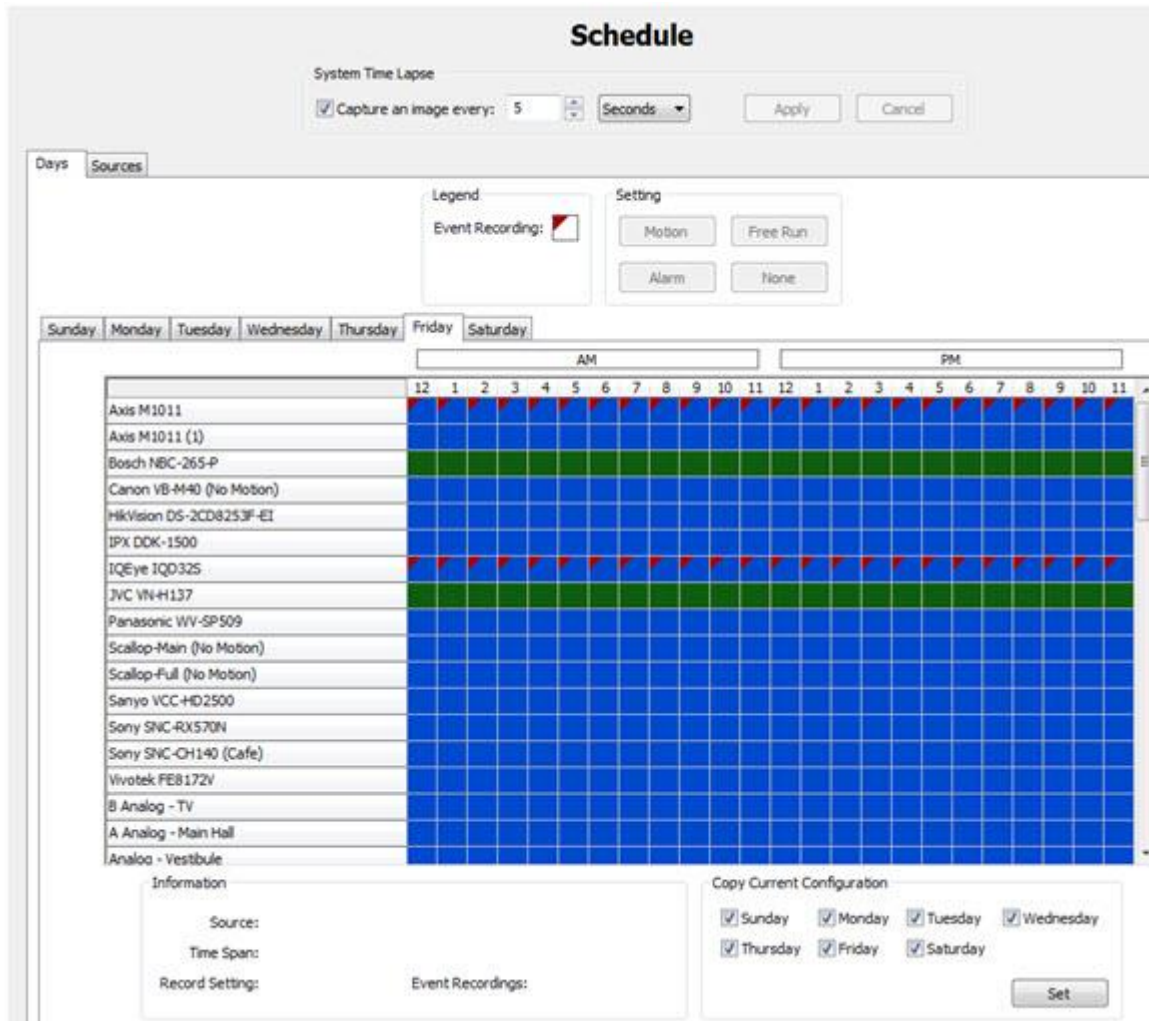


Input	Camera Name	Video Detected	Enable	Record Status	Model	Firmware	Frame Rate	Resolution	Format	Quality
<input checked="" type="checkbox"/>	1 Input 1	Yes	<input checked="" type="checkbox"/>	Motion Recording	Stretch SDVR6632	7.5-4.66	15	4CIF	H.264	B
<input checked="" type="checkbox"/>	2 Input 2	Yes	<input checked="" type="checkbox"/>	Motion Recording	Stretch SDVR6632	7.5-4.66	15	4CIF	H.264	B
<input checked="" type="checkbox"/>	3 Input 3	Yes	<input checked="" type="checkbox"/>	Motion Recording	Stretch SDVR6632	7.5-4.66	15	4CIF	H.264	B
<input checked="" type="checkbox"/>	4 Input 4	Yes	<input checked="" type="checkbox"/>	Motion Recording	Stretch SDVR6632	7.5-4.66	15	4CIF	H.264	B
<input checked="" type="checkbox"/>	5 Input 5	Yes	<input checked="" type="checkbox"/>	Motion Recording	Stretch SDVR6632	7.5-4.66	15	4CIF	H.264	B
<input checked="" type="checkbox"/>	6 Input 6	No	<input checked="" type="checkbox"/>	Motion Recording	Stretch SDVR6632	7.5-4.66	15	4CIF	H.264	B

Format: Check the Format setting on the Camera Recording page. H.264 or MPEG4 formats, if available on a camera, result in more compact disk storage than JPEG, increasing longevity of overall recorded data.

Resolution and Quality: Check the Resolution and Quality settings on the Camera Recording page for your cameras. Higher resolution and higher quality result in greater disk usage. (You can open the camera's configuration page in exacqVision Client to see the average image size). Reducing resolution and quality settings increases the recorded media longevity. Try adjusting resolution and quality settings on individual camera to see how it affects video viewing experience before deciding on a final setting. Quality can also be adjusted on an individual camera's settings page.

Recording Schedule: Check the Schedule configuration. Free Run recording (colored green) requires the most disk space compared with Alarm or Motion Recording, which are recorded only when predefined activity occurs. Reducing the amount of free run recording increases recording longevity.



Motion Recording: Determine whether any camera configured for motion recording is recording content when no actual motion is present in the scene. You can investigate this by executing a search during the times when no motion is expected. If video results are returned, our motion recording needs to be adjusted to record only the content that you care about.

*Moving objects present in the scene (like a tree or traffic) that you do not care about (but their motion triggers recording) can be masked. Alternatively, you can also adjust motion window to include the area in the camera scene that is important for recording. Motion Mask and Motion Window configuration are available on a camera's settings page.

*A camera's sensitivity to light can also trigger motion. You can adjust the Sensitivity configuration on an camera's individual settings page.

*Make sure all day/night cameras are switching to night mode as needed.

*Make sure continuously touring PTZ cameras are not configured to record motion (unless required).

Alarm Recording: If any of your video sources are configured to record based on an alarm condition, you can check whether event linking configuration is triggered too frequently, resulting in unwanted recorded content. On the Search for Events page, search for events during the time when you know a particular event should not happen. Reducing pre- and post- trigger settings will result in reduced disk space usage.

How to determine which device takes up the most space

If your system consists of many different IP camera models, the following command-line command might be useful in identifying which media source to investigate based on the device that takes up the most storage.

Note for Windows servers: The commands below have been tested using PowerShell 2.0 on Windows 7 SP1 32-bit. Earlier versions of Windows should be able to download PowerShell 2.0 from here: <http://support.microsoft.com/kb/968930>

Execute the following command on the command prompt to list existing manufacturer-device-storage rule file naming patterns on your ev server:

Linux:

```
find /mnt/edvr/1/2013 -type f -name "*.ps" -printf "%f\n" | sed 's/^\.....//' | sort | uniq
```

Windows:

```
get-childitem D:\2013 -include "*.ps" -name -recurse | %{$_ -replace "^\.*\d{4}-", "" } | sort | unique
```

NOTE: Those commands can require more than ten minutes to complete, depending on the size of your system and drive speed.

Your output might look something like this:

```
00070480.ps
00150280.ps
00160280.ps
00160380.ps
00180280.ps
00190280.ps
00190380.ps
00190480.ps
00190580.ps
```

Refer to the KB article on exacqVision file naming (<https://exacq.com/kb/?kbid=30471>), which should help you understand how exacqVision's file names translate to specific cameras on your system.

For each of the reported devices in the list, you can see the amount of storage that a particular device uses. For example, for device with 00150280 pattern:

Linux:

```
find /mnt/edvr/1/2013 -name "*00150280.ps" -exec ls -l '{}' \; | awk 'BEGIN {sum=0} {sum+=$5} END{print sum}'
```

Windows:

```
get-childitem D:\2013 -include "*00150280.ps" -recurse | measure-object -property length -sum | %{ $_.Sum; }
```

The resulting output is the total number of bytes used by a media device on your disk. If you find the media input that is responsible for the largest usage, you can then follow the adjustment recommendations to reduce space demands of this source.

Using Storage Rules to Increase Oldest Content

If you find a media source on your server that requires high resolution recording, but you do not necessarily need to preserve those recordings for a long time, you can use storage rules to control recorded age for a particular input.

*On the Storage page, select the desired input from the Expiration Configuration panel and click Add.

*Select the newly added input on the right-hand side panel and select the At Most in the Type drop-down box.

*Select the desired number of days.

*Click Apply to save the configuration.

Note for exacqVision System Manager (ESM) Users

ESM might report content age alarms when the system is not actually in an alarmed state. Upon startup in exacqVision Server versions before 6.0, the server software assumes a non-alarmed state for the content age alarm and sends notification to ESM after it becomes alarmed. If you stop the exacqVision service while in a content age alarm state and then start the service again expecting the alarm to be cleared, you might continue to see an active content age alarm in ESM (but not exacqVision Client). To work around this, force the server into a content age alarm state and verify that the alarm is reported in exacqVision Client. Then adjust the Desired Content Age setting to turn off the alarm. This should also clear the alarm state in ESM.