



Milesight-Troubleshooting

Record and Playback in VMS Enterprise

VMS Version	V1.2.0.1 or above	Update	2021.6.22
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Content

1. Introduction	1
2. Disk Settings	1
3. Continuous Recording	2
2.1 Enable Continuous Record	2
2.2 Continuous Record Settings	3
2.3 Copy Record Schedule and Settings	4
4. Event Record	4
5. Basic Playback	7
(1) Toolbar on the top	7
(2) Right-Click Menu	8
(3) Playback Toolbar	10
(4) Right-Click Timeline Bar	12
(5) Tags for Playback	13
6. Event and Split Playback	14
(1) Event Playback	14
(2) Split Playback	15

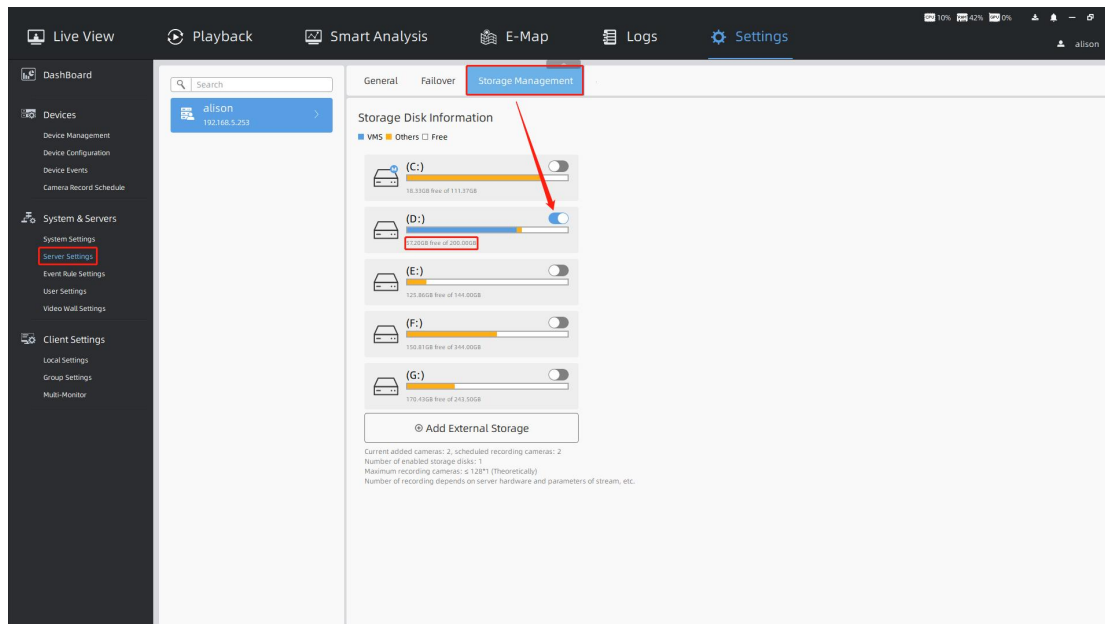
1. Introduction

For a VMS software, Live View, Record and Playback must be the three most important functions. Milesight VMS Enterprise has powerful video recording and playback, which are the critical parts of the forensic process. This document will introduce how to configure and use these two functions in order to solve some doubts and problems in use.

2. Disk Settings

Ensure that one or more of the server's disks are enabled and have space left before configuring record. In addition to local disks, NAS external storage is also supported.

Select *Settings*→*System&Servers*→*Server Settings*→*Storage Management* and enable one or more disks to save record. It is recommended that the hard disk is used for storing recordings only. Move the mouse to the capacity bar to display more capacity information of the disk.

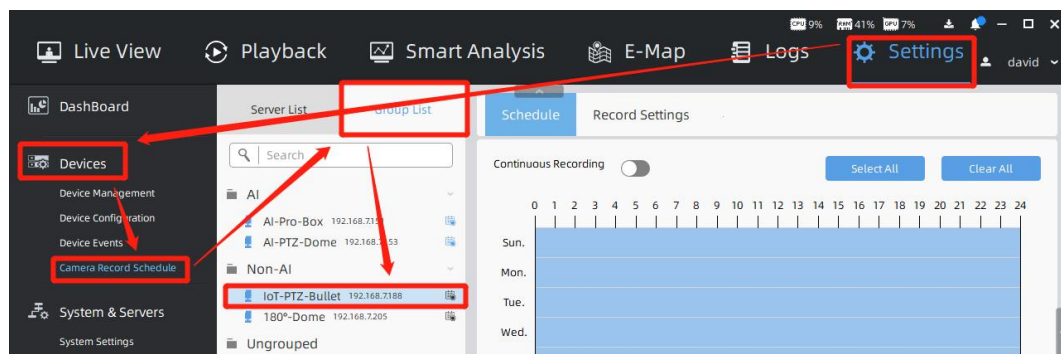


3. Continuous Recording

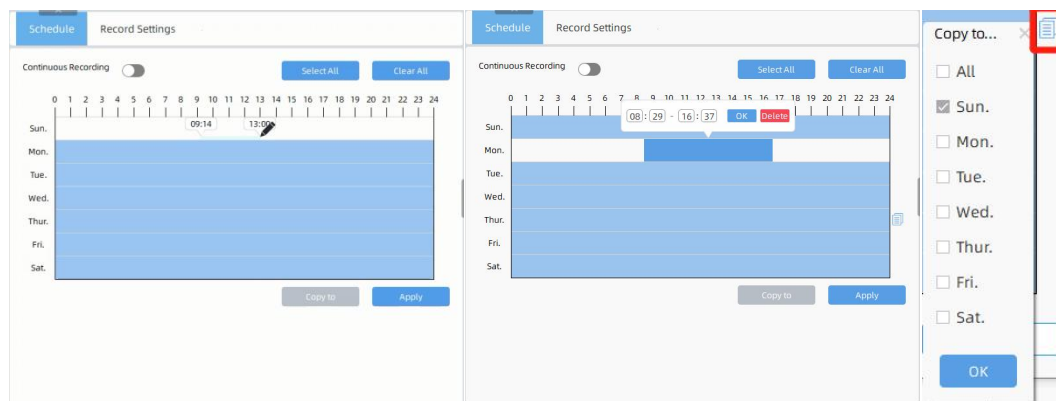
3.1 Enable Continuous Record

Step1 Select *Settings*→*Devices*→*Camera Record Schedule*→*Schedule*;

Step2 Click *Server List* or *Group List* to show devices from different servers or groups. Click one camera to configure this channel's record.



Step3 By default, the time bars in the schedule have been all selected. Click *Select All* or *Clear All* to quickly choose or clear all times. When the time bar is blank, you can select a time period by crossing over it. Click one time period and then you can modify it specific time. Click Co to copy one day's schedule to others'.

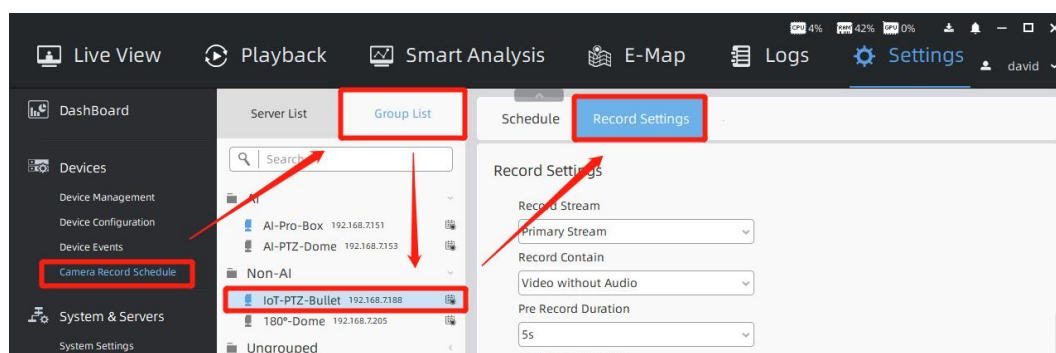


Step4 Enable *Continuous Recording*  and do not forget to Click *Apply* to save.

3.2 Continuous Record Settings

Step1 Select *Settings*→*Devices*→*Camera Record Schedule*→*Record Settings*,

Step2 Click *Server List* or *Group List* to show devices from different servers or groups.
Click one camera to configure this channel's record.



Step3 Configure specific settings of the camera after continuous recording is enabled.

Table1 Description of the settings

Parameters	Function Introduction
Record Stream	Set record stream as primary, secondary or both of them
Record Contain	Select whether the record includes audio or not
Pre Record Duration	Set the duration of pre-recording from 1s to 10s
Post Record Duration	Set the duration of post-recording from 10s to 60s
Archive Minimum Retention Time	Set minimum time for recording to expire: Auto(delete the oldest recordings based on the disk capacity); Preset times; Custom time from 1 to 365 days
Archive Maximum Retention Time	Set maximum time for the recording to expire: Auto(delete the oldest recordings based on the disk capacity); Preset times; Custom time from 1 to 365 days
ANR	Set whether to enable ANR which needs a SD card inserted in

	Milesight camera added via MSSP
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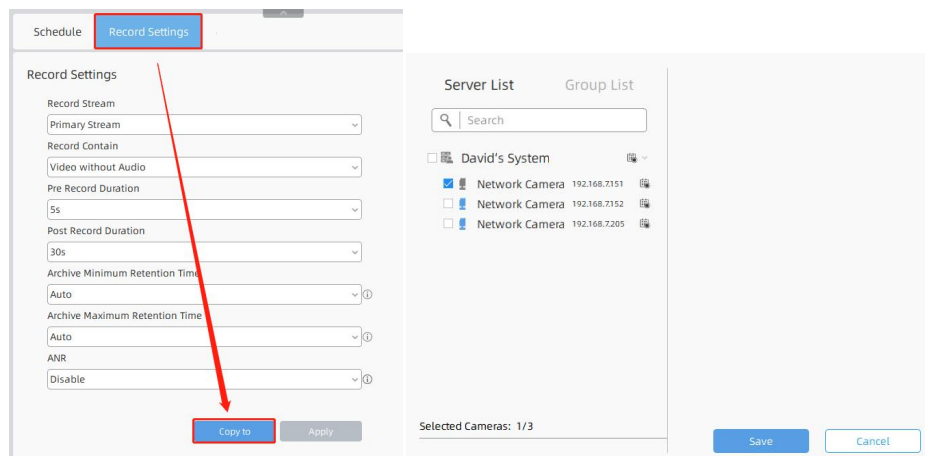
3.3 Copy Record Schedule and Settings

Both Schedule and Record Settings support copy one channel's to others'. We take Record Settings as an example.

Step1 Click *Copy to* and then check the cameras you want to copy the configuration to.

Step2 You can also see all cameras from different Servers or Groups by selecting *Server List* or *Group List*.

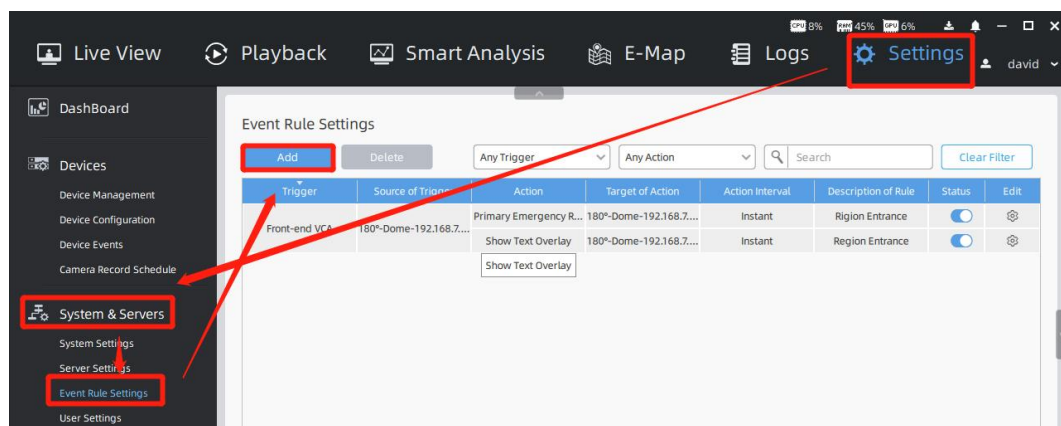
Step3 Click *Save* and you will find the checked cameras' configuration is the same as the first one.



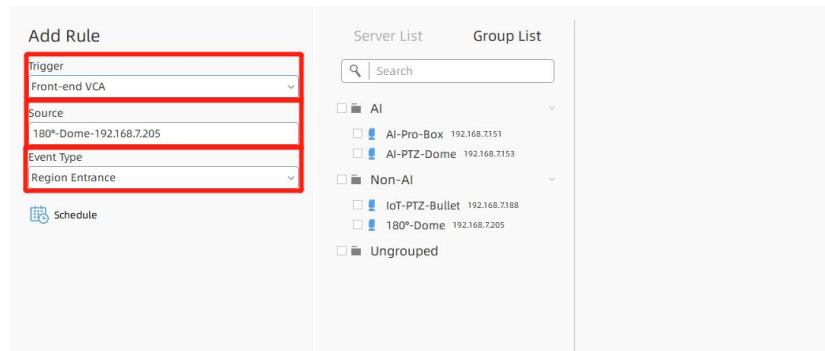
4. Event Record


Event Record of VMS Enterprise is based on Event Rules. So you need to set it in *Event Rule Settings* interface.

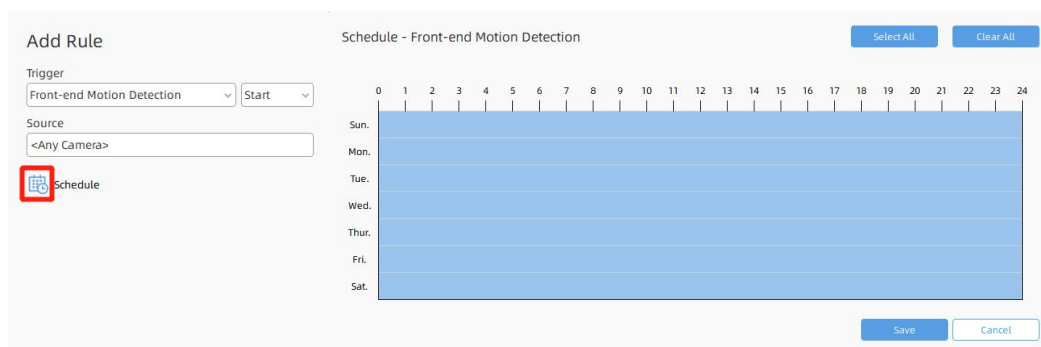
Step1 Select *Settings*→*System&Servers*→*Event Rule Settings* and click *Add* to set a new rule;



Step2 Select the event which you want to trigger the recording. We take Region Entrance in Front-end VCA as an example. Then click *<Any Camera>* and all cameras will show up in Server List or Group List. Check one or more cameras as the source and click save.



Step3 Click  to bring up the window of schedule. The way to configure it is just the same as it in Continuous Recording. Don't forget to click *Save*.



Step4 Check *Do Recording* or *Primary Emergency Recording* in Action List. *Primary Emergency Recording* is based on recording schedule, which should be configured first at *Camera Recording Schedule*. Trigger primary stream recording when event occurs.

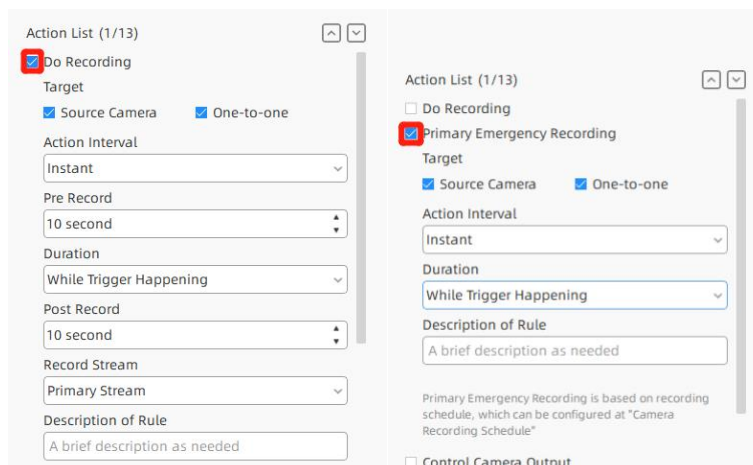


Table2 Description of the settings

Parameters	Function Introduction	Do Recording	Primary Emergency Recording
Target	Set which camera to record: Source Camera(One-to-one means that event from a particular camera triggers recordings of not all source cameras but only this camera when	✓	✓

	there are more than one source cameras); Custom selected cameras		
Action Interval	Set time interval between two Actions: Instant; 5s; 10s; Custom time from 1 to 3600s	✓	✓
Pre Record	Set the duration of pre-recording from 0s to 10s	✓	×
Duration	Set the duration of whole action: While Trigger Happening; Custom time from 1 to 3600s	✓	✓
Post Record	Set the duration of post-recording from 0s to 120s	✓	×
Record Stream	Set record stream as primary or secondary stream	✓	×
Description of Rule	A brief description as needed for easily finding this rule	✓	✓

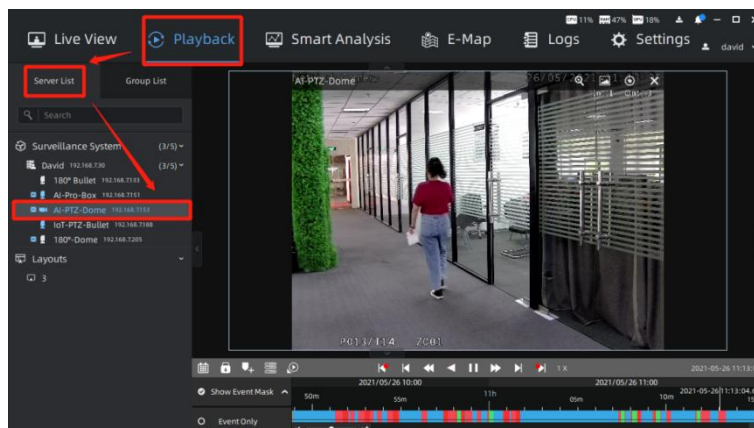
Step5 Configure the event record rule as needed and click *Save*.


Step6 Click *Apply* to save the rule changes.

Take the following figure as an example, when Panoramic Dome Camera detects Region Entrance, it will trigger recording its video. Don't forget to click *Apply* in *Event Rule Settings* interface.

Note: All front-end triggers should be enabled on Milesight camera side first. You can configure it in *Device Events* module.


5. Basic Playback




Click *Playback* on the top. And then the playback interface will show up. Choose and double click a channel from Server List or Group List to replay your recordings. The icon  means this channel has recordings to play.


(1) Toolbar on the top

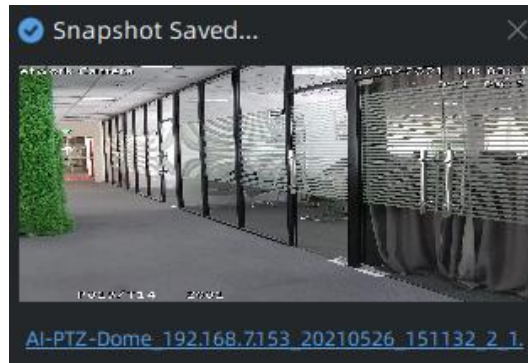
Move your mouse to the video, and then the toolbar will show on the top.


Click  to turn on Speaker, and you can adjust the volume of the speaker from 1~100. This item is available only for cameras which support built-in mic or Audio I/O.














Click  to enable digital zoom. A thumbnail of the enlarged position is displayed in the lower right corner. Mouse dragging and wheel scrolling to move and zoom in/out.



Click  to take a snapshot. The blue text will lead you to the snapshot storage path.



Click  to open the Fisheye toolbox. Here are a list for each icon of Fisheye toolbox.

	Enable Dewarping
	Select ceiling mounting mode
	Select wall mounting mode
	Select flat mounting mode
	Select playback of original fisheye view
	Select playback of 360° panoramic view
	Select playback of two 180° panoramic views
	Select playback of four regional views
	Select playback of one original fisheye view and three regional views
	Select playback of one 360° panoramic view and one regional view
	Select playback of one 360° panoramic view and four regional views
	Select playback of one 360° panoramic view and six regional views
	Select playback of one original fisheye view and eight regional views

Click  to close this channel's playback.

(2) Right-Click Menu

Right click the video and the menu will show up.

Stream Type(S)	>
Display Info(D)	>
Split Playback(T)	Ctrl+T
Add Tag for...	>
Remove...(R)	>
Save As Layout(L)	Ctrl+S
Cell Spacing(C)	>
Aspect Ratio(A)	>
Pause All(P)	Alt+Shift+P
Turn on All Speakers(O)	Ctrl+Alt+O
Stream Type for All(M)	>
Display Info for All(N)	>
Full Screen(F)	Ctrl+Enter

The meanings of the items on the right-click menu can be referred to the table below:

Item	Description
Stream Type	Auto, Primary and Secondary supported. Auto means the playback video will automatically switch stream according to computer performance.
Display Info	Choose to display stream information at Left or Right, or customize the position of info. You can also hide the stream information.
Split Playback	Divide the video files into several channels during specified time period. Users can watch playback videos of different time periods simultaneously.
Add Tag for	Add tag for the selected cameras or all cameras in the playback panel.
Remove	Choose Selected Views or All Views in Layout to remove the camera playback.
Save As Layout	Click it to save the current layout to Layouts list.
Cell Spacing	Set the cell spacing size among the live view windows in the layout. There are four options available, including None, Small, Normal and Large.
Aspect Ratio	Choose 1:1, 4:3, 16:9, 3:4 and 9:16 to show the window aspect ratio.
Pause/Resume all	Pause/Resume all playback in the current layout.
Turn on/Mute All Speakers	Enable or disable the speakers of all cameras in the current layout.
Stream Type for All	Set stream type for all cameras in the current layout.
Display Info for All	Set to display stream information of all channels in the current layout.
Full Screen	You can choose Layout to display all cameras in the layout to full screen. Click again the Exit Full Screen to restore the normal window.

Right click on a position in the layout where there is no video and the menu will change

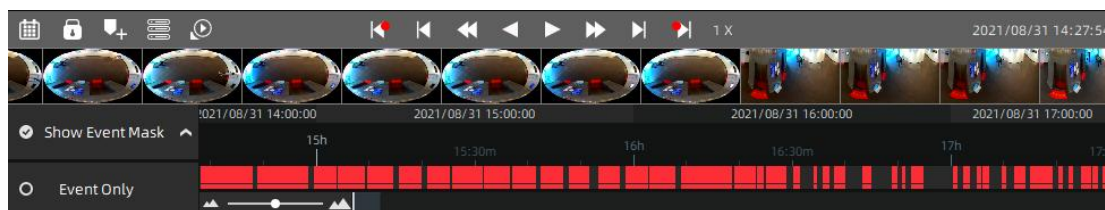
into:


Save As Layout(L)	Ctrl+S
Cell Spacing(C)	>
Aspect Ratio(A)	>
Pause All(P)	Alt+Shift+P
Turn on All Speakers(O)	Ctrl+Alt+O
Stream Type for All(M)	>
Display Info for All(N)	>
Add Tag for All	
Full Screen(F)	Ctrl+Enter
Remove All Views(R)	Ctrl+Alt+A

There are two more items:


Add Tag for All	Add tag for all cameras in the playback panel.
Remove All Views	Remove all cameras' playback from this layout.

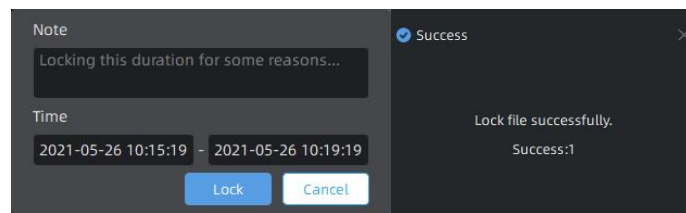
(3) Playback Toolbar



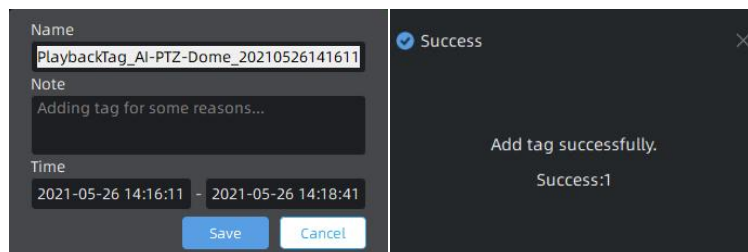
Select a certain channel in the current layout and  to show the calendar. The blue date and time both indicate availability of recordings. Click the date and time you want to locate to.

< May 2021 >						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5
< 2021-05-26 >						
00:00	1:00	2:00	3:00			
04:00	5:00	6:00	7:00			
08:00	9:00	10:00	11:00			
12:00	13:00	14:00	15:00			
16:00	17:00	18:00	19:00			
20:00	21:00	22:00	23:00			

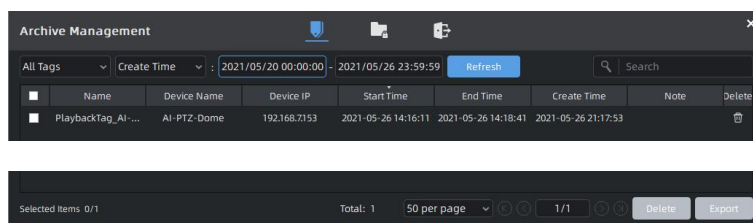
Click  to lock recording file, and you can set locked time duration and notes.



Click to add tags for selected channels, and you can set tag name, note and time duration.

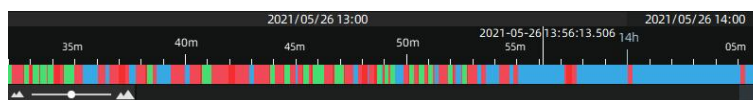


Click to show Archive Management which can be used to check and retrieve tag and lock files.

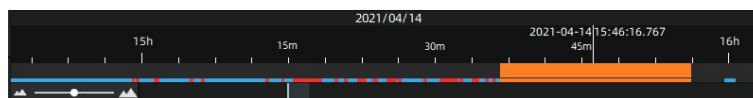


Click to switch to Asynchronous Playing or Synchronous Playing.

Asynchronous Playing: The timeline only represents the recording of selected channel.



Synchronous Playing: Playback all channels in the current layout synchronously. The thick timeline bar represents recordings of currently selected camera, while the thin bar represents recordings of all channels in the current layout.



Click / to play previous or next event video.

Click / to play previous or next frame of the recording.

Click / to adjust the playback speed to 1/32, 1/16, 1/8, 1/4, 1/2, 1X, 2X, 4X, 8X, 16X or 32X.

Click / / to rewind, play or pause the video.

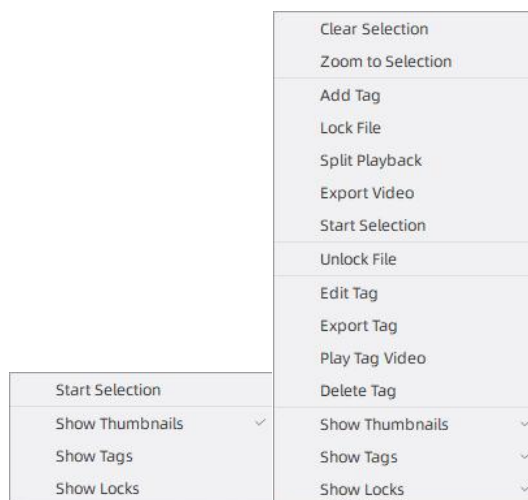
Click to move the current playback time to the center of timeline bar. The short white vertical line which represents the position of the current playback moment will move to the centre of the time bar.

Drag to zoom in/out timeline bar. Or you can just scroll the mouse wheel on timeline bar to do so.



(4) Right-Click Timeline Bar

Right-Click the timeline bar and hold down to drag to move the time bar sideways.

Right-Click the timeline bar, the menu will show up as follows. If there has been a part of video selected and it contains locked video and tags, right-click menu will have more items.



The meanings of the items on the right-click menu can be referred to the table below:

Item	Description
Start Selection/End Selection	Select start/end time of period on the timeline.
Clear Selection	Clear selection on the timeline.
Zoom to Selection	Extend the selected period to whole timeline.
Add Tag	Add tag for the selected period.
Lock File	Lock the selected period.
Split Playback	More Details in 6.2 Split Playback
Export Video	Export the selected period.
Unlock File	Unlock the locked video file.
Edit Tag	Edit tag which you set.
Export Tag	Export tag which you set.
Play Tag Video	Play videos with tag you set.
Delete Tag	Delete tag which you set.
Show Thumbnails	<p>Show thumbnail of the corresponding time. Users can also resize the thumbnail timeline as needed.</p> 
Show Tags	<p>After setting the tags, you can choose the option to show the tag on the timeline</p> 

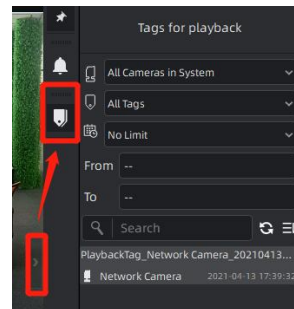
Show Locks

After setting the lock files, you can choose the option to show the lock file on the timeline

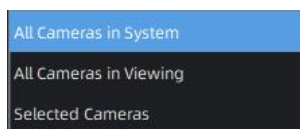


(5) Tags for Playback

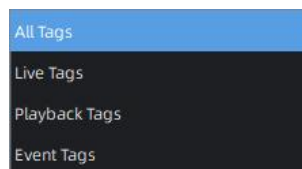
Click the Hide/Show bottom to pop-up right side menu and click the tag icon to show Tags for Playback.



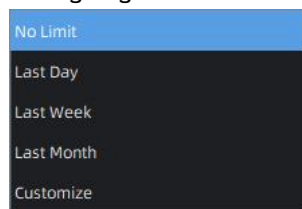
Select which channels to search tags from.



Select which types of tags to search.



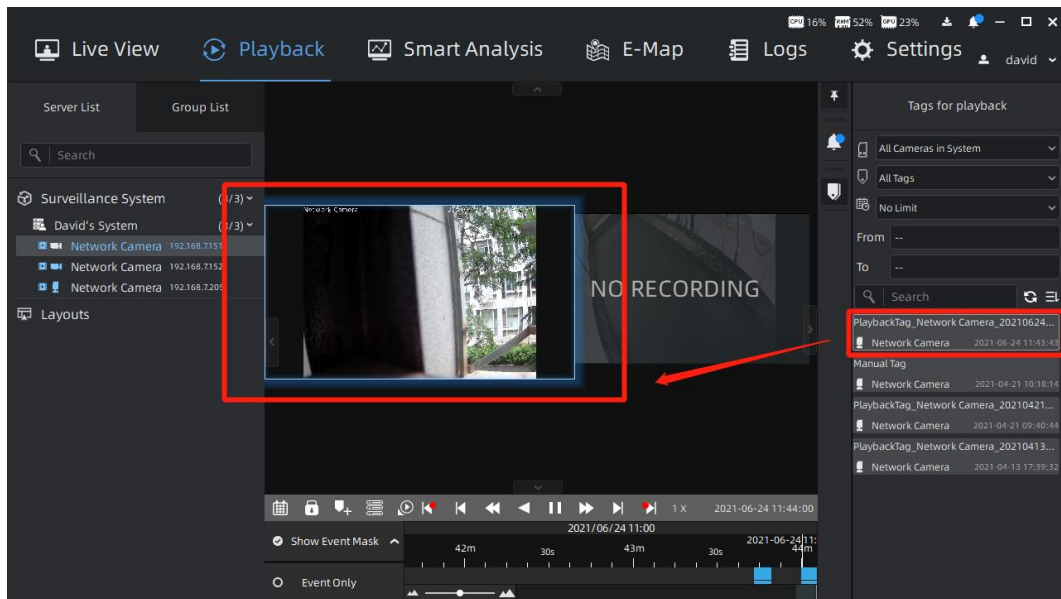
Select the time duration for searching tags



Search keyword of tags' names and notes. Refresh the tag list and chose how to sort the tag list (Tag Start Time, Tag Name, Camera Name and Create Time).



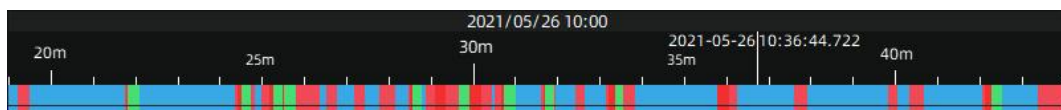
Double click the tag you want, and the video of the corresponding channel then jumps to the time of the tag and flashes the window.



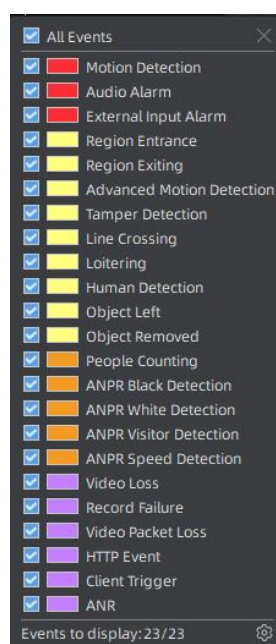
6. Event and Split Playback


(1) Event Playback

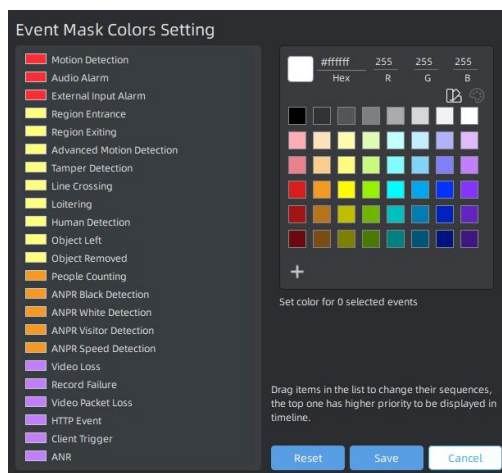
If the channel is configured with rule-triggered recording, the timeline bar of Playback will have different colors representing different events.



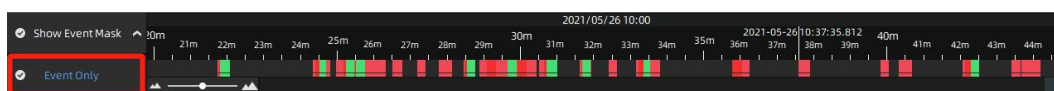
Click *Show Event Mask* to check event type to be shown on the timeline, the timeline will show different colors according to selected event type as below:



Click the  button to enter Event Mask Colors Setting interface, it supports customizing different colors for different events according to the user's requirement.



Click *Event Only* to exclude continuous recording.

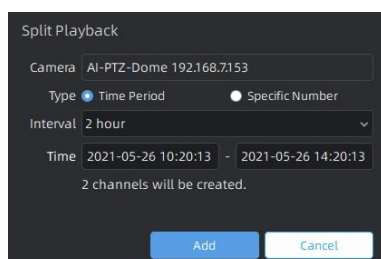


(2) Split Playback

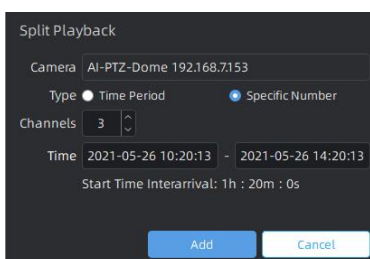
Split Playback allows you to divide a period time of recording into several parts when watching playback, so that users can watch videos of different time simultaneously.

Split Playback setting steps are as below:

Step1: Right click the playback window of a channel and click Split Playback, or right-click the selected time period on the timeline and choose Split Playback, and a window will pop up.



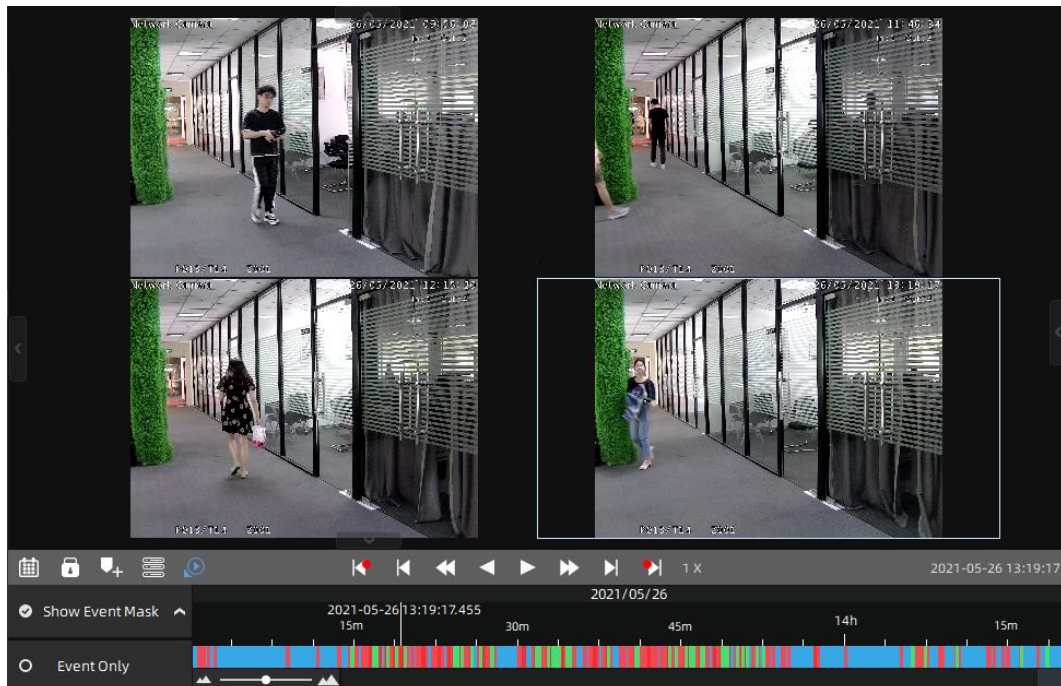
Time Period setting



Specific Number setting

Step2: Check a type to split the video file. If you choose the Time Period, and set Time Interval and Start/End Time, then the channels will be split automatically by VMS system as above. If you choose the Specific Number, and set channel number and Start/End Time, then Time Interval will be calculated and split automatically by VMS system as above.

Step3: After setting, click [Add](#) , and the selected video will be split to new channels to replay asynchronously on the playback layout as shown below:



-END-