

Milesight-Troubleshooting ANPR Settings on NVR

Milesight Technology Co.,Ltd.



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Milesight ANPR Solution based on Milesight NVR with Milesight Camera provides users a comprehensive ANPR experience, abundant functions including Settings, Live View, Smart Analysis, etc.

In order to make ANPR perfectly work on NVR, this troubleshooting shows you some important operation parts including:

- Preparation
- How to set ANPR?
- How to check real-time license plate?
- How to check ANPR record?
- How to check/backup ANPR logs?

I. Preparation

Here are some notes you should notice before using ANPR function.

 $\oplus~$ Insert available HDD to NVR.

 $\odot~$ Upgrade your device to corresponded firmware version.

Camera: V4X.7.0.72-r16 or above.

NVR: V7X.9.0.7-r7 or above.

Firmware download link: http://www.milesight.com/support/download#firmware

③ Ensure your device support LPR/ANPR function. Model of NVR:

- MS-N1009-UT / MS-N1009-UNT
- MS-N5008-UT / MS-N5016-UT
- MS-N7016-UH / MS-N7032-UH (16 ANPR Channels)
- MS-N8032-UH / MS-N8064-UH (16 ANPR Channels)
- MS-N1009-UPT
- MS-N5008-UPT / MS-N5016-UPT
- MS-N7016-UPH / MS-N7032-UPH (16 ANPR Channels)

Name of LPR Camera:

- LPR H.265⁺ Mini Bullet Camera
- LPR H.265⁺ Vandal-proof Motorized Mini Bullet Camera
- LPR H.265⁺ Pro Box Camera
- LPR H.265⁺ Motorized Pro Bullet Camera
- LPR 12X H.265⁺ AF Motorized Pro Bullet Camera
- LPR 12X H.265⁺ Mini PTZ Bullet Camera

(4) Ensure that NVR can get license plate information. Please set TCP which is the default mode as Post Type. It can be set in Camera web page -> Advanced Settings -> ANPR -> Settings interface.

LPR Message Post Settings		
Enable LPR Message Post:		
Post Type:	TCP	~
Camera LPR Port:	3344	

II. How to set ANPR?

Set ANPR settings on Event -> ANPR interface.

ANPR settings consist of Settings, List Management, Black List Mode, White List Mode and Visitor Mode.

Settings

Do as following 5 steps to enable ANPR function.

Camera will start to detect license plate and NVR will start to receive license plate information once these steps are done.

*	Event Se	ttings								Me	CPU 8%
	Settings	List Management	Black List #	Vode	White List Mode	Visito	r Mode				
Viriao I orr	1 1165*581			1	2	3	4	5	6 14	7	8
				17	18	19	20	21	22	23	24
				25	26	27	28	29	30	31	32
Alarm Output				41	34 42	35 43	36 44	45	38 46	39 47	40
				49	50	51	52	53	54	55	56
	C	annel: 3 Name: CAM3		57	58	59	60	61	62	63	64
	Please draw the scree	n forsettings.		ANPR		6	5				
	Add	Clear Clear Al		Processing Re	solution	1	280*720				•
	1	ROL1	100 CERCITO	Effective Time	gion s		Edit				•
				Detection Se	llings		Edit				
				Please config th	e Action in Block Li	t / White List or Vi	stor Mode.				
Live View									I	Apply	Bock

Step1: Select a channel and enable ANPR function.

Step2: Select processing resolution. The further distance you detected, the higher resolution is needed.

1280*720 by default.

Step3: Set ANPR function effective time.

Step4: Set detection parameters including detection trigger, repeat plate checktime and features identification. Detection Trigger: Always and Alarm Input are available. It will only detect when alarm input is triggered if you select Alarm Input.

Repeat Plate Checktime: The same license plate information won't be received on NVR within the time you set. Features Identification: The selected features identification will be shown in ANPR logs interface.

	Detection Settings
Detection Trigger	Always
Repeat Plate Checktime	2 🔶 Minute 🔻 (0~60min)
Features Identification	
	✓ Direction ✓ ROI_ID
	OK Cancel Apply

Step5: Set the detected ROI region which can be up to 4 regions. License plate will only be detected in the ROI regions.



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1	833°434		
	Channel: 1	Name: CAM1	
ise draw th	e screen for settings		
Add	Clear	Clear All	
	Name		

List Management

Make a license plate list for your own NVR ANPR system.

Upload license plates and set them with different license type here. 10000 plates can be added at most. Kindly note that the list is exclusive for NVR, working with all LPR cameras you add. It won't synchronize with the list on camera side.

~	Event Settings			CPU 5% Memory 8%
•••		AA	NPR	
Motion Detection	Settings List Management	Black List Mode White List Mode	Visitor Mode	
Video Loss	Ucense Rate Ucense Type	AL		
				Search
Alarm Input	Ucense Plate MS1111	License Type White	Edit	Dalate
Alarm Output				
Exception				
VCA				
ANPR				
	Total 1 Items	Poge: 1-1 4 4	►)> Go	Download Template
Live View			Add Delete List	Import Export Back

There are two methods to add license plates:

 \bigcirc Add one by one.

Step1: Click Add button Add.

Step2: Input the license plate and select license type.

Step3: Click OK and then the license plate will be added into the list.

License Plate	M\$2222
Plate Type	Black

 \odot Batch adding by importing template.

Step1: Click Download Template button Download Template, select USB device folder and click OK to download Template.



Step2: Input all license type and license plate number as Template shows.



Step3: Click Import button

import, select the file and click OK to add all license plates into list.

		Device			
levice	Na	ime 🔺	Size	Туре	Date Modified
Flash Disk	a			Folder	2019-12-17 17:57:41
0%	list_demo.csv		40 bytes	File	2019-12-17 17:58:36
/	1				
peration	_				
New Folder	É la companya di seconda di second				
Format					
Petreth					
Refresh	File Name		2		

Black List Mode/White List Mode/Visitor Mode

We provide you three modes for better event management, which is based on two license types.

Black List Mode: Manage event for license plates in black list.

White List Mode: Manage event for license plates in white list

Visitor Mode: Manage event for those license plates do not have license type.

~	Event Se	ettings								CPU 6%
				A	NPR					
	Settings	List Management	Black List Mode	White List Mode	vish	or Mode				
Video Loss			1	2	3	4	5	6 14	7	8
			17	18	19	20	21	22	23	24
			25	26	27	28	29	30	31	32
			33	34	35	36	37	38	39	40
			.41	42	43	- 44	45	46	47	48
			49	50	51	52	53	54	55	56
	0	annel: 3 Name: CAM3	5/	58	59	60	61	62	63	64
			Black Lis	Mode	8	2				
VCA			Ettective	Time		Edit				
			Action			Edil				
Live View								I	Apply	Bock

Steps for settings:

Step1: Enable Black List Mode/White List Mode/Visitor Mode as your demand.

Step2: Set effective time which means Mode works during that.

Step3: Set action including Audible Warning, Email Linkage, Event Popup, PTZ Action, Alarm Output and Trigger Channels Record.



Audible Warning	Clear All		Select.	Al		Edit									
Email Linkage	Sunday	0	2	4	6		8	10	12	14	16	18	20	22	24
Event Popup	Monday														
PTZ Action	Tuesday Wednesday														
Alarm Output	Thursday														
Others	Friday														
	Holiday														
	Audible			Era	50										
	Trigger interval		20s		•	1									
									_	OK		Cance		Anr	Nu
										OK.		Conce		Apt	AY -

Note:

Do not forget to enable these modes, set effective time and record action for corresponded mode, ensuring that you can get real-time video when license plate is detected (Effective time and record action is enabled by default.). You can refer to **How to check ANPR record** part for detailed record settings.

III. How to check real-time license plate?

At the beginning, you need to switch the preview mode to ANPR mode.

There are two methods to enter live view ANPR Mode:

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 $\oplus~$ Right click the mouse and select ANPR Mode as preview mode.



 \odot Select ANPR Mode on live view bottom tool bar.

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After entering ANPR mode, the real-time license plate information will be shown on the left of the interface once it get detected.



License plate information includes Plate Snapshot, Channel Name, License Plate Number, Detected Time and Plate Type.

Two License types:

- ---- License from Black List
- ---- License form White List





No plate type will be shown if the license plate does not exist in Black/White list.

However, you can right click the license plate information to quick add it to Black/White list or delete it from Black/White list.



Besides, you can click the license plate information to check the latest X seconds (10s~20s) video.



Note:

• X = 10 + Pre Record Time

You can set Pre Record Time in Storage -> Video Record -> Record Settings interface.

Pre Record	10s	T
Post Record	15	
Audio Record	25	II.
Record Stream Type		
Video Due Time	55	
	6s	I.
	7s	I.
	8s	
	9s	
	10s	-

- Ensure that there is available HDD on NVR and correct record settings is made, so that you can check the record on live view. Please refer to **How to check ANPR record** part for detailed record settings.
- Ensure that NVR can get the license plate information. Please set TCP which is the default mode as Post Type. It can be set in Camera web page -> Advanced Settings -> ANPR -> Settings interface.

LPR Message Post Settings			
Enable LPR Message Post:			
Post Type:	TCP	~	
Camera LPR Port:	3344		

IV. How to check ANPR record?

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Before checking record, please ensure that you have done correct settings to make record work. **Step1:** Set Smart Analysis as Record Type in Storage -> Video Record -> Record Schedule interface.



Step2: Black List Mode or White List Mode or Visitor Mode is enabled as your demand.

Step3: Effective time and Trigger Channels Record action of Black List Mode/White List Mode/Visitor Mode is set (Full effective time and trigger channel record are set by default).

Audible Warning	Trigger Chan	nels Record						
5. J	ILA 🔳							
Email Linkage	🗹 1	2	3	4	5	6	7	8
Event Popup	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
PTZ Action	25	26	27	28	29	30	31	32
Alarm Output	33	34	35	36	37	38	39	40
	41	42	43	44	45	46	47	48
Others	49	50	51	52	53	54	55	56
	57	58	59	60	61	62	63	64
	Note: This pa	ge's configurati	on will not be c	opied into othe	r channels.		ß	

Then NVR will record when license plate is detected .

Note:

Generally, record is triggered by event. If you just enable ANPR function without enabling Black List/White List/Visitor modes and setting record action, that means you just enable the function while record action is not set. Then no record will be triggered. So it is necessary to do all above three steps if you want to trigger record. Check record in Playback

Entering Playback -> Event Playback -> Smart Analysis interface.

Input corresponded information and click search button

to search.





Click record to play the video searched out .



Check video in Live View

Click the license plate information to check the latest X seconds (10s~20s) video.



Note:

• X = 10 + Pre Record Time

You can set Pre Record Time in Storage -> Video Record -> Record Settings interface.

Pre Record	10s	v
Post Record	ls	A
Audio Record	2s	
Record Stream Type	35 4s	
Video Due Time	55	
	6s	
	7s	
	8s	
	9s	
	10s	V

• Ensuring that there is available HDD on NVR and correct record settings is made so that you can check the record on live view. Please refer to **How to check ANPR record** part to check if record is correctly set.

V. How to check/backup ANPR Logs?

Check ANPR logs

Search on Smart Analysis interface.

Input corresponded information and click search button Search to search.

Then you will get a whole ANPR logs list.

License plate snapshot will be shown on the logs list while the complete image video and license plate information will be shown on the left of the interface.

*	Smart Analysis		
		ANPR	
Live View	Image: A constraint of the second	A 024 9757; 31+ 6029; 027 0844; 0 Image: Im	020// 9757 31± 6029 31 201+350 K K K K 0 cm 201+350 K K K K K 020// 9757 31± 6029 01 201+350 K K K K 0 cm 201+360 K K K K 020// 9757 31± 6029 020// 9757 31± 6029 020// 9757 31± 6029 020// 9757 31± 6029 020// 9757 31± 6029 01 201+350 K K K K 31± 6029 020// 9757 31± 6029 01 201+350 K K K K 31± 6029 020// 9757 31± 6029 01 201+350 K K K K 31± 6029 020// 9757 31± 6029 01 201+350 K K K K 31± 6029 020// 9757 0 201 201+30 K K K K 020// 9757 0 201 201+30 K K K K 020// 9757 0 201 201 10 K K K K 020// 9757 0 201 201 10 K K K K 020// 9757 0 201 201 10 K K K K 020// 9757 0 201 201 10 K K K K

Click 🕑 to play the video.

Backup ANPR logs

Two methods are available after searching ANPR logs out .

Backup license plates you want.

Step1: Tick license plates you want to backup and click backup button
 Step2: Select the export file type, video stream type and video file format, then click export button.

Device						
evice	N	ame 🔺	Size	Туре	Date Modified	
Flash Disk 0% Free: 3.8G, Total: 3.8G		[Folder	2019-12-19 14:27:26	
Aperation	Directory	/media/usb1_2/1				
operation New Folder	Directory Export File	/media/usb1_2/1	Video		Picture	
Operation New Folder Format	Directory Export File Video Stream Type	/media/usib1_2/1 Pitate List Primary Stream	Video		Picture	

 $\odot~$ Backup all.

Step1: Click backup all Backup All button.

Step2: Select the export file type, video stream type and video file format, then click export button. Then you will get corresponded file as selected export file type.

- Picture	12/19/2019 6:49 AM	File folder
Plate List	12/19/2019 6:48 AM	File folder
	12/19/2019 6:49 AM	File folder

-END-