

HCP VCA Search Function

Operation Guide

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1 Scheme Introduction

The camera stores the recording in CVR/NVR/DVR/pStor, retrieves and filters events on the platform, and returns corresponding event recording fragments. The topology of the solution is as follows.



[Note]: HCP currently supports three types of intelligent post retrieval for events, namely: mobile detection, cross line detection, and intrusion detection. However, the specific support for the above three events for different storage types is as follows: NVR/DVR: All three events mentioned above are supported.

CVR: Supports motion detection and line crossing detection.

PStor/SAC: Supports mobile detection and line crossing detection.

Cloud storage: supports mobile detection and offline detection.

2 Installation Steps

[Note]: The software used in this article is the baseline version of HCP 2.4.1.

2.1 Video recording with encoding device (NVR/DVR) to achieve

VCA Search function

[Note]: The device model and firmware version used for testing are as follows:

_		Live Vie	w Playback	File /	Application	Configuration	Display Alarm
Ģ		Basic Informatio	on Time Settings	RS-232	RS-485	5 Menu Outpu	t About
8	System	~	Device Name	DeepinMir	nd		
	System Settings		* Device No.	255			
			Mode	iDS-7732N	KI-M4 / 16P/X		
			Serial No.	iDS-7732N	KI-M4 / 16P/X1	620230301CCRRL34	18
	User Management		Firmware Version	V4.61.225 b	ouild 230518		
	Camora Managama	-+	Encoding Version	V5.0 build 2	30316		
	Camera Manageme	n	Hardware Version	B-R-K21B1	_H930-00		
	VCA Configuration		FR Version	V5.0.300			
		Perimeter P	rotection Algorithm Ve	V2.0.0			
			HMS Version	V4.5.0			
¢		Version of F	ace Capture Algorithm	V5.0.300			
		Objects	ThrownDetection Version	V1.1.0			
⊕		~	Web Version	V4.5.0 build	230228		
			Plugin Version	V3.0.8.11			
			Number of Channels	13			
¥	VCA	~	Number of HDDs	1			
ΞŦ.			Number of Alarm Input	45			
[,	Vehicle Detection		Number of Alarm Output	45			
Ba	sic Information	Time Settings	RS-232 F	RS-485	System S	ervice Loc	ation
		Device Name	IP CAMERA2				
		*Device No.	88				
		Device Model	iDS-2CD7547G0-X7	'HSY			
		Donio moder					
		Device Serial No.	iDS-2CD7547G0-XZ	(HSY20230	522AAWRAE	5625452	
		Firmware Version	V5.8.40 build 23083	0 Upgrade			
		Encoding Version	V7.3 build 230824				
		Web Version	V5.1.0_R0101 build	230810			
	N	umber of Channels	1				
		Number of HDDs	1				

Number of Alarm Inputs 1

Number of Alarm Outputs 1

Firmware Version Property B-R-H8-0

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> Device configuration

 Log in to the IPC webpage and switch the camera VCA mode to intelligent event mode. (Some camera operations may vary slightly)

	Select Application	 Set Application
Playback	Enable a smart application or event for the channel.	
کمار Application Display	Smart Event	Face Capture
₩ VCA		
Configuration Maintenance and Security	Multi-Dimension People Counting	People Management
	Next	

 Enter the camera configuration interface and click on Video/Audio Display Info On Stream, enable the Enable Dual VCA option.

HIKVIS	5ION						
۲ Live View	Common Settings		Video	Audio	ROI	Target Cropping	Display Info. on Stream
	Local			ſ	Enable Dual-		
Playback	System	~		L	Linubio Dudi		
ୡ	Network	~				Save	
Application Display	Video/Audio						
	Image						
	PTZ						
Configuration	Storage	~					
	Event	~					
Maintenance and Security	Device Management	~					

3) Enter the camera configuration interface, click Event Motion Detection, configure events as needed, and check to upload to the monitoring center.



 Enter the camera configuration interface, click VCA - Smart Event, enable Intrusion Detection and Line Crossing Detection, customize the detection box, and check to upload to the monitoring center.

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-	G	Smart Event								
Live View		Intrusion Detection	ne Crossing Detection	Region Entrance Detection	Region Exiting Detection	Loitering Detection	People Gathering Detection	Fast Moving Detection	Parking Detection	Unattended E
Playback		Rule	Arming Schedul							
Application Display			Enable		0 6. 6		វេបារា	View	Drawing Example	
VCA		R	ule List	+ Add		E BERT		A ARE THE AND	ALC: NOT	
@ Configuration		Detection	Target I Human Vehic	3e	2	And Lawrence				
ه Maintenance		Thr	eshold 🔿	0 se		the state of	Apartales 2			
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Rule	Arming Schedul					
Enable			/ 5. 5.	0 0 0 X d	a 0 0	View Drawing Ex
Rule List	+ Ad	d		Service -		
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Detection Target	Human Vehicle					
Direction	A<->B		× 21 10	and in the second se	a grant to the state of	3.0
		0 100		The second second		
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Sensitivity Target Validity	Basic			The second se	The second second	

5) Enter the backend device WEB interface, click Configuration Event Basic Event in sequence, and manually enable Motion;

Enter Configuration Event Smart Event, enable cross line detection and area intrusion events, and check the Notify Surveillance Center for all options.





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6) The configuration item for saving camera VCA data needs to be enabled locally on the NVR.



> Configuration on HCP

1) Open the HCP WEB interface, click on Device - Area, select the resource point,

and ensure that the recording plan has been configured.

G HikCentral Professional 🟫 🔡 🛛 Video Access Control Ever	nt and Alarm Person Account and Security Device 🗿 Maintenance Visual Map
Device 📻 🕂 🛍 🕸	Supports global sorting for the list data.
Device and Server	🔄 doortest
Encoding Device	Basic Information Recording Settings Picture Storage Se
Access Control Device	Basic Information
Video Intercom Device III 10.15.96.189	*Name doortest
Visitor Terminal 🧧 9503	
Display Screen	• Iransmission type for Live view
Dock Station	Picture □> Live View €1
Network Transmission Device	and a second and a second a second a second a second as
Recording Server III TEST	
Streaming Server	
DeepinMind Server	and the second sec
[〗 Area ★	
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Device Application	Recording Settings
	Main Storage Get Device's Recording Settings
	Storage Location Encoding Device V
	Recording Schedule Custom Template View Template
	Stream Type Main Stream
	• Pre-Record 🗹
	Post-Record Ss

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- 2) Open the HCP client, click on Exploration Video Search VCA Search, select the filtering criteria, and draw rule boxes for mobile detection, cross line detection, and regional intrusion events. Then, search and return the VCA results of the corresponding events, as shown in the following figure.





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88	🔞 HikCentral Professional Con	trol Client 🚺 Video Search		A 10 ⊡ □	admin	18:44:27 UTC+08:00 🗎	۱ –	σ
		VCA Search	31 result(s) found. 🗁 Export			8	=	Ľ
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			landar harden hard	THE R. P. LEWIS CO., LANSING MICH.			1.1.1	1.1

2.2 Video storage on CVR to achieve VCA Search

[Note]: The CVR model and firmware version used for testing are as follows.

HIK VISI	ON DS-A806245 F	Hybrid SAN + + + + + + + + + + + + + + + + + + +								
Information	System Config -> Version									
Encoding Device										
Braview and Record	Hybrid SAN Version I	nformation								
Strategy and Alarm	Hybrid SAN_Release:	V2.3.8-8								
Download and play	Library Version Inform	mation								
User Management										
System Config	nvralarm:	V1.1.34								
» Mode Switch	nvrdev:	V1.2.20								
» Evetem Alarm	rtsp:	V2.0.1								
" System Aidim	libnvr:	V1.0.3								
* Version	dvrhk:	V1.0.3								
Log Management	hksdk:	V6.1.7.10								
	libSystemTransform:	V2.5.5.3								
	Other Version Inform	ation								
	HKServer:	V3.41-1								
	CoreServer:	V2.2.1-6								
	StoreServer:	V3.0.0-4								
	nvrschedule:	V1.0.3								
Logout	nvrmanager:	V1.0.3								
	nvradmin:	V1.0.3								
	nvrctrl:	V1.0.3								
	nvrlist:	V1.0.3								
@ 2019	nvralarm:	V1.1.34								
HIKVISION	nvrdev:	V1.2.20								
	nvrdb:	V1.0.3								
	nvrfilter:	V1.0.3								

> Configuration on CVR

Open the CVR WEB interface, log in in to Hybrid San mode, click on System Config Mode Switch, find the Smart Switch, and enable the intelligent functions.



HIK VISI	ON DS-A80624S Hybrid SAN		C Class	-W-System is normal 10.41.8.154
Information Encoding Device Preview and Record Strategy and Alarm Download and play User Management System Config	System Config Smart Switck Smart function is enabled v Setting Video Query Time: 0	Configuration Configuration	Special Notes: When the first- and device manufacturer is Hikvision, smart smitch is valid for HK encoding device, instead of NHK encoding device, Node Description: This mode is used to set the total length of video query, the deflatt value is 0, that is, no limit, After the user modifies once, to is to be smaller than the original values. If you want to expand the query scope, you need to Service Reset.	e. the value modified again need
Mode Switch System Alarm Version Log Management			Coperate, please enter "yes" (* YES".) Ves Coperate, please enter "yes" (* YES".) Ves Coperate Co	
🕤 Logout				
© 2018 HIKVISION				

> Configuration on HCP

1) Open the HCP WEB interface, add CVR, open Device Area in sequence, select the

	_	+ 0 \$	 Supports global sorting for the list data. 			
Device	⋸	HikCentral Professional V	⊖ doortest			
Device and Server	^					
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Access Control Device		HikCentral Protessional	Storage Location	Encoding Device ~		
Video Intercom Device		i QAQ	Decention School de	Custom Template	Manu	
Visitor Terminal		I TEST	Template	custom tempate	VIEW	
Display Screen		III TXQQ ····				
Dock Station			Stream Type	Main Stream V		
Network Transmission Device			Pre-Record			
Recording Server						
Strasming Canvar			Post-Record	5s ~		
Description Conver				_		
Deepinimina server			Video Expiration			
🖪 Area	*		Enable ANR			
Firmware Upgrade						
			Auxiliary Storage	Get Device's Recording Settings		
			Storage Location	Huhrid Storane área Network	CVP	×
			Storage Estation	There beings with retrieve	- Cont	
				rv		
				4.1T8 Free of 4.8T8		
			Storage Type	Real-Time Storage O Scheduled Conv.Back		
			Recording Schedule	All-Day Time-Based Template	View	
			Template	① CVR only supports time-based and event-based recording schedule.		
			Stream Type	Main Stream 🗸		
			Post-Record	10s ~		

channel, and ensure that the recording plan has been correctly configured.

 Open the HCP client and click on Exploration Video Search VCA Search. To retrieve, select the storage path CVR and click Retrieve.





 After drawing the detection rule box for area intrusion and line crossing detection, the following results are obtained.



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Original Professional Control Client Int Video Search	Ø≉ 🗘 🖾 🚊 🛃 admin 19:52:22 UTC+08:00 🖨 →
VCA Search	41 result(s) found. 🕒 biport
Voteo Footage Search Time Scheduled Capture Search Today Time: Today Tome: Lapue Photography Vot Search Device Voteo Search	
Sensitivity	Feur Statice 2020/07/02.59.9
	Result Statistics 2023/09/07 00:00:00 ~ 2023/09/07 23:59:59

[Note]: When the storage location is CVR for motion detection retrieval, as CVR does not support intelligent post retrieval of motion detection events, if the current channel is configured with NVR, the motion detection event results in NVR will be automatically detected.



2.3 Implementing VCA Search for Video Recording Storage on

pStor

[Note]: The version of pStor used for testing is as follows:





> pStor configuration

Open the installation path of the pStor program C:\SurveyanceSystem\ASW\conf\cva, and modify <enable_ivs>0</enable_ivs> from 0 to 1, save it, and then restart the pStor services.

ange.log	🛛 🔚 nginx.conf 🗵 🔚 cva_config.xml 🔯				
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_ <c< th=""><th>onfig></th></c<>	onfig>				
	<version>2.2.1</version>				
	<pre><pool_size>4096</pool_size></pre>				
曱	<cvm></cvm>				
	<ip>127.0.0.1</ip>				
F					
Ē	<mds></mds>				
	<ip>127.0.0.1</ip>				
F					
닏	<cpm></cpm>				
	<ip>127.0.0.1</ip>				
	<heartbeat_interval>3</heartbeat_interval>				
	<heartbeat_fail_time>3</heartbeat_fail_time>				
上					
닏	<record></record>				
	<buffer_size>10</buffer_size>				
	<frame_count>10000</frame_count>				
	<pre><enable_ivs>1</enable_ivs></pre>				
	<stream_type>0</stream_type>				
	<anr_trigger_time>5</anr_trigger_time>				
	<anr_enable>1</anr_enable>				
	<stream_timeout>5</stream_timeout>				
	<anr_extense_before>15</anr_extense_before>				
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Configuration on HCP

1) Open the HCP WEB interface, add pStor, open Device Area in sequence, select the channel, and ensure that the recording plan has been correctly configured.

🏮 HikCentral Professional 👔 🔡	Video Access Control Even	t and Alarm Person Account and Secur	rity Device 🗘 Maintenance Visual Map	
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	HikCentral Professional	(C) doortest		
Device and Server V		() utoritati		
📳 Area 🔶	Search	Basic Information Recording Se	ettings Picture Storage Se	
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Firmware Upgrade	PTZ	Pre-Record	V	
Device Application	III QAQ			
	TEST	Post-Record	56 ~	
	III IXQQ			
		Video Expiration		
		Enable ANR		
		Auvillan/ Storage	Get Device's Recording Settings	
		Hakilary Storage	Bet bene 3 heading settings	
		Storage Location	pStor V pStor	~
			pStor	
			8.0GB Free of 8.0GB	
		Storage Type	Real-Time Storage Scheduled Copy-Back	
		Recording Schedule	All-Day Time-Based Template	
		Template	pStor only supports time-based and event-based recording schedule.	
		Stream Type	Main Stream 🗸	
		Pre-Record		
		Ctrasming Sequer	-Manas	
		Successing Server	*(1915* V	
		Recording Server Gets		
		Video from Camera		

2) Open the HCP client and click on Investment Video Search VCA Search. To retrieve,

select the storage path pStor and click Retrieve.

	> 🔢 PTZ	
Dock Station File Search	> 🖪 QAQ	
	> 🖪 TEST	
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	IP Camera17	Main Storage TXOO
	IPCamera 02	
		 Auxiliary Storage_pStor
		l. I

 After drawing the detection rule box for area intrusion and line crossing detection, the following results are obtained.





[Note]: When the storage location is pStor for mobile detection retrieval, as pStor does not support intelligent post retrieval of mobile detection events, if the current channel is configured with NVR, the mobile detection event results in NVR will be automatically detected.



3 FAQ

Q: When VCA records cannot be searched on HCP, how do I troubleshoot and locate the problem?

Answer: In addition to checking configuration parameters, troubleshooting can be carried out from the following aspects.

- If the storage location of the recording is NVR, it can be retrieved on the NVR local interface. If there are no results, it is a device issue or device configuration issue. If there are results, please continue to use SDK Demo to troubleshoot.
- ▶ Using SDK Demo to perform intelligent post retrieval function.
- 1) Adding devices on SDK Demo.
- Click Playback By Motion, set the search time range, select the type of event to retrieve in the retrieval section, and select the response channel.
- After clicking Preview, hold down the Ctrl+left mouse button to draw the event rule box, and finally click Search to return the results.
- 4) If the SDK demo is normal and the platform has no results, it indicates that the problem occurred in the platform test. If the SDK demo also has no results, please troubleshoot the device or configuration issue.

