Network PTZ Dome Camera Firmware

Version: V5.5.0

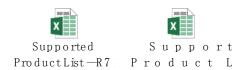
Release Note

	Firmware Version:	V5.5.0	
	SDK Version:	V5.2.7.45_build20170612	
	Play Library (PlayCtrl.dll)	v7.3.3.61 build170510	
	Encapsulation Library	V2.5.2.5	
Firmware	(SystemTransform.dll)	٧٢.3.٢.3	
Basic Information	Voice intercom library	1.4.0.3	
	iVMS-4200	2.5.13.2build20170709	
	IE Client version	plugin: V3.0.6.26	
	ie chefit version	web:V4.0.1build170711	
	SADP	v3.0.0.11 build20170710	

1. Compatibility Update

- HIKCGI version: V2.0;
- ONVIF version: V1612;
- ISAPI version: 2.4;
- <u>Milestone:</u>
 - 1) Milestone Enterprise 8.1a(2016 R2 10.2a), Milesstone drive version (Device Pack 9.1);
 - 2) Milestone Corporate version(2017 R1 11.1), Milestone drive version (Driver 9.1);
- Avigilon Control Center: V5.10.12.2;
- Excaqvision: V8.4.2.111542
- <u>Keyboard access:</u>
 - 1) Network Keyboard: DS-1600K V2.0.0
 - 2) Serial Keyboard: DS-1006K V1.0
- Version 5.5.0 not supports 4MP DE PTZ Camera that use new sensor, the models are blow:
 - 1) DS_2DE7430IW

- 2) DS_2DE7420IW
- 3) DS_2DE5430IW
- 4) DS_2DE5420IW
- Supported Products:



2. Security modifications(compared to 5.4.8)

2.1 Device Parameters Information Export

The password is needed when import or export Device Parameters from Web or 4200 client. The length of password is from 1~16 bits, numbers or letters are permitted.

		Reboot			
		Reboot	Reboot the device	э.	
	Maintenance	Default			
	Security	Restore	Reset all the para		× settings.
	User Management			File Encryption Configuration	× settings.
C	Network	Default	Restore all param		
<u>Q.</u>	Video/Audio	Information Export		Input the encryption password.(1 to 16 characters)	
		Device Parameters		••	S
<u>.</u>	РТΖ	Diagnose Informa	Download the log	Confirm	
曲	Event	Import Config. File		• •	I
		Device Parameters			iport
		Status		ОК С	Cancel
		Upgrade			
		Firmware V		Brows	se Upgrade
		Status			

2.2 Modify ONVIF and CGI

 ONVIF is disabled by default at vision 5.5.0, even update device from old version(ONVIF is enabled). There will be ONVIF switch at Web interface, 4200 Client and Batch Configuration Client.

SNM	P	FTP	Email	Platform Access	HTTPS	QoS	802.1x	Integration Protocol	
	Ena	ble Hikvi	sion-CGI						
Hik	visio	n-CGI Ai	uthenticat	digest		•			
	Ena	ble ONV	IF						
	User	List						A	Add Modify Delete
١	<mark>ا</mark> ٥.			User Name				L	evel

2) User management system in ONVIF is independent from device. Add user types, including Media user, Operator and Administrator, Up to 32 users. The password level of ONVIF user is consistent with device user.

User Name	
Password	
	Valid password range [8-16]. You can use a combination of numbers, lowercase, uppercase and special character for your password with at least two kinds of them contained.
Confirm	
Level	Media user
	 Operator
	 Administrator

- ONVIF version is updated to V1612, support Media 2.0(only H265 Video Encoding) and Two-way Audio at TCP/UDP/HTTP protocol.
- 4) ONVIF supports PTZ control in H265 Video Encoding, if ONVIF platform doesn't support media 2.0, streaming from device or PTZ control won't be supported.
- 5) CGI is disabled by default at vision 5.5.0, even update device from old version (CGI is enabled). There will be CGI switch at Web interface, 4200 Client and Batch Configuration Client and only baseline device support it.

SNMP	FTP	Email	Platform Access	HTTPS	QoS	802.1x	Integration Protocol	
	Hikvision-CGI Authenticat digest							
Use	User List Add Modify Delete							
No.			User Name				L	_evel

6) If device was restored, ONVIF's enable status won't be restored, but CGI's enable status, ONVIF/CGI/RTSP/web authentication, ONVIF's username and password will be restored, These information was included in Device Parameters can be imported or exported except password.

2.3 Hik-Connect

1. The ezviz name of baseline device is "Hik-Connect" and domain name is

<u>dev.hik-connect.com</u>; the ezviz name of neutral device is "Guarding Vision" and domain name is <u>dev.guardingvision.com</u>.

- DF series, DY series and ZOOM Camera series don't support HIK-Connect, DE series support HIK-Connect, and HIK-Connect is disabled by default.
- 3. SADP, 4200, 5200, 4500 and HIK-Connect client support to open Cloud P2P when active new device, you can also create verification code at the same time.

Tips		×
To enable Hik-Connect service, you verification code.	need to create a verification code or change the	The device is not activated.
Verification Code	•••••	
	6 to 12 letters (a to z, A to Z) or numbers (0 to 9),case sensitive.You are recommended to use a combination of no less than	You can modify the network parameters after the device activation.
Confirm Verification Code	8 letters or numbers.	Activate Now
		New Password:
The Hik-Connect service will requir <u>Service"</u> and <u>"Privacy Policy"</u> before	e internet access. Please read the <u>*Terms of</u> enabling the service.	Weak Confirm Password:
	Confirm	✓ Enable Hik-Connect
8000 V5.4.50build 170		Activata

4. You can also open Cloud P2P by web interface or client, there will be a notice to let you create Verification code, the verification code is visible.

If the factory equipment already have the verification code, the device will reminder you to

change it.

Enable	
Platform Access Mode	Hik-Connect
Server IP	dev.hik-connect.com 🖉 📄 Custom
Register Status	Offline
Verification Code	abcd1234 💿 🥑
	6 to 12 letters (a to z, A to Z) or numbers (0 to 9), case sensitive. You are recommended to use a combination of no less than 8 letters or numbers.

5. UPNP is disabled by default, if the device was registered to HIK-Connect, UPNP will be opened. UPNP will be close if the device was unbundled from HIK-Connect platform.

3. Newly add

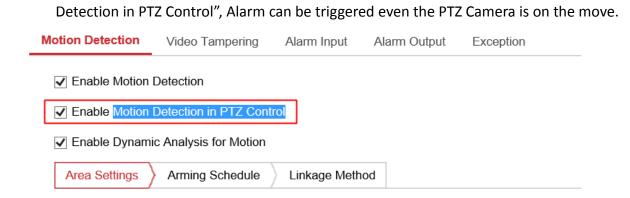
3.1 Alarm newly add

1) Preset duration time of Alarm Input can be set up, time range is from 0 to 20 seconds and the default value is 0.

Motion Detection Video Tampering	Alarm Input Alarm Output	Exception	
Alarm Input No. A<-1 Alarm Type NO		ddress Local	(cannot copy)
Arming Schedule Linkage Meth	nod		
Normal Linkage	Trigger Alarm Output	Trigger Recording	PTZ Linking A1 🗸
 Send Email Notify Surveillance Center Upload to FTP/Memory Card/ 	☐ A->1	☐ A1	Preset No. Duration Duration Patrol No. Patrol No. Pattern V

Note: Only device reaches the preset point, duration time can be started. Inside the duration time, device won't deal with other alarm linkage unless the duration time is over. And the device just process latest alarm linkage.

2) PTZ Camera is added "Motion Detection in PTZ Control" function. After enable "Motion



3.2 Rapid Focus supports 4 Scenes.

Compared to version 5.4.8, Rapid Focus has up to 4 Scenes.

Finish calibration before you enable eagle vision focus. Disabling eagle vision focus before you delete all scenes.

Start (Calibration Stop Calibration			
				Add Delete
No.	Scene Name	Rate	Calibration Point Amount	
1	Scene1	21	3	
2	Scene2	21	2	
3	Scene3	21	5	
4	Scene4	21	4	

Rapid focus support list:

- 1、 R3 (62XX, 82XXI) DarkFighter
- 2、 DS-2DF8225IH-AEL、 iDS-2VS225-F836
- 3、H3 (62xxX, 82xxIX, 64xxX, 84xxIX) DarkFighter
- 4、 DeepinView : iDS-2PT9122IX

3.3 Diagnose Information Export

- 1) All devices of Version 5.5.0 support export **Diagnose Information**, the filename format is "Serial No._current time.txt".
- 2) The exported information includes, but is not limited to, netstat, ifconfig, stack infor mation, ft information, Device start-up time, routing table, ps, taskShow, meminfo, g etpreviewStatus, dspStatus, getUserOnlineInfo, hardware information.

Ţ	Local	Upgrade & Maintenance	Log System Service
	System	Reboot	
	System Settings	Reboot	Reboot the device.
L	Maintenance	D. C. H	
	Security	Default	
	User Management	Restore	Reset all the parameters, except the IP parameters and user information, to the
Ð	Network	Default	Restore all parameters to default settings.
<u>Q.</u>	Video/Audio	Information Export	
1	Image	Device Parameters	
<u> </u>	PTZ	Diagnose Informa	Download the log, system information and hardware information.

3.4 Local password reset

- 1) Support Security question in order to help customers get back passwords that might have forgotten
- 2) In order to ensure safety, reset password operation must be in local area network
- 3) User can create 3 common questions, there has 10 optional questions.

Us	er Manag	ement Online Users	
	User Li	st	Security Question Add Modify Delete
	No.	User Name	Level
	1	admin	Administrator
Se	curity Q	uestion Configuration	×
		Security Question C	onfiguration
		Security Question1	Your father's name.
		Answer	
		Security Question2	Your mother's name.
		Answer	
		Security Question3	Your senior class teacher's name.
		Answer	
			OK Cancel

4) At the Login interface, you can click "Forgot password" to input the answers to the questions

that you set.

	tillingen institu. Ülimine Ülim	User Name Password Password? Login
0	2	3
Verify Identification	Set New Password	Complete
Verification Mode	Security Question Verification	~
Security Question1	Your father's name.	\checkmark
Answer		
Security Question2	Your mother's name.	~
Answer		
Security Question3 Answer	Your senior class teacher's name.	~
7 (15110)	L	

5) SADP client support set *Security Question* when active new device.

3.5 HTTP protocol event alarm connection

- 1) Support unload arming (alertStream mechanism)
- 2) Support unload subscription arming (subscribeEvent mechanism)
- 3) Support unload listening (httpHosts mechanism)

Target: All event alarm is uploaded to platform via http, in order to integrate the third platform.

3.6 Newly add number 46 preset

1) number 46 preset is used for *Day/Night Auto Mode*

3.7 Newly add serial command: setSelfCheck 0/1

The function of "setSelfCheck 0" is turning off "*reboot checking*", and "setSelfCheck 1" is used for turning on "reboot checking".

Notes: this command should be carefully used, which may make device's related movement function abnormal

3.8 Right Reserved information on web interface add year.

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3.9 Firmware Version Property add identification

Take B-R-R3-OF for example:

- 1) The first character: B expresses baseline, C expresses OEM
- 2) The second character: R expresses baseline firmware, F expresses fault recovery firmware.
- 3) The third character expresses platform information.
- 4) The forth character is reserved.

Basic Information Time	Settings	DST	RS-485	About	
Device Name	IP Positio	ning Syst	tem		
Device No.	88				
Model	DS-2DY9	188-AIA			
Serial No.	DS-2DY9188-AIA20170224CCWR722324861B				
Firmware Version	V5.5.0 build 170731				
Encoding Version	V7.4 build 170728				
Web Version	V4.0.1 build 170711				
Plugin Version	V3.0.6.26				
Number of Channels	1				
Number of HDDs	0				
Number of Alarm Input	7				
Number of Alarm Output	2				
Firmware Version Property	B-R-R3-0				

3.10 Serial No. add platform identification

- B/C is for R3 platform
- W is for R7 platform
- V is for R4 platform
- X is for H3/H1 platform
- Y is for E2 platform

3.11 Support "iperf" command, which can be used in PSH mode.

3.12 The probe PTZ Camera newly add "characteristic collection"

configuration.

3.13 Support new firmware identification code

• V5.5.0 support new firmware identification code, in order to make preparation for later online update.

4. Optimization

For R3&&R7 platform

4.1 Optimize 4G network

- 1) Solve some operator network, add APN2 mode, only Demo client support it.
- 2) APN is used to connect private network, and APN2 is used to connect global network.
- 3) Restoring device doesn't makes 4G, Wifi, Wlan parameters restored.

4.2 Defog&&White-light

1) Optimize optical defog mode: When non-white light device enable optical defog mode, you can switch Day/Night/Auto/Scheduled-Switch mode and open supplement light, but the image is in black-and-white status

- 2) Optimize optical defog is compatible with automatic white light:
 - a) After optical defog opened, image of device is in black-and-white status, Supplement Light will be closed.
 - b) After optical defog opened, switching Supplement Light mode won't influence image and light status; Only Day/Night Switch is Auto, which can be configured; Switching to any Day/Night Switch won't influence image and light status too.
 - c) After optical defog closed, Day/Night Switch mode and light status will recover.

4.3 Optimize transparent cover

1) Optimize transparent cover of 6.5 inch PTZ Camera, input "setSpecialIris" serial command to open the function, which is closed by default.

4.4 Change the password needs to enter the original password

1) Administrator delete or add new user needs to input Admin Password.

4.5 H265 Encoding support SVC configuration.

4.6 Change HTTPS

- 1) Delete https certification and reboot device, which won't create certification automatically.
- 2) Secret key length of HTTPS certification is change from 1024 to 2048.

4.7 Optimize supplement light effect of PTZ Camera.

1) Optimize IR light ICR back and forth oscillation issue.

4.8 Close SSH on the web interface

1) Delete SSH on the web interface, which can be opened at SDK client.

	Config Previo		Management	Others	Product Related	i I	Exit
VCA A	VCA Alarm Host DVR/NVR/DVS CVR Decode CFG PC/IPD CFG ITC CFG ACS VIS						
Confi	gure						
	CCD	IPC Special	IPC Special B	x Came	raSetUpCfg	IP	C File Export
	PTZ Socpe	SMD	Device Serve	er PTZ	Ctrl CFG		ROI
Devi	ce Server Module					×	ree Dim PTZ
_[Dev services module -		Security servic	s module ———			Eagle Cfg
	IrLamp Server	Disable 💌	SSH	Disable	•		mware Version
	telnet Server	Disable 💌	Web	Digest	•		
*	ABF	Enable 💌	Telent	Disable	•		

4.9 The memory side of SD card mostly supports 256Gb

4.10 Repair the issue that Model in Serial No. can only display 19 bits.

Local	Basic Information	Time Settings DST RS-485 About				
System	Device Name	IP DOME				
System Settings	Device No.	88				
Maintenance	Model	DS-2DF8223IW-AELW				
Security	Serial No.	DS-2DF8223IW-AELW20160507AAWR538259396W				
User Management	Firmware Version	V5.5.0 build 170724				

4.11 Optimize the device's SD card compatibility

For R3 platform

4.12 Optimize SDI PTZ Camera of R3 platform control effect.

4.13 Modify IPTH Positioning System Model and zoom multiple.

1) Zoom multiple is changed to 62X, 278 model is changed to 277 model.

For R7 platform

- 4.14 All devices support SVC function.
- 4.15 All devices was deleted "1000M Full-dup" on the web interface.
- 4.16 EIS of PTZ Camera supports "hold" function: image will not had sudden change after enable EIS.
- 4.17 Whether supports SMD push graph function or not depends on the device's memory size, 1G memory size device supports SMD push graph, 256M not.
- 4.18 ZOOM Camera don't support MicIn function on the web interface.
- 4.19 If Device model Camera don't match Module or lens don't match sensor, the device will has suppositional focus.
- 4.20 Zoom tracking function of all PTZ Camera and positioning system

support semi-auto mode, if the device supports Eagle Vision Focus, Zoom tracking supports Auto, semi-auto and Eagle Vision Focus mode.

4.21 The Park Time of ZOOM Camera keeps consistent with PTZ Camera, which is changed from 15 second to 5 second.

5. Delete

Delete Genetec and PSIA supports

Customer Impact and Recommended Action

This update refers to function/compatibility improvement and will take effect automatically after the Date of Change. We are very sorry for any inconvenience of use-habit changes caused by this action.

For any questions and request for this firmware, please contact our local technical support team.

<u>Remarks:</u>

- Hikvision reserves the right to change, alter or withdraw the above notification without prior notice.
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- The Hikvision firmware may contain defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.
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