

How to connect a 2N Helios IP intercom

This FAQ describes how to connect a 2N Helios IP intercom to the qulu VMS platform via ONVIF S Profile. Please note that for ONVIF functionality your intercom must be running the Enhanced Video Licence (9137906) or Gold Licence (9137909). As with any camera stream connected to qulu, you will need to have a spare licence if you wish to record the image and audio stream.

Note: Qulu provides video only recording from the camera in the panel, additionally events generated within the panel can trigger alarms within Qulu. Please note audio speech to and from the panel, and door release via the Qulu VMS is not supported.

\bigcirc		2N Helios IP Verso CZ EN DE FR IT ES RU L	.ogout
()	System	Licence Settings >	
.⊫ && ☆ ₩	Network Date & Time	Licence Status ~ Enhanced Security YES	
× c		Enhanced Audio YES	
	Licence >	Enhanced Video YES	
* *	Certificates	Enhanced Integration YES	
	Auto Descisionia	NFC Support YES	
	Auto Provisioning	G.729 Support NO	
	Syslog	Informacast Support NO	
	Maintenance	Online licence download >	







HOW TO CONFIGURE THE 2N® HELIOS IP INTERCOM

Navigate to the ONVIF section of the intercom settings. Set Discovery Mode to "Discoverable" and create user with Administrator rights. The credentials **admin/admin** has been used for this FAQ.

		2N Helios IP Verso CZ EN DE FR IT ES RU Logout	
(Services	ONVIF Settings -	
		Discovery Mode Discoverable	
•	Phone		
502		Accounts ~	
A. 4	Streaming	ENABLED NAME PASSWORD ACCESS LEVEL	
	Onvif >	admin ••••• Administrator •	
- \$ ☆ \$ =	E-Mail	Anonymous ~	
	Automation	Anonymous -	
	HTTP API	Anonymous -	
	User Sounds		
	Web Server	Logical Output Settings ~	
	Audio Test	Output Type Non Inverted	
	Audio Test	Scopes ~	
	SNMP	onvif://www.onvif.org/Profile/Streaming	
		onvif://www.onvif.org/type/Device	
		onvif://www.onvif.org/hardware/HeliosIP-54-1046-0239	
		onvif://www.onvif.org/location/	
		onvif://www.onvif.org/name/HeliosIP-54-1046-0239	
		Apply	







Check the 'RTSP Server Enabled' and Audio/Video Streams as below, then choose your preferred Video Codec from the drop down menu, also ensuring that the 'UDP Unicast Enabled' box is checked.

		2N Helios IP Verso CZ EN DE FR IT ES RU Logou	Jt
€	Services	RTSP JPEG Multicast InformaCast FTP	
.h		RTSP Server Enabled	
	Phone	Ctrappe Cattings	
<u>~</u>	Streaming >	Streams Settings ~	
	Onvif	Video Stream Enabled 🖌	
= <mark>3</mark> % ♥ =	E-Mail	Video Codec H.264 🔹	
	Automation	H.264 Video Parameters >	
	HTTP API		
	User Sounds	MPEG4 Video Parameters >	
	Web Server	MJPEG Video Parameters >	
	Audio Test	Authorised IP Addresses >	
	SNMP		
		Transmission Quality Settings ~	1
		QoS DSCP Value 0	
		UDP Unicast Enabled 🖌	
		Maximum Video Packet Size 1400	
		Starting RTP Port 4800	
			_
		- Analy	

No further configuration is required within the 2N Helios IP intercom to view and record the video/audio stream.

HOW TO ADD THE INTERCOM TO VISTA QULU

The intercom should now be visible in the available cameras list, thanks to ONVIF discovery.

Locate the intercom that you wish to add to the layout and right click on it and select 'Camera Settings' to configure.







With the camera settings window open complete the login and password window to match the ONVIF account settings in the intercom.

In our example **admin/admin** was used which are the default login values within qulu. As such, the credentials were already present and no changes were necessary to access the camera stream.

NOTE: It is strongly recommended that a more secure login and password is used.

Camera Settings - Vista CCTV qulu Client	? ×
General Recording 10 parts Motion Faheye Advanced Expert	
Name: 2N Telecommunications2N Helios IP Verso	
Model: 2N Helios IP Verso	
Model: ZN Hellos IP verso	
Vendor: 2N Telecommunications	
vendor: 2N telecommunications	
Address	
IP Address: 192.168.1.216	Ping
Web Page: <u>http://192.168.1.216</u>	
MAC Address: 7C-1E-B3-01-26-60	
Authentication	
Login: admin	
Password: *****	
Image Control	
Force aspect ratio to:	
Default Rotation:	
This is a fish-eye lens camera	
× Enable Audio	
Open in New Tab Camera Diagnostics Camera Rules	Cancel

Click the OK button to save settings and then drag the intercom camera stream into the layout from the device list just like any other camera.



You can now view and record the stream as per any camera added to qulu. *Continued on next page*







VISTA QULU - HOW TO ENABLE THE HELIOS INTERCOM TO TRIGGER EVENTS BY CALL

Thanks to the automation section of the Helios IP you can set an intercom to trigger 'Generic Events' within qulu via HTTP command. Events can be triggered by a wide variety of scenarios such as the pushing of a button on the intercom, a DTMF tone detected in the call or the change of a call status.

In this example we will demonstrate how a call initiated or received at the intercom can trigger a named event within qulu to control a PTZ camera. At the end of the call the PTZ camera will reset to a predetermined location.

This guide assumes that you have already added a 2N Helios IP intercom to your qulu VMS platform via ONVIF.

Please note that for automation functionality your intercom must be running the Enhanced Integration Licence (9137907) or Gold Licence (9137909).

2N® Helios IP intercom Settings:

Within the Automation section of the intercom settings, enable one of the functions (in our example 'Function 1') by checking the 'Function Enabled' box.

Setup each object type and parameter as per the screen shot below ensuring that the IP address and port number match your qulu server address and that the username and password match the credentials for logging into the server.



In this example the following address and credentials are used:

qulu Server Address - 192.168.1.201 qulu Server Port - 7001 (default) Password - admin Username - admin









Full parameter values are as follows:

- 1 Event.CallStateChanged: state=ringing
- 2 Action.SendHttpRequest: url=http://192.168.1.201:7001/api/createEvent?source=genericevent&caption=start; Password=admin; Username=admin; Event=1
- 3 Event.CallStateChanged: state=terminated
- 4 Action.SendHttpRequest: url=http://192.168.1.201:7001/api/createEvent?source=genericevent&caption=stop; Password=admin; Username=admin; Event=3

A call started or received by the intercom sends an http command to the qulu server with the caption 'start'. When the call is ended the intercom sends an http command with the caption 'stop'.

Vista qulu Settings:

Select the Alarm/Event rules icon located to the right of the layout window.







Create the first of two new rules by clicking 'Add' followed by 'Advanced' to reveal a window that looks like the following:

_	nt Rules - Vista CCTV qulu Clier	it			
Add ter by cam	- Delete				Event log Advanced
# On	Event	Source	-> Action	Target	Interval of Action
	On Camera Disconnected	₩ <any camera=""></any>	Send email	User admin has invalid email address	Every 6 hours
	On Network Issue	☆ <system></system>	Send email	User admin has invalid email address	Every 6 hours
	On Camera IP Conflict	☆ <system></system>	Show notification	All Users	Every 30 seconds
	On Server Started		Send email	User admin has invalid email address	Every 6 hours
	On Archive backup finished		Show notification	🐣 All Users	Instant
	On Camera Disconnected	🥃 <any camera=""></any>	Show notification	🐣 All Users	Every 30 seconds
	On Camera IP Conflict	☆ <system></system>	Send email	User admin has invalid email address	Every 6 hours
	On Generic Event	☆ <system></system>	Execute PTZ preset	VK2-1080XVRDPTZF	Instant
ø	On Generic Event	☆ <system></system>	Execute PTZ preset	VK2-1080XVRDPTZF	Instant
ø	On Camera Disconnected	🤝 <any camera=""></any>	Show notification	💄 All Users	Every minute
_		Event			Action
When		Camera Disconnected	Do		Show notification 3
at 🔻	<any camera=""></any>			Interval of action : No more than or	
A Sd	hedule		Sh	ow to administrators only	Giobal Notification Settings
Comments	s:				
Reset Defa	ault Rules				OK Apply Cancel

In the Event settings select 'Generic Event' from the 'When' drop down box and enter 'start' in the 'Caption contains' field.

In the Action settings select 'Execute PTZ preset' from the 'Do' drop down box and select the desired camera that you wish to control (in our case a VK2-1080XVRDPTZF) and uncheck the 'Interval of action' box so that the command is carried out instantly. Next, choose a pre-determined PTZ preset that you wish to trigger when a call is made (in our case 'Saved Position 1'). The new Generic Event rule should look as follows:

On	On Server (Event Conflict	Source System>	-> Action Send email		Targe address	t	Every 6 hours	Interval of Action
	On Camera	Disconnected	😈 <any camera=""></any>	Send email		User admin ha address		Every 6 hours	
	On Network	k Issue	☆ <system></system>	Send email		User admin ha address	s invalid email	Every 6 hours	
	On Camera	IP Conflict		Show notification	i	🔒 All Users		Every 30 second	
	On Server S	started	☆ <system></system>	Send email		User admin ha address	s invalid email	Every 6 hours	
	On Archive	backup finished		Show notification		🔒 All Users		Instant	
	On Camera	Disconnected	🤝 <any camera=""></any>	Show notification		🔒 All Users		Every 30 second	
	On Camera	IP Conflict	☆ <system></system>	Send email		User admin ha	s invalid email	Every 6 hours	
Ø	On Generic	Event	▲ <system></system>	Execute PTZ preset	: (VK2-1080XVR	OPTZF	Instant	
ø	On Generic	Event		Execute PTZ preset	: 1	VK2-1080XVR	DPTZF	Instant	
Vhen (Ge	eneric Event	Occurs	Do 😑		Ex	ecute PTZ preset	
Source	contains:		ated by space		at 🐨	VK2-1080XVRDP	rzf		
Captior	n contains:	start			= Tote	rval of action : In	tant		
Descrip	tion contains:						Autre .		
empty,		ways met. If not,		itions. If a keyword field is rresponding field of Generic	<u>P</u> TZ preset			Saved Position	1
To gen	erate Generic	Event, please refe	er to <u>Server API</u> .						
☆ s	chedule								







Finally, create a second rule that will be applied when the server receives the 'stop' command. Edit the new rule as above ensuring that the caption contains 'stop' and that the PTZ preset relates to an appropriate resting state. See below:

Alarm/Event Rules - Vista CCTV qulu Clien	nt			
🕂 Add 🗕 Delete				💴 Event log 🔻 Advanced
filter by cameras				
# On Event On Server Conflict	Source ->	Action Send email	Target address	Interval of Action Every 6 hours
🗹 🛛 On Camera Disconnected	🥃 <any camera=""></any>	Send email	User admin has invalid email address	Every 6 hours
🖉 🛛 On Network Issue	☆ <system></system>	Send email	User admin has invalid email address	Every 6 hours
on Camera IP Conflict	☆ <system></system>	Show notification	🔒 All Users	Every 30 seconds
 On Server Started 		Send email	User admin has invalid email address	Every 6 hours
 On Archive backup finished 		Show notification	🐣 All Users	Instant
On Camera Disconnected	🤝 <any camera=""></any>	Show notification	🔒 All Users	Every 30 seconds
🗹 On Camera IP Conflict		Send email	User admin has invalid email address	Every 6 hours
🗹 🛛 On Generic Event	☆ <system></system>	Execute PTZ preset	VK2-1080XVRDPTZF	Instant
Generic Event	📩 🔥 <system></system>	Execute PTZ preset	UK2-1080XVRDPTZF	Instant
	Event			Action
When G	eneric Event	Occurs	Do Ex	ecute PTZ preset 🔹
Source contains: Keywords separ	rated by space		at 🔻 VK2-1080XVRDPTZF	
Caption contains: stop			Interval of action : Instant	
Description contains: Keywords separ				
Event will trigger only if Generic Event empty, condition is always met. If not, Event contains any keyword.	t meets all the above conditions. If a keyv , condition is met if the corresponding fiel	vord field is	PTZ preset:	Saved Position 2
To generate Generic Event, please ref	fer to <u>Server API</u> .			
☆ Schedule				
Comments:				
comments.				
Reset Default Rules				OK Cancel

Click 'Apply' followed by 'OK' to return to the layout screen.

Your PTZ camera will now move to 'Saved Position 1' during a call and back to 'Saved Position 2' when the call is terminated. This type of function is useful for applications where an intercom is being monitored by a PTZ camera, but only needs to monitor the intercom during use.

For further examples of automation functions see the 2N wiki site automation manual: **https://wiki.2n.cz/hip/auto/latest/en**





VISTA VK2-1080XVRDPTZF – HOW TO ADD TO THE HELIOS IP INTERCOM AS AN EXTERNAL CAMERA

The 2N Helios IP intercom can accept an additional camera as a secondary feed via an RTSP stream. This guide shows what settings are required in order to capture a feed from a Vista VK2-1080XVRDPTZF.

Please note that for external camera functionality the Enhanced Video licence (9137906) or Gold licence (9137909) is required.

Vista VK2-1080XVRDPTZF Settings:

Login to the camera via a browser using the device's IP address. Select 'Video & Image' from the 'Basic Configuration' window and edit the Stream 2 Settings to match the screenshot below.

Basic Configuration			
Basic Configuration	Video & Image		
· Users			_
 Network 	Sensor Setting		
· Video & Image	Capture mode	1920x1080 Max. 25fps 🗸	
· Audio			
· Date & Time	Stream 1 Setting		
	Codec	H.264 Baseline Profile 🗸	
Live View	Resolution	1920×1080 V	
Video & Image	Bitrate control	O VBR O CVBR	
Audio	Bitrate	3200 V [Kbps]	
Event	Framerate	25 ~	
Dome Configuration	GOP size	20 [150]	
System	Stream 2 Setting		
About	Codec	MJPEG 🗸	
	Resolution	640x360	
	Framerate	15 🗸	
	Quality	50 [1100]	
	Stream 3 Setting		
	Codec	H.264 Baseline Profile V	
	Resolution	640x360 V	
	Bitrate control		
	Bitrate	100 V [Kbps]	
	Framerate		
	GOP size	14 [1 20]	
		Save Reset	





Helios IP Settings:

Set the external camera settings as per the screen shot below ensuring that the IP address of the camera is entered as per your network configuration:

		2N Helios IP Verso CZ EN DE FR IT ES RU Logout
€	Hardware	Common Setting Internal Camera External Camera
-lı & ≪ ↓	Cuitada a	External IP Camera 🗸
502	Switches	External Camera Enabled 🔽
<u>.</u>	Audio	RTSP Stream Address rtsp://192.168.1.172:554/1/stream2
X	Camera	> Username admin
	Keyboard	Password •••••
		Local RTP Port 4700
	Buttons	Status Connected
	Backlight	Stream MJPEG 640x360
	Display	Camera Preview ~
	Digital Inputs	
	Extenders	

Now that an external camera feed is added to the intercom it can be used as the primary video stream for all calls or the camera feed can be switched between the internal camera by DTMF (in call), by HTTP command, or by time of day by utilising the automation function of the Helios IP intercom. Further information on what can be achieved with automation can be found on 2N's wiki site - wiki.2n.cz Automation requires the Enhanced Integration licence (9137907) or Gold licence (9137909).

