

**IVM**

# Getting Started

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# 1 IVM Overview

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Industry Video Management (IVM) provides a wide range of cloud-based capabilities for surveillance devices and platforms. These capabilities include cloud-based video access and storage, live video viewing, and recording playback.

IVM provides the following functions: device management, personnel management, and video viewing.

The basic operations of IVM include **service provisioning, device group creation, and cloud access**. After these steps, you can **manage cloud-based video accesses**.

# 2 Accessing Cloud Videos

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## Creating a Device Group

**Step 1** Log in to the IVM background.

**Step 2** Choose **Devices** and click **Add**.

**Step 3** Enter the user group name and click **OK**.

 **NOTE**

- You can select a device group and click **Add** to create a sub-device group.
- You can click **Edit** or **Delete** next to a device group name to change the device group name or delete the current device group.

----End

## Cloud Access

### Scenario

If a few cameras need to be connected to the IVM platform, you can manually add them one by one.

### Restrictions on adding a device through the GB protocol

A single SIP/UDP packet sent by the device must be less than 1,300 bytes.

### Configuring platform parameters

1. Log in to the IVM background ("platform" for short).
2. Choose **Devices** in the navigation pane on the left, select a device group to which you want to add devices, and click **Add**.
3. Select **Individually** and set the **Access Protocol** to **GB**.

**Table 2-1** Parameters

Parameter	Description
Name	User-defined device name that is used in this platform. The value can contain up to 26 characters. Numbers, letters, spaces, hyphens (-), and underscores (_) are allowed. The first character cannot be a space.
Device ID	The device ID consists of 20 numbers. The mapping between the 11th to 13th numbers and the device type is as follows: <ul style="list-style-type: none"> <li>• Camera: 132</li> <li>• NVR: 118</li> <li>• DVR: 111</li> </ul> Other numbers can be customized.
User Name	User name for logging in to the device. The value contains 5 to 32 characters and cannot start with a number.
Password	Password used by the device to register with the platform
Registration Authentication Algorithm	Type of the authentication algorithm used for device registration. SHA265 is recommended because it is more secure.

4. After a device is added, a dialog box is displayed, indicating that the device is added successfully.

Manually record the device information, which will be used when you set device parameters as described in [Table 2-2](#).

### Configuring device parameters

After a device is added through the GB protocol, you need to set connection parameters on the device. The following uses a Huawei camera as an example to describe how to set connection parameters.

1. Log in to the camera portal from the web UI.
2. Choose **Configuration > Network > Platform Connection > General Protocol Parameters** and select **T28181**.
3. Configure the GB/T 28181 parameters. For details about the parameters, see [Table 2](#).

**Table 2-2** Parameters

Parameter	Configuration Method
GB/T 28181	Protocol for connecting to GB/T 28181 devices. If this parameter is selected, the GB/T 28181 protocol is used.

Parameter		Configuration Method
Connection Status		The connection status between the camera and the platform. You can click <b>View Details</b> to check the connection status and click the refresh button to refresh the connection status.
Protocol		<p>The protocol type varies depending on the device. You can log in to the camera portal to view the protocol type.</p> <p>Select a protocol type from the drop-down list box.</p> <p><b>NOTE</b> If the <b>TCC-VMS-2020</b> protocol is selected, you can configure the active and standby servers. If the active or standby server is faulty, services can be automatically switched to the standby or active server for reconnection and registration.</p>
28181 Advanced Parameters	Max Recordings Can Be Queried	<p>Number of recordings carried in a packet at a time during recording query when the GB/T 28181 protocol is used.</p> <p>Enter an integer ranging from 1 to 20. The default value is <b>10</b>. If the platform limits the packet size, you can properly adjust the value of this parameter. Adjusting the value of this parameter affects the recording query speed. Adjust the value based on the site requirements.</p>
Compatible Parameters	H.265	<p><b>H.265</b> and <b>H.264</b> encoding protocols are supported.</p> <p>Indicates whether to support the H.265 and H.264 encoding protocols when the camera is connected to the platform through the GB/T 28181 protocol.</p> <p>If this parameter is not selected, only the H.264 encoding protocol is supported when the camera is connected to the platform through the GB/T 28181 protocol.</p>
	Shanghai Local Standard	<p>Shanghai local standard.</p> <p>If this parameter is selected, the Shanghai local standard is supported.</p> <p><b>NOTE</b> If the Shanghai local standard is enabled, the image capture function of the platform does not take effect.</p>
	Video Stream Type	Video stream: Only video streams can be sent.

Parameter		Configuration Method
Business Parameters	Downlink Voice Streams for Voice Intercom	Protocol type of downlink voice streams for voice intercom. The value can be <b>UDP</b> or <b>TCP</b> . <b>NOTE</b> If a camera and the platform are on different network segments, you are advised to set this parameter to <b>TCP</b> .
	Max. Timeouts	Maximum number of consecutive heartbeat timeouts. If the actual number reaches the value specified by this parameter, the camera cannot connect to the platform.  The default value <b>3</b> is recommended.
	Registration Validity (s)	Validity period of the camera registration with the platform. The default value is <b>86400</b> (one day).
	Heartbeat Interval (s)	Time interval at which the camera sends heartbeat messages. The default value is <b>60</b> . You are advised to change it to <b>20</b> .
Server Parameters	Server IP Address	Gateway address for a camera to connect to the cloud service, which can be obtained from <b>IP Address of SIP Server</b> recorded in <a href="#">4</a> .
	Port Number	The value of this parameter can be obtained from the <b>SIP Server Port</b> recorded in <a href="#">4</a> .
	Server Code	The value of this parameter can be obtained from the <b>SIP Server ID</b> recorded in <a href="#">4</a> .
	SIP Server Domain	The value of this parameter can be obtained from the <b>Domain ID of SIP Server</b> recorded in <a href="#">4</a> .
Device Parameters	Device ID	The value of this parameter can be obtained from the <b>Connection Code</b> recorded in <a href="#">4</a> .
	Password	Password used by the device to register with the platform
	Name	Login name used for registering a camera with the platform. The value can contain numbers or other characters.
	NIC Type	For a camera with dual network ports, you can select <b>ETH0</b> or <b>ETH1</b> .
	Local Port	Port number of the camera for connecting to the SIP server.



Parameter		Configuration Method
	Alarm Input ID	<p>Alarm input ID of the camera. The value is a string of 0 to 64 characters, including letters and numbers.</p> <p>If there are multiple alarm input channels, you need to specify a unique ID for each channel.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>Some C/D series cameras do not support this parameter.</li> <li>You need to manually enter the value. The 11th to 13th numbers must be <b>134</b>. Otherwise, the IVS platform cannot report alarms properly.</li> </ul>
	Authentication	<ul style="list-style-type: none"> <li><b>SHA256</b>: Only the SHA256 authentication method is supported.</li> <li><b>MD5/SHA256</b>: Both MD5 and SHA256 authentication methods are supported.</li> </ul> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>The MD5 authentication method has security risks. Therefore, you are advised to use the SHA256 authentication method.</li> <li>The value of this parameter must be the same as that configured on the platform. Otherwise, the registration fails.</li> </ul>
Channel Parameters	Channel	Channel type of the camera.
	Stream Index	Type of streams to be sent to the platform. You can select the primary stream or a secondary stream. The default value <b>Primary Stream</b> is recommended.
	Camera ID	Camera ID. The stream ID of the Huawei Cloud IVM device is the same as this camera ID. Set this parameter based on the <b>GB28181</b> protocol. The value consists of 20 numbers. Set the 11th to 13th numbers to <b>131</b> .

4. Click **OK**.