

DN-16041/DN-160422 CGI commands V1.0

From Firmware 1.26

1. JPEG image commands

1.1 Get one JPEG image

Method: Get

URL: HTTP://camera_ip/jpg/image.jpg

Return: One JPEG image will be transferred to client.

1.2 Get one JPEG image without any authentication

Method: Get

URL: HTTP://camera_ip/loginfree.jpg

Return: One JPEG image will be transferred to client.

Note: User maybe change the loginfree filename.(Fw1.27)

1.3 Get one JPEG video stream

Method: Get

URL: HTTP://camera_ip/mjpg/video.mjpg

Return: One multipart JPEG video stream will be transferred to client.

Format:

```
HTTP/1.0 200 OK\r\n
Content-Type: multipart/x-mixed-replace;
boundary=myboundary\r\n
\r\n
--myboundary\r\n
Content-Type: image/jpeg\r\n
Content-Length: 15656\r\n
\r\n
<JPEG image data>\r\n
--myboundary\r\n
Content-Type: image/jpeg\r\n
Content-Length: 14978\r\n
\r\n
<JPEG image data>\r\n
--myboundary\r\n
Content-Type: image/jpeg\r\n
Content-Length: 15136\r\n
\r\n
<JPEG image data>\r\n
--myboundary\r\n
. . . . .
```

2. System commands

2.1 Get system information and configuration

2.1.1 Get image properties supported by camera

Method: Get

URL: `http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group=Properties.Image`

Return: Image resolution, rotation and format supported by camera

Example:

`root.Properties.Image.Rotation=0`

`root.Properties.Image.Resolution=640x480,320x240,160x120`

`root.Properties.Image.Format=jpeg,mjpeg`

Description: Camera doesn't support rotation, supports 3 kinds of

resolution and supports JPEG format only.

2.1.2 Get current camera configuration of resolution and JPEG quality

Method: Get

URL: `http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group=Image.I0.Appearance`

Return: Current configuration of resolution and JPEG quality

Example:

`root.Image.I0.Appearance.Resolution=640x480`

`root.Image.I0.Appearance.Compression=0`

Compression: value range is 11, 20, 30, 40, 60

11: Lowest quality, small image size

60: Highest quality, large image size

2.1.3 Get current FPS value of camera

Method: Get

URL: `http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group=Image.I0.Stream`

Return: Current FPS value of camera (frame rate per second)

Example:

`Image.I0.Stream.FPS=30`

2.1.4 Get current configuration of camera sensor

Method: Get

URL: `http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group=ImageSource.I0.Sensor`

Return: Current brightness value

Example:

`ImageSource.I0.Sensor.Brightness=50`

Brightness value range is 0~100

2.1.5 Get default video format

Method: Get

URL: `http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group=Layout`

Return: Camera default video format

Example: `Layout.DefaultVideoFormat=mjpeg`

2.1.7: Get hardware MAC address of camera

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group= Network.Interface.I0.Active.MACAddress](http://camera_ip/camera-cgi/admin/param.cgi?action=list&group=Network.Interface.I0.Active.MACAddress)

Return: Hardware MAC address of camera

Example:

[Network.Interface.I0.Active.MACAddress=00:11:09:15:10:AB](#)

2.1.8: Get Firmware Version, Model ID and Vendor ID

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group=Properties.Firmware](http://camera_ip/camera-cgi/admin/param.cgi?action=list&group=Properties.Firmware)

Return: Firmware version, Model ID and Vendor ID of camera

Example:

[Properties.Firmware.Version=v1.32](#)

[Properties.Firmware.ModelID=8](#)

[Properties.Firmware.VendorID=1](#)

2.1.9: Get web port number

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group= System.HTTPPort](http://camera_ip/camera-cgi/admin/param.cgi?action=list&group=System.HTTPPort)

Return: web port number

Example:

[System.HTTPPort=80](#)

2.1.10: Get private video port number

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group= System.PrivateVideoPort](http://camera_ip/camera-cgi/admin/param.cgi?action=list&group=System.PrivateVideoPort)

Return: web port number

Example:

[System.PrivateVideoPort=4321](#)

2.1.11: Get MaxUsers and CurrentUsers Number

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group= Properties.VideoServer](http://camera_ip/camera-cgi/admin/param.cgi?action=list&group=Properties.VideoServer)

Return: **MaxUsers and CurrentUsers Number**

Example:

[Properties.VideoServer.MaxUsers=16](#)

[Properties.VideoServer.CurrentUsers=2](#)

2.2 Set system configuration

2.2.1: Set resolution of camera

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=update
&Image.I0.Appearance.Resolution=Width X Height](http://camera_ip/camera-cgi/admin/param.cgi?action=update&Image.I0.Appearance.Resolution=Width X Height)

Parameters: 640x480, 320x240, 160x120

Example: Set resolution to 320X240

[http://camera_ip/camera-cgi/admin/param.cgi?action=update
&Image.I0.Appearance.Resolution=320x240](http://camera_ip/camera-cgi/admin/param.cgi?action=update&Image.I0.Appearance.Resolution=320x240)

2.2.2: Set JPEG compression level

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=update
&Image.I0.Appearance.Compression=Compression Level](http://camera_ip/camera-cgi/admin/param.cgi?action=update&Image.I0.Appearance.Compression=Compression Level)

Parameters: 11, 20, 30, 40, 60

11: Lowest quality, small image size

60: Highest quality, large image size

Example: Set compression level to 60

[http://camera_ip/camera-cgi/admin/param.cgi?action=update
&Image.I0.Appearance.Compression=60](http://camera_ip/camera-cgi/admin/param.cgi?action=update&Image.I0.Appearance.Compression=60)

2.2.3 Set brightness of camera sensor

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=update
&ImageSource.I0.Sensor.Brightness=Brightness Level](http://camera_ip/camera-cgi/admin/param.cgi?action=update&ImageSource.I0.Sensor.Brightness=Brightness Level)

Parameters: 0~100

Example: Set brightness to 60

[http://camera_ip/camera-cgi/admin/param.cgi?action=update
&ImageSource.I0.Sensor.Brightness=60](http://camera_ip/camera-cgi/admin/param.cgi?action=update&ImageSource.I0.Sensor.Brightness=60)

2.2.4 Set camera FPS

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=update
&Image.I0.Stream.FPS=FPS](http://camera_ip/camera-cgi/admin/param.cgi?action=update&Image.I0.Stream.FPS=FPS)

Parameters: 1, 3, 5, 10, 15, 20, 25, 30

Example: Set FPS to 20

[http://camera_ip/camera-cgi/admin/param.cgi?action=update
&Image.I0.Stream.FPS=20](http://camera_ip/camera-cgi/admin/param.cgi?action=update&Image.I0.Stream.FPS=20)

3. PTZ commands

3.1 Determine whether camera supports PTZ function

Method: Get

URL: [http://camera_ip/camera-cgi/admin/param.cgi?action=list
&group=Properties.PTZ.PTZ](http://camera_ip/camera-cgi/admin/param.cgi?action=list&group=Properties.PTZ.PTZ)

Example:

[Properties.PTZ.PTZ=yes](#)

3.2 Move the image in the specified direction and offset.

Method: Get

URL: http://camera_ip/camera-cgi/com/ptz.cgi?move=direction&ptspeed=n

Parameters:

direction: left, right, up, down, upleft, upright, downleft, downright,

home

n: 1(slow), 3, 5, 7, 9(fast)

Example:

http://camera_ip/camera-cgi/com/ptz.cgi?move=left&ptspeed=9

3.3 Zoom the device n steps

Method: Get

URL: http://camera_ip/camera-cgi/com/ptz.cgi?zoom=n

Parameters:

zoom: 0(full image), 1, 2

Note: 640X480 VGA only supports zoom=0 and zoom=1

Example:

http://camera_ip/camera-cgi/com/ptz.cgi?zoom=1

3.4 Move the image to preset point

Method: Get

URL: http://camera_ip/camera-cgi/com/ptz.cgi?gotoserverpresetname=name

Parameters:

name: Preset point name

Example:

http://camera_ip/camera-cgi/com/ptz.cgi?gotoserverpresetname=myroom

3.5 Add a preset point with current image coordinate and zoom configuration

Method: Get

URL: http://camera_ip/camera-cgi/com/ptzconfig.cgi?setserverpresetname=name

Parameters:

name: Preset point name

Example:

<http://192.168.2.168/camera-cgi/com/ptzconfig.cgi?setserverpresetname=myroom>

3.6 Remove a preset point

Method: Get

URL: http://camera_ip/camera-cgi/com/ptzconfig.cgi?removeserverpresetname=name

Parameters:

name: Preset point name

Example:

<http://192.168.2.168/camera-cgi/com/ptzconfig.cgi?removeserverpresetname=myroom>

3.7 Continuous Pan Tilt Move

Method: Get

URL: http://camera_ip/camera-cgi/com/ptz.cgi?continuouspantiltmove=X,Y

Parameters:

X: x>0 right(pan) , x<0 left(pan) , x=0 stop

Y: y>0 tilt(up) , y<0 tilt(down) , y=0 stop

Example:

<http://192.168.2.168/camera-cgi/com/ptz.cgi?continuouspantiltmove=30,-30>