



SPC Camera Integration

This document describes the basic configuration steps, how to configure IP cameras to make them available for the integration into the SPC system.

Key topics:

- Supported Vanderbilt/Siemens IP Cameras and encoder
- Supported 3rd IP Cameras
- SPC settings
- Test options
- General information about the CGI command

Table of content

- 1. IP CAMERA CONFIGURATION..... 3**
 - 1.1. Settings for Vanderbilt/Siemens IP Cameras..... 3**
 - 1.1.1 Basic Configuration for Vanderbilt/Siemens Camera streaming.....3
 - 1.1.2 Test options.....4
 - 1.1.3 SPC configuration for Vanderbilt/Siemens IP Cameras4
 - 1.2. Settings for Vanderbilt/Siemens Video Encoder..... 5**
 - 1.2.1 Basic Configuration for Vanderbilt/Siemens Video Encoder streaming.....5
 - 1.2.2 SPC configuration for Vanderbilt/Siemens Video Encoder5
 - 1.2.3 Test options.....5
 - 1.3. Settings for Eventys IP Cameras 6**
 - 1.3.1 Basic Configuration for Eventys Camera streaming.....6
 - 1.3.2 Test options.....7
 - 1.3.3 SPC configuration for Eventys IP Cameras7
 - 1.4. Settings for 3rd party IP Cameras..... 8**
 - 1.4.1 Basic Configuration for 3rd party IP Camera streaming8
 - 1.4.2 Test options.....8
 - 1.4.3 SPC configuration for 3rd Party IP Cameras.....8
- 2. SUPPORTED CAMERAS AND VIDEO ENCODER10**
 - 2.1. Vanderbilt/Siemens IP Cameras..... 10**
 - 2.2. Vanderbilt/Siemens Video Encoder.....10**
 - 2.3. Supported 3rd party IP Cameras.....11**
- 3. GENERAL INFORMATION12**
- 4. WARRANTY13**

1. IP Camera Configuration

1.1. Settings for Vanderbilt/Siemens IP Cameras

1.1.1 Basic Configuration for Vanderbilt/Siemens Camera streaming

Mandatory stream settings:

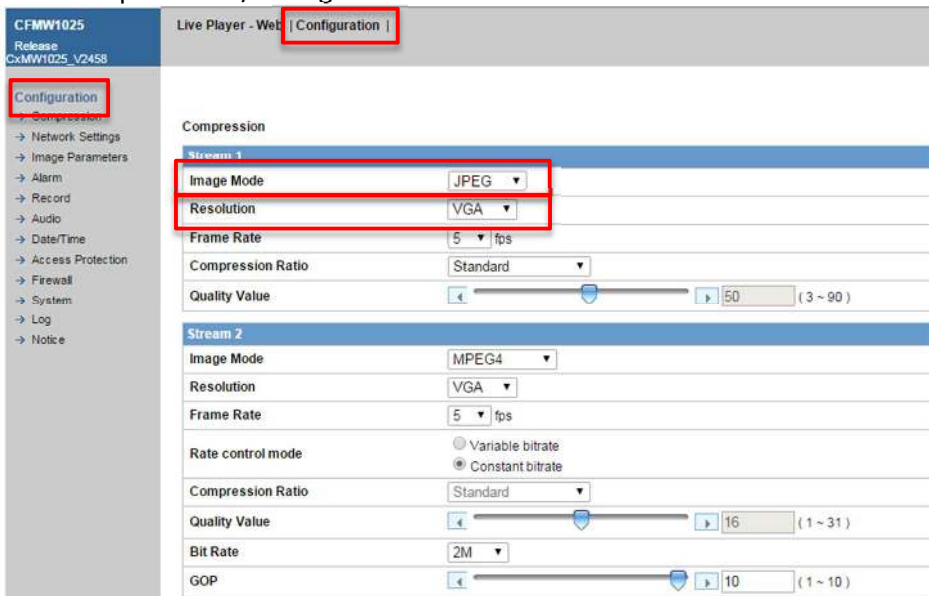
- Resolution: VGA (min. 320x240 - max. 640x480)
- Streaming codec: MJPEG / JPEG
- IP address: set to a free IP address in the same IP range as the SPC
- Streaming port: 80 (recommended)

- Open the web browser, enter the IP-address from the camera and log in.
(Standard login: “admin” and password: “admin”)

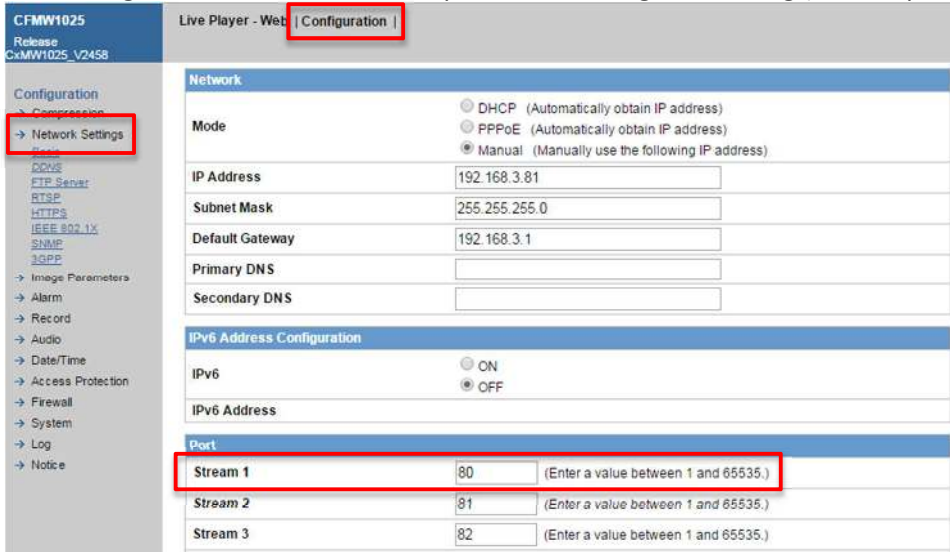


Remark: Make sure that the IP-address of the camera is in the same IP network range as the SPC panel.

- To configure the image compression from the defined stream select “Configuration” / “Compression” / “Image Mode” select “JPEG” or “MJPEG” and for “Resolution”: VGA.



- To configure the network settings from the defined stream, select “Configuration” / “Network Settings” / “Port” and enter the port for the image streaming (default port 80).



1.1.2 Test options

To verify if the camera is supported from the SPC panel, open the web browser and enter the following string into the web browser address field:

http://	<IP-address>/	cgi-bin/	stilljpeg
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If no picture is shown, please verify the camera settings above.

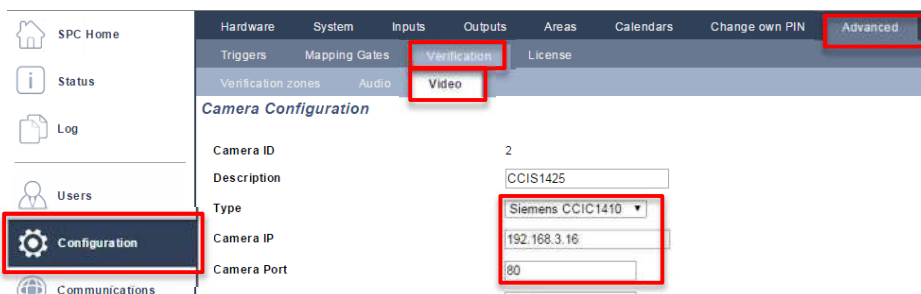
1.1.3 SPC configuration for Vanderbilt/Siemens IP Cameras

Required SPC settings to support Vanderbilt cameras:

- Camera type: Siemens CCIC1410 or Siemens CMFC1315
- Network: IP address of the camera
- Streaming port: Streaming port (defined in the camera)
- Command string: /cgi-bin/stilljpeg

To configure these settings in SPC panel, please follow the instructions. (see below)

- Open the SPC webpage / enable Full Engineer mode / select “Configuration” / “Advanced” / “Verification” / “Video” / and add a new camera and enter the camera details (type, IP and port).



1.2. Settings for Vanderbilt/Siemens Video Encoder

1.2.1 Basic Configuration for Vanderbilt/Siemens Video Encoder streaming

The CNE 0410 / 0810 / 1610 with the Firmware V1.2.0_151015 or later, requires the Firmware 3.6.6 or later on the SPC panel. The configuration itself is nearly the same as for the Vanderbilt/Siemens cameras, only the CGI string need to be adjusted.

1.2.2 Test options

To verify if the camera is supported from the SPC panel, open the web browser and enter the following string into the web browser address field:

http://	<IP-address>/	“cgi-string“
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If no picture is shown, please check out the section 1.2.2 in this manual.

1.2.3 SPC Configuration for Vanderbilt/Siemens Video Encoder

Required SPC settings to support Vanderbilt video encoder:

- Camera type: Siemens CCIC1410 or Siemens CMFC1315
- Network: IP address of the encoder
- Streaming port: Streaming port (defined in the encoder)
- Command string: /Streaming/channels/1/picture?snapShotImageType=JPEG&videoResolutionWidth=704&videoResolutionHeight=576&username=YWRtaW4=&pwd=YWRtaW4=
=

To adjust the above command string to your own CNE device, please enter the username and password in the corresponding fields and update the string with the “Update Cmd. String” button.

To configure these settings in SPC panel, please follow the instructions. (see below)

- Open the SPC webpage / enable Full Engineer mode / select “Configuration” / “Advanced” / “Verification” / “Video” / and add a new camera and enter the camera details (type, IP and port).

SPC Home | Hardware | System | Inputs | Outputs | Areas | Calendars | Change own PIN | Advanced

Triggers | Mapping Gates | Verification | License

Verification zones | Audio | Video

Camera Configuration

Camera ID: 1

Description: CNE NF

Type: Siemens CMFC1315

Camera IP: 192.168.2.221

Camera Port: 80

Username: admin

Password: ****

Update Cmd. string

Camera Authorisation: Enable/disable camera authorisation

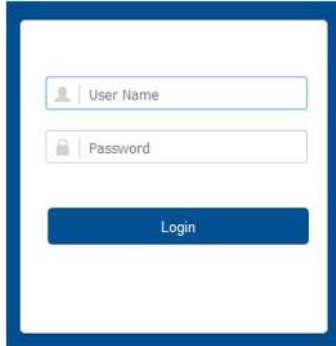
Command String: /cgi-bin/stjpeg Command to send to camera to get images

1.3. Settings for Eventys IP Cameras

1.3.1 Basic Configuration for Eventys Camera streaming

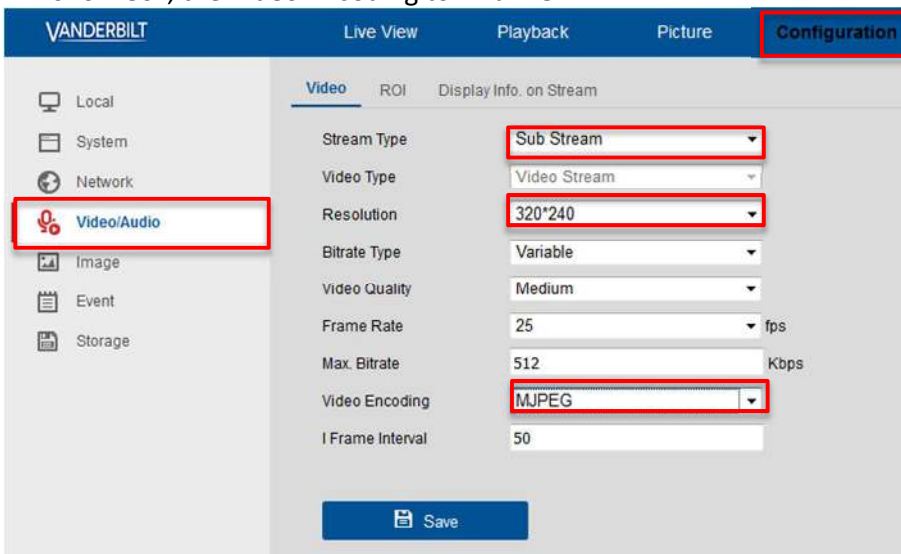
Mandatory stream settings:

- Resolution: VGA (min. 320x240 - max. 640x480)
 - Streaming codec: MJPEG / JPEG
 - IP address: set to a free IP address in the same IP range as the SPC
 - Streaming port: 80 (recommended)
- Open the web browser, enter the IP-address from the camera and log in.
(Standard login: “admin” and password: “admin”)



Remark: Make sure that the IP-address of the camera is in the same IP network range as the SPC panel.

- To configure the image compression from the defined stream select “Configuration” / “Video/Audio” / “Stream type” select “Sub Stream”, change the “Resolution to “320x240 or 640x480”, the Video Encoding to “MJPEG”.



1.3.2 Test options

To verify if the camera is supported from the SPC panel, open the web browser and enter the following string into the web browser address field:

http://	<IP-address>/	/ISAPI/Streaming/Channels/2/picture
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If no picture is shown, please check out the section 1.3.1 in this manual.

1.3.3 SPC Configuration for Eventys IP Cameras

Required SPC settings to support Vanderbilt video encoder:

- Camera type: Generic
- Network: IP address of the Eventys camera
- Streaming port: 80
- Command string: /ISAPI/Streaming/Channels/2/picture

To configure these settings in SPC panel, please follow the instructions. (see below)

- Open the SPC webpage / enable Full Engineer mode / select “Configuration” / “Advanced” / “Verification” / “Video” / and add a new camera and enter the camera details (type, IP, port, authorization, etc.).

To adjust the above command string to your own Eventys camera:

- Enter the camera username and password in the corresponding fields
- Active the Authorisation
- Update the string with the “Update Cmd. String” button
- Copy afterwards the command string into the Command string field.
- Save the new configuration.

The screenshot shows the SPC Configuration interface. The left sidebar contains navigation options: SPC Home, Status, Log, Users, Configuration (selected), Communications, and File. The main content area is titled 'Camera Configuration' and includes the following fields and controls:

- Camera ID: 1
- Description: Eventys camera
- Type: Generic
- Camera IP: 192.168.2.221
- Camera Port: 80
- Username: admin
- Password: *****
- Camera Authentication: (checked)
- Command String: /ISAPI/Streaming/Channels/2/picture

Additional controls include an 'Update Cmd. string' button and a checkbox for 'Enable/disable camera authorisation'.

1.4. Settings for 3rd party IP Cameras

1.4.1 Basic Configuration for 3rd party IP Camera streaming

Mandatory stream settings:

- Resolution: VGA (min. 320x240 - max. 640x480)
- Streaming codec: MJPEG / JPEG
- IP address: set to a free IP address in the same IP range as the SPC
- Streaming port: 80 (recommended)
- Command string: CGI support (**to be requested by the camera manufacturer**)

Example CGI-strings from 3rd party camera manufacturer:

Axis	/jpg/image.jpg
Mobotix	/cgi-bin/image.jpg?size=320x240
Samsung	/stw-cgi/video.cgi?submenu=snapshot&action=view&ProfileID=3
SONY	oneshotimage.jpg?username=YWRtaW4=&pwd=YWRtaW4=

Tab.3: cgi-strings for 3rd party cameras

Please note!

Please make sure, that the username/password is at the end of the CGI string, otherwise the browser will cache the username/password with the result, that the SPC panel does not get any image from the IP camera.

1.4.2 Test options

To verify if the camera is supported from the SPC panel, open the web browser and enter the following string into the web browser address field:

http://	<IP-address>/	“cgi-string” According to tab.3 / camera manufacturer
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If no picture is shown, please check out the installer manual from the camera manufacture. If you get a picture, please use this string for the camera integration into the SPC system.

1.4.3 SPC Configuration for 3rd Party IP Cameras

Required SPC camera integration settings for 3rd party cameras:

- Camera type: Generic
- Network: IP address in the same IP range as the SPC panel
- Streaming port: Streaming port (defined in the camera)
- Command string: (see chapter. 1.4.1.)

To configure the standard settings for 3rd party cameras in SPC panel, please follow the instructions. (see below)

- Open the SPC webpage / enable Full Engineer mode / select “Configuration” / “Advanced” / “Verification” / “Video” / and add a new camera and enter the camera details (type, IP, port, authorisation, etc.).
- Fill in the CGI-string (see chapter 1.4.1.) into the “Command String” field.

The screenshot displays the SPC web interface. On the left is a navigation menu with 'Configuration' highlighted. The main content area shows the 'Advanced' tab selected, with 'Verification' and 'Video' sub-tabs. The 'Video' sub-tab is active, showing the 'Camera Configuration' form. The form fields are as follows:

Field	Value
Camera ID	1
Description	3rd party camera
Type	Generic
Camera IP	192.168.2.221
Camera Port	80
Username	admin
Password
Camera Authorisation	<input type="checkbox"/> Enable/disable camera authorisation
Command String	/cgi-bin/stillpeg Command to send to camera to get images

2. Supported Cameras and Video Encoder

2.1. Vanderbilt/Siemens IP Cameras

Product	Latest FW tested	Remarks
CCMS2025	V.2564	
CFMS2025	V.2564	
CVMS2025-IR	V.2564	
CCMW1025	V.2564	
CFMW1025	V.2564	
CCIS1425	V.2564	
CFIS1425	V.2564	
CCID1445-DN18	V.2564	No PTZ support
CCID1445-DN28	V.2564	No PTZ support
CCID1445-DN36	V.2564	No PTZ support
CCMW3025	V0.1.41_SP5	
CFMW3025	V0.1.41_SP5	
CVMW3025-IR	V0.1.41_SP5	
CCMD3025-DN	V0.1.41_SP5	
CCPW3025-IR	V0.1.59	
CCPW5025-IR	V0.1.59	
CCMS2010-IR	S520141212NSA	
CMS2010-IRW	S520141212NSA	
CCIC1410-L	100d	
CCIC1410-LA	100d	
CCIC1410-LAW	100d	
CVMD4010-IR	100c	
CCMC1315-LP	X.1.1.29	
CCMS1315-LP	X.1.1.29	
CFMC1315-LP	X.1.1.29	
CCID1410-ST	X.1.1.29	No PTZ support
CPMS2010-IR	V5.3.3 build 160616	Min. SPC FW 3.7.1 required
CPMS2010-VIR	V5.3.3 build 160616	Min. SPC FW 3.7.1 required
CVMS1310-IR	V5.3.3 build 160616	Min. SPC FW 3.7.1 required
CVMS1310-VIR	V5.3.3 build 160616	Min. SPC FW 3.7.1 required
CVMS2010-IR	V5.3.3 build 160616	Min. SPC FW 3.7.1 required
CVMS2010-VIR	V5.3.3 build 160616	Min. SPC FW 3.7.1 required
CVMW2010-IR	V5.3.9 build 160616	Min. SPC FW 3.7.1 required
CVMW2010-VIR	V5.3.9 build 160616	Min. SPC FW 3.7.1 required

Tab.1: Supported Vanderbilt/Siemens IP Cameras (October 2016)

2.2. Vanderbilt/Siemens Video Encoder

Product	Latest FW tested	Remarks
CNE1000	0102b	
CNE0410	V1.2.0_151015	*Special settings, see chapter 3.4
CNE0810	V1.2.0_151015	*Special settings, see chapter 3.4
CNE1610	V1.2.0_151015	*Special settings, see chapter 3.4

Tab.2: Supported Vanderbilt/Siemens Video Encoder (October 2016)

2.3. Supported 3rd party IP Cameras

Product	FW tested	Command String	Port	Type
AXIS P1347	5.40.9.2	/jpg/image.jpg	80	Generic
Vivotek IP71XX		/ipderkamera/cgi-bin/viewer/video.jpg?user=test&pwd=password	80	Generic
Vivotek TC5332		/ipderkamera/cgi-bin/viewer/video.jpg?user=test&pwd=password	80	Generic
Foscam FI8910W		/ipderkamera/snapshot.cgi?user=test&pwd=password	80	Generic
ACTi ACM-3311		/cgi-bin/encoder?USER=Admin&PWD=123456&SNAPSHOT	80	Generic

Tab.3: Supported 3rd party IP Cameras* (October 2016)

Remark:

* This list is generated based on customer's feedback, no guarantee for completeness and correctness!

3. General information

The Common Gateway Interface (CGI) is a method to display dynamic contents on a web page. The CGI command enables a communication with the camera.

The SPC panel uses the CGI command to request an image from the IP camera.

String examples for Vanderbilt/Siemens Cameras:

- Standard strings (it is supported to add no user and password).

http://	<ip-address>/	cgi-bin/	stilljpeg
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or

http://	<ip-address>/	cgi-bin/	jpeg
---------	---------------	----------	------

or

http://	<ip-address>/	cgi-bin/	image
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- The user and password must be at the end of the string (it is supported to add unencrypted user and password)!

http://	<ip-address>/	cgi-bin/	stilljpeg?username=admin=&pwd=admin=
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- The user and password must be at the end of the string (it is supported to add BASE64 encrypted user and password).

http://	<ip-address>/	cgi-bin/	stilljpeg?username=YWRtaW4=&pwd=YWRtaW4=
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It is also possible to add:

- The image resolution to the string
- The channel number to the string
- The streaming port number to the string.

4. Warranty

The mentioned examples are the recommended settings. There are other configuration scenarios available, e.g. dual streaming required. For such scenarios, please consider possible limitations given from the different IP cameras.

Vanderbilt do not have the control over the development of 3rd party cameras, therefore no warranty for correctness of the documentation will be given at any time.

If you have further experience with other IP cameras or supplementary information, please feel free to contact our Technical Support department.

If you have any questions, please contact our Technical Competence Centre.
Contact details can be found on our website:

www.vanderbiltindustries.com