

SUPPORT INFORMATION

Technical Support

Intrusion
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VANDERBILT



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

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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.

The screenshot shows the CFMW1025 software interface. On the left is a sidebar with various configuration options like Network Settings, Image Parameters, and Alarm. The main area is titled 'Live Player - Web' and has tabs for 'Configuration' (which is selected), 'Compression', 'Network Settings', 'Image Parameters', 'Alarm', 'Record', 'Audio', 'Date/Time', 'Access Protection', 'Firewall', 'System', 'Log', and 'Notice'. In the 'Configuration' tab, under 'Compression', there are two sections: 'Stream 1' and 'Stream 2'. For Stream 1, the 'Image Mode' is set to 'JPEG' and the 'Resolution' is set to 'VGA'. These two settings are highlighted with red boxes. Other settings in Stream 1 include 'Frame Rate' (5 fps), 'Compression Ratio' (Standard), and 'Quality Value' (50). Stream 2 settings include 'Image Mode' (MJPEG), 'Resolution' (VGA), 'Frame Rate' (5 fps), 'Rate control mode' (set to 'Constant bitrate'), 'Compression Ratio' (Standard), 'Quality Value' (16), 'Bit Rate' (2M), and 'GOP' (10).

- 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).

The screenshot shows the CFMW1025 configuration interface. On the left, there's a sidebar with various options like Configuration, Compression, Network Settings (which is selected and highlighted with a red box), Basic, DDNS, FTP Server, RTSP, HTTPS, IEEE 802.1X, SNMP, 3GPP, Image Parameters, Alarm, Record, Audio, Date/Time, Access Protection, Firewall, System, Log, and Notice.

The main area is titled "Live Player - Web" and has tabs for "Configuration" (which is also highlighted with a red box) and "Advanced". Under "Configuration", there's a "Network" section with fields for Mode (set to Manual), IP Address (192.168.3.81), Subnet Mask (255.255.255.0), Default Gateway (192.168.3.1), Primary DNS, and Secondary DNS. Below that is an "IPv6 Address Configuration" section with IPv6 set to OFF. At the bottom is a "Port" section where Stream 1 is set to 80, Stream 2 to 81, and Stream 3 to 82. A note says "(Enter a value between 1 and 65535.)" next to each port number.

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`

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).

The screenshot shows the SPC configuration interface. On the left, there are icons for SPC Home, Status, Log, Users (which is selected and highlighted with a red box), Configuration (highlighted with a red box), and Communications. The main menu has tabs for Hardware, System, Inputs, Outputs, Areas, Calendars, Change own PIN, and Advanced (which is highlighted with a red box). Under Advanced, there are sub-tabs for Triggers, Mapping Gates, Verification (highlighted with a red box), Verification zones, Audio, and Video (highlighted with a red box). The "Verification" tab is active, showing sections for Camera Configuration, Verification zones, and Audio. In the Camera Configuration section, there are fields for Camera ID (2), Description (CCIS1425), Type (Siemens CCIC1410), Camera IP (192.168.3.16), and Camera Port (80). A note says "(Enter a value between 1 and 65535.)" next to the port number.

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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”`

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).

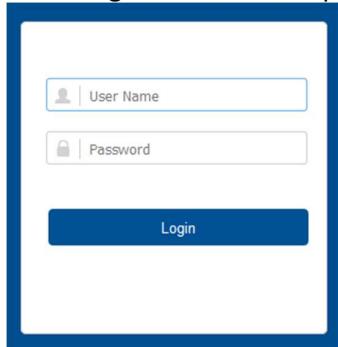
The screenshot shows the SPC Configuration software interface. On the left is a sidebar with icons for SPC Home, Status, Log, Users, Configuration (which is selected), Communications, and File. The main area has a navigation bar with tabs: Hardware, System, Inputs, Outputs, Areas, Calendars, Change own PIN, Advanced, Triggers, Mapping Gates, Verification (which is selected), License, Verification zones, Audio, and Video. Below this is a 'Camera Configuration' section. It includes fields for Camera ID (1), Description (CNE NF), Type (Siemens CMFC1315), Camera IP (192.168.2.221), Camera Port (80), Username (admin), and Password (.....). A red box highlights the 'Username' and 'Password' fields. To the right of the password field is a button labeled 'Update Cmd. string'. At the bottom of the configuration section, there is a checkbox for Camera Authorisation and a text input for Command String containing '/cgi-bin/stilljpeg'.

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".

Setting	Value
Stream Type	Sub Stream
Video Type	Video Stream
Resolution	320x240
Bitrate Type	Variable
Video Quality	Medium
Frame Rate	25 fps
Max. Bitrate	512 Kbps
Video Encoding	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`

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:

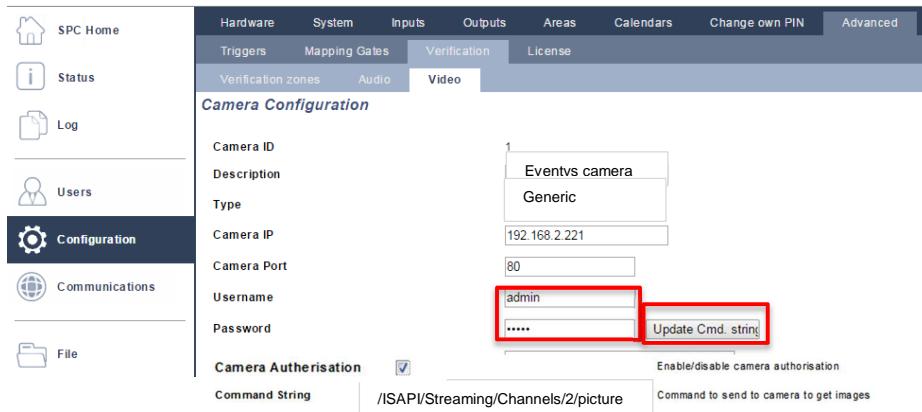
- Camera type: Generic
- Network: IP address of the Eventys camera
- Streaming port: 80
- Command string: /ISAPI/Streaming/Channels/2/picture

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.



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?msubmenu=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
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According to tab.3 / camera manufacturer

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.

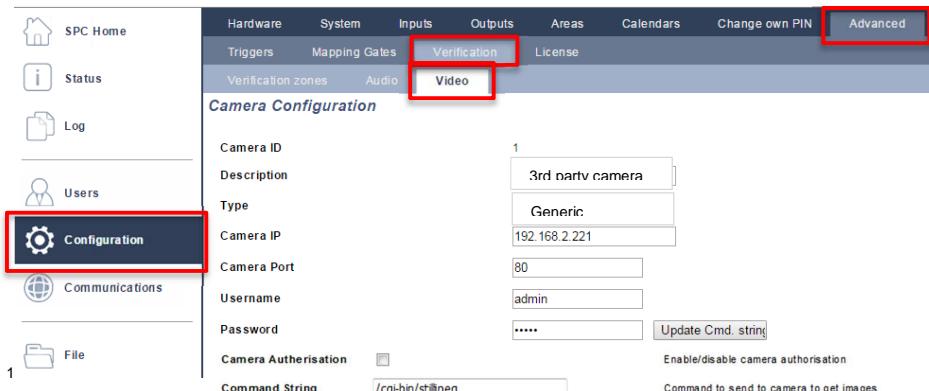
1.4.3 SPC Configuration for 3rd Party IP Cameras

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.



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

or

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

or

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

- 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=

- 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=

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