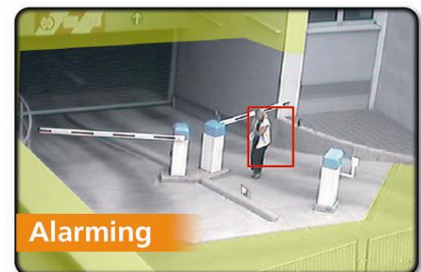




and



Quick Start Guide: Integrating viasys Intelligent Video into exacq Vision



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1 Quickstart

Its simple: To properly connect viasys with exacq Vision, you need to set up both sides properly. This guide tells you how: Choose the Hardware where you have installed viasys onto and set it up, choose the version of exacq Vision Client you use and follow the instructions in that manual.

1.1 Supported versions

Interfacing between viasys and exacq Vision Client is possible with this versions:

- **Viasys from Version 3.0**
(older version can be easily used by entering a manual string in the communication settings – see Advanced section ant end of this document)
- **Exacq from Version 4.1**

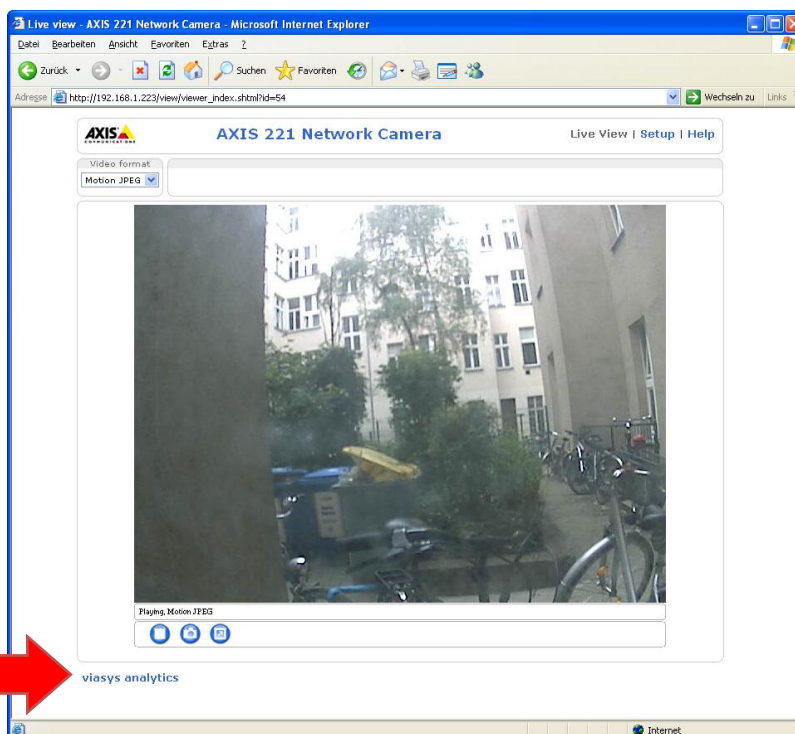
2 How to trigger viasys events in exacq

This chapter gives a quick overview how to configure exacq Vision Client to communicate with viasys as server. See the respective manuals for a more detailed description.

2.1 Prepare your Camera for exacq Vision Client:

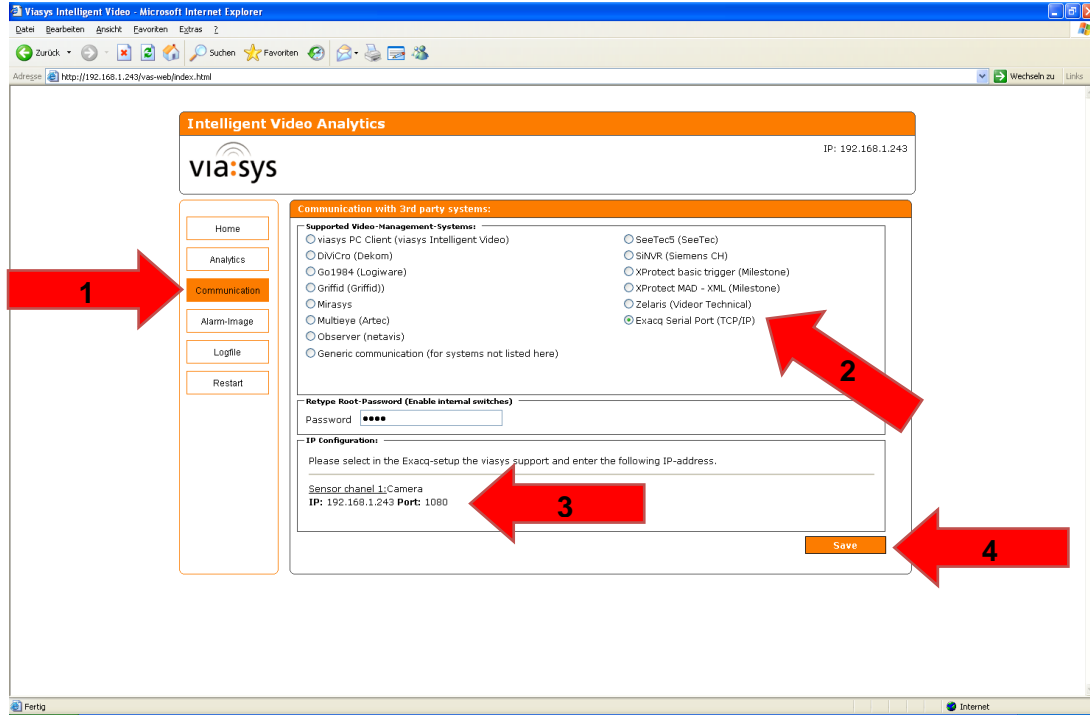
Start your browser and enter the IP address of your camera.

- 1) Click on “viasys analytics”



Guide for integration of viasys Intelligent Video Analytics in exacq

- 1) Choose “Communication” in the left main menu
- 2) Select “Exacq Serial Port (TCP/IP)”
- 3) Please take a note of the IP and port, you will need it to set up exacq
- 4) Finish with “Save”



2.2 Configure exacq Vision Client

Start exacq Vision Client

- Start
- all programs
- exacqVision Client
- exacqVision Client

Serial Profile Setup

- 1) Choose the configuration menu
- 2) Go to "Serial Profile Setup"
- 3) Create a "New Profile" with exact these settings (double click for activate the check mark).

Serial Profile Setup

Current Profile Properties

Profile Name:

SOT marker:

EOT marker:

Select Display Font

Font Sample

Existing Profiles

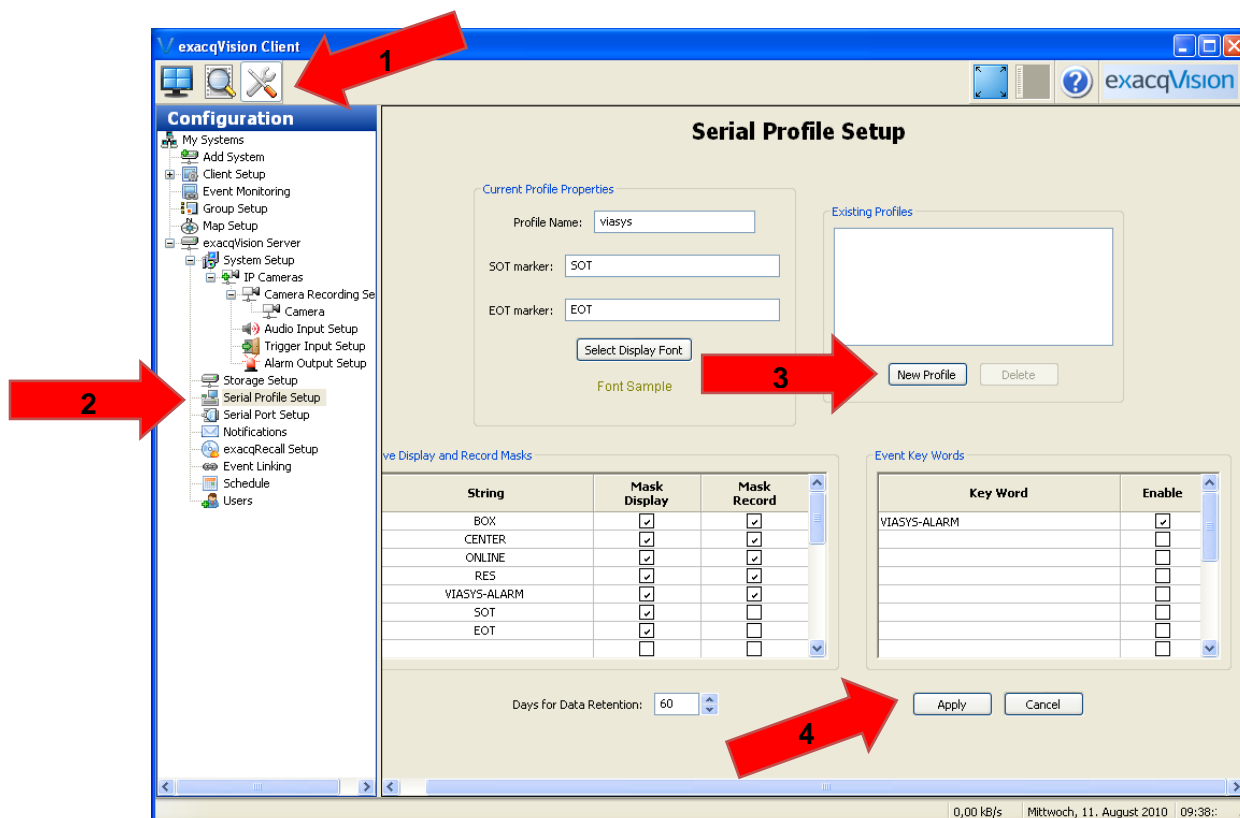
New Profile Delete

Event Key Words

String	Mask Display	Mask Record
BOX	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CENTER	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ONLINE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
VIASYS-ALARM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>

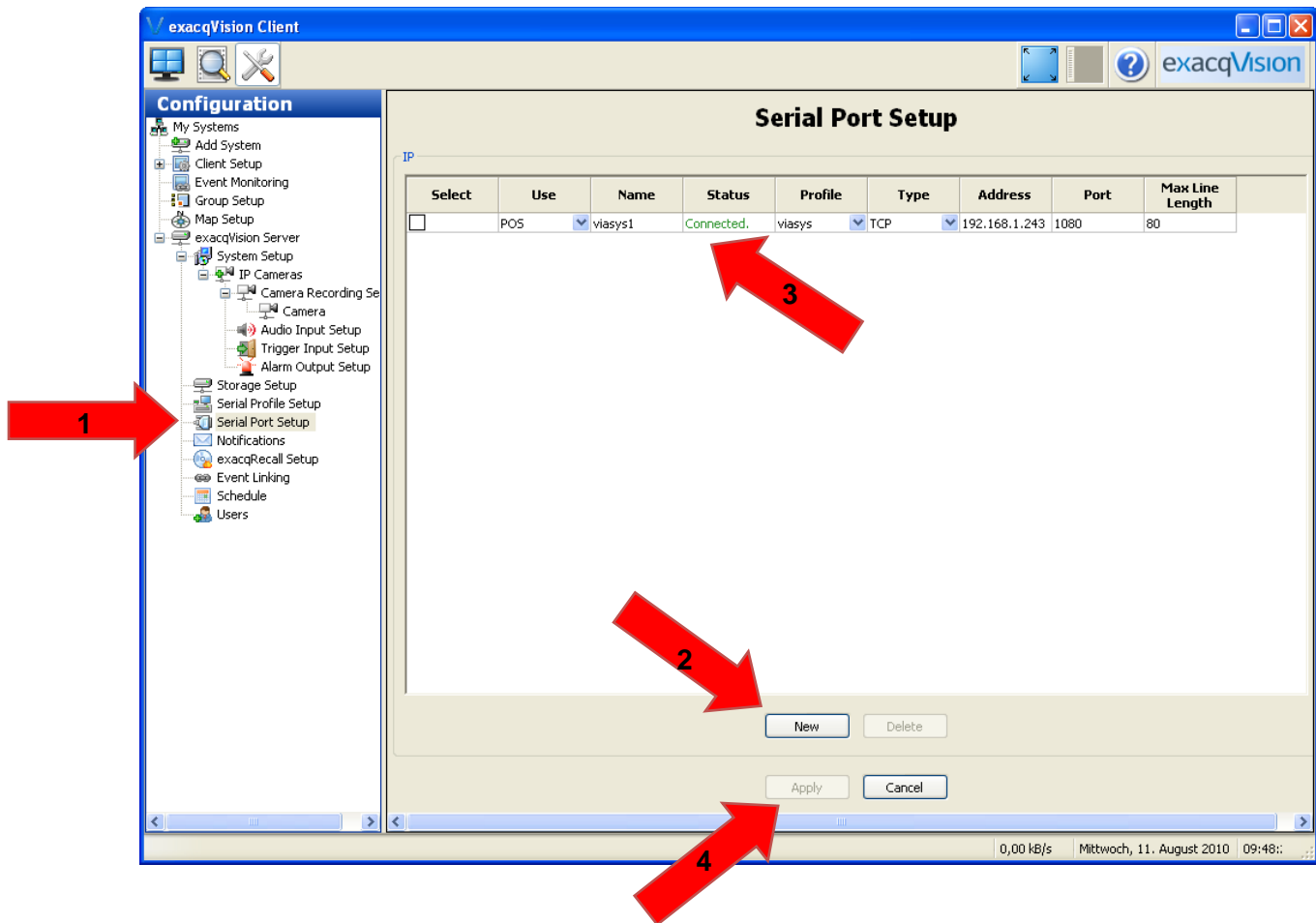
Key Word	Enable
VIASYS-ALARM	<input checked="" type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

- 4) Save it with click on "Apply"



Serial Port Setup

- 1) Choose “Serial Port Setup”
- 2) Build a new entry by pressing “New”
- 3) Enter the settings like shown in the screenshot below. Replace “Address” and “Port” with the IP and port you noted in section 3.1 (Communication settings of viasys)
- 4) Save it with clicking on “Apply”



The status field of this entry should turn green with status “Connected”.

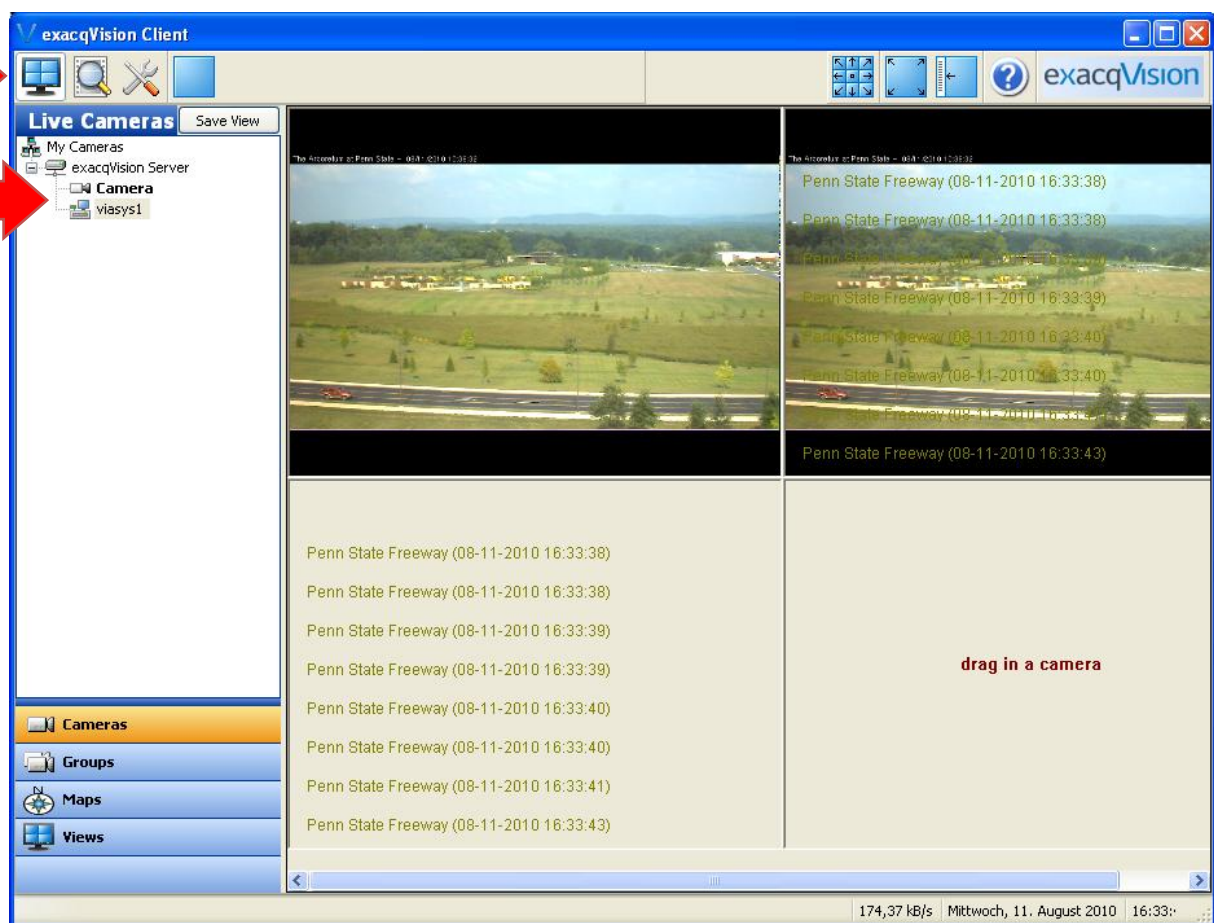
If it does not work, check if you have entered the correct viasys communication IP and port or if the right protocol had been selected in viasys “Communication” settings.

2.3 Test it

There are two ways for testing the functionality.

Live Video

- 1) Change into “Live Video”
- 2) Drag and drop the viasys entry (not the camera but the “Serial Port” with the name you have chosen in section 3.4 (Serial Port Setup)) for example “viasys1”
- 3) Now in the window into which you have drag & dropped the respective entry, every time viasys detects a relevant event, an alarm entry will be displayed.
- 4) In this way you can directly verify the connection.

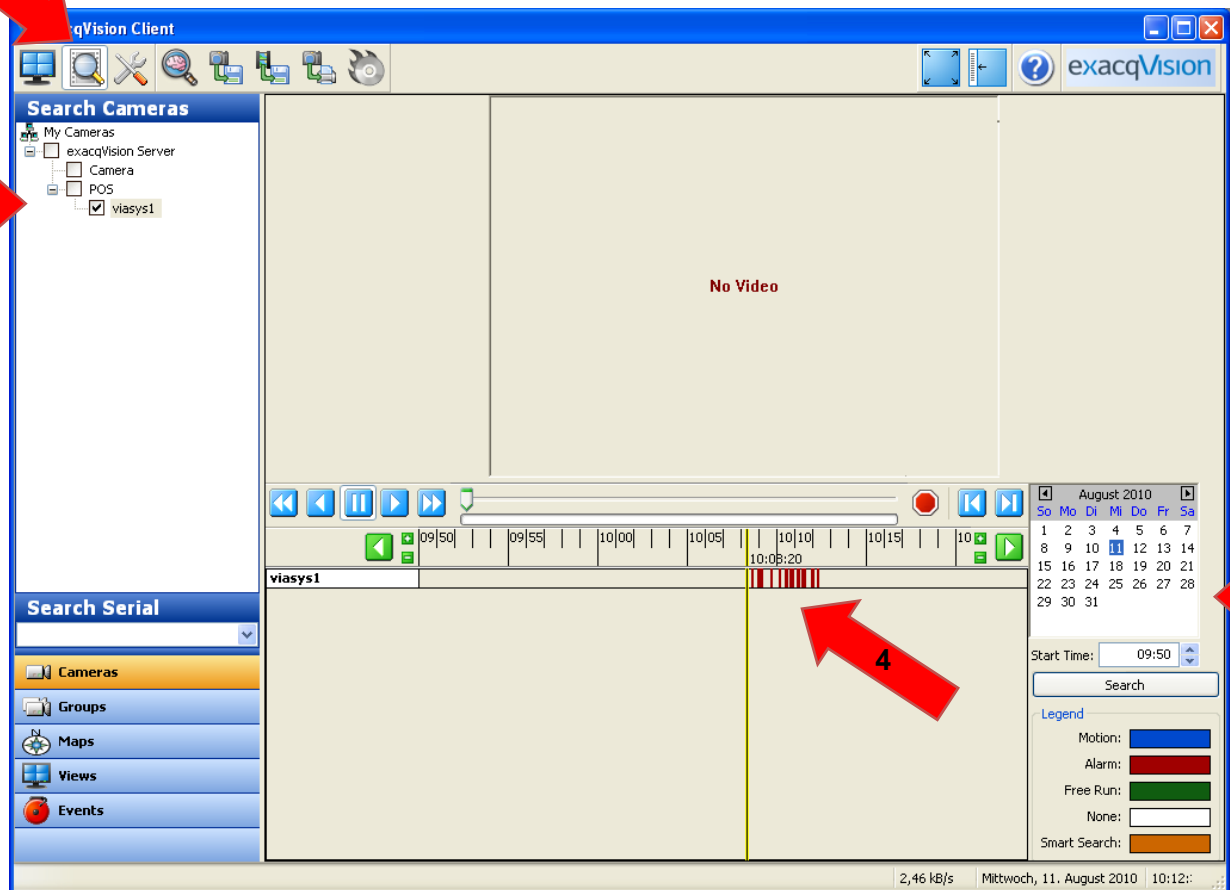


At our screenshot:

- Top left = Camera
- Top right = Camera + Alarm text
- Down left = Alarm text

Search cameras

- 1) Change into “Search Page”
- 2) Activate the camera
- 3) Choose the right date and click “Search”
- 4) Test your camera and that’s it

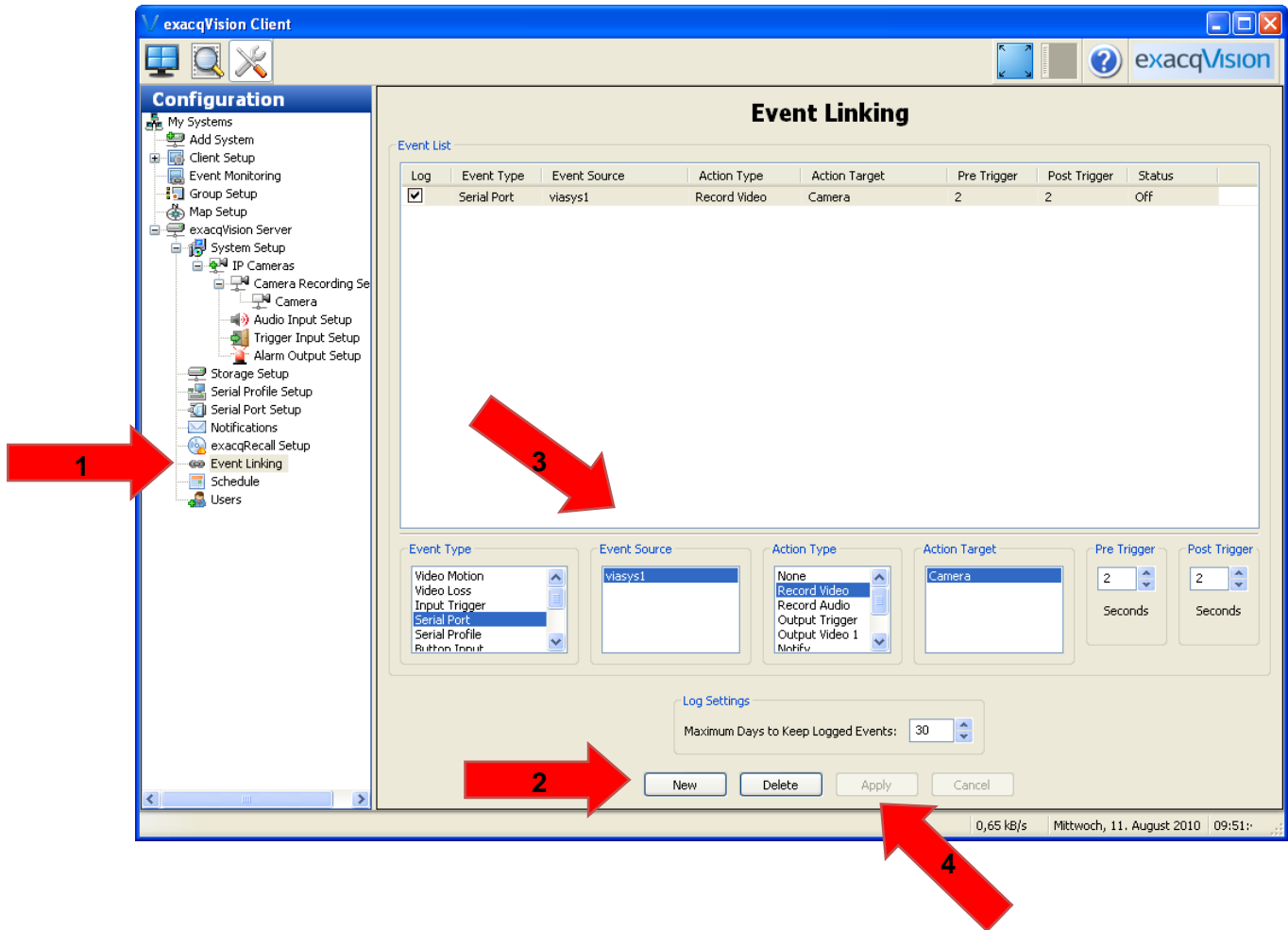


If you do not see any red event markers please check if you have chosen the right date and time.

2.4 Event Linking

Now you can link the viasys events to whatever action is needed.

- 1) At “Event Linking”
- 2) Construct with “New”
- 3) Configure with exact these configurations
- 4) “Apply” it



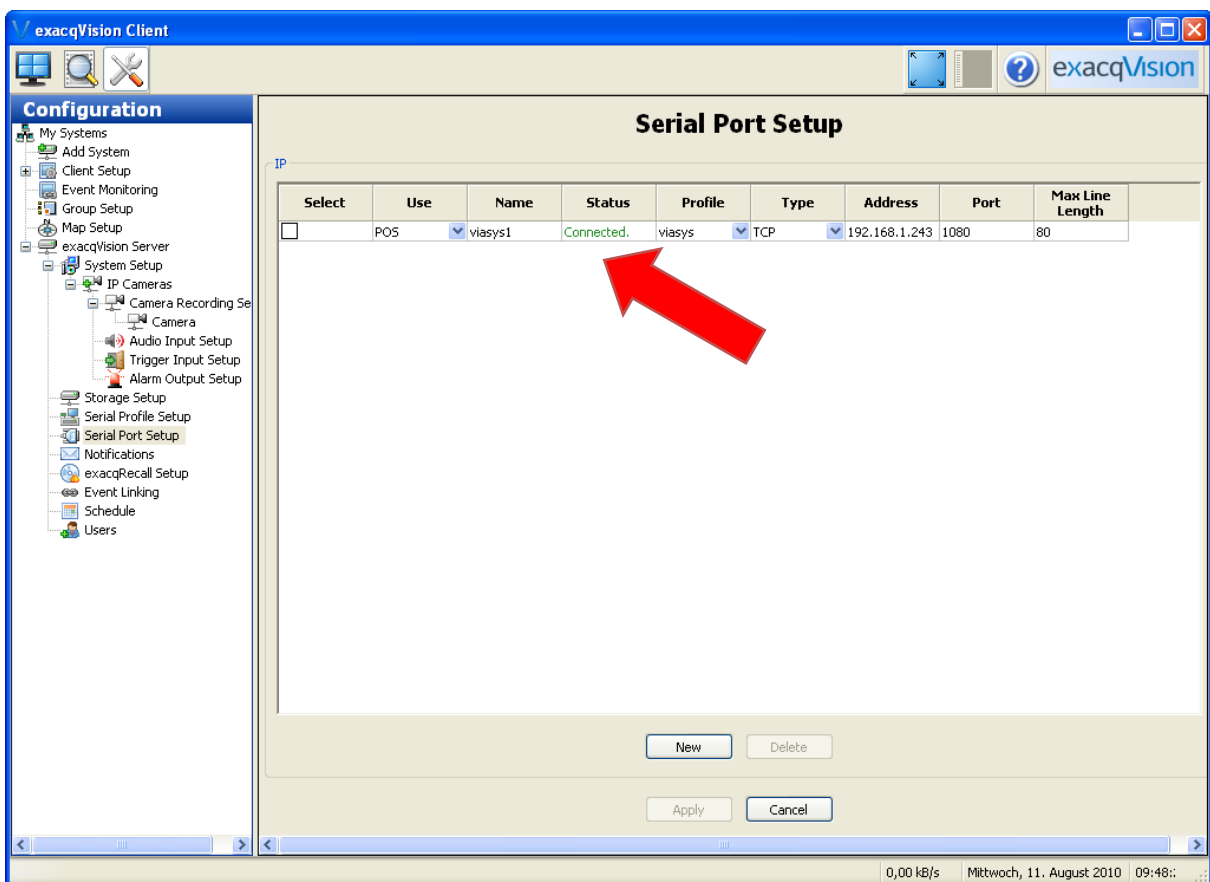
2.5 Troubleshooting

If you do not get events triggered in exacq, that may have the following reason:

Any time something is saved in viasys („save“ button pressed either in Analytics or Communication) viasys shuts down all connections and restarts them.

That causes exacq to recognize the serial port TCP/IP connection as closed until it retries after some minutes to reconnect. During that period of time no events are notified by exacq.

The best way to reconnect earlier is to change „POS“ to „unused“ and then back to „POS“. Don't forget to set in profile again „viasys“ as exacq will loose that setting.



Guide for integration of viasys Intelligent Video Analytics in exacq

You can anytime verify in the Logfile of viasys if a client did a connect and from which IP address this connect comes from.

The screenshot shows the VAS IP-Video Sensor web interface in Microsoft Internet Explorer. The browser address bar shows `http://video-sensor.com/vas-web/index.html`. The page title is "Edge Analytics - Intelligent Motion Detection". The main content area is titled "Logfile: Penn State Freeway" and displays a list of movement alarms. A red arrow points to a specific log entry: "08-11-2010 16:31:11, Channel 8 : Client : Connected 92.225.143.231:11269". The interface also includes a menu on the left with options like Home, Analytics, Alarm-Images, Communication, Image Source, and Logfile. On the right, there are channel status indicators for "Santa Clara, CA", "Le Normandy", "Dog Pound", and "Traffic Cam", all showing "Status: online".

Timestamp	Channel	Event	Coordinates (lx, ly, rx, ry)
08-11-2010 16:31:21	Channel 8	Movement Alarm	lx=0496, ly=0488 rx=0572, ry=0536
08-11-2010 16:31:20	Channel 8	Movement Alarm	lx=0420, ly=0488 rx=0496, ry=0532
08-11-2010 16:31:20	Channel 8	Movement Alarm	lx=0036, ly=0476 rx=0072, ry=0512
08-11-2010 16:31:19	Channel 8	Movement Alarm	lx=0226, ly=0476 rx=0264, ry=0520
08-11-2010 16:31:19	Channel 8	Movement Alarm	lx=0152, ly=0472 rx=0224, ry=0520
08-11-2010 16:31:18	Channel 8	Movement Alarm	lx=0056, ly=0468 rx=0124, ry=0516
08-11-2010 16:31:18	Channel 8	Movement Alarm	lx=0572, ly=0476 rx=0616, ry=0512
08-11-2010 16:31:17	Channel 8	Movement Alarm	lx=0632, ly=0480 rx=0660, ry=0512
08-11-2010 16:31:11	Channel 8	Client	Connected 92.225.143.231:11269
08-11-2010 16:31:06	Channel 8	Movement Alarm	lx=0068, ly=0464 rx=0084, ry=0488
08-11-2010 16:31:05	Channel 8	Movement Alarm	lx=0392, ly=0472 rx=0424, ry=0512
08-11-2010 16:31:04	Channel 8	Movement Alarm	lx=0532, ly=0476 rx=0568, ry=0528
08-11-2010 16:31:03	Channel 8	Movement Alarm	lx=0776, ly=0480 rx=0812, ry=0540
08-11-2010 16:31:03	Channel 8	Movement Alarm	lx=0908, ly=0484 rx=0956, ry=0524
08-11-2010 16:31:02	Channel 8	Movement Alarm	lx=0268, ly=0476 rx=0296, ry=0516
08-11-2010 16:31:02	Channel 8	Movement Alarm	lx=0156, ly=0472 rx=0180, ry=0508
08-11-2010 16:31:01	Channel 8	Movement Alarm	lx=0028, ly=0476 rx=0052, ry=0500
08-11-2010 16:31:01	Channel 8	Movement Alarm	lx=0196, ly=0496 rx=0232, ry=0520
08-11-2010 16:31:00	Channel 8	Movement Alarm	lx=0076, ly=0484 rx=0092, ry=0508
08-11-2010 16:30:57	Channel 8	Movement Alarm	lx=0056, ly=0460 rx=0108, ry=0492
08-11-2010 16:30:56	Channel 8	Movement Alarm	lx=0276, ly=0472 rx=0336, ry=0504
08-11-2010 16:30:55	Channel 8	Movement Alarm	lx=0388, ly=0480 rx=0440, ry=0504
08-11-2010 16:30:55	Channel 8	Movement Alarm	lx=0500, ly=0484 rx=0560, ry=0520
08-11-2010 16:30:54	Channel 8	Movement Alarm	lx=0436, ly=0488 rx=0472, ry=0524

If you have done those steps and you get no connect, its maybe a good idea to check if a firewall is in the way or if the port number may be used from another service or application.

3 How to use exacq as picture source

3.1 Integration scenarios

With viasys server plugin there are two ways to get the picture stream for analytics:

Use Camera directly as picture source



- works with viasys supported IP cameras
- requires 2nd stream (2 fps – mjpeg) from camera
- creates little more network traffic to server

Use Exacq as picture source (get camera video through Exacq)



- works with all exacqVision supported cameras
- even works with analog cameras digitized by exacqVision
- creates no additional network traffic in network (if viasys is installed on same server as exacqVision)

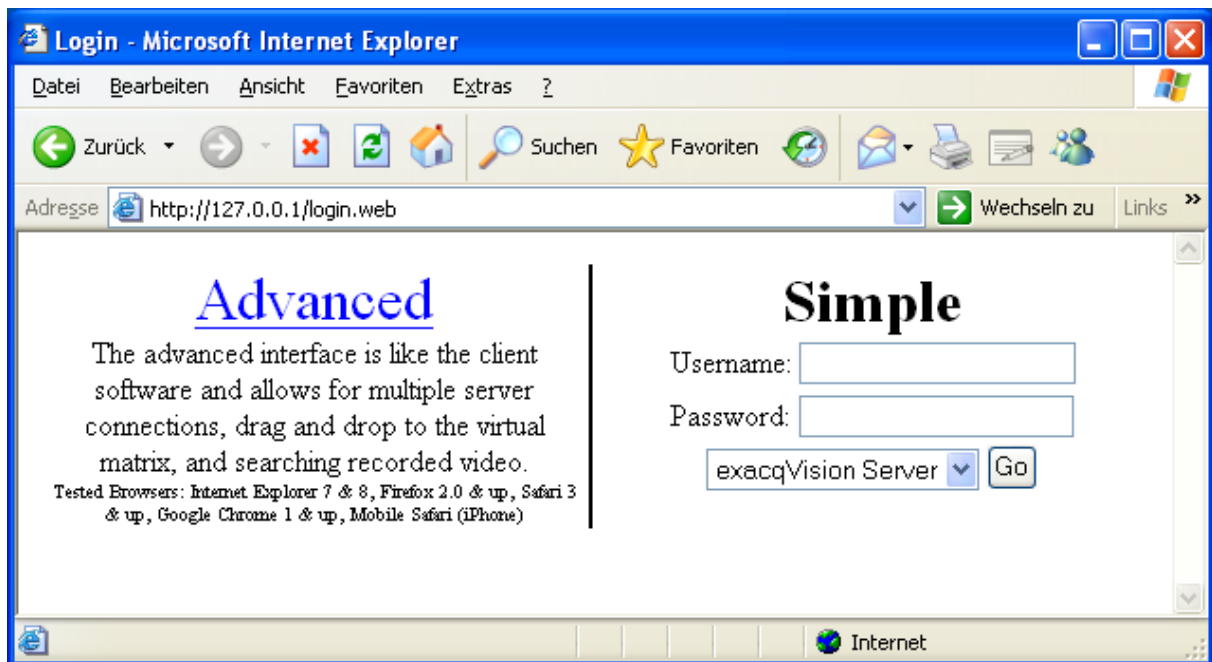
This means, you can use exacq as a picture source, but you can also use any viasys supported IP camera directly by choosing the respective entry in the “picture source” selection of viasys.

This section describes only the more complicated case of using exacq as picture source – and because you need to set up the exacq web service properly in order to do so, this documentation also refers to this.

3.2 Web Service configuration

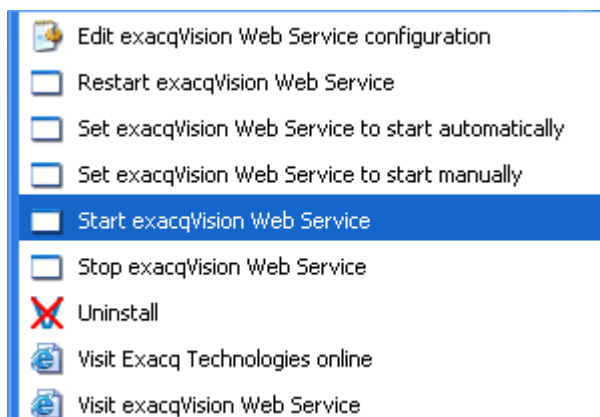
Test if Web Service is already started

- 1) Start your browser and switch to <http://127.0.0.1/> or localhost
- 2) If you got a screen like that one skip the next single step (Starting Web Service)



Starting Web Service

- Start
- All programs
- ExacqVision Web Service
- Start exacqVision Web Service

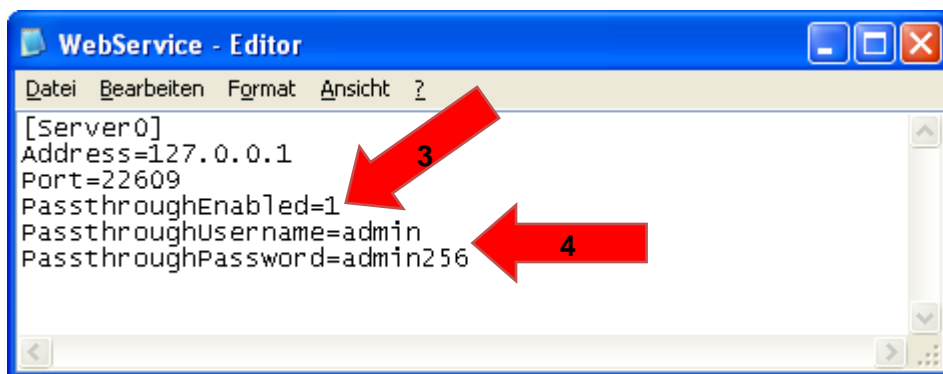


Try step 3.2 again

Prepare Webservice

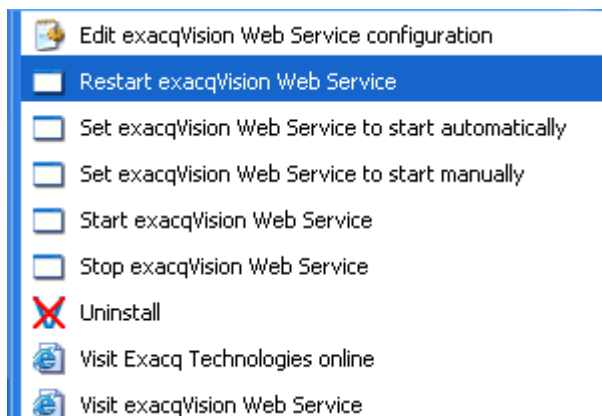
Viasys can at the actual version only receive pictures from exacq that are not password protected. (This will be changed in the very next version of viasys server – hopefully before Q4-2010). To enable the access to exacq web service without login information, please change the following configuration:

- 1) Start windows explorer and switch to “C:\program files\exacqVision\WebService”
- 2) Open Webservice.ini by right click and edit
- 3) Replace on “PassthroughEnabled” 0 with 1
- 4) Enter your Username and Password like in the screenshot below
- 5) Save it



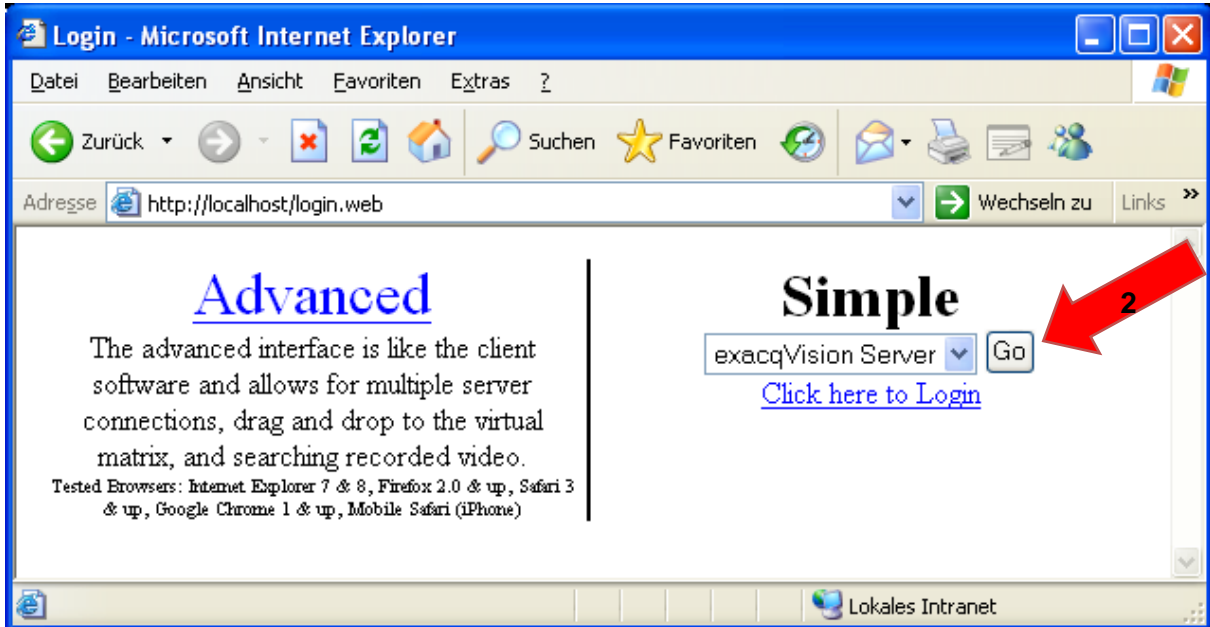
Restart Webservice

- Start
- All programs
- ExacqVision Web Service
- Restart exacqVision Web Service

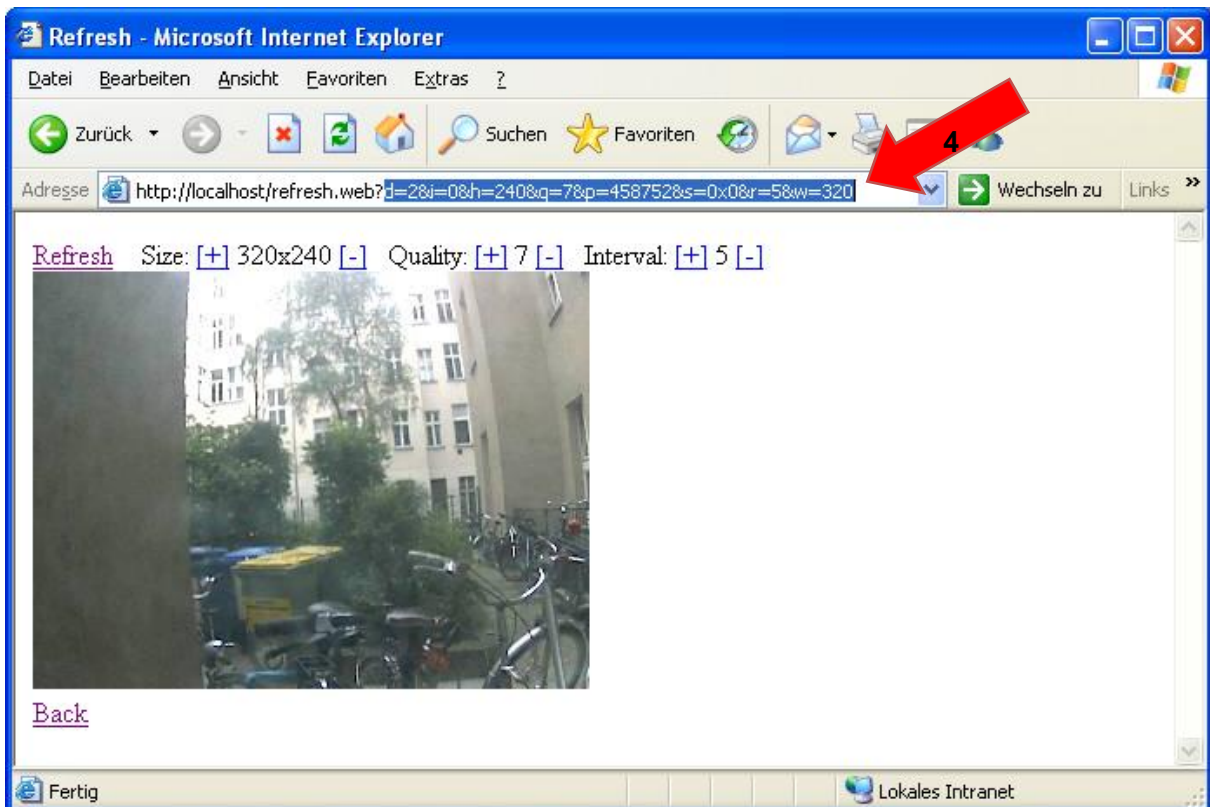


Login and select a camera

- 1) Start your browser and switch to <http://127.0.0.1/> or localhost
- 2) Click “Go”

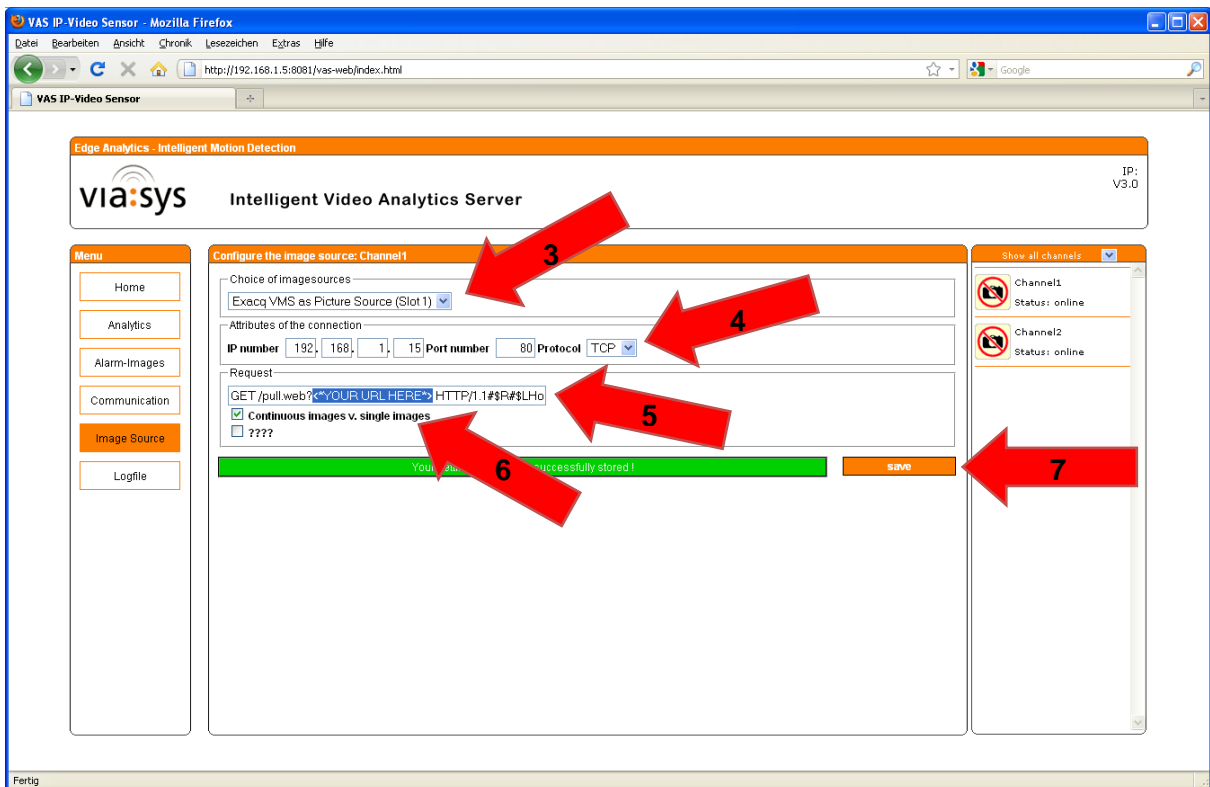


- 3) Choose a camera
- 4) Copy the string below the “?” like in the screenshot below



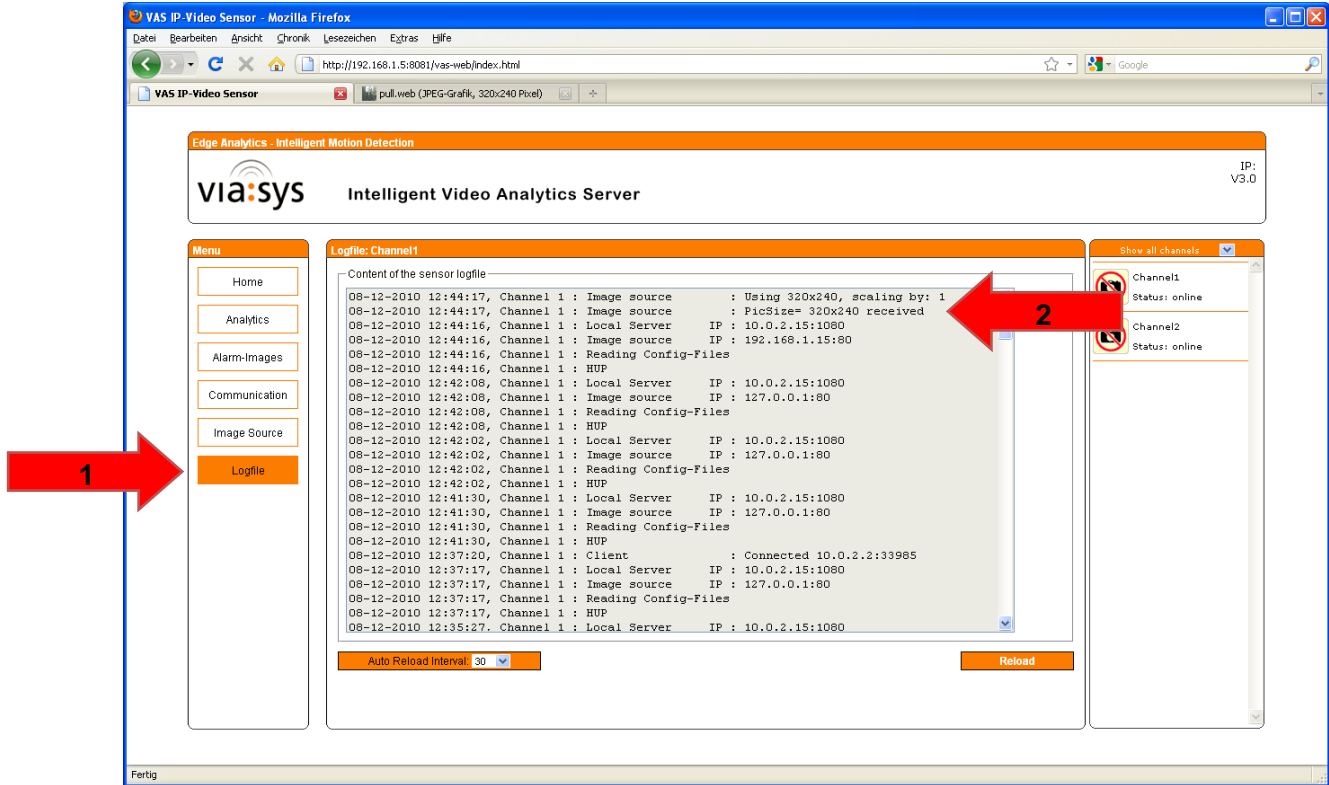
3.3 Configure viasys web interface

- 1) Start your browser
- 2) Switch to web interface with the IP and port (8081) of your server and change at the menu to "Image Source"
- 3) Change "Choice of imagesources" to "Exacq VMS as Picture Source" (Slot 1 or 2)"
- 4) Enter IP number and port number (80)
- 5) Replace the blue market string with the string of last section
- 6) Activate "continuous images v. Single images"
- 7) "save" it



3.4 Test it

- 1) Step into Logfile
- 2) If you get a message like this "PicSize= * received" everything works fine

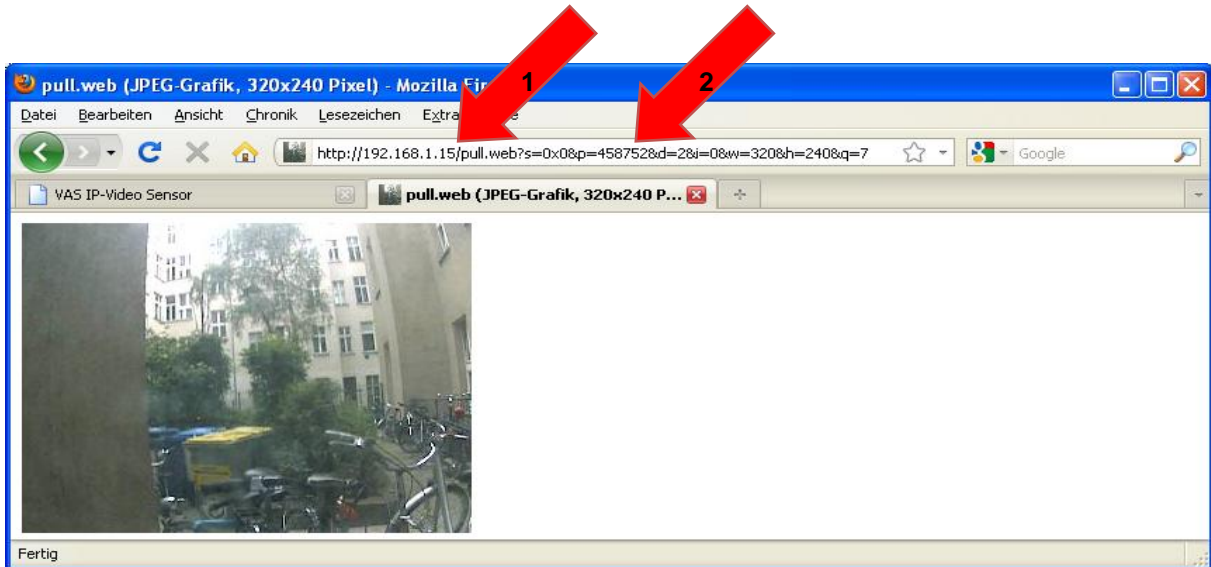


Click Analytics to see the live view (latest picture received).

3.5 Troubleshooting

If you did not get a message with “PicSize= * received” like in step 3.4 please check the camera in your browser. The URL is segmented into two pieces:

- 1) “http://” and IP address of your exacq Server and “/pull.web”
- 2) String from section 3.3 last step



If you get a JPEG snapshot in the browser, this string should work and maybe you just did one character wrong. Check if the string really looks like described.