

Introduction

exacqVision Edge is a variation of the standard exacqVision Server application that operates on a compatible Axis camera. It can record video from the local camera directly to the SD memory card in the camera or remote drives. The exacqVision Client application can connect to any combination of Edge and standard servers simultaneously.

Requirements

- A one-channel license from Exacq Technologies must be obtained for each Edge-enabled camera. (A standard Edge license part number is EDGE, and an Edge Plus license part number is EDGEPLUS.)
- exacqVision Edge is compatible with Axis ACAP cameras:
 - The camera must be running version 5.2 firmware or later (5.4 or later if remote storage drives are used).
 - An SDHC class 10 or better SD memory card is required for each camera. (See Axis documentation for maximum card size support)

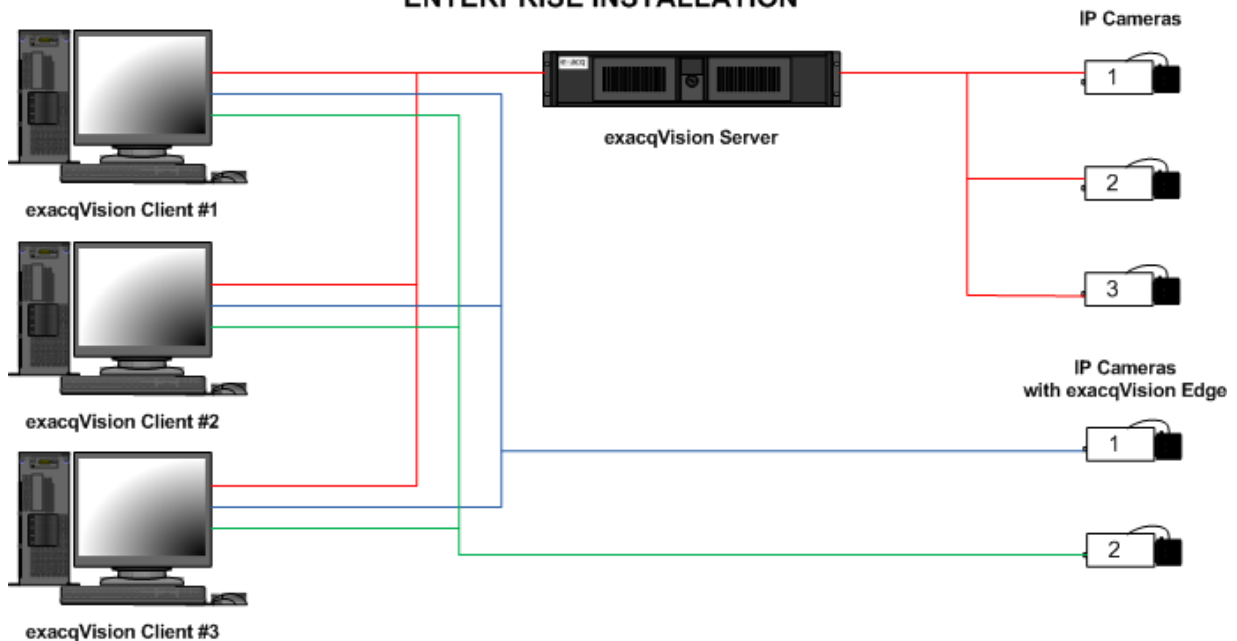
NOTE: Up to 2GB is reserved for exacqVision Edge operations and cannot be used for exacqVision Edge data storage.
- A separate web server computer running the exacqVision Web Service application is required for mobile or web clients connecting to Edge servers.

Block Diagram

STANDALONE INSTALLATION



ENTERPRISE INSTALLATION



Installation and Configuration

CAUTION: Do not record from an IP camera on more than one exacqVision server at a time, regardless of where exacqVision Server is running.

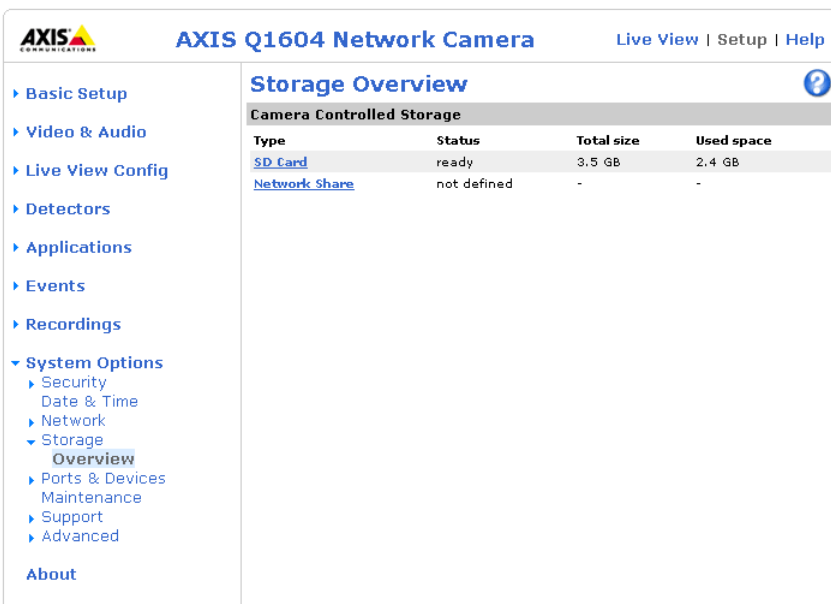
1. Install the Axis camera and insert the SD memory card in the camera.

NOTE: SD cards are normally pre-formatted to the FAT32 file system and automatically mounted when inserted. However, you can re-format the card using the camera, if desired, by following the instructions provided by Axis.

2. Configure the camera's network parameters to communicate with a PC-based browser using the Axis Camera Finder utility found on the CD shipped with the camera, or downloaded from the Axis website.
3. If necessary, upgrade the camera firmware to the latest version from the Axis website.
4. Download the latest exacqVision Client application from the Exacq website at www.exacq.com/support/downloads.html.
5. Install the client software on your computer.
6. Download the latest exacqVision Edge server application from <https://www.exacq.com/support/downloads.html>.

NOTE: exacqVision Edge server software is available for both ARTPEC 3 and ARTPEC 4 processors. (ARTPEC 3 processors can host one application at a time, whereas ARTPEC 4 processors can host multiple applications simultaneously.) The download page contains a list of cameras supported by each exacqVision Edge ARTPEC version. Make sure you download the correct version for your camera.

7. Open a browser to the camera and log in. The default username and password are **root** and **pass**.
8. Select **Setup**. Under **System Options**, select **Storage**.

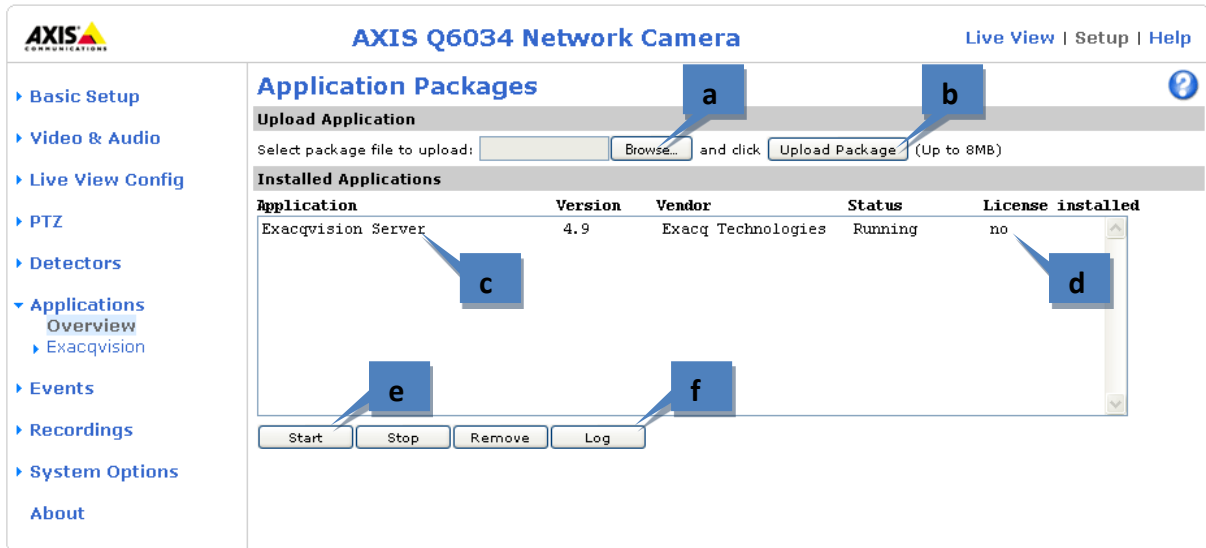


The screenshot shows the web interface for an AXIS Q1604 Network Camera. The page title is "AXIS Q1604 Network Camera" and it includes links for "Live View", "Setup", and "Help". A navigation menu on the left lists various settings categories, with "System Options" expanded to show "Storage Overview" selected. The main content area displays a table titled "Camera Controlled Storage" with the following data:

Type	Status	Total size	Used space
SD Card	ready	3,5 GB	2,4 GB
Network Share	not defined	-	-

9. Ensure the Total Size for SD Card is greater than zero, which means the camera is communicating with the SD card.
10. From the Setup menu, select **Applications**.

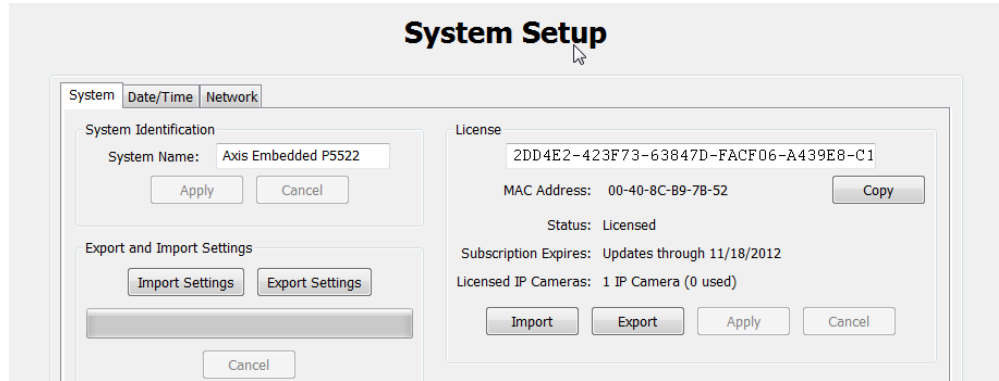
11. Complete the following steps on the Application Packages page, as shown in the following illustration:
 - a. Select Browse or Choose File (depending on the firmware version) and then locate the .eap file downloaded in step 6.
 - b. Select Upload Package. It may take up to five minutes for the package to load and install.
 - c. After successfully installing exacqVision Edge, exacqVision Server is displayed in the Installed Applications list.
 - d. The License Installed column lists “no” because exacqVision software is licensed separately.
 - e. Select exacqVision Server and click Start. The Status should now be “Running.” Note that after the first installation, or after the SD card is replaced, up to five minutes could elapse before the server software is ready to connect.
 - f. The Log file lists any exacqVision Edge messages and errors.



12. In the local exacqVision Client, add the remote Edge server on the **Add System** page using the default **exacqVision Server** username (**admin**) and password (**admin256**). This allows the local client on your computer to communicate with the Edge server on the camera. When complete, the server’s status is displayed as Connected.

Add System					
System List					
Enabled	Address	System Name	Username	Status	
<input checked="" type="checkbox"/>	192.168.101.51	Axis Embedded P5522	admin	Connected.	

13. Add the exacqVision camera license to the camera's server on the System Setup page. When complete, the status is displayed as Licensed.



14. On the IP Cameras page, verify that the camera is associated with its Edge server:
- The IP address must be 127.0.0.1 so that the Edge server communicates with the local camera.
 - The camera's credentials are **root** and **pass** by default.
 - The status is displayed as Connected when complete.

The screenshot shows the 'IP Cameras' page. At the top, there is a title 'IP Cameras'. Below it, there is a section titled 'IP Camera List' which contains a table with the following data:

Enabled	Address	Type	Model	MAC	Firmware	Status
<input checked="" type="checkbox"/>	127.0.0.1	AXIS VAPIX	P5522	00-40-8C-B9-7B-52	5.25	Connected.

15. See the exacqVision user manual for additional configuration steps, such as configuring recording settings.

Using Network Storage

exacqVision Edge can also save data to network attached storage (NAS) provided by the camera's operating system. (An SD card must be installed even if you use NAS because critical exacqVision Edge processes run on the card.) Before configuring a NAS for use with AXIS and exacqVision Edge, make sure the following requirements are met:

- The NAS must be compatible with the camera and camera firmware. Not all cameras support the use of NAS.
- The NAS must be properly configured on the camera's web page (see the following procedure).
- The NAS must provide adequate, stable Input/Output Per Second capacity for the camera's search, read, write, and delete functions.
- **The NAS must contain a unique partition for each camera.** If not, each camera will overwrite the other cameras' video. (The data filenames are based on the time when the video was captured and will be the same among all cameras.)

The procedure for enabling the NAS for use with exacqVision Edge is similar to the procedure in the previous section. To use NAS with exacqVision Edge, complete the following steps:

1. Configure the NAS as described in the camera instructions provided by Axis.
2. Confirm that the NAS is properly mapped. To do this, open the camera's web page and select Setup, System Options, and then Storage. Verify that the Total Size for Network Share is greater than zero, which means the camera is communicating with the NAS. If the Network Share is "not defined," click the link to open Storage Management, enter the required information, and click Ok.

The screenshot shows the 'Storage Management' web interface. It has a title bar with a question mark icon. Below the title is a 'Network Share' section with two input fields for 'Host' and 'Share'. There is a checkbox labeled 'The share requires login' which is currently unchecked. Below this, the status is 'not defined' and there is a 'Connect' button. The next section is 'Storage Tools' with 'Clear' and 'Test' buttons. The final section is 'Recording Settings' with a checked checkbox for 'Remove recordings older than:' followed by a text input '1' and a dropdown menu set to 'weeks'. There is also an unchecked checkbox for 'Lock (write protection)'. At the bottom are 'Ok' and 'Cancel' buttons.

3. Restart the exacqVision Edge server from the camera's Applications page by selecting Stop and then Start.
4. Verify that the exacqVision Edge server appears on the Storage Setup page in exacqVision Client and that its Enabled box is selected.

NOTE: On exacqVision Edge systems with multiple drives (NAS and local SD card), data is initially saved to the drive with the largest amount of free space. For example, if the NAS contains more free space than the SD card, exacqVision Edge saves data to the NAS until the SD card has more free space—and then it saves data to the SD card until the NAS has more free space. When all storage locations are full, exacqVision Edge deletes video from both locations to create free space. If the connection to the NAS is broken, exacqVision Edge continues to save data to the local SD card.

Troubleshooting

If you encounter a write error, complete the following steps:

1. Stop the exacqVision Edge server on the camera's Applications page.
2. Unmount the SD card on the Storage Setup page.
3. Check the SD card. If necessary, repair and format the card.
4. Remount the SD card.
5. Restart the exacqVision Edge server on the camera's Applications page.