Summary
Video from a camera consists of many images which must be transmitted and processed by software and hardware. The 1080p HD video produced by the Axis P1355 camera uses a large amount of bandwidth and often many of the images contained are not needed. Using a view area sends a smaller image without sacrificing quality.

Objective
This application note will explain how the view area feature of the Axis P1355 camera can be used to decrease the bandwidth of the transmitted signal.

Introduction
The P1355 smart camera from Axis has many features. One feature useful for this application is the view area which allows you to select a smaller area of the overall image captured by the camera and transmit it as a separate video stream. This can allow for the video images to be transmitted and processed more quickly.

Hardware/Software
The Axis P1355 Network Camera is a 1080p HD camera capable of producing multiple H.264 video streams. It also offers digital Pan Tilt Zoom (PTZ). The view area feature is available when PTZ is set to digital mode, meaning that the camera will not physically move or zoom but only digitally pan tilt and zoom within the stationary image observed.
To configure view areas follow these steps:

1. Go to **Setup** pages in the camera's web interface.

2. Go to **Video&Audio > Camera Settings**, check the box **Enable View Areas** and **Save** settings.

3. A new menu link called **View Areas** appears to the left under Video&Audio and there you can configure up to 8 view areas.

Different view areas can be accessed under **Live View** in the **Source** list.

In the AXIS Camera Station, different view areas are configured as separated cameras for each view area with Video Port set from 1 to 8 depending on number of view areas used.

The view area can then digitally pan, tilt, and zoom around the whole original image. Another way to make the view area feature available without forcing the camera to be stationary is a PTZ driver, the driver has to ability to track the movements of the camera and adjust the view area accordingly.

To download the Ptz driver:


**AXIS P1355 PTZ Drivers**

**Manufacturer:** Pelco

**Latest version:** 4.09 Supported by firmware **5.40.19.1** and later.

- Download driver file Pelco-4.09-mipsisa32r2sl-3_28-3_0.ptz
- Release notes
- Technical information
- Connection example
- Other driver releases

**Applications**

A view window can be used to meet a variety of needs. If the entire image is not required, a view window can create a signal with a much lower bandwidth and increase the transmission and processing speed of the image. A view window is a good alternative to lowering the resolution of the entire image to increase speed. A view window can also create multiple
smaller images out of a larger image and transmit them as individual videos, as seen in the picture below.

Conclusion
This application note explains how the view area feature of the Axis P1355 camera can be used to decrease the bandwidth of the transmitted signal. A view window or similar technique is not exclusive to the Axis P1355 and can be used with many other cameras and applications to increase speed by reducing the bandwidth needed to transmit a signal.

References
http://www.axis.com
http://www.mathworks.com
http://www.digital-photo-secrets.com