

Monitoring AXIS Cameras over Dynamic DNS Connectivity

Introduction

This document explains the configuration for monitoring Axis cameras from Security Management System; when the Axis cameras are available on internet through dynamic DNS.

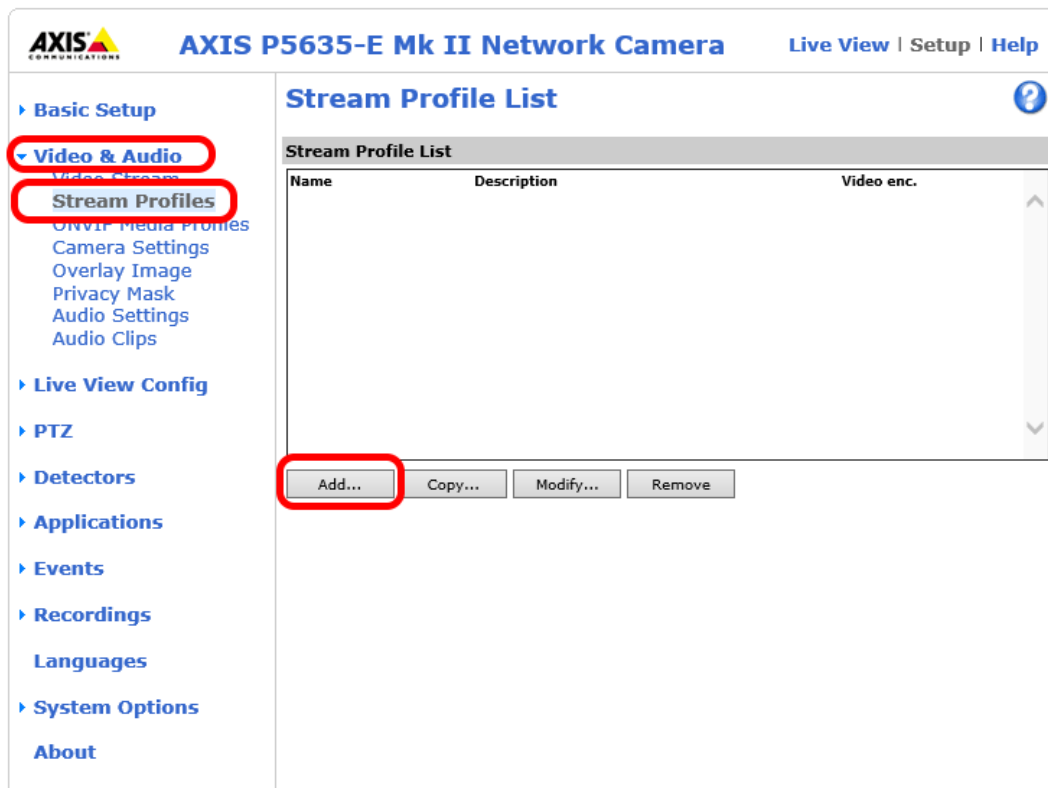
This document is applicable to Axis camera models which support 'stream profiles' The Axis cameras are configured for access over internet through dynamic DNS. It is possible to connect to the Axis cameras from web browser on any computer with internet connectivity.

The configuration includes 2 parts –

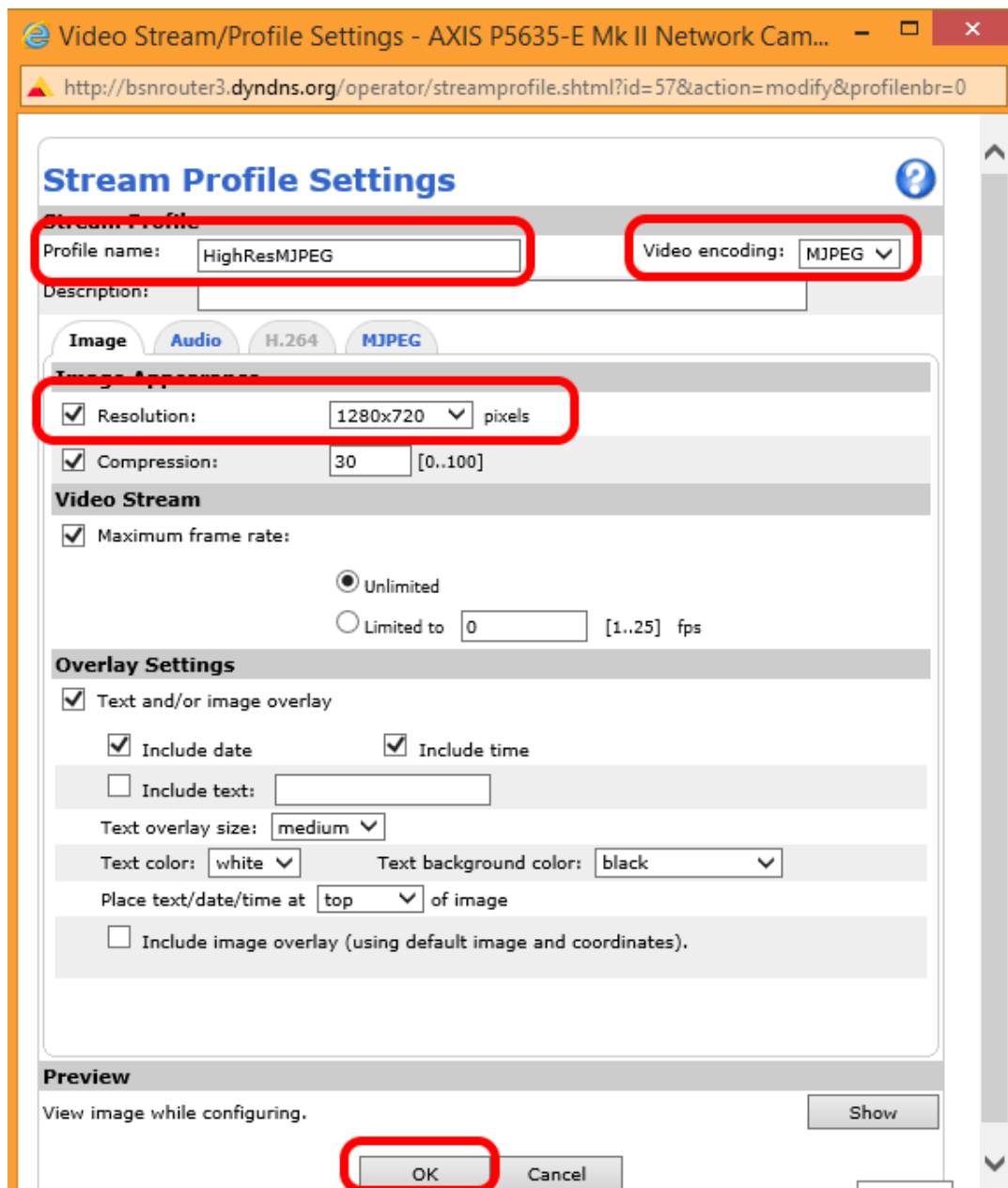
- (a) One time set up of the Axis camera
- (b) Parameter configuration in Security Management System server software

Axis camera configuration

1. Please access the Axis camera from standard web browser
2. Switch to the 'Setup' menu, which provides access to camera configuration.
3. Access 'Video & Audio -> Stream Profiles' page. This page displays the list of configured stream profiles.

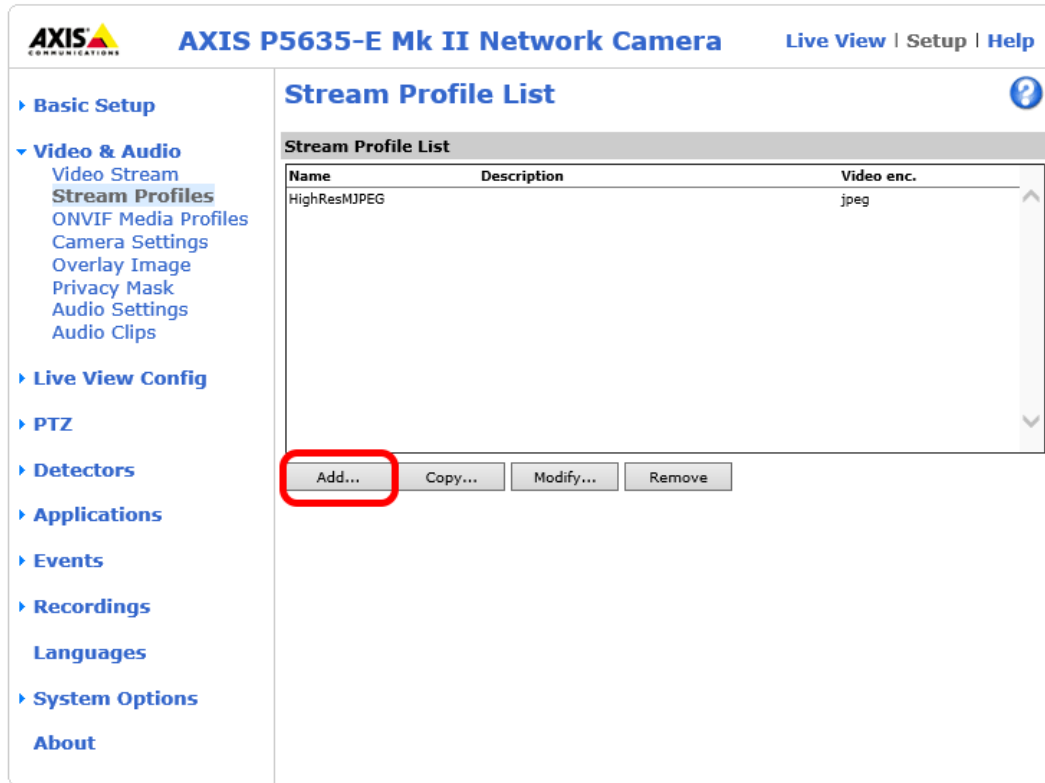


4. Click on the 'Add...' button to add new stream profile.
5. This will pop up the 'Stream Profile Settings' window

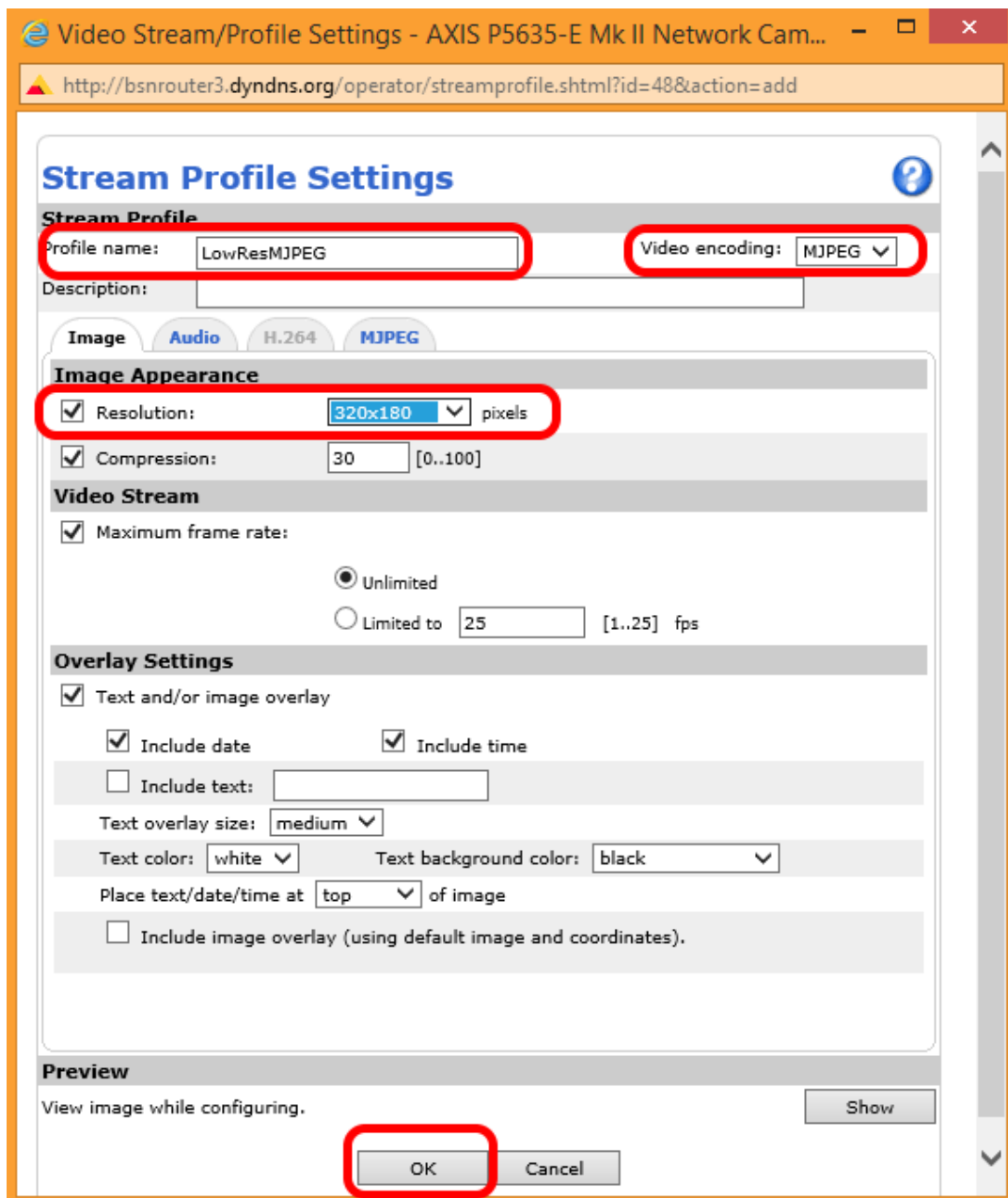


6. Type 'Profile name' as 'HighResMJPEG'.
It is possible to specify any valid string as 'Profile name', however for ease of identification we will be using this specific name. Please note that this same name string will be used in Security Management System server software configuration, which is described in the later section of this document. Hence if any other name is specified here, same needs to be used during the Security Management System server software configuration.
7. Select 'Video encoding' as 'MJPEG'
Under 'Image' tab, enable 'Resolution' and select '1280x720' option
All other settings can be kept unchanged

- Click on 'OK' button to save the changes and to close the 'Stream Profile Settings' window



- Click on the 'Add...' button to add new stream profile.
- This will pop up the 'Stream Profile Settings' window



11. Type 'Profile name' as 'LowResMJPEG'.
It is possible to specify any valid string as 'Profile name', however for ease of identification we will be using this specific name. Please note that this same name string will be used in Security Management System server software configuration, which is described in the later section of this document. Hence if any other name is specified here, same needs to be used during the Security Management System server software configuration.
12. Select 'Video encoding' as 'MJPEG'
Under 'Image' tab, enable 'Resolution' and select '320x180' option
All other settings can be kept unchanged

13. Click on 'OK' button to save the changes and to close the 'Stream Profile Settings' window

The screenshot displays the web interface for an AXIS P5635-E Mk II Network Camera. The top navigation bar includes the AXIS logo, the camera model name, and links for Live View, Setup, and Help. A left-hand sidebar contains a menu with categories like Basic Setup, Video & Audio, Live View Config, PTZ, Detectors, Applications, Events, Recordings, Languages, System Options, and About. The 'Stream Profiles' option under Video & Audio is selected. The main content area is titled 'Stream Profile List' and features a table with the following data:

Name	Description	Video enc.
HighResMJPEG		jpeg
LowResMJPEG		jpeg

Below the table are four buttons: 'Add...', 'Copy...', 'Modify...', and 'Remove'.

Security Management System server software configuration

1. Execute 'Security Management System server software'.
2. Navigate to 'Video devices -> Channels' page.
3. Click on the 'Add video channel..' button.
4. This will pop up the 'Add video channel' dialog box

The screenshot shows the 'Add video channel' dialog box with the following configuration:

- Channel Name: Cam409
- Channel ID: VC_ Cam409
- Channel Description: Cam409
- Video Source Type: Axis IP Device (Stream Profile Support)
- IP address or name: snrouter3.dyndns.org
- User name: root
- Password: [masked]
- HTTP port: 80
- RTSP port: 554
- Camera number: 1
- Audio support: [unchecked]
- Display stream 1: Stream type: MJPEG, Profile: LowResMJPEG
- Display stream 2: Select stream: Use different stream, Stream type: MJPEG, Profile: HighResMJPEG
- Recording stream: Select stream: Use display stream 1, Stream type: H.264, Profile: Bandwidth
- Motion detection and video analytics stream: Select stream: Use display stream 1, Stream type: H.264, Profile: Bandwidth

5. Select 'Video Source Type' as 'Axis IP Device (Stream Profile Support)'
Type 'IP address or name'. This is IP address or dynamic DNS name of the target Axis camera
Type 'User name' and 'Password', which will be used for authorization while connecting to the camera
Specify 'HTTP port'
Keep 'RTSP port' unchanged.

Keep 'Camera number' as 1.

Under 'Display stream 1', select 'Stream type' as 'MJPEG' and 'Profile' as 'LowResMJPEG'. This string should match with the low resolution stream profile configured in the camera, as described in 'Axis camera configuration' section of this document.

Under 'Display stream 2', select 'Select stream' as 'Use different stream', select 'Stream type' as 'MJPEG' and 'Profile' as 'HighResMJPEG'. This string should match with the low resolution stream profile configured in the camera, as described in 'Axis camera configuration' section of this document.

Under 'Recording stream', select 'Select stream' as 'Use display stream 1'

Under 'Motion detection and video analytics stream', select 'Select stream' as 'Use display stream 1'

6. Click on 'Add' button to finish adding the camera and to close the 'Add video channel' dialog box