



Documentation

Axis Video RTU Guide

Version 3.x

Intelli-Site

Security Management Software

Axis Video RTU Guide

PC Software RTU Interface Guide
For Windows 7 SP1, 2008 R2 SP1, XP SP3 & 2003 SP2

Version 3.x
Copyright © 1999 – 2014 OSSI, LLC

Copyright

Copyright © 1999-2014 OSSI, LLC. All rights reserved.

Information in this document is subject to change without notice. The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's use without the written permission of OSSI, LLC.

OSSI, LLC
W228 N727 Westmound Drive
Waukesha WI 53186
TEL: 262-522-1870
FAX: 262-522-1870

Trademarks

Intelli-Site[®] is a registered trademark of OSSI, LLC. **Intelli-Site**[®] is registered in U.S. Patent & Trademark Office.

All other registered and unregistered trademarks are the sole property of their respective owners.

Table of Contents

| | |
|---|----|
| Copyright | 3 |
| Trademarks | 3 |
| Table of Contents | 4 |
| Section 1 – Introduction | 5 |
| Overview | 5 |
| Technical Support Assistance | 6 |
| OSSI Headquarters..... | 6 |
| Technical Support | 6 |
| Section 2 – Important Setup Note | 7 |
| Section 3 – MPEG-4/H.264/AAC Codec Info | 8 |
| Section 4 - Axis Video Setup (Design Mode) | 9 |
| Adding Axis RTU Nodes..... | 9 |
| Configuring the Axis Node | 11 |
| Programming Examples..... | 14 |
| Quad Camera View Setup..... | 18 |
| “Disk Space Low” Warning | 19 |
| Section 5 - Axis Video Mode | 20 |
| Using Axis Video Mode | 20 |
| Playback Start/Stop buttons..... | 24 |
| Using the Multi View Mode (Video Display Area)..... | 25 |
| Main Video Controls..... | 25 |
| Section 6 - Axis Driver Setup | 27 |

Section 1 – Introduction

This section describes the following:

- Overview
- Minimum System Requirements
- Symbols and Conventions
- Technical Support Assistance

Overview

The Axis Video RTUs (Receiver/Transmitter Units) are the Intelli-Site software representations of a collection of Axis IP Video devices (both encoders and cameras).

Technical Support Assistance

OSSI Headquarters


W228 N727 Westmound Drive
Waukesha WI 53186 USA
Tel: 262-522-1870
Fax: 262-522-1872

Technical Support

Technical support is available via Telephone, Fax or Email. Contact Intelli-Site Technical Support 8:00 AM to 5:00 PM Central Standard time. If calling after hours, please leave a detailed voice mail message, and someone will return your call as soon as possible.

E-Mail: support@ossi-usa.com
Fax: 262-522-1872 (Attention Technical Support)
Local: 262-522-1870

When calling, please be at the computer prepared to provide the following information:

- Product version number, found by selecting the **About**  button from the Intelli-Site Menu Application Bar.
- Product serial number used for registration.
- The type of computer being used including, operating system, processor type, speed, amount of memory, type of display, etc.
- Exact wording of any messages that appear on the screen.
- What was occurring when the problem was detected?
- What steps have been taken to reproduce the problem?

Section 2 – Important Setup Note

The Windows feature 'Desktop Experience' must be turned on for Windows Server 2008 R2. If this feature is not enabled, recording and possibly other functionality will fail.

To enable this feature, consult your Operating System instructions. Typically, features are turned on/off via the 'Server Manager' application.

Section 3 – MPEG-4/H.264/AAC Codec Info

By default, video display and recording is done using the MJPG format.

Other video/audio formats are supported, including MPEG-4, H.264, and AAC audio. These other codecs are available from Axis. Due to licensing restrictions, these codecs are not distributed with Intelli-Site.

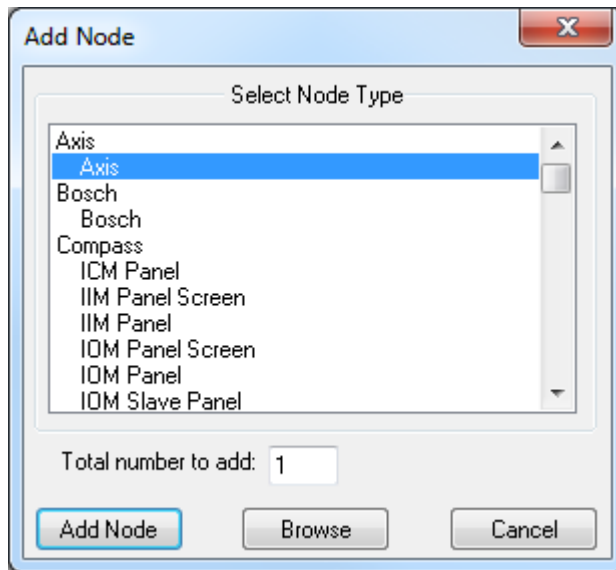
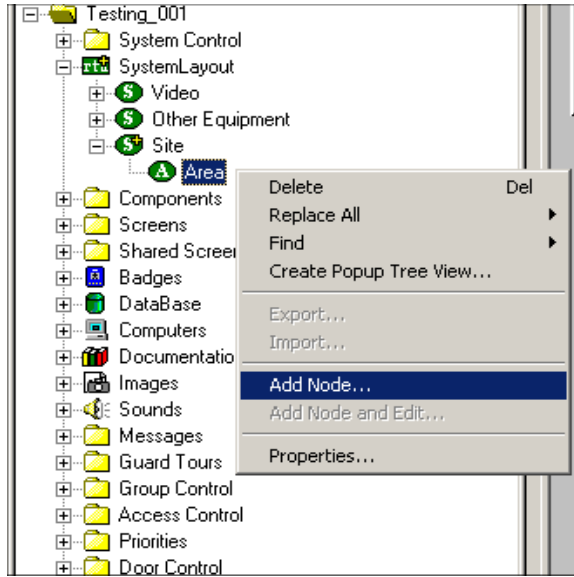
For further information regarding these codecs and their availability, contact Axis.

Section 4 - Axis Video Setup (Design Mode)

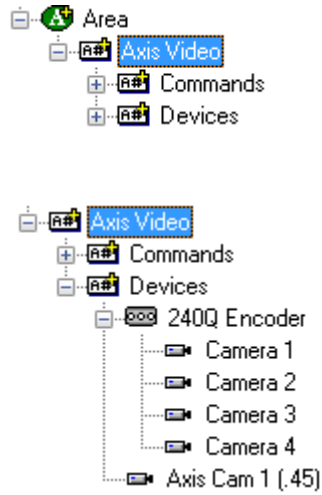
This section discusses the setup of Axis RTUs in the project in Graphic Design mode.

Adding Axis RTU Nodes

Axis RTU nodes are added by selecting the 'Add Node' menu option:

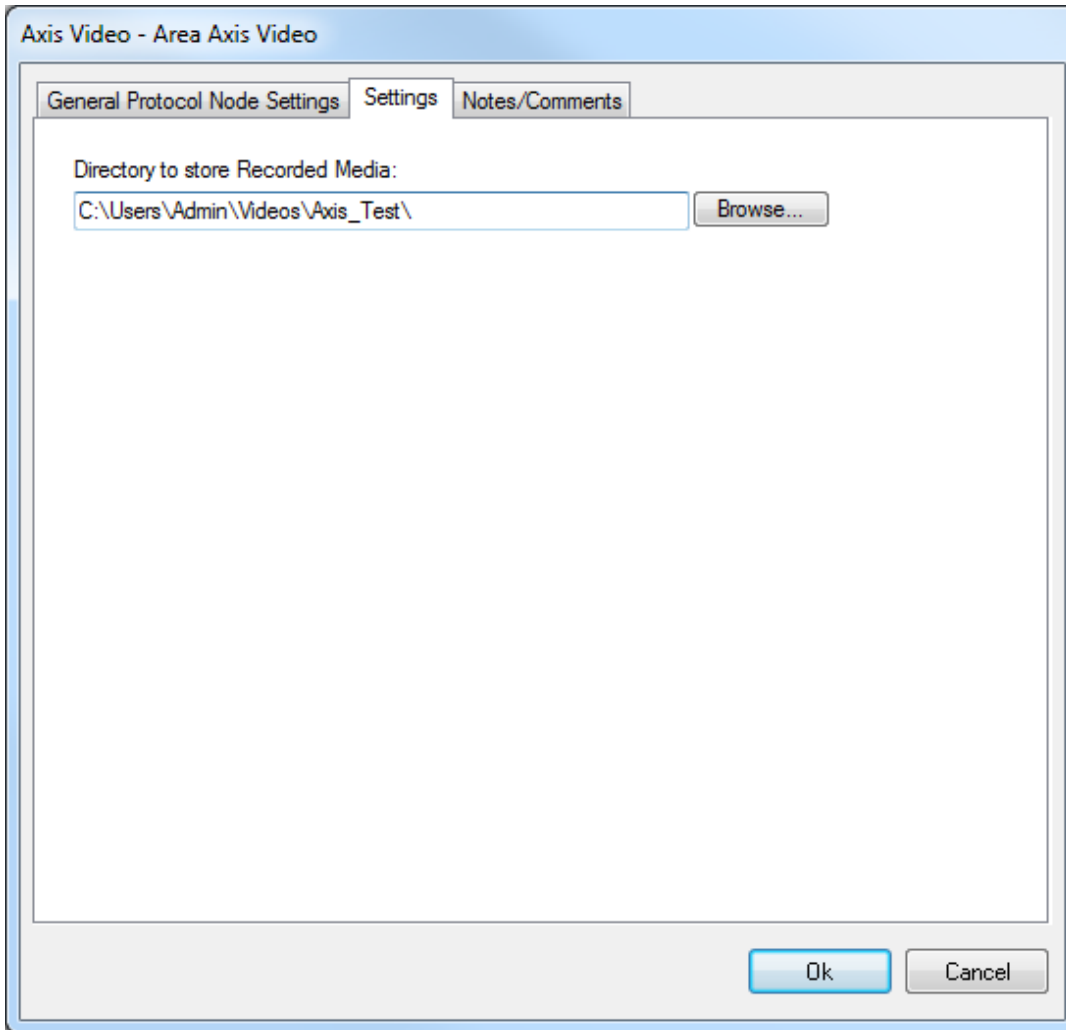


After selecting 'Add Node', a new Axis node will be created:



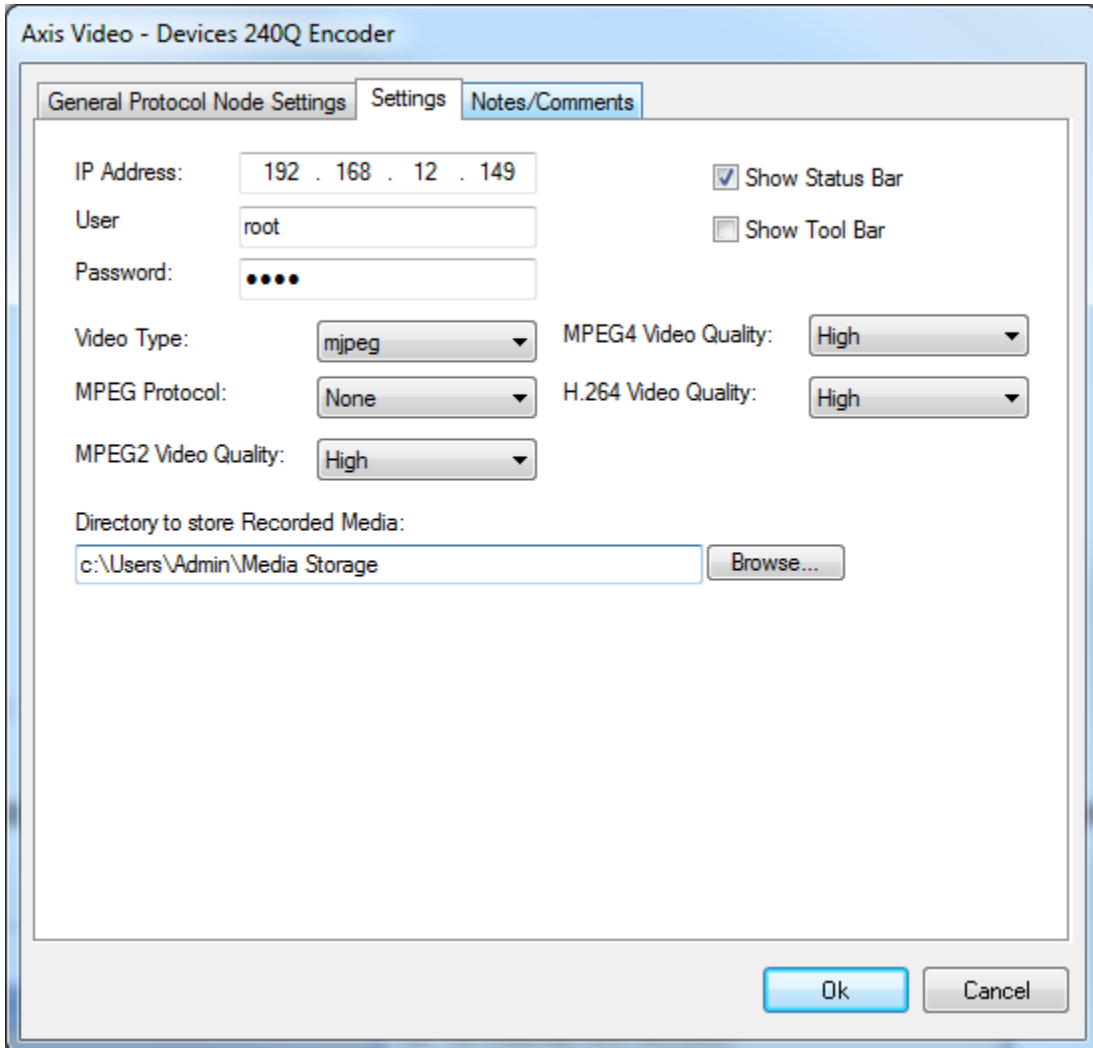
Note: Under the devices node, you may have cameras and encoders, which contain camera child nodes.

Configuring the Axis Node



'Directory to store Media'- This is the location where video recordings for alarms associated with Axis cameras will be stored. Valid path formats include local or UNC. A path that uses a network mapped drive letter will not work (recordings will not be saved).

Each camera or encoder node will have the following 'Settings' tab. These settings need to be configured before video can be accessed. This tab will appear on either an encoder or a camera. Camera nodes that are part of an encoder (children) share the same settings and therefore do not have a 'Settings' tab.



'User/Password': Enter logon credentials here.

'Show Status Bar/Show Tool Bar': These options determine whether either item will be displayed on the Axis video objects used in the project.

'Video Type': Select the type of video for this Video Server. The default is 'mjpeg'.

'MPEG Protocol': Select the type of video for this Video Server. The default is 'None'.

'MPEG-2/MPEG-4 Video Quality': Four options exist: Low, Medium, High and Very High. The default is High.

'H.264 Video Quality': Three options exist: Low, Medium and High. The default is High.

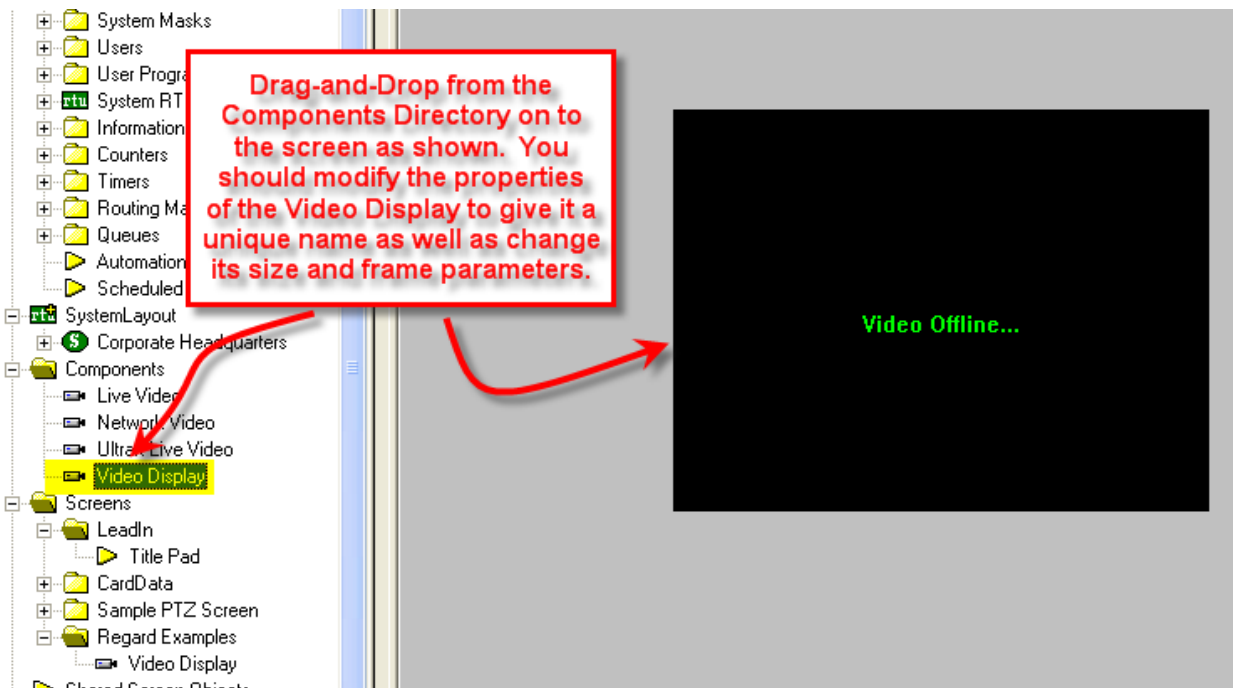
'IP Address': Specify the IP Address of the device.

'Directory to store... (media folder)': The path selected here will be the location where recorded media and snapshots are stored. This folder is not the same as that selected at the RTU level. The RTU-level folder is where video recorded in the Axis driver is stored.

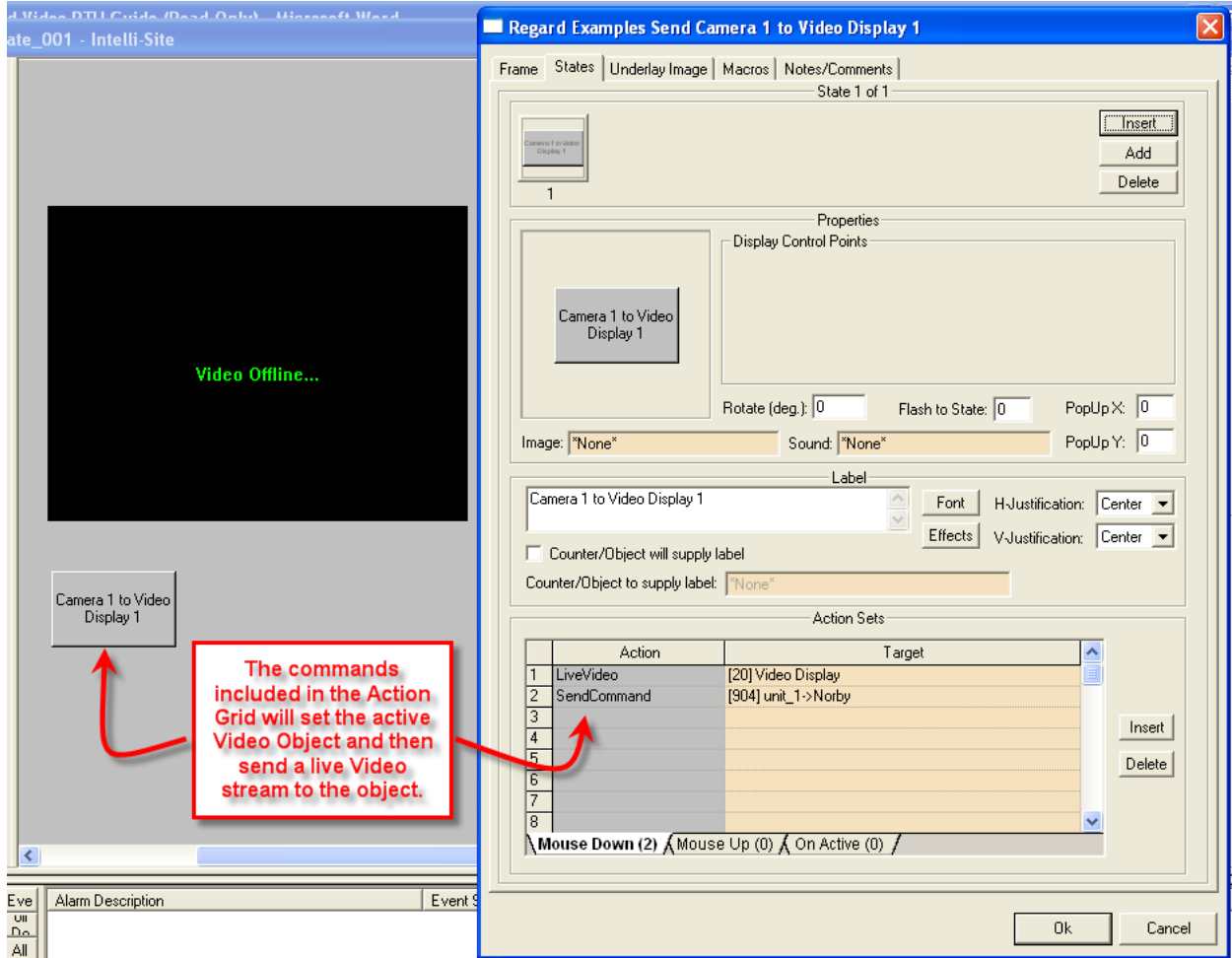
Programming Examples

The following section describes some basic programming for Axis RTU functionality in Run Mode:

The first step in adding Axis RTU functionality is to create a Video Display Object. The Video Display Object is the display target for any Axis Video Channel (Camera). You can add as many Video Display Objects to a Screen as you need. In Design Mode Drag-and-Drop a Video Display from the Components Directory on to the Screen.



1. Create a control Screen Object (a button or icon) that directs a video channel (Camera) to the Video Display. The Action for any Axis command is always SendCommand, and the Target may be any Subnode in the Axis RTU. In the following example, we are sending live video stream (Camera) to the Video Display Object that we created in the previous step.



2. In Run Mode select (mouse-down) the button. The resultant display should be live streaming video to the Video Display Object:



3. Additional video-related commands can be set up as SendCommand action targets, such as:
 - a. Pause Playback – Temporarily pauses a playback video stream.
 - b. Stop – Stops the current video stream (live or playback).
 - c. Snapshot – Takes a snapshot of the current frame displayed and saves it as a jpeg file in the 'media folder' assigned to this RTU.
 - d. Start Recording – Begin recording the media stream; this command is currently only supported with MPEG-2 unicast (HTTP) streams.
 - e. Stop Recording – Stop a 'Start Recording' command. Using the 'Stop' command above will not stop recording; this command must be used.
 - f. Audio Receive Start – Open an audio channel and start listening.
 - g. Audio Receive Stop – Close any incoming audio receive feed.
 - h. Audio Transmit Start – Open an audio channel for speaking/transmitting audio.
 - i. Audio Transmit Stop – Close any incoming audio transmit feed.
 - j. Audio Volume Increase/Decrease – Adjust volume accordingly for incoming audio (receiving).
 - k. Audio Volume Mute/Unmute – Mute/Unmute sound.
 - l. Audio Transmit Volume Increase/Decrease- Adjust volume accordingly.
 - m. Set Normal UI Mode – Return to normal video display mode after having used another mode (described next).

- n. PTZ Absolute/Relative/Relative no cross-hairs UI Modes – Choose a desired PTZ mode to allow for clicking on the video control to invoke camera movement.
- o. Set Motion Config UI – This mode allows for configuring VMD areas on the selected camera(s).
- p. Playback File – When run, a File Open dialog will popup so that a file can be selected for playback in the target video control.
- q. Start/Stop Transmit Media – When run, a File Open dialog will popup so that a file can be selected for transmitting to the target Axis Video Server. Note: Currently, only audio files in raw PCM format can be transmitted.
- r. Start Record for Received Media/Transmitted Media or Both (All) – Start recording media to this Axis RTU's media folder. Note: Currently only audio streams are recorded, and only in motion-JPEG mode (mjpeg).
- s. Stop Record Media – Stop recording Media (whether it be received, transmitted, or both). The Stop command will not suffice; this command must be used to stop media recording.

Quad Camera View Setup

AXIS 216FD - 240Q Cameras 1-4

General Protocol Node Settings Notes/Comments

Name: Cameras 1-4 ID: 1261

Access Level: Operator

Domain: 130

Node Type: Camera

Address: CAMERA_quad

Protocol:

Ok Cancel

Quad View- In the 'Address' field, the camera number should state 'quad'.

"Disk Space Low" Warning

QA system notification point will be triggered when disk used to store Axis recordings becomes 90% full. By default, this System Notification Point will appear in the alarm queue:

| Alarm Description | Event Status | Priority |
|-----------------------------|--------------|----------|
| System RTU - V-Point 3 | Point ON | None |
| System RTU - Disk Space Low | Point is On | None |

The screenshot shows a software interface with a table of alarms. The second row is highlighted in grey. To the left of the table are buttons for 'Select Event', 'Ack Event', 'Scroll Up', 'Scroll Down', 'Ack All Events', and 'Clear All Events'. At the bottom are buttons for 'Queue Control', 'Monitor Control', 'Shunt Control', and 'Operator Messages'.

Right clicking this alarm will bring up the 'Alarm Acknowledge/Clear Dialog', pre-populated with the path or disk which is running low on space.


The dialog box is titled "Alarm Acknowledge/Clear Dialog". It contains the following elements:

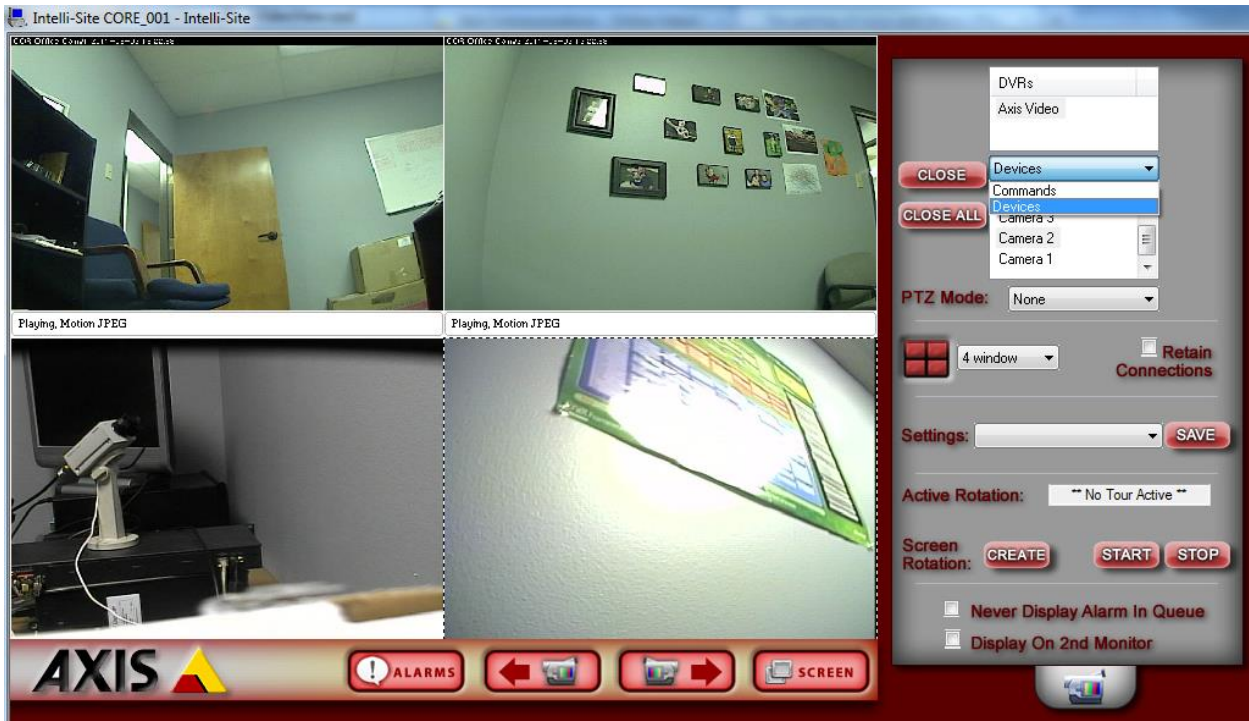
- Alarm Description:** A text box containing "System RTU - Disk Space Low".
- Operator Instructions:** A section with a "Speak->" button and a text area containing "No instructions available."
- Response Comments:** A large text area containing the path "C:\Users\Public\" which is circled in green. To the right of this area are "Previous Comment" and "Next Comment" buttons.
- Buttons:** "Ack Alarm", "Clear", and "Close" buttons are located at the bottom of the dialog.

Section 5 - Axis Video Mode

This section discusses the use of the Axis Video Mode.

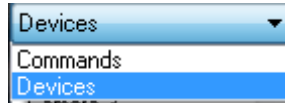
Using Axis Video Mode

Click on the  icon on the Application Menu bar in order to switch to the DVR Mode.



1. General Settings Tab (on the right) allows you to set display, control, and camera tour parameters.
 - a. DVRs – This window will list all of the DVR nodes in the Design Mode tree. You can display all available channels for a specific DVR by Dragging and Dropping the selected DVR on to the Video Display Area.

- b. Commands Combo Box – select commands to be applied to specific display areas in the categories of Commands and Devices. First Select the command desired, then Drag-and-Drop the command on to the specific camera view in the Video Display Area.

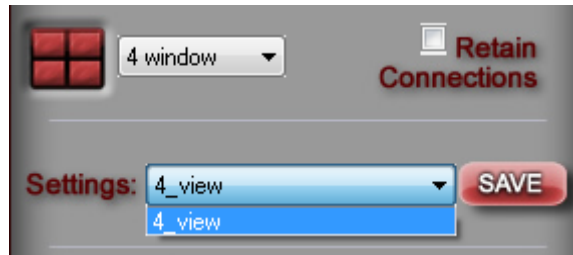


To switch cameras, select the 'Devices' item in the listbox. Then, either double-click or drag-and-drop the camera item onto the video display area (on the left).

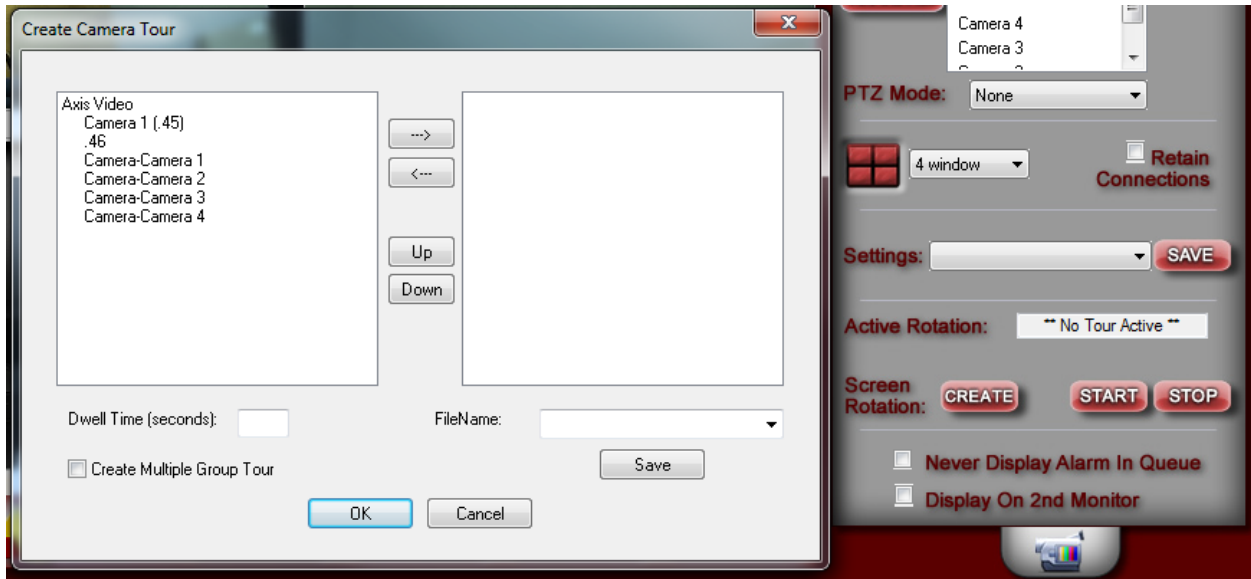
- c. PTZ Mode:- Selecting a value other than 'None' allows the user to control the camera movement by clicking in the video window.
- d. Screen Division – The Screen Division window allows you to select the number, and layout, of video display windows in the Video Display Area.
 - i. Screen Division Combo Box – allows you to select from 1, 4, 8, 9, 10, 13, 16, 25 or 36 windows for the Video Display Area.
 - ii. Retain Connections – checking this box will retain currently-connected video channels when you switch from one division settings to another.

- iii. Settings Save – allows you to set up a custom display and save the settings for the custom setup for later recall. An application example of this feature would be to create a display that shows specific video channels from a number of different DVRs that are located in different buildings in the network – say; all lobby cameras from ten-different buildings.

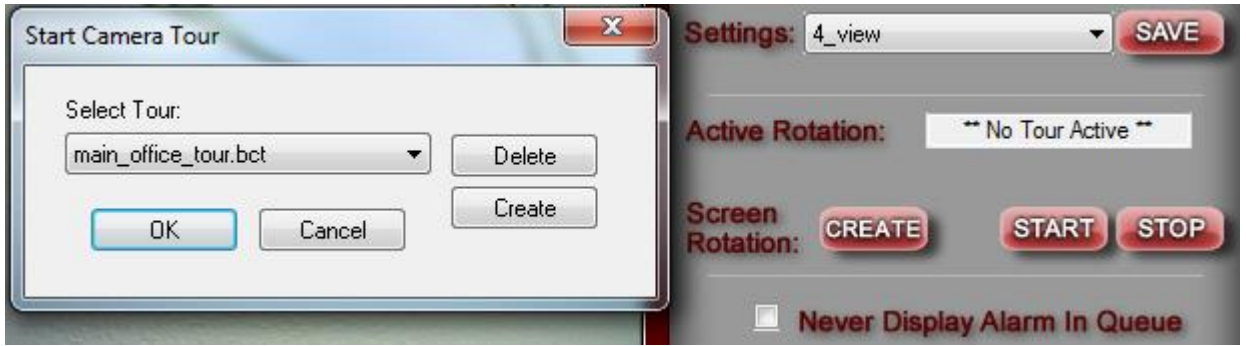
Once these settings are saved they can be instantly retrieved from the Settings Combo-Box.



- e. Active Rotation (Video Tours) – This feature allows you to create and run sequential video tours consisting of any number of cameras or even groups of tours consisting of groups of camera groups.
 - i. Create a Camera Tour – Select the **CREATE** button to open the Create Camera Tour dialog. All available cameras will be listed in the left window. Simply use the Add or Delete arrows to add the desired cameras to your tour list in the right window. Next enter a Dwell Time – this is the amount of time a camera will display before switching to the next in the list. Finally, enter a FileName and Select the Save Button. Select the OK Button when finished.



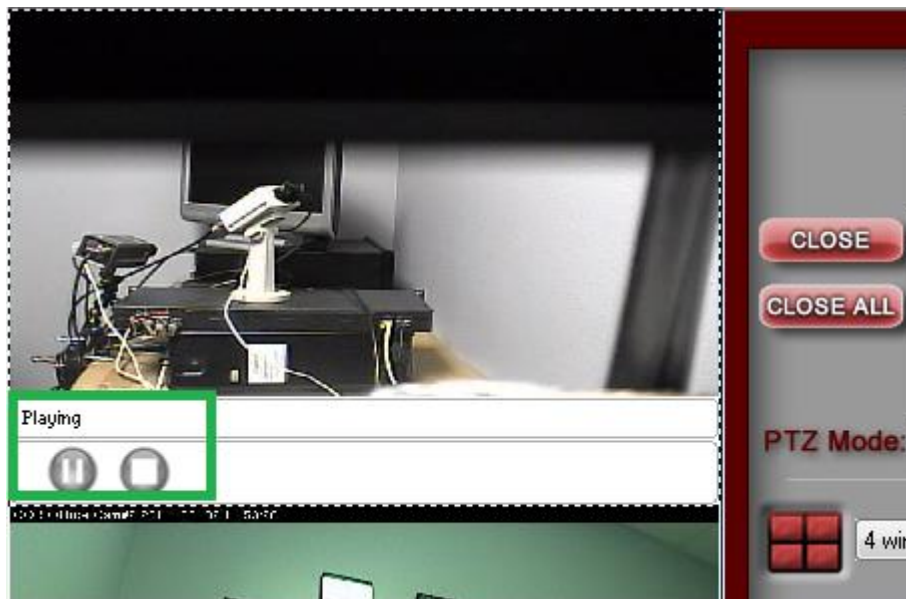
- ii. Create a Group Tour – Select the Create Multiple Tour Group checkbox. When selected, the left window will display all tours previously saved. Simply select the tours you wish to include in the Multiple Group Tour, give it a filename, and hit the Save Button.
- iii. Running a Tour or Multiple Tour Group – Start the tour with the Start Button **START** and the Start Camera Tour dialog will open. Select the tour you wish to run from the Combo-Box. To stop the tour, select the Stop Button **STOP**.



- f. Additional settings – Select the Never Display Alarm Queue if you do not wish to see Video-originated alarms in the alarm queue. Select Display on 2nd Monitor if you wish to display the Axis Mode on the 2nd Monitor in a dual-monitor workstation.

Playback Start/Stop buttons

When a video window is in playback mode, Start, Stop and Pause buttons will be displayed at the lower-right hand corner of the window:



Using the Multi View Mode (Video Display Area)

The main window (Video Display Area) of multi view consists of a viewing area and four control buttons.

If you double-click on any of the individual video display views, the view will expand to full size. To return, simply double-click on the full-size view.

Main Video Controls



Previous Camera: Allows user to scroll backwards through available channels.



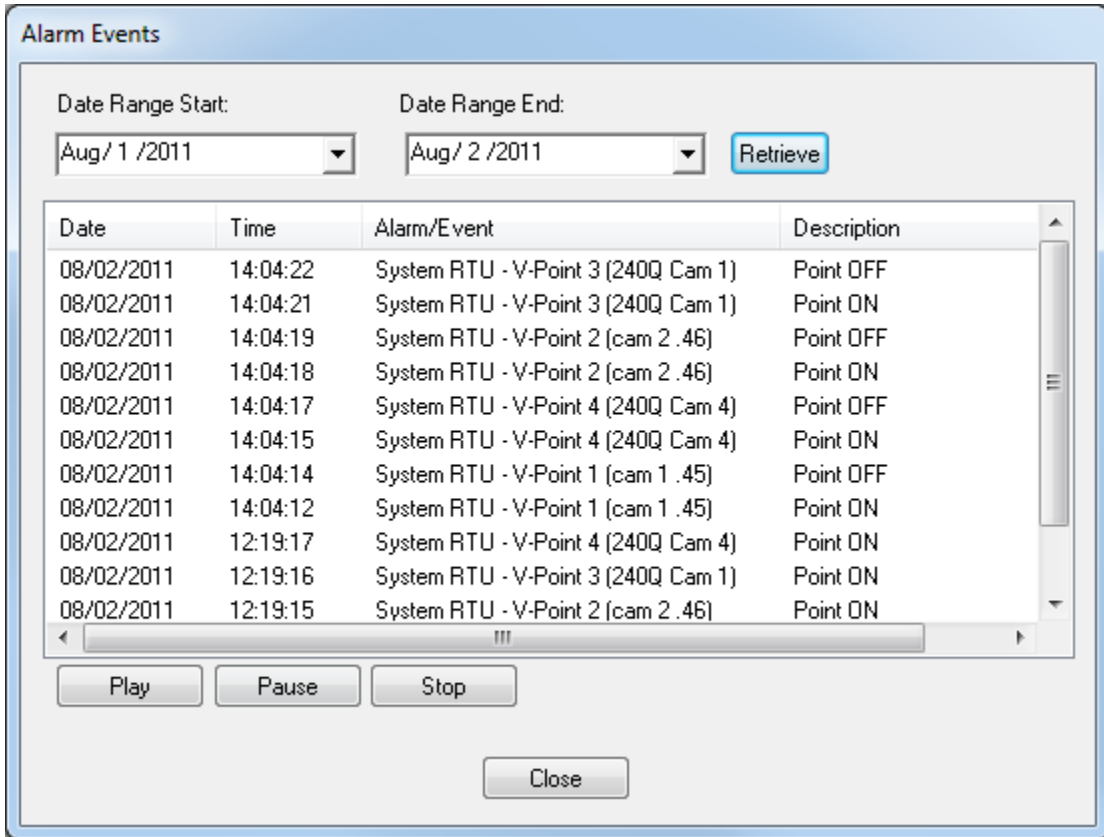
Next Camera: Allows user to scroll forward through available channels.



Full Screen: This feature will expand the multi-channel view to full screen. Just hit 'Escape' key to return.



Alarm Events: This feature brings up a dialog that can be used to search for alarm events that are associated with cameras.



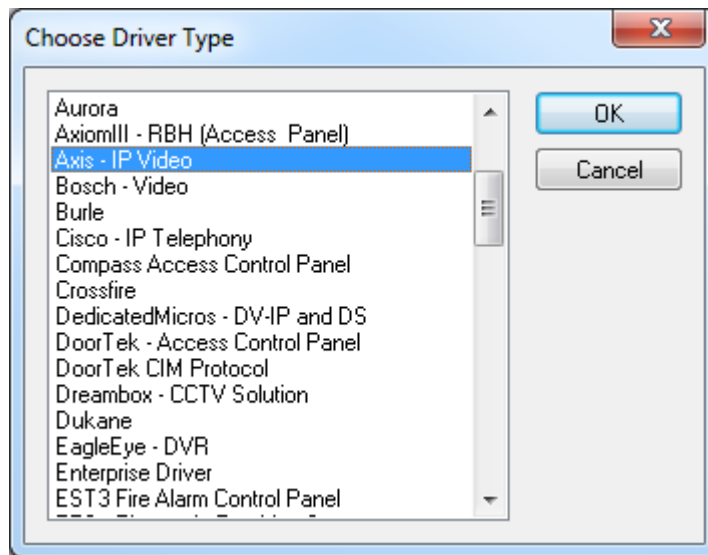
NOTE: A video control in either PTZ or Playback mode is not sizeable. While in either mode, a double click will do nothing. A single click will not select the control (the highlight border). For PTZ, changed the 'PTZ Mode' back to 'None' reverts the control to a selectable state. For Playback, the current playback session must be stopped via the 'Close' or 'Close All' buttons.

Section 6 - Axis Driver Setup

This section discusses the setup of the Axis Video Driver.

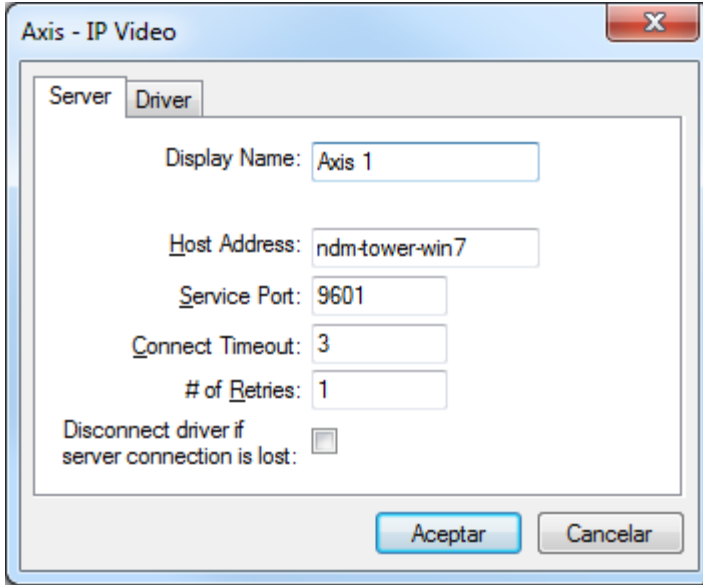
Important Note: The driver must be online to record video from Axis devices.

Open the Driver Service window and select the Add button:



Select the 'Axis – IP Video' item and select OK.

There are no extra configuration fields for the Axis driver. As with any driver, fill out the Host Address, Domain and other fields as needed



One Axis IP Video driver needs to be added for each 'Axis Video' node in the project tree. This means one driver for each top-level 'Axis Video' node, NOT for each Axis camera.

The messages window can be used to view recording activity:

