3xLOGIC

VIGIL Server 12.5 for Linux® User Guide

Video Management System Software

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62368-1

CAN ICES-003 (A) / NMB-003(A)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Table of Contents

1 INTRODUCTION

Welcome to 3xLOGIC's VIGIL Server Software Service user guide.

VIGIL Server is cutting edge video management software service with an abundance of powerful features, toolsets and accompanying utilities. Server's enhanced integration with video analytics-capable cameras, micro-management style settings and POS/ATM capability are just a few examples of the features that can help to improve the efficiency and stability of your business. Its intuitive design provides ease of use for the most basic user while providing virtually unlimited flexibility for the advanced. VIGIL Server has been engineered to be securely and seamlessly accessible via 3xLOGIC's remote VIGIL Client software giving you access to your Server and all its data from single or multiple remote location(s). Server can also be configured and setup locally or remotely using the VIGIL Settings Management Utility (VSMU).

This guide will familiarize you with the software interface of the VIGIL Server and the VSMU. This user guide will detail VIGIL Server's many features but do not hesitate to contact us with any questions, concerns or suggestions. See "Contact Information" on page 95

Welcome to 3xLOGIC's VIGIL Server.

This user guide is current as of VIGIL Server 12.50.0000 for Debian 11 GNU/Linux®.

2 SOFTWARE FEATURES

This section describes some of the features of VIGIL Server.

Feature	Details
VIGIL Settings Management Utility (VSMU)	Use the VSMU to connect to a local or remote VIGIL Server and configure its settings.
Individual Camera Settings	Configure each camera independently: brightness, contrast, sharpness, hue, resolutions, and more.
IP Camera Support	VIGIL Server supports up to 32 IP hi-resolution cameras (dependent on recorder model) without the need for an installed capture card. With full support for ONVIF Profile S, VIGIL Server is compatible with most modern IP cameras. Functionality may be restricted in the Linux environment for same makes and models. Inquire with 3xLOGIC Support for more information.
POS Integration	Built-in support for several popular serial and IP POS systems with advanced VIGIL Client POS search for data, events and exceptions available with additional VIGIL POS (V-POS) licensing.
DIO / Alarms / Relays	VIGIL Server features support for several popular physical DIOs (e.g. ADAM 6060) and also contains built-in Virtual DIO / Alarm / Relay functionality. Some DIOs in the Linux environment may not be available. Inquire with 3xLOGIC Support for more information.
Full Video Search Capabilities via VIGIL Client	Retrieve a list of stored footage for specified cameras from a start date / time to an end date / time and a variety of other search criteria using Server's companion software, VIGIL Client.
Footage Restriction and Footage Locking	Restrict footage to allow only users with sufficient permissions to review it. Lock footage to prevent it from being scavenged, preserving the footage for playback on the system, regardless of age. Restricting and locking footage, as well as management of locked and restricted footage is performed only via the VIGIL Client interface.
Two-Way Audio	VIGIL Server's *Audio Talk* feature allows for easy two-way audio communication via properly configured camera's with two-way audio capability. After configuration, the audio talk controls can be accessed via VIGIL Client. **Note:**For Linux-based systems, two-way audio is only supported for some camera makes and models. Contact 3xLOGIC sales for more information.
Exporting / Saving Video and Images	Powerful export capabilities via VIGIL Client enable you to save video footage in AVI or Authentic Video (MJPG) formats. Save still shots in JPEG or BMP formats. Export to local destinations via VIGIL Client.
Full VIGIL Suite Support	VIGIL Server is a service and is intended to be interfaced with all products comprising the VIGIL VMS Software Suite. This includes VIGIL Client, VIGIL Central Management, VIGIL VDM, View Lite II Mobile App, VIGIL CLOUD (via the VIGIL CLOUD NVR Plugin) and more. In conjunction with the VIGIL Suite, VIGIL Server offers a complete and comprehensive set of tools to meet the needs of any user, from single-point applications to enterprise-level networks.
infinias™ Integration	Integration with 3xLOGIC's infinias CLOUD and Intelli-M Mobile Access Control products provides a scalable video surveillance and access management solution, and a seamless, consistent user experience encompassing two of 3xLOGIC's cornerstone products. Uses can configure and access a VIGIL Server's integrated infinias interface via the VIGIL Client application.

3 ACCESSING VIGIL SERVER

3.1 System Tray Server Icon - Menu

To access a VIGIL Server via VSMU, click the VIGIL Server System Tray icon.

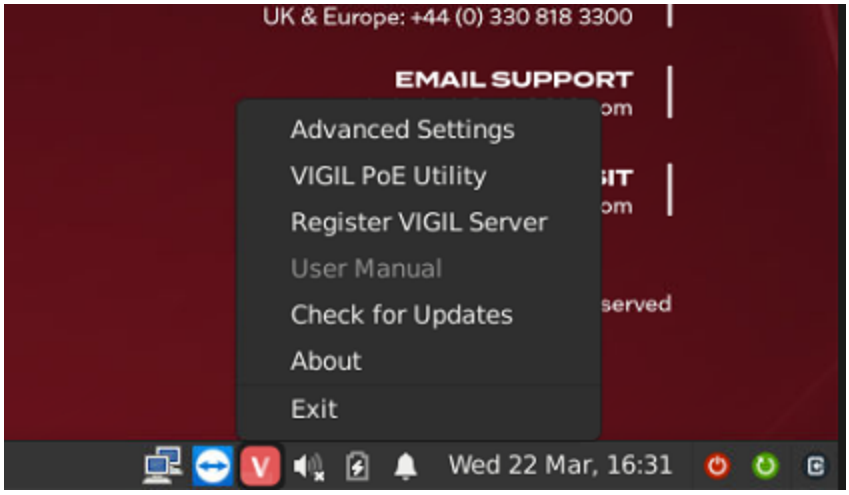


Figure 3-1:VIGIL Server System Tray Icon- Menu

All options will be accessible except *Advanced Settings* until the user has logged into a VIGIL Server. Select **Advanced Settings** and you will be prompted to login to a VIGIL Server with VSMU. Menu options are detailed below.

- **Advanced Settings** - Opens the *VIGIL Settings Management Utility*, the main interface for configuring and settings up a VIGIL Server and its many features. All available settings are described in the proceeding sections of this user guide. This can also be launched by navigating to the Start Menu > VIGIL Applications folder
  - Use the login prompt to login to your local or remote (using VIGIL Connect) VIGIL Server for settings configuration.

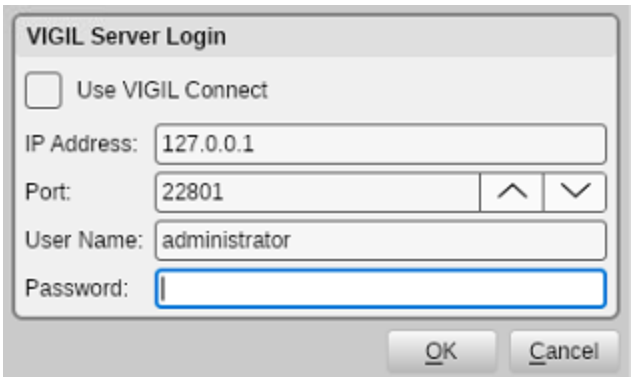


Figure 3-2:VSMU Login

- **VIGIL PoE Utility** - Launch the VIGIL PoE Utility.
- **Register VIGIL Server** - Open VIGIL Registration Utility. See "Registration" on page 83 for more information.

- **User Manual** - Launch the VIGIL Server User Guide.
- **Online Help** - Launches the VIGIL VMS Online Help portal. See What's New in the latest VIGIL release, access user guides in a moderrn browser-based format for easy searching, and access critical support materials for VIGIL VMS applications. External internet connection requried.
- **Check for Updates** - Launches the VIGIL Local Update Utility.
- **About** - Opens the *About 3xLOGIC Inc. VIGIL Server System* window that contains information such as:
  - *Remaining Trial Period Time*
  - *Registration information*
  - *Serial number / VIGIL Connect alias*
  - *Software version (including IP Camera and POS .dll file versions).*
  - *SUP(Software Upgrade Plan) Activation.*
- **Exit** - Quit the VIGIL Server application.

4 VSMU – CAMERA SETUP TAB

VIGIL Server is a diverse software application that interfaces with a wide variety of hardware configurations. A comprehensive control set is available to configure the VIGIL Server as required. The proceeding sections will describe the available settings in detail.

To access settings, right-click the system tray VIGIL icon and select **Advanced Settings**. The *VIGIL Settings Management Utility - Advanced Settings* window will deploy with the *Camera Setup Tab* displayed by default. DVR / NVR Type and version will be displayed in the window header. Select a camera from the left-side list.

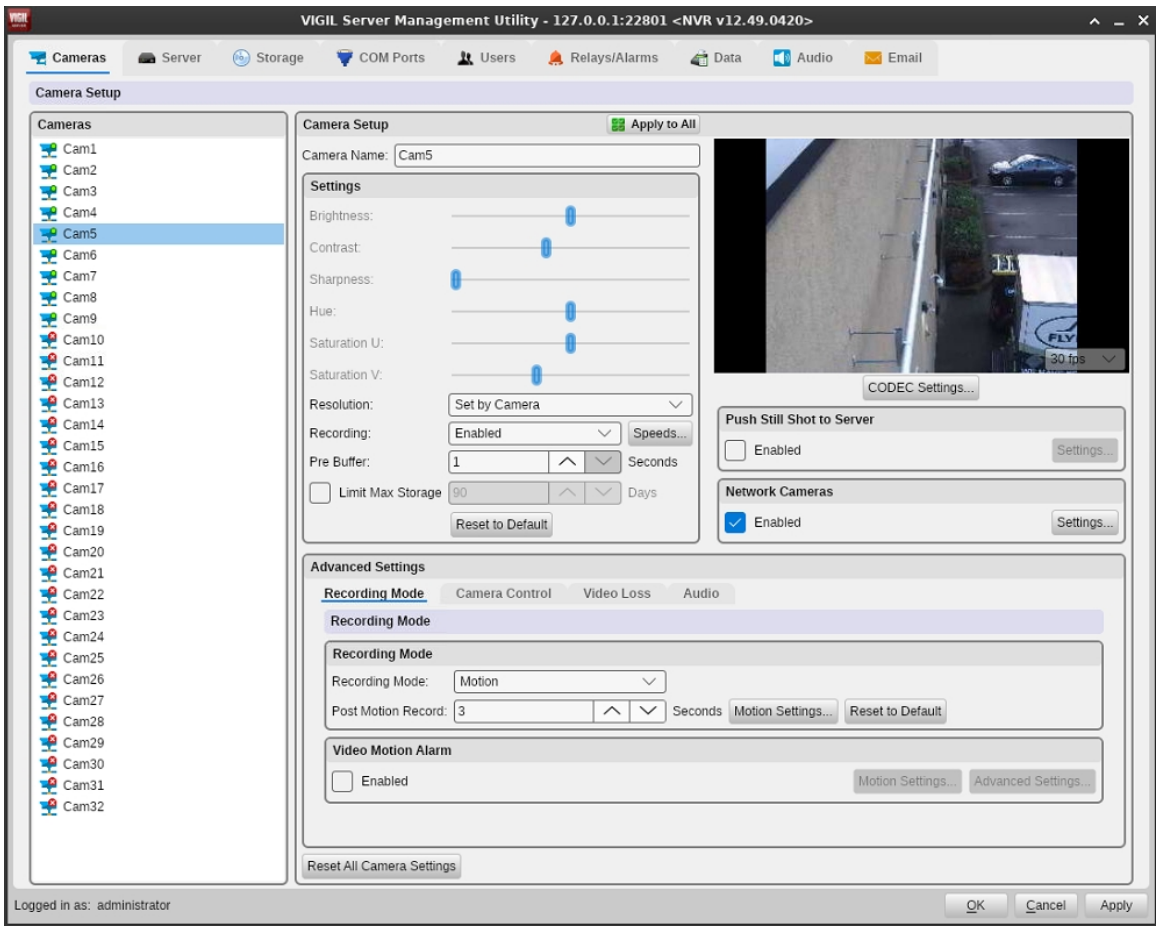


Figure 4-1: Settings - Camera Setup Tab

The *Camera Setup Settings* allow configuration of the camera image, resolution, recording speed, buffering and CODEC. Network cameras are also enabled under the *Camera Setup* tab.

- **Camera Name** - Configure the selected camera's name. This is how it will be reference in the VIGIL suite.
- **Apply to All** - Click the *Apply to All* button at the top of the window to apply the same settings to all cameras. Settings that will be applied to all cameras will be indicated by **BOLD** headings.

Note: Only changes made after clicking *Apply to All* will be applied to every camera.

4.1 Camera Setup Tab – Camera Settings

- **Brightness** - Adjusts the brightness of the video footage.
- **Contrast** - Adjusts the contrast of the video footage.
- **Sharpness** - Adjusts the sharpness of the video footage.
- **Hue** - Adjusts the color of the video footage.
- **Saturation U and V** - Adjusts the U and V color difference signals used in YUV color format for the video footage. Note that not all cameras use a YUV color format, in which case, adjusting the *Saturation U* slider will adjust the color saturation while the *Saturation V* slider will have no effect.
- **Resolution** - Select a recording resolution from the drop-down menu. Options range from 352x240 to 704x480 resolution. If a network camera is enabled on the channel, this option will not be available.
- **Recording** - Use the drop-down menu to enable or disable recording of the selected camera. If the selected camera is not available, *Inactive* will be displayed here.
- **Speeds** - Opens the *Recording Speed* window. The recording speed can be set individually for *Constant, Motion* and *Alarm* Recording Mode. Use the drop-down menu to select the desired number of frames per second (fps).

Note: Network cameras will often record and play back at a slower rate than what was set in the *Recording Speed* window, depending on the bandwidth and camera.

Figure 4-2: Recording Speed Window

- **Pre Buffer** - The number of seconds of footage to record prior to a motion detection or alarm event. For JPEG Camera streams the recommended setting is 1. For H264 Camera streams it is recommended to set the pre buffer to the key frame rate.
- **Limit Max Storage** - If enabled, this setting will limit retention for footage and data from this camera to the designated number of days, configured in the available selection field.
- **Reset to Default** - Returns the camera settings to their default values.

4.1.1 Push Still Shot to Server

The *Push Still Shot to Server Settings* window allows a still shot from the camera to be copied periodically to another location. To enable this feature for the selected camera, check the *Enabled* box. Click the *Settings…* button to configure the destination for the still shots. This applies to all cameras.

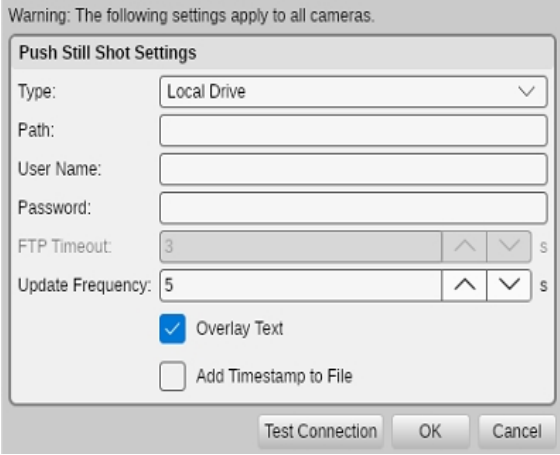


Figure 4-3: Push Still Shot Settings Window

- **Type** - The type of storage location. Options are *FTP Location* and *Local Drive*.
- **Path** - The path where the image files will be uploaded (only pre-existing directories can be used).
  - **Local Drive**:C:\Images.
  - **FTP Location**: ftp://ftpserver/folder.
- **FTP User Name and Password** - If required, enter the user name and password for the FTP Site.
- **FTP Timeout** - The time to wait in seconds before a timeout occurs.
- **Overlay Text** - Check this to have an overlay of the camera name, date, and time on the still shot.
- **Update Frequency** - The frequency, in seconds, at which the image file is uploaded to the specified path.
- **Add Timestamp to File** - Enable this option to append still-shot file names with a timestamp.
- **Test Connection** - Tests the connection using the specified parameters. A window will display a message stating whether the connection is successful or not.

4.2 Network Camera Settings

Enabling the Network Camera setting on a camera or clicking on the Network Camera - Settings button opens the *Network Camera Settings* form, pictured below.

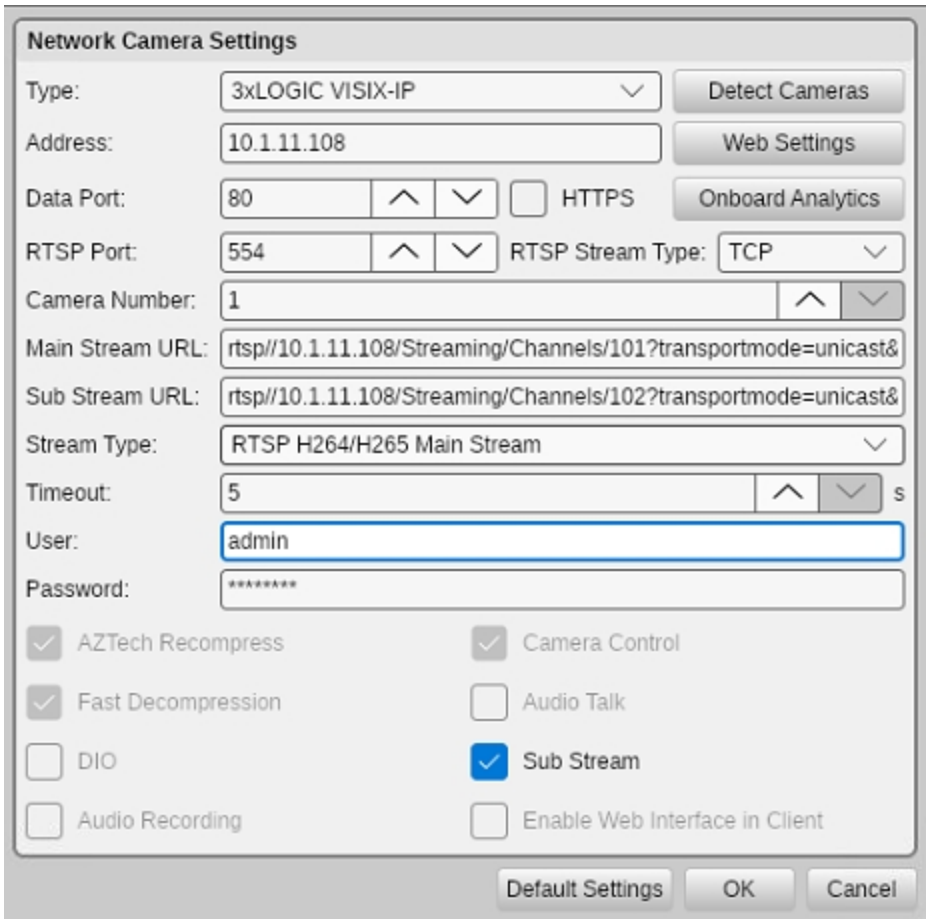


Figure 4-4: Network Camera Settings Window

VIGIL Server is able to receive video from one or many network cameras connected to a LAN or WAN. VIGIL Server currently supports several types of network cameras.

To setup or change a network camera, check the *Network Camera* box, then click the *Settings…* button. This will open the *Network Camera Settings* window. Descriptions for each of the form's fields are as follows:

- **Type** - The type of network camera being configured. See " Network Camera Types " on page 10 for more information on common network camera types.

  Warning: Due to the substantial overhead associated with HTTP, attempting to record HTTP camera feeds over the Internet is not recommended. High speed LAN or WAN configurations are recommended for HTTP camera use. If the network bandwidth is insufficient, the message *Signal Loss* will be displayed in place of the live feed.

  - **Detect Cameras** - If an applicable camera type is selected, this option will be visible. Choose this option to open the associated camera detection utility (Detect Network Cameras Utility, etc...)

- **Web / Camera Settings** - Connects to the camera's web interface to make changes to the camera's internal settings. For some camera types, this will open a *Camera Settings* window instead of connecting to the web interface.
- **On-Board Analytics** - If the configured camera has on-board analytics rule processing, this button will launch the On-Board Analytics form (formerly referred to as the VIGIL Analytics Bridge) so the user may interface the camera's rules with VIGIL Server.
  For details on the On-Board Analytics window, See "On-Board Analytics" on page 81.

- **Address** - The IP or HTTP address of the camera. It is not necessary to include http:// at the beginning of the HTTP address.
- **Data / RTSP Port** - The network ports used to connect with the camera.
- **HTTPS** - Enable if HTTPS if required for the camera.
- **RTSP Stream Type** - Select the camera's preferred RTSP Stream Type(also known as the RTSP Transfer Protocol; UDP or TCP).
- **Camera Number** - Some *Network Camera* types also support encoders. Select the camera number on the encoder to use for this network camera.
- **Mainstream / Substream URL** - Set the broadcast URL for the camera's mainstream and substream (if applicable). The substream URL field will not be editable if a sub-stream is not enabled for the camera.
- **...** - Opens additional configuration options for *File Stream* camera type.
- **Stream Type** - Select the video stream type for the camera: *MPEG4, JPEG, or H264/H265*. Some kinds of network cameras can only have one stream type for all cameras of its kind.
- **Timeout** - The number of seconds to attempt to connect to the camera before timing out. If the timeout is reached, *Signal Loss* displays in the *Live Viewer* window.
- **User / Password** - The user name and password to connect to the camera. The default values are automatically entered.
- **AZTech Recompress** - This will recompress the image using AZTECH™ codec.

Note: This feature is not available for Linux systems.

- **Fast Decompression** - If the JPG image provided by the HTTP camera supports fast decompression, select this option to significantly reduce the number of CPU cycles needed for rendering the network camera feed.
  Not all network cameras support fast decompression. Disable *Fast Decompression* if the image does not display or appears distorted when this feature is enabled.

Note: This feature is not available for Linux systems.

- **DIO (Digital Input/Output)** - If the Network Camera supports DIO, enable the checkbox to automatically add the camera as a DIO device.

- **Audio Recording** - If the Network Camera supports audio, enable the checkbox and enter a Name for the audio channel to automatically add the camera as an audio device.
- **Camera Control** - If the Network Camera supports *PTZ (Pan/Tilt/Zoom)*and its PTZ control interface is compatible with VIGIL Server Linux, enable the checkbox to allow PTZ controls to be utilized from within VIGIL Server (via VIGIL Client).
- **Audio Talk** - If the Network Camera supports *Audio Talk*and its audio talk interface is compatible with VIGIL Server Linux, this feature can be enabled to allow for two-way audio talk.
- **Substream** - Enable this checkbox to make the *Sub Stream* from the Network Camera available to applications that connect to the Server such as VIGIL Client.
- **Enable Web Interface in Client** - Grants a right-click menu option to quickly access the camera's web interface from a built-in browser. This feature is not available for Linux systems.
- **Default Settings** - Changes the network camera settings to their default values.

4.2.1 Network Camera Types

VIGIL Server maintains direct support for several camera makes and models, and with full ONVIF Profile S compliance, compatibility is extended to any camera compliant with the ONVIF Profile S standard. The following section contains basic descriptions and / or minor configuration instructions on common network camera types utilized in VIGIL Server.

VISIX IP Camera - Network Camera Type

VISIX IP Cameras, by 3xLOGIC Inc, come in all shapes and styles and offer the performance and clarity you demand.

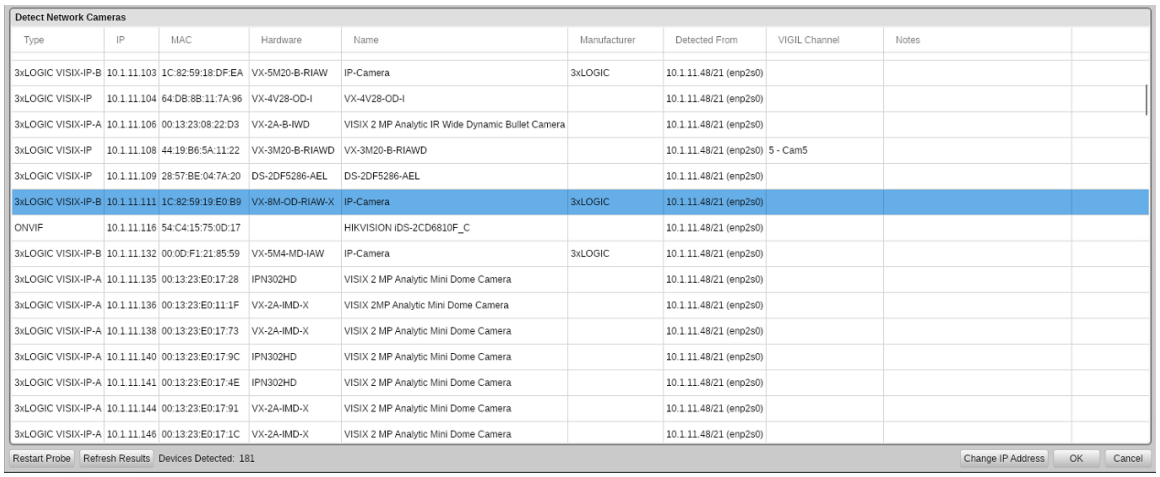
To configure a 3xLOGIC VISIX Camera, select **3xLOGIC VSX-IP**in the *Network Camera Settings - Camera Type* field. Newer cameras generations are referred to as **3xLOGIC VSX-IP-A** or **3xLOGIC VSX-IP-B**.

VIGIL Server features an embedded camera detection tool for detecting and adding VISIX cameras on your network to VIGIL Server. After selecting the camera type, click **Detect Cameras** to launch the tool. If you select the incorrect VISIX-IP type for your camera, the utility will automatically detect and correct the type when saving the camera back to VIGIL Server. Conversely, if you are manually entering camera information into the *Network Camera Settings* form, be sure to select the type as defined in your camera's documentation. Proceed below for instructions on operating the detection tool.

Adding a VISIX Camera to VIGIL Server

Warning: If adding new 3xLOGIC VISIX Cameras, the camera password must be changed before the camera will stream to VIGIL Server. This is a security precaution. Refer to your camera documentation for steps on changing the default password.

After the tool launches, a list of VISIX and ONVIF cameras discovered on your network will be generated. Click **Refresh Results** and / or **Restart Probe** (bottom-left) to update results list and available camera information respectively.



Detect Network Cameras

Type	IP	MAC	Hardware	Name	Manufacturer	Detected From	VIGIL Channel	Notes
3xLOGIC VISIX-IP-B	10.1.11.103	1C:82:59:18:DF:EA	VX-5M20-B-RIAW	IP-Camera	3xLOGIC	10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP	10.1.11.104	64:DB:8B:11:7A:96	VX-4V28-OD-I	VX-4V28-OD-I		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-A	10.1.11.106	00:13:23:08:22:D3	VX-2A-B-IWD	VISIX 2 MP Analytic IR Wide Dynamic Bullet Camera		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP	10.1.11.108	44:19:B6:5A:11:22	VX-3M20-B-RIAWD	VX-3M20-B-RIAWD		10.1.11.48/21 (enp2s0)	5 - Cam5	
3xLOGIC VISIX-IP	10.1.11.109	28:57:BE:04:7A:20	DS-2DF5286-AEL	DS-2DF5286-AEL		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-B	10.1.11.111	1C:82:59:19:E0:B9	VX-8M-OD-RIAW-X	IP-Camera	3xLOGIC	10.1.11.48/21 (enp2s0)		
ONVIF	10.1.11.116	54:C4:15:75:0D:17		HIKVISION iDS-2CD6810F_C		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-B	10.1.11.132	00:0D:F1:21:85:59	VX-5M4-MD-IAW	IP-Camera	3xLOGIC	10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-A	10.1.11.135	00:13:23:E0:17:28	IPN302HD	VISIX 2 MP Analytic Mini Dome Camera		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-A	10.1.11.136	00:13:23:E0:11:1F	VX-2A-IMD-X	VISIX 2MP Analytic Mini Dome Camera		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-A	10.1.11.138	00:13:23:E0:17:73	VX-2A-IMD-X	VISIX 2 MP Analytic Mini Dome Camera		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-A	10.1.11.140	00:13:23:E0:17:9C	IPN302HD	VISIX 2 MP Analytic Mini Dome Camera		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-A	10.1.11.141	00:13:23:E0:17:4E	IPN302HD	VISIX 2 MP Analytic Mini Dome Camera		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-A	10.1.11.144	00:13:23:E0:17:91	VX-2A-IMD-X	VISIX 2 MP Analytic Mini Dome Camera		10.1.11.48/21 (enp2s0)		
3xLOGIC VISIX-IP-A	10.1.11.146	00:13:23:E0:17:1C	VX-2A-IMD-X	VISIX 2 MP Analytic Mini Dome Camera		10.1.11.48/21 (enp2s0)		

Restart Probe | Refresh Results | Devices Detected: 181 | Change IP Address | OK | Cancel

Figure 4-5: Detect Network Camera Tool

To add a camera to VIGIL:

1. Select the desired camera from the results list.
2. If IP settings changes for the camera are required, click the **Change IP Address** button.

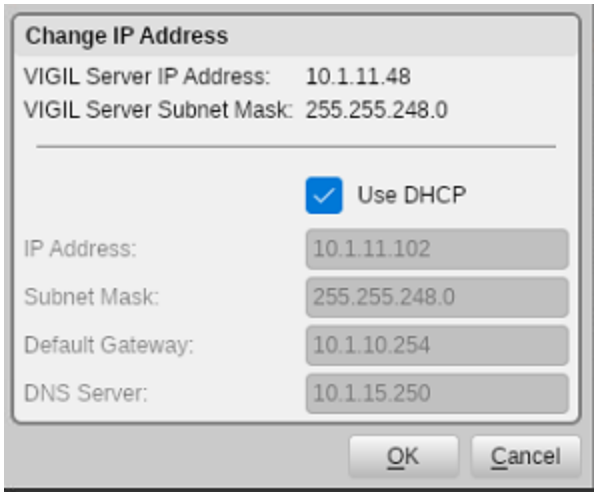


Figure 4-6: Detect Network Camera Tool- Change IP Address

3. DHCP is used by default. Disable **Use DHCP** and configure *IP Address, Subnet Mask, Default Gateway* and *DNS Server* values as required. Click **OK** to save the new IP settings. You will be returned to the detection utility.
4. With the camera selected, click **OK**. If you did not change IP settings, you will be prompted to login to the camera. If required enter login info and click **OK**.

If login is successful, the camera's info window will deploy. The camera's *IP Address,Manufactuer* (or *Type*), *Models*, *Firmware*, *Serial Number* and *Hardware ID* are displayed alongside a camera preview.

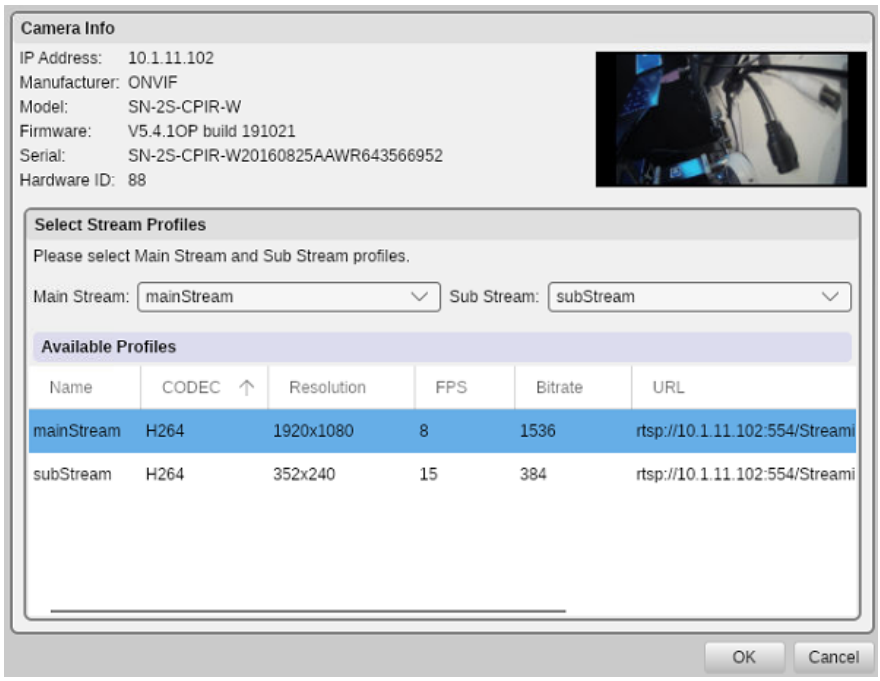


Figure 4-7: Detect Network Camera Tool- Camera Info

5. Under the *Select Stream Profiles* section, review profile configurations and assign stream profiles to the cameras Mainstream and Substream (if applicable).
6. Click **OK**. The camera settings will now populate the Network Camera Settings form in VIGIL.

ONVIF and PSIA - Network Camera Type

ONVIF and PSIA are interoperability standards for IP based Network Cameras. As long as a camera supports either of these standards, it can be configured with this standard instead of the brand specific standard. ONVIF is the predominate standard currently being utilized by manufacturers.

When configuring an ONVIF supported camera through the *Network Camera Settings* and the *Detect Cameras* button is clicked, the *Detect Network Cameras* tool will launch. See "Adding a VISIX Camera to VIGIL Server" on page 10 for more information.

Multiple Cameras (VIGIL Multiview™ Technology) - Network Camera Type

When selecting a Network Camera *Type*, a user may select the *Multiple Cameras* option. This camera type uses VIGIL Multiview™ technology to multiplex(mux) a customized number of your camera feeds into a single, bandwidth friendly image stream. This stream can then be viewed in Server or other VIGIL Products such as VIGIL Client like a traditional IP camera.

To setup a Multiview stream, open / enable *Network Camera* settings on a camera channel, then:

Figure 4-8: Network Camera Types - Adding a VIGIL Multiview Channel

1. Select **Multiple Cameras** in the*Network Camera Settings* form *Type* field.
2. Click the **Setup** button.

This will open the *Multiple Camera Settings* window(pictured below).

Multiview layouts are configured by row. By default, the first row will already exist.

To add a new row:

1. Select the *Add* button located within the Rows portions of the Multiple Camera Settings window.

To add a camera to a row:

1. Select the desired row using the Rows drop-down menu.
2. Select the *Add* button located within the Camera portion of the Multiple Camera Settings window.
3. Set Camera Width to designate how much of the row a camera frame will occupy. Use this to make some camera images more prominent.

Rows and cameras may be deleted by selecting the camera or row to be deleted and clicking their respective *Delete* buttons.

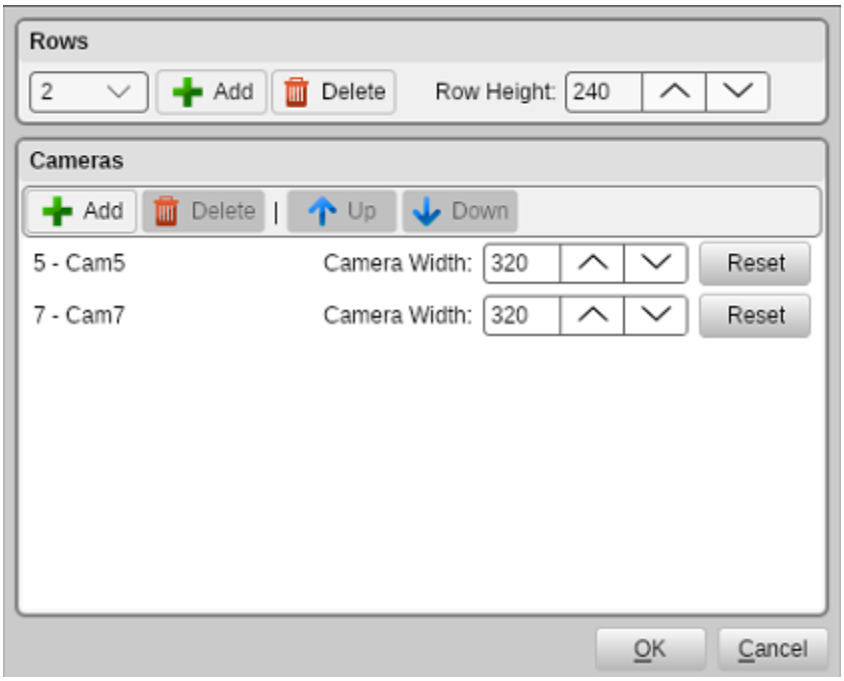


Figure 4-9: Network Camera Types - Multiview - Multiple Cameras Settings Window

After exiting the Multiple Camera Settings window, Click **OK** in all remaining settings windows to save the new multiview. The Multiview will now be visible in the configured camera channel in the Live Viewer.

VIGIL Server - Network Camera Type

Another VIGIL Server can be connected in the same way you would connect to a *Network Camera*. This will display any camera that the VIGIL Server receives and allows you to relay analog video from one recording VIGIL Server with a capture card installed to another (with or without a capture card).

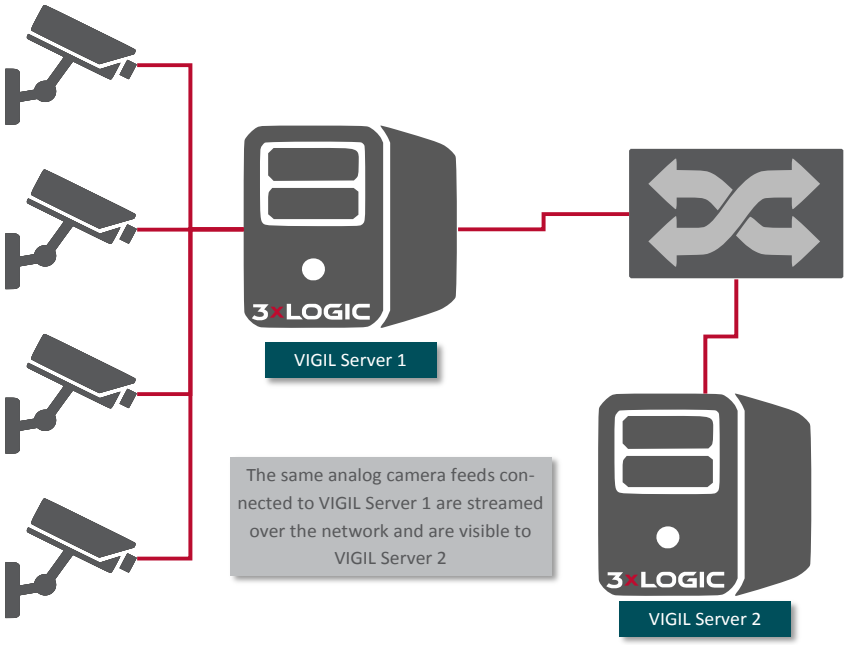


Figure 4-10: Selecting VIGIL Server as Network Camera Type - Analog Camera Relay

To set up this configuration, select the **VIGIL Server** type in the *Network Camera* window. The recommended settings for this setup are:

- **Address** - IP Address of the VIGIL Server.
- **Port** - Live Video Port, default 22802.
- **Camera Number** - The camera input number on the remote VIGIL Server to be used.
- **User / Password** - The username and password used to log into the remote VIGIL Server, if applicable.

4.3 Camera Setup Tab – Advanced Settings

At the bottom of the Camera Setup tab are several sub-tabs that makeup the *VSMU Camera Setup Advanced Settings*.

4.3.1 Recording Mode Tab

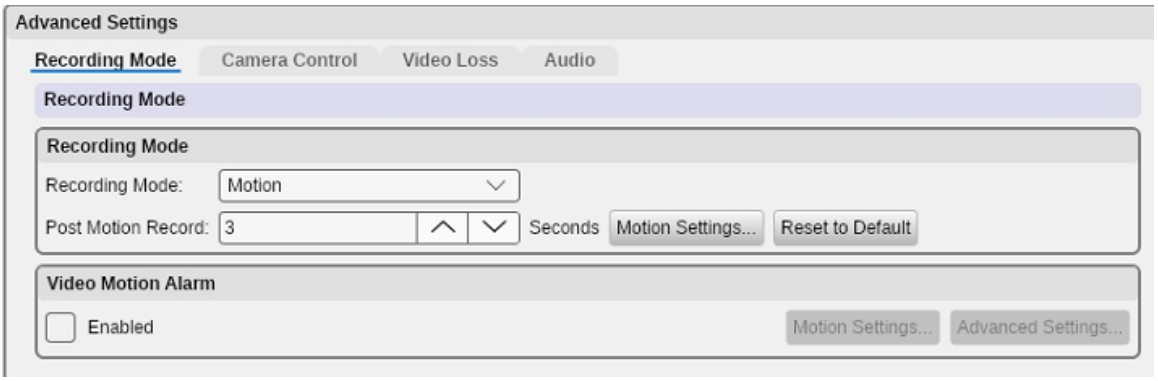


Figure 4-11: Settings - Camera Setup - Recording Mode Tab

Recording Modes

There are four *Recording Mode* options encompassing a full range of recording possibilities. These modes are accessible by selecting the appropriate option from the *Recording Mode* drop-down menu.

- **Constant** - Always recording, 24 hours, 7 days a week.
  - When choosing constant, the user will also have the option of enabling *Variable Speed Recording*. Variable speed recording will drop camera FPS to 1 when no motion is detected and will resume full frame rate when motion is present. This settings can be highly beneficial in low-bandwidth environments. Motion settings will also be available for configuration when Variable is enabled.
  - Check off *Variable* (only visible when Constant is selected as Recording Type) to enable Constant Variable Speed Recording.
- **Schedule** - Records based on a schedule. The easy to use graphical interface provides a full overview of a week's schedule in 15-minute intervals. This mode offers full control over recording times and any combination of constant or motion controlled recording modes.
- **Motion** - Records only when motion is detected. Full configuration over motion area, amount of motion, size of motion and post motion recording time makes this a very versatile recording mode.
- **Alarm Only** - Records in alarm mode when any alarm is detected. The alarms can be of any type including *Video Analytics, Video Motion, Digital Input* and *POS Alarms*.

Scheduled Recording

If *Schedule* is selected from the *Recording Mode* drop-down menu, the *Schedule* window will appear. To edit an existing schedule click the … button to open the *Schedule* window. To modify a schedule, click the appropriate recording mode button (*Const* or *Motion*), and then click-and-drag across a

time slot. Areas that are blank (no color) have no recording modes defined for that time and will not record any footage.

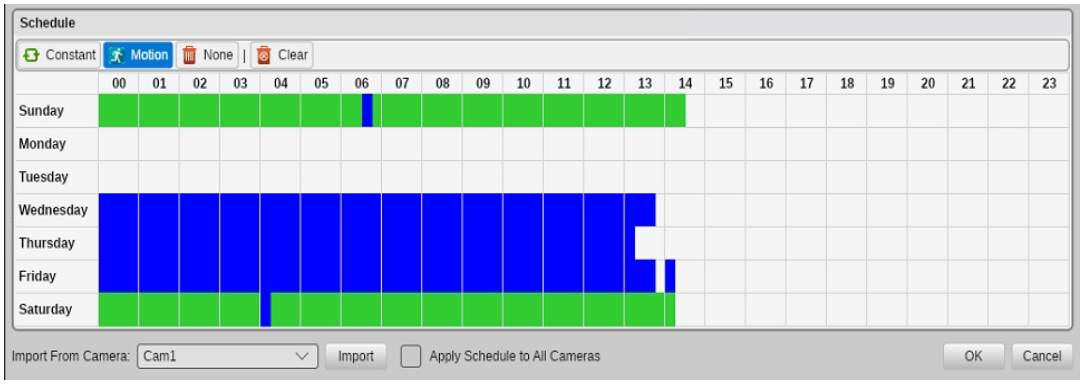


Figure 4-12: Scheduled Recording - Scheduler Window

Note: The smallest time interval that can be used is a 15 minute period.

To view time for a specific point in the schedule, mouse over the desired point in the scheduler. The corresponding day and times of your cursors location are displayed near the top-right corner of the *Schedule* window. Hover the mouse over any part of the section to display the time. See below for descriptions of the remaining scheduling tools.

- **Constant** - Sets to *Constant* recording mode; these time periods are colored green.
- **Motion -** Sets to *Motion* recording mode; these time periods are colored blue.
  - **Change Record Mode** - Click the desired recording type and drag over an existing section of schedule to overwrite it.
- **Import from Camera** - Select the camera from the *Import From Camera* drop-down menu, and then click *Import*. This will overwrite the current schedule.
- **None / Erase** - Select the *None* recording type then click and drag where desired to erase existing recording mode schedules.
- **Clear** - Click the *Clear* button to delete the entire schedule.
- **Apply Schedule To All Cameras** - When marked, this checkbox will apply the created schedule to all cameras that have been set to *Schedule* recording mode.

Motion Recording Settings

When recording in Motion mode or if looking to configure Video Motion Alarm Motion Settings, click the *Motion Settings…* button to access the *Motion Settings* window. Here you configure which regions of the video image are to be used for motion detection. To do this, simply draw on the video. A semi-transparent overlay will be drawn over the video; this marks the motion detection region. To clear a motion detection region, click and draw on it.

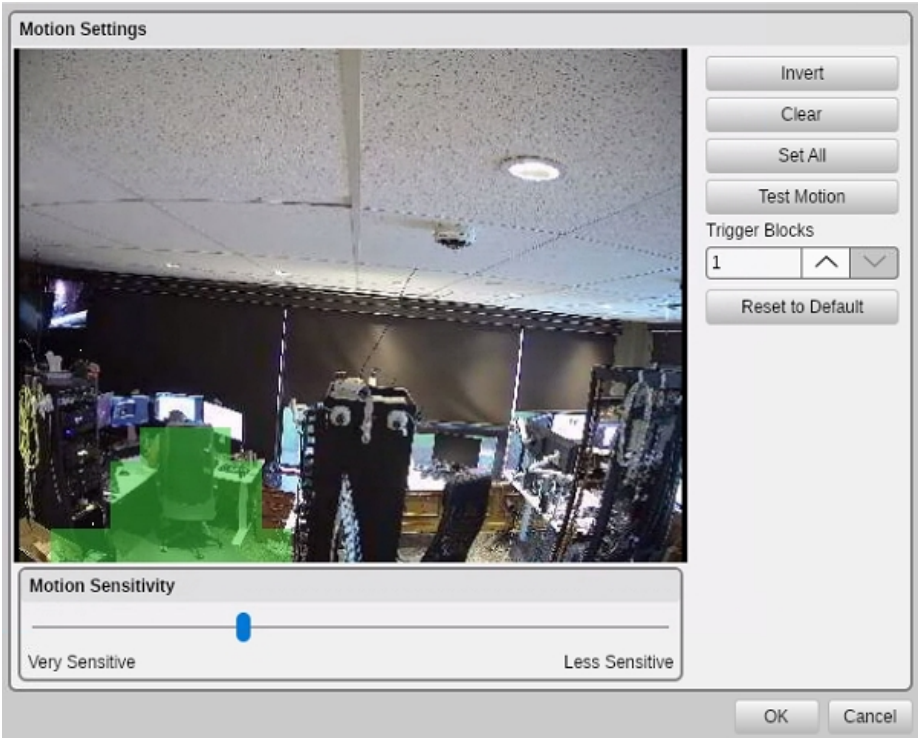


Figure 4-13: Motion Recording Settings Window

- **Invert** - Swaps masked and clear regions.
- **Clear** - Clears all masked regions.
- **Set All** - Masks the entire image.
- **Test Motion** - When latched on, the preview window will display motion detection blocks and their real-time motion values overlaid on masked regions of the video. When motion is detected based on the sensitivity, values are highlighted in green.

Figure 4-14: Test Motion

- **Trigger Blocks** - Determines how many motion blocks must meet the motion sensitivity requirement to trigger motion recording.
- **Motion Sensitivity** - Adjust the Motion Sensitivity slider to control the amount of motion required to trigger recording. Use a very sensitive setting to detect almost all motion, or a less sensitive setting to require only very large movements to trigger recording.

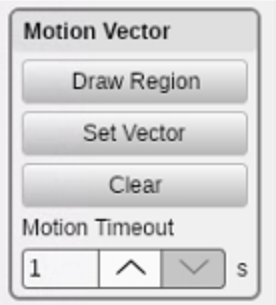
Click **Reset to Default** to return all settings to default state. Click **OK** to save new settings. Click **Cancel** to close the form without saving.

Video Motion Alarm - Motion Settings

The *Video Motion Alarm* settings allow you to configure powerful motion detection alerts that include full control over motion quantity, size, area, speed and direction of motion. In addition to the alarm itself, a wide variety of alarm notification settings are available. *Video Motion Alarms* can be used in conjunction with any other recording mode.

Note: When *Video Motion Alarm* is enabled and a motion alarm is detected, the VIGIL Server will record in alarm mode regardless of any other recording mode defined, and an alarm event will be triggered.

Click the *Motion Settings* button to launch the *Motion Settings* window. See "Motion Recording Settings" on page 16 for more information on Motion Recording Settings. The below tools will also be available in the Motion Recording Settings when video motion alarm is enabled:

	A motion vector is composed of two or more motion detection regions and one vector. It represents an object moving through specific areas of the image in a set direction. If motion is detected in two of the regions in the general direction indicated by the vector arrow, the *Motion Alarm* will be triggered.

- **Draw Region** - Draws a motion detection region as an alternative to using the mouse and drawing by hand. You cannot draw on a motion detection region to create a clear region.

  Note: Regions with sides that are touching or overlapped are detected as one region. To use a motion vector, you must have at least 2 motion regions that do not border each other.

- **Set Vector** - Specify a direction of movement that will trigger a motion alarm; draw a direction by clicking and dragging the mouse. An arrow will be drawn on the preview window.

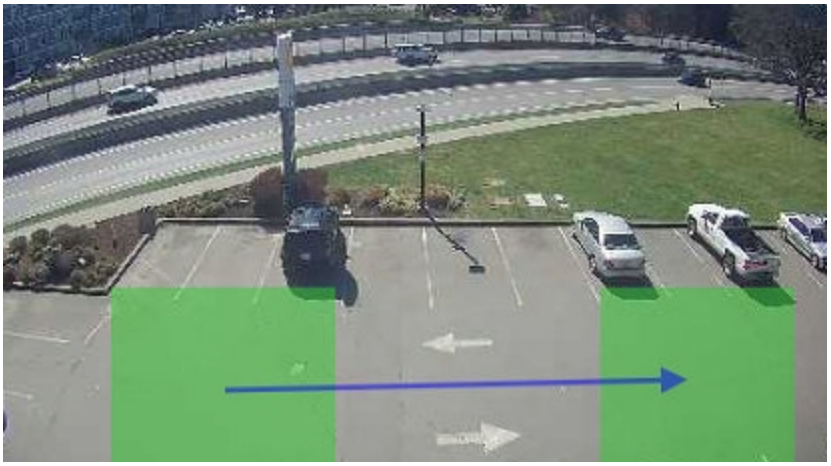


Figure 4-15: Example of Motion Vector

- **Clear** - Remove the applied motion vector.
- **Motion Timeout** - Determines the speed required to trigger the alarm. Motion must be detected in two or more of the regions in the desired direction within this time. If the object moves so slowly that it does not move from one region to the next within the Motion Timeout period, then a motion alarm will not be triggered.

Video Motion Alarm Advanced Settings

The advanced settings include scheduling when the alarm is active, *Output Relay Options,* and *Notification Settings*.

General Tab

Video Motion Alarm Schedule

Click the checkbox to enable a schedule for when the *Video Motion Alarm* will be active. Click **...** to configure the schedule.

Click-and-drag to set when the *Video Motion Alarm* is active, marked in green. The schedule functions the same as in *Recording Mode Tab – Scheduled Recording* but applies only to video motion alarm (no constant recording mode).

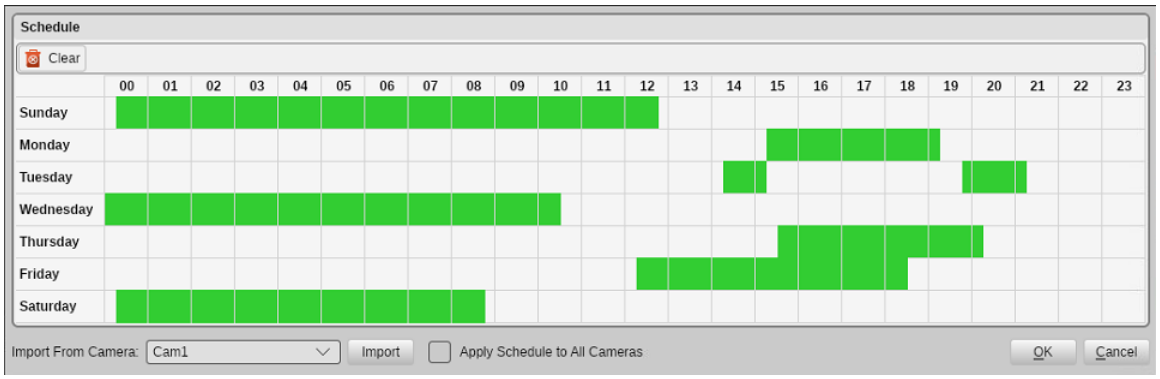


Figure 4-16:VA Alarm Schedule - Scheduler

Output Relay

Select an *Output Relay* to be triggered from the drop down box. The trigger options are *Latched* (for the duration of the alarm), or *Momentary* (2 seconds, regardless of alarm duration).

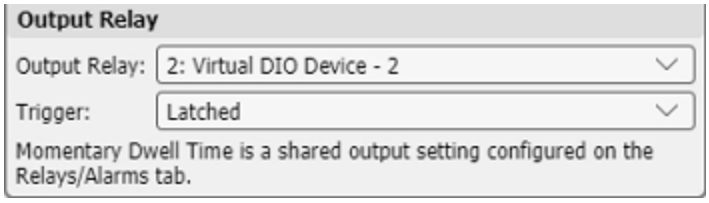


Figure 4-17: Output Relay Configuration

Post Motion Record

Post motion recording time for *Video Motion Alarms* is set here and is independent of any other post motion recording settings. The default is 3 seconds.

Figure 4-18: Post Motion Record Settings

Local Alarm

This setting will cause the alarm to only be visible on the VIGIL Server and not be relayed to other VIGIL products.

Figure 4-19: Enable Local Alarm Only Mode

Linked Camera

Select other cameras that will also record when the video motion alarm is triggered on the current camera.

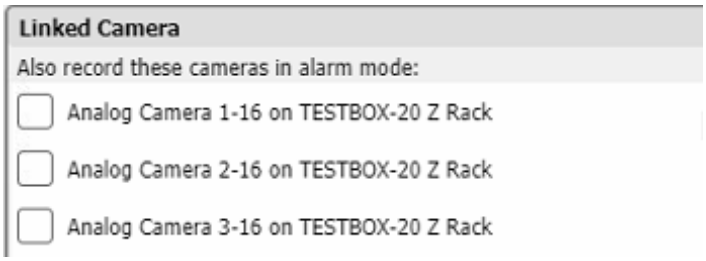


Figure 4-20: Linked Cameras

Notifications Tab

Local Notification Settings

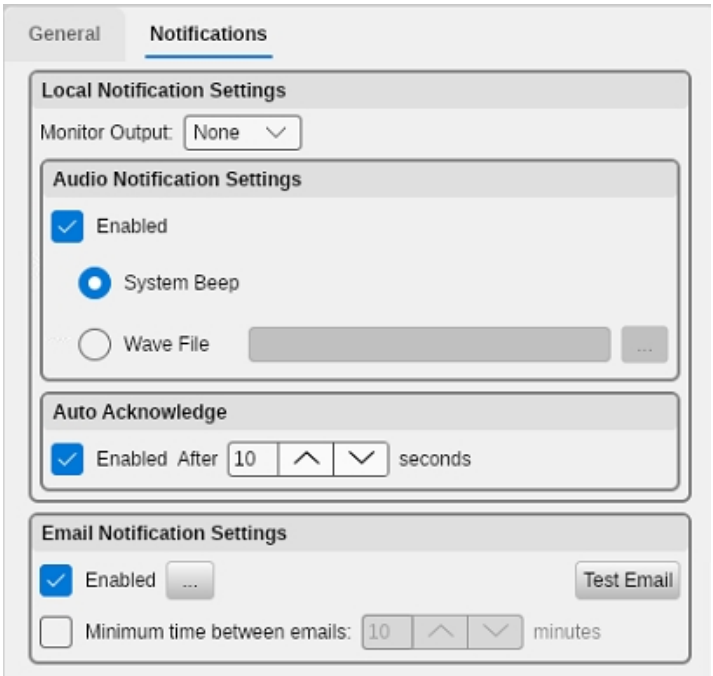


Figure 4-21: Local Notification Settings

- **Monitor Output** - Select an analog output monitor to display the triggered camera at the time of the motion alarm.
- **Audio Notification Settings** - Enables audio notification when a motion alarm is triggered. Two audio notification types are available:
  - **System Beep** - Sounds a system beep.
  - **Wave File**– Plays a WAV audio file.
- **Auto Acknowledge** - Enables the automatic acknowledge for *Motion Alarm* notifications after the specified number of seconds.

Email Notification Settings

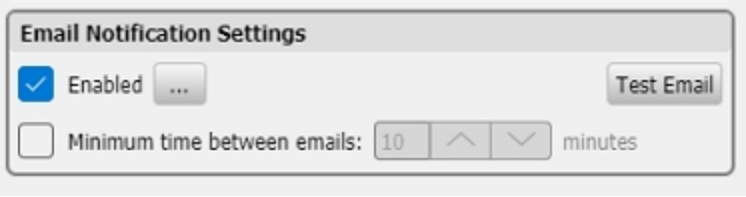


Figure 4-22: Email Notification Settings

When this feature is enabled, an email is sent to all recipients informing them that a motion alarm has been triggered.

- To configure timed suppression for email notifications, enable *Minimum time between emails* and configure a time suppression duration. This will prevent notification recipients from receiving multiple notifications from the same DIO event.
- Click the *Enabled* check box to enable *Email Notifications* and click the ... button to open the *Email Settings* window. *Email Header Options* are described below:

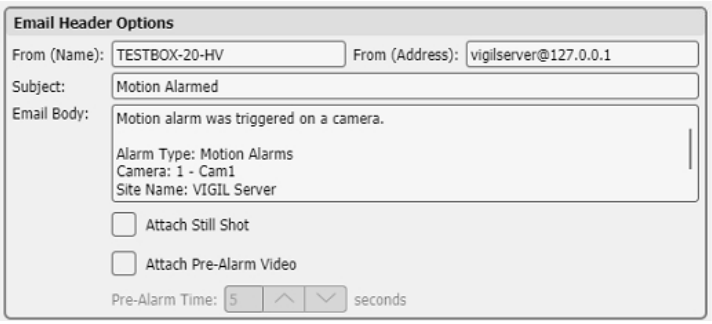
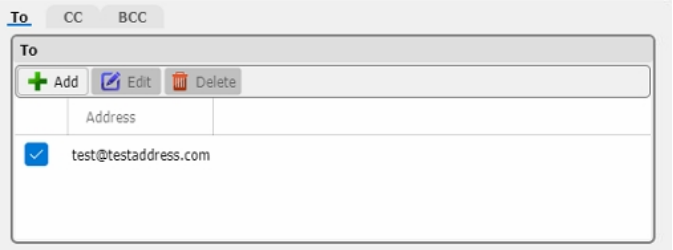


Figure 4-23: Email Header Options

Form Field	Description
From (Name)	The name of the entity that will be sending the emails.
From (Address) -	The email address of the entity that will be sending the emails.
Subject -	The text that will be the subject line of the emails.
Email Body -	The text that will be included in the body of the emails.
Attach Still Shot -	Allows a still image from that camera to be attached to the outgoing email. The image is always from the beginning of the motion alarm event.

Attach Pre-Alarm Video	Attach pre-alarm footage to the email notification. Use the available *Pre-Alarm Time* drop-down to configure the amount of pre-alarm footage (in seconds) to attach.
Recipients	These are the lists of recipients who will receive *Motion Alarm* notifications. There are three lists of recipients, direct recipients, carbon copied recipients and blind carbon copied recipients. Recipients can be added, deleted and edited.  **Figure 4-24:**Email Notification Recipients Configuration Window

4.3.2 Camera Control Tab

Some PTZ cameras can be operated remotely by VIGIL Server. To configure a camera for remote control, click on the *Camera Control* tab. Select the camera type, the *COM* port and the address. These settings are determined by the camera itself and the *COM* port on your VIGIL Server that the camera is connected to. For IP *Network Cameras* , simply select the *Camera Type*. Other custom settings such as the *Digital Presets* button, login prompts or camera labels may appear in the area circled in red, below, depending on the selected camera type.

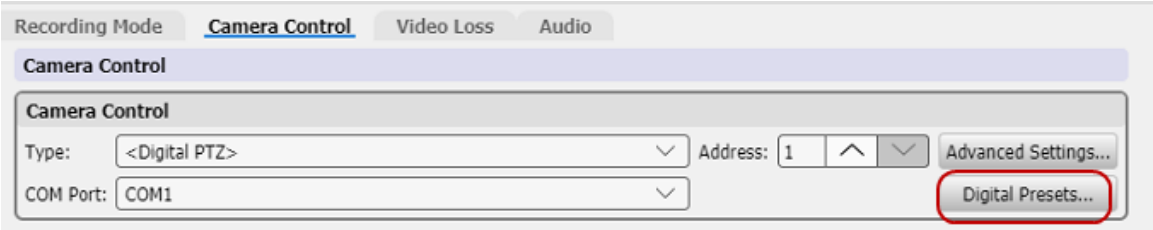


Figure 4-25: Settings - Camera Setup Tab - Camera Control Tab

- **Type** - The type of PTZ camera that is connected to your VIGIL Server. If *Digital PTZ* is the selected camera type, the *Digital Presets* button will appear. See "Digital Presets" on page 24
- **COM Port** - The COM port on the VIGIL Server that the PTZ camera is connected to.
  If a message titled *CONFLICT* appears below the camera type drop-down menu, then there is another camera or data connection that is set up to use that COM port or Address. Determine which device is connected to the COM port and Address, and then modify the camera settings appropriately.
- **Address** - The address of the camera when multiple cameras are attached via the COM port. See your camera's user guide for details

Camera Control Advanced Settings

Auto Restart PTZ

Automatically runs a *Pattern*, *Preset*, or *Tour* after the camera has been manually controlled by a user, after a *DIO Alarm Event* has ended, or when a *Video Analytics Alarm* is triggered.

Figure 4-26: Auto Restart PTZ Settings

- **Mode** - Select which action to apply after the timeout has been reached: *Patterns*, *Presets* or *Tours*.
- **Timeout** - The number of minutes after the camera control ends before the automatic restart is activated.
- **Name / Number** -Enter the name or number of the pattern, preset, or tour to run after the timeout period has elapsed.

DIO Alarm PTZ Event

DIO Alarms can be used to trigger PTZ events. The *DIO Alarm* must be enabled and assigned to the Camera, See *Settings – Relays / Alarms Tab* for details. Multiple *DIO Alarms* can be assigned to one camera, click the checkbox beside the *Alarm Name* to enable it.

Figure 4-27:DIO Alarm PTZ Events

Video Analytics Alarm PTZ Events

Video Analytics Alarms can also be used to Trigger PTZ events. Multiple *Video Analytics Alarms* can be assigned to one camera. All *Video Analytics Rules* configured on the Server will show in the list, click the checkbox beside the *Rule Name* to enable it.

Clicking the checkbox will open the *PTZ Configuration* window.

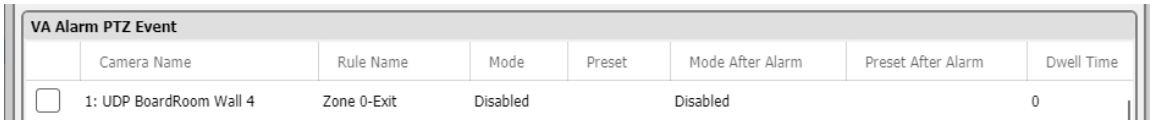


Figure 4-28: Video Analytics Alarm PTZ Events

Motion Alarm Event

Motion Alarm Events can also be used to trigger PTZ events. A Video Motion alarm must be enabled and assigned to the Camera. See "Video Motion Alarm - Motion Settings" on page 18 for more information. Multiple alarm events can be assigned to one camera, click the checkbox beside the *Alarm Name* to enable it.

Figure 4-29: Motion Alarm PTZ Events

During Alarm

When an alarm is enabled, the user can select what action to apply during the DIO Alarm.

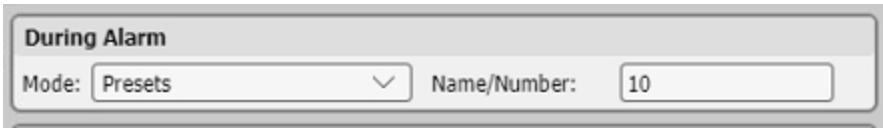


Figure 4-30: During Alarm Settings

- **Mode** - Select *Patterns*, *Presets* or *Tours* from the drop-down box.
- **Name / Number** - Enter the *Name* or *Number* of the *Pattern*, *Preset* or *Tour*.

After Alarm

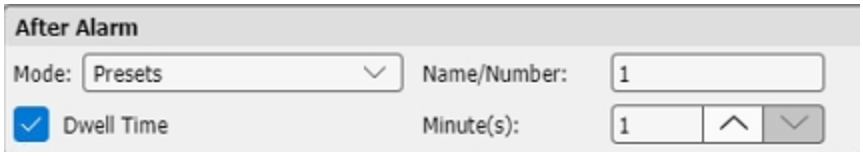


Figure 4-31: After Alarm Settings

When an alarm is enabled, the user can select what action to apply after the *DIO Alarm* has ended. To do nothing after the alarm, select *Disabled* from the mode drop-down.

- **Mode** - Select *Disabled*, *Patterns*, *Presets* or *Tours* from the drop-down box.
- **Name / Number** - Enter the Name or Number of the *Pattern*, *Preset* or *Tour*.
- **Dwell Time** - The amount of time from when the DIO Alarm is triggered until the *After Alarm* event occurs. If *Dwell Time* is not checked the *After Alarm* event will trigger when the DIO Alarm ends.

Control Interface

Control Interface Push Button Controls	Enables the *Push Button Directional* controls for the camera in place of the virtual joystick.
Region Control	*Region Control* is a setting that is only accessible on certain PTZ camera models. It is an alternative to the traditional push button, joystick or on-screen drag method for controlling *PTZ* movement. *Region Control* enables you to simply click on-screen to shift the cameras line-of-sight toward the region that has been clicked.

Digital Presets

When *Digital PTZ* is the selected camera control*Type*, the *Digital Presets* button will become available.

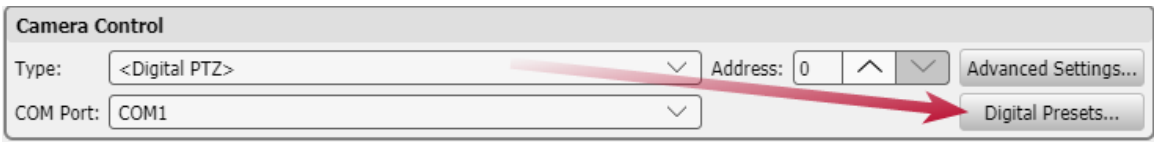


Figure 4-32: Settings - Camera Setup - Camera Control Tab - Launching a Camera's Digital Preset Settings

A Digital PTZ Preset is a saved portion of a camera's full image, where the original camera image has been manipulated by a user using digital PTZ commands to focus on a specific area-of-interest. Once

saved. this manipulated version of the image can than be instantly opened as a camera digital preset in VIGIL Client. Digital Presets cna also be configured in VIGIL Server as a POS Priority Camera. Multiple digital presets can be created for a single camera.

To configure and save a digital preset(s), click the *Digital Presets* button to launch the selected camera's *Digital Preset Configuration* window (pictured below).

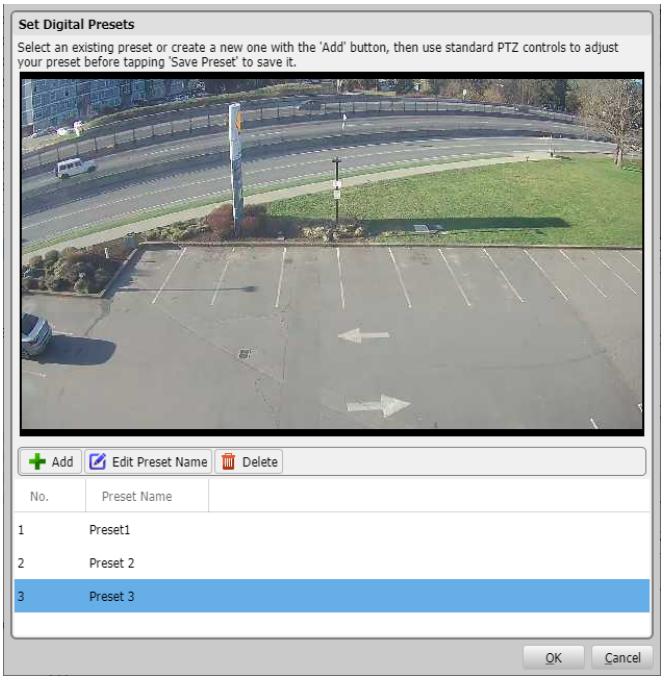


Figure 4-33: Settings - Camera Setup - Camera Control Tab - Digital Preset Configuration

The controls located on the window are described below:

- **Add** - Add a digital preset. A window will deploy where the user can enter a name for the preset.
- **Edit Preset Name** - Edit the selected preset's name.
- **Delete** - Delete the selected preset.

Adding / Editing a Digital Preset

To add a new preset:

1. Click the *Add* button and name the preset. The preset will be added to the list and will be the actively selected preset.
2. Manipulate the image as required. The manipulated view will save automatically to the preset.

Repeat the above process to add multiple presets.

To edit an existing preset name:

1. Select the preset from the list.
2. Manipulate the image as desired using standard Digital PTZ Controls.The preset will save automatically.

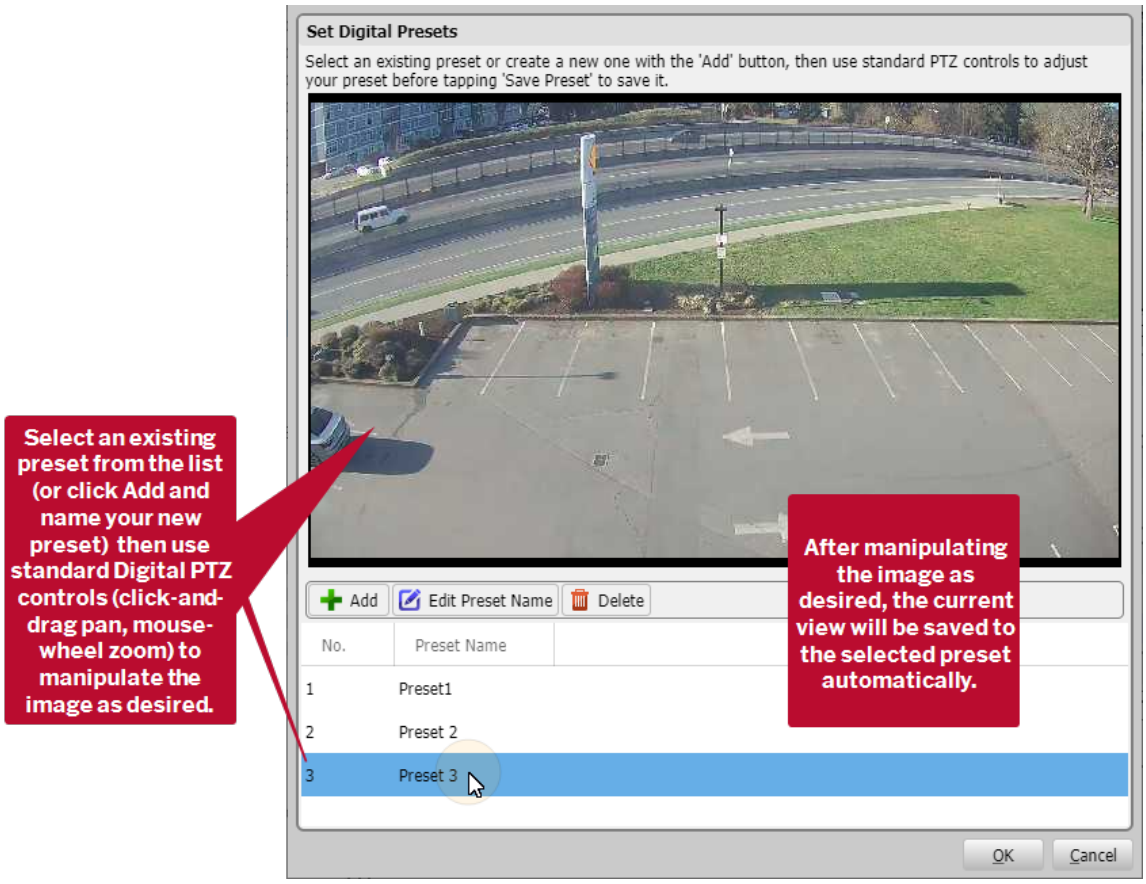


Figure 4-34: Settings - Camera Setup - Camera Control Tab - Adding / Editing a Digital Preset

- To edit a preset name, select the preset from the list and click *Edit Preset Name.*
- To delete a preset, select it from the list and click *Delete.*

When you have finished configuring presets, click the *OK* button to exit the *Digital Preset Configuration* window.

Viewing a Digital Preset

Aside from the configuration process on VIGIL Server, Digital Presets can only be accessed using a VIGIL Client that has been interfaced with the VIGIL Server. A user can interact with saved digital presets in VIGIL Client in the same manner as a camera; Digital Presets maintain both live and playback functionality. Please reference the VIGIL Client User Guide for more information.

Digital Presets can also be configured as a POS/ATM Priority Camera. See "Priority Camera Settings " on page 65

4.3.3 Video Loss Tab

If the video signal is lost from an enabled camera, you can specify an action to take in the *Video Loss* tab.

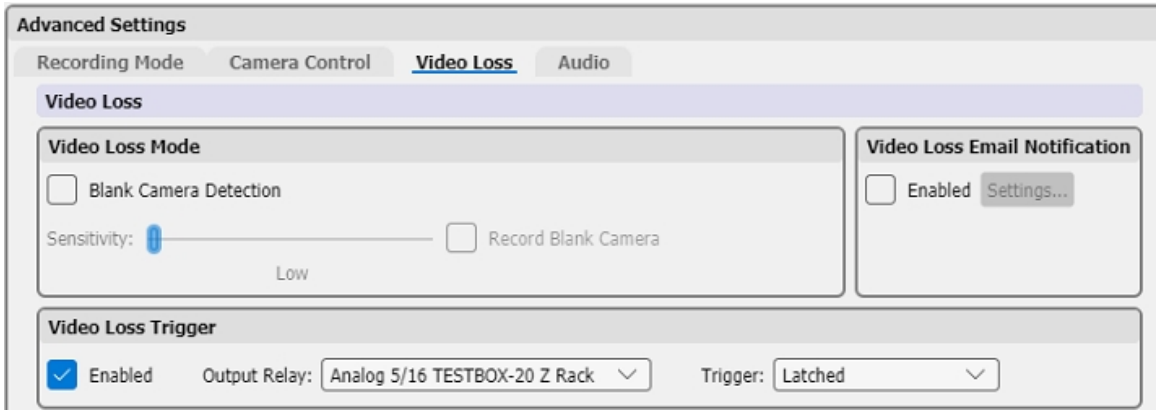


Figure 4-35: Settings - Camera Setup Tab - Video Loss Tab

Video Loss Mode

- **Sensitivity** - Adjusts the *Sensitivity* of the software signal loss detection.
- **Blank Camera Detection** - When enabled, the software detects a signal loss when the live video is all black or white. This is useful if the camera is covered or blocked, and can be used in addition to or in place of hardware signal loss detection.
- **Record Blank Camera** - When enabled, the VIGIL Server continues recording the camera feed during a signal loss. The Recording Mode for the camera must be set to *Constant* for this feature to work.

Video Loss Trigger

When enabled, *Video Loss Detection* triggers a DIO Relay.

- **Output Relay** - Select the DIO Relay.
- **Trigger** - Select the type of trigger for the DIO Relay: *Momentary*, which lasts two seconds or *Latched*, which lasts until the video is recovered.

Video Loss Email Notification

When enabled, an e-mail will be sent to the recipients configured in *Email Settings...* For details on how to set up e-mail recipients, see Video Motion Alarm Advanced Settings – Email Notification Settings.

5.0.1 Camera Setup - Advanced - Video Analytics Tab

From *Camera Setup* > *Video Analytics* tab, a user can view and edit an applicable camera's video analytics rules which have been synchronized with VIGIL Server via the embedded On-Board Analytics utility. See "On-Board Analytics" on page 81 for more information on this process.

Note: VIGIL Server offers support for VCA video analytics from analytic-capable cameras. VCA Video analytics rules are configured on camera and are then synchronized with VIGIL Server via an embedded on-board analytics tool (formerly VIGIL Analytics Bridge). Contact your 3xLOGIC representative for more information.

Note: If you have updated a pre-v9 copy of VIGIL Server to v9 or newer, advanced calibration and rules settings may be configurable for rules configured on the host VIGIL Video analytics (no longer supported). Please refer to VIGIL Server 8.5 User Guide or older for configuration confirmation regarding VIGIL Video Analytics.

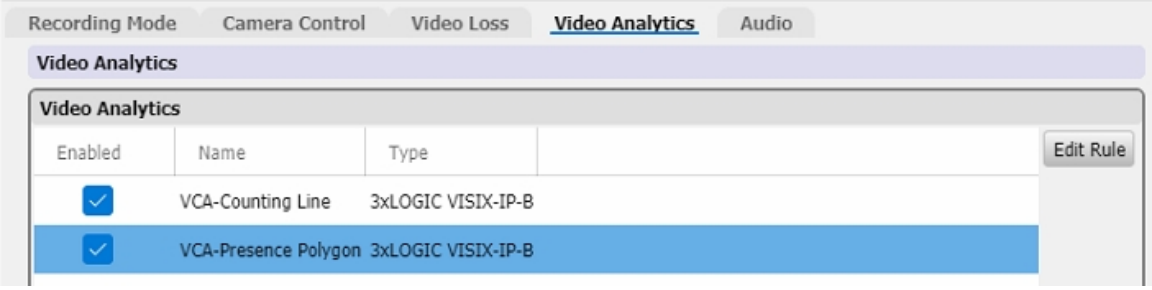


Figure 5-1: Settings - Video Analytics Tab

- **Edit Rule** - Opens the *Rule Settings* window for the selected rule.

To enable a rule, mark the check-box under the enabled column for the desired rule. Rule data will now be recorded by VIGIL Server. To edit a rule, select a rule from the list and click *Edit.* .

Editing an Analytics Rule

After selecting a rule and choosing *Edit Rule*, the *Rule Settings* window will deploy. The Rule Settings window consists of 3 tabs. *General, Alert Settings* and *Rule Settings.* As most analytics settings are configured on the camera itself, minimal settings can be edited from VIGIL Servers.

General

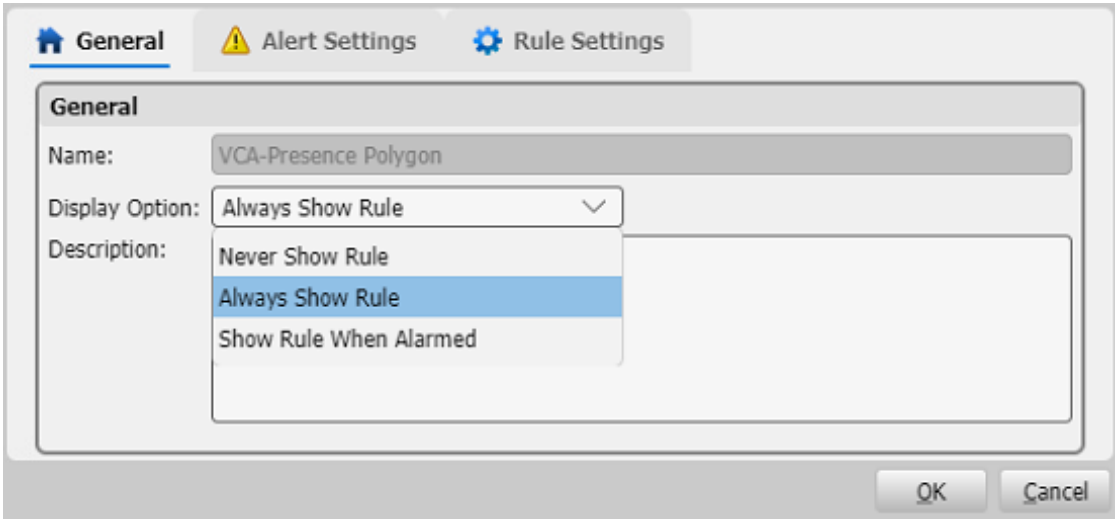


Figure 5-2: Video Analytics - Rules Settings - General Tab

- From the General Settings window, a user may re-name the rule, select a *Display Option* (*Never Show Rule*, *Always Show Rule*, *Show Rule when Alarmed*) for on-screen rule information and enter a description for the rule.

Alert Settings

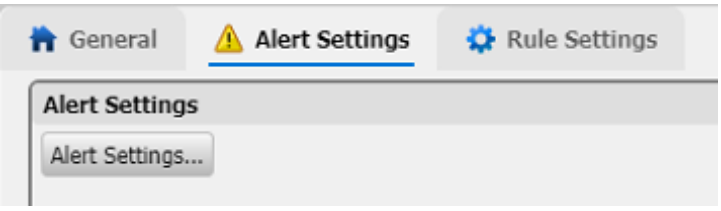


Figure 5-3: Video Analytics - Rules Settings - Alert Settings Tab

- Clicking this tab reveals an Alert Settings button which opens the *Video Analytics Alert Settings* window which allows a user to schedule the alarm recording period and configure alerts / notifications. The *Video Analytics Alert Settings* window is the same as the *Video Motion Alarm Advanced Settings* window.See "Video Motion Alarm Advanced Settings" on page 19 for configuration information.

Rule Settings

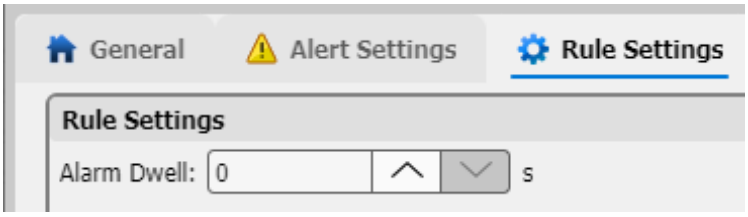


Figure 5-4: Video Analytics - Rules Settings - Rules Settings Tab

- On the *Rules Settings* tab, a user may set the *Alarm Dwell* time for the selected rule.

Warning: If the embedded VIGIL on-board analytics utility is used to retrieve rule info from a camera and the rules are re-synced with VIGIL Server, any rule changes configured on VIGIL Server will be overwritten with the new settings from the camera.

5.0.2 Advanced Camera Setup - Audio Tab

The *Audio* tab allows you to choose a *Priority Audio* channel and *Audio Talk* device for each camera.

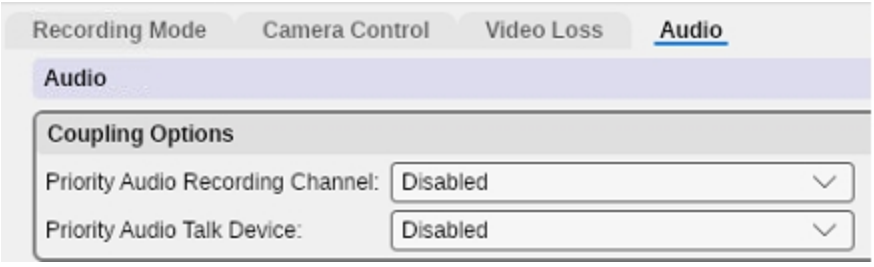


Figure 5-5: Settings - Camera Setup Tab - Audio Tab

- **Priority Audio Recording Channel** - Select the *Audio Channel* that will be associated with this camera. *Audio Channels* are configured on the *Settings - Audio Tab*. See "VSMU - Audio Tab" on page 72 for more information.
- **Priority Audio Talk Device** - Select the *Audio Talk Device* that will be associated with this camera. *Audio Talk* devices are configured on the *Settings - Audio Tab*. See "VSMU - Audio Tab" on page 72 for more information.

6 VSMU - SERVER SETTINGS TAB

6.1 Server Settings Tab - Basic Settings

The *Server Settings* tab contains settings related to the software and hardware configuration of a VIGIL Server.

6.1.1 Site Name

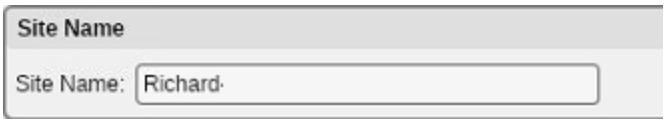


Figure 6-1: Server Settings Tab - Site Name Settings

- **Site Name** - The name of the *Site* where VIGIL Server is located. The site name is included when saving still images.

6.1.2 Interface

Note: *VSMU* > *Server Settings* > *Interface Settings* and the features configurable within are not available on Linux systems.

6.1.3 Offsite Backup on Alarm

Enable automatic export of footage to the specified off-site location when a DIO alarm occurs.

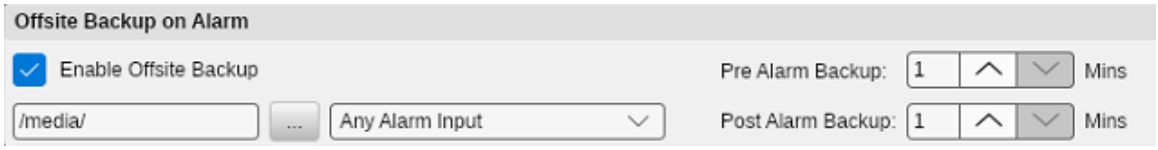


Figure 6-2: Server Settings Tab - Offsite Backup on Alarm Settings

- **Enable Offsite Backup** - Click the check box to enable this option. Click ... to a location where the footage will be saved.
- **Alarm Input** - Use the drop-down to select the DIO alarm input that will trigger the off-site backup or select *Any Alarm Input*.
- **Pre / Post Alarm Backup** - Specifies the number of minutes of footage to save prior to and after the *Alarm* event.

6.2 General Tab

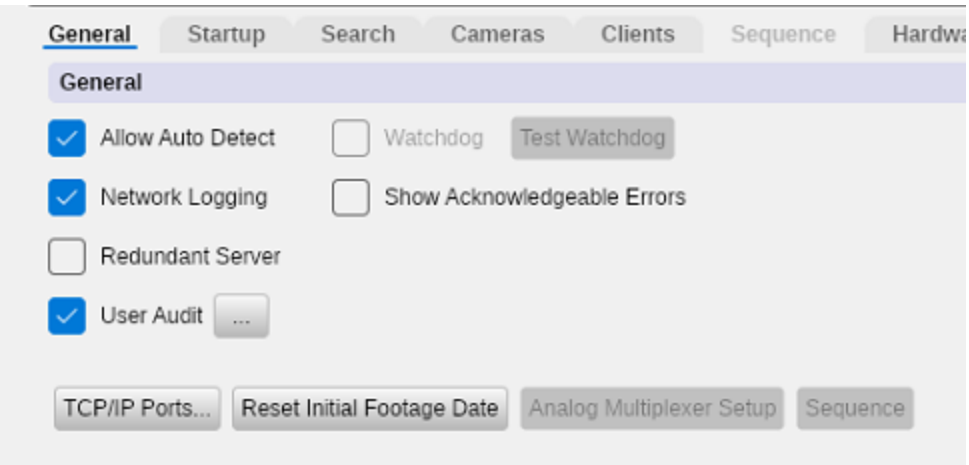


Figure 6-3: Server Settings - General Tab

- **Allow Auto Detect** - Allow VIGIL suite applications with Auto-Detect to see this VIGIL Server when using their auto-detect function.
- **Network Logging** - Logs network activity that can be reviewed in the *Network Log Analyzer*
- **Redundant VIGIL Server** - This feature is not intended for use with Linux-based systems. Please contact 3xLOGIC for more information.
- **User Audit** - Enable *User Audit.* Click the ... button to launch user audit settings. See "User Audit" on page 34 for more information.
- **Watchdog** - This feature is not available for Linux systems.
- **Show Acknowledgeable Errors** - When enabled, the *Error Alert* window will display nin VIGIL Client if an error is recorded in the *Audit Log*; this window will display until the error has been acknowledged by a user:

Figure 6-4: Error Alert Window

- **Audit Log Analyzer** - Opens the *Audit Log Analyzer* where error alerts can be reviewed for the active VIGIL Server.
- **Acknowledge All** - Acknowledges all error alerts.
- **Remind Me Later** - Closes the *Error Alert* window and opens it again after the set number of minutes.

Note: When the *Show Acknowledgeable Errors* feature is first enabled, the *Error Alert* window may display alerting of past errors that may already be resolved.

- **TCP/IP Ports** - Allows the configuration of the TCP/IP ports used by VIGIL Server to connect with VIGIL Clients.

Figure 6-5: TCP/IP Ports Window

  - **Presets** - Select a preset from the drop-down menu to change all of the ports to that preset.
  - **Change a Port** - Type a port number in the appropriate field.
  - **Disable a Port** - Uncheck the appropriate box. If a port is disabled, VIGIL Clients connecting to the server will be unable to use the feature corresponding to that port.
  - **Reset to Defaults** - Resets the ports to the default port numbers.
- **Reset Initial Footage Date** - The VIGIL Server Health Monitor software uses the initial footage date in VIGIL Server to determine if the VIGIL Server is recording the proper number of days of video storage. Click the *Reset* button to reset the cached date of the first video footage recorded by the VIGIL Server to the oldest footage currently on the VIGIL Server.
- **Analog Multiplexer Setup** - This feature is not available for Linux systems.
- **Sequence** - This feature is not available for Linux systems.

Figure 6-6: Sequence Selector

6.2.1 User Audit

When *User Audit* is enabled, an audit trail of user activity is created based on criteria configured on a per user or group basis.

User Audit Configuration

Enable *User Audit* and click the ... button to open the *User Performance Criteria* window. *Performance Criteria* can be configured on a per user or group basis.

Note: If a user has *Performance Criteria* configured, and is also a member of a group with *Performance Criteria* enabled, the *User Criteria* will be used.

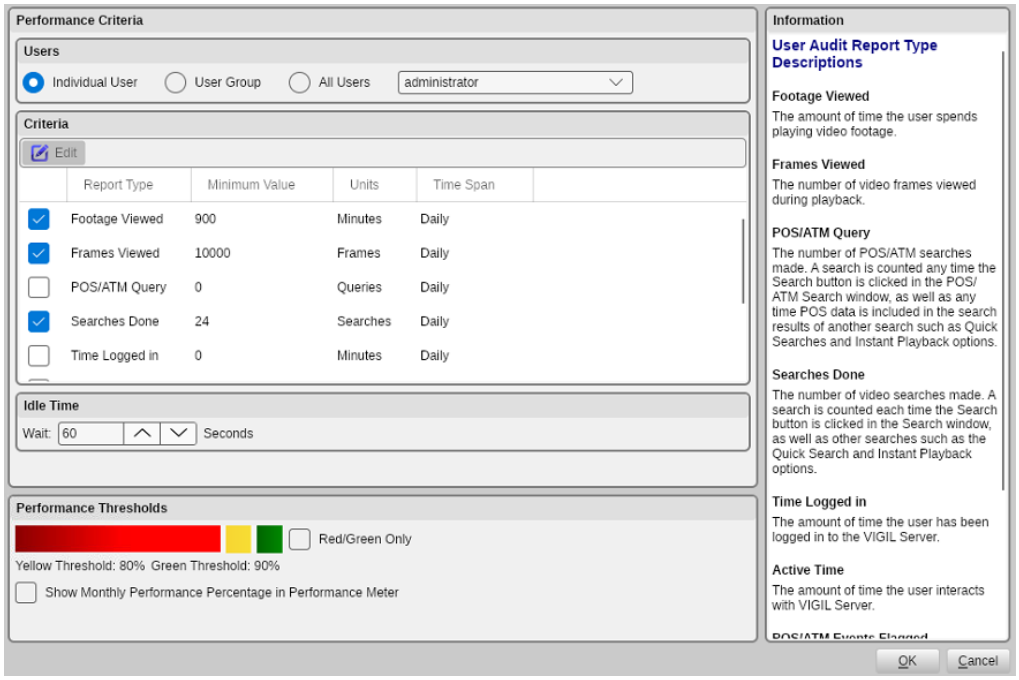


Figure 6-7: User Audit - User Performance Criteria Window

- **All Users** - Select *All Users* to configure generalized options for all system users.
- **Individual User** - Select Individual User and choose the User Name from the drop-down box to configure options for a specific user.
- **User Group** - Select *User Group* and choose the *Group Name* from the drop-down box to configure options for a *Group*.
- **Edit** - Edit the selected performance criteria.
- **Idle Time** - Enter the time in *Seconds* that the system will wait before it begins to log the user as idle.
- **Show Monthly Performance Percentage in Performance Meter** - Replace the daily usage performance percentage in the Performance Indicator (located in the Icon toolbar of both VIGIL Server and Client) with the monthly performance percentage.

Performance Criteria

Enable the Report Type (checkbox)to configure the Minimum Value and the Time Span (Daily, Weekly or Monthly):

- **Footage Viewed** - The amount of time spent playing video footage.
- **Frames Viewed** - The number of video frames viewed during playback.
- **POS Query** - The number of POS searches done. A query is counted each time the POS Data button is latched on and the Search button is clicked in the Search window.
- **Searches Done** - The number of searches made. A *Search* is counted each time the *Search* button is clicked in the *Search* window.
- **Time Logged In** - The amount of time logged in to VIGIL Server.
- **Active Time** - The amount of time logged that the user is actively interacting with VIGIL server. This is tracked via cursor activity or other input such as keystrokes.
- **VPOS Events Flagged** - The number of VPOS events the user has flagged.
- **VPOS Events Flagged %** - The percentage of VPOS Events which were flagged by the user the previous day.

Usage Performance Indicator (VIGIL Client)

When a user who is configured for *User Performance Monitoring*logs into the VIGIL Server via VIGIL Client, the *Usage Performance* status bar will is displayed. The user can click the *Details* button to view their performance usage details (See User Performance Report - Sample Report below for an example report).

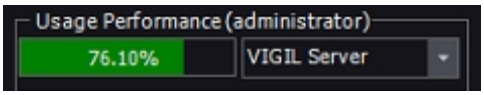


Figure 6-8: User Audit - Main Toolbar Usage Performance Indicator

User Audit Report (VIGIL Client)

To open the User Audit Report tool, select it from a VIGIL Server's tree menu in VIGIL Client. The *User Audit Report* tool provides detailed reports on the report types that are configured.

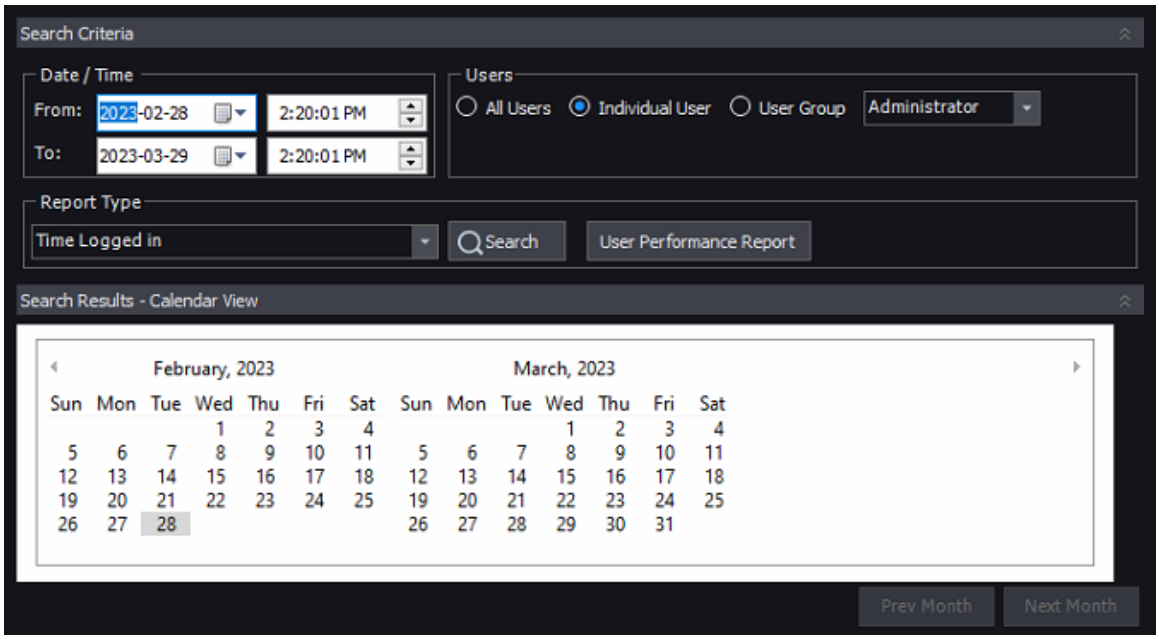


Figure 6-9: User Audit Report - Search Window

Report Types

- **Time Logged In** - Details on login information for each session.
  - *Idle time* is counted when there is no user input.
  - *Active time* is counted while the user is actively manipulating the system.
- **Footage Viewed** - Details on video playback including the camera number, footage start and end times, number of frames viewed and the total time watched.
- **POS/ATM Query** - Details on the search criteria used for POS queries.
- **Searches Done** - Details on the searches performed including the camera numbers, search times and footage types.
- **User Login Failed** - Details on failed user logins.
- **Shift Analysis Tags Viewed** - Provides details on tags viewed by the user using the shift analysis reporting tool.
- **Daily User Performance** - A detailed report regarding a users daily performance based on configured user performance audit crtieria.
- **All Report Types Summary** - A summary report of the users activity similar to the usage performance details

User Audit Report - Sample Report

Below is an example of a completed *Time Logged In-User Audit* search query.

Search Results

User	Login Time	Logoff Time	Active Time	Idle Time	Total Time
Administrator	2023-03-03 8:35:30 AM	2023-03-03 8:35:30 AM	00:00:00	00:00:00	00:00:00
Administrator	2023-03-03 10:36:29 AM	2023-03-06 9:42:29 AM	71:06:00	00:00:00	71:06:00
Administrator	2023-03-03 10:38:33 AM	2023-03-03 10:38:33 AM	00:00:00	00:00:00	00:00:00
Administrator	2023-03-03 11:00:20 AM	2023-03-03 11:00:20 AM	00:00:00	00:00:00	00:00:00
Administrator	2023-03-03 11:06:56 AM	2023-03-03 11:06:56 AM	00:00:00	00:00:00	00:00:00
Administrator	2023-03-03 11:08:37 AM	2023-03-03 11:08:37 AM	00:00:00	00:00:00	00:00:00
Administrator	2023-03-03 11:10:19 AM	2023-03-03 11:10:19 AM	00:00:00	00:00:00	00:00:00
Administrator	2023-03-03 11:21:18 AM	2023-03-03 11:21:18 AM	00:00:00	00:00:00	00:00:00

Figure 6-10: User Audit - VIGIL Client - Sample User Audit Report Search Results

For more information on a user's usage history regarding individual audit entries, double click an entry in the *Search Results* section. A user usage summary report regarding the selected audit entry will open in a separate window.

An example of the usage summary report is pictured below.

User Audit Report - Example Usage Summary Report

Administrator's Usage Summary

Report Generated: *6/20/2013 12:33:09 PM*

User is currently **logged in** since *6/20/2013 10:47:09 AM* with **1h 46m** of total time this session (active time: **29m**, idle time: **1h 17m**).

Total **logged in time** for all sessions this period is **53m**.
Total **active time** for all sessions this period is **13m**.
Total **idle time** for all sessions this period is **40m**.

Usage Item	Value
Footage Viewed	0 Min(s)
Frames Viewed	16898 Frames
POS/ATM Query	2 Queries
Searches Done	1 Searches
Idle Time	40 Min(s)
Time Logged In	53 Min(s)
Active Time	13 Min(s)

Figure 6-11: User Audit - Usage Summary Report - Example

User Performance Report (VIGIL Client)

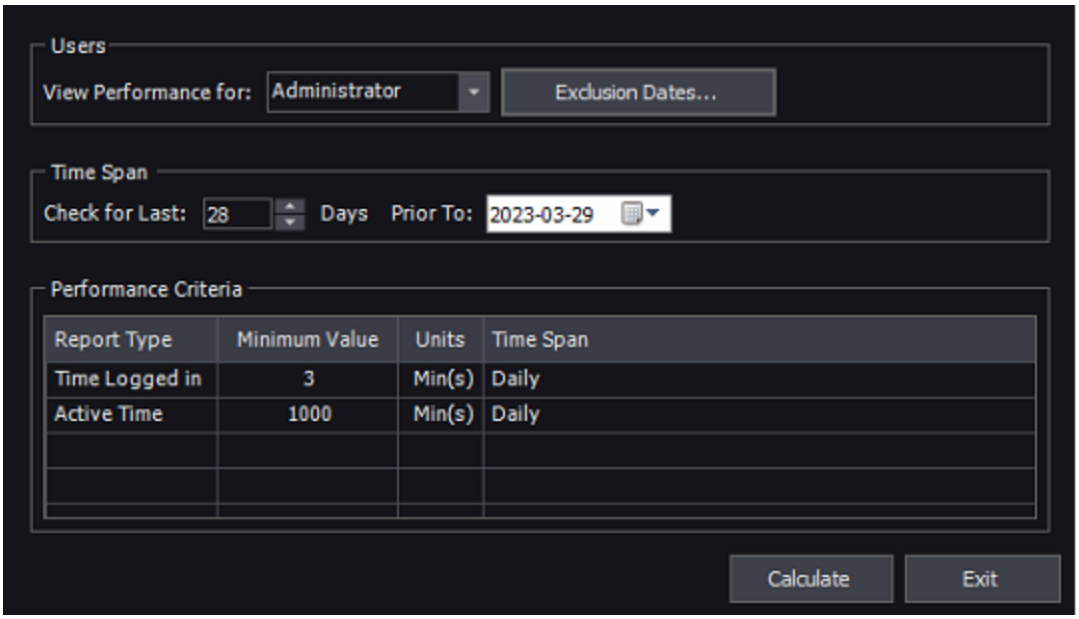


Figure 6-12: User Audit - VIGIl Client - User Performance Report Configuration

- **Users** - Under the *Users* section of the form, two settings related to the audited user can be configured:
  - **View Performance For** - Choose the user whose performance statistics will be reported.
  - **Exclusion Dates** - When clicked, this button will open an *Exclusion Dates* window where dates that need to be excluded from the performance reported can be chosen.
- **Timespan** - Select the amount of days to audit by selecting a *Check for Last x Days* value and an appropriate *Prior To* date. In the above example, the 28 days leading up the 5/1/2015 will be audited for user performance.
- **Performance Criteria** - Under *Performance Critieria*, the following user performance settings can be configured:
  - **Active Time Per Day** - Set the amount of acceptable active daily usage.
  - **Acceptable Performance** - Set the acceptable performance percentage(the user will pass or fail the Performance Report based on this percentage.)

Click **Calculate** to generate a *User Performance* report.

User Performance Report - Sample Report

User Performance Report

Report Generated: *4/19/2015 10:32:14 AM*

Date Range:	**3/22/2015 to 4/18/2015**
Site Name:	**Demo Test**
Employee:	**Administrator**

Performance Criteria

Footage Viewed:	**60 Min(s) Daily**
Frames Viewed:	**3000 Frames Daily**
POS/ATM Query:	**5 Queries Daily**
Daily Performance:	**100%**

Performance Summary

Total Days:	**28**
Excluded Days:	**0**
Days with at least 100%:	**26**
Days with less than 100%:	**2**

Overall Performance: 0.00%

Details

Date	Status	Footage Viewed (Min(s))	Frames Viewed (Frames)	POS/ATM Query (Queries)
3/22/2015	100%	113.00	4168	7
3/23/2015	95%	52.13	2616	5

Figure 6-13: User Audit - User Performance Report

The User Performance Report contains detailed report info(date, site, audited user), the required performance criteria aluminium values, and the user's performance summary. The user will be awarded an Overall Performance percentage which is then followed by a list of all audit data entries.

6.3 Startup Tab

The *Startup* tab allows configuration of VIGIL Server's startup behaviour, as well as scheduling of system reboots.

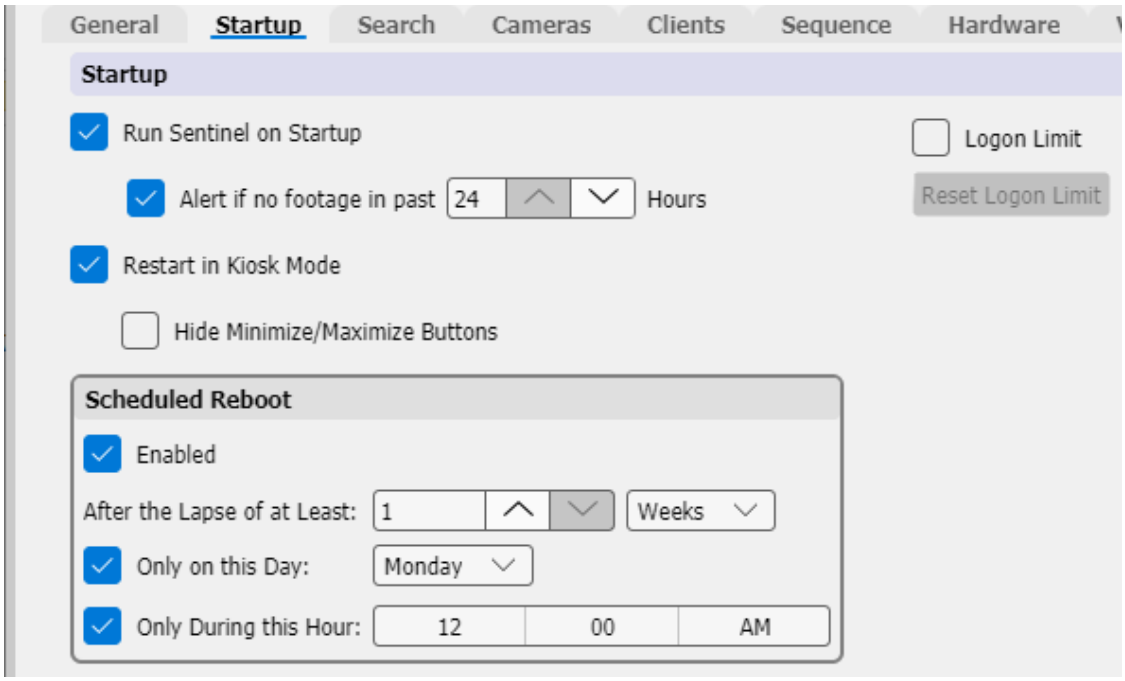


Figure 6-14: Server Settings - Startup Tab

- **Run Sentinel on Startup** - When enabled, the *Sentinel* program will run as soon as VIGIL Server launches. The *Sentinel* program monitors critical VIGIL Server functions and warns the user in event of failure.
- **Alert if no footage in past ... hour(s)** - Displays an alert if VIGIL Server detects that there is no footage recorded in the amount of time set in the drop-down menu. Choose any hour increment between 1 and 24.
- **Restart in Kiosk Mode** - This feature is not available for Linux systems..
  - **Hide Client Minimize/Maximize Button** - This feature is not available for Linux systems.
- **Scheduled Reboot** - When enabled, the VIGIL Server will automatically reboot after the specified amount of time has lapsed but only during the day and time indicated.
- **Logon Limit** - When enabled, User accounts are restricted to 3 logon attempts. If 3 incorrect attempts are made, the account will be locked out for a period of one hour. A user with administrative rights can reset the lockouts with the *Reset Logon Limit* button.

6.4 Search Tab

The *Search* tab defines search parameter and settings for the VIGIL Server. Searches are performed via VIGIL Client.

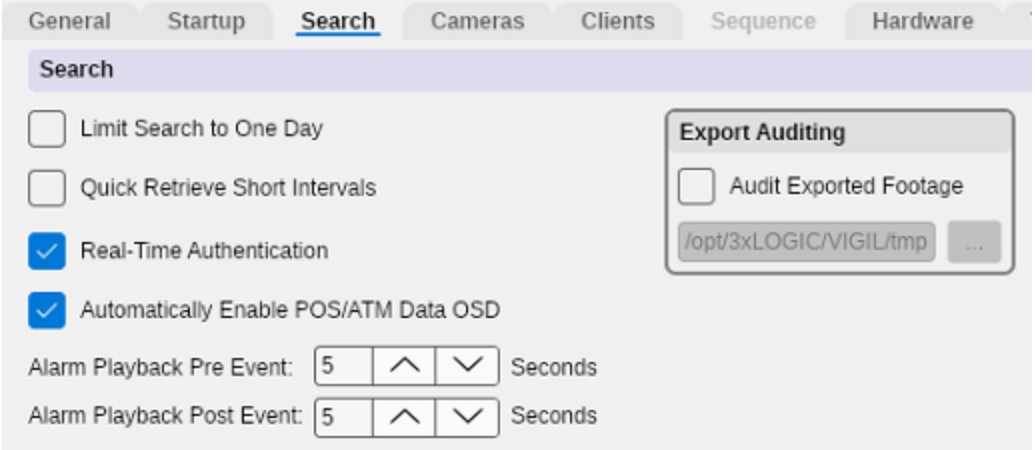


Figure 6-15: Settings - Server Settings Tab - Search Tab

- **Limit Search To One Day** - When enabled, the VIGIL Client *Search* window will be limited to performing searches for a single day only for this VIGIL Server.
- **Quick Retrieve Short Intervals** - When enabled, the *Quick Retrieve* drop-down menu in the VIGIL Client *Search* window offers a selection of short intervals of 15 and 30 minutes in addition to the standard choices.
- **Real-Time Authentication** - When enabled, video footage is checked for authenticity while played back from the VIGIL Client*Search* window.
- **Automatically Enable POS/ATM OSD** - When enabled, *POS/ATM Data On Screen Display (OSD)* will be automatically enabled in VIGIL Client when playing back a camera that is set as a Priority POS/ATM Data Camera on the VIGIL Server.
- **Alarm Playback Pre / Post Event** - Set the amount of time to playback prior to / after an *Alarm* when playing *Alarm* footage in VIGIL Client's *Server Alarms* window.
- **Export Auditing** - Enables mandatory auditing of all video exports. Choose the path where the audit text files will be saved.

6.5 Cameras Tab

The *Cameras* tab allows the user to schedule camera still shots.

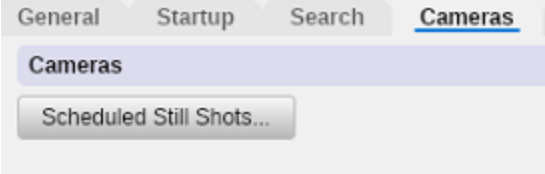


Figure 6-16: Settings - Server Settings Tab - Cameras Tab

- **Scheduled Still Shots** - Open the Schedule Still Shots dialogue. See "Schedule Camera Still Shots" on the next page for more information.

6.5.1 Schedule Camera Still Shots

To schedule camera still shots:

1. Click the **Schedule Still Shots** button on the *Server Settings Tab> Cameras Tab*. The *Schedule Still Shots* dialogue will deploy.

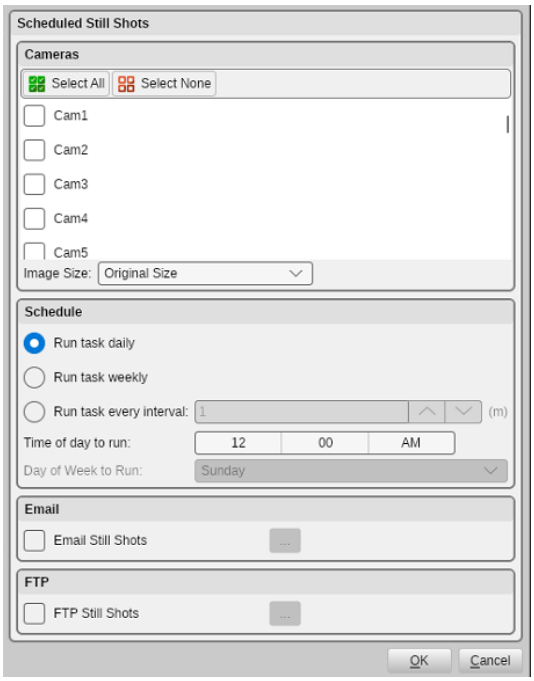


Figure 6-17: Schedule Still Shots

2. Select the cameras you want to schedule still shots from in the available list. Click the **Select All** button to select all available cameras. To clear the current selection, click **Select None**.
3. Set an **Image Size** from the drop down.
4. Use the settings under the *Schedule* section to configure the schedule as desired.
   - If an email with still images attached is desired whenever the schedule runs, enable **Email Still Shots** and click the **...** button to launch email settings. Scheduled Still Shot Email settings are configured using the same process as other email notification settings in VIGIL Server. See "Email Notification Settings" on page 21 for more information on this process.
   - If desired, click **FTP Still Shots** to enable an FTP export destination for the stills. Click the ... button to deploy the destination configuration window. Configure FTP settings and click **OK** to save the destination. Stills will be exported to the destination at the scheduled intervals.

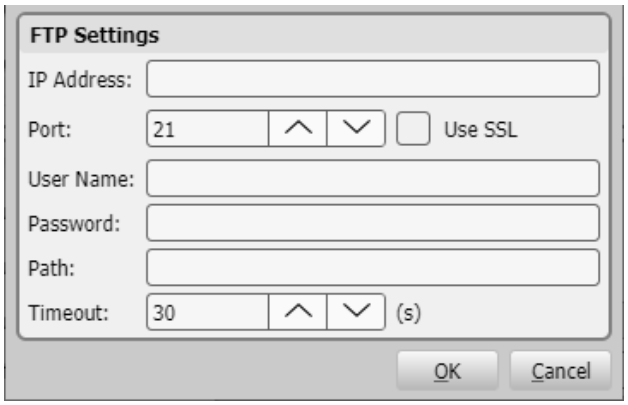


Figure 6-18: Scheduled Stills - FTP Destination Settings.

6.6 Clients Tab

The *Clients* tab indicates how client connections should be handled. A *Client Connection* represents a network connection to the VIGIL Server from an outside source(VIGIL Client, View Lite Smart Device App, 3xCLOUD, VIGIL Web, etc.)

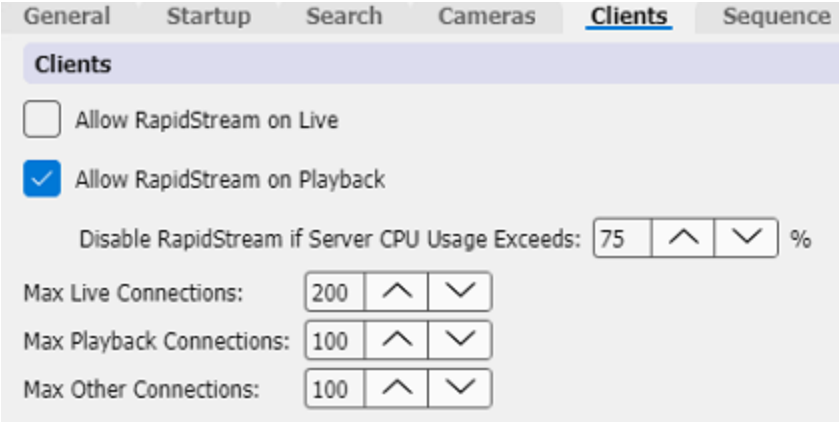


Figure 6-19: Settings - Server Settings Tab - Client Tab

- **Allow RapidStream on Live / Playback -** When enabled, the Live and / or Playback window in VIGIL Client will have the option to playback video using *RapidStream* technology when streaming video from this Server.
- **Disable RapidStream if Server CPU Usage Exceeds... -** The *RapidStream* playback on Client is handled by the Server before sending the playback stream to the Client. To ensure functionality of the VIGIL Server is not adversely affected, the *RapidStream* playback will be disabled if the CPU on the Server reaches the specified percentage. When the CPU usage drops back below the percentage the *RapidStream* option will again be available. This can happen dynamically during playback.
- **Max Network Connections -** Enter the maximum number of simultaneous client connections allowed. Three types of connections are available.
  - *Max Live Connections*
  - *Max Playback Connections*
  - *Max Other Connections*

6.7 Hardware Tab

The *Hardware* tab informs VIGIL Server of the specific hardware you may have installed.

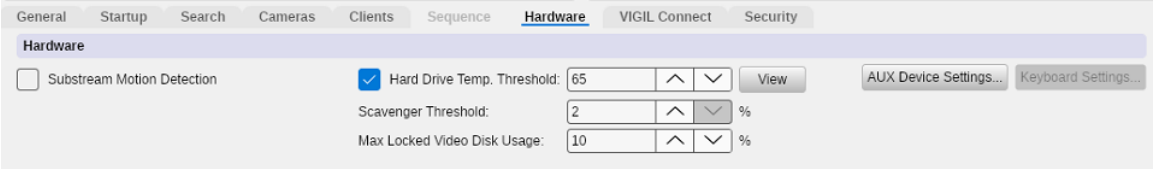


Figure 6-20: Settings - Server Settings Tab - Hardware Tab

- **Substream Motion Detection** - When enabled, VIGIL will attempt to detect motion via sub-stream. If sub-stream is not available, VIGIL will revert to detecting motion on main stream. If sub-stream is in signal loss, VIGIL will revert to mainstream after 10 seconds. This feature must be licensed though a 30-day free trial is included. Contact your 3xLOGIC representative for more information.

  Warning: For the *Substream Motion Detection* feature to function successfully with VISIX IP cameras and / or systems with capture cards, the substream needs to be configured for 1 or more key frames per second. For capture cards, this is the equivalent to a GOP (Group of Pictures) value of equal to or less than the FPS configured on the substream.

- **Hard Drive Temperature Threshold** - Set the maximum temperature for the VIGIL Server's hard drives. If a hard drive exceeds this temperature, a warning will be displayed and an entry placed in the *Audit Log*. The *View* button will open a window to display Information about the Hard Drives in the system, including *Temperature, Model, Serial Number* and *Firmware* version.
- **Scavenger Threshold** - Set the VIGIL *Scavenger Threshold* percentage. When a media drive's available capacity falls under the allotted threshold, VIGIL will begin scavenging the oldest footage / data on the drive to free up storage space.
- **Max Locked Video Disk Usage** - Set the maximum amount (as a percentage of your total video storage) of locked video than can be stored on the Server. When this threshold is reached, older locked video must be released to allow for new video locking.
- **AUX Device Settings...** - Open the *AUX Device Settings* window for configuring other attached devices such as DIO boards and encoders. See "Remote Client Retry Settings" on page 63 for more information.
- **Keyboard Settings...** - This feature is not available for Linux systems.

6.8 VIGIL Connect Tab

VIGIL Connect allows for simplified connections to Server. When VIGIL Connect is enabled, you can configure a VIGIL Client to connect with either the system's *Serial Number* or an *Alias* instead of the IP Address. This is especially useful in situations where the IP Address of the VIGIL Server may change without notice.

To utilize a VIGIL Connect Alias, click *Enable VIGIL Connect*. The following information prompt will deploy:

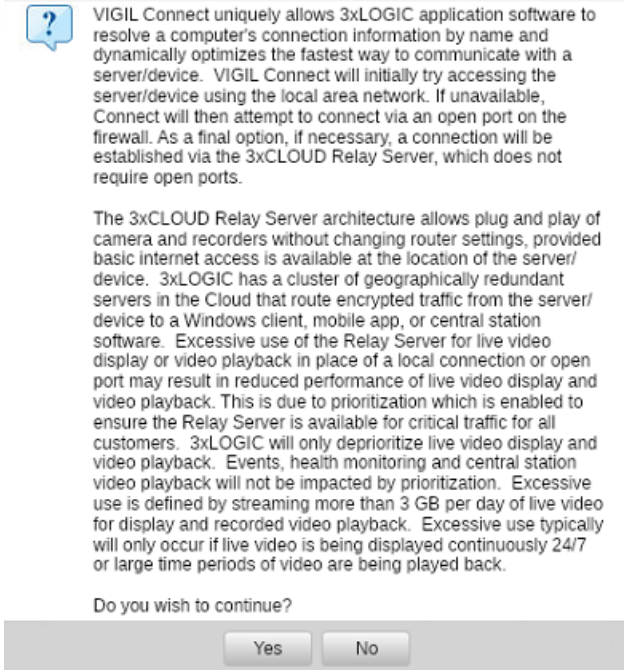


Figure 6-21:VIGIL Connect Info Prompt

If you have read and are in agreement with the information in the prompt, click *Yes* to enable VIGIL Connect. The below interface will deploy. VIGIL Connect settings are contained on the left-side with disclaimer information available at-right.

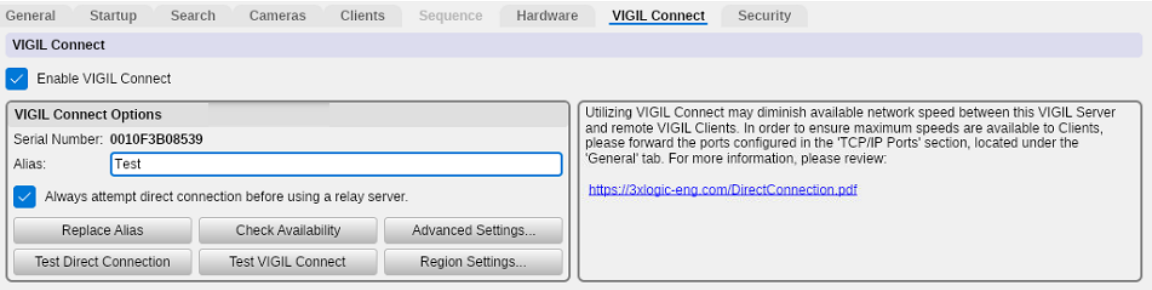


Figure 6-22: Settings - Server Settings Tab - VIGIL Connect Tab

- **Enable VIGIL Connect** - Check to enable VIGIL Connect. The first time you enable this option the system will check if your router is UPnP enabled. If it is, the port forwarding will be automatically created in the router for you. If it is not, you will receive a message stating this and that you will need to create the port forwarding in the router yourself. Please consult the

documentation for your specific router for how to configure port forwarding.

- **Serial Number** - The *Serial Number* of the VIGIL Server.
- **Alias** - You can configure an easy to remember *Alias* for the VIGIL Server so you do not have to remember the Serial Number. The alias is **case sensitive.**
- **Always attempt direct connection...** - Enable this option to always attempt direct connection first when using the VIGIL Connect service. If direct connection is unavailable, VIGIL will then utilize the VIGIL Connect Relay service to interface your VIGIL Server with VIGIL Connect-enabled devices and software. .
- **Replace Alias** - If a user is receiving a *Duplicate VIGIL Connect Alias* warning, or if a motherboard has recently been swapped on the system and desired alias is assigned to the old motherboard, clicking *Replace Alias* will open the Alias Swap web portal.
  - » Follow the instructions on the web page to swap the alias from the old motherboard to the new motherboard. The old motherboard's MAC address is required to perform the Alias replacement..
- **Check Availability** - Click this button to communicate with the VIGIL Connect Central Server and determine if the *Alias* is available. All aliases must be unique and if the check fails, the user will be prompted accordingly.
- **Advanced Settings...** - Opens the *VIGIL Connect Settings* window. If UPnP was not detected by VIGIL Server, you may retrieve port Internal Port and Port Mapping values here to manually enter into your router's port forwarding. Available ports are dependent on UPnP and enabled / disabled ports in Server Settings > General > TCP / IP Ports.

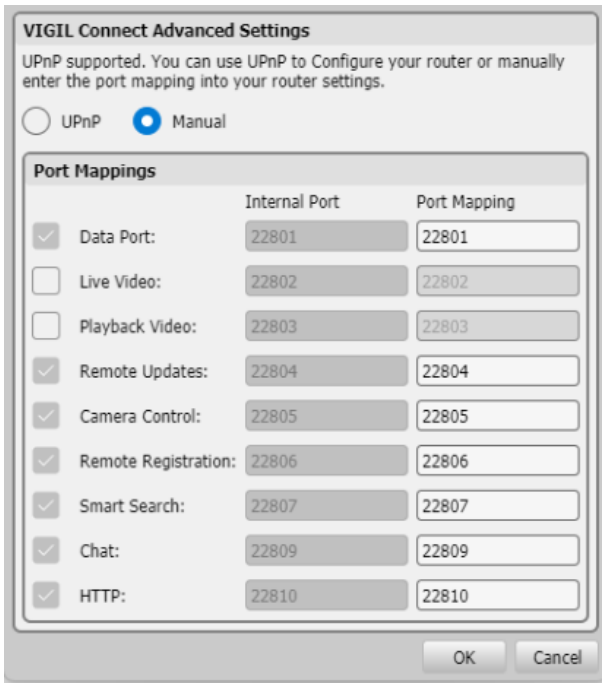


Figure 6-23:VIGIL Connect Advanced Settings

- **Test Direct Connection** - Clicking the *Test Direct Connection* button will open the below window. Every port will be tested and its status will be indicated with either a (connection failure) or a (connection success.)

» Click the *Test Connection* button to run the test again.

Figure 6-24:VIGIL Connect - Test Direct Connection Window

- **Test VIGIL Connect** - Tests VIGIL Connect using your current configuration.
- **Region Settings...** - Opens the VIGIL Connect Region Settings. Specify your region for improved VIGIL Connect performance.

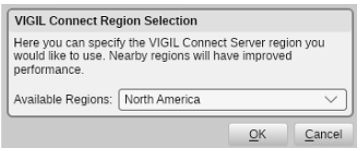


Figure 6-25:VIGIL Connect - Region Settings

6.9 Security

The Security tab features configuration options for security features of the VIGIL Server.

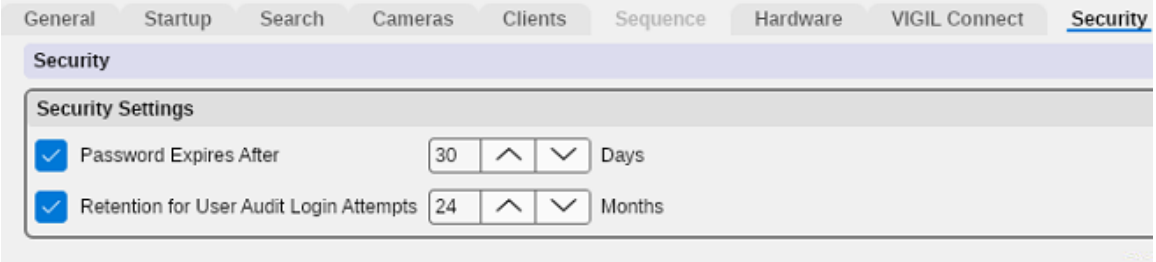


Figure 6-26:VIGIL Server Settings - Server Settings - Security Tab

- **Password Expires After** - IF enabled, the user can set the VIGIL Server USer password expiry interval (in days)
- **Retention for User Audit Login Attempts** - If enabled, the user can choose the maximum amount of time (in Months) to log login attempts for user audit reporting purposes.

7 VSMU - STORAGE TAB

The Storage tab configures video recording destinations and export destinations for the VIGIL Server.

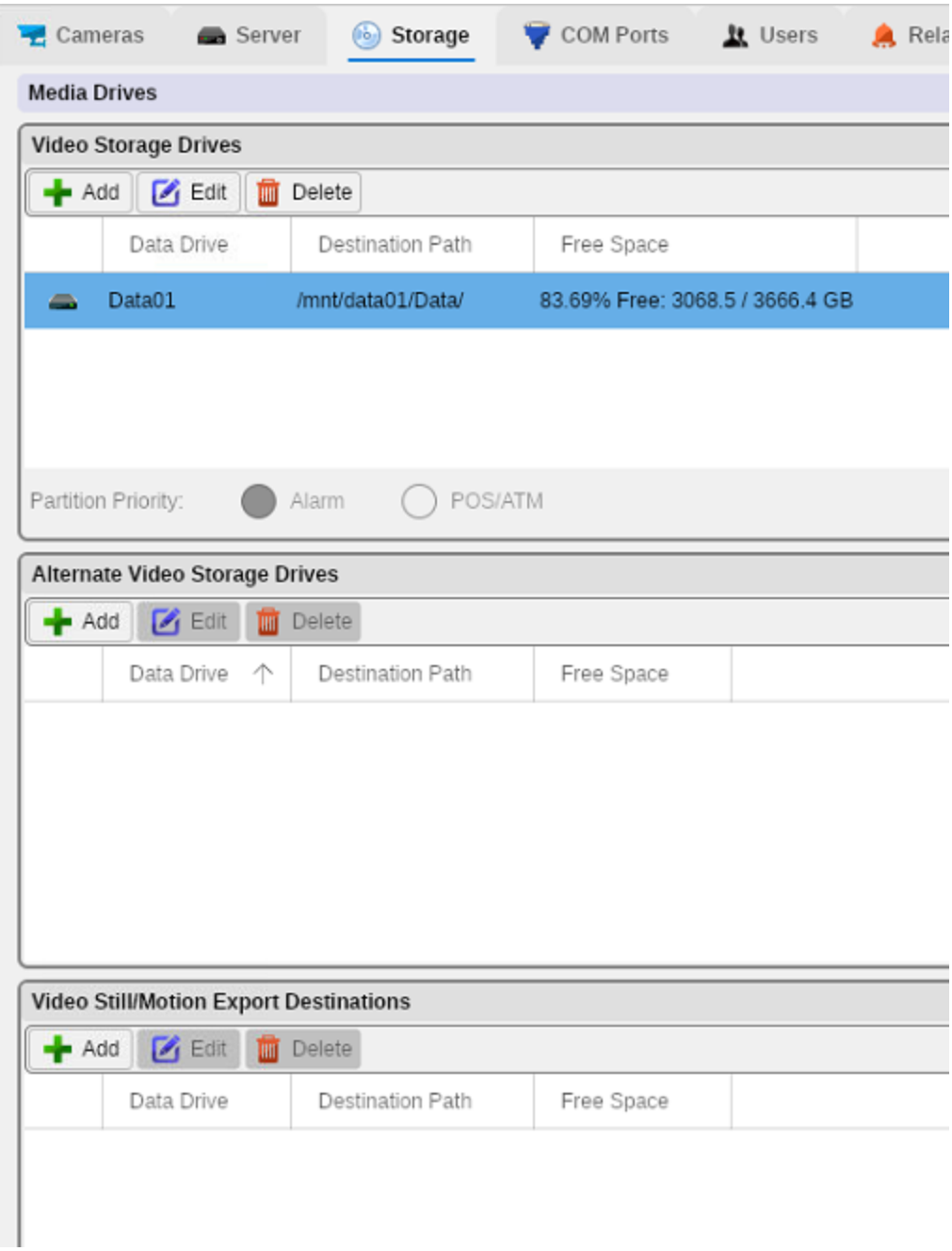


Figure 7-1: Settings - Storage Tab

There are three types of media storage drives: Video Storage Drives, Alternate Video Storage Drives, and Export Destinations. *Alternate Video Storage Drives* are only used if every *Video Storage Drive* is offline.

- **Add** - Opens the Media Control window to configure a storage location.
- **Edit** - Edit the selected location.
- **Delete** - Deletes the selected location.
- **Partition Priority** - If data partitioning is enabled, the priority can be set to Alarm or POS/ATM Data Alarm footage. For example, if a motion alarm and a POS/ATM data alarm occur on the same piece of footage, the priority determines into which partition the footage will be saved.
- **Limit Maximum Days of Video/Audio Storage** - Enable this option to set a maximum limit (in days) for footage and audio storage. Enter a maximum value in the available field. When this feature is enabled, the default value is 90 days.

e.g. **Example:** If this maximum value is set to 45 days, VIGIL will begin to scavenge footage and audio once 45 days of footage/audio retention has been reached.

Note: Deleting a location does not remove the physical destination, only the reference to it within VIGIL Server.

Note: If a *VideoStorage Drive* or *Alternate Storage Drive* is deleted, the user will be prompted whether they also want to delete any database records of the footage at that location and whether they want to delete any saved footage at that location.

7.1 Video Storage Drives

Video Storage Drives are the main drives where video footage is stored. If a *Video Storage Drive* becomes full, VIGIL Server will switch to the next *Video Storage Drive* for recording. Also, if all of the Video Storage Drives are offline, the *Alternate Video Storage Drives* will be used until they return online.

When adding or editing a video storage drive, the *Media Control* window is displayed.

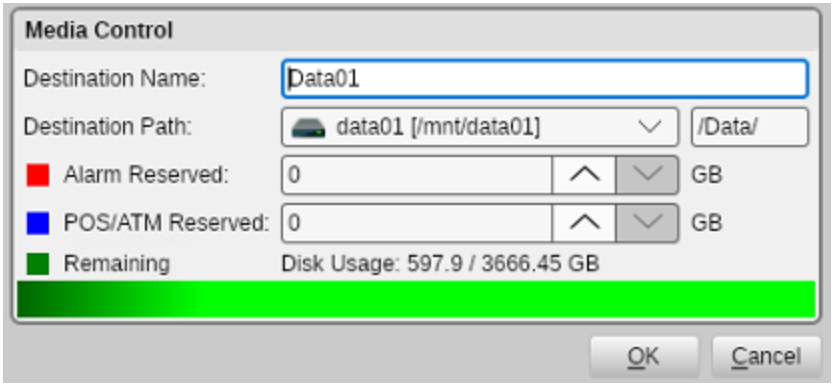


Figure 7-2: Settings - Media Drives Tab - Media Control Window

- **Destination Name** - The name for the video storage location.
- **Destination Path** - The hard drive and folder path to record video data to.
- **Alarm Reserved** - The amount of storage to be reserved for Alarm video footage.

- **POS/ATM Alarm** - The amount of storage to be reserved for POS/ATM Alarm video footage.
- **Remaining** - The amount of remaining available storage.

7.2 Data Partitioning for Video and POS/ATM Alarm Video Footage

Data partitioning has been added to VIGIL Server allowing for better user input as to how data is saved to the hard drive. Data partitioning allows you to set up logical divisions between standard alarm video files, POS/ATM alarm video files, and normally recorded video. This allows the video scavenging process to skip alarm video files and allows you to save these types of video footage for longer periods of time.

Instead of copying alarm footage under the normal areas for storage, it will be recorded to a special folder that is considered a separate entity. Normal video storage is scavenged and deleted as new footage is written, however these special folders are not scavenged normally; they will retain as much data as you have allotted for them in the *Media Control* window. Once they reach capacity, they will be scavenged, and the oldest video data will be removed to write new data. Since alarm and POS/ATM alarm data is less storage intensive, this data can have a much longer 'shelf life' on your VIGIL Server, depending on the size of the partition you create.

Note: This feature is not enabled by default.

7.3 Alternate Video Storage Drives

Alternate Video Storage Drives are emergency backup drives that are used only if all of the Video Storage Drives are offline. If an alternate video drive is being used, VIGIL Server will beep and a flashing *Critical Warning* message will be displayed. When the *Video Storage Drives* return online, the *Critical Warning* message will disappear; the Server will stop beeping and will switch back to recording to the main *Video Storage Drives*.

When adding or editing an *Alternate Video Storage Drive*, the *Media Control* window is displayed.

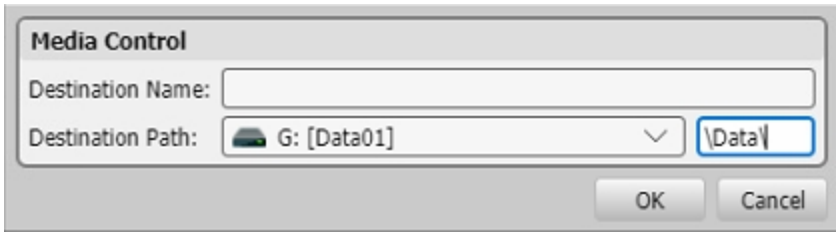


Figure 7-3: Alternate Video Storage Drives - Media Control Window

- **Destination Name** - The name for the *Alternate Video Storage* destination.
- **Destination Path** - The hard drive and folder path to record video data to.

7.4 Export Destinations

Video Export Destinations are used to store exported video footage. You must set up destinations here before you can save video footage or still images from VIGIL Server using the VIGIL Client application.

When an export destination is added or edited, the *Media Control* window is displayed.

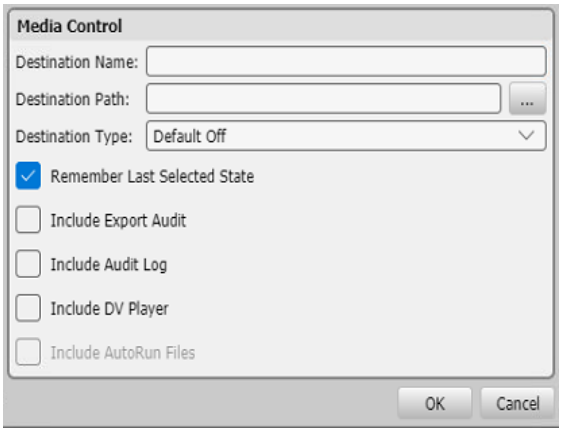


Figure 7-4: Settings - Media Drives Tab - Export Destinations - Media Control Window

- **Destination Name** - The name for the export destination.
- **Destination Path** - The path for the export destination. Click ... to browse to the destination.
- **Destination Type** - This setting affects how the destination appears in the export list.
  - **Default On** - The destination checkbox will be selected.
  - **Default Off** - The destination checkbox will not be selected.
  - **Silent Send** - All exports will also be sent to this destination without notifying the user.
- **Remember Last...** - When enabled, *Remember Last Selected State* remembers the previous state of the *Export Destination* > *Media Control* form. This feature is enabled by default.
- **Include Export Audit** - Saves a text file that contains a log of export activity to the destination. When this is enabled, users will be required to fill out a form each time they export.

Note: Must be enabled in conjunction with the Audit Exported Footage feature in the search settings for it to work.

- **Include Audit Log** - Saves a complete copy of the *Audit Log* to the same destination each time an export is done.
- **Include DV Player** - This feature is not available for Linux systems.
- **Include AutoRun Files** - Due to some Anti-Virus applications detecting all AutoRun files as a potential threat, disable this option to not include the AutoRun files with the export. If the AutoRun files are included, the DV Player install will run when the DVD is inserted to a system that does not already have *DV Player* installed.
- **Include AutoRun Files** - Due to some Anti-Virus applications detecting all AutoRun files as a potential threat, disable this option to not include the AutoRun files with the export. If the

AutoRun files are included, the DV Player install will run when the DVD is inserted to a system that does not already have *DV Player* installed.

8 VSMU - COM PORTS TAB

The *COM Ports Settings* tab configures the installed COM ports for communication with connected hardware such as POS data Connections and camera control.

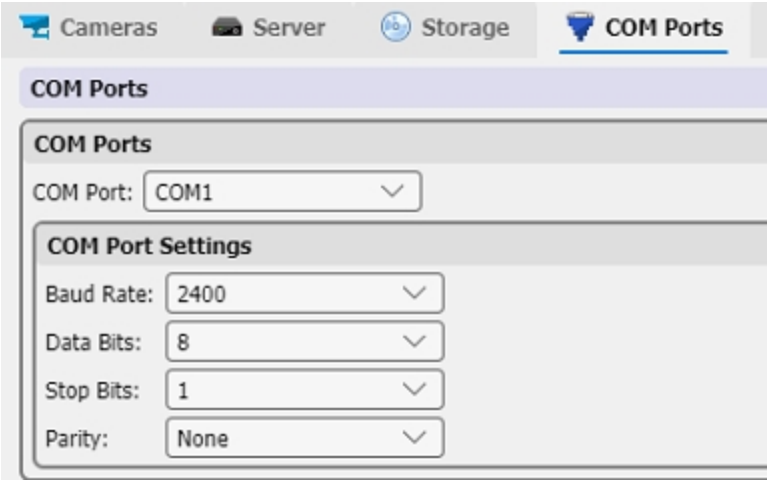


Figure 8-1: Settings - COM Ports Tab

Select the desired *COM Port* from the drop-down menu and adjust the *Baud Rate*, *Data Bits*, *Stop Bits* and *Parity* to match that of the connected hardware.

9 VSMU - USER AND GROUP MANAGEMENT TAB

The Users tab allows the configuration of users on the VIGIL Server with specific permissions. Each *User* belongs to a *Group* and each *Group* has a set of permissions which can also be configured within this tab. User permissions are derived from their group's permissions.

9.1 Users Tab

Click the *Users* tab to access the *User* configuration options.

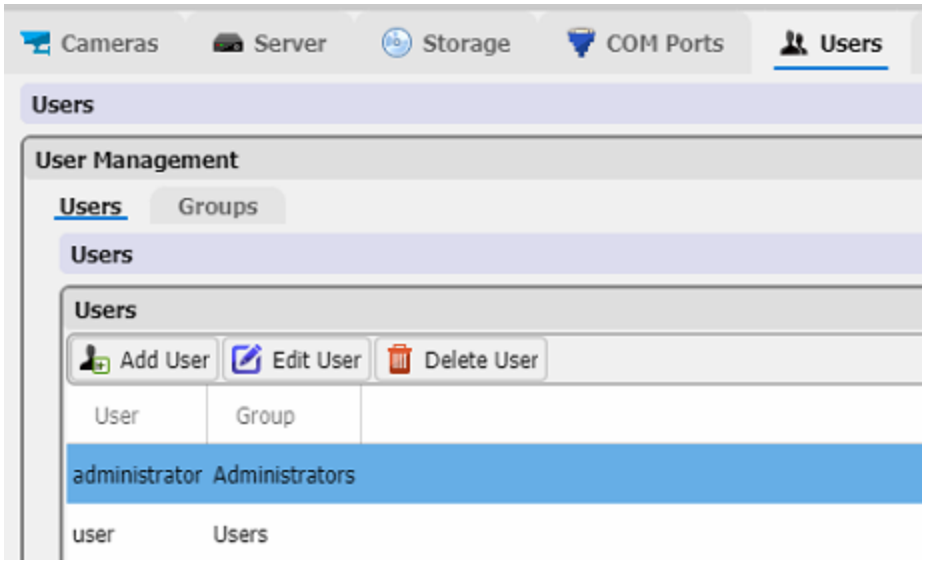


Figure 9-1: Settings - User and Group Management Tab - Users Tab

- **Add a User** - Click the *Add User* button to bring up the below window, select a *Group* and enter a password in the *Add New User* window. 3xLOGIC highly recommends the use of a secure, complex password for all user accounts to best safeguard your system.

Warning: VIGIL Server will prompt a user on login to create a more secure password whenever an insecure password is detected. Secure passwords should contain a mix of letters (lower and upper case), numbers and special characters.

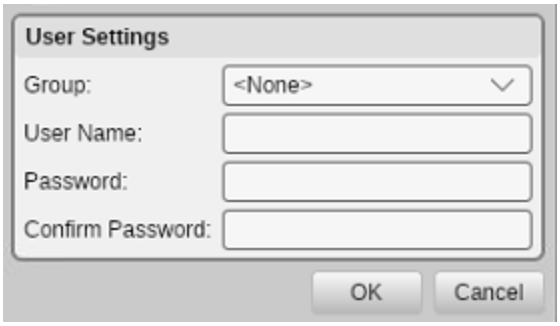


Figure 9-2: Add User Form

- **Edit a User** - Select a *User* from the drop-down menu and click the *Edit* button. The user's group or password can be changed, the user's name cannot.
- **Delete a User** - Select a *User* from the drop-down menu and click the *Delete* button.

- **Users Managed by VCM** - This option is only visible if this server has been configured for user management VCM-side. If this checkbox is toggled, than the VIGIL Server's users are currently being managed by VCM. The *VIGIL Server Settings- User Tabs* will display the following information text when this checkbox is toggled:

  The users for this VIGIL Server are currently set to be managed by a VCM. Any user or password changed will need to be performed on the VCM system and then the VCM will automatically update this VIGIL Server.

  The "Users Managed by VCM: option can be disabled if a VCM is no longer being used. It is important to verify that VCM is no longer managing the users before disabling this settings since any user list from VCM will take precedence and all changes done locally will be lost.

9.2 Groups Tab

Click the *Groups* tab to access the *Group* configuration options.

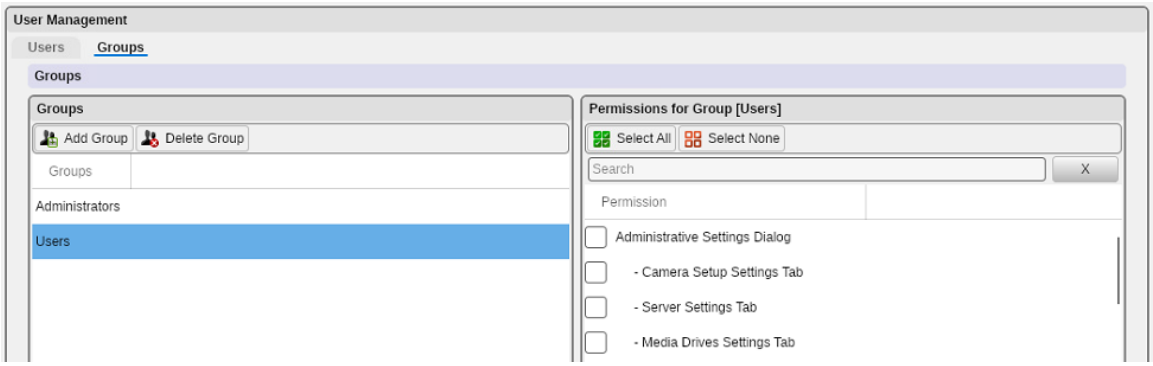


Figure 9-3: Settings - User and Group Management Tab - Groups Tab

- **Add a Group** - Click the *Add* button and enter a group name in the *Add New Group* window.
- **Permissions** - Select a group from left-hand *Group* menu and enable the check box beside each permission that the group will have in the right hand window. To disable permissions for the group, uncheck the box beside the permission. These permissions are useful for maintaining access controls to VIGIL server and can keep your settings safe from accidental and malicious tampering. To filter down the permissions list, enter a search term into the available search bar. Matching permission swill be displayed in the permissions list.

  See "User and Group Permissions List" on the facing page for a description of each permission.
- **Select All / None** - Enable all permissions or disable all permissions.
- **Search** - Utilize the search function to quickly narrow down larger group lists.
- **Delete Group** - Select a *Group* from the left-hand window and click the *Delete* button.

9.3 User and Group Permissions List

Below is a list of all VIGIL Server User / Group permissions with accompanying descriptions of the actions they permit. Permissions are applied to Groups and not individual Users. Thus, every user in the group will share the same permissions. Users can only be applied to a single group.

Permission	Description
Administrative Settings Dialogue: (Server Settings Tabs)	Selecting this permission will also give you permissions to all Advanced Settings Tabs for VIGIL Server, including: ■ Camera Setup Tab ■ Server Settings Tab ■ Media Drives Settings Tab ■ COM Port Settings Tab ■ User Management Tab ■ Relays/Alarms Settings Tab ■ Data Settings Tab ■ Audio Settings Tab. ■ Email Overview Settings Tab ■ OS Settings Tab Uncheck the tabs that you want to exclude access for the selected Group.
User Management Tab	Aside from granting individual access to the User Management tab , granular permissions for *Modifying User / Group Permissions* and *Adding Users / Groups* and *Adding Users to Own Group* also exist forgroups.
Codec Settings	Group has access to adjust codec settings for cameras on the server.
Recorder Controls	Enables / Disables access to the Recorder window in VIGIL Client.
Allow Video Playback	Video Playback on VIGIL Client.
Allow Still Image Export	Export Still Images using VIGIL Client.
Allow Still Image Email	Send email notification with attached still image
Allow AVI Export	Export Video in AVI format in VIGIL Client.
Allow Authentic Video Export	Export authentic video (MJPG) format in VIGIL Client..
Allow AVI Export (RapidStream)	Export video in AVI format compressed with RapidStream in VIGIL Client.
Allow Authentic Video Export (RapidStream)	Export video in Proprietary MJPG format compressed with RapidStream in VIGIL Client.
Allow Data Export	Export data associated with a camera in VIGIL Client.
Allow Audio Export	Export audio associated with a camera in VIGIL Client.
Allow Video Tagging	Ability to tag footage in VIGIL Client
Allow Live View	View live video at VIGIL Client
Allow Relay Control	Ability to change the state of a Relay
Allow Client Live Speeds Over 1 frame	If unchecked, the user cannot live view video at more than 1 FPS.
Allow Rapidstream on Live / Playback (Local or Remote)	Allows access to live view or playback using the RapidStream codec, either locally or remotely depending on the selected permission.
Allow Substream on Live (Local or Remote)	Allows access to live view or playback using the RapidStream codec, either locally or remotely depending on the selected permission.
Socket Activity Form	This is the Client Connections window, access from the toolbar
Allow Relay Control	Enables the user to toggle configured relays on and off via VIGIL Client

Permission	Description
Allow Export File Browsing	Ability to view the contents of the Exports folder through Client in main interface mode, remote browsing is covered by another permission.
Allow Export Delete	Ability to delete exported video from VIGIL Client.
Audio Recorder Control	Access to the Audio Recorder Controls tab in Server Settings > Audio > Other Settings.
Allow Audio Live	Stream audio associated with camera in live display in Client
Allow Audio Playback	Playback audio associated with a camera on search in VIGIL Client.
Allow Audio Talk	Two-way Audio controls in VIGIL Client
Allow Camera Control	Ability to manipulate a camera in VIGIL Client for PTZ cameras.
Allow Analog Output Configuration	Access to analog I/O configuration on a VIGIL Server
Allow Analog Sequence Control	Access to the Sequence window which controls the sequences configured in the settings -> server settings tab -> Sequences sub tab.
Auto reply Chat Audio Request	Automatically connect an audio chat request.
Allow Software Updating	This enables the update button in the server settings in client, VCM is not affected by this setting.
Allow Access to Custom Help Application	This turns on / off the button itself, if off, you will just see the regular About button.
Exit VIGIL Server	Users without this permission cannot exit server.
Shut Down VIGIL Server (Kiosk Mode)	Shut down the VIGIL Server within Kiosk Mode.
V-POS Administrator	Access to the Exceptions and the VPOS Settings forms in VIGIL Client.
Client Administrator- Main Interface Mode	Allows user to adjust VIGIL Client settings when Server option Use Client as Main Interface is checked.
Allow Footage Date / Time Range in Client	Ability to see the Footage Date / Time Range window.
Allow Audit Log	Allow access to User Audit in VIGIL Client.
Display Usage Performance Meter	This is the performance bar on the toolbar in VIGIL Client
User Audit Reports	Run a User Audit Report in VIGIL Client. This will enable the User Audit in the Treeview.
User Audit Settings	Access to modify User Audit Settings in VIGIL Client.
User Audit Exclusion	Enabling this permission will exclude the user groups data from being audited by the VIGIL User Audit tool.
Server Alarms	View server alarms in VIGIL Client.
POS/ATM Live	Ability to view POS/ATM Data in live mode. Option under Other tab in VIGIL Client.
Allow Remote Exports in Client	When exporting in client, users can choose to perform the export on the remote VIGIL Server.
V-POS Events	Run a report for all exceptions in VIGIL Client. Option under V-POS tab in VIGIL Client. Enables the VPOS Events Treeview option.
V-POS POS/ATM Search	Search data in Playback within the VIGIL Client software. Enables Treeview option and option under POS/ATM tab in Search.

Permission	Description
V-POS Quick Search	Enables the Treeview option, quick search lets you bring up footage / data with only and Event ID or a receipt # or an IDX.
Clearing V-POS Event Flags in Client	Allows the user to clear V-POS Event flags via the VIGIL Client ui.
Allow Camera Web Interface in Client	Ability to access a camera's web interface through VIGIL Client.
Allow Remote Export Browser in Client	Enables the remote export browser from which the user on client can copy exports on the remote server or to the client.
Allow to use VIGIL Relay Server (VIGIL Connect)	Enables the user to access features and services requiring the VIGIL Connect Relay Server(non-direct connections).
Allow Printing	Enables printing capability for the user.
Allow Screen Record in Client	Enables the use of the VIGIL Client Screen Record function.
Allow Remote Main Stream	Enables the use of a camera's mainstream when connecting in from VIGIL Client.
View Restricted	Enables a user to view restricted footage when connecting in from a VIGIL Client.
Allow to Restrict Video	Enables the ability for a user to restrict footage when connecting in from a VIGIL Client.
Manage, View and Restrict Video	Enables the ability for a user to manage, view and restrict video when connecting in from a VIGIL Client.
Allow to Lock Video	Enables the user to lock video (prevent footage scavenging) when connecting in from a VIGIL Client.
Manage and Lock Video	Enables the user to lock video and manage locked video when connecting in from a VIGIL Client.
Advanced Reporting: Employee Exceptions	Enables the user to access the Advanced Reporting > Employee Exceptions report in VIGIL Client.
Advanced Reporting: People Counting	Enables the user to access the Advanced Reporting > People Counting report when connecting in from a VIGIL Client.
Advanced Reporting: Average Dwell Time	Enables the user to access the Advanced Reporting > Average Dwell Time report when connecting in from a VIGIL Client.
Advanced Reporting: Shift Analysis	Enables the user to access the Advanced Reporting > Shift Analysis report when connecting in from a VIGIL Client.
Advanced Reporting: Shift Analysis Settings	Enables the user to access the Advanced Reporting > Shift Analysis Settings.
Advanced Reporting: Heatmaps	Enables the user to access the Advanced Reporting Heatmaps when connecting in from a VIGIL Client.
Audio Channel	Enables the user access to configured / edit the specified audio channel. All configured audio channels will be listed to allow for indivdual permission configuration per channel.
Camera	Access to view a camera in VIGIL Client . If you want to make the camera covert for a specified Group, deselect the camera in permissions.

10 VSMU - RELAYS / ALARMS TAB

The *Relays / Alarms* tab configures the input alarms and associated notifications settings for the VIGIL Server.

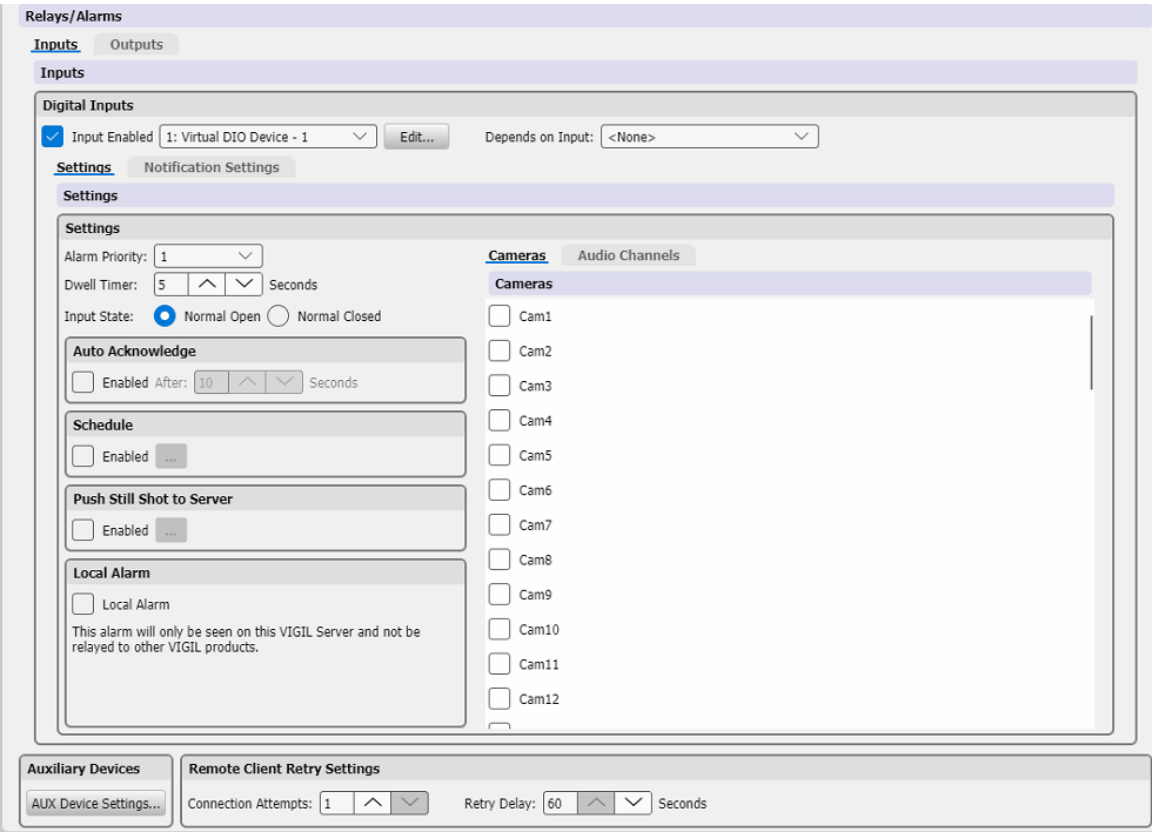


Figure 10-1: Settings - Relays / Alarms Tab

If no DIO device is configured, the form will be greyed out and will display the following warning:

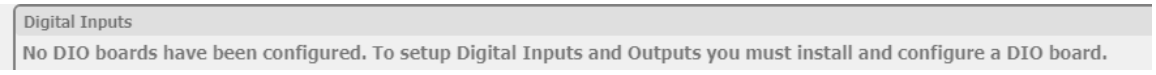


Figure 10-2: Advanced Settings - Relays / Alarms - No DIO Warning

If the user needs to edit DIO device settings, click the **AUX Device Settings** at the bottom-left of the window to open the settings form for configuring attached devices.

Digital inputs are alarms triggered by external circuits. The input alarm can be used to trigger video recording, audio recording or PTZ events.

10.1 Input

10.1.1 Input Number

Select the Input number from the I*nput Enabled* drop-down list. Click the *Edit...* button to rename the input for easier identification. To enable the input, click the check box for *Input Enabled*. If this input should only be active when another input is triggered, select the desired input from the *Depends on Input* drop-down.

10.1.2 Settings Tab

Configure the settings for the selected input. A *Camera* or *Audio Channel* must be selected for the *Digital Input* to remain enabled.

- **Alarm Priority** - Set a priority level for the alarm. These levels can be used to quickly assess the importance of multiple alarms.
- **Dwell Timer -** The number of seconds the *Digital Input* remains active after a *Trigger* occurs.
- **Input State: Normal Open / Closed** - Set the normal state for the *Digital Input*. When the *Digital Input* changes state, the alarm will be triggered.
- **Auto Acknowledge** - When enabled the *Alarm* will be automatically acknowledged after the selected number of seconds have passed.
- **Schedule** - Check *Enabled* and click ... to configure a schedule for when the *Digital Input* will be active. The Relay Schedule functions identically to Recording Mode Schedule. See "Scheduled Recording" on page 15
- **Push Still Shot to Server** - When *Enabled*, a still shot from the selected camera will be uploaded to the configured server when a *Digital Input Alarm* is Triggered.
- **Local Alarm** - When Client as Main UI is active and this *Local Alarm* is enabled, alarms will only be recieved on the Client as Main. Alarms will not eb realyed to other connected VIGIL products.
- **Cameras** - Select the *Camera(s)* to be associated with the *Digital Input.*
- **Audio Channels** - Select the *Audio Channel(s)* to be associated with the *Digital Input*.

10.1.3 Notification Settings Tab

Configure *Notification* and *Relay* settings for the selected *Digital Input*.

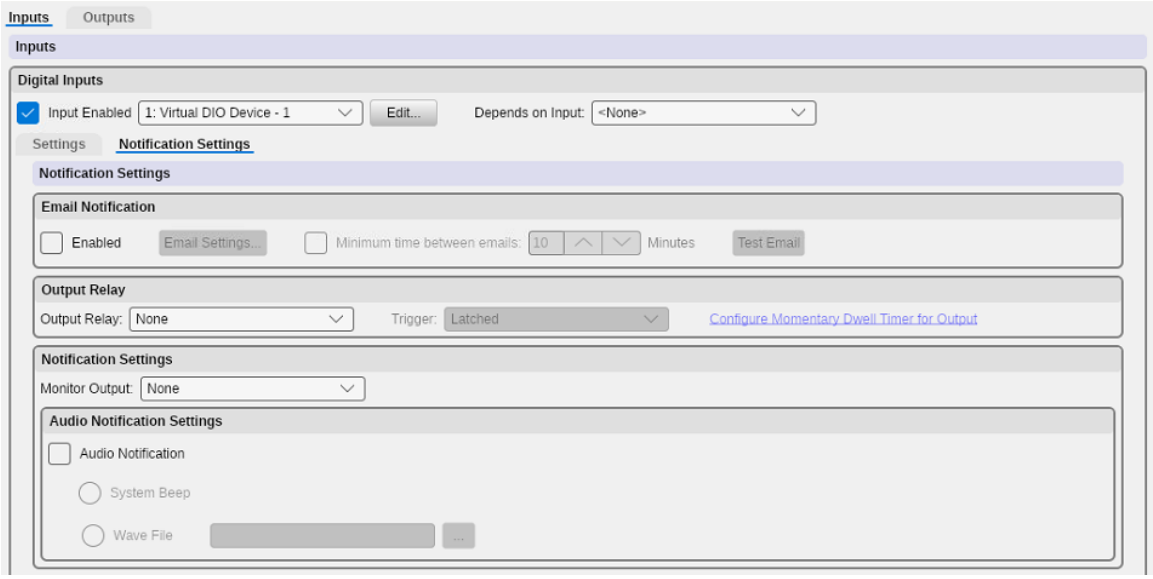


Figure 10-3: Settings - Relays / Alarms Tab - Notification Settings Tab

Email Notification

When enabled, an email is sent when an alarm is triggered.

To configure timed suppression for email notifications, enable *Minimum time between emails* and configure a time suppression duration. This will prevent notification recipients from receiving multiple alarms from the same prolonged VA alarm events.

Click *Email Settings...* to configure the email recipients and contents. Enter the appropriate details for the email that will be sent. To add, edit, or remove email recipients, use the *Recipients* section and the appropriate buttons. Enabling *Attach Still Shot* will add a still image of the selected cameras to the outgoing email. This image is from the beginning of the triggered alarm event.

Note: For email options to function properly, a valid SMTP server must be set up correctly in the *Email Overview Settings* tab.

Output Relay

Select the Output Relay to trigger when the *Digital Input Alarm* is triggered. The *Output Relay* can be set to *Latched* or *Momentary*.

Notification Settings

- **Monitor Output** - To display the Camera feed associated with the *Digital Input* on a Monitor during an alarm, choose the *Monitor Number* or *All Monitors* from the Drop-Down. This will be visible when connected with a VIGIL Client.
- **Suppress Email Notification** - This option, which will only work in conjunction with enabling the *Popup Alarm* Window, will prevent a flood of email alerts being sent out. It will only send out one email alert until the alerts have been acknowledged on the *Popup Alarm* window. If alerts have been set to auto acknowledge, it will send out an email after each period of auto acknowledgement has passed.
- **Audio Notification** - Enables *Audio Notification* which plays a system beep or wave file when an alarm is triggered. When *Wave File* is selected, click the ... button to browse for the .wav file that will be played.

10.1.4 Output

Output Relay Settings

Select Outputs from the top of the *Relays / Alarms* tab page.

Figure 10-4: Settings - Relays / Alarms Settings - Output Relay Settings

To configure an output:

1. Select an *Output Relay* from the drop-down. Select *Edit...* to configure Output settings.
2. Configure *Mode* and *Momentary Dwell Time* under the *Settings* section and assign the output to a camera via the *Cameras* list.
3. Select a default *Output State* (Normal Open, Normal Closed).

Output - External Notification Settings

If extneral noification for the selected output is desired, enable *External Notification* and click *Settings*.

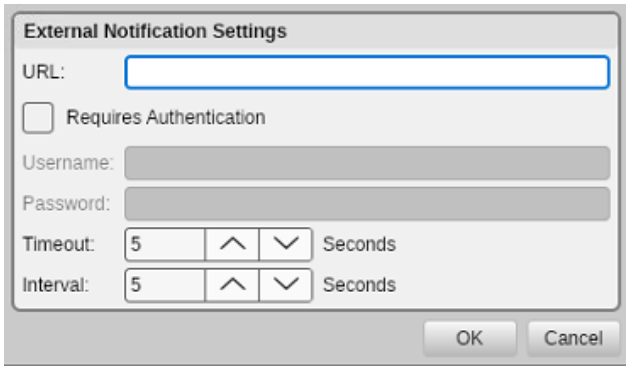


Figure 10-5: Output - External Notification Settings

When these settings are configured, anytime the selected output occurs, the configured URL will be visited by VIGIL Server. This can be used for third party applications that can generate alarm events / notifications any time the configured URL is hit.

1. Configure connection settings as required
2. Click **OK** to save.

Output - Relay Override

This logical function is used to override a relay when another relay is in use. This will cause a relay which would normally trigger to remain inactive when another specific relay has already been tripped.

10.2 Remote Client Retry Settings

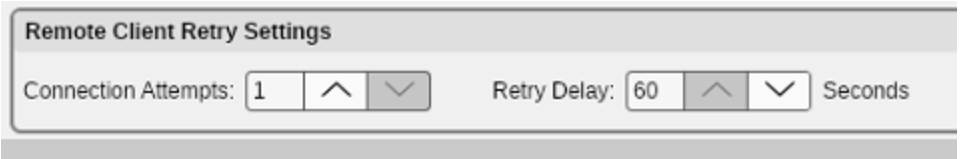


Figure 10-6: Settings - Relays / Alarms Tab - Remote Client Retry Settings

- **Connection Attempts** - The number of times to retry sending an alarm to a remote Client.
- **Retry Delay** - The number of seconds to wait between connection attempts.

10.3 Aux Device Settings

Click the *AUX Device Settings* button under *Auxiliary Devices* to configure other attached devices such as DIO boards and encoders.

Note: AUX Device Settings can also be launched from the Server Settings > Hardware Tab.

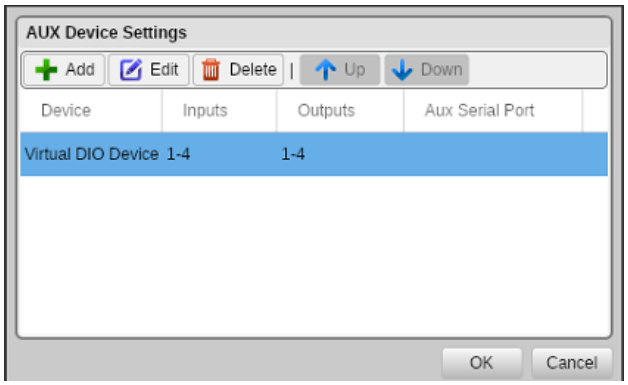


Figure 10-7:AUX Device Settings

Add / Edit form fields will change depnding on the selected devices (e.g the *DIO Quantity Settings* fields for *Virtual DIO Devices*, as pictured below).

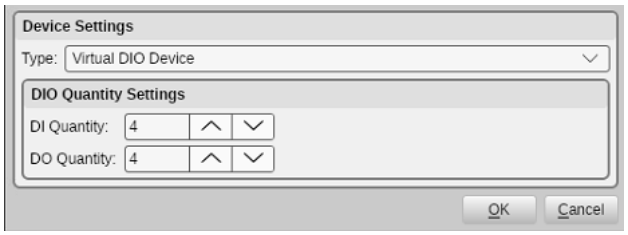


Figure 10-8: Edit DIO Device Window

11 VSMU - DATA TAB

The VIGIL Server software can be configured to receive and record information from POS/ATM data connections. The *Data* tab allows configuration of the *POS/ATM Connection Settings*.

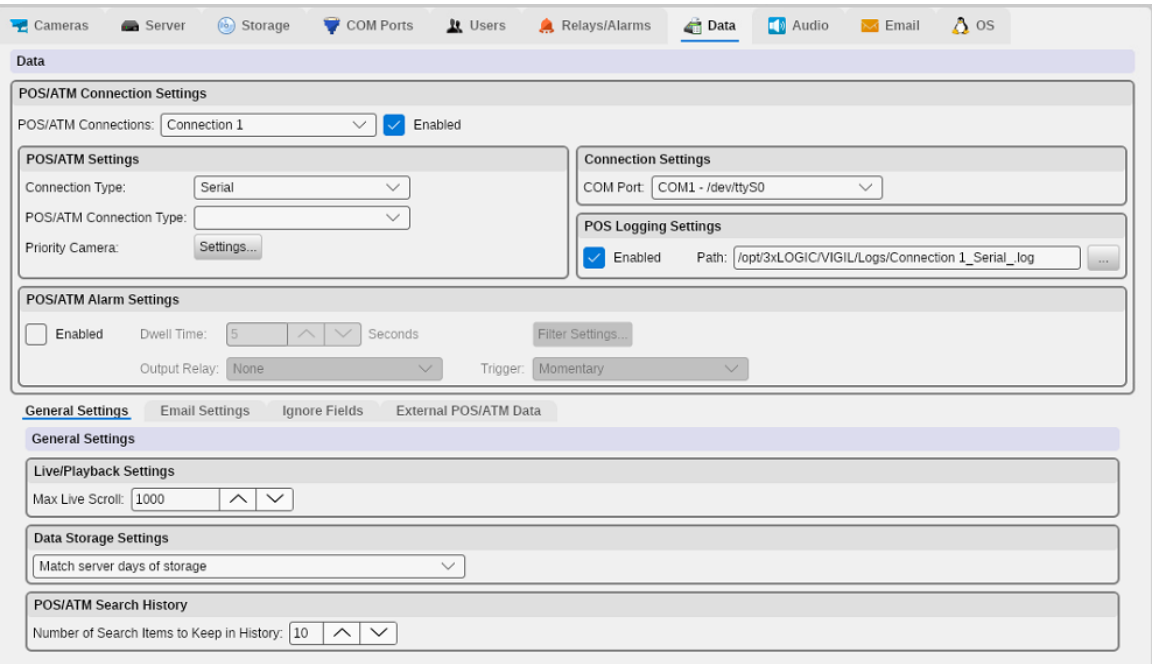


Figure 11-1: Settings - Data Tab

11.1 POS/ATM Connection Settings

- **POS/ATM Connections** - Enable the POS/ATM Connection.
- **Enabled** - Enable the POS/ATM Connection.

11.1.1 POS/ATM Settings

- **Connection Type** - Select whether the POS/ATM Data stream uses a Serial or IP based connection.
- **POS/ATM Connection Type** - Set the type of Connection for the POS Data stream.
- **Priority Camera** - Opens the Priority Camera Settings window.

Priority Camera Settings

The camera that is pointed directly at a POS/ATM Register is referred to as a *Priority Camera*. *Priority Cameras* are assigned to the a specific POS *Connection* and *Register Numbers*. Multiple *Connection / Register Numbers* can be assigned to a single *Priority Camera*. A camera's *Digital Presets* can also be used as a priority camera.

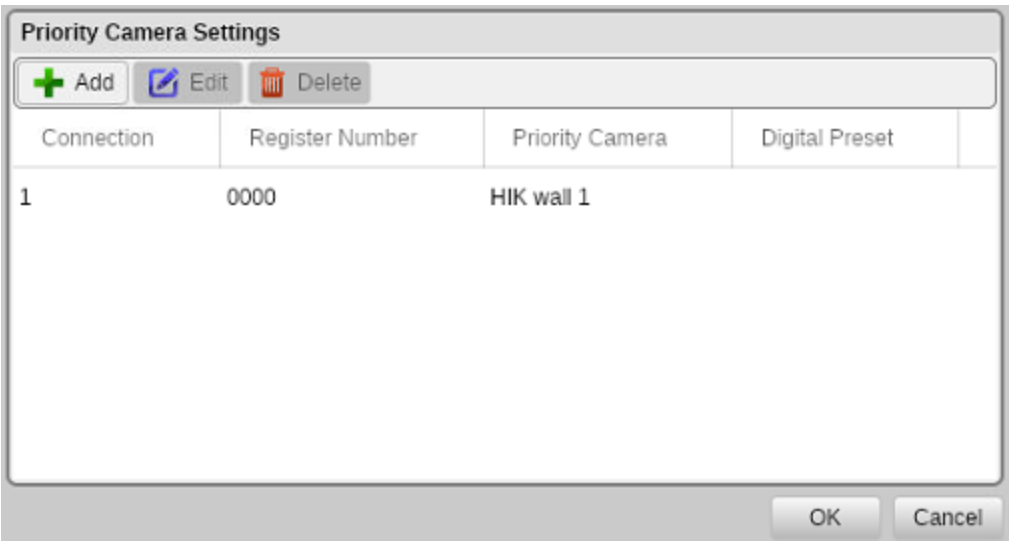


Figure 11-2: Settings - Data Tab - POS/ATM Settings - Priority Camera Settings

Note: Priority Cameras are global across Internal and External POS/ATM Data Sources.

Click the *Add* button to add a priority camera. The *Add / Edit a Priority Camera* window will deploy. The window features the configurable priority camera settings as well as a camera preview from the camera currently assigned as priority.

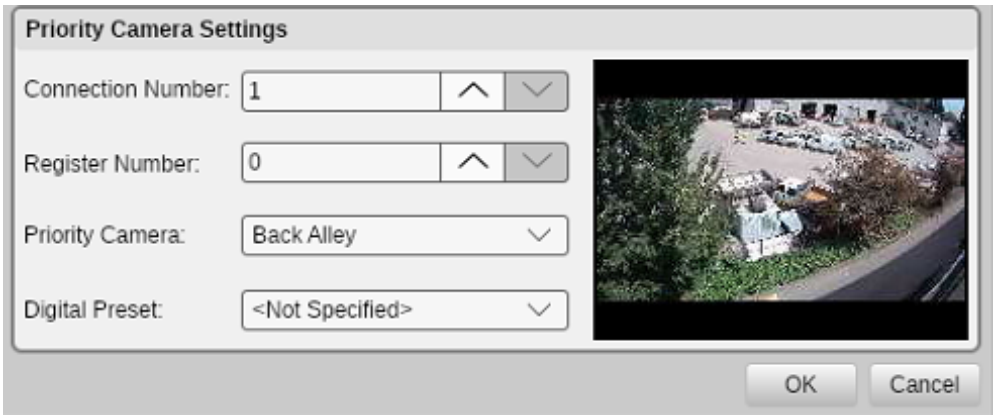


Figure 11-3: Settings - Data Tab - POS/ATM Settings - Priority Camera Settings - Add / Edit a Priority Camera

- **Connection Number** - Set the POS/ATM Connection number to associate with the priority camera.
- **Register Number** - Set the POS Register number to associate with the priority camera.
- **Priority Camera** - Select the VIGIL Server camera to be assigned as the priority camera.
- **Digital Presets** - If desired, select one of the chosen priority camera's *Digital Presets*. The preset will be used as the Priority Camera in place of the original camera image. If the camera currently selected in the *Priority Camera* field has no digital presets configured, this menu will be blank. See "Digital Presets" on page 24 for more information on configuring *Digital PTZ Presets*.

11.1.2 Connection Settings

- **COM Port** - When the POS/ATM connection type is set to Serial, select the COM port the Serial connection will use from the Drop-Down list.
- **Port** - When the POS/ATM connection type is set to IP Server, enter the Port that VIGIL Server will listen on for the POS/ATM Data stream.

POS Logging Settings

- **Enabled** - Check off this box to enable *POS Logging*. This log collects raw POS data before it is parsed. Click the ... button to select a log destination. When troubleshooting POS system issues, users may refer to this raw POS data log for information. The log file defaults to the naming convention of *Connection number - Connection Type - Parser Name. i.e Connection 1_Serial_Verifone Sapphire.log)*

11.1.3 POS/ATM Alarm Settings

This setting becomes available once *Priority Cameras* are configured.

- **Enabled** - Enable specific *POS/ATM Data* items to trigger an *Alarm Event*. This alarm event will be recorded to the POS Partition if data partitions have been enabled.
- **Dwell Time** - The time in seconds that the POS/ATM alarm event will record Video footage for.
- **Output Relay** - Select an *Output Relay* from the Drop-Down list to trigger when a *POS/ATM Data Alarm* occurs.
- **Trigger** - Select whether the Relay will be triggered momentary, or latched on for the durations of the *Dwell Time*.

Filter Settings...

Open the *POS/ATM Alarm Filters* window to configure POS/ATM events that will trigger *POS/ATM Data Alarms.*

Figure 11-4: Settings - Data Tab - POS/ATM Alarm Settings - Filter Settings

- **No Sale** - Enable *POS/ATM Alarms* for all 'No Sale' items.
- **Void** - Enable *POS/ATM Alarms* for all 'Void' items.
- **Value** - A *POS/ATM Alarm* will trigger for any item with the value that is configured. Choose *Greater than*, *Less than* or *Equal to* from the Drop-Down box, and set a value in the first entry field. If you select *Between*, enter a value in each box tor Acevedo entries that fall between the two specified prices.
- **Item / Codes Tabs** - Add or delete specific *Item* names or codes that will trigger a *POS/ATM Alarm*. The text must be an exact match for the POS/ATM data record including spaces, but it is not case sensitive.
- **Filter Method** - Select *AND* to meet all criteria listed before a *POS/ATM Alarm* is triggered. Select *OR* for any criteria to trigger a *POS/ATM Alarm.*

11.2 General Settings Tab

The *General Settings* tab controls the display and storage of POS/ATM Data.

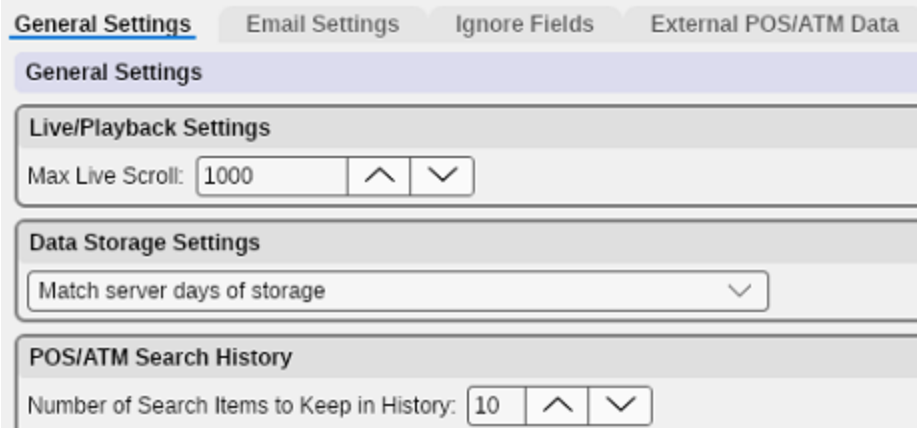


Figure 11-5: Settings - Data Tab - General Settings Tab

Live / Playback Settings	
Max Live Scroll	The maximum number of lines to display in the *POS/ATM Data (Live)* window.
Max Playback Scroll	The maximum number of lines to display in the *Data Search Results* pane of the *Search* window.
Data Storage Settings	
Records of Data Storage	The maximum number of POS/ATM data records to retain in the database.
POS Search History	
Number of Search Items to Keep in History	The number of items to retain in the *Item* drop-down in the *Search* window.

11.3 Email Settings Tab

The *Email Settings* tab allows users to configure email notifications containing filtered POS/ATM Data.

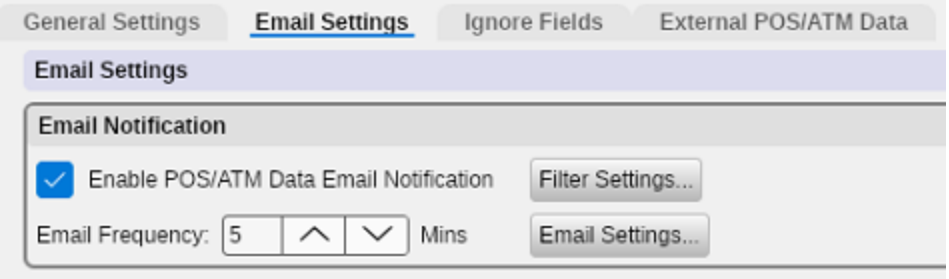


Figure 11-6: Settings - Data Tab - Email Settings Tab

- **Enable POS/ATM Data Email Notification** - When enabled, an email with POS/ATM Data will be sent to specified recipients. POS/ATM Data recorded since the last email and meet the criteria set in *Filter Settings...* are included in the email.
- **Email Frequency** - Specifies the time interval between outgoing emails.
- **Filter Settings...** - Opens the*Data Email Notification Filters* window where you can specify which conditions to filter when sending POS data emails.

Note: Leave the Filter Settings blank to receive POS data email notifications that include all POS/ATM Data since the last sent email.

- **Email Settings...** - Opens the *Email Settings* window, where details for the outgoing email may be entered.

Note: For email options to function properly, a valid SMTP Server must be configured in VIGIL Server *Email Overview Settings* tab.

11.4 Ignore Fields Tab

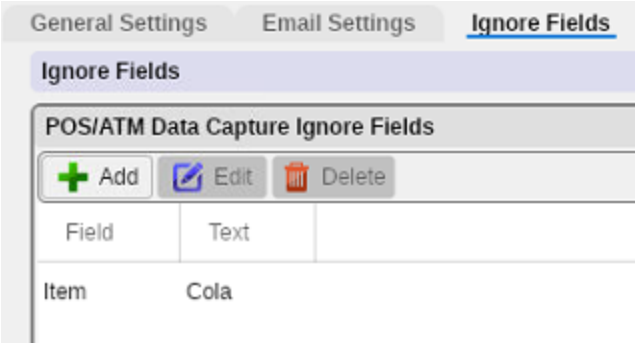


Figure 11-7: Settings - Data Tab - Ignore Fields Tab

The *Ignore Fields* tab allows POS/ATM data records to be ignored in the *POS/ATM Data (Live)* window and POS/ATM Search if they match the specified criteria.

Note:POS/ATM data email notifications will not be sent for the items added to the ignore fields list.

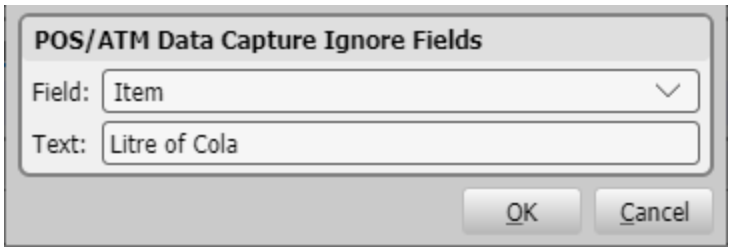


Figure 11-8:POS/ATM Data Capture Filter Configuration

- **Field** - Select Item or Code from the Drop-Down menu.
- **Text** - Enter the Text to ignore.

11.5 External POS/ATM Data Tab

This feature reconfigures data display windows for external data source capability and requires a 3rd party interface to operate. The *Priority Cameras* list is *Global* between *Internal* and *External* POS/ATM Data Types.

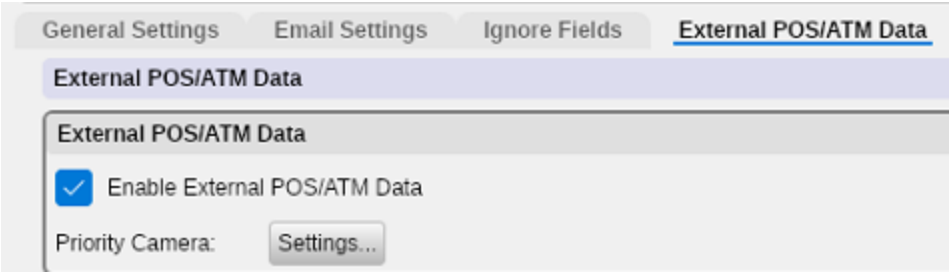


Figure 11-9: Settings - Data Tab - External POS/ATM Data Tab

12 VSMU - AUDIO TAB

The *Audio* tab allows users to add *Audio Channels* and *Audio Talk Devices* to VIGIL Server and configure how they are recorded. Like footage, audio can be listened to live or via playback using VIGIL Client.

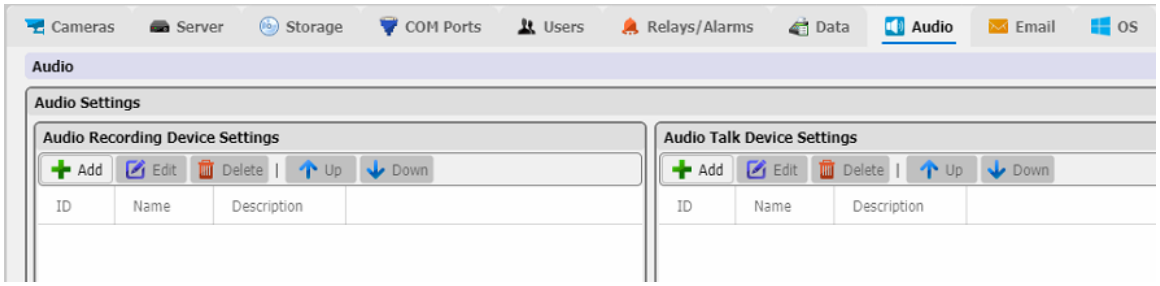


Figure 12-1: Settings - Audio Tab

12.1 Audio Recording Device Settings

Audio Recording Device settings are used to configure *Audio Sources* to be recorded on the VIGIL Server. These can be IP Cameras, IP Audio Devices, Capture Card Inputs or VIGIL Server Sound Card Inputs.

Figure 12-2: Settings - Audio Tab - Audio Settings Window.

Note: Capture card inputs and VIGIL Server audio inputs only require configuration of the *Channel Name* and *Compression*. The form will change to reflect this when either of these types is selected in the *Device* drop-down menu.

- **Channel Name** - Enter a name for the audio channel. This can be used to describe the location of the audio source.

- **Device** - Select the type of audio device. IP Audio from a supported IP Camera, Capture card inputs or VIGIL Server audio inputs.
- **Use settings from camera** - Enable to use settings from a currently connected IP camera. Some cameras require this option to be used or no audio will record.
- **Type** - Select the type of IP camera.
- **Address** - The IP address of the IP camera.
- **Port** - The Port used on the IP camera.
- **URL** - The camera URL for certain camera types.
- **User Name / Password** - The user name and password for the IP camera.
- **Timeout** - The period of time in seconds before a disconnection is determined to have occurred.
- **Compression** - Select *PCM* for no compression, or *High* for a compression ratio of 16 to 1.
- **Limit Max Storage** - Configure th e maximum amount storage (in days) for audio.
- **Enable Scheduled Audio Recording** - Enables scheduled audio recording. Click the **...** button to open the scheduler (see below). Click and drag across the schedule to confgure recording times. To import a schedule from an existing audio schedule, select the channel in the *Import from Audio Channel* drop-down and click **Import**. To apply the current schedule to all channels, toggle **Apply Schedule to All Audio Channels**.

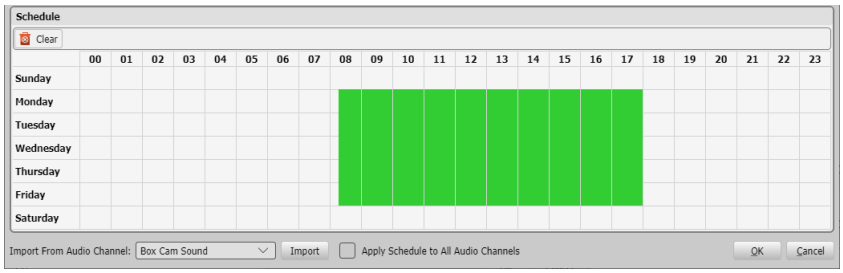


Figure 12-3: Audio Recording Scheduler

12.2 Audio Talk Device Settings

Audio Talk Device settings are used to configure Remote Audio Talk Devices for VIGIL Server to be used with VIGIL Client Audio Talk interface.. These can be IP Cameras or IP Audio Devices.

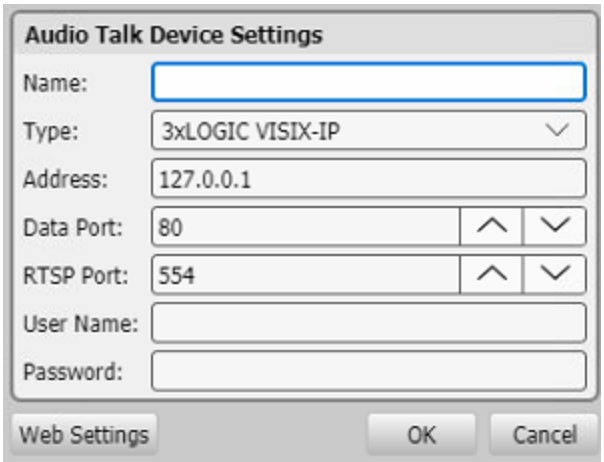


Figure 12-4: Settings - Audio Tab - Audio Talk Device Settings Window

- **Name** - Enter a name for the Audio Talk Device. This can be used to describe the location of the Audio Talk Device.
- **Type** - Select the type of Audio Talk Device. This can be an Audio Talk capable IP Camera or IP Audio Device.
- **Address** - The IP address of the Audio Talk Device.
- **Data Port** - The Data Port used on the Audio Talk Device.
- **RTSP Port** - The RTSP Port used on the Audio Talk Device.
- **User Name / Password** - The user name and password for the Audio Talk Device.
- **Web Settings** - Opens the device's browser UI, if available (dependent on device). Users can edit audio talk settings directly on the device from this UI.

12.3 Live Audio Settings

- **Force to User Software Live** - When enabled, live audio will be routed through the VIGIL Server's audio output instead of the capture card's audio output. This function is only available with some capture cards.

12.4 Audio Storage Drives

Create and configure *Audio Storage Drives*.

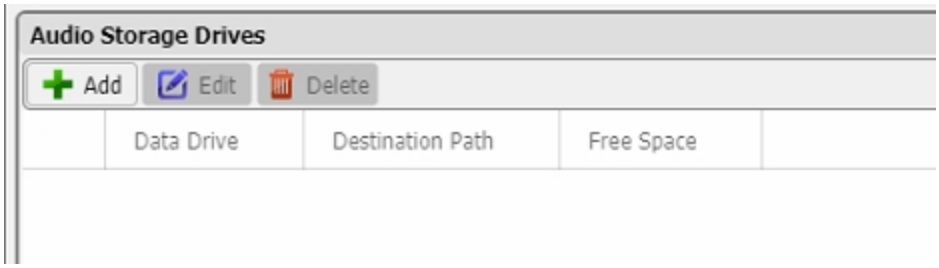


Figure 12-5: Settings - Audio Tab - Audio Storage Drives

Audio Storage Drives are defined in the same way as *Video Storage Drives*. It is recommended that the *Audio Storage Drive* be on a different drive than the *Video Storage Drive(s).*

12.5 Audio Talk / Chat

- **Audio Device** - Select the audio device that will be used by the VIGIL Server for voice communication in *Audio Talk Mode*. Set to *None* to disable Audio Chat.

12.6 Other Settings - Audio - Recorder Settings

Figure 12-6: Audio Settings - Other Settings - Audio Recorder Controls

Click the **Audio** button under the *Other Settings* portion of the *Audio Settings* form. This will launch the *Recorder Settings* window.

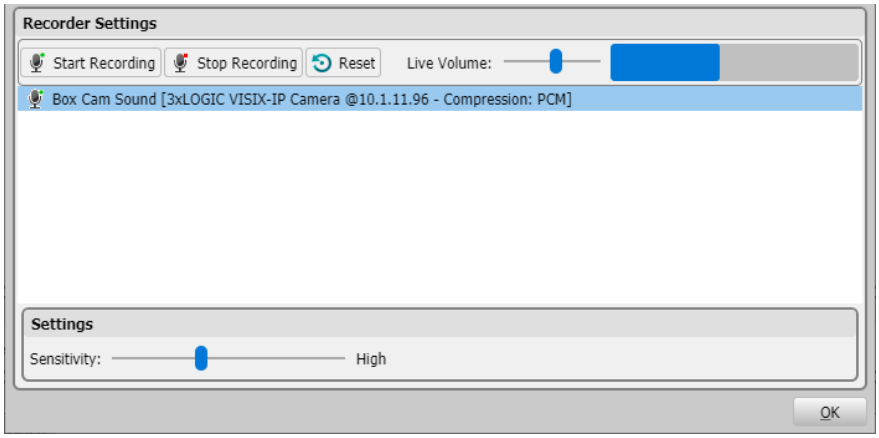


Figure 12-7: Audio Settings - Other Settings - Recorder Settings

From this interface the user can monitor Live Audio for the selected audio channel and view the incoming audio signal to help with sensitivity and volume adjustments. Available channels will be listed under the VIGIL Server node in the bottom portion of the form. The following icons act as recording indicators for the channels:

Indicator	Description
	The channel is currently recording audio.
	The channel is set to record, but there is no audio detected.
	Audio recording has been stopped on this channel.

Adjust *Live Volume* using the slider bar and use the audio visualizer to help preview sensitivity and recording volume. Click the **Audio** button and select **Stop Monitor** to stop monitoring audio. The user can also view audio channel status and to manually stop or start the recording of specific audio channels. See below for descriptions of the available options / controls.

- **Start Recording** - Starts recording audio on the selected channel.
- **Stop Recording** - Stops recording audio on the selected channel.
- **Sensitivity** - Controls the sensitivity of the audio detection. Higher sensitivity will trigger audio recording at the slightest noise while lower sensitivity will only trigger audio recording with louder noise. Positioning the slider far left will set the audio channel's record mode to *Always On*. Positioning the slider far-right will set the audio channel's record mode to *Alarm Only.*
- **Reset** - Reset the current configuration to default settings.

13 VSMU – EMAIL OVERVIEW TAB

From the *E-Mail Overview* tab, a user can configure the VIGIL Server's outgoing email settings including SMTP configuration and e-mail details.

Also available are an *E-Mail Address Master List* and a list of local *Configured Email Recipients.*

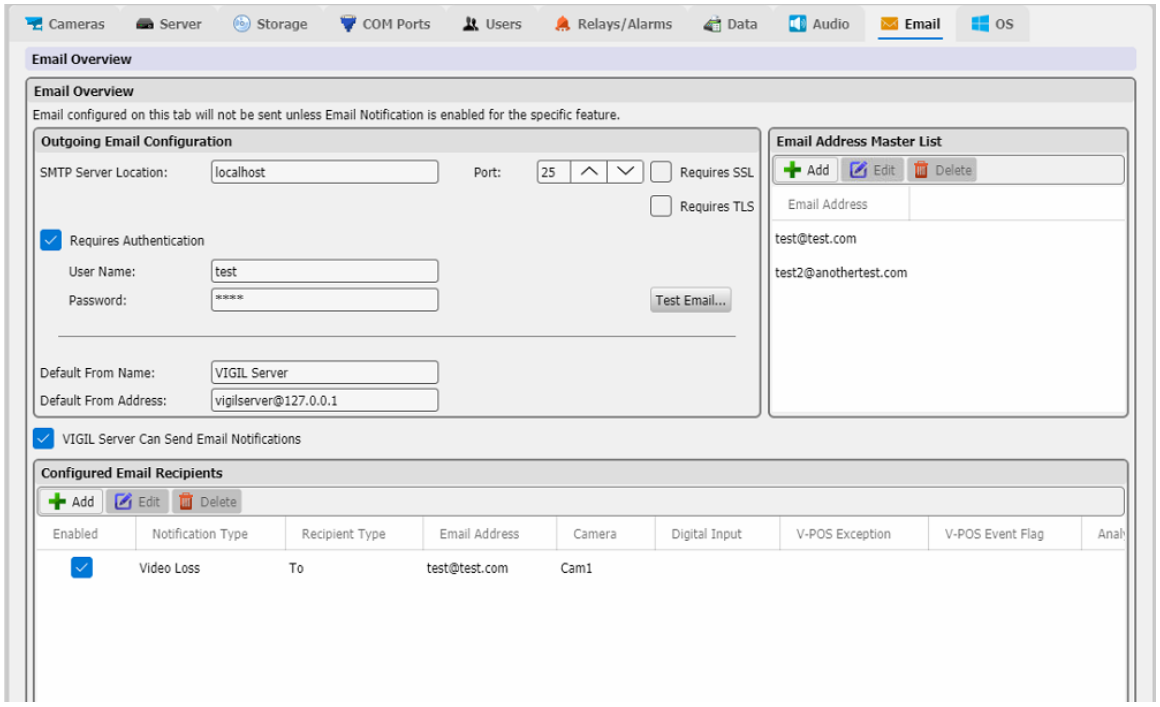


Figure 13-1:VIGIL Server Settings - Email Overview Tab

- **SMTP Server Location** - The SMTP Server location.
- **Port** - The E-Mail Server port.
- **Requires SSL** - Check-off this box if SSL certification is required.
- **Requires TLS** - Check-off this box if TLS certification is required.
- **Requires Authentication** - If the Email Server requires authentication, check-off this box and enter the appropriate email / username and password.
- **Default From Name** - The default From name in outgoing emails sent from this VIGIL Server.
- **Default From Address** - The default From Address in outgoing emails sent from this VIGIL Server. *VIGILServer@127.0.0.1* (local host) is used by default, however a custom address can be entered if the correct SMTP Server settings are configured. If SMTP authentication is required for your mail server, the *From*address will be the user name / email that was entered when enabling *Requires Authentication*, regardless of what is entered in this field.
- **Test Email...** - Click this button to test the connection and confirm the details you have configured are accurate.

E-Mail Address Masterlist

All e-mail addresses configured on the VIGIL Server will be compiled here. New addresses can also be added from this window. Click *Add* and enter a new address to add another entry to the list. To

edit an existing entry, select it in the list and click the *Edit* button. To delete an existing entry, select it in the list and click *Delete*. Addresses in the masterlist may or may not be configured as an email recipient.

Configured Email Recipients

All email recipients on the VIGIL Server will be compiled in this list alongside information regarding their notifications settings.

E-Mail recipients can also be configured in this list, though the recipient address must exist in the Email Address Masterlist before being added as a recipient.

To disable / enable a recipient, toggle the check-box next to the address entry.

Click *Add* to add a new e-mail recipient. To edit an existing recipient, select the entry from the list and click *Edit*.. To delete an existing entry, select the entry from the list and click *Delete.*

Adding an Email Recipient

When Adding or Editing an e-mail recipient, the Email Notification Recipient Settings window will deploy.

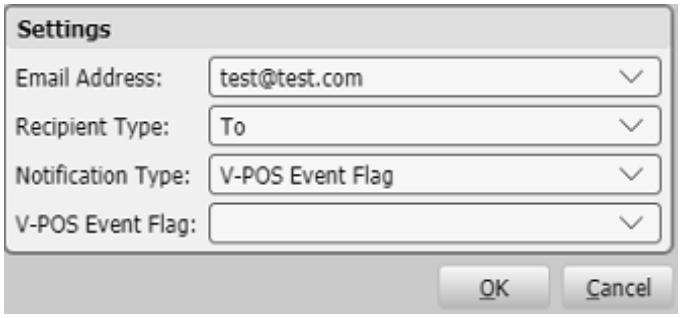


Figure 13-2: Email Notification Recipient Settings Form

When adding or editing an e-mail recipient, the *Email Notification Recipient Settings* window will deploy.

- **E-mail Address** - Select an e-mail address. Addresses must be present in the E-mail Address Masterlist to be added to a recipient.
- **Recipient Type** - Select recipient type. To, CC and BCC are available.
- **Notification Type** - Select the notification type. Available options include: *Video Loss, Video Motion Alarm, POS/ATM Data, Digital Input, V-POS Exceptions, Video Analytics* and *V-POS Event Flag* Each type represents different notification trigger. Recipients can also be added from the appropriate settings form related to your notification type.
- **Camera** - Select the associated camera.
- **Digital Input** - If Notification Type is set to Digital Input, select the input number here.
- **V-POS Exception** - If the Notification Type is set to V-POS Exception, select the configured exception here.
- **V-POS Event Flag** - If the Notification Type is set to V-POS Exception, select the configured flag here.
- **Analytics Rule** - IF the Notification Type is set to Video analytics, select the configured rule here.

Click *OK* to save the new recipient.

14 VSMU - OPERATING SYSTEM (OS) TAB

The Operating System tab features general settings related to the system's OS.

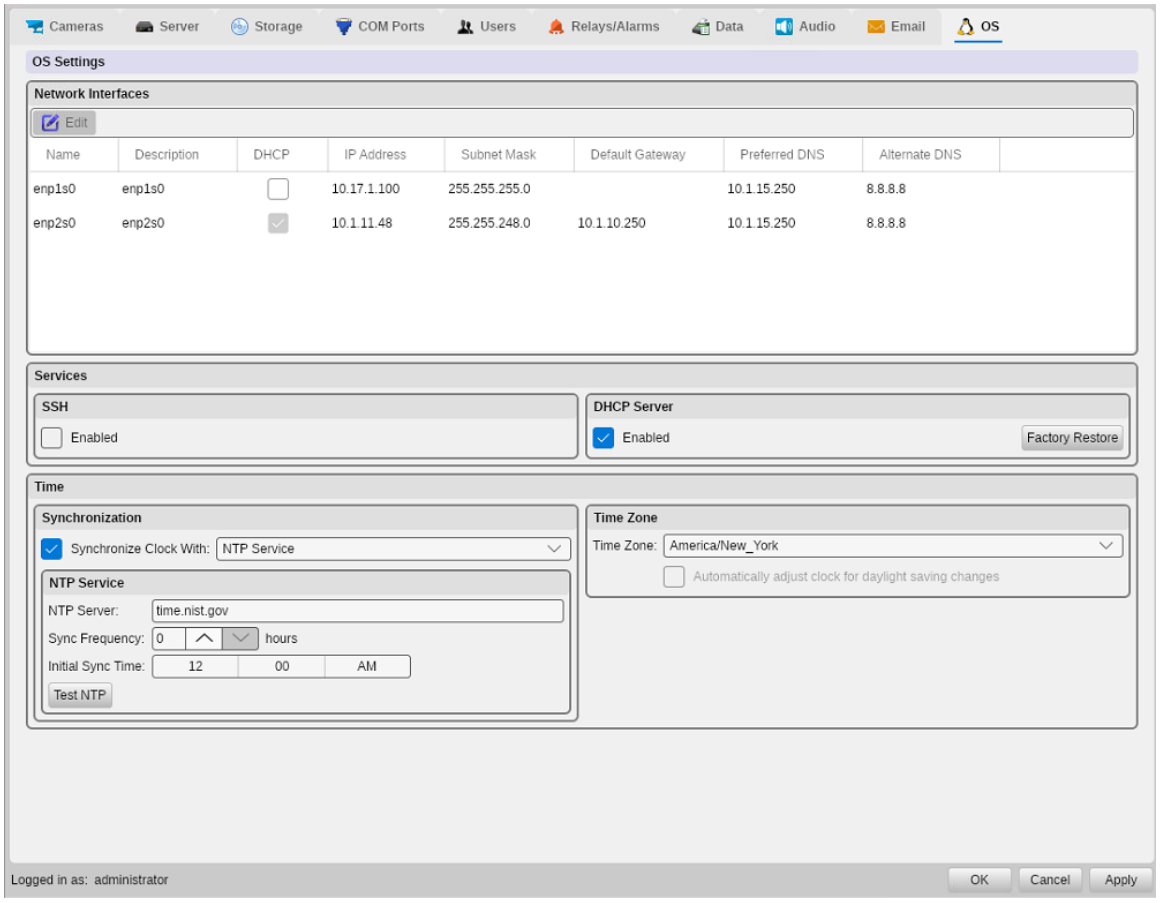


Figure 14-1:VSMU - OS Tab

14.1 Network Interface

To edit system network adapter settings, select the desired NIC from the list and click the *Edit* button. The *Edit Network Interface* window will launch.

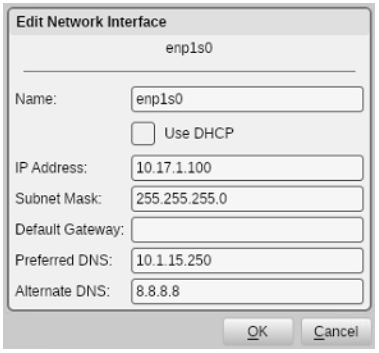


Figure 14-2: Edit Network Interface

Fill in adapter settings required. *Name*, *IP Address*, *Subnet Mask*, *Default Gateway*, *Preferred DNS* and *Alternate DNS* can be configured in this form.

14.2 Services

- **SSH Server** - Enabling this option will turn on SSH.
- **DHCP Server** - Enables the embedded PoE interface's DHCP Service (assigns camera IPs). Click **Factory Restore** to restore DHCP settings to default.

14.3 OS Time Settings

- **Synchronize Clock With** - VIGIL Server can connect to a time server to synchronize the VIGIL Server time. When enabled, you can choose to sync with either an NTP server or to another PC that can respond to a NET TIME request. You must specify which NTP or NET TIME PC to synchronize with. If the VIGIL Server system's time is off by more than twelve hours, the time will not be synchronized. See below for for descriptions of required fields unique to NTP.
  - **NTP Server -** Etner the NTP server's domain name.
  - **Sync Frequency** - Set this value (in hours) to configure how often the VIGIL Server will sync with the NTP Server.
  - **Initial Sync Time** - Set this value to configure the initial synchronization time. If the *Sync Frequency* value is set to any other value than 24 hours, the initial sync time will only be used for the initial synchronization and any future auto-synchronizations will be performed according to the *Sync Frequency* value.
  - **Test NTP** - Attempts to synchronize the time on the VIGIL Server system immediately

Note: The NTP test will not record an event in the Windows Event log if the time is already correct.

- **Time Zone** - Select the Time Zone for the VIGIL Server.
  - **Automatically adjust clock for daylight savings time** - Enable this option to have VIGIL automatically adjuts the clock for daylight savings time.

15 ON-BOARD ANALYTICS

When configuring a VISIX Camera with available on-board VCA analytics, the *On-Board Analytics* button will be visible on the *VSMU>Camera Setup >Network Camera Settings* form. Click the **On-Board Analytics** button to launch the *On-Board Analytics* utility.

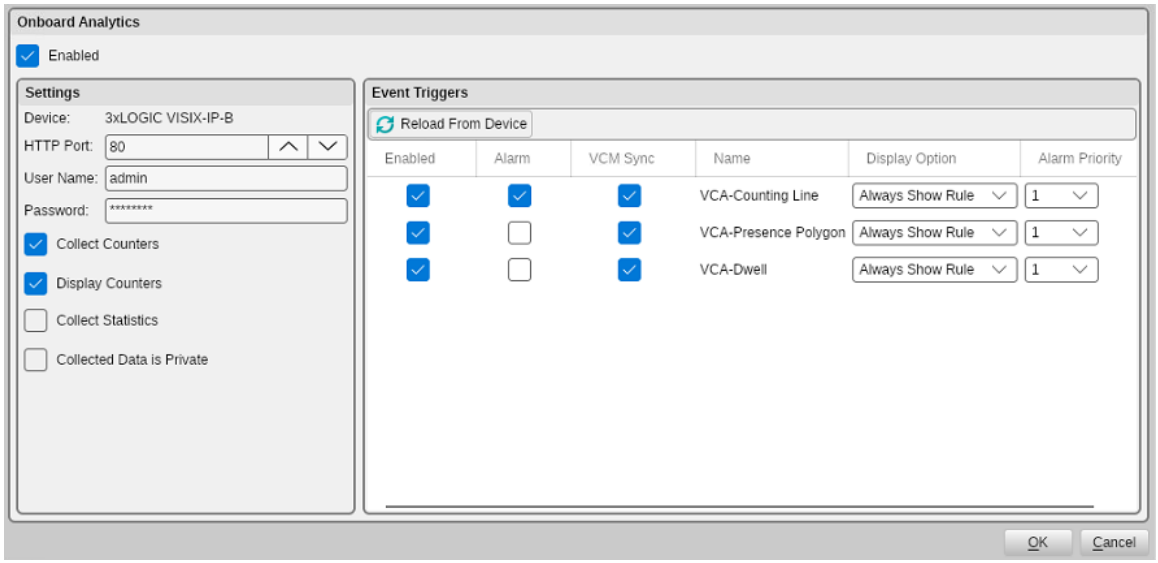


Figure 15-1: On-Board Analytics Window

This window will display connection information for the camera (automatically populated by VIGIL Server) as well as VCA rules options. It will also list all VCA analytics rules that have been constructed on the camera. VCA rules will populate the *Event Trigger* list. Each component of the *On-Board Analytics* utility is described below.

- **Enabled** - Click this button to enable VIGIL Server to detect on-board analytics rules on the camera.
- **Device Type** - List the type of device / camera being edited or added.
- **HTTP Port** - One of two ports used to connect to the camera's analytics data.
- **Username / Password** - Login credentials are required to sign in to the camera. These fields will be auto-populated by VIGIL Server.
- **Collect Counters** - Enables the collection of data counters
- **Collect Statistics** - Enables the collection of analytics statistics
- **Collected Data is Private** - This feature prevents VIGIL Central Management from acquiring analytics information collected by the camera and will overrule VCM Sync if enabled for a rule / event trigger.

Event Trigger Configuration

- **Reload from Device** - Reload rules from the connected camera. The rule list will be updated with rules currently configured on the camera.
- **Edit** - Edit the rule's *Display Options* (*Always Show Rule*, *Never Show Rule*, *Show Rule When Alarmed*).

- **Enabled** - Click this rule to enable rule data insertion in the VIGIL database. This will be enabled by default.
- **Alarm** - Enable ths option to trigger an alarm in VIGIL Server when the rule is triggered.
- **VCM Sync** - Enable this option to insert event rule data into the VCM Central Analytics datbase (if VCM has been configred to Manage Analytics for the VIGIL Server). If *Collected Data is Private* is enabled for this camera, this setting will be ignored.
- **Name** - The Name of the rule.
- **Display Option** - The current *Display Option* for the rule. Display options can be edited by selecting a rule and clicking **Edit**.
- **Alarm Priority** - Assign a priority level for alarms triggered by this event rule.

Once a rule is added to VIGIL Server, VCA analytics data generated by the rule will be inserted into the VIGIL database. VIGIL Server's VA rule settings can be viewed from the *Camera Setup* > *Video Analytics tab*. See "Camera Setup - Advanced - Video Analytics Tab" on page 28 for more information.

16 REGISTRATION

If modules of VIGIL Server are in use during the 30 day trial period, a screen will pop up to remind the user that there are active unregistered modules. The reminder screen will only list modules that are actively being used, pressing *Remind Me Later* will repeat the reminder in 24 hours.

To register VIGIL Server modules, shut down the VIGIL Server software then click the Linux®Start menu and select *VIGIL Applications >VIGIL Register*The VIGIL Registration utility will launch.

Figure 16-1:VIGIL Registration Utility

16.1 Manual Registration

To manually register modules:

1. Choose the desired module from the *Unregistered Modules* drop-down.
2. Enter the registration key provided to you by your sales representative.
3. Click ***Register.***

The registration process for the selected module is complete.

16.2 Auto-Registration

As an alternative to manual reigstration, a user can use **Online Import** to automatically import all keys associated with the system's serial numbera via 3xLOGIC WebReg. Simply click the button and allow the import to complete. Alternatively, you may use an auto-registration XML fileusing the **Local Import** option if you have received one from your sales representative . To use a local xml file.

1. Click the ***Local Import*** button.
2. Locate the file .xml license file in the available file explorer and click **Open.**

All modules associated with the.xml file will now be automatically registered.

16.2.1 Requesting Registration Keys

If you have yet to receive registration keys, keys can be requested. To request keys:

1. Click the ***Key Request Form...*** button
2. Check-off the appropriate modules for which you require registration keys and click ***Save***.
3. Send the resulting .xml file to your 3xLOGIC sales representative.

The representative will contact you to complete the transaction and will provide you with the appropriate keys for the auto-registration XML file.

16.3 Re-Registering Upgraded Modules

e.g.

Example: A VIGIL Server system currently has 8 Network Camera Channels licensed and registered. The VIGIL Server's owner has purchased a new 8 Network Camera Channel license to double the VIGIL Server's camera capacity to 16. The owner has been supplied the appropriate registration key for the new license by their sales representative. The below steps must be followed to successfully re-register the upgraded module to allow for access to the new camera channels.

To re-register an upgraded module:

1. Select the module from the *Registered Modules* list and press the ***Delete*** key on the keyboard to remove the original module.
2. Re-select the module from the bottom *Unregistered Modules* list. Enter the upgraded module's new license key and click ***Register***. If you have been provided an .xml license file, you can use the alternate auto-registration method (outlined in Section 1.2 of this tech tip) to complete registration.
3. Launch VIGIL Server.

The re-registered module will now be active. If the VIGIL Server software was not shut down during registration, a software restart is required for changes to take effect.

17 TOOLS

Several secondary tools can be accessed from the system tray icon right-click menu or the Linux® Start Menu > VIGIL Applications folder. These tools can be used to view important connection and usage information about the VIGIL Server. Tools outlined in the proceeding sections are listed below.

17.1 VIGIL Audit

The *Audit Log Analyzer* provides a way to analyze, search and monitor various errors and general information for the VIGIL Server software. Essentially, it allows you to search the logs by using a variety of criteria such as date / time, error code, IP address, or module

To open the *Audit Log Analyzer*, navigate to *Start>VIGIL Applications* and select **VIGIL Audit**.

Search sorting and filter tools as well as search filter criteria make up the top portion of the analyzer. After performing a search, the bottom portion will be populated with a list of log entries matching your search criteria and filters.

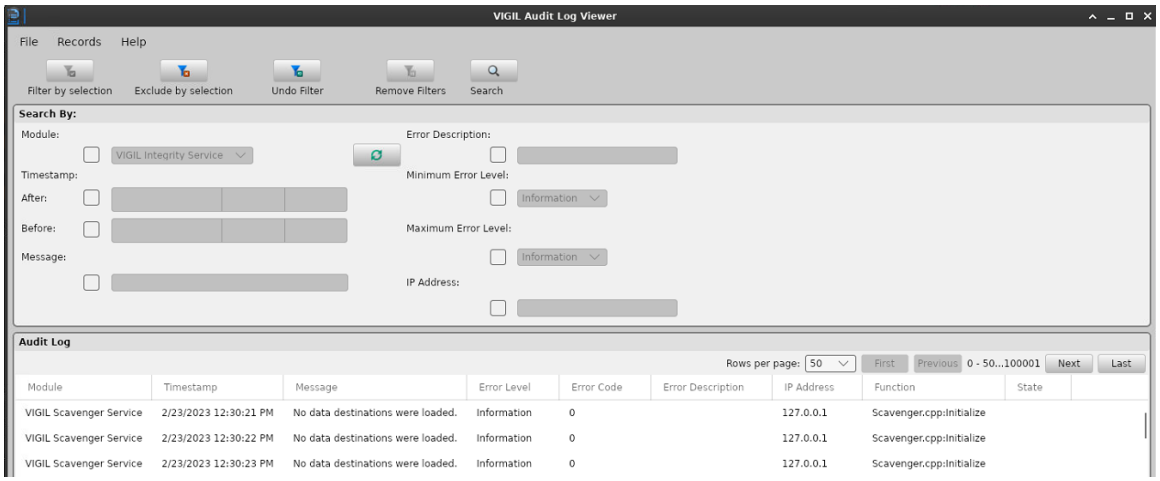


Figure 17-1:VIGIL Server Audit Log Analyzer

- **Sort Ascending** - Sort log entries from newest to oldest.
- **Sort Descending** - Sort log entries from oldest to newest.
- **Filter by Selection** - Search only for log entries of the currently selected log entry type.
- **Exclude by Selection** - Exclude the currently selected log entry type from the search.
- **Undo Filter** - Exclude the currently selected log entry type from the search.
- **Redo Filter** - Redo the last used filter.
- **Search** - Perform a search of the audit log.

- **Search By** - A list of search criteria the user may use to narrow down their audit log entry search. Criteria includes: *Module, Timestamp (Before and/or After) Message, Error Description, Minimum Error Level, Maximum Error Level, IP Address.*

For descriptions of the different log entries you may encounter, see *Tech Tip 160017 VIGIL Server - Audit Log Legend.* Contact 3xLOGIC support to receive the latest revision of TT 160017.

17.2 VIGIL Server System Database Utility (VIGIL Maintenance)

The VIGIL Server System Database Utility is an advanced management utility for data drive and database management.

Warning: If your VIGIL Server is experiencing issues, please contact your system administrator or 3xLOGIC technical support before using the database manager utility. Please See "Contact Information" on page 95

The VIGIL Server System Database Utility contains features that may cause a system failure or other undesired effects if operated incorrectly. Only advanced users with an understanding ot eh VIGIL database should use this utility.

The utility can be launched from *Start>VIGIL Applications>VIGIL Maintenance*. You will have to login to the utility before being able to modify any settings; a VIGIL administrator account must be used.

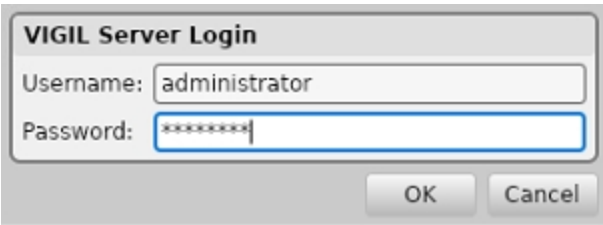


Figure 17-2: Database Utility Login Window

17.2.1 Drive Management Tab

In the *Drive Management* tab, three types of media drives can be set up: *Video Storage Drives, Alternate Video Storage Drives* and *Audio Storage Drives*. VIGIL Server must be shut down to make changes on this Tab.

Figure 17-3:VIGIL Server Database Utility

- **Video Storage Drives –** Video Storage Drives are the main drives where video footage is stored. If all of the Video Storage Drives are offline, the Alternate Video Storage Drives will be used until the Video Storage Drives return online.
- **Alternate Video Storage Drives –** Alternate Video Storage Drives are emergency backup drives that are used only if all of the Video Storage Drives are offline. If an Alternate Video Drive is being used, the VIGIL Server will beep and a warning message will be displayed. When the Video Storage Drives return online, a warning message will disappear, the audio alarm will stop beeping, and the VIGIL Server will switch back to recording to the main Video Storage Drives.
- **Alternate Video Storage Drives –** Alternate Video Storage Drives are emergency backup drives that are used only if all of the Video Storage Drives are offline. If an Alternate Video Drive is being used, the VIGIL Server will beep and a warning message will be displayed. When the Video Storage Drives return online, a warning message will disappear, the audio alarm will stop beeping,

and the VIGIL Server will switch back to recording to the main Video Storage Drives.

- **Audio Storage Drives –** Audio Storage Drives are the drives where audio data is stored.

17.2.2 Data Management Tab

Maintenance operations on the VIGIL Server Database can be performed on this tab. These operations can be performed while VIGIL Server is running.

Purge Data

To purge data:

1. Select the type of data you wish to purge; *Video / Audio Footage, POS Data* or *Video Analytics Data*.
2. Specify a date range in the **From** and **To** boxes or toggle **Purge All** on.
3. Click the **Purge** button to purge the selected data.

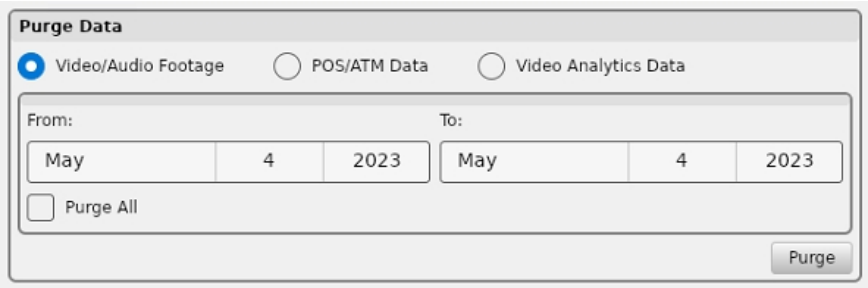


Figure 17-4: Database Utility - Data Management Tab - Purge Data Options

Note:VIGIL Server is designed to manage the purging of data; it will delete the oldest hour of video footage or the oldest POS / Video Analytics Data automatically before the data drives become full. Under normal operating conditions, there is no need to manually purge Data.

Warning: This is a permanent deletion of the data itself.

Rebuild Database

The *Rebuild Database* feature rebuilds the database entries for all of the footage on the selected drives. To rebuild the database:

1. *Click the* **Rebuild** *button*
2. Select the drive(s) to rebuild.
3. Click **OK** to rebuild the selected drives.

During the rebuild process the Sentinel 'No Footage Recorded within the last 24 hours' warning may appear, this is expected as the database of the footage is being rebuilt.

You may choose the utilities post-rebuild action by checking *When The Rebuild is Completed Successfully*: and choosing either *Close this Utility* or *Automatically Reboot the Server*.

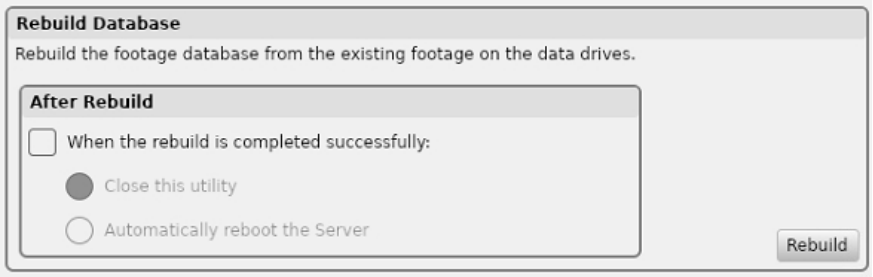


Figure 17-5: Database Utility - Data Management Tab - Rebuild Database Options

Reset Initial Footage Date

The VIGIL Server Health Monitor software uses the initial footage date in VIGIL Server to determine if the VIGIL Server is recording the proper number of days of video storage.

- Click the *Reset* button to reset the cached date of the first video footage recorded by the VIGIL Server to the oldest footage currently on the VIGIL Server. Please refer to the VIGIL VCM software Users Guide Health Monitor section, or contact 3xLOGIC for more information.

Figure 17-6: Database Utility - Data Management Tab - Reset Initial Footage Date

17.2.3 Database Management Tab

The Database Management Tab allows for configuration and maintenance of the VIGIL Server Database.

Backup / Restore Database

Creates a backup image of the video footage database or restores the database from an existing backup image. Click the *Browse* button to select the image folder. Click *Backup* to backup the database in the selected folder. Click *Restore* to restore the database from the backup image in the selected folder.

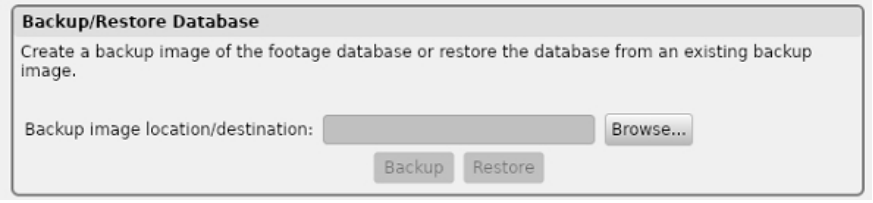


Figure 17-7:VIGIL Server Database Utility -Database Management Tab - Backup / Restore Database Settings

Database Performance

In the case that the database index becomes corrupt, the *Database Performance* feature will repair the index files and compact the memory usage of the video footage database to tune its performance.

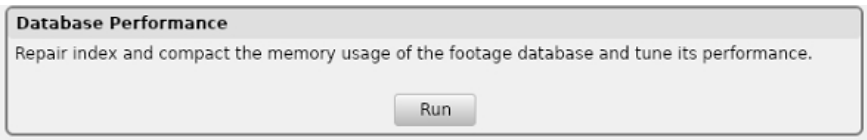


Figure 17-8:VIGIL Server Database Utility - Database Management Tab - Database Performance

Database Integrity

Runs an integrity health check on the VIGIL Server database. If errors are found, the user will be presented with available repair options. This tool is helpful database integrity issues are suspected to be causing poor VIGIL Server performance.

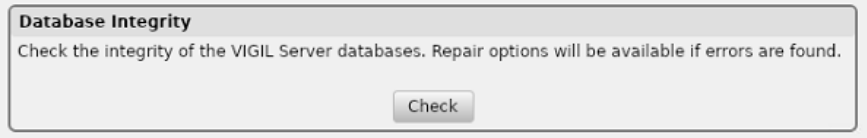


Figure 17-9:VIGIL Server Database Utility - Database Management Tab - Repair Database Settings

17.2.4 Database Settings Tab

The *Database Settings* tab is used to change settings within the VIGIL Server database.

Local Database Administrator Password Settings

Figure 17-10: Database Settings Tab - Local Database Administrator Password Settings

To change the SQL Server Administrator account (sa) password, enter the old password, new password and lick Set Password.

TCP Port

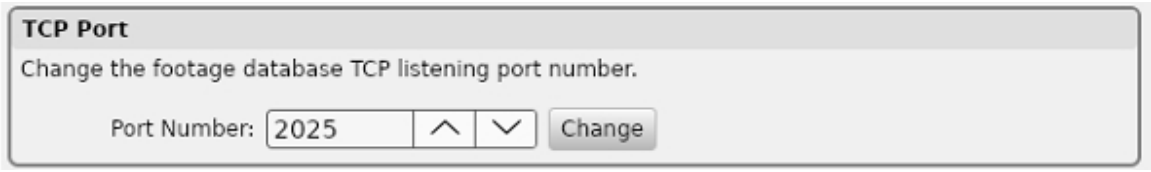


Figure 17-11: Database Settings Tab - TCP Port Settings

Enter in the desired port number and click Change to change the listening TCP port number of the SQL Server database.

Local Database Memory Usage

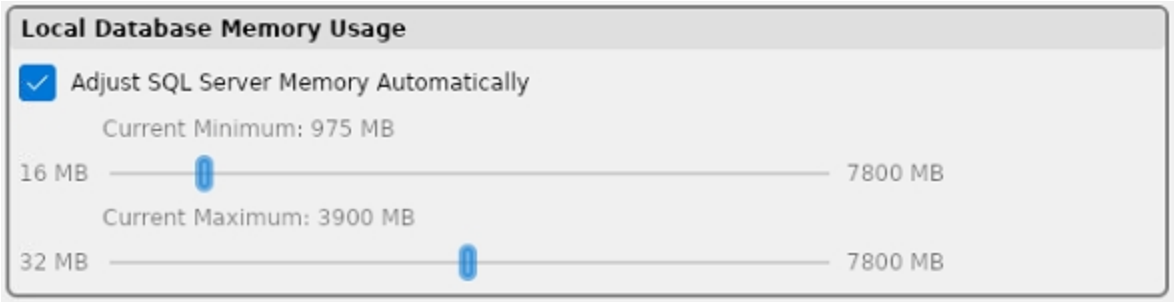


Figure 17-12: Database Settings Tab - Local DB Memory Usage Settings

The *Database Memory Usage* section is used to limit the amount of memory used by the local SQL database. This will not affect the disk space usage of the database - only the memory usage. Minimum memory usage should always be set to 0 MB. Maximum memory usage should be set according to the amount of memory installed in the VIGIL Server (see table below). Setting the appropriate maximum memory usage level for the VIGIL Server will improve VIGIL Server performance. To change the maximum memory usage, drag the slide bar to the appropriate MB amount. Check *Adjust SQL Server Memory Automatically* checkbox to have the memory set automatically.

MB of RAM Installed in VIGIL Server	Max MB of Memory Usage Recommended
512MB	250MB
1024MB	700MB
2048Mb	1536Mb

17.2.5 Reset Tab

This tab contains a button that will initiate a full data wipe and settings restore for the VIGIL Server.

Warning: This button shuts down services, purges all data, recreates all databases and clears key portions of the registry to return the VIGIL software to its factory state. Please make appropriate backups before proceeding.

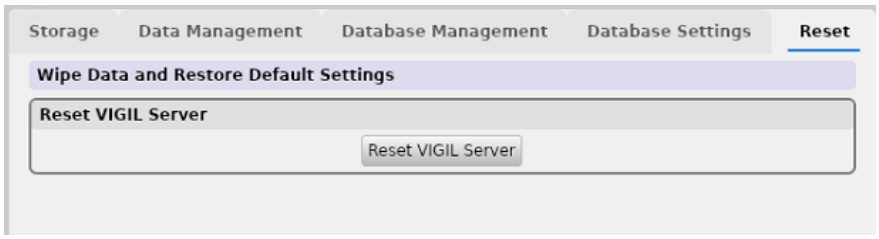


Figure 17-13:VIGIL Database Manager - Reset

17.3 VIGIL Update Utility

Use the VIGIL Update Utility to locate files locally or remotely (via URL) and update your VIGIL system using VGL update files. The utility can be launched via *Start>VIGIL Applications>VIGIL Update*.

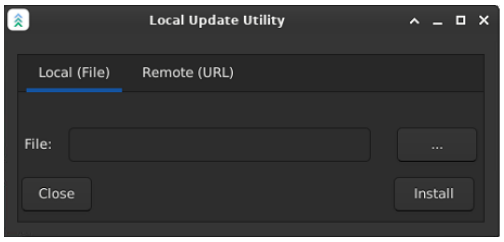


Figure 17-14:VIGIL Local Update Utility

To perform an update:

1. Click the ... button to open the file explorer. Locate the file, open it and click *Update* in the utility to perform the update. Follow the on-screen instructions to complete the update.
2. To perform an update using a remote file, click the *Remote* tab, enter the file's URL and click *Fetch* to download the file. Run the file and follow the instructions to complete the update.

17.4 VIGIL PoE Utility (Linux)

The VIGIL PoE Utility allows the user to monitor and control the system's embedded PoE switch-ports. The utility can be launched from the system tray right-click menu or from the *Start>Menu>VIGL Applications* folder. The utility consists of three tabs: *Power Control*, *PoE Ports* and *About*.

The About tab lists version information for the utility. For information about the Power Control and PoE Ports tabs, see the sections below.

17.4.1 Power Control

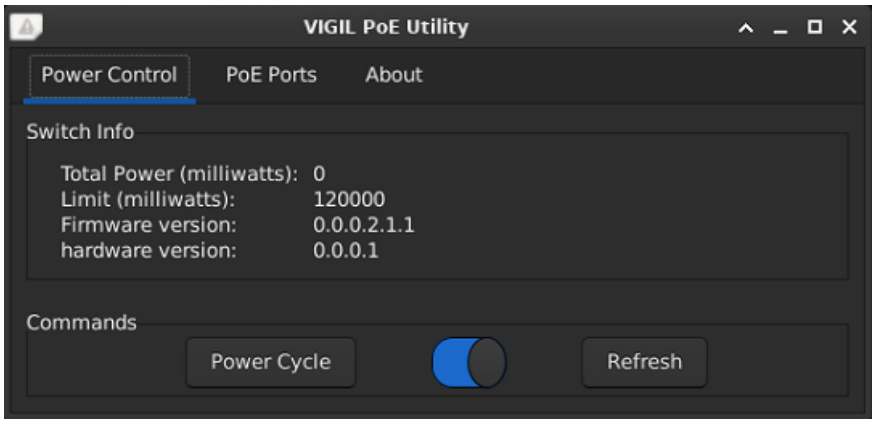


Figure 17-15:VIGIL PoE Utility (Linux)

- **Switch Info** - Lists switch information including *Total Power*, *Limit*, *Firmware Version* and *Hardware Version*.
- **Commands:**
  - **Power Cycle** - Power cycles the embedded PoE Switch.
  - **Refresh** - Refreshes PoE switch information.

17.4.2 PoE Ports

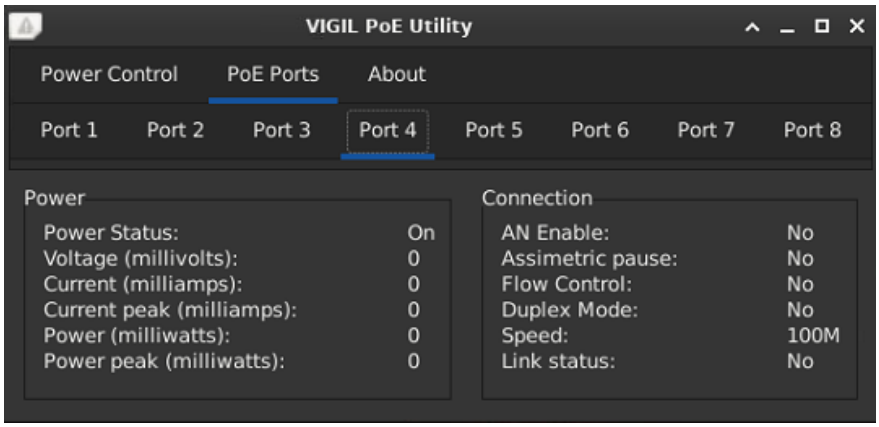


Figure 17-16:VIGIL PoE Utility (Linux)

The PoE ports tab lists *Power and Connection* information for the selected port. Select a port's tab to view information regarding that port.

18 CONTACT INFORMATION

3xLOGIC has offices in Victoria BC, Canada and in Fishers, Indiana, USA. Please visit our 3xLOGIC web site at www.3xlogic.com. Please contact us by e-mail at helpdesk@3xlogic.com (technical support), or using the following contact information:

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