

VIGIL

Client 10.5

Remote Desktop Client Software
User Guide

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3xLOGIC Inc.

290-12000 Pecos Street
Westminster, CO 80234
United States (303) 430-1969

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Table of Contents

1 Introduction	1
2 System Requirements	2
3 Features	3
4 Main Screen	4
4.1 Top Bar Menu	4
4.2 Icon Toolbar	6
4.3 Sidebar	7
4.3.1 Sites Tab	7
4.3.2 Camera Treeview	9
Digital PTZ Presets	10
On-board Analytics Settings	10
4.3.3 Quick Export	12
Quick Export Window:	13
4.3.4 Audio Treeview	14
Live Audio	14
4.3.5 Relay Treeview	15
4.3.6 V-POS Treeview	15
4.3.7 User Audit	16
Enabling and Configuring User Audit in VIGIL Server	16
Utilizing the User Audit feature in VIGIL Client	16
User Audit Settings	16
Usage Performance Bar	17
User Audit Reports	17
Search Criteria	17
Report Types	18
Sample Report	19
User Performance Report	19
User Performance Report - Example	20
4.3.8 Advanced Reporting	21
Employee Exceptions	21
People Counting	24

Average Dwell Time	25
Heatmaps	26
4.3.9 Chat (located under Other)	28
4.3.10 Server Alarms (located under Other)	29
4.3.11 POS/ATM Live (located under Other)	30
4.3.12 Audit Log (located under Other)	31
4.3.13 Tagged Footage (located under Other)	31
4.3.14 Footage Date / Time Range (located under Other)	32
4.3.15 Server Exports Status(located under Other)	33
4.3.16 Remote Exports Browser (located under Other)	33
4.3.17 Bandwidth Test (located under Other)	34
4.3.18 Manage Restricted Video	35
4.3.19 Manage Locked Video	36
4.4 Views Tab	37
4.5 Information Bar	38
5 Servers Window	39
5.1 Add / Edit a Server	41
5.2 VIGIL Server Settings	43
5.2.1 VIGIL Server Recorder Tab	43
5.2.2 Picture Quality Tab	45
Simple Settings Tab	45
Advanced Settings Tab	45
5.2.3 Camera Names Tab	45
5.2.4 Camera Settings Tab	46
Camera Setup / Recording Mode	46
Camera Settings Sub-Tab	47
Recording Mode Sub-Tab	47
CODEC Settings Tab	48
AZTech™ CODEC Settings	48
MPEG4 CODEC Settings	49
Hardware CODEC Settings	50
Recording Rate / Resolution	50
5.2.5 Settings Tab	52
Site Name	52
Auto Logon	52

Data Drive Settings	53
Global Server Settings Sub Tab	53
Sequence Sub Tab	54
5.2.6 Users Tab	54
Users	54
Groups	55
5.2.7 Email Overview Tab	56
E-Mail Address Masterlist	57
Configured Email Recipients	57
Adding an Email Recipient	57
5.3 Remote Register	59
6 Live Viewer	60
6.1 Live Viewer Controls	61
6.2 Live Viewer Windows	62
6.2.1 Live Viewer Window Edge Controls	63
Top Edge Controls	63
Left Edge Controls	63
Bottom Status Bar	66
6.2.2 Live Viewer Window Right Click Menu	66
6.3 Full Screen Mode	70
6.4 On Screen Display (OSD) Configuration	71
6.5 PTZ Camera Controls	72
PTZ Camera Control Window	72
Joystick Customization Window	73
Presets	74
Patterns	74
Tours	74
Tour Settings Window	74
Enhancements	75
Menu	75
6.6 Recording Modes	76
6.7 Audio Talk	76
7 V-POS Treeview Configuration	78
7.1 V-POS Exceptions	78

7.1.1 Add / Edit Exceptions	78
Exception Criteria	78
Exception Criteria - POS/ATM Filter	79
Exceptions Criteria - Video Analytics Filter	81
Exception Criteria - Event Time Frame	81
Scheduled Email Alerts	81
7.2 V-POS Events	83
VPOS Event Search	84
7.2.1 Exception Event Playback	85
7.3 V-POS Settings	87
7.3.1 General Tab	87
7.3.2 Database Settings Tab	87
7.3.3 Email Settings Tab	88
7.3.4 Event Settings Tab	89
Event Column Settings	89
Event Configuration Options	89
7.3.5 VIGIL Server Site Information Tab	91
7.4 V-POS Search and Reports	92
7.4.1 VPOS Search / Report Types	92
Manual Query	93
Predefined Exception Query	95
Search for Transaction by Receipt	95
7.4.2 Report Results	96
7.5 V-POS Quick Search	97
8 Digital Virtual Switch	98
8.1 Virtual Switch Keypad	98
Virtual Switch Keypad Hotkeys	99
8.2 Virtual Switch Screen	100
9 Searching and Playback	102
9.1 Searching Video	102
9.1.1 Search Criteria	103
9.1.2 Video Search Results	104
9.2 Searching POS/ATM Data	105
9.2.1 Search for Line Items	105

9.2.2 Search for Transaction	106
9.3 Custom Search	108
Add / Edit a Custom Search	108
9.4 Search Monitor Output History	110
9.5 Video Playback	111
9.5.1 Playback Window Edge Controls	112
Top	112
Left	113
Playback Synchronization Controls	115
Playback Thumbnail Browser	116
Right	117
Bottom / Playback Controls	118
9.5.2 Visual Timeline	120
9.5.3 Stitched Playback	120
Stitched Playbacks Window	121
9.5.4 Controlling Playback Video with Digital PTZ:	121
9.5.5 Playback Right-Click Menu	122
10 Exporting	124
10.1 Still Image Exporting	124
Still Image Export Destination Selection Window	124
10.2 Video Exporting	125
Video Export Destination Selection Window	125
10.3 Audio Exporting	127
Audio Export - Destination Selection Window	127
10.4 Export File Browser	128
11 Site Map	130
12 Server Alarms	131
Server Alarms Window - Right-Click Menu	132
12.1 Preview Alarms	132
12.2 Suppress Alarms	132
12.3 Search Alarms	133
13 Settings	134

13.1 Startup Tab	134
13.1.1 Managed by VCM	136
Add /Edit a VCM Server	136
Managed by VCM - Server List	137
13.1.2 infinias Access Control	138
infinias Login	140
infinias Settings	141
Searching infinias Events	142
13.1.3 Enable Client Login	143
13.2 Main Interface Tab	144
13.3 Live Tab	145
13.4 Playback Tab	147
13.5 Search Tab	150
13.6 Alarms Tab	151
13.7 Hardware Tab	152
13.8 Destinations Tab	153
Quick Export	154
Default Export File Name	154
13.9 Audio Tab	155
13.10 Chat Tab	155
13.11 Sitemaps Tab	155
13.12 Virtual Switch Tab	155
13.12.1 Virtual Switch Camera Mappings	157
13.13 Help Menu	158
14 Site Map Designer	159
Creating a New Site Map	159
Opening an Existing Site Map	159
Saving a Site Map	159
14.1 Site Map Designer Icons and Buttons	160
14.2 Site Map / Hot Spot Properties	161
Sitemap Properties	161
Hotspot Properties	161
Remote Host	161

Relay	161
15 DV Player	162
Top Menu Bar	163
POS Receipt View and POS Search	165
360 Dewarping	165
16 Language Switcher	167
17 Contact Information	168

1 Introduction

VIGIL Client gives you unrivalled access to live and recorded video from any of your networked VIGIL Server's. Advanced playback and intelligent SmartSearch functionality lets you identify and review events of interest quickly and easily. The result is more accurate and efficient investigation of incidents with easy export of evidence material. Our mapping function provides unlimited map layers and camera links for unrivalled access to your cameras.

A unique combination of control, efficiency, and adaptability offering investigators unparalleled accessibility and manageability to their video network. The result is faster response times, reduced investigator times, and increased access and effectiveness of your video surveillance investments.

VIGIL Client's advanced SmartSearch functionality includes:

- Instant playback of 1, 5 or 10 minute video increments with the click of a mouse
- The ability to define advanced search parameters, incorporating video analytics and POS/ATM data integration for unrivalled incident investigations
- Quickly and accurately navigate through large amounts of recorded high-definition video
- Advanced playback – review recorded video using an intuitive interface and buttons.
- Bookmark and export video clips or still images in industry-standard formats including AVI or 3xLOGIC's Authenticated Video for forensic investigations. Files are exported with our exclusive DV Player application ensuring that recipients can easily access and view surveillance video related to your investigation.
- Tag playback footage for instant recall at a later date via the Tagged footage window.

Advanced Control Feature - Alarm monitoring:

- Can be triggered by an internal system event, as well as external third-party access control and building management system triggers.
- VIGIL Client's Virtual Switch Functionality enables additional PC VGA monitor outputs to be used as a Virtual Switch. This allows the user constant live view of their sites on the virtual switch monitors while maintaining the standard VIGIL Client monitor for regular usage. The Virtual Switch can be controlled using on screen virtual keyboard or using a Pelco KBD300a.

Advanced Control Feature - POS/ATM Integration:

- Instantly link surveillance footage with related transactional data for complete access of your operation. Increase compliance requirements while reducing shrinkage and theft. This, coupled with advanced exception-based reporting functionality enables operators to be notified in the event of POS/ATM transactions falling outside the norm – so called POS/ATM exceptions.

Advanced Control Feature - Client as Main Interface:

- When a VIGIL Server has 'Client as Main Interface' enabled, VIGIL Client can be used as a singular interface, granting full control of the VIGIL Server to VIGIL Client users. This eliminates the need for two separate interfaces and allows advanced functionality available only through VIGIL Client to be applied to tasks historically completed through VIGIL Server.

This user guide is current as of VIGIL Client v10.50.0000

Disclaimer: *This application has been optimized for use with Windows 7, Windows 8.1 and Windows 10. 3xLOGIC does not actively support other operating systems. Installing this application on operating systems other than the those mentioned above may have undesirable consequences.

2 System Requirements

Component	Recommended System Requirement
Operating System	Windows 7 Professional or Ultimate (32 or 64 bit), Windows 8.1, Windows 10
CPU	Intel® Core™ i3 Processor
RAM	Minimum 2 GB (4GB when running Virtual Switch)
Video Card	PCI Express 1GB (2GB when running Virtual Switch)
Hard Drive	SATA (Minimum 100MB required for install)



Note: VIGIL Client will only run on Windows platforms that support DirectX 7.01 or higher. Run Dxdiag.exe to view the version of DirectX that is currently installed.

3 Features

Feature	Details
Search	Retrieve a list of stored footage for specified cameras from a start date / time to an end date / time.
Smart Search	Quickly find the footage you need by marking an area within a camera's field-of-view and searching. VIGIL will pull footage containing motion in the marked area, eliminating the need for lengthy footage review.
Quick Search	Retrieve a list of all footage for the past 1 – 8 hours.
Quick Export	Export a pre-determined amount of footage from a Server to a set destination with the click of a button.
Playback with Optional Multi-Playback Synchronization	Scan through recorded footage using play / pause buttons. Add and remove multiple playback frames to the synchronization pool, allowing for easy review of events from multiple camera viewpoints.
Scroll-bar Playback	Use a scroll-bar to locate footage by dragging to a desired location, or skim ahead or back 1 or 10 frames per click.
Current Frame	See the frame number, frame count, frame size (in KB) and frame time / date for the currently displayed frame.
Save Footage	Save the currently displayed video footage in AVI or Authentic Video (MJPEG) format.
Save Still Frame	Save the currently displayed frame in JPG or BMP format.
Remote Exporting	Export footage and data to locations on connected remote VIGIL Servers.
Full Screen	View footage or pictures at their full resolution.
Live Viewer	View many video feeds at once; see the site name, camera name and local time / date for each live video feed; with the client / server, view feeds for multiple sites at once.
Modular Live and Playback	View Live and Playback feeds at the same time or separately.
Full VPOS Integration	When connected to a Server with a VPOS license, view in-depth POS data, pull footage via POS/ATM receipt, view events and exceptions and more.
Advanced Reporting	Instantly call advanced reports including Employee Exceptions, People Counting, Average Dwell Times and Heatmaps.
Managed by VCM Mode	Aside from standard local site management, VIGIL Client's Sites list can also be managed by VCM (VIGIL Central Management) , offering 3xLOGIC product users a seamless experience when interfacing with our enterprise management application.
infinias CLOUD and Intelli-M Integration	By enabling infinias support, users can login and view their door controller scope, issue access control commands and view infinias event playback instantly. Full infinias integration offers our infinias access control product users a fluid and seamless experience when interfacing with VIGIL Client.
Remote VIGIL Server Registration	Remotely register a connected VIGIL Server's camera channels and modules.

4 Main Screen

This is the *Main Screen* window that is displayed when VIGIL Client has finished loading.

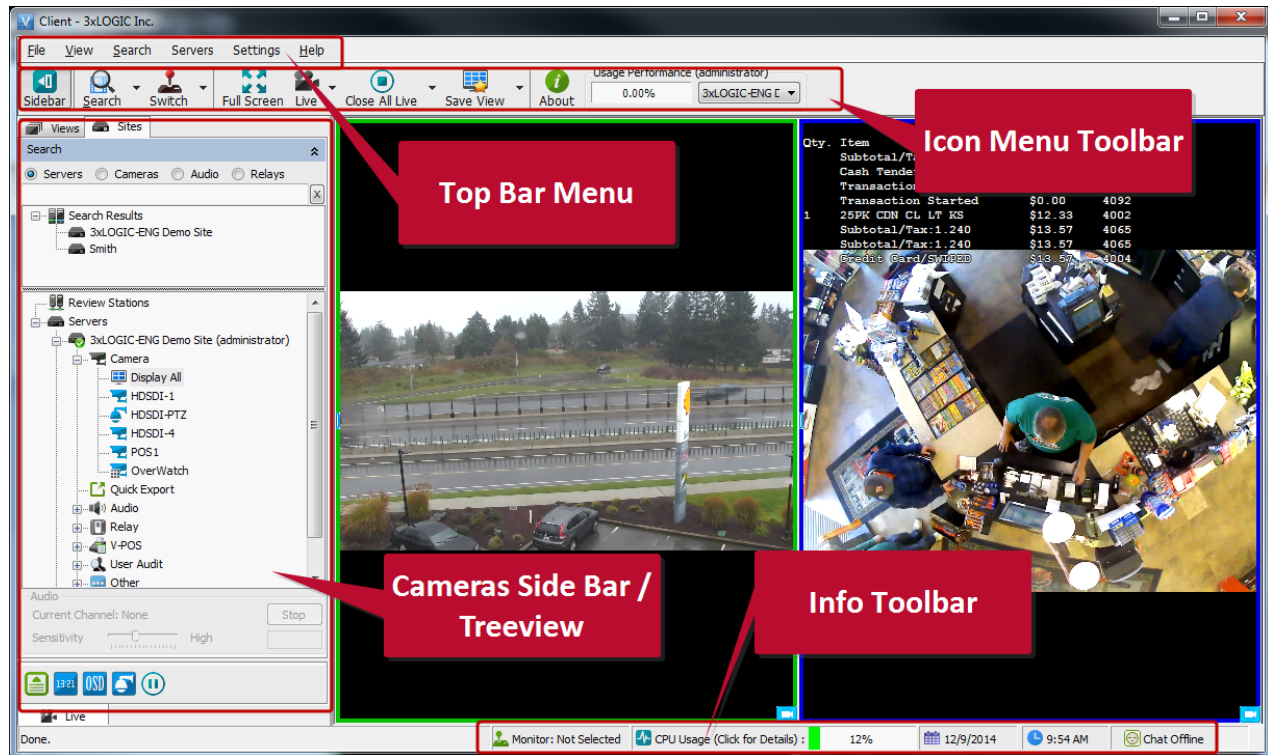


Figure 4-1: VIGIL Client Main Screen

4.1 Top Bar Menu

The *Top Bar Menu* located at the top of VIGIL Client user interface is a traditional feature seen in most software applications. For an explanation of the menu's items, please see the table below.

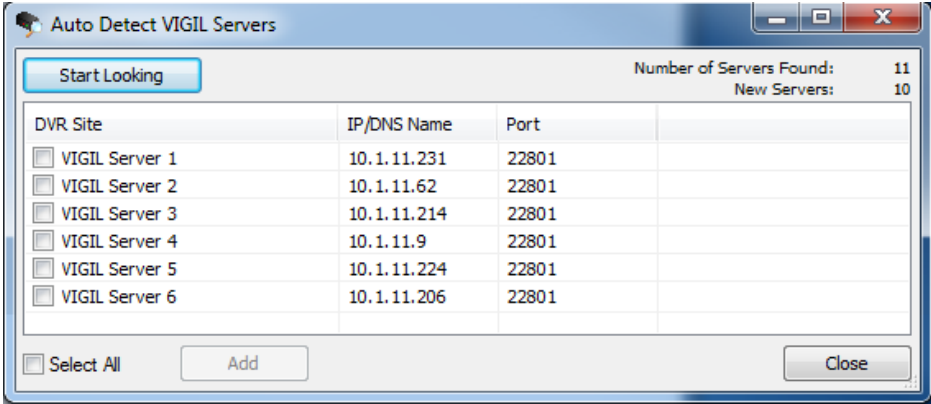
Menu Item	Description																											
File	Auto Detect VIGIL Servers.... - Opens the Auto Detect VIGIL Servers Utility.																											
	 <p>The screenshot shows the 'Auto Detect VIGIL Servers' window. It has a 'Start Looking' button and displays the 'Number of Servers Found: 11' and 'New Servers: 10'. The table below lists the detected servers:</p> <table><thead><tr><th>DVR Site</th><th>IP/DNS Name</th><th>Port</th><th></th></tr></thead><tbody><tr><td><input type="checkbox"/> VIGIL Server 1</td><td>10.1.11.231</td><td>22801</td><td></td></tr><tr><td><input type="checkbox"/> VIGIL Server 2</td><td>10.1.11.62</td><td>22801</td><td></td></tr><tr><td><input type="checkbox"/> VIGIL Server 3</td><td>10.1.11.214</td><td>22801</td><td></td></tr><tr><td><input type="checkbox"/> VIGIL Server 4</td><td>10.1.11.9</td><td>22801</td><td></td></tr><tr><td><input type="checkbox"/> VIGIL Server 5</td><td>10.1.11.224</td><td>22801</td><td></td></tr><tr><td><input type="checkbox"/> VIGIL Server 6</td><td>10.1.11.206</td><td>22801</td><td></td></tr></tbody></table> <p>At the bottom, there are 'Select All', 'Add', and 'Close' buttons.</p>	DVR Site	IP/DNS Name	Port		<input type="checkbox"/> VIGIL Server 1	10.1.11.231	22801		<input type="checkbox"/> VIGIL Server 2	10.1.11.62	22801		<input type="checkbox"/> VIGIL Server 3	10.1.11.214	22801		<input type="checkbox"/> VIGIL Server 4	10.1.11.9	22801		<input type="checkbox"/> VIGIL Server 5	10.1.11.224	22801		<input type="checkbox"/> VIGIL Server 6	10.1.11.206	22801
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<input type="checkbox"/> VIGIL Server 5	10.1.11.224	22801																										
<input type="checkbox"/> VIGIL Server 6	10.1.11.206	22801																										





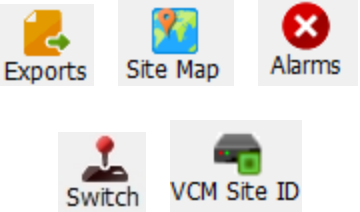





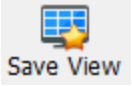


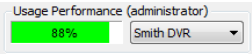
Figure 4-2:Auto Detect VIGIL Servers Window

Figure 4-2: Auto Detect VIGIL Servers Window

	Auto Detect VIGIL Servers	
	Start / Stop Looking	Start or Stop the Auto Detect Process.
	Number of Servers Found/ New Servers	Number of Servers Found - Number of Server found via the Auto Detect Process. New Servers - Number of Servers found by the Auto Detect process which are not currently in your VIGIL Client List.
	Select All	Select all Servers in the list.
	Add	Add selected Servers to VIGIL Client Servers list.
	Close	Close the Auto Detect VIGIL Server utility.
	Exit - Close / Exit the VIGIL Client application. VIGIL Client can also be closed / exited by clicking the standard Windows "X" button.	
View	Toolbar - Open or Close the Icon Menu Toolbar Sidebar - Open or Close the Sidebar Export File Browser - Open the Export File Browser. See "Export File Browser" on page 128 for more info. Site Map - Open the Site Map. Server Alarms - Open the Server Alarms window. Switch - Open the Virtual Switch Control window.	
Search	Search Footage and Data - Open the playback <i>Search</i> window. See "Searching and Playback" on page 102 for more info. Search Monitor Output History - Open the <i>Search Monitor Output History</i> window. See "Search Monitor Output History" on page 110 for more info. Custom Search - Opens the Custom Search Window. See "Custom Search" on page 108 for more info.	
Servers	Servers - Opens the <i>Servers</i> window. See "Servers Window" on page 39 for more info. Login to VCM Server - Use a VCM server to generate the VIGIL Servers list. This option is only available if <i>Managed by VCM</i> mode is enabled. See "Managed by VCM" on page 136 for more info Use Local Settings - Use local settings to generate the VIGIL Servers list. This option is only available if <i>Managed by VCM</i> mode is enabled. See "Managed by VCM" on page 136 for more info	
Settings	Settings - Open the Settings Window. See "Settings Tab" on page 52 Export Settings - Export the current VIGIL Client Settings to a destination of your choice. The settings file will use a .xml. Import Settings - Import VIGIL Client Settings by selecting a Client Settings file (.xml)	
Help	User Guide - Open the VIGIL Client User Guide. About - Open the <i>About</i> window. This window gives basic details about the software including the software version.	

4.2 Icon Toolbar

This table is a quick listing of the main toolbar buttons and their usage. Detail of each corresponding window is outlined in later sections.

	<p>Login to a desired account or Log off of the current User. This option will only appear if Client Log-On is enabled in <i>Client Settings> Start-Up</i> tab.</p>
	<p>Shows or hides the camera sidebar.</p>
	<p>Opens the <i>Search</i> window. Clicking the  button opens the context menu from which the <i>Custom Search</i> window or the <i>Search Monitor Output History</i> window can be opened.</p>
	<p>Opens the Exports, Site Map, Alarms, Virtual Switch or VCM Site ID Window, depending on the displayed icon. Clicking the  button opens the context menu from which any one of these 5 options can be selected. All options are discussed in proceeding sections of this guide. <i>VCM Site ID</i> is described below.</p> <p>The <i>VCM Site ID</i> option allows you to view or enter a VCM Site ID for the currently connected Server. This gives VCM users a reference to help quickly locate a Server, as opposed to traversing large lists of Server group to find a specific system. This button is only visible in <i>Managed by VCM</i> mode.</p>
	<p>Toggles Full Screen View. See the Full Screen Mode section under “Live Viewer” for more information.</p>
	<p>Choose to <i>Close All</i> live or playback feeds (or all live and playback feeds) by clicking the  button and selecting your desired action from the context menu. Clicking the icon button itself will execute the currently displayed action.</p>
	<p>Opens the Live Viewer or the Playback Page. These icons will only appear when <i>Separate Pages for Live and Playback</i> is enabled in the VIGIL Client <i>Settings> Startup</i> tab.</p>
	<p>Saves the current layout of the Client interface, including opened windows and modules. Click the  button to open the context menu and select a previously <i>Saved View</i>.</p>
	<p>Opens the <i>About 3xLOGIC VIGIL Client</i> window that displays the software version.</p>
	<p>Displays Usage Performance data for the current user of the selected VIGIL Server. The indicator will only be displayed if <i>User Audit</i> is enabled and the current user has permission to view the indicator.</p>

4.3 Sidebar

The *Sidebar* consists of two tabs: *Sites* and *Views*. The default view is the *Sites* tab.

4.3.1 Sites Tab

The Sites tab(1) features a treeview list of configured VIGIL Server Sites / Review Stations / All-in-One Cameras(2)

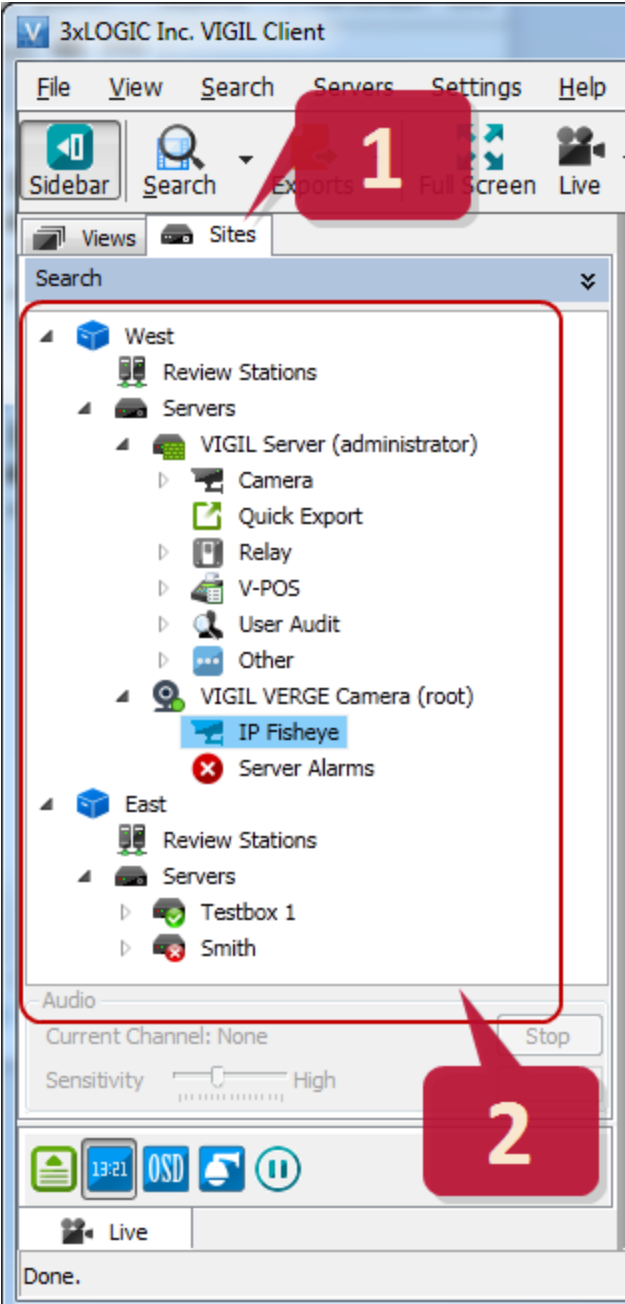
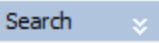
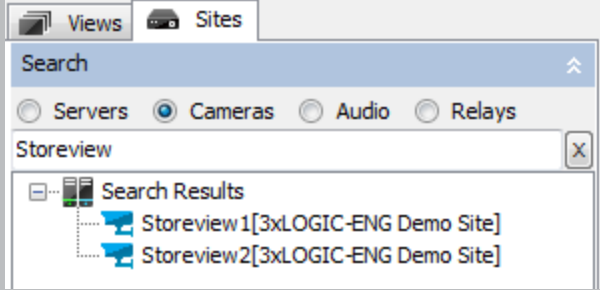






Figure 4-3: VIGIL Client Sidebar - Sites Tab - Treeview

Quick Search	
Sites Tab Quick Search	<p>Click the  bar to open the <i>Sites Tab Quick Search</i> feature(below). This feature is useful for long <i>Sites</i> lists that can be tedious to navigate.</p>  <p>Figure 4-4:Sites Tab Search Feature</p> <p>Enter a letter or word found in the desired component's name to quickly locate the desired component. Available component filters include Servers(includes VERGE devices), Cameras, Audio Channels and Relays.</p> <p>All components are remembered by VIGIL Client, even when not actively connected to a site.</p>
	<p>Server / All-in-One devices can be organized into Server Groups:</p>
	<div>  <p>This icon represents a Server Group. Click the context-arrow next to the icon to open a list of all Servers belonging to the group. If no custom server groups have been configured, this icon will not be visible.</p> <p> Note:If using Managed by VCM mode, Server Group's in the Sidebar will be organized according to the managing VCM's Server Group hierarchy.</p> </div> <div>  <p>This icon represents a VCM Server Folder (not pictured above). When <i>Managed by VCM</i> mode is enabled, the VIGIL Client sites list assumes the hierarchy of the managing VCM's Server list. Server lists in VCM are organized using Server Folders and Server Groups.</p> </div> <div>  <p>This icon represents a VCM Server Group (not pictured above). When <i>Managed by VCM</i> mode is enabled, the VIGIL Client sites list assumes the hierarchy of the managing VCM's Server list. Server lists in VCM are organized using Server Folders and Server Groups.</p> </div>

Status Icons



The Server/All-in-One Camera is connected/disconnected.



If these icons appear in front of a Server icon, this indicates the Server is configured using VIGIL Connect.








Indicates the camera is associated with a door (from an active infinias account). The icon color will change depending on door status (if *Automatically Update Door Status* is enabled in VIGIL Client Startup > infinias settings).

Right-click on a Site Name / VIGIL Server for the following options:

Connect	Connect to the site with the configured username and password.
Connect As...	Enter a username and password to connect to the site.
Refresh	Reload the Information from the Site.
Disconnect	Disconnect from the Site.
Server Set-tings	Opens the selected Server's settings window. See "VIGIL Server Settings" on page 43
Door	<p>Mouse-over this option to reveal infinias door controls. This option is only visible if infinias mode is active and the camera is associated with a door:</p> <ul style="list-style-type: none"> ■ Momentary Unlock - Unlock the door momentarily. ■ Live Events - Opens the infinias <i>Live Events</i>. This list contains the latest events associated with the current infinias account. ■ Search Events - Opens the infinias <i>Search Events</i> window. ■ Refresh Status - Refresh the current door status. Door status is indicated by the color of the door icon. The door icon is visible in the lower-right of the Live Viewer, next to the camera's name in the Servers>Camera tree node, and also in the left-side Live Viewer edge controls. ■ Event Filter - Choose an event filter (filters are configured infinias-side) or select <i>All Events</i>.

4.3.2 Camera Treeview

The Camera Treeview shows all configured and currently enabled cameras on the connected Server. Camera type, status and audio talk capability are indicated by the camera icons.

-  - Standard camera; Online.
  - Standard camera; Offline.
  - Digital PTZ Preset (See "Digital PTZ Presets" on the facing page for more info).
-  - Camera with Audio Talk Enabled
  - PTZ Camera

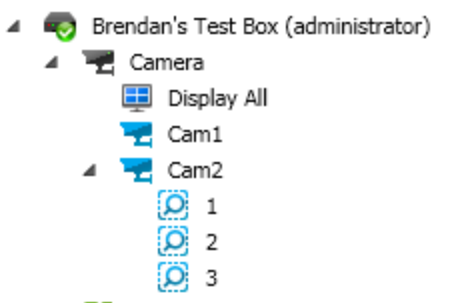


Figure 4-5:Sidebar - Sites Tab- Camera Treeview

Display All	Double Click <i>Display All</i> to open all Cameras on this site in Live View Windows.
Double Click	Double Click on a Camera to open it in a Live View Window.
Right Click	<p>Right Click on a Camera to reveal the following options:</p> <ul style="list-style-type: none"> ■ Instant Replay - playback the last five minutes of footage. Five minutes is the default but

	<p>can be changed in VIGIL Client Playback Settings.</p> <ul style="list-style-type: none"> ■ Web Interface - Selecting Web Interface will open your default web browser containing the camera's web interface login screen. This option will only be available for applicable cameras only. ■ Door - Access infinias door controls. This option is only visible when infinias mode is enabled and if the cameras is associated with an infinias door. ■ On-board Analytics Settings - Opens the on-board analytics window. A user can use this interface to interface on-board analytics rules from the target camera with the camera's host VIGIL Server. Changes made in this interface are reflected in the connected VIGIL Server's VIGIL Analytics Bridge. See "On-board Analytics Settings" below for more information.
Click and Drag	Click and drag a Camera onto a Live View Window to open it in the selected Live View Window.

Digital PTZ Presets

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 then be instantly opened as a camera digital preset in VIGIL Client. Digital PTZ Presets can be configured on a VIGIL Server for any camera utilizing *Digital PTZ* camera control. Multiple digital presets can be created for a single camera. .

To display a Digital PTZ Preset in the VIGIL Client Live Viewer, click the context arrow on the desired camera in the Sidebar's *Camera Treeview* and double-click an available preset.

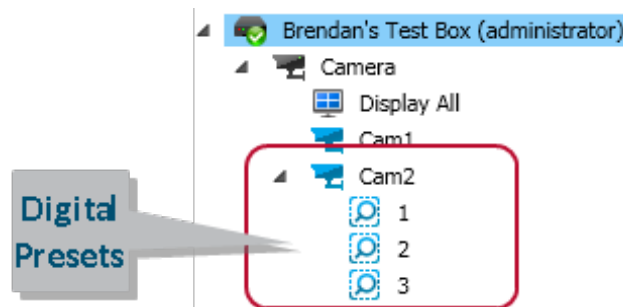



Figure 4-6: Opening a Digital Preset

The selected preset will be displayed in the VIGIL Client Live Viewer in its own layout frame in the same manner as an individual camera.

To view playback for a Digital PTZ Preset, right-click directly on the digital preset's live viewer frame and select either the *Quick Search* or *Instant Replay* feature. Alternatively, search the digital preset's host-camera using your desired playback search parameters. After opening the desired playback, use the playback window's left-edge control Digital PTZ Presets button -  - to open any of its configured Digital PTZ Presets at the current playback time.

On-board Analytics Settings

When *On-Board Analytics Settings* is selected in the camera right-click menu, the On-Board Analytics window will launch.

1. Toggle *Use On-Board Analytics* on to enable the interface.



Warning: This feature is intended for advanced VIGIL network administrators only. Please reference [Guide 120034 - VIGIL Analytics Bridge](#) for more information on operating the analytics bridge locally on the VIGIL Server.

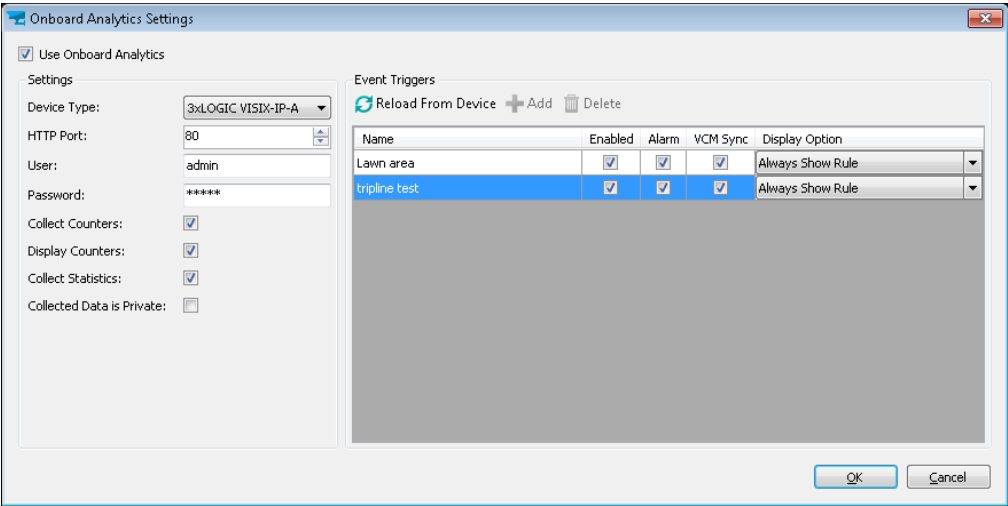


Figure 4-7:VIGIL Client - Camera Treeview - Right-click Menu - On-Board Analytics

From this window, a user can interface on-board analytics rules from any of a VIGIL Server's cameras) directly with the VIGIL Server's database. Some camera models do not support on-board analytics. Check with the camera's manufacturer to confirm a camera supports on-board analytics. All changes made in this window are reflected in the VIGIL Server's VIGIL Analytics Bridge.

Camera Info	
Device Type	The type of device / camera being edited or added. 3xLOGIC, SenTech Crosspoint, UDP or VideoIQ. Select 3xLOGIC for 3xLOGIC All-in-One cameras.
HTTP Port	One of two ports used to connect to the camera’s analytics data.
Username	Username required to sign in to the camera.
Password	Password required to sign in to the camera.
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.
Event Triggers	
Reload from Device	Detects any configured analytics rules located on the camera.
Add	Manually adds a rule. Adding a rule will tell VIGIL Analytics Bridge to search for a rule of that name. It will not add the rule to the camera. Rules must be created and configured in the camera's Web inter-

	face.
Delete	Deletes the selected rule from the VIGIL Analytics Bridge.
Enabled	Enabling a rule allows VIGIL Analytics Bridge to monitor the matching rule in the camera and place analytics data in VIGIL Server's database. The name of the rule in VIGIL Analytics Bridge is case sensitive and will match the corresponding rule in a camera.
Alarm	Enabling the Alarm option will place analytics data for the associated rule into VIGIL Server's database and display it in the VIGIL Server's Alarm list when received. If disabled, the alarm data will still be inserted into the database but will not be "seen" by VIGIL Server users as an alarm.
VCM Sync	This field will indicate whether or not data from this camera is being synced with the VIGIL Central Management (VCM) central analytics database.
Display Options	<p>Display options designate when rule information will be displayed on-screen (displayed in the bottom-left corner of the video):</p> <ul style="list-style-type: none"> ■ Never Show Rule - Never display rule information on-screen. ■ Always Show Rules - Always display active rule information on-screen. ■ Show Rule When Alarmed - Only display rule information on-screen when the rule / alarm has been triggered.

4.3.3 Quick Export

The *Quick Export* option, located underneath the *Camera Treeview* in the VIGIL Client Sites Tab, allows for quick export of footage from all cameras (all camera's are exported by default; exported footage parameters can be edited via the Quick Export Advanced Settings) to a pre-configured destination.

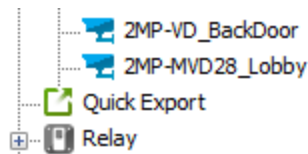
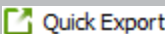


Figure 4-8: Sidebar - sites Tab - Quick Export Treeview

	Double click the <i>Quick Export</i> button in the treeview. This will open the Quick Export Window.
---	--

Quick Export Window:

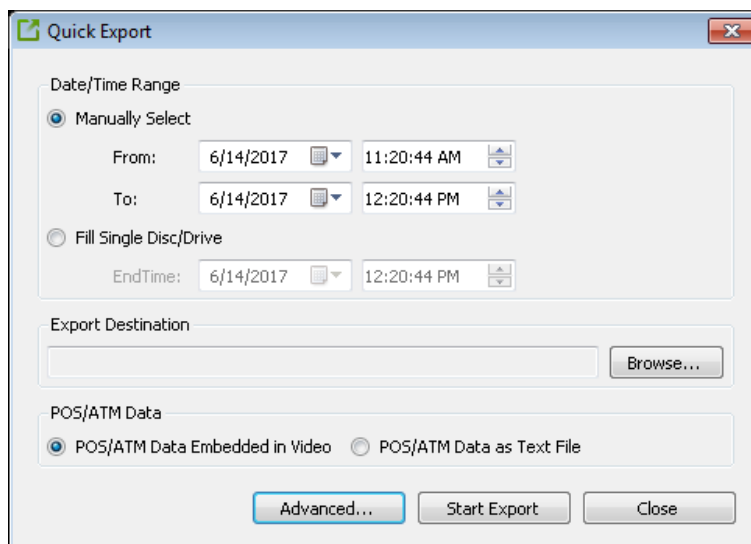


Figure 4-9: Quick Export Window

Date Time Range	
Manually Select	<p>Manually set a footage interval.</p> <ul style="list-style-type: none"> ■ From - Set a start date for the footage export. Default parameters will set the <i>From</i> value to an hour before the <i>Quick Exports</i> window was opened. ■ To - Set an end date for the footage export. Default parameters will set the <i>To</i> value to the time at which the <i>Quick Exports</i> window was opened.
Fill Single Disc / Drive (Default)	<p>Fill an entire disc or storage drive with footage. Only setting a footage end time is necessary for this method.</p> <ul style="list-style-type: none"> ■ End Time - Select an <i>End Date</i> for the footage export. VIGIL will export as much footage as possible to the destination until the configured <i>End Date</i>.
Export Destination	
Browse	Select a destination for the export footage. By default, VIGIL will use the destination configured in the selected Destination Settings tab .
POS/ATM Data	
POS/ATM Data Embedded in Video	Embed any associated POS/ATM data in the video as an OSD overlay, visible in VIGIL DV Player.
POS/ATM Data as Text File	Include any associated POS/ATM data in a separate .txt file.
Other	
Start Export	Begin exporting the footage.
Advanced	Click <i>Advanced</i> to open the Advanced Quick Export window. From this window you can select which cameras will be exported (default is all cameras) as well as whether or not to include Audio and POS data from the individual cameras you select. If required, check off

desired cameras and assign the appropriate *Audio Channel* and *POS/ATM Connection* to their corresponding cameras

A camera does not have to be the associated priority device to include the target audio or POS data with the export. Any audio channel and any POS/ATM connection can be included with any camera.

Camera				
<input checked="" type="checkbox"/>	No.	Name	Audio	POS/ATM
<input checked="" type="checkbox"/>	10	ZMP-MVD_Overhead	Right	Register 701
<input checked="" type="checkbox"/>	11	VSXPTZ	No Audio	No POS/ATM
<input checked="" type="checkbox"/>	13	FrontStairs F5	No Audio	No POS/ATM
<input checked="" type="checkbox"/>	15	Sanyo_HD_FrontDoor	No Audio	Register 701
<input checked="" type="checkbox"/>	16	Cam16	No Audio	No POS/ATM
<input checked="" type="checkbox"/>	18	Side Road	No Audio	No POS/ATM
<input checked="" type="checkbox"/>	21	Cam21	TV Sync	Register 5
<input checked="" type="checkbox"/>	22	Cam22	No Audio	No POS/ATM

Figure 4-10: Quick Export - Advanced Options

Close

Close the *Quick Exports* window.

4.3.4 Audio Treeview

The Audio Treeview shows all configured and currently enabled Audio channels on the connected Server.

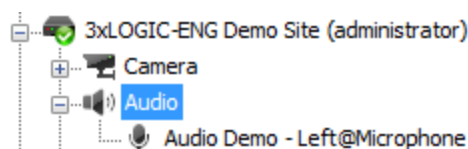


Figure 4-11: Sidebar- Sites Tab - Audio Treeview



Double Click

Double-click on an Audio Channel to begin recording.
Control volume with the Windows Volume controls.

Live Audio

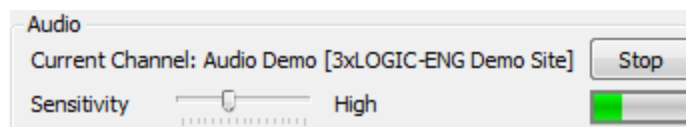


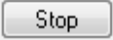

Figure 4-12: Live Audio Window

Current Channel: Board Room [smith]

The currently selected Live Audio channel.

Sensitivity  High

This slider adjusts the audio sensitivity without affecting the sensitivity settings on the connected server.

	Click to stop recording.
	This level meter indicates the audio level for the currently selected audio channel.

4.3.5 Relay Treeview

The Relays Treeview shows all configured Relays on the connected Server and allows for them to be quickly toggled on or off.

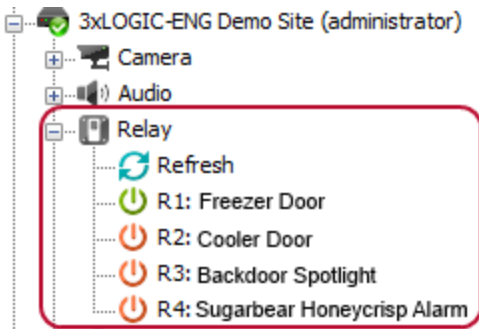





Figure 4-13:Sidebar - Sites Tab - Relay Treeview

The current status of the <i>Relay</i> is indicated by the following icons:	
	Double Click the Refresh option to poll the current state of the Relays from the VIGIL Server.
	The relay is toggled <i>On</i> .
	The relay is toggled <i>Off</i> .

4.3.6 V-POS Treeview

The V-POS Treeview will be available when V-POS is installed on the VIGIL Server. Details of each option will be discussed in the [V-POS Treeview Configuration](#) section.

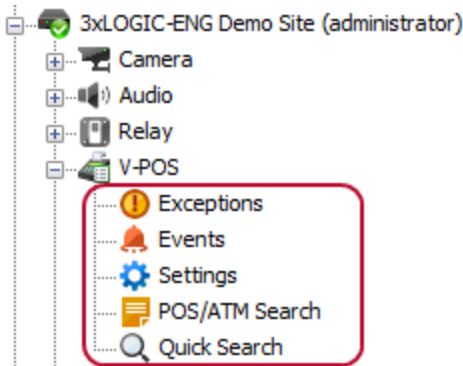






Figure 4-14:Sidebar - Sites Tab - VPOS Treeview

	Opens the <i>POS/ATM Exceptions</i> window, where POS/ATM Exceptions can be created, edited, deleted, imported, exported or manually run.
---	---

 Events	Opens the <i>POS/ATM Exception Events</i> window, where users can view, acknowledge, or playback POS/ATM exception alerts.
 Settings	Opens the <i>Settings</i> window, where V-POS settings can be configured.
 POS/ATM Search	Opens the <i>Reports</i> window, where manual or predefined queries can be run.
 Quick Search	Opens the <i>Quick Search</i> window, where transactions can be searched for by receipt number, IDX line number or Event ID number.

4.3.7 User Audit

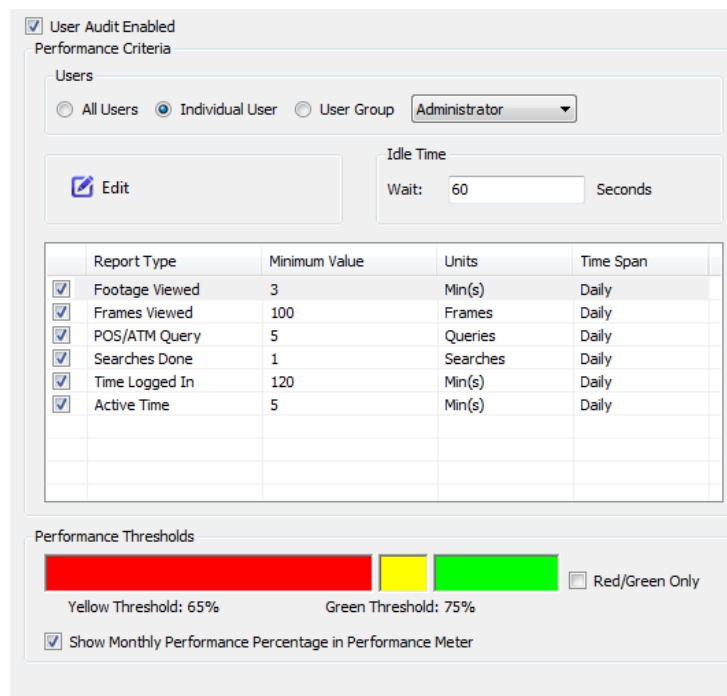
Enabling and Configuring User Audit in VIGIL Server

In VIGIL Server, proceed to *Settings* and click on the *Server Settings* tab. Enable *User Audit* at the bottom of the left-hand list and click the ... button to open the *User Performance Criteria* window. Performance Criteria can be configured on a per user or group basis.

Utilizing the User Audit feature in VIGIL Client

To access VIGIL Client's *User Audit* feature, select *User Audit* from the Client Treeview. From here, navigate to either *User Audit Settings* or *User Audit Reports* by selecting either from the Treeview.

User Audit Settings

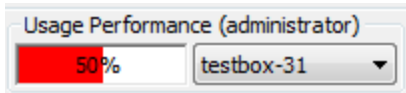


The screenshot shows the 'User Audit Settings' window. At the top, 'User Audit Enabled' is checked. Below it, 'Performance Criteria' is selected. Under 'Users', 'Individual User' is selected, and 'Administrator' is chosen from the dropdown. An 'Idle Time' section shows 'Wait: 60 Seconds'. An 'Edit' button is present. A table lists performance criteria with checkboxes, report types, minimum values, units, and time spans. At the bottom, 'Performance Thresholds' are shown with color-coded bars (red, yellow, green) and checkboxes for 'Red/Green Only' and 'Show Monthly Performance Percentage in Performance Meter'.

	Report Type	Minimum Value	Units	Time Span
<input checked="" type="checkbox"/>	Footage Viewed	3	Min(s)	Daily
<input checked="" type="checkbox"/>	Frames Viewed	100	Frames	Daily
<input checked="" type="checkbox"/>	POS/ATM Query	5	Queries	Daily
<input checked="" type="checkbox"/>	Searches Done	1	Searches	Daily
<input checked="" type="checkbox"/>	Time Logged In	120	Min(s)	Daily
<input checked="" type="checkbox"/>	Active Time	5	Min(s)	Daily

Figure 4-15: User Audit Settings Window

User Audit Enabled	Enabling User Audit allows VIGIL to create traceable audit entries to be used for future user audit reporting. This must be selected to utilize VIGIL's <i>User Audit</i> feature.
Performance Criteria	In this section you can designate report types (for individual users or user groups,) to be incorporated into <i>User Performance</i> levels. Performance levels calculated based on

	<p>these report types are then reflected in a user's <i>Usage Performance Bar</i>, which is displayed on the right-side of the VIGIL Client Icon toolbar. When a specific user or user group is selected, check off the report types you would like to be incorporated into the <i>User Performance</i> levels.</p> <p>Usage Performance Bar</p>  <p>Figure 4-16:Main Toolbar Usage Performance Indicator</p> <p>Edit- After selecting a report type, click <i>Edit</i> to further customize report type values in accordance with minimum usage standards of your company or institution.</p> <p>Idle Time - Set the amount of time needed to transpire before the <i>User Performance Bar</i> displays the user as IDLE.</p>
Performance Thresholds	<p>The <i>Performance Threshold</i> controls the levels that dictate the current indication colour of the usage performance bar. In the above example, any usage performance level below 66% will cause the <i>Usage Performance Bar</i> to display as red(or, failing). Anything above 66% will display as green(indicating a satisfactory level of usage performance). You may slide the centre bar to adjust these levels.</p> <p>Red / Green Only- Select this feature to use only Red and Green as Usage Performance bar indication colours. Disabling this option adds Yellow as a third cautionary color.</p>
Show Monthly Performance Percentage in Performance Meter	<p>Replace the daily performance percentage in the User Performance Meter(located in the Icon Menu toolbar) with a monthly performance percentage.</p>

User Audit Reports

When *User Audit* is enabled, an audit trail of user activity is created based on criteria configured on a per user or group basis. In order for a VIGIL Server's User Audit data to be available to a user, it must be enabled and configured in the VIGIL Server's settings.



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.

Search Criteria

Enter your search criteria here and locate your results at the bottom of the window.

Figure 4-17:User Audit -Search Criteria

Date / Time	Enter the Date and Time for results you wish to be included in your query.
Report Type	The type of performance criteria results the search function will retrieve in regards to the chosen user or user group.
User Performance Report	This button will open a separate <i>User Performance Report</i> window. See "User Performance Report" on the next page
All Users	Search function will audit all users
Individual User	Search function will audit a selected Individual User that is chosen in the drop-down menu on the right side of the Search Criteria window.
User Group	Search Function will audit a selected User Group that is chosen in the drop-down on the right side of the Search Criteria window.
Search Results and Calender View	Search Results presents you the results of your search based on your chosen report type. In <i>Calender View</i> , days which contain data that matches your chosen report type are displayed.

Report Types

The available report types are listed below.

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.
All Report Types	A summary report of the users activity similar to the usage performance details.
Daily User Performance	Lists daily user performance percentages based on acceptable performance usage levels.

Sample Report

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

Search Results					
User	Login Time	Logoff Time	Active Time	Idle Time	Total Time
administrator	3/16/2014 2:55:59 AM	3/17/2014 7:29:29 AM	28:22:02	00:11:28	28:33:30
administrator	3/17/2014 12:11:30 AM	3/17/2014 8:56:26 AM	08:44:56	00:00:00	08:44:56
administrator	3/17/2014 7:30:02 AM	3/17/2014 7:30:02 AM	00:00:00	00:00:00	00:00:00
administrator	3/17/2014 7:30:02 AM	3/17/2014 8:56:14 AM	00:04:55	01:21:18	01:26:13
administrator	3/17/2014 8:58:23 AM	3/17/2014 8:58:23 AM	00:00:00	00:00:00	00:00:00
administrator	3/17/2014 8:58:31 AM	3/17/2014 9:47:21 AM	00:04:56	00:43:54	00:48:50
administrator	3/17/2014 8:58:31 AM	3/17/2014 8:58:31 AM	00:00:00	00:00:00	00:00:00
administrator	3/17/2014 9:01:02 AM	3/17/2014 11:28:34 AM	02:09:59	00:17:33	02:27:32
administrator	3/17/2014 9:21:07 AM	3/17/2014 9:21:07 AM	00:00:00	00:00:00	00:00:00
administrator	3/17/2014 9:21:07 AM	3/17/2014 9:23:15 AM	00:02:08	00:00:00	00:02:08
administrator	3/17/2014 9:23:25 AM	3/17/2014 9:24:20 AM	00:00:55	00:00:00	00:00:55
administrator	3/17/2014 9:38:02 AM	3/17/2014 9:39:04 AM	00:01:01	00:00:00	00:01:01

Figure 4-18:User Audit Report - Sample

For more information on a user's usage history regarding individual audit entries, double click an entry in the *Search Results*(circled in red, above) section. A user *Usage Summary Report* regarding the selected audit entry will open in a separate window.

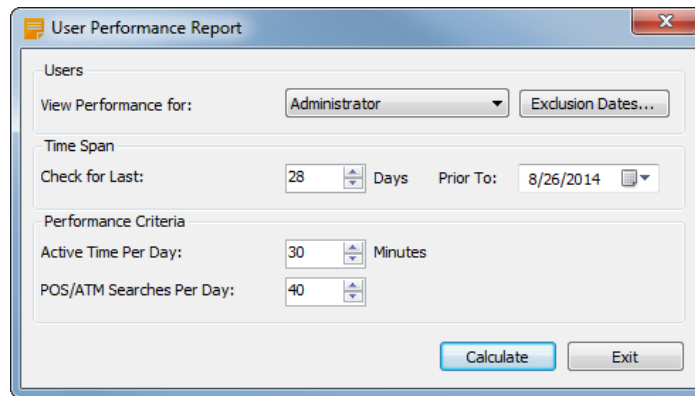
An example of the usage summary report is pictured below.

Usage Item		Value
Footage Viewed		1 Min(s)
Frames Viewed		35616 Frames
POS/ATM Query		0 Queries
Searches Done		0 Searches
Idle Time		136 Min(s)
Time Logged In		154 Min(s)
Active Time		18 Min(s)

Figure 4-19:Usage Summary Report - Sample

User Performance Report

A User Performance Report can instantly grant management with a detailed report outlining the activity of a specific VIGIL user.



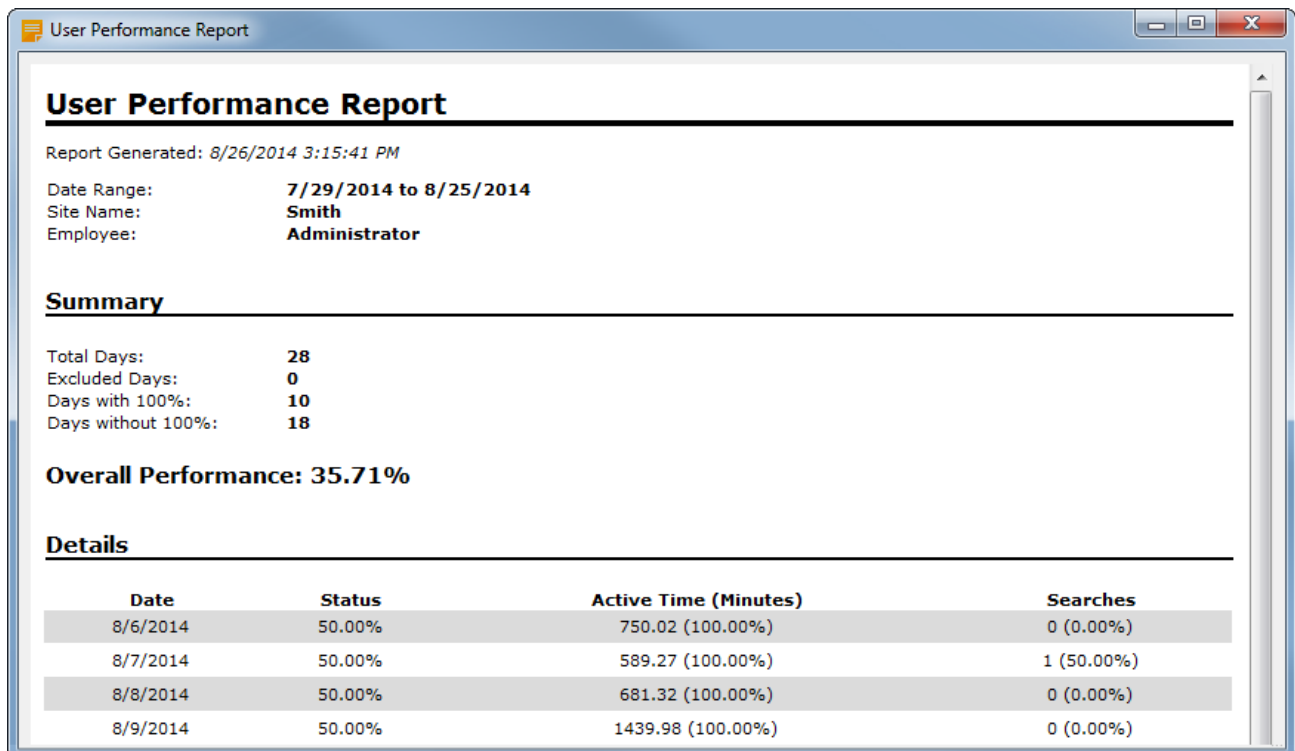
The configuration window for the User Performance Report. It includes sections for Users, Time Span, and Performance Criteria. The 'View Performance for' dropdown is set to 'Administrator'. The 'Check for Last' is set to 28 Days, and 'Prior To' is 8/26/2014. Under Performance Criteria, 'Active Time Per Day' is 30 Minutes and 'POS/ATM Searches Per Day' is 40. 'Calculate' and 'Exit' buttons are at the bottom right.

Figure 4-20: User Performance Report - Configuration Window

Users	<p>View Performance For - Choose the user whose performance statistics will be reported.</p> <p>Exclusion Dates - When clicked, this button will open an <i>Exclusion Dates</i> window where dates that need to be excluded from the performance reported can be chosen.</p>
Timespan	Choose the time range of the user performance report.
Performance Criteria	<p>Active Time Per Day - Set the amount of acceptable active daily usage.</p> <p>POS/ATM Searches Per Day - Set the acceptable amount of POS/ATM searches per day.</p>

Click *Calculate* to generate a *User Performance Report* (pictured below.) The user will be assigned an Overall Performance percentage based on the performance criteria configured in the [User Audit Settings](#).

User Performance Report - Example



The sample User Performance Report window. It displays the report title, generation date, date range, site name, and employee. It includes a summary section with total days, excluded days, and days with/without 100% performance. It also shows the overall performance percentage and a details table with columns for Date, Status, Active Time (Minutes), and Searches.

Date	Status	Active Time (Minutes)	Searches
8/6/2014	50.00%	750.02 (100.00%)	0 (0.00%)
8/7/2014	50.00%	589.27 (100.00%)	1 (50.00%)
8/8/2014	50.00%	681.32 (100.00%)	0 (0.00%)
8/9/2014	50.00%	1439.98 (100.00%)	0 (0.00%)

Figure 4-21: User Performance Report - Sample

4.3.8 Advanced Reporting

The Advanced Reporting Treeview lists three different advanced reports for a VIGIL Server.

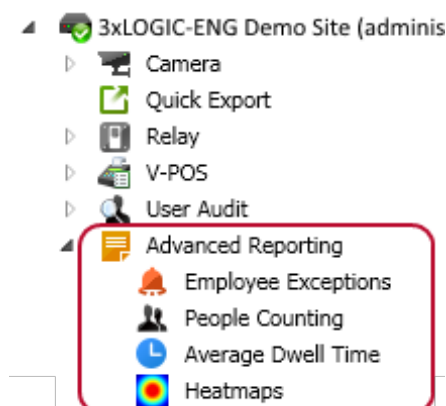


Figure 4-22:Sidebar - Sites Tab - Advanced Reporting Treeview



Warning: A VIGIL Server must be properly configured for VPOS Exceptions (Employee Exceptions Report) or Video Analytics (Average Dwell Report, People Counting Report) for the Advanced Reporting feature to function successfully. Also, the VIGIL Server user account used to login to the VIGIL Server must have the proper *Advanced Reporting* user permission to access this functionality. A separate permission exists for each report type. For more information, contact a 3xLOGIC representative.

The four available report types are as follows:

- **Employee Exceptions** - Generates a report table featuring all configured V-POS *Employee Exceptions* counts for each employee configured in the system. Each count can be opened in a separate report window and can be reviewed further to focus on specific exception events for an employee. Corresponding playback footage from each exception event in the report can also be recalled from the report UI. This report will only generate data on VIGIL Server's with configured V-POS *Employee Exceptions*.
- **People Counting** - Generates a calendar report with *People Counting* rule count totals for each day of the month. Each rule's count, or the total count for all rules, can be opened in a separate window which features a basic line graph and hourly counts for the selected day or rule. This report will only generate data on VIGIL Server's with appropriately configured analytics rules.
- **Average Dwell Time** - Generates a calendar report with Dwell Time rule averages for each day of the month. Each rule's average, or the total average for all rules, can be opened in a separate window which features a basic line graph and hourly averages for the selected day or rule. This report will only generate data on VIGIL Server's with appropriately configured analytics rules.
- **Heatmaps** - Opens the Heatmaps window where a user configure heatmap settings, select a target camera, and retrieve a heatmap from the camera based on the settings they have configured. Heatmaps are used to give a visual representation of high-traffic areas within a camera's field-of-vision.

Double-click on a report type to launch the report.

Employee Exceptions

If the *Employee Exceptions* report is selected, a report table will deploy, as pictured below.

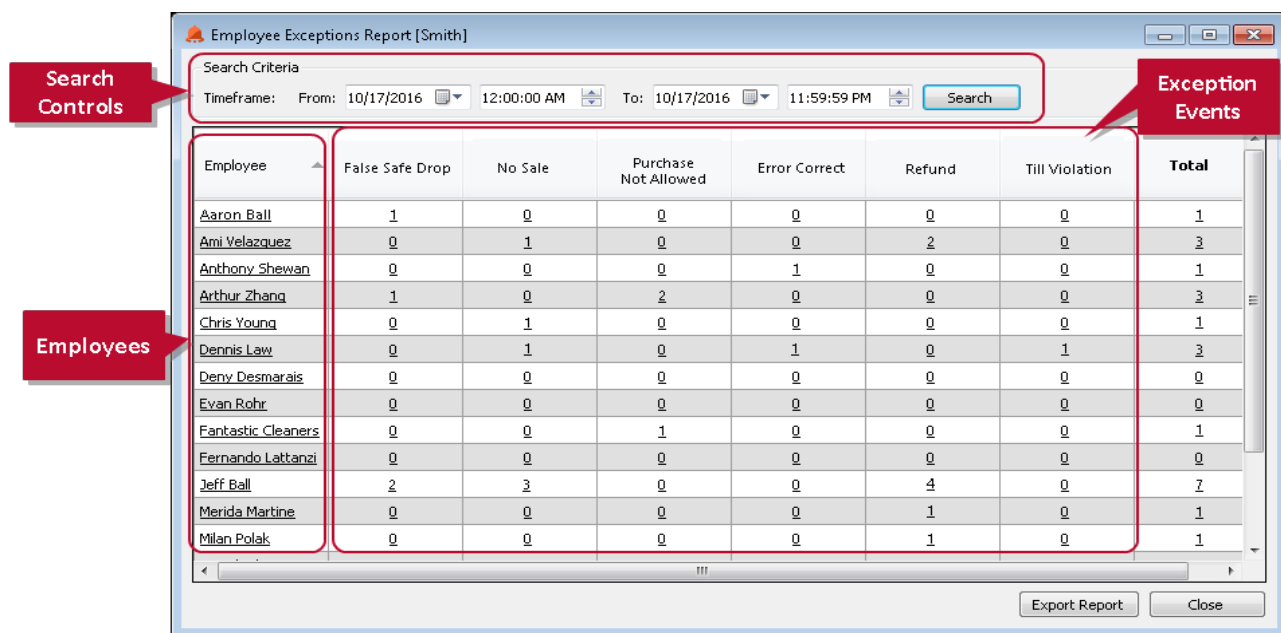


Figure 4-23:Advanced Reporting - Employee Exceptions Report - Employee Exception Table

The report table features a list of all configured employees in the system (far-left column) along with their individual exception event (header row) totals. A total count of all an employee's exception events is also included in the far-right column.

By default, the report will search for exceptions for the entirety of the previous day, however, a custom timeframe can be configured using the timeframe controls located under the *Search Criteria* section.

Click and drag a column header to the desired location to re-order report columns.

The controls located on the window are described below:

From / To	Specify the start date / time and end date / time of your exception search.
Search	Run the exception search using the defined timerange.
Previous / Next	Navigate to the previous or next month.
Switch to Yearly Report	Open a yearly calender featuring monthly totals.
Export Report	Save a .csv of the report to the local system.
Close	Close the Employee Exceptions Report.

Click an employee name to open a *Single Employee POS/ATM Exception Report* for the selected employee listing all exceptions.

Click on an exception count or a total count to open a *Single Employee POS/ATM Exception Report* for the selected employee featuring only exceptions of the chosen type.

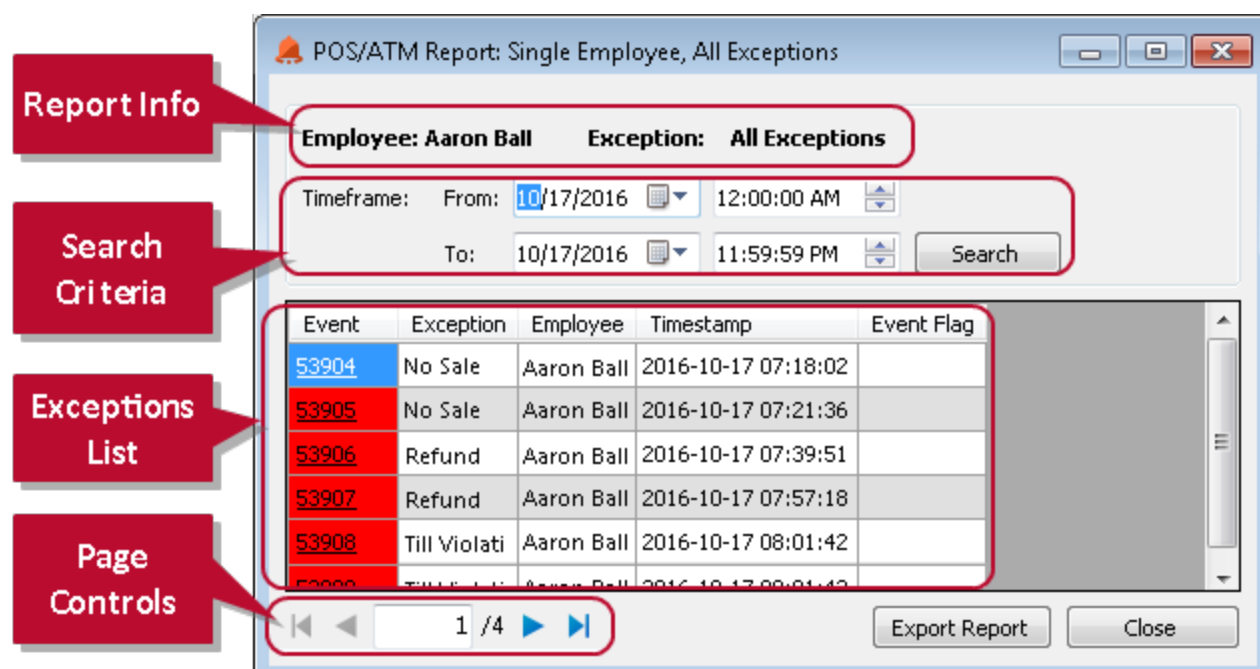


Figure 4-24:Advanced Reporting - Employee Exceptions Report - Single Employee POS/ATM Exceptions Report

The single employee report window features a *Report Info* section, *Search Criteria*, an *Exceptions List* and *Page Controls* for navigating results.

By default, the report will list exceptions from the entirety of the previous day, however, a custom timeframe can be configured using the timeframe controls located under the *Search Criteria* section. If the exception events list spans multiple pages, use the page controls at the bottom of the list to navigate to the desired page.

The controls located on the *Single Employee Exception Report* window are described below:

From / To	Specify the start date / time and end date / time of your exception search.
Search	Run the exception search using the defined timerange.
Previous / Next	Navigate to the previous or next month.
Export Report	Save a .csv of the exception report to the local system.
Close	Close the Single Employee Exception Report.

Exception information provided in the exception list includes *Event ID*, *Exception Name*, *Employee*, *Timestamp* and *Event Flags*.

Click an exception's *Event ID* to launch its corresponding playback.

Event	Exception	Employee	Timestamp	Event Flag
53904	No Sale	Aaron Ball	2016-10-17 07:18:02	
53905	No Sale	Aaron Ball	2016-10-17 07:21:36	
53906	Refund	Aaron Ball	2016-10-17 07:39:51	
53907	Refund	Aaron Ball	2016-10-17 07:57:18	
53908	Till Violati	Aaron Ball	2016-10-17 08:01:42	

Figure 4-25:Launching Exception Playback

To open corresponding playback for a listed exception, click the value located in its *Event* cell. The playback will open in the VIGIL Client Playback viewer.

People Counting

If the *People Counting* report is selected, a calendar-style report will deploy, as pictured below.

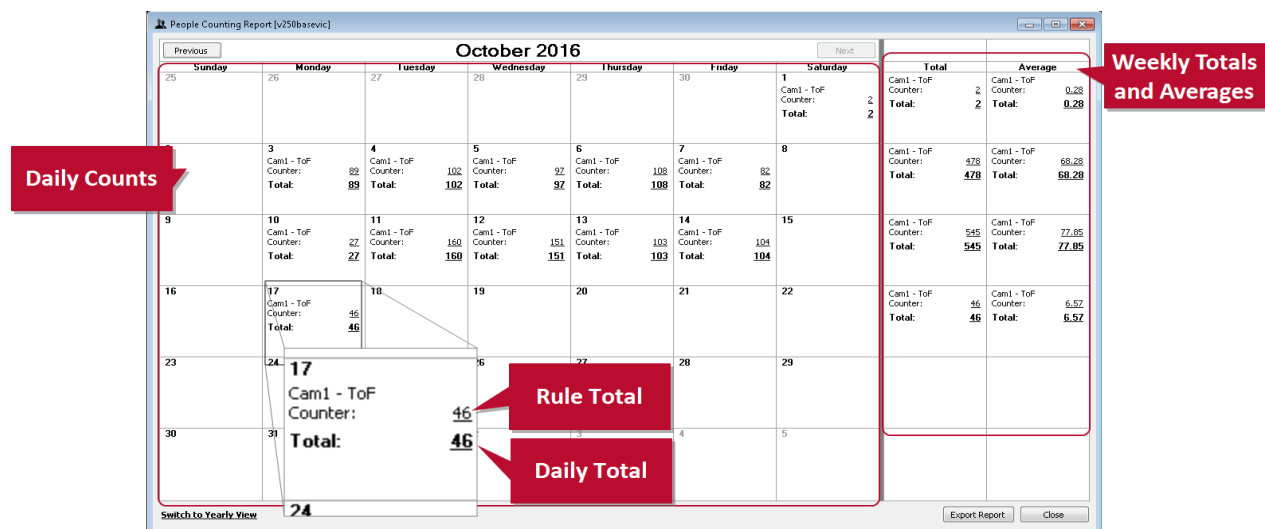


Figure 4-26: Advanced Reporting - People Counting Report - Calendar View

Daily Counts are listed in the left-side portion of the window. A *Rule Total* for each people counting rule and a *Daily Total* for all rules will be listed within each day. If multiple rules are present, a scroll-bar will be present within each day on the calendar to allow the user to view and select the different rule totals. *Weekly Totals and Averages* are provided in the right-side portion of the window, alongside their corresponding week.

The remaining controls located on the window are described below:

Previous / Next	Navigate to the previous or next month.
Switch to Yearly Report	Open a yearly calendar featuring monthly totals.
Export Report	Save a .csv of the report to the local system.
Close	Close the People Counting Report.

To open an *Hourly Report*, click a rule total, or the daily total count (underlined links located on each calendar day).

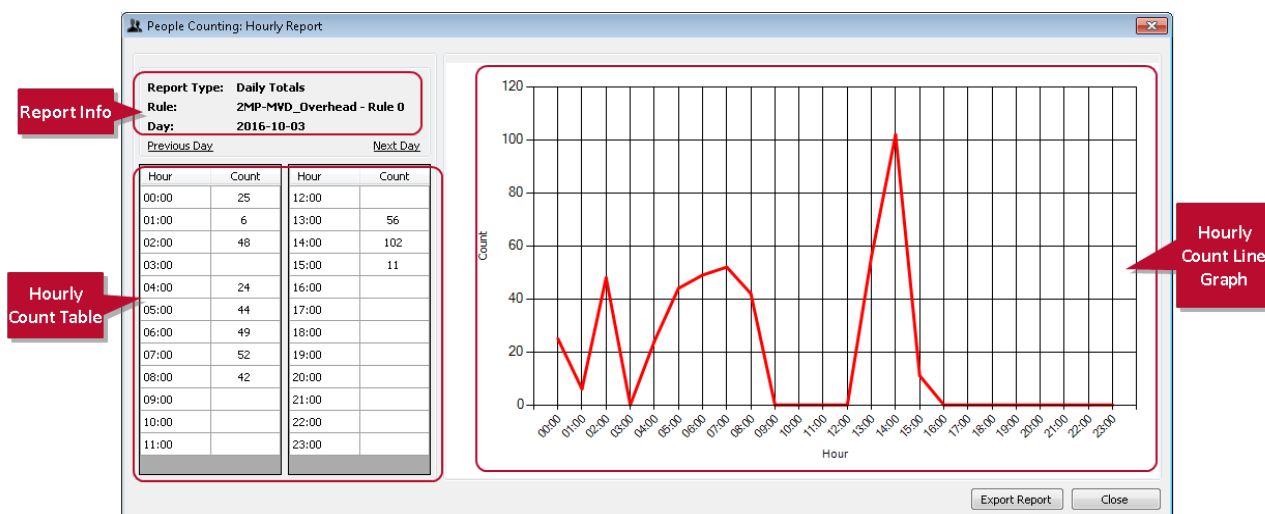


Figure 4-27: Advanced Reporting - People Counting Report - Calendar View

A daily report will feature *Report Information* (*Report Type, Rule, Day*), an *Hourly Count Table* as well as a basic line graph depicting the hourly counts, as pictured above.

The controls located on the window are described below:

Previous Day / Next Day	Navigate to the previous or next day.
Export Report	Save a .csv of the hourly report to the local system.
Close	Close the hourly report window.

Average Dwell Time

If the *Average Dwell Time* report is selected, a calendar-style report will deploy, as pictured below.

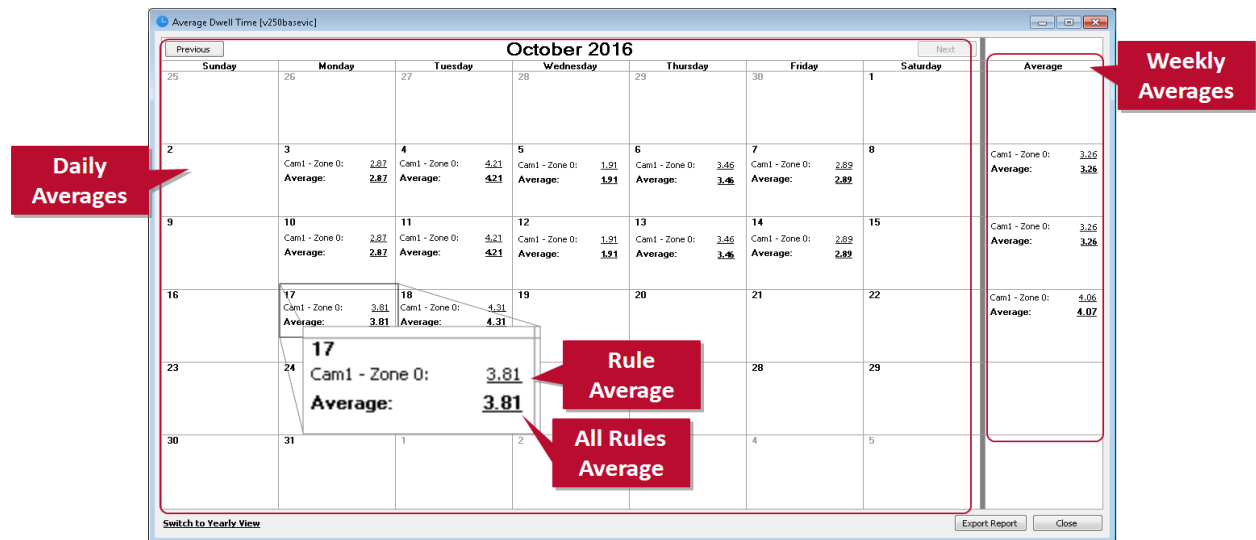


Figure 4-28:Advanced Reporting - Average Dwell Time Report - Calendar View

Daily Averages are listed in the left-side calendar portion of the window. A *Rule Average* for each dwell time rule (identified by rule name) and a total average for all dwell time rules will be listed within each day. If multiple rules are present, a scroll-bar will be present within each day on the calendar to allow the user to view and select the different rule averages. *Weekly Averages* for both individual rules and all rules are provided in the right-side portion of the window, alongside their corresponding week.

The controls located on the window are described below:

Previous / Next	Navigate to the previous or next month.
Switch to Yearly Report	Open a yearly calendar featuring monthly totals.
Export Report	Save a .csv of the report to the local system.
Close	Close the Average Dwell Report.

To open an hourly report, click a rule total, or the daily total count (underlined links located on each calendar day).

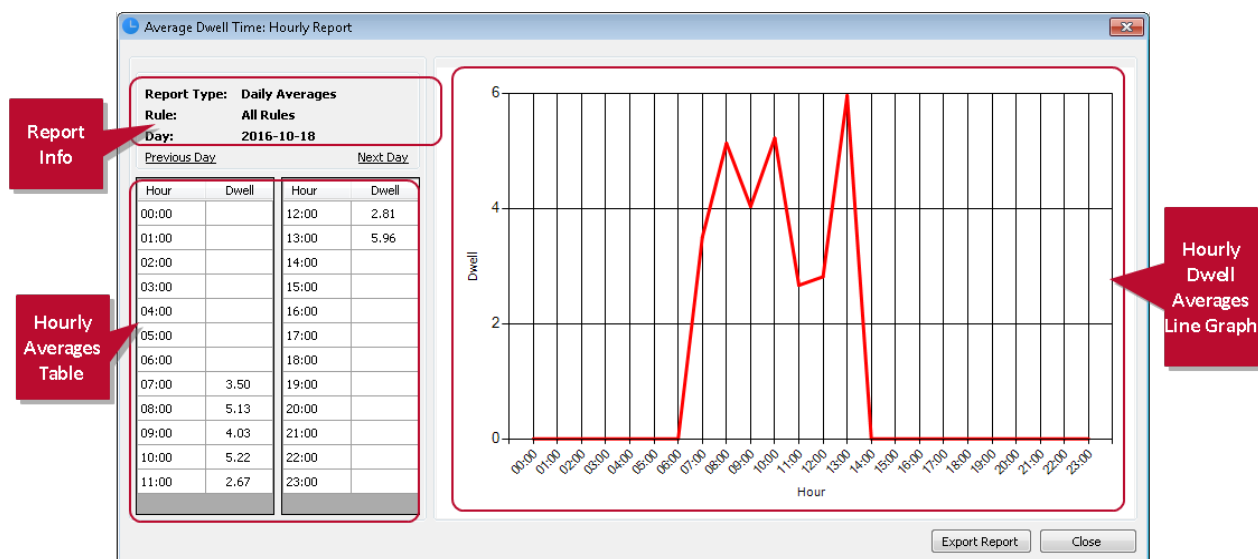


Figure 4-29:Advanced Reporting - Average Dwell time Hourly Report

A daily report will feature *Report Information*(*Report Type, Rule, Day*), an *Hourly Averages Table* as well as a basic line graph depicting the hourly averages, as pictured above.

The controls located on the window are described below:

Previous Day / Next Day	Navigate to the previous or next day.
Export Report	Save a .csv of the hourly report to the local system.
Close	Close the Average Dwell hourly report window.

Heatmaps

When *Heatmaps* is double-clicked, the *Heatmaps* window will launch.

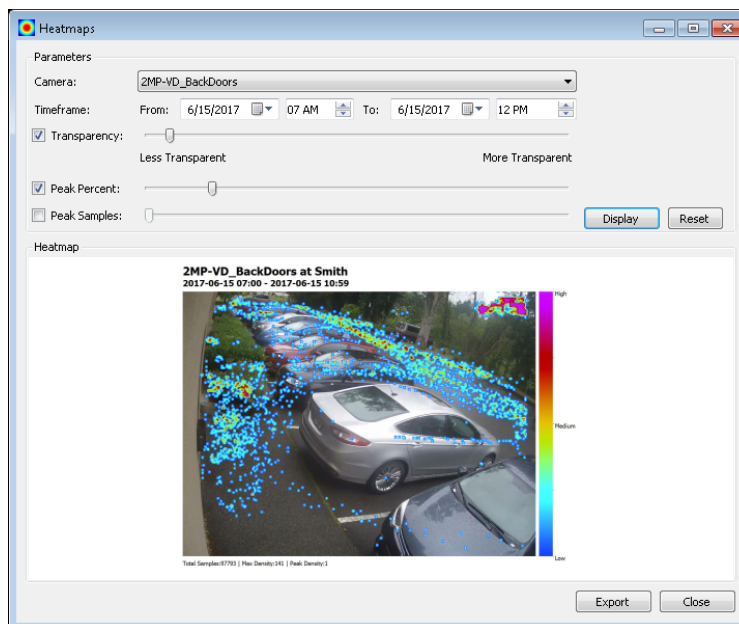



Figure 4-30:VIGIL Client - Advanced Reporting - Heatmaps

Heatmap criteria is detailed below

Camera	Select the camera you wish to generate a heat map for.
Timeframe	Select the timeframe from which to draw the motion density data.
Transparency	Set the transparency of the heatmap visuals. Lower transparency visuals are easier to see but can greatly obscure portions of the original image.
Peak Percent	When generating heatmaps based on this setting, color intensity will depend on the peak percent (of motion traffic) as defined by the user.
Peak Samples	When generating heatmaps based on this setting, color intensity will depend on the peak amount of samples containing motion against one million samples. In lower traffic environments, settings this value low will results in more colorful heatmaps as less motion samples are required to increase color intensity.

- To generate a heatmap, fill in the required criteria then click *Display*. The resulting heatmap will be displayed in the open portion of the window.
- Click *Export* to save a jpg of the heatmap to a local destination.

4.3.9 Chat (located under *Other*)

VIGIL Server and Client include a chat feature to speak or write back and forth between VIGIL Clients connected to VIGIL Servers. The Chat session is initiated by the VIGIL Client only and can be used to communicate via voice or text chat. Double click on  **Chat** in the Treeview to initiate a chat session with the selected Server.



Note: For voice chat to be available and function correctly, audio settings for *Chat* must be configured correctly in the VIGIL Server's Settings (see the VIGIL Server Users Guide for more information).

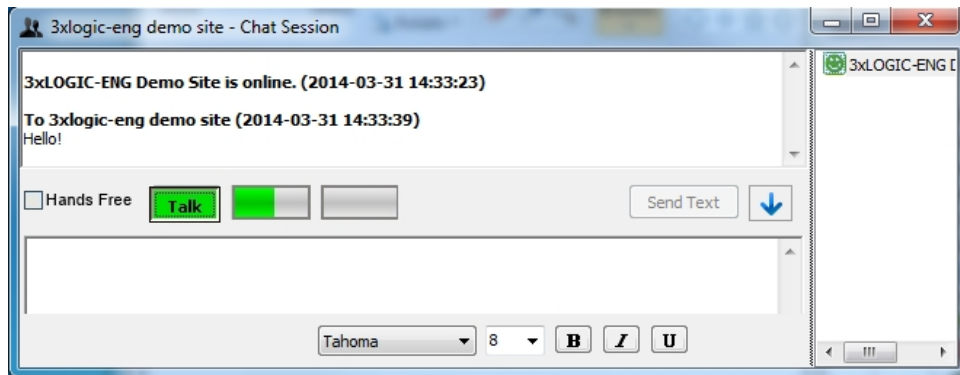






Figure 4-31: VIGIL Chat Window

Hands Free	Check <i>Hands Free</i> for VIGIL Chat to automatically detect the volume level and only send voice when sound reaches a specific volume. Uncheck <i>Hands Free</i> to use the <i>Talk</i> button to manually start and stop sending voice data.	
Talk	When <i>Hands Free</i> is unchecked, click <i>Talk</i> to send voice data. Unclick <i>Talk</i> to stop sending voice data.	
Voice Detection Graphs		The voice detection graphs provide a visualization of voice data detected in the chat session.
Send Text	Sends a typed message. Type text into the text-box and click <i>Send Text</i> .	
Sensitivity	Use the slide bar to adjust the chat audio sensitivity. To the left is less sensitive, to the right is more sensitive.  Note: Click the down  button to expand the <i>Controls</i> section and reveal the sensitivity slider.	



Note: To erase chat history, click within the history portion of the chat window and press the *Delete* button on your keyboard. You will be asked to confirm the deletion. Select *OK*.

4.3.10 Server Alarms (located under *Other*)

Double Click on the  **Server Alarms** Treeview item to open the Alarms window for the selected server. Server Alarm Polling must be enabled for this option to work.

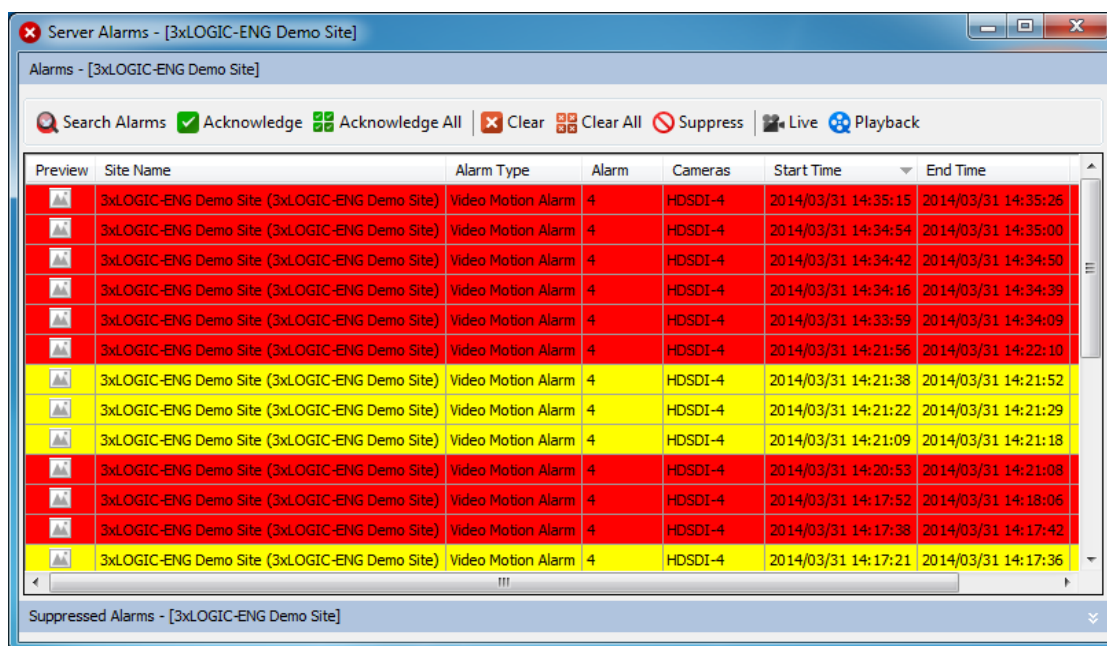









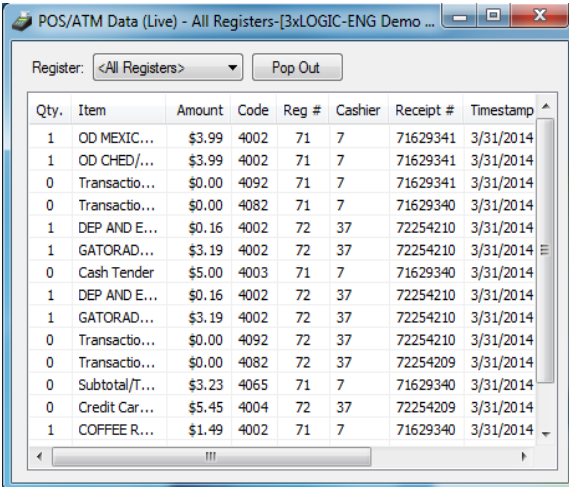


Figure 4-32:Server Alarms Window

 Search Alarms	Search Alarms allows you to search through different triggered alarms based on simple criteria. Please see Section See "Search Alarms" on page 133 - See "Search Alarms" on page 133 for more information on Search Alarms options and functions.
 Acknowledge	Acknowledges a selected alarm.
 Acknowledge All	Acknowledge all alarms currently displayed in Server Alarms window.
 Clear	Clear selected alarm from Server Alarms window.
 Clear All	Clear all alarms from Server Alarms window.
 Suppress	Suppress a specific alarm type so that no new notifications from the suppressed alarm will display until the alarm suppression expires or is deleted. Please see See "Suppress Alarms" on page 132 - See "Suppress Alarms" on page 132 for more information.
 Live	Opens a live display of the camera on which the selected alarm was triggered.
 Playback	Brings up a playback window containing footage of when the alarm was triggered.

4.3.11 POS/ATM Live (located under *Other*)

Double Click on the  POS/ATM Live Treeview item to open the POS/ATM Data (Live) window for the selected Server.



The screenshot shows a window titled "POS/ATM Data (Live) - All Registers-[3xLOGIC-ENG Demo ...]". It has a "Register:" dropdown menu set to "<All Registers>" and a "Pop Out" button. The main area contains a table with the following columns: Qty., Item, Amount, Code, Reg #, Cashier, Receipt #, and Timestamp. The table lists various transactions including items like "OD MEXIC...", "OD CHED/...", "Transaction...", "DEP AND E...", "GATORAD...", "Cash Tender", "Subtotal/T...", "Credit Car...", and "COFFEE R...".

Qty.	Item	Amount	Code	Reg #	Cashier	Receipt #	Timestamp
1	OD MEXIC...	\$3.99	4002	71	7	71629341	3/31/2014
1	OD CHED/...	\$3.99	4002	71	7	71629341	3/31/2014
0	Transaction...	\$0.00	4092	71	7	71629341	3/31/2014
0	Transaction...	\$0.00	4082	71	7	71629340	3/31/2014
1	DEP AND E...	\$0.16	4002	72	37	72254210	3/31/2014
1	GATORAD...	\$3.19	4002	72	37	72254210	3/31/2014
0	Cash Tender	\$5.00	4003	71	7	71629340	3/31/2014
1	DEP AND E...	\$0.16	4002	72	37	72254210	3/31/2014
1	GATORAD...	\$3.19	4002	72	37	72254210	3/31/2014
0	Transaction...	\$0.00	4092	72	37	72254210	3/31/2014
0	Transaction...	\$0.00	4082	72	37	72254209	3/31/2014
0	Subtotal/T...	\$3.23	4065	71	7	71629340	3/31/2014
0	Credit Car...	\$5.45	4004	72	37	72254209	3/31/2014
1	COFFEE R...	\$1.49	4002	71	7	71629340	3/31/2014

Figure 4-33:POS/ATM Live Data Window

Site Name	The <i>Site Name</i> is listed in the <i>Title</i> of the window in square brackets [].
Register	Select a <i>Register Number</i> from the drop-down.
Pop-Out	Opens a separate POS/ATM Receipt using the currently selected <i>Register</i> . These receipts can be docked to the VIGIL Client Sidebar.

The *POS/ATM Data (Live)* window presents data in tabular form with these columns:

- **Qty.** – The quantity of the item purchased.
- **Item** – The item purchased.
- **Amount** – The price of the item purchased.
- **Code** – The transaction code identifies the type of transaction.
- **Reg #** – The cash register number.
- **Cashier** – The cashier currently logged into the POS system.
- **Receipt #** – The receipt number of the current receipt.
- **Timestamp** – The time at which the Point of Sale event occurred.
- **Idx** – A unique identifier to quickly identify and find POS/ATM data line items.

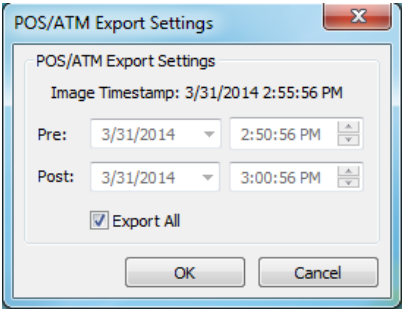
The column headers are all able to be re-sized as well as moved around within the window. Simply drag and move the column header to the desired location. The column locations can be reset by right-clicking in the *Live POS/ATM Data* window and selecting *Reset Column Order*.



Note: Some types of POS systems do not support all of the columns that are available.

Below are the options available when the *POS/ATM Data (Live)* entry is right-clicked:

Copy Line	Copies the selected data record to the Windows clipboard.
------------------	---

Export All Records	<p>Opens the <i>Select Destination</i> window where an export destination is selected.</p> <p>After making a selection, the <i>POS/ATM Export Settings</i> window opens. Select the time periods to export or select <i>Export All</i> to export all Data records. A filename may also be assigned.</p> <p>Once complete, click <i>OK</i> to begin the export process. Click <i>Cancel</i> to exit without exporting.</p>	 <p>Figure 4-34:POS/ATM Export Settings</p>
Print All Records	Prints the live POS/ATM Data to the default printer.	
Reset Column Order	Resets the order of the POS/ATM Data columns if they have been rearranged.	
Quick Search	Search for footage on the POS item’s associated camera a pre-defined amount of time before the POS Item was scanned. Available time frames are <i>One, Five, Ten</i> minutes, or <i>Instant Replay</i> .	

4.3.12 Audit Log (located under *Other*)

The Audit Log provides a way to analyze, search and monitor various errors and general information concerning the VIGIL Client software that is automatically logged by VIGIL Client. Essentially, it allows you to search the VIGIL Client activity logs by using a variety of criteria such as date / time, error code, IP address, or module. This information can be sent to our engineers to help locate and fix bugs within VIGIL Client and ultimately improve its performance.

4.3.13 Tagged Footage (located under *Other*)

Tagged Footage is video (and accompanying data)that has been tagged for quick retrieval and review. Click the *Tagged Footage* Option in a site’s Treeview to look up all footage that has been tagged.

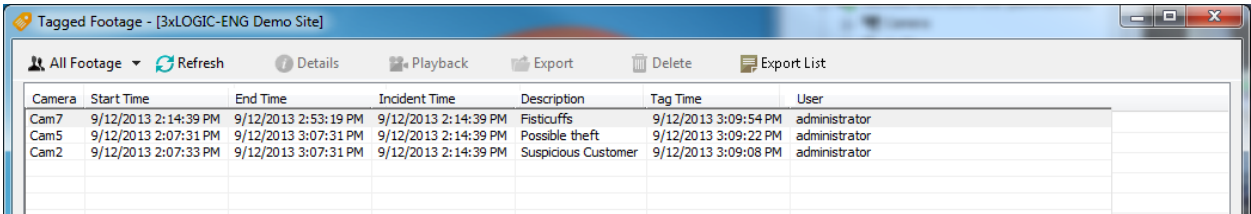

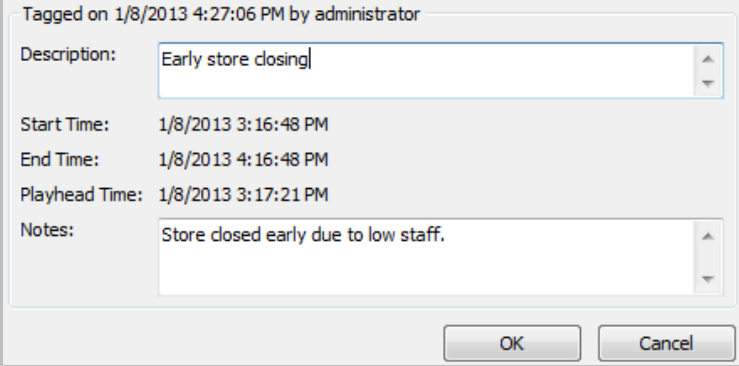







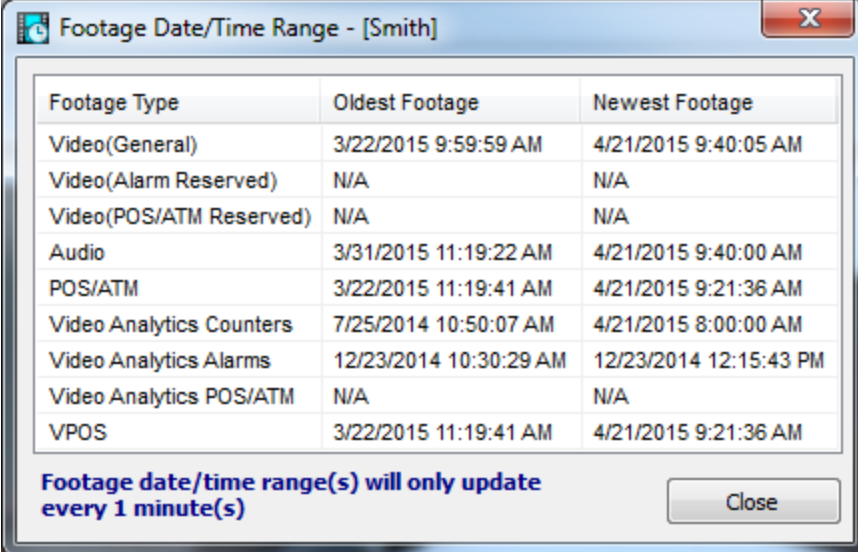
Figure 4-35:Tagged Footage Window

<div>My Footage</div> <div>All Footage</div>	Use these buttons to switch between showing the footage tagged by the current user (<i>My Footage</i>) or all footage tagged on the VIGIL Server by any user (<i>All Footage</i>).
<div>Refresh</div>	Use this button to update the current list of tagged footage.

 Details	<p>After selecting an item of tagged footage, click on the <i>Details</i> button to view or edit detailed information about the currently selected footage.</p>  <p>Figure 4-36: Tagged Footage Details</p>
 Export	<p>Click this button after selecting an item of tagged footage to export the footage to your export destination.</p>
 Playback	<p>Click this button after selecting an item of tagged footage to open that footage for playback.</p>
 Delete	<p>Click this button to delete the tag from the footage.</p> <p> Note: Deleting the tag does not delete the footage; it only removes the tag.</p>
 Export List	<p>Click this button to export a list of Tagged Footage in CSV format. A File Explorer prompt will deploy where you may select a destination of your choosing.</p>

4.3.14 Footage Date / Time Range (located under *Other*)

The *Footage Date / Time Range* window (pictured below) lists the oldest and newest footage dates for several different types of video, audio and data stored on the selected VIGIL Server.



Footage Type	Oldest Footage	Newest Footage
Video(General)	3/22/2015 9:59:59 AM	4/21/2015 9:40:05 AM
Video(Alarm Reserved)	N/A	N/A
Video(POS/ATM Reserved)	N/A	N/A
Audio	3/31/2015 11:19:22 AM	4/21/2015 9:40:00 AM
POS/ATM	3/22/2015 11:19:41 AM	4/21/2015 9:21:36 AM
Video Analytics Counters	7/25/2014 10:50:07 AM	4/21/2015 8:00:00 AM
Video Analytics Alarms	12/23/2014 10:30:29 AM	12/23/2014 12:15:43 PM
Video Analytics POS/ATM	N/A	N/A
VPOS	3/22/2015 11:19:41 AM	4/21/2015 9:21:36 AM

Footage date/time range(s) will only update every 1 minute(s)

Close

Figure 4-37: VIGIL Client - Sidebar Sites Tab - Server Footage Date / Time Range Window.

4.3.15 Server Exports Status(located under *Other*)

The *Server Export* window gives you real-time progress updates on data currently being exported from the selected *Server*. Click the *Server Export* button in the *Sites Treeview* (under *Other*) to open the *Server Export* window.

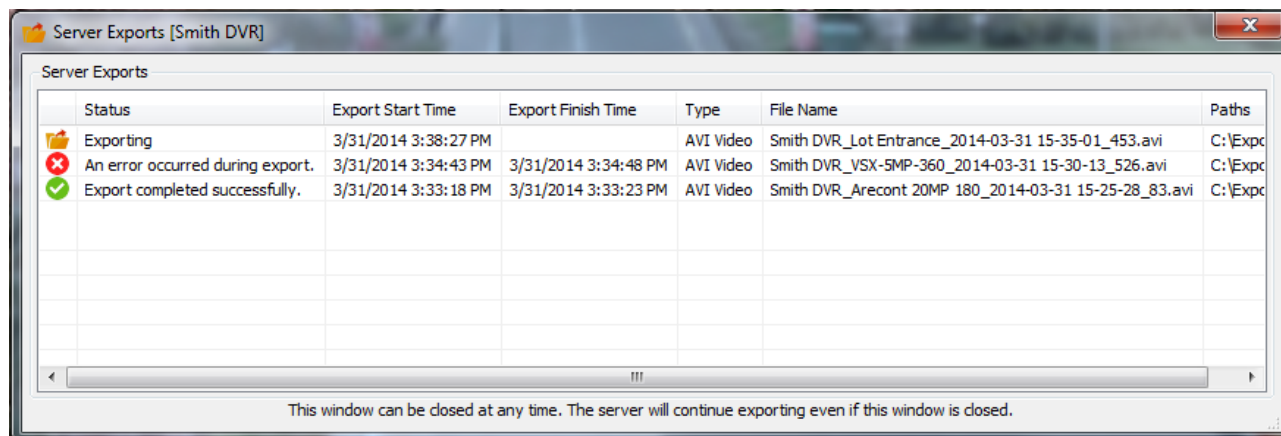


Figure 4-38:Server Exports Window

4.3.16 Remote Exports Browser (located under *Other*)

The *Remote Exports Browser* allows a VIGIL Client user to quickly review all export files located in the selected VIGIL Server's local export destinations.

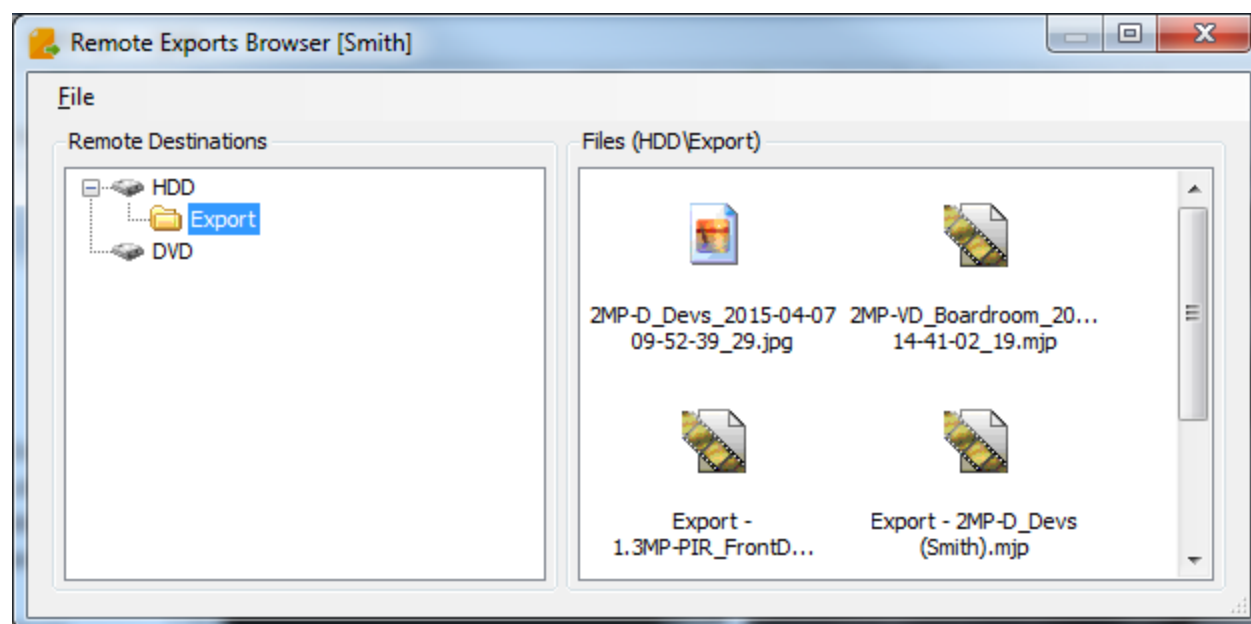


Figure 4-39:VIGIL Client - Sidebar Sites Tab - Remote Exports Browser

Use the left-hand *Remote Destinations* explorer window to navigate to the desired export destination on the selected VIGIL Server.

Files located in the destination will be displayed in the right-hand *Files(HDD/Export)* explorer window. Double left-clicking a file will export it to a local destination on your current system.

Right-clicking a file will open a menu with the following options:

Download to Local Destinations	Download the file to a local export destination on your current system
Download to My Computer	Download to alternate location / folder on your current system.
Delete Files from Remote Server	Delete the file from the Remote Server.
Copy on Remote Server	Copy the file on the Remote Server. Use this function to move files from one destination on a Server to another.
Refresh	Refresh the current export destination folder.
Select All	Select all files located in the current export destination folder.

4.3.17 Bandwidth Test (located under *Other*)

The *Bandwidth Test* feature is a simple utility to check average bandwidth availability between VIGIL Client and the selected VIGIL Server site and will notify a user if an insufficient bandwidth issue exists. Double-click the *Bandwidth Test* option in the treeview to open the utility pictured below.

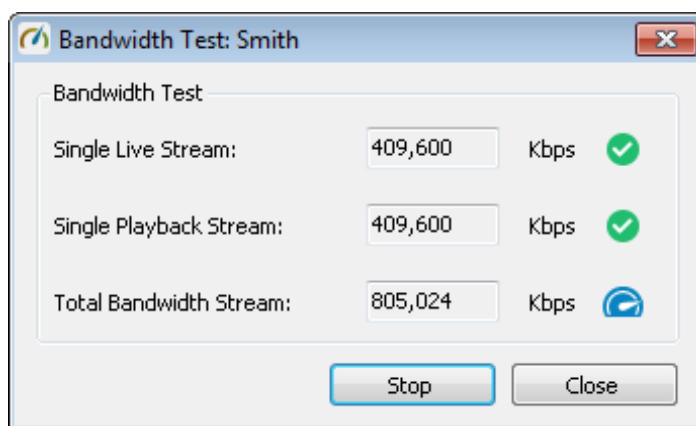


Figure 4-40:VIGIL Client - Bandwidth Test - Test in Progress

The test will produce separate bandwidth availability averages for the following three stream criteria:

- **Single Live Stream** - The average amount of available bandwidth for a single camera live stream.
- **Single Playback Stream** - The average amount of available bandwidth for a single camera playback stream.
- **Total Bandwidth Stream** - The total available bandwidth average.

Click *Start* to begin the test.

When the test has begun, progress will be indicated via the gauge icons. Available bandwidth averages will be listed in the corresponding fields (kbps).

	The HIGH icon indicates ample bandwidth exists for the corresponding stream criteria.
	The MED icon indicates sufficient bandwidth exists for the corresponding stream criteria.
	The LOW icon indicates the minimum amount of recommended bandwidth exists for the corresponding criteria.
	The FAIL icon indicates an insufficient bandwidth issue.

Click *Stop* at anytime during the test to cancel the process.

Bandwidth ranges are graded below:

Stream Criteria	Low	Med	High
Single Live Stream	250Kbps – 2048Kbps	2048Kbps – 50000Kbps	50000Kbps or more
Single Playback Stream	250Kbps– 2048Kbps	2048Kbps – 50000Kbps	50000Kbps or more
Total Bandwidth Stream	512Kbps – 3048Kbps	3048Kbps – 70000Kbps	70000Kbps or more

- **LOW** - The system will work but you will most likely not be able to stream video in real time and playback will be very slow.
- **MED** - The system will function but viewing more than one camera in live mode and playback will be noticeably slow.
- **HIGH** - The system will be able to stream multiple cameras in real time as well as multiple cameras on playback.

4.3.18 Manage Restricted Video

Restricted video is footage that has been restricted for viewing by only users with the *View Restricted Video* permission.

The *Manage Restricted Video* interface allows users with the appropriate permissions to manage any footage that has been tagged as restricted.

Footage can be restricted from the playback viewer by marking footage and choosing to restrict it (*Right-click>Restrict Video*) or from the Playback Search form (the *Restrict All* button).

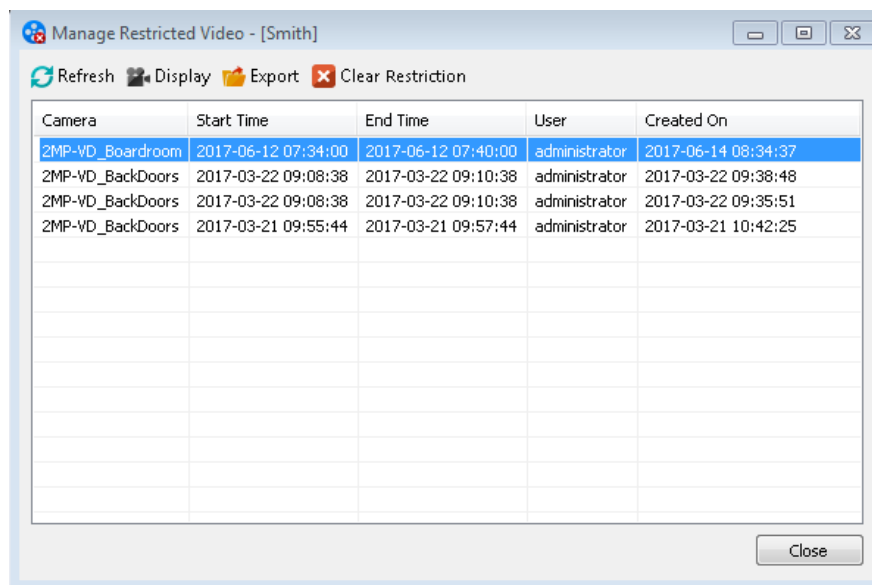


Figure 4-41: Manage Restricted Video Interface

Restricted video management controls are described below:

Refresh	Refreshes the list of restricted footage.
Display	Opens the associated footage of the currently selected restricted entry.
Export	Opens an Export Options menu. After selecting the export type, a user can select a destination and proceed with the export of the restricted footage.

Clear Restriction	Clear the selected footage of its Restricted tag.
--------------------------	---

Click the *Close* button to exit the Restricted Video Management interface.

4.3.19 Manage Locked Video

Locked video is footage that a user has safeguarded against footage scavenging. Locked video will never be scavenged, regardless of age.

The *Manage Locked Video* interface allows users with the appropriate permissions to manage any footage that has been tagged as locked.

Footage can be locked from the playback viewer by marking footage and choosing to lock it (*Right-click>Lock Video*) or from the Playback Search form (the *Lock All* button).

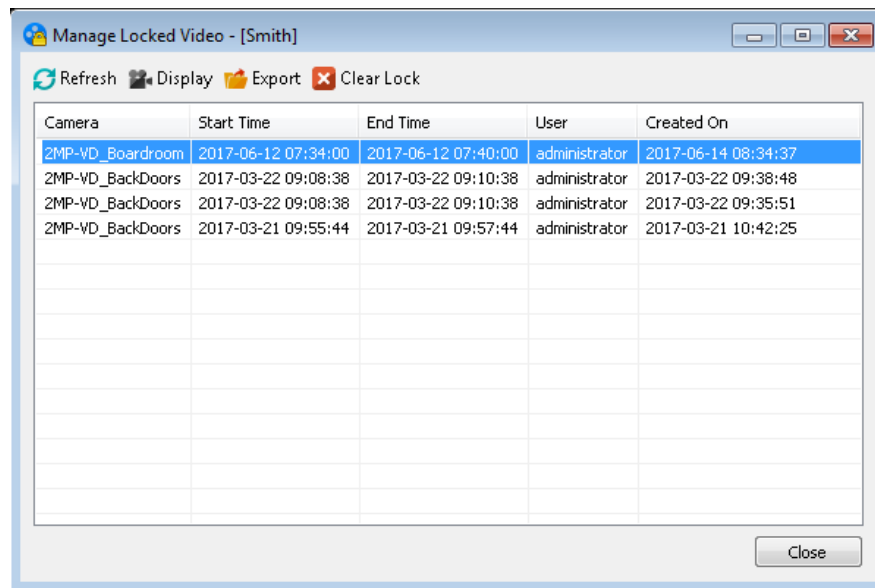


Figure 4-42:Manage Locked Video Interface

Locked video management controls are described below:

Refresh	Refreshes the list of locked footage.
Display	Opens the associated footage of the currently selected locked entry.
Export	Opens an <i>Export Options</i> menu. After selecting the export type, a user can select a destination and proceed with the export of the locked footage.
Clear Lock	Clear the selected footage of its Locked tag. The footage will now be available for scavenging.




Click the *Close* button to exit the Locked Video Management interface.

4.4 Views Tab

Cameras are typically grouped by server site; however, custom camera groups that include cameras from any connected server can be defined. To view custom camera groups, click the *Views* tab(1, below.)



Figure 4-43:Sidebar - Views Tab

	To save the current layout on the Live Window as a new View, click the <i>Save View</i> button. You may also save the current view via the <i>Save View</i> button in the icon menu toolbar.
	To delete a group or a camera, click on the group name or camera name and then click the <i>Delete</i> button. Click <i>Yes</i> in the confirmation box.
	To display all of the cameras of a group Live, select the group and click the <i>Display</i> button.

4.5 Information Bar

The information bar found at the very bottom of the main Client window provides you with the last command sent to the Virtual Switch, CPU usage, date, time, and chat status. A green CPU bar indicates that the CPU usage is under 95 percent; red indicates that it is over 95 percent.



Figure 4-44: VIGIL Client - Bottom Information Bar

Clicking on the *CPU Usage* portion of the info bar will bring up an information screen (pictured below) detailing information about the system, current streams and virtual switch.

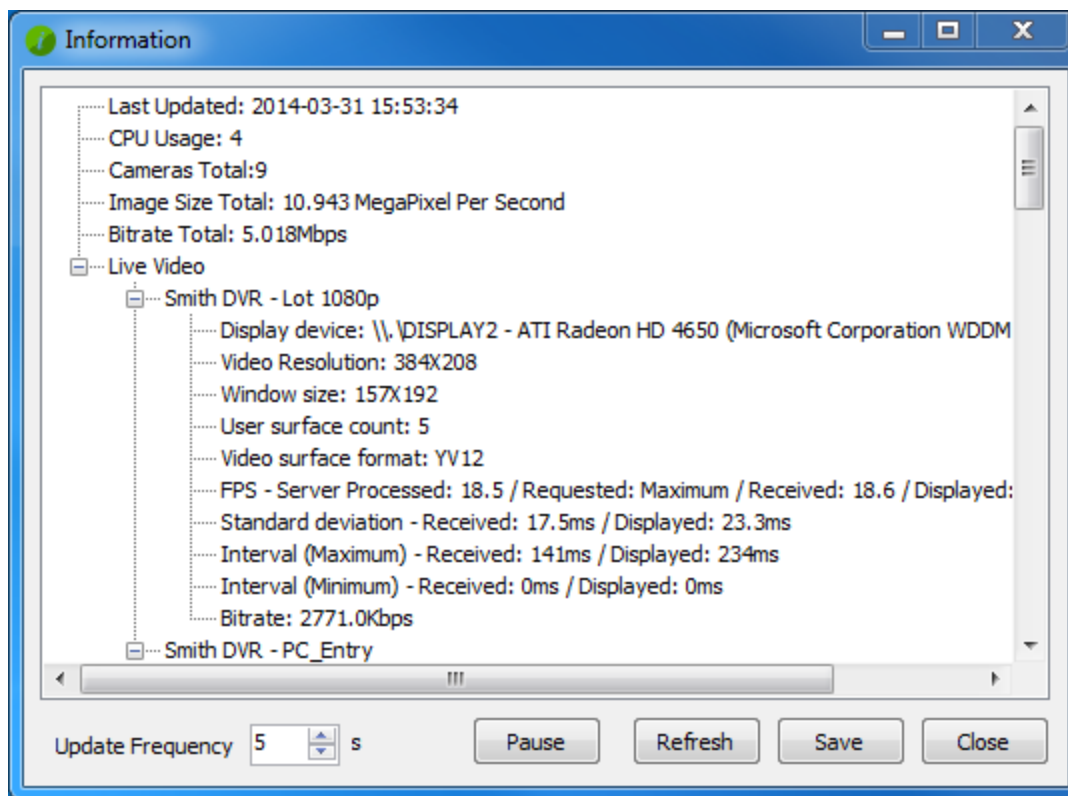


Figure 4-45: CPU Usage- Information Window

5 Servers Window

The *Servers Window* can be opened from the Servers top bar menu. Mouse-over the *Servers* menu item and select *Servers* from the drop-down list.

A Server in this context is a Windows PC configured as a VIGIL Server or a 3xLOGIC VERGE Server Camera. Review Stations may also be added from the window. The purpose of setting up servers is to make connecting to local and remote servers more efficient than remembering IP addresses or DNS names. Server information is stored by a description that is created by the user.



Note: If *Managed by VCM* is enabled in the Settings, the Servers list will be populated by the VCM Server that VIGIL Client connects to.

The *Servers* window displays a list of saved servers. It also displays their current connection status and offers different buttons to interact with the servers.

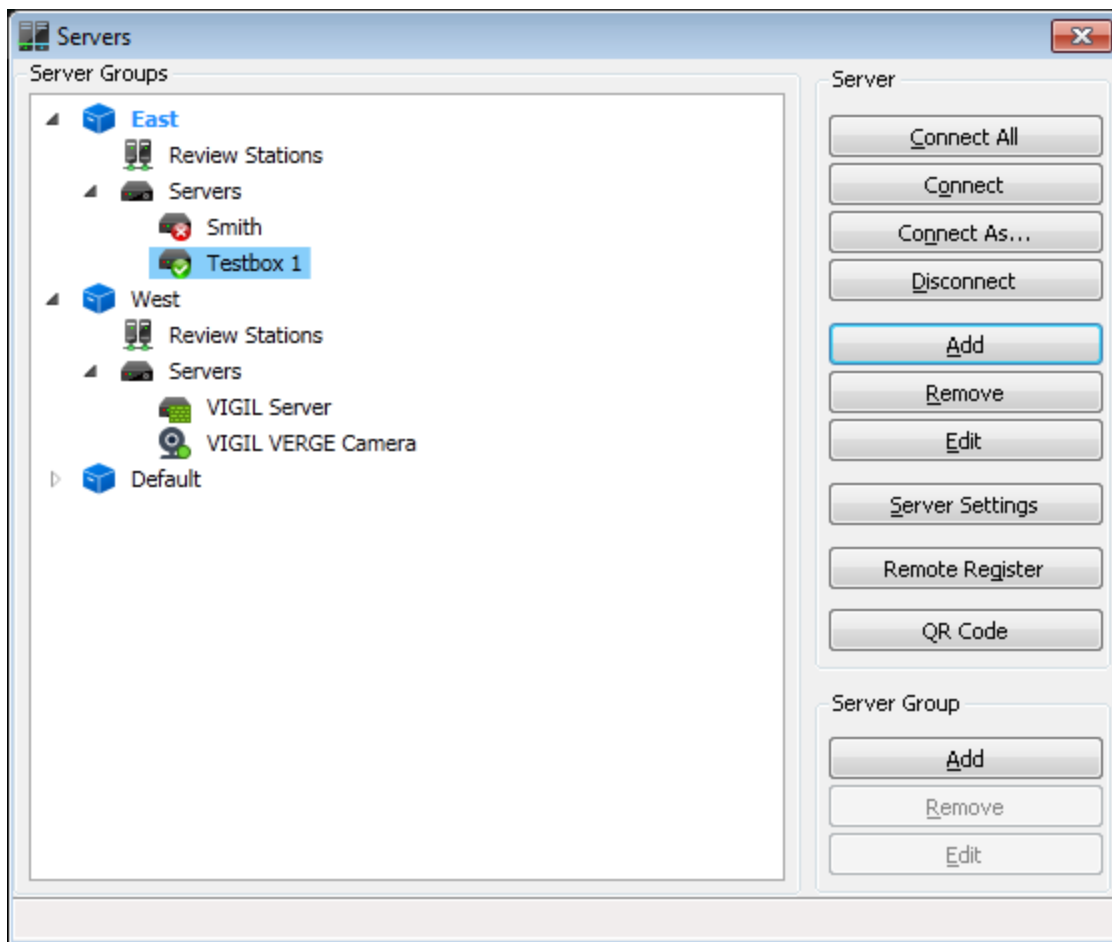



Figure 5-1: VIGIL Client - Servers Window

	Server Group icon. Click the context-arrow next to the icon to open a list of all Servers belonging to the group.
	Connected / Disconnected to /from the VIGIL Server/Review Station/VERGE Device.
	Red and green icons in front of a Server icon indicates that Server is configured using VIGIL Connect.


	
Connect All	Connects to all configured servers. If a server does not have a username and password stored in the settings, it will prompt for the username and password.
Connect	Connects to the selected server only. If the server does not have a username and password stored in the settings, it will prompt for the username and password.
Connect As...	Connects to the selected server only. However, it will automatically bypass the stored username and password and will prompt one for this connection.
Disconnect	Opens a prompt asking if you want to disconnect from the currently selected server.
Add	Opens the <i>Server Settings</i> window where you can add a server.
Remove	Opens a prompt confirming if you wish to remove the currently selected server from the server list.
Edit	Opens the <i>Server Settings</i> window for the currently selected server allowing you to change the stored settings.
Server Settings	Opens the <i>VIGIL Server Settings</i> window for the currently selected server. You must be connected to the server with administrative privileges for this to be available.
Remote Register	Opens the <i>Registration</i> window for the currently selected server.
Server Group - Add/Edit/Delete	<p>Add, edit or delete customized Server Groups for easy organization of your Client Sidebar Sites tab.</p> <p>Clicking <i>Add</i> will deploy the <i>Add Server Group</i> window. In this window, a user can name the group, and add any desired existing Servers / All-in-One Devices/Review Stations to the group by checking them off in the Servers list. Once you have finished. click <i>OK</i> to add the new Server Group.</p>

5.1 Add / Edit a Server

Click the *Add* or *Edit* (with a Server or All-in-One Device elected) buttons from the *Servers* window to open the *Server Settings* form window.

Figure 5-2: Add / Edit Server Window

Server Group	Select a custom Server Group to add this Server to. Custom Server groups can be created in the VIGIL Client Servers window. See "Servers Window" on page 39 for more information.
Use VIGIL Connect	Enable this to use a VIGIL Connect alias or serial number instead of an IP address. VIGIL Connect aliases are case sensitive so be sure it is an exact match of the alias configured on the desired server.
IP/DNS Name	The IP address or DNS name of the server. To use a dial-up connection, leave this setting blank and Enable <i>Use Dial-up</i> , select the dial-up connection to use from the drop-down menu.
TCP/IP Ports	Open a window to change the default TCP/IP port settings if they have been altered on the server (see below).
User Name /	The user name and password that VIGIL Client will use to log in to the server. If these are

Password	left blank, a prompt will be opened during connection for the user name and password to be input manually.
Use Dialup	<p>Enable to use a dial-up connection to connect to a server.</p>  Note: At least one Windows dial-up connection must be set up for this feature to become enabled.
Check Network Status	Check the connection to the Server on a set interval and mark it as Offline if a set number of timeouts occur.
Description	Enter a site description to identify the in Client or check-off <i>Use Site Name for Description</i> to name configured on the VIGIL Server itself as its description.
Sync Server Alarms	Check the Server for Alarms on the defined interval. This option is enabled by default.
Sync Live POS/ATM	Check the Server for Live POS/ATM data on the defined interval. This option is enabled by default.

5.2 VIGIL Server Settings

To access a remote VIGIL Server's settings, VIGIL Client must be connected to the server with administrative privileges. Select a server from the list and click *Connect*. If the default user does not have administrative privileges, use *Connect As* to login as an administrator.

5.2.1 VIGIL Server Recorder Tab

From this window, cameras can be set to start or stop recording, the server can be rebooted or updated, and basic information about the operating performance of the VIGIL Server is displayed.

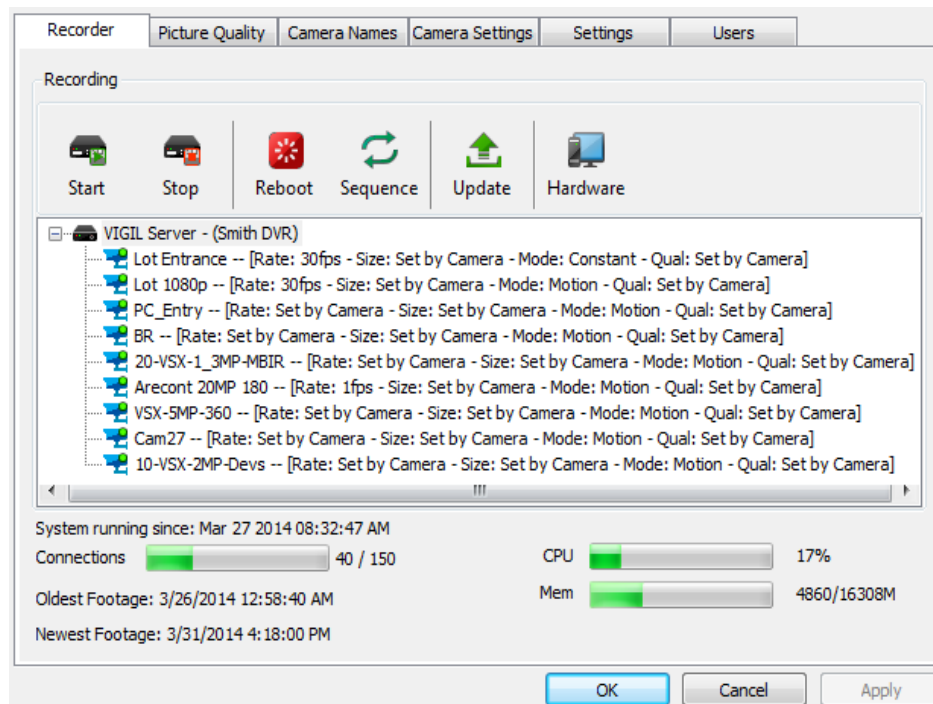


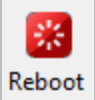

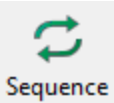

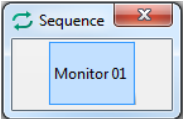


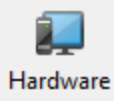


Figure 5-3: Server Settings - Recorder Tab

	Starts recording on the currently selected camera(s).
	Stops recording on the currently selected camera(s).
	Restarts the server system.  Warning: This action will restart the entire Server system(not just the VIGIL Server software)and will take it temporarily offline.

	<p>Opens the <i>Sequence</i> window which turns on / off the camera sequencing on connected analog monitors.</p> <p> Note: The sequences must be configured on the Server.</p>	
	<p>Uploads and applies an update file on the server. Select the .VGL update file and the update process will begin.</p> <p> Warning: This action will restart the Server software and take it temporarily off-line.</p>	
	<p>Opens the Hardware Information window which provides some basic information about the Capture Card installed in the VIGIL Server.</p>	

Camera information is displayed in the main portion of the window. Two status icons are used to show the status of each camera:

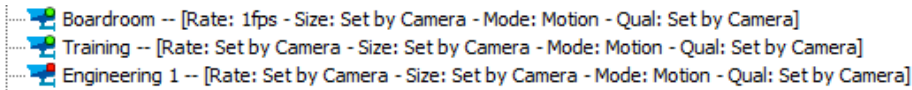




Figure 5-4:Server Settings - Recorder Tab - Camera Info

Along with the status icons, camera settings are also displayed. The camera recording frame rate, the recording resolution, recording mode and compression quality are listed.

	Camera is currently recording.
	Camera is currently stopped and not recording.

At the bottom of the window, VIGIL Server information such as running time, number of Client Connections, current CPU and memory usage and oldest / newest footage dates are displayed.

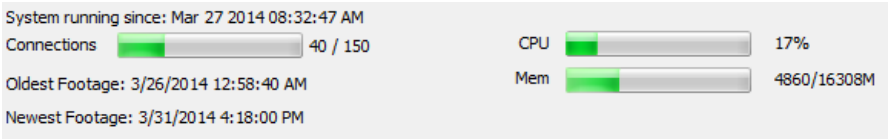


Figure 5-5:Server Settings - Recorder Tab - Server Information

System running since:	Shows the time when the VIGIL Server was last rebooted.
CPU	Shows the CPU usage on the VIGIL Server.
Connections	Shows the amount of client connections to the VIGIL Server.
Mem	The total memory usage on the VIGIL Server.
Oldest / Newest Footage	Shows the date and time of the oldest / newest footage stored on the VIGIL Server.

5.2.2 Picture Quality Tab

The recording quality of each camera can be adjusted on this tab.

Simple Settings Tab

Adjust the camera recording quality to preset values: Low (20), Medium (40), High (60) and Super-High (80).

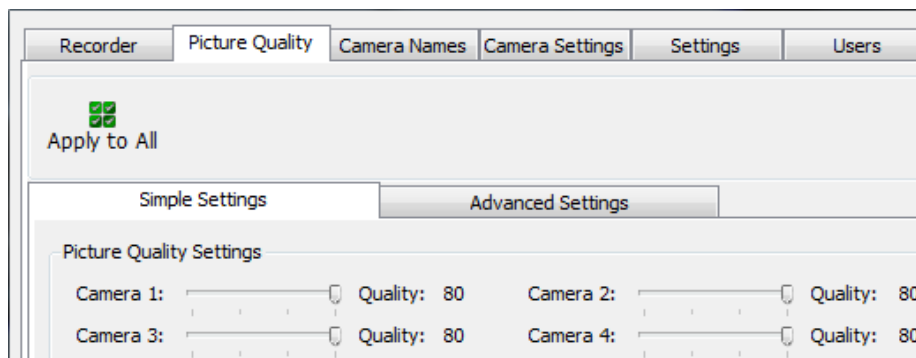


Figure 5-6: Server Settings - Picture Quality - Simple Settings Tab

Advanced Settings Tab

Adjust the camera recording quality between 20 and 90. This is for fine-tuning the camera recording quality.

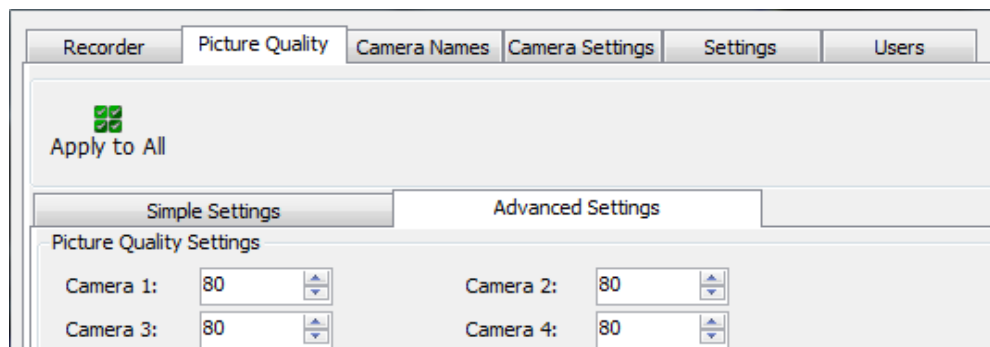


Figure 5-7: Server Settings - Picture Quality Tab- Advanced Settings Tab

5.2.3 Camera Names Tab

The *Camera Names* tab allows the ability to change the name of each camera.

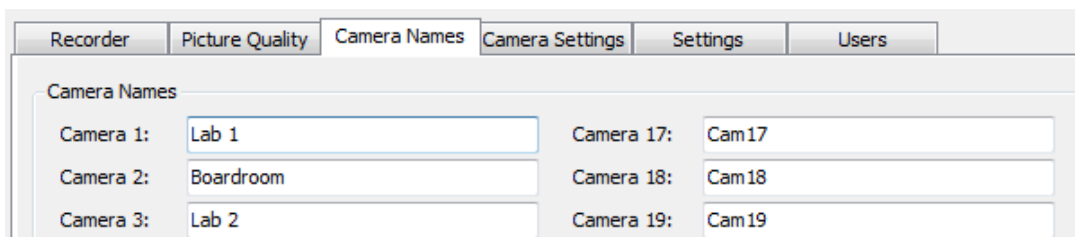


Figure 5-8: Server Settings - Camera Names

To change the name of a camera, type in the new name beside the camera number and click either *Apply* or *OK*.

5.2.4 Camera Settings Tab

The *Camera Settings* tab provides advanced configuration of camera parameters, recording mode and rates, and recording CODECs.

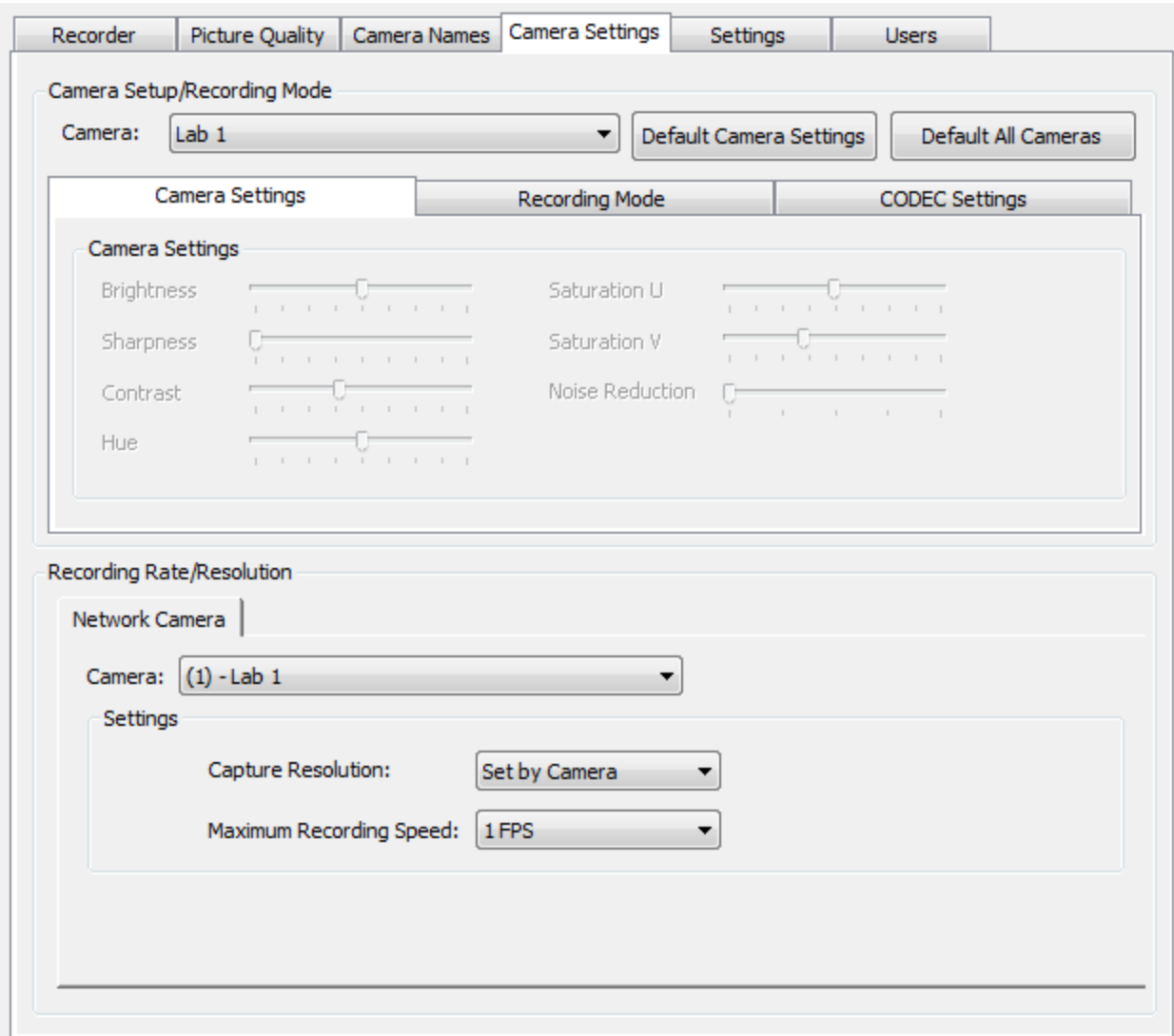


Figure 5-9:Server Settings - Camera Settings Tab

Camera Setup / Recording Mode



Figure 5-10:Server Settings - Camera Settings Tab - Camera Setup / Recording Mode

Camera	Select a camera to configure.
Default Camera Settings	Set the currently selected camera back to default settings.
Default All Cameras	Set all cameras back to default settings.

Camera Settings Sub-Tab

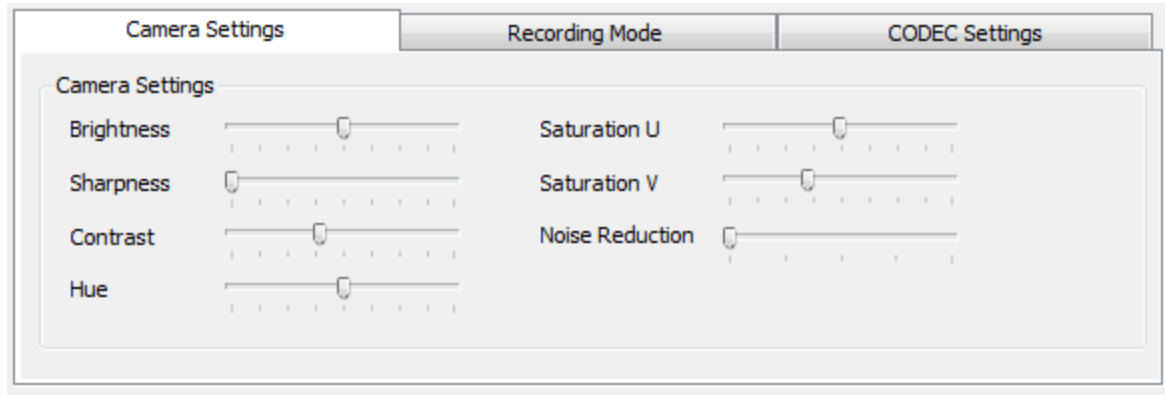



Figure 5-11: Server Settings - Camera Settings Tab - Camera Settings Sub-tab

Brightness	Adjusts the brightness of the video footage.
Sharpness	Adjusts the sharpness of the video footage
Contrast	Adjusts the contrast of the video footage.
Hue	Adjusts the hue of the video footage.
Saturation U/ Saturation V	Adjusts the U and V color difference signals used in YUV color format for the video footage.  Note: Not all cameras use a YUV color format, in which case, adjusting the <i>Saturation U</i> slider will adjust the color saturation while the <i>Saturation V</i> slider will have no effect.
Noise Reduction	Reduces video noise on grainy video images. Warning: If this value it is set too high it may have detrimental effects.

Recording Mode Sub-Tab

The Recording Mode Sub Tab allows for the Recording Speed of the Camera and the Recording Mode to be configured. 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.

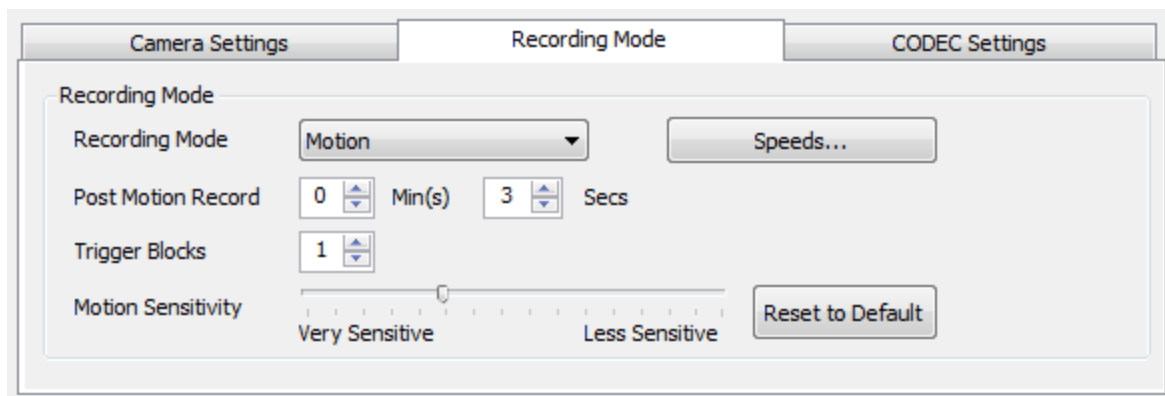
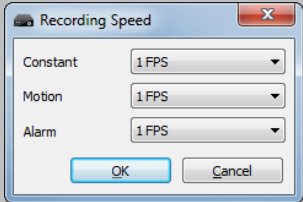


Figure 5-12: Server Settings - Camera Settings Tab - Recording Mode Subtab

Speeds...	<div><p>Figure 5-13:Recording Speed Window</p></div>	<p>Opens the <i>Recording Speed</i> window. The recording speed can be set individually for <i>Constant</i>, <i>Motion</i> and <i>Alarm Recording Mode</i>. Use the drop-down menu to select the desired number of frames per second (fps).</p> <p>Note: Network cameras will often record and play back at a slower rate than what was set in the <i>Recording Speed</i> window, depending on the bandwidth and camera.</p>
Constant	<p>Always recording, 24 hours 7 days a week.</p> <p>When Constant is selected, the user will have the option of also enabling Variable Constant Recording. Variable constant recording will drop camera FPS to 1 when no motion is detected and will resume full camera rate when motion is present.</p> <p>Check off <i>Variable</i> (only visible when Constant is selected as Recording Type) to enable Variable Constant Recording.</p>	
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.	
	Post Motion Record	The length of time a camera continues to record after motion or an alarm is detected.
	Trigger Blocks	The number of motion zones necessary to trigger the motion detector. The recommended value is 1.
	Motion Sensitivity	Controls the sensitivity of the motion detection. High sensitivity will detect minute amounts of motion; less sensitivity will only detect larger ranges of motion.
	Reset to Default	Resets the motion settings back to their default values.
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/ATM alarms.	

CODEC Settings Tab

The *CODEC Settings* tab allows advanced configuration of the recording CODEC used for storing video footage. Normally, two video encoding CODECs are available for recording video footage: *AZTECH* and *MJPEG4*, however some models support Hardware CODECs, which have slightly different customization options.

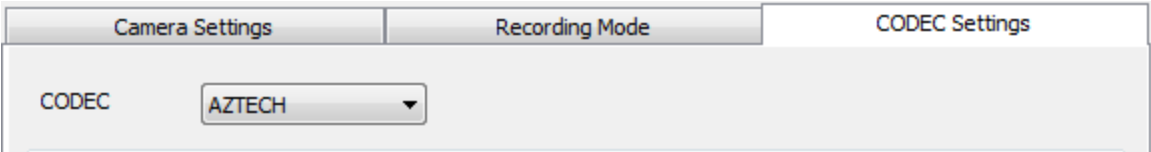


Figure 5-14:Server Settings - Camera Settings Tab - CODEC Settings Tab

AZTech™ CODEC Settings

The *AZTECH* CODEC is the default CODEC for most 3xLOGIC systems. To switch the recording CODEC to *AZTECH*, select the *AZTECH* option from the CODEC drop-down menu.

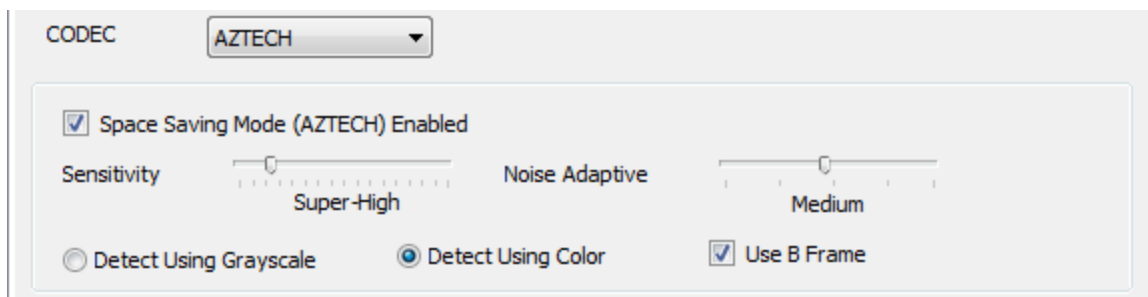





Figure 5-15: CODEC Settings Tab - AZTech™ Codec Settings

Space Saving Mode (AZTECH) Enabled	Enables advanced compression technology to decrease the file size of recorded footage.  Note: This is a CPU intensive setting.
Sensitivity	Adjusts the threshold used by the CODEC to identify areas of change between frames. The higher the sensitivity, the smaller a change is encoded.
Noise Adaptive	Adjusts the noise threshold used by the comparison algorithm when determining whether a block contains a change. When this value is increased, more noise is allowed in the block without triggering change for that block. This feature does not decrease noise in an image.
Detect Using Gray-scale/ Color	Determines whether grayscale or color will be used to detect changes.  Note: Color detection is a CPU intensive setting.
Use B Frame	Uses bi-directional frames to decrease the file size of recorded footage.  Note: This setting is extremely CPU and Memory intensive.

MPEG4 CODEC Settings

To switch the recording CODEC to MPEG4, select the *MPEG4* option from the *CODEC* drop-down menu.

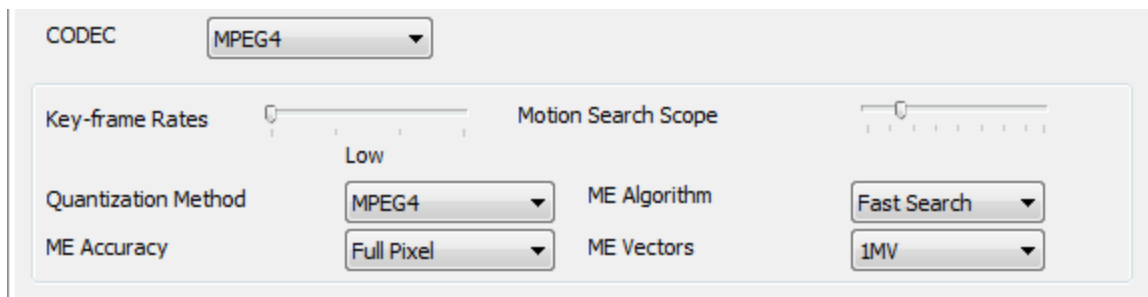



Figure 5-16: CODEC Settings Tab - MPEG4 CODEC Settings

Key-frame Rates	Sets the number of key-frames recorded per second. The higher the value, the greater the data space needed for recording, but the higher the quality of the video.
Motion Search Scope	Changes the size of the regions used to detect motion.

Quantization Method	Selects the type of compression. H264 offers higher compression than MPEG4 but requires more CPU usage.
ME Accuracy	<p>Motion Estimation Accuracy includes two options: <i>Full Pixel</i> and <i>Half Pixel</i>. Full Pixel checks for motion comparing differences of full pixels. Half Pixel will check for motion using an interpolation method that detects finer movements.</p> <div>  Note: Half Pixel is a CPU intensive setting. </div>
ME Algorithm	The Motion Estimation Algorithm changes the shape of the area used for motion detection and includes two options: <i>Full Search</i> and <i>Fast Search</i> . <i>Fast Search</i> will save CPU time but <i>Full Search</i> is more accurate.
ME Vectors	Sets the number of vectors tested for motion from 1 to 4. The greater the number, the more CPU processing is required.

Hardware CODEC Settings

Depending on the VIGIL Server model, it may use Hardware CODEC recording, which has slightly different customization options. For some types of cards the CODEC used can be changed on the VIGIL Server Settings | Hardware Tab via the Hardware CODEC Drop-down box.

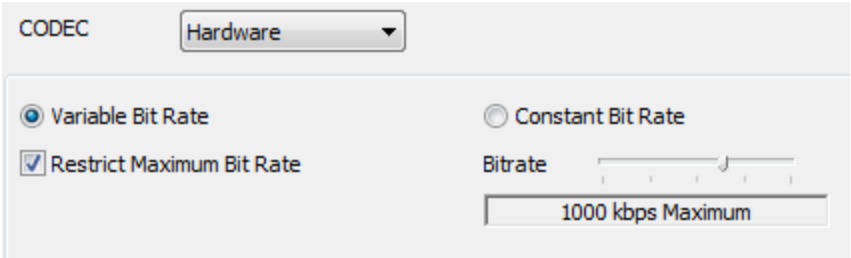


Figure 5-17:CODEC Settings Tab - Hardware CODEC Settings

Variable Bit Rate	The default setting of <i>Variable Bit Rate</i> allows the encoder to change its recording bit rate automatically as required. This option offers the best combination of file size and visual quality.
Constant Bit Rate	A setting of <i>Constant Bit Rate</i> with a very high bit rate selected will provide the maximum video quality settings, although this is at the expense of storage space.
Restrict Maximum Bit Rate	Sets a hard limit on the maximum quality that can be recorded. Use the slide bar to select the desired maximum bit rate.

Recording Rate / Resolution

In the *Recording Rate / Resolution* section, analog cameras are grouped into *Bank* tabs that represent the physical camera banks in the VIGIL Server. This allows the user to maximize the capture resolution and recording speeds for each camera bank. When the number of FPS is changed in the *Recording Rate / Resolution* window, it is applied to all recording modes.

Figure 5-18:Server Settings - Camera Settings Tab- Recording Rate / Resolution



Note: The number of banks and the cameras in each bank is determined by the capture card installed, which cannot be configured. There are many possible layouts of banks and channels per bank. If no capture card is installed (NVR) only the Network Camera tab will be available.

Camera	Select a camera number within the current bank tab to change its settings.
Capture Resolution	Select the desired recording resolution from the drop-down menu.
Recording Speed	Select the desired number of frames per second. Each bank has a set amount of FPS that can be set to its cameras. Values will change depending on the recording speeds for other cameras within the same bank.
Network Camera	IP network cameras are automatically detected and the analog feed is disabled for that camera number. Network camera speeds are independent of other cameras and do not change the maximum allowable FPS for cameras belonging to the same camera bank.

5.2.5 Settings Tab

The Settings tab provides control over some of the basic behaviour of the VIGIL Server.

The screenshot shows the 'Settings' tab in the VIGIL Client 10.5 interface. At the top, there are tabs for 'Recorder', 'Picture Quality', 'Camera Names', 'Camera Settings', 'Settings' (which is selected), and 'Users'. Below these tabs, the 'Settings' section is divided into several sub-sections:

- Site Name:** A text box labeled 'Site Name' containing the text 'Client Interface Test'.
- Global Server Settings:** A section with two sub-tabs: 'Global Server Settings' (selected) and 'Sequence'. It contains several checkboxes:
 - ☒ Auto-Start Recorder
 - ☒ Network Logging
 - ☐ Resolve Client Name
 - ☒ A/C Cameras
 - ☐ Watchdog
 - ☐ Limit Search to One Day
- Auto Logon:** A section with a single checkbox:
 - ☐ Auto Logon
- Data Drive Settings:** A table showing the status of data drives.

	Data Drive	Free Space
<input checked="" type="checkbox"/>	E:\DATA\	8.34% Free: 0.8 / 9.8 GB
<input checked="" type="checkbox"/>	F:\DATA\	1.91% Free: 0.9 / 48.8 GB

Figure 5-19:Server Settings - Settings Tab

Site Name

This screenshot shows the 'Site Name' section of the 'Settings' tab. It features a text box labeled 'Site Name' with the text 'DVR Site' entered.

Figure 5-20:Server Settings - Setting Tab - Site Name

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

Auto Logon

This screenshot shows the 'Auto Logon' section of the 'Settings' tab. It contains a checkbox labeled 'Auto Logon' which is checked.

Figure 5-21:Server Settings - Settings tab - Enable Auto-Logon

When this is checked, a message prompts for a username and password. The username and password entered will be used to log into VIGIL Server automatically when the program is launched.

Data Drive Settings

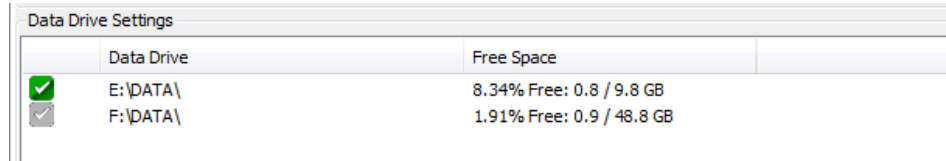


Figure 5-22:Server Settings - Settings Tab - Data Drive Settings

The *Data Drive Settings* area displays the data drive information of the VIGIL Server. The path of the drive and the available / total space of the drive are displayed.

The status of the data drive is indicated by its icon:

	Configured drive
	Currently recording on this drive
	Drive warning
	Drive error, contact your system administrator.

Global Server Settings Sub Tab

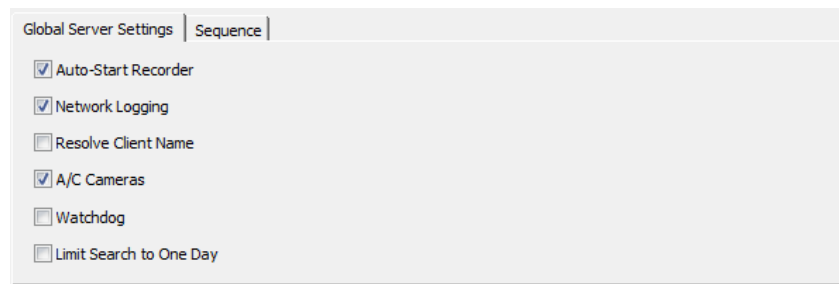


Figure 5-23:Server Settings - Settings Tab - Global Server Settings Sub-Tab

Auto-Start Recorder	When enabled, the VIGIL Server starts recording footage as soon as the VIGIL Server program is launched. When disabled, the user must manually start the recorder using the controls in the Recorder Controls window.
Network Logging	Logs network activity that can be reviewed in the Network Log Analyzer.
Resolve Client Name	When enabled, client IP addresses are translated into their computer names for easier recognition.
A/C Cameras	Enable <i>A/C Cameras</i> to set VIGIL Server to record footage from A/C powered cameras. Disable it to record footage from D/C powered cameras.
Watchdog	When enabled, the watchdog circuit on the video capture card is used to verify that VIGIL Server is responsive. If the software becomes unresponsive, then the watchdog will reboot the VIGIL Server
Limit Search to One Day	When enabled, the <i>Search</i> window will be limited to performing searches for a single day only.

Sequence Sub Tab

The *Sequence* tab configures the camera display sequences for the analog output monitors.

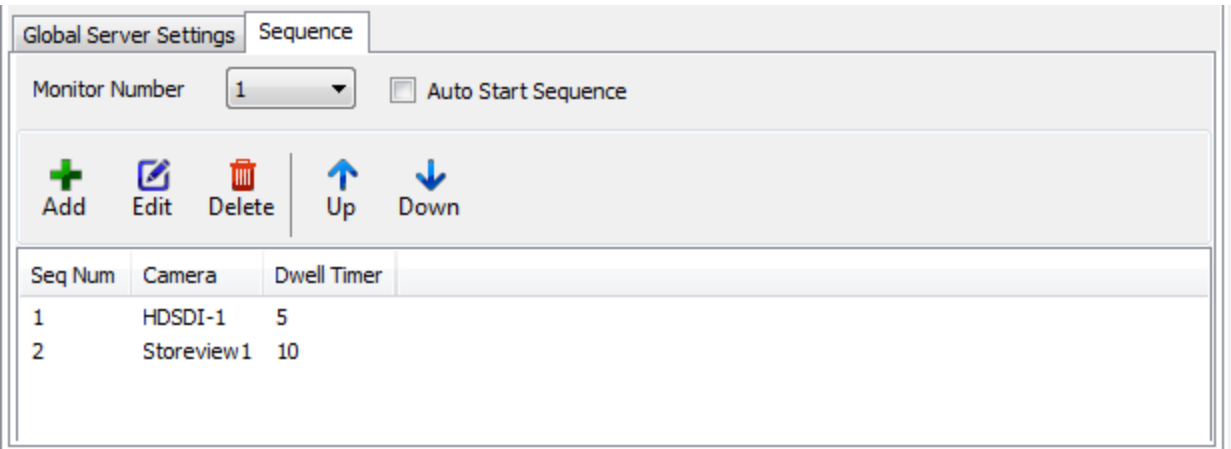


Figure 5-24:Server Settings - Settings Tab - Sequence Sub-Tab

Monitor Num-ber	Select the analog output monitor number for the sequence.
Auto Start Sequence	When enabled, the sequence for the selected analog output monitor is started automatically when VIGIL Server starts.
Add	Add a new camera to the sequence with a specified dwell time.
Edit	Modify the dwell time of the selected camera.
Delete	Remove the selected camera from the sequence.
Up / Down	Moves the selected camera up / down in the sequence.

5.2.6 Users Tab

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

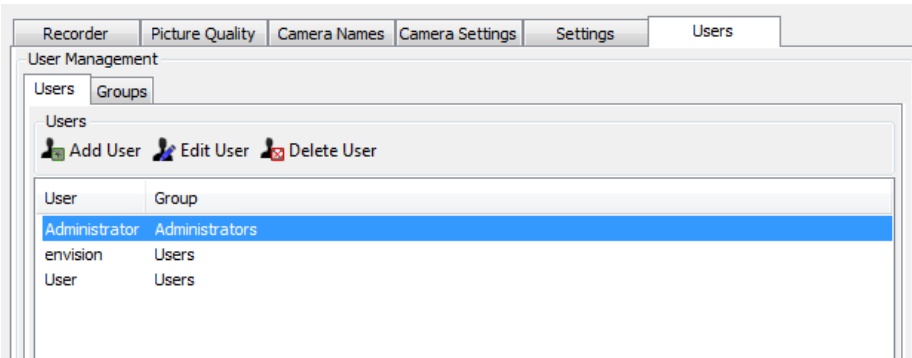
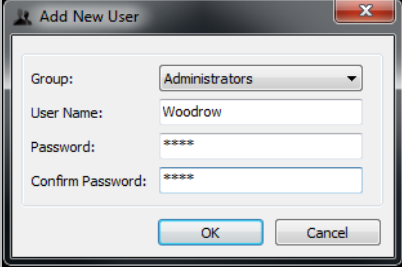


Figure 5-25:Server Settings - Users Tab

Users

Click the Users tab to access the User configuration options.

<p>Add a User</p>	<p>Click the Add User button to bring up the below window, select a Group and enter a Username and Password in the Add New user window.</p> <p>3xLOGIC highly recommends the use of a secure, complex password containing a mix of uppercase and lowercase letters, numbers and special characters. VIGIL will prompt any user when an insecure password is detected.</p>	 <p>Figure 5-26: Add New User Window</p>
<p>Edit a User</p>	<p>Select a User from the Drop-Down Menu and click the Edit button. The user's group, user password can be changed. The user's name cannot be changed.</p>	
<p>Delete a User</p>	<p>Select a User from the Drop-Down Menu and click the delete button.</p>	

Groups

Click the Groups tab to access the Group configuration options.

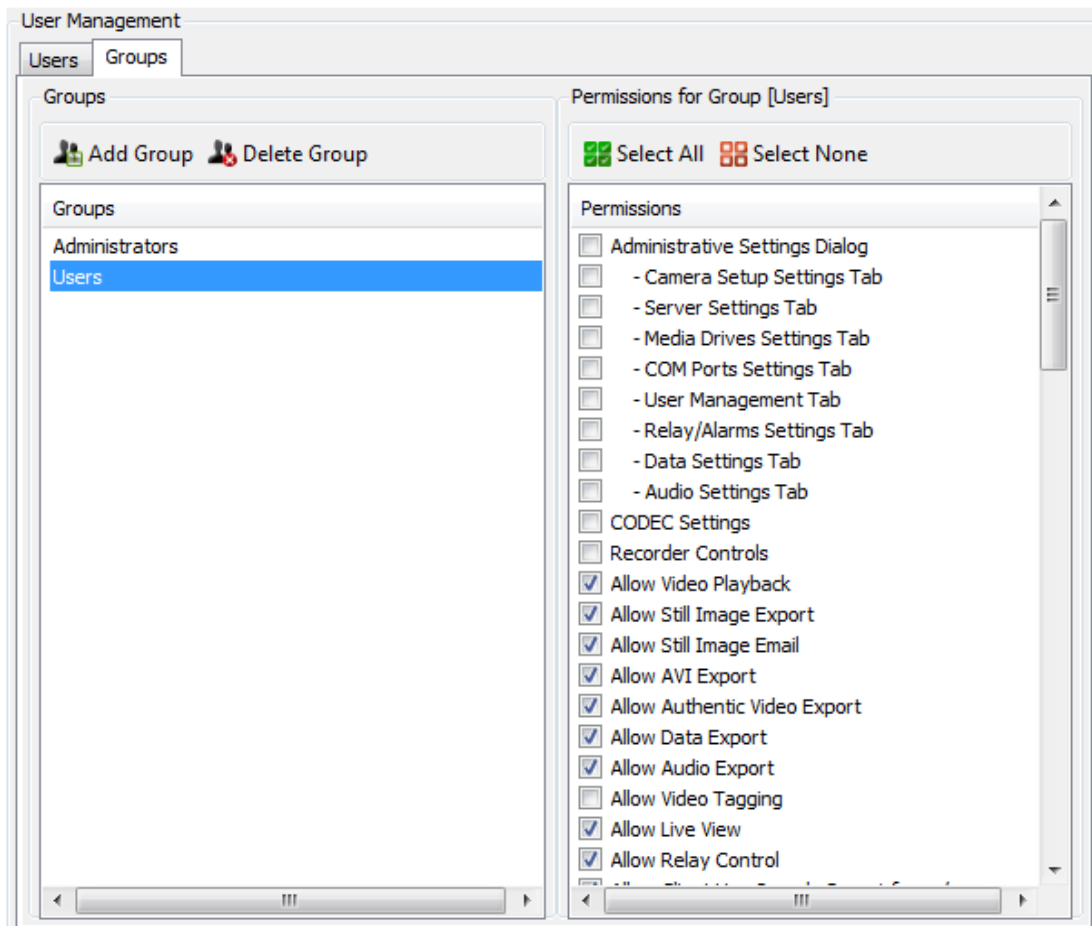


Figure 5-27: Server Settings - Users Tab - Groups Sub-Tab

<p>Add a Group</p>	<p>Click the Add button and enter a group name in the Add New Group window.</p>
---------------------------	---

Permissions	Select a group from the left-hand <i>Group</i> 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, un-check the box beside the permission. These permission are useful for maintaining access controls to your VIGIL Server and can keep your settings safe from accidental and malicious tampering.
Select All / None	Enable all permissions or disable all permissions.
Delete Group	Select a Group from the left-hand window and click the delete button.

5.2.7 Email Overview Tab

From the *E-Mail Overview* tab, a user can configure the selected 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 the VIGIL Server's local*Configured Email Recipients*.

The screenshot shows the 'Email Overview' tab in the VIGIL Client 10.5 interface. The top navigation bar includes 'Recorder', 'Picture Quality', 'Camera Names', 'Camera Settings', 'Settings', 'Users', and 'Email Overview'. The main content area is divided into three sections:

- Email Overview:** A message states 'Email configured on this tab will not be sent unless Email Notification is enabled for the specific feature.'
- Outgoing Email Configuration:** Includes fields for 'SMTP Server Location' (smtp.gmail.com), 'Port' (465), and a 'Requires SSL' checkbox. Below these are 'Requires Authentication' (checked), 'User Name' (redacted@3xlogic-eng.com), 'Password' (masked with asterisks), and a 'Test Email...' button. At the bottom are 'Default From Name' (VIGIL Server) and 'Default From Address' (vigilserver@127.0.0.1).
- Email Address Master List:** Features '+ Add', 'Edit', and 'Delete' icons. Below is a table with one column 'Email Address' containing three entries, all ending in '@3xlogic-eng.com'.
- Configured Email Recipients:** Features '+ Add', 'Edit', and 'Delete' icons. Below is a table with columns: Status, Notification Type, Recipient Type, Email Address, Camera, Digital Input, V-POS Exception, and Analytics Rule. One entry is shown: Status 'Enabled' (checked), Notification Type 'Video Loss', Recipient Type 'To', Email Address 'redacted@3xlogic-eng.com', and Camera '2MP-VD_BackDoors'.

At the bottom right are 'OK', 'Cancel', and 'Apply' buttons.

E-Mail Configuration Setting	Definition
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 Authentication	If the Email Server requires authentication, check-off this box and enter the appropriate user name / email address 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. <i>VIGILServer-@127.0.0.1</i> (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 <i>From</i> address will be the user name / email that was entered when enabling <i>Requires Authentication</i> , 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 5-28: 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: <i>Video Loss</i> , <i>Video Motion Alarm</i> , <i>POS/ATM Data</i> , <i>Digital Input</i> , <i>V-POS Exceptions</i> , <i>Video Analytics</i> . 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.
Analytics Rule	IF the Notification Type is set to Video analytics, select the configured rule here.

Click *OK* to save the new recipient.

5.3 Remote Register

To Register a VIGIL Server remotely via VIGIL Client, select it from the *Servers* Window and click the *Remote Register* button(1).

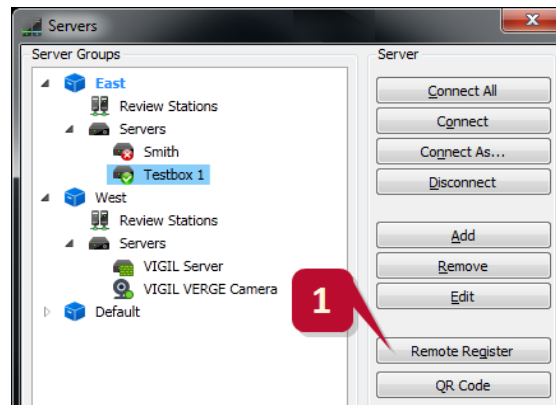


Figure 5-29:Servers Window - Selecting Remote Registration

Clicking this opens the *Registration* window, where you can register software components for the remote server.

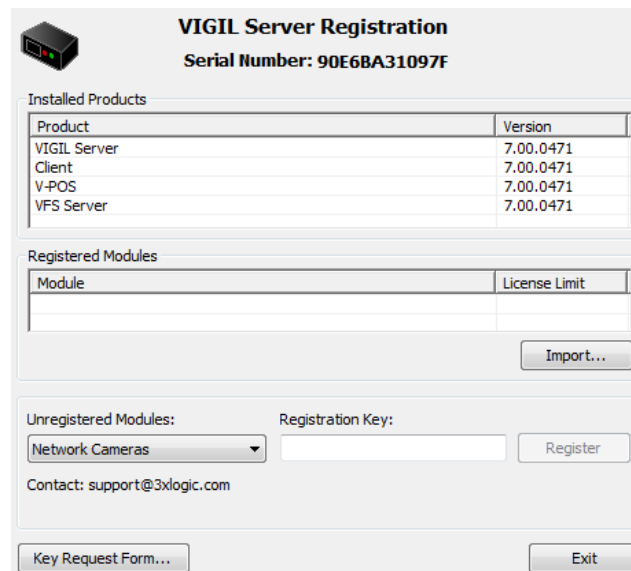


Figure 5-30:VIGIL Remote Registration Utility

To register modules, choose the desired module from the Unregistered Modules drop-down and enter the registration key provided to you by your sales representative. Click Register. The registration process is complete.

To delete a registered module, select the module in the list and press Delete on your keyboard. Click OK to confirm.

Alternatively, you may use the auto-registration XML file if you have received one from your sales representative. To use this file, click the Import button, locate the file and click Open. All modules and components purchased through WebReg when the XML file was created will now be automatically registered.

To request registration keys for a module, click the Key Request Form... button and check-off the appropriate modules for which you require registration keys. A representative will contact you to complete the transaction and will provide you with the appropriate keys or the auto-registration XML file.

6 Live Viewer

Live Viewer Windows each display a single camera feed from a connected VIGIL Server.

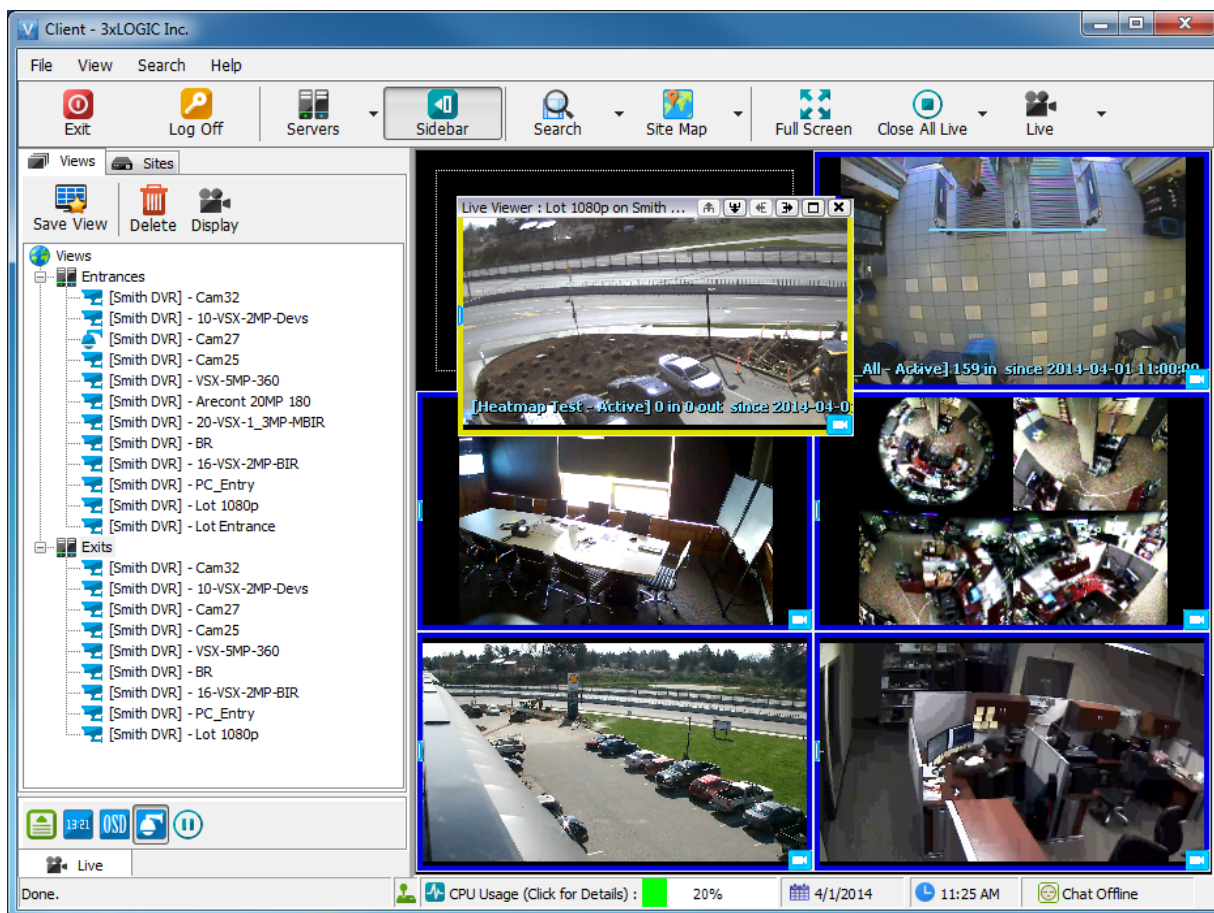


Figure 6-1:VIGIL Client Live Viewer

When *Separate Pages for Live and Playback* is disabled in *VIGIL Client Settings>Startup*, playback pulled from a camera window on the Live Viewer will replace the selected window.

When *Separate Pages for Live and Playback* is enabled, the Live Views are suspended and the user is taken to a separate playback page. Live Views are resumed after the playback window has been exited.

6.1 Live Viewer Controls

There is a tab at the bottom of the *Cameras Sidebar* that contains controls for the *Live Viewer* windows.



Figure 6-2:Live Viewer Controls

Actively selected controls will be depressed(i.e the *Camera Control* button in the above example.)

	Increase all <i>Live Viewer Windows</i> to the maximum speed available for each Camera.
	Hides / Displays the server timestamp in the top left corner of each Live Viewer Window.
	Opens the <i>OSD Configuration</i> window. See the OSD Configuration section for details.
	Click to open / close the <i>Camera Control</i> pad. See the PTZ Camera Controls section for details.
	Click to <i>Suspend / Resume</i> all <i>Live Feeds</i> . This option will only suspend or resume the <i>Live</i> video feeds, the windows will remain open.

6.2 Live Viewer Windows

Camera and Playback Feeds are displayed in windows that are by default in an automatically adjusting layout. The coloured border around each window indicates the associated camera's current recording mode (See the [Recording Modes](#) section for details.)



Figure 6-3: VIGIL Client Live Viewer Windows

6.2.1 Live Viewer Window Edge Controls

Live viewer windows each have a set of controls available by hovering the mouse cursor over the appropriate window edge.

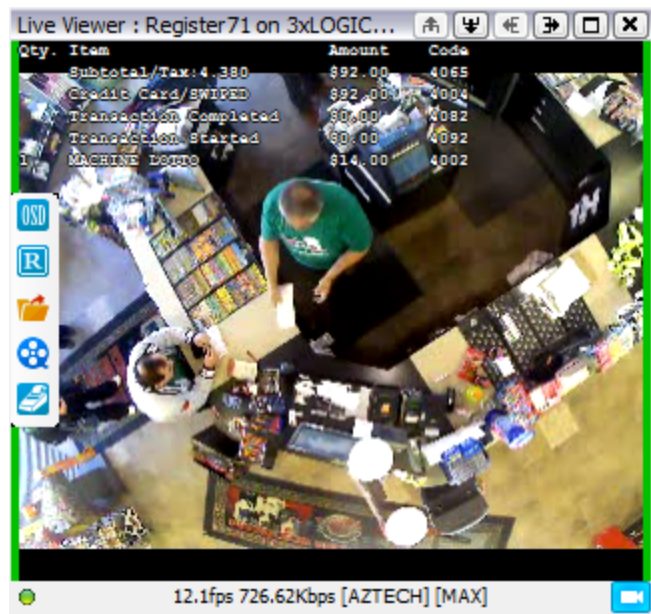

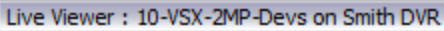






Figure 6-4: Live Viewer Window - Edge Controls


Each edge’s controls are pictured and described in detail below.














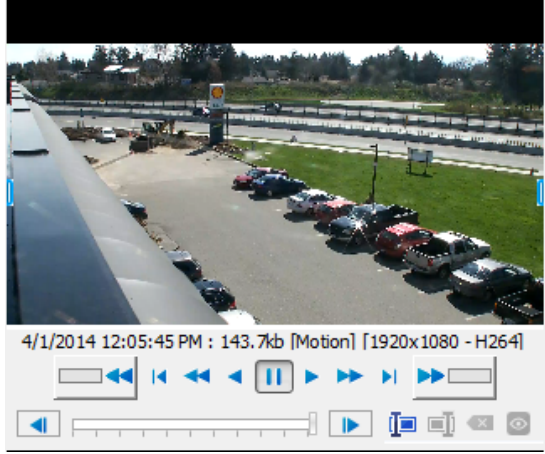

 **Note:** The controls displayed and explained here are the controls for live feeds. For an explanation of the Edge Controls for a playback feed, see the [Video Playback](#) section.

Top Edge Controls

	The title bar displays the current mode of the live window, the camera name, and the server the camera is on.
	Click and drag this to move the current <i>Live Window</i> around the <i>Live Viewer Area</i> . Other <i>Live Windows</i> will be automatically rearranged.
	Use these buttons to expand / shrink the Live stream window.
	 Note: This may affect the surrounding Live Windows’ sizes.
	This button maximizes the selected <i>Live Window</i> to fill the entire <i>Live Viewer Area</i> .
	This button stops the feed and closes the selected Live Window.

Left Edge Controls

	Click this button to open the Camera Control window for the current camera. See the PTZ Camera Controls section for details.
---	--

	<p>Click this button to disable / enable POS data display on the current <i>Live Viewer Window</i>.</p>
  	<p> Sub-stream Enabled - Clicking this will switch the camera back to mainstream.</p> <p> Mainstream Enabled- Clicking this will switch the camera to sub-stream or RapidStream dependent on camera ability.</p> <p> RapidStream Enabled - Clicking this will switch the camera back to mainstream.</p>
	<p>Export a still shot of the current live frame. You will be promoted to name the file and select the Export destination. A user may also adjust image quality at the bottom of the <i>Select Destination</i> window.</p>
	<p> Mute / Unmute incoming audio. Green indicates incoming audio is animated. Red indicates incoming audio is currently muted.</p> <p> Mute / Unmute Outgoing Audio (Mic Audio). Green indicates your mic is active. Red indicates your microphone is muted.</p> <p> Exit audio talk session</p> <p>See "Audio Talk" on page 76 for more info on audio talk sessions.</p>
	<p>Click this button to open the <i>Instant Playback</i> feature. This option will replace the <i>Live Viewer</i> window of the camera you selected with a Playback window) or on a separate playback page depending on your settings (the amount of playback time is dependent on your playback time settings for Instant Replay). See "Search Tab" on page 150</p> <p>A basic playback options bar and playback slider bar (pictured below) will appear on the selected camera window so that you can select your desired portion of footage.</p> <div data-bbox="649 1161 1190 1612" data-label="Image">  </div> <p>Figure 6-5: VIGIL Client Playback Window</p> <p> Note: If <i>Separate Live and Playback Pages</i> is enabled in the VIGIL Client <i>Settings > Startup Tab</i>, the instant playback footage will load on a separate playback page.</p>

Click this button on applicable cameras to open the *Live POS/ATM Data* receipt window. This window will display Live POS/ATM data as it is received and can be docked to the Sidebar for your convenience.

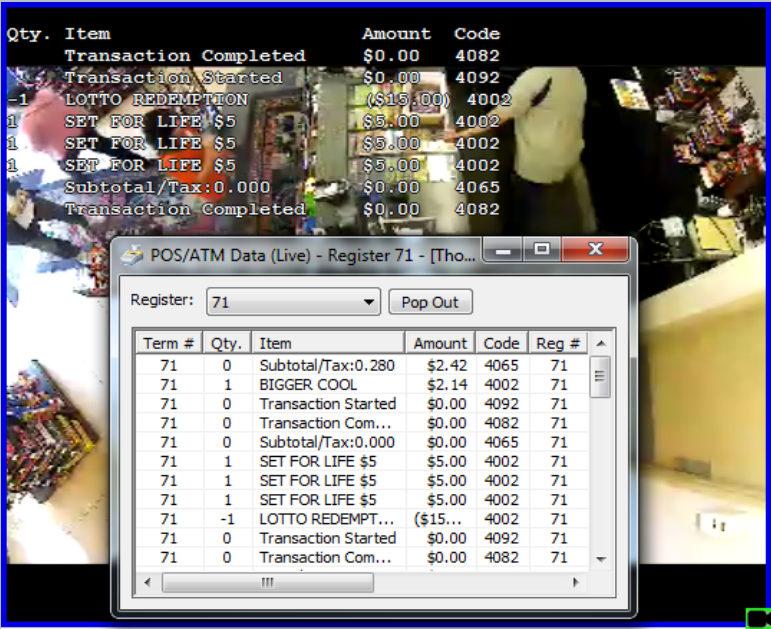


Figure 6-6:VIGIL Client Live Viewer Window - Edge Controls - POS/ATM Live Data

Click this button to open a menu of the active camera's *Digital PTZ Presets*.

Selecting a preset will open the preset in the current live viewer frame.The preset will not open in a seperate frame. To open a preset in a new layout frame, select it from the *Camera Treeview*. See "Digital PTZ Presets" on page 10 for more info.

This control will not be visible if the camera has no digital presets configured.

Click this button to open door controls for the infinias door controller associated with the active camera. This option is only visible if infinias mode is active and the camera is associated with a door. Door controls include:

- **Momentary Unlock** - Unlock the door momentarily.
- **Live Events** - Opens the infinias *Live Events*. This list contains the latest events associated with the current infinias account. See "infinias Access Control" on page 138 for more information.
- **Search Events** - Opens the infinias *Search Events* window. See "infinias Access Control" on page 138 for more information.
- **Refresh Status** - Refresh the current door status. Door status is indicated by the color of the door icon. The door icon is visible in the lower-right of the Live Viewer, next to the camera's name in the Servers>Camera tree node, and also in the left-side Live Viewer edge controls.
- **Event Filter** - Choose an event filter (filters are configured infinias-side) or select *All Events*.Only infinias door events that match the selected event type will be displayed. This is a global setting and will be applied to all open infinias components that feature events filtering. See "infinias Settings" on page 141 for more information on Events and Event Filtering.

The Door icon color will change depending on door status (if *Automatically Update Door Status* is enabled in VIGIL Client Startup > infinias settings). See "infinias Settings" on page 141 for details on door status indicators.

Note: When the VIGIL Client live viewer window size becomes too small to display the top and left edge controls, the controls will be consolidated into drop-down menus that can be accessed by clicking their respective context arrows.

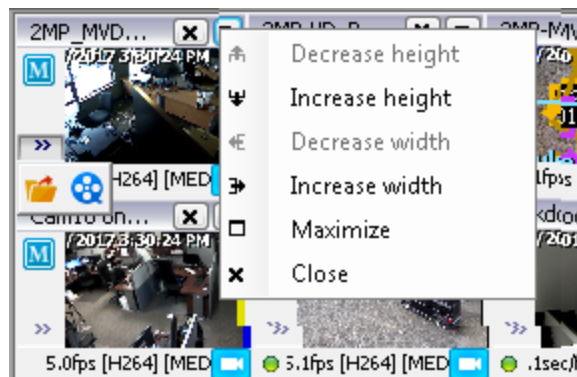


Figure 6-7: Consolidated Edge Controls




Bottom Status Bar



Figure 6-8: VIGIL Client Live Viewer Window - Edge Controls - Bottom Information Bar

Hovering over the bottom of a Live Viewer Window reveals the framerate, link speed, stream type, and stream speed of the current Live View Window.

The icon in the far right of the bottom Edge Control displays an icon for the mode of the current Live View Window:

Live View 	Indicates the current footage is a Live feed.
Playback - Paused 	Indicates the current footage is Playback and is actively playing. This icon will appear in upper right hand corner of frame as bottom bar is replaced by playback controls
Playback - Playing 	Indicates the current footage is Playback and is actively playing. This icon will appear in upper right hand corner of frame as bottom bar is replaced by playback controls

When a camera is active, a small green dot will blink at the lower left of the *Live Viewer Window*. This gives feedback that a camera is still active, useful when the video frame rate is less than 1 frame per second.

6.2.2 Live Viewer Window Right Click Menu

Right-clicking on a *Live Viewer Window* provides a context menu (pictured below) with the following options

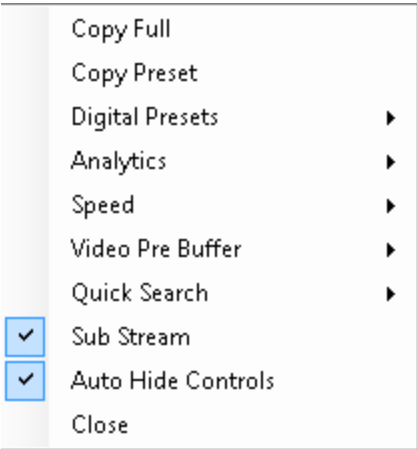



Figure 6-9:VIGIL Client - Live Viewer - Right-Click Menu

Copy Full	Copies a still-shot of the full camera image to the system clipboard. This option will only be present if the targeted "camera" is a <i>Digital PTZ Preset</i> .	
Copy Preset	Copies a still-shot of the Digital PTZ Preset portion of the camera image to the system clipboard. This option will only be present if the targeted "camera" is a <i>Digital PTZ Preset</i> .	
Digital Presets	Opens a list of available Digital PTZ presets for the active camera.. This menu option will be absent if no digital presets exist for the target camera..	
Zoom	Enables the zoom tool. Left-click to zoom in, right-click to zoom out. This option will be absent on cameras with Digital PTZ Preset configured.	
Camera Control	Opens the <i>Camera Control Pad</i> .	
Copy	Copy a still shot of the video feed to the Windows clipboard. If <i>Show Camera Details on Copied Images</i> is enabled in the Live Tab of the VIGIL Client Settings, than camera information will be included on the still image. See "Live Tab" on page 145 for info on enabling the <i>Show Camera Details on Copied Images</i> setting. This option will be absent if the targeted "camera" is a <i>Digital PTZ Preset</i> .	
Stop	Stops and removes the camera from the <i>Live Viewer</i> window. This does not affect the recording settings.	
Quad / Panorama View	Only available for 180 cameras. This toggles between displaying the 180 camera in Quad View layout or Panoramic View Layout.	
Enable On-Screen Display	Enables On-Screen display of POS/ATM data. This option will only be available if the camera is configured as a Priority camera for POS/ATM on the VIGIL Server.	
Digital PTZ	Enable this feature for zoom and pan control on fixed cameras. This option is available and enabled by default for all cameras that do not have alternative camera control setup in the VIGIL Server camera settings.	
360 Dewarping	This option is available for cameras using the 360 Dewarping control type. This must be configured on VIGIL Server to be available as an option in Client.	
	Source Video Only (Rotate Disabled)	This option is enabled by default. This feature allows users to zoom in and move cameras during playback. Click on an area of interest and then use the mouse scroll to zoom in. Click-and-drag to move the image after it is zoomed in.

360 Dewarping (cont'd)	Source Video Only (Rotate enabled)	This feature allows users to zoom in and rotate cameras during playback. Click on an area of interest and then use the mouse scroll to zoom in. Or, click-and-drag to rotate the image. This option is only available for ceiling mounted 360 cameras.
	360 View and Source Video	This feature splits the playback image into 4 quadrants. The first quadrant shows the full image, and the second, third and fourth quadrants show different zoomed sections of the image. To load an area of interest in one of the zoom quadrants, click on a zoom quadrant and then click on the first quadrant to load that section. The zoomed sections can be clicked on directly and then rotated.
	Panorama View (Wall-mounted 360 cameras only)	This feature dewarps the 360 camera into an elongated, panorama-style image. A user may digitally pan and zoom in and out of the image for added review capability.
Priority Audio	If a <i>Priority Audio</i> channel is configured for the camera on VIGIL Server, toggle this option to play live audio.	
Analytics	Select which Video Analytics information will be displayed on the live video feed.	
Speed	Select the display speed for the camera. Options are: <i>Slow (1fps)</i> , <i>Medium (5fps)</i> , <i>Fast (10fps)</i> , <i>Turbo (20fps) Maximum</i> , and <i>Frame by Frame</i> .	
Video Pre Buffer	Select the <i>Video Pre Buffer</i> time. <i>Auto Sense</i> will detect and apply the best pre-buffer settings. Choose <i>Disabled</i> to have no <i>Video Pre Buffer</i> applied to the current stream.	
Relays	<p>Interfaces with the VIGIL Server's <i>Relay(s)</i>. <i>Relays</i> can be toggled on or off, corresponding to closed and open states respectively.</p> <p> Note: <i>Relays</i> must first be configured on the VIGIL Server to enable this option. See the VIGIL Server user's guide for more information.</p>	
Quick Search	Retrieve recent footage from the camera for preset intervals of one, five, or ten minutes or open the search menu by selecting <i>Search</i> . All options will open the <i>Search</i> window however the one, five or ten minute interval options will begin playback of the selected camera and time interval.	
Audio Talk	Opens the audio talk window. Audio Talk must be configured and associated with the Camera on VIGIL Server for this option to be available. See "Audio Talk" on page 76 for further details.	
Sub Stream / RapidStream	Toggle between Main and Sub Stream if the Camera supports a Sub Stream. If the Camera does not support a Sub Stream, the <i>RapidStream</i> option will be available. <i>RapidStream</i> is CPU intensive on the VIGIL Server and will be disabled if CPU usage exceeds a defined threshold. See the VIGIL Server Users Guide for more details.	
Auto Hide Controls	Toggle this option to auto-hide live view edge controls.	
Door (infinias Mode Only)	<p>Mouse-over this option to reveal infinias door controls. This option is only visible if infinias mode is active and the camera is associated with a door::</p> <p>■ Momentary Unlock - Unlock the door momentarily.</p>	

- **Live Events** - Opens the infinias *Live Events*. This list contains the latest events associated with the current infinias account. See "infinias Access Control" on page 138 for more information.
- **Search Events** - Opens the infinias *Search Events* window. See "Searching infinias Events" on page 142 for more information.
- **Refresh Status** - Refresh the current door status. Door status is indicated by the color of the door icon. The door icon is visible in the lower-right of the Live Viewer, next to the camera's name in the Servers>Camera tree node, and also in the left-side Live Viewer edge controls.
- **Event Filter** - Choose an event filter (filters are configured infinias-side) or select *All Events*. Only events that match the selected event type will be displayed. This is a global settings and will be applied to all open infinias components that feature events filtering. See "infinias Settings" on page 141 for more information on Events and Event Filtering.

6.3 Full Screen Mode

In Full Screen Mode the UI is replaced with a toolbar at the bottom of the screen. The rest of the screen is available for displaying Live Viewer windows.

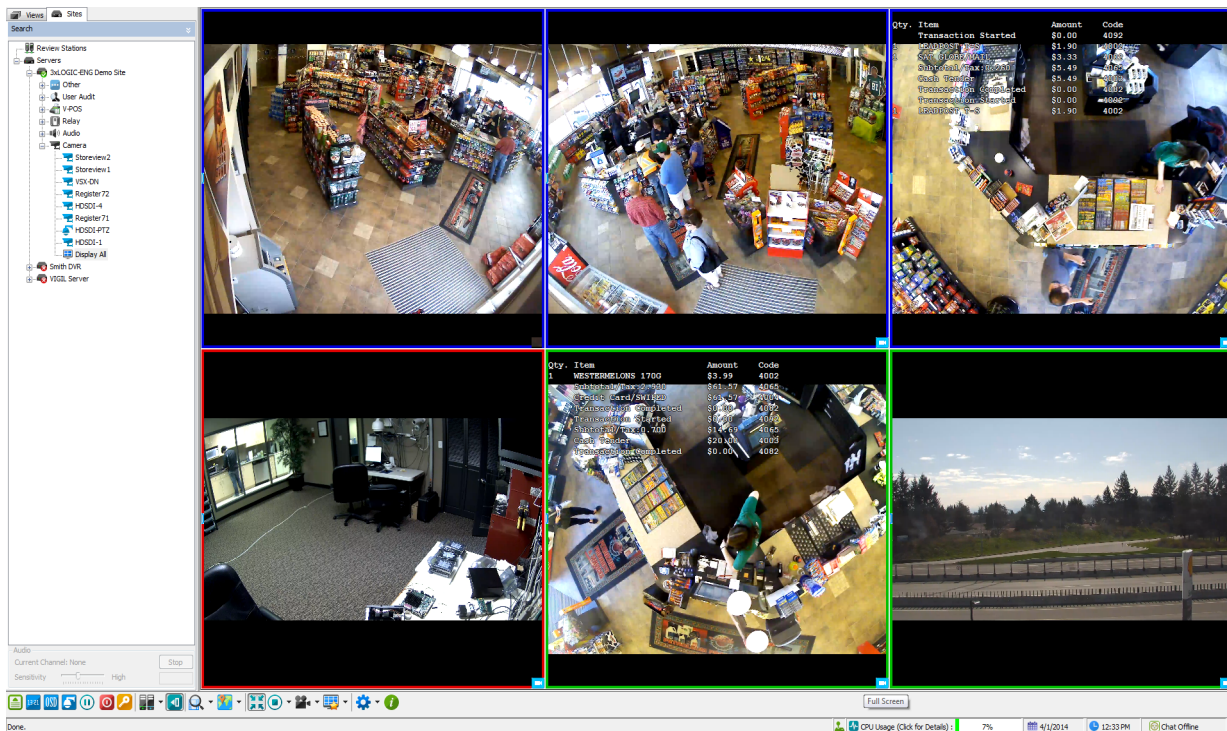



Figure 6-10: VIGIL Client - Full-Screen Mode

See the [Icon Toolbar](#) section for an explanation of the buttons below the Live Viewer.

Press **Alt+Shift+F3** to exit full-screen or, alternatively, select the full-screen button from the icon menu toolbar.

6.4 On Screen Display (OSD) Configuration

Open the *On-Screen Display* configuration window by the pressing the  button (located at the bottom of the side-bar in the [Live Viewer Controls](#)).

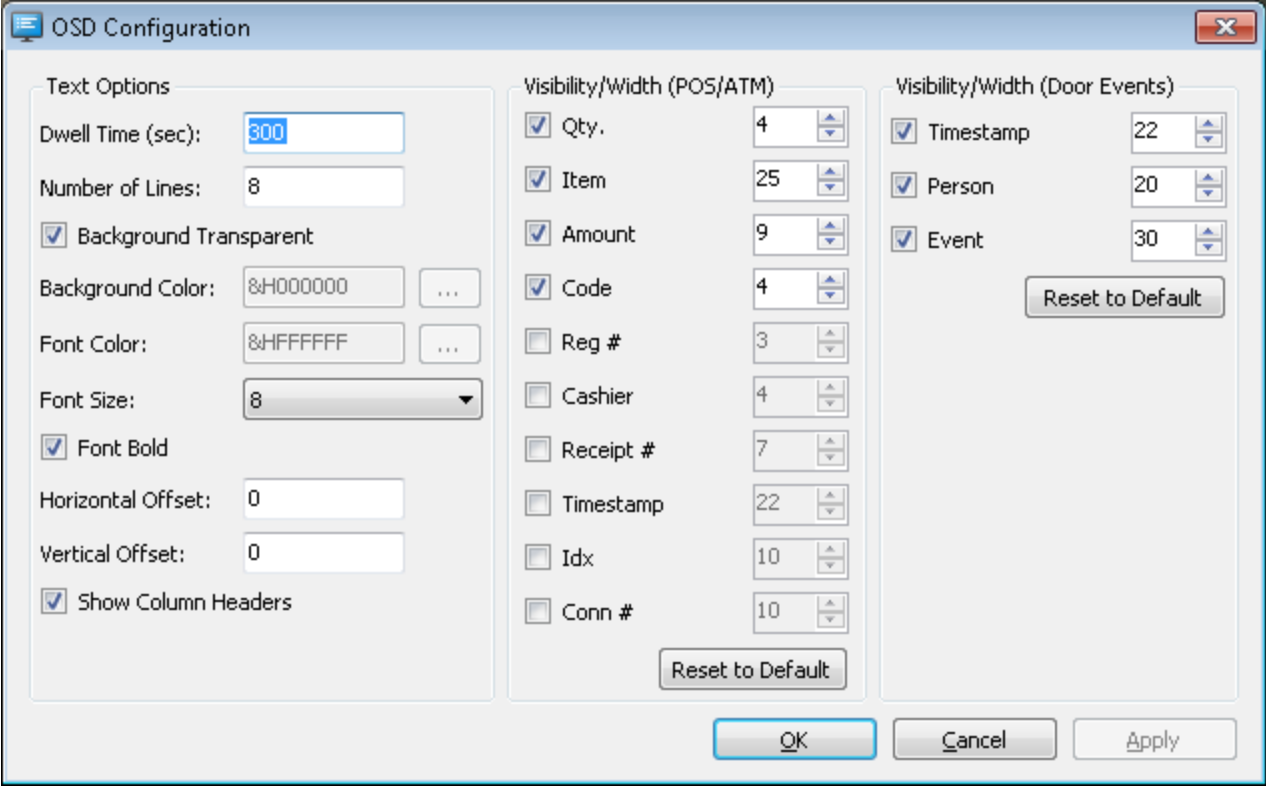


Figure 6-11:OSD Configuration Window w/ infinias Door Events

Dwell Time	The number of seconds a data record will remain on-screen.
Number of Lines	The maximum number of records to display at a time.
Background Transparent / Color	Change the text background color / transparency.
Font Color/Size/Bold	Change the font color/size/boldness.
Horizontal / Vertical Offset	The number of characters to offset the text from the left / top side.
Column Selection	Specify which columns to display on-screen. Unchecked columns will not be displayed. When <i>infinias</i> mode is active, related OSD columns (Door Events - <i>Timestamp</i> , <i>Person</i> , <i>Event</i>) will be available for configuration.
OK	When you are finished configuring the OSD, click the <i>OK</i> button to apply your changes and return to the <i>Search</i> window.



Note: An avatar thumbnail for infinias uses will be displayed on-screen when they trigger an infinias event. This cannot be hidden unless OSD is completely disabled.

6.5 PTZ Camera Controls

Pan/Tilt/Zoom (PTZ) cameras allow navigation to an area of interest and are controlled by the user from the *Live Viewer* window. There are three major types of Pan/Tilt/Zoom (PTZ) cameras that exist: digital PTZ cameras, IP PTZ cameras and hard-wired PTZ cameras:

Digital PTZ camera control allows users to zoom in on a fixed camera and move within the image without controlling the physical camera itself. Digital PTZ camera control is automatically enabled for all cameras in the live viewer that are not assigned to any other type of camera control. To disable or re-enable the control, right-click the camera in the live viewer, and then select Digital PTZ. The live digital PTZ control works in single-view, multi-view and full-screen mode.

IP PTZ cameras must be set up individually in the VIGIL Server settings and control the physical camera through a network connection to the VIGIL Server.

Hard-wired PTZ cameras are also set up individually in the VIGIL Server settings and control the physical camera through a camera input on the VIGIL Server.

PTZ Camera Control Window

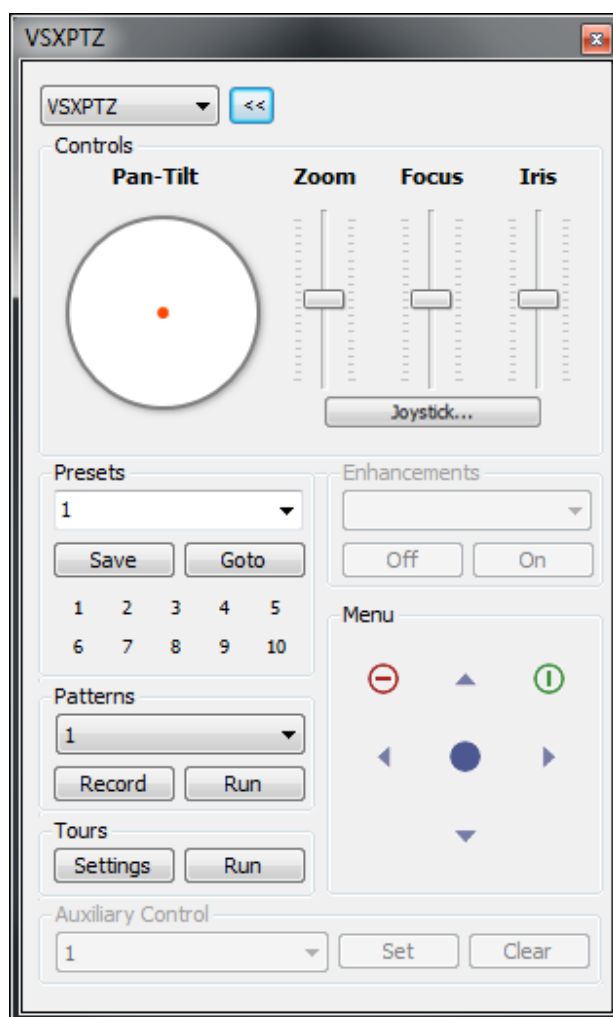



Figure 6-12:PTZ Camera Control Panel

<div>VSX-640MP-MV</div>	This is a menu of all the PTZ cameras configured on the VIGIL Server. Select a camera to load for control.
<div><<</div>	Shows / Hides additional PTZ camera controls.
Pan-Tilt	Use the mouse to click-and-drag the blue dot in the middle of the Pan-Tilt control in the desired direction. The speed at which the camera moves increases as the dot is dragged closer to the edge of the circle. <div></div>
	The alternate directional controls are displayed when the selected PTZ camera does not support a full range of motion (i.e. it cannot pan and tilt at the same time), or when the Push-Button Controls option is enabled. <div><div>Speed: Moderate</div><div><div>▲</div><div>◀ ▶</div><div>▼</div></div></div>
Zoom/Focus/ Iris	Click-and-drag the appropriate slide bar up to increase or down to decrease. The speed at which the camera is adjusted increases as the bar is moved farther from the centre of the control.
Joystick	If a USB Joystick is attached, this button will be available. Once clicked, it opens the <i>Joystick Customization</i> window.

Joystick Customization Window

This window allows for customization of each of the joystick buttons. Use the drop-down menus to assign actions to each button.

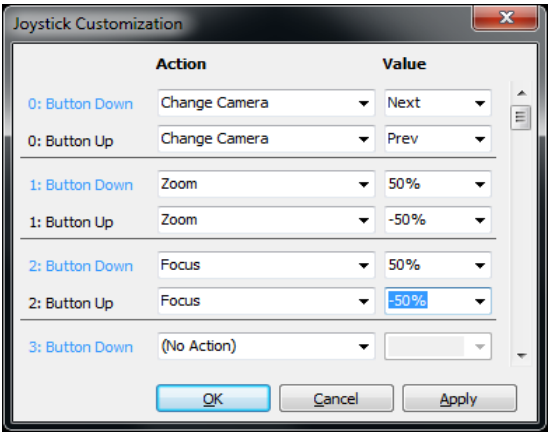


Figure 6-13:Joystick Customization Window

To determine which button is which, go into the Windows Control Panel and select *Game Controllers*, where the device will be listed. Select it and click *Properties*. Click any button on the joystick and the button number will be highlighted in the resulting window.

Presets

Presets are fixed locations that the camera can save and go to. The presets are stored within the camera for hard-wired PTZ cameras.



Figure 6-14:Presets Configuration

To save a preset, move the camera to the desired preset location, select the preset number from the drop-down menu and click *Save*. This will overwrite any presets previously saved to that number.

To move the camera to an existing preset, select a preset from the drop-down menu and click *Goto*, or click the button with the preset number on it.

Patterns

Patterns control the saved pattern of movement for the selected camera. Patterns are stored within the camera.

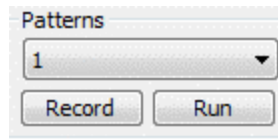


Figure 6-15:Patterns Configuration

Select a pattern from the drop-down menu and click *Record*. Use the other control buttons to move the camera in the desired pattern. Once finished, click *Stop*. This will overwrite the existing saved pattern. Select a pattern from the drop-down menu and click *Run* to begin the saved pattern.

Tours

A tour is a cycle of camera presets. Tour settings are stored within VIGIL Server.

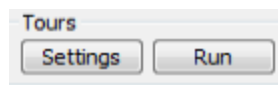


Figure 6-16:Tours Configuration

Click *Settings* to open the *Tour Settings* window, where presets are added and set to run for a specified number of seconds before going to the next preset.

Click *Run* to activate the tour. The camera will cycle through the presets in the Live Viewer window. The tour can be ended by moving the camera or pressing *Stop*.



Note: Presets must be configured before a tour can be run.

Tour Settings Window

Users may add, edit and delete tours from the *Tours Settings* window.

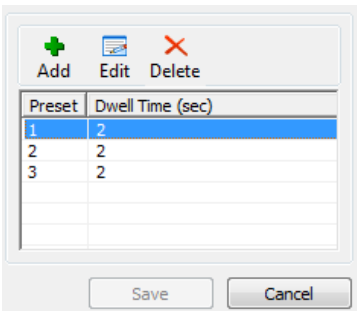


Figure 6-17:Tours Settings Window

Add	Adds a preset to the tour.
Edit	Edits a preset in the tour.
Delete	Deletes a preset from the tour.
Save	Saves changes made to presets.
Cancel	Exits the <i>Tour Settings</i> window without saving any changes.

Enhancements

Settings on the camera that can be toggled on / off. These include Color, Sensitivity, Backlight, White Balance and Auto Focus.

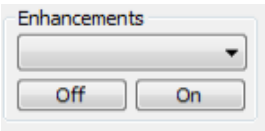


Figure 6-18:Enhancements Selection

Enhancements can be selected via the drop-down Box and turned on or off via the respective buttons.

Menu

Some cameras have built-in menus that can be accessed and configured via this tool.

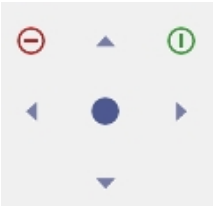


Figure 6-19:Camera Menu Controls

	Displays the camera’s menu; it may take a moment to appear.
	Exits the camera’s menu. You can also navigate to the <i>Exit</i> menu option and click the <i>Select</i> button.
	Camera menu navigation buttons.
	Camera menu select button.

6.6 Recording Modes

Colored borders appear around the frame of each Live Viewer Window. These are used to provide a quick assessment of current camera recording modes and events.

Green	Constant recording mode and is <i>recording</i> .
Blue	Motion recording mode and is <i>recording</i> (motion detected).
Red	Alarm recording mode and is recording (alarm triggered).
Yellow	Set to motion recording mode (motion currently not detected and will stop after the <i>Post Motion Record</i> time has elapsed).
Uncolored	Camera is currently <i>not recording</i> , but is enabled.

6.7 Audio Talk

To open audio talk / two-way audio on a properly configured camera, right-click within the camera frame and select audio talk. The *Audio Talk* window will deploy.



Warning: An audio talk device(mic) must be installed on your system and selected in the VIGIL Client Settings>Audio Settings for audio talk to retain functionality. The target camera must also have two-way audio capability. If the target camera is not two-way audio capable, or a microphone is not installed on the VIGIL Client system and selected within the Audio settings, the talk functionality of the audio talk interface will be disabled. .

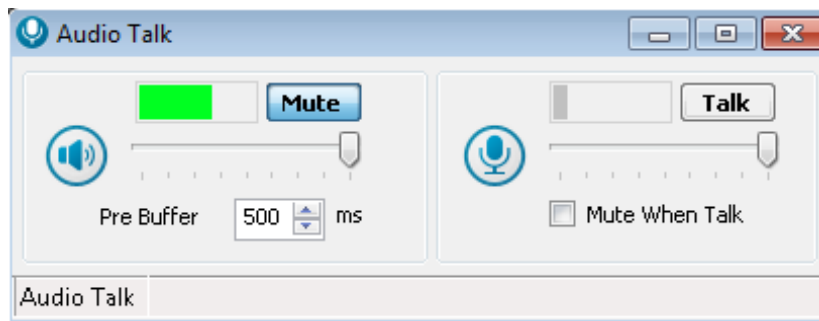




Figure 6-20: VIGIL Client - Audio Talk Window

	Set the incoming audio channel volume level.
Mute	Mute the incoming audio.
Pre Buffer	Set the audio pre-buffer. Default value is 500ms.
	Set the outgoing (microphone) audio volume level.
Talk	Toggle this button to mute / unmute your microphone. This button is unavailable when no microphone is detected.
Mute When Talk	Mute incoming audio when you are talking / sending outgoing microphone audio.

Audio talk controls will also be available in the Live Viewer left-edge controls. See "Left" on page 113 for more info.

7 V-POS Treeview Configuration

7.1 V-POS Exceptions

V-POS *Exceptions* are a powerful tool for automating the process of scanning through POS/ATM records looking for anomalies. *Exceptions* are automatically checked against the POS/ATM data and when triggered can set off a local or email based report.

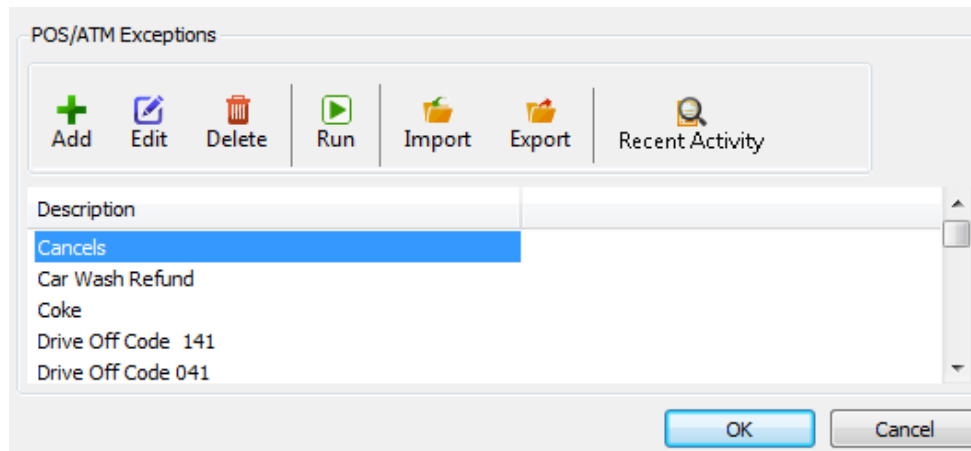


Figure 7-1: V-POS Treeview - POS/ATM Exceptions Window

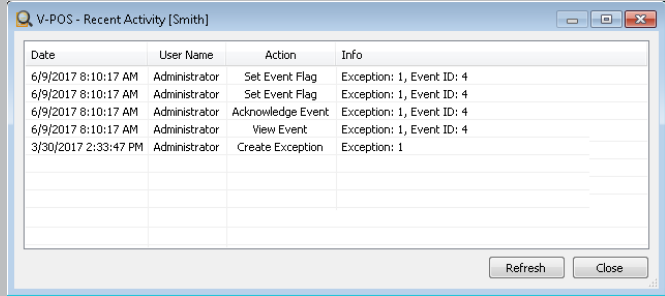
Add	Opens an <i>Exception Settings</i> window to create a new exception.
Edit	Opens an <i>Exception Settings</i> window to edit the selected exception.
Delete	Delete the selected exception.
Run	Manually run the selected exception. This will open in the <i>Reports</i> window.
Import	Import <i>Exceptions</i> from an .xml file. This will clear all existing Exceptions and replace them with the Exceptions contained in the .xml file.
Export	Export <i>Exceptions</i> to an .xml file. This file can be used to import exceptions onto another system, or as an Exception Auto-Sync File.
Recent Activity	<p>This option opens an audit list of recent activity regarding user interaction with VPOS exceptions.</p> 

Figure 7-2: VPOS - Exceptions - Recent Activity Audit List

7.1.1 Add / Edit Exceptions

Exception Criteria

Exception Report Description	Enter the description for the Exception. This will show in the Descrip-
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tion column in the Event window, the Predefined Exception Query drop down and the Subject line of Emailed reports.

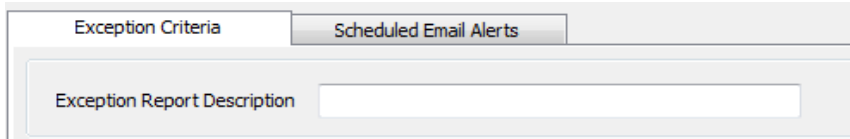
The screenshot shows a software interface with two tabs: "Exception Criteria" (active) and "Scheduled Email Alerts". Below the tabs is a label "Exception Report Description" followed by a text input field.

Figure 7-3:V-POS - Add / Edit Exception - Exception Criteria Tab - Exception Report Description

Exception Criteria - POS/ATM Filter

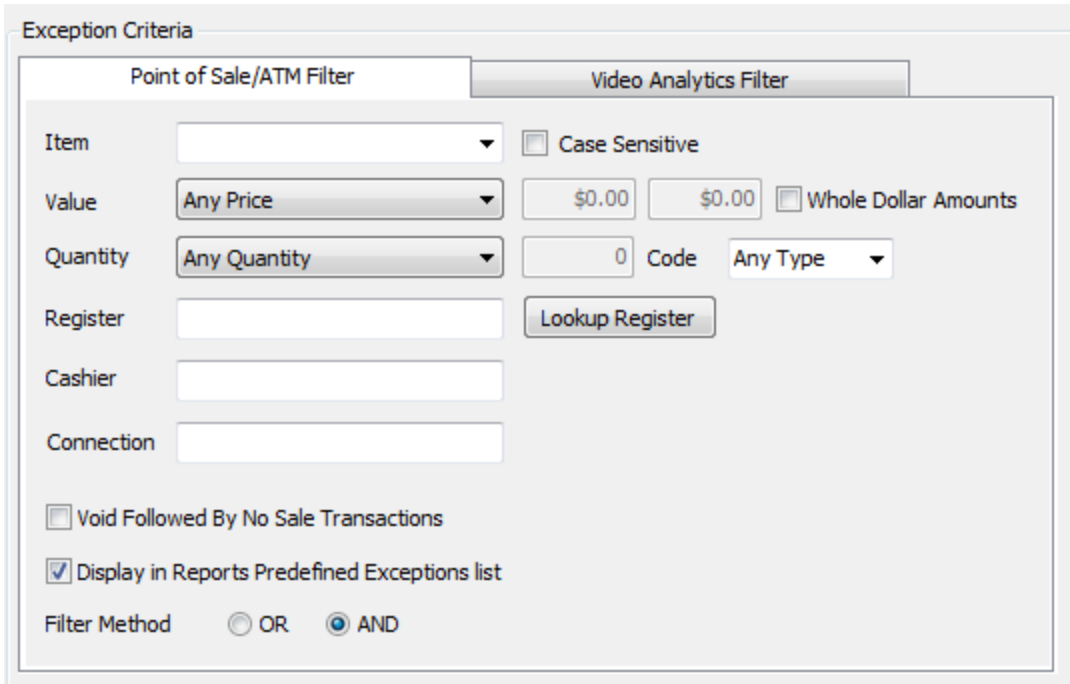
The screenshot shows the "Exception Criteria" window with the "Point of Sale/ATM Filter" tab selected. The "Video Analytics Filter" tab is also visible. The "Point of Sale/ATM Filter" section includes fields for "Item" (a dropdown menu), "Value" (a dropdown menu with "Any Price" selected), "Quantity" (a dropdown menu with "Any Quantity" selected), "Register" (a text field), "Cashier" (a text field), and "Connection" (a text field). There are also checkboxes for "Case Sensitive", "Whole Dollar Amounts", and "Void Followed By No Sale Transactions". A "Lookup Register" button is next to the "Register" field. At the bottom, there is a "Filter Method" section with radio buttons for "OR" and "AND" (selected). The "Display in Reports Predefined Exceptions list" checkbox is checked.

Figure 7-4:V-POS - Add / Edit Exception - Exception Criteria Tab - POS/ATM Filter

Item	Enter a full or partial item name to search for. To search for multiple items, insert a comma between each item. To exclude an item, insert the term [NOT] before the item name. If the <i>Load Distinct Items on Startup</i> setting is enabled (VPOS Settings - Database Settings Tab), a list of valid items will be available from the drop down menu.
Case Sensitive	Enable this option to make the item field Case Sensitive. When enabled, only items matching the case used in the item field will be reported by the exception. <div><div>e.g.</div><div>Example:Item will only report back Item, not item or ITEM.</div></div>
Value	Matches results in the <i>Amount</i> column. By default, <i>Any Price</i> is selected. If you want to match a certain value, select an operator and input a value. Results will include entries that fall between the listed prices. The available operators are; <i>Greater Than</i> , <i>Greater Than or Equal To</i> , <i>Equal To</i> , <i>Less Than or Equal To</i> and <i>Less Than</i> and <i>Between</i> . The blank dollar amount boxes are available when the <i>Between</i> operator is selected.

	<p>e.g. Example: If the operator <i>Greater Than or Equal To</i> is used with the value of \$20.15, any Data with a value of 20.15 and higher will be returned.</p>
Whole Dollar Amounts	<p>Enable this option to only include Whole dollar amounts in the Exception Report.</p> <p>e.g. Example: \$5.00 will show in the report, but \$5.25 will not.</p>
Quantity	<p>Matches results in the <i>Quantity</i> column. By default, <i>Any Quantity</i> is selected. If you want to match a certain value, select an operator and input a value. The available operators are; <i>Greater Than</i>, <i>Greater Than or Equal To</i>, <i>Equal To</i>, <i>Less Than or Equal To</i> and <i>Less Than</i>.</p> <p>e.g. Example: If the operator <i>Greater Than or Equal To</i> is used with the value of 5, any Data with a Quantity of 5 and higher will be returned.</p>
Code	<p>Matches results in the <i>Code</i> column. You can manually type in a code to search for, or select NS (No Sale) or VX (Void) from the drop down menu.</p>
Register / Connection	<p>Matches results in the <i>Register</i> or <i>Connection</i> column. Click on the <i>Lookup Register</i> button to display a list of <i>Register to Priority Camera</i> mappings configured on the VIGIL Server, double click a <i>Register</i> in the list to auto fill the <i>Register</i> field. The <i>Register</i> field is used for matching up the Records to the appropriate video footage.</p>
Cashier	<p>Matches results in the <i>Cashier</i> column. Enter a <i>Cashier Name</i> or <i>Number</i> to search for.</p>
Void Followed by No Sale Transactions	<p>Enable this option to configure the <i>Exception</i> report to search for transactions that contain a <i>Void</i> followed by a <i>No Sale</i>.</p>
Display in Reports Pre-defined Exceptions List	<p>Enable this option to have this <i>Exception</i> included in the <i>Predefined Exceptions</i> drop down menu in the Reports window.</p>
Filter Method OR / AND	<p>Logical operators that will assist in searching with multiple criteria. By default, this is the <i>AND</i> operator, which will only produce results that match all of the used Data criteria fields. Alternatively, the <i>OR</i> operator will match results from any of the used Data criteria fields.</p>

Exceptions Criteria - Video Analytics Filter

The screenshot shows a window titled 'Exception Criteria' with two tabs: 'Point of Sale/ATM Filter' and 'Video Analytics Filter'. The 'Video Analytics Filter' tab is selected. Inside this tab, there is a sub-section titled 'Video Analytics Filter' containing the following controls: a checked checkbox for 'Enabled', a dropdown menu for 'Camera' with 'Lot 1080p' selected, a dropdown menu for 'Rule Name' with 'Heatmap Test' selected, and a dropdown menu for 'Value' with 'Greater Than' selected next to a text input field containing '0'.

Figure 7-5:V-POS - Add / Edit Exception - Exception Criteria Tab - Video Analytics Filter

Enabled	Enable this option to enable the use of <i>Video Analytics Rules</i> configured on the VIGIL Server. Combining Video Analytics with POS Data in Exception Reports allows for powerful Exception reporting such as empty analytics zone (Customer not Present) during a Refund transaction.
Camera	Select the <i>Camera</i> which the <i>Video Analytics Rule</i> is configured on.
Rule Name	Select the <i>Rule</i> from the list of Rules configured on the selected <i>Camera</i> .
Value	Select an operator and input a value. The available operators are; <i>Greater Than</i> , <i>Greater Than or Equal To</i> , <i>Equal To</i> , <i>Less Than or Equal To</i> and <i>Less Than</i> . <div><div>e.g.</div><div>Example: When using an Occupancy Count rule on the VIGIL Server, use the operator <i>Less Than or Equal To</i> with a value of 0. If the rule reports back that the Occupancy is 0, then it can be assumed that a customer is not present during this transaction.</div></div>

Exception Criteria - Event Time Frame

The screenshot shows a window titled 'Event Time Frame'. It has two radio buttons: 'Always' (which is selected) and 'Only During Specified Hours'. Below the 'Only During Specified Hours' radio button, there are two time pickers labeled 'From' and 'To', both of which are set to '12:00:00 PM'.

Figure 7-6:V-POS - Add / Edit Exception - Exception Criteria Tab - Event Time Frame Configuration

Always	This is the default. This <i>Exception</i> report will always be in effect.
Only During Specified Hours	Enable this option to specify a time range for this <i>Exception</i> report to be in effect.

Scheduled Email Alerts

Scheduled Email Alerts	Scheduled Email Alerts send the <i>Exception Event Reports</i> to designated email addresses at the specified interval. The <i>Email Alerts</i> contain information about the <i>Exception Event</i> , a screen shot of the associated camera, and the full transaction that contained the item that triggered the <i>Exception Event</i> .
------------------------	---

Figure 7-7:V-POS - Add / Edit Exception - Scheduled Email Alerts Tab

Enable Scheduled Report Emails	Enable this option to enable Scheduled Report emails. By default this option is disabled.
Plain Text / HTML Email	Choose Plain Text or HTML format emails. Plain Text is the default. The HTML report contains the Exception details, a screenshot of the priority camera, and the entire receipt containing the transaction that triggered the exception report. A still image is not included in Plain Text emails.
After the Lapse of at Least	Sends an Email alert when the specified amount of time has elapsed since the previous Email alert. Editing the Email settings will reset this timer. Available options are Minutes, Hours, Days and Weeks.
Email Alerts can be further restricted with the following criteria:	
Only on This Day	Sends Email alerts only on the specified day of the week.
Only During This Hour	Sends Email alerts only during the specified hour.
Only if this number of exceptions occur	Sends Email alerts only when the specified number of Exceptions have occurred.
E-mail Recipients (To, CC and BCC) can be added using the following controls:	
Add / Edit / Delete	<p>Click <i>Add</i> or <i>Edit</i> to configure an Email Address / Recipient to send exception notifications to.</p> <p>Select <i>Delete</i> to remove the currently selected address.</p> <p>CC and BCC recipients can also be added/edited/deleted by selecting the appropriate tab and performing the desired action.</p> <p>In the E-mail Address list, use the checkbox next to each recipient to enable or disable the recipient. Disabled recipients will not receive email notifications for VPOS exceptions.</p>

7.2 V-POS Events

All Exceptions that have the *Enable Real Time Exception Events* enabled (the default setting) will create an Exception Event for each POS/ATM record that matches the criteria specified in the Exception.

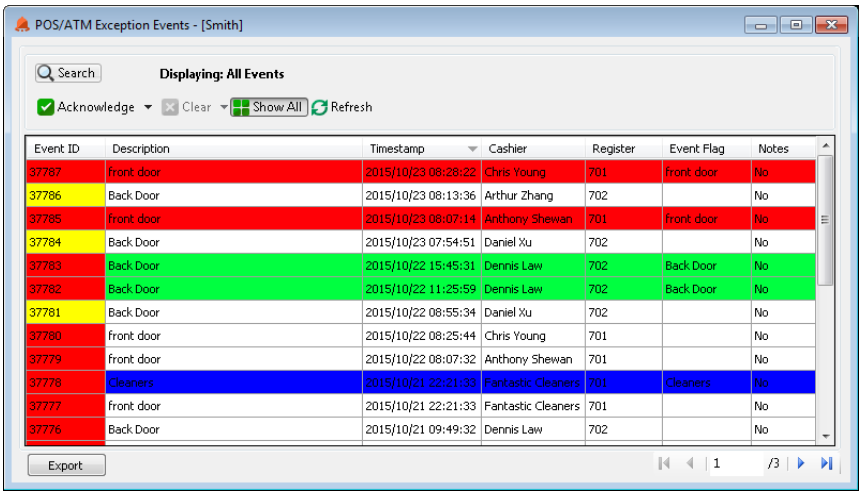


Figure 7-8:POS/ATM Exception Events Window

For ease-of-use purposes, the POS/ATM Exception Events window can be dragged into the sidebar, and docked for quick access. When closed, Client will remember the state of the POS/ATM Exception Events window and auto-dock the window for future use until the window is removed from the side-bar.

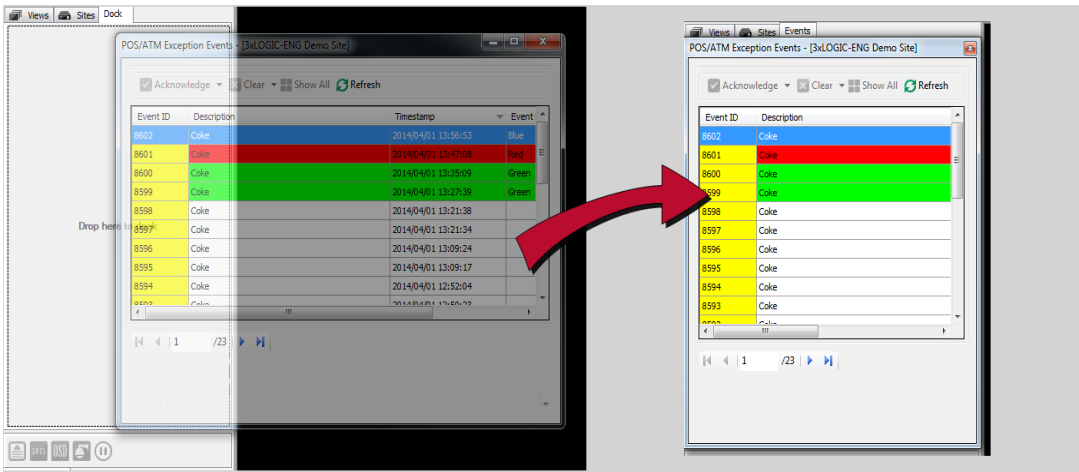




Figure 7-9:Docking the Exception Events Window in the VIGIL Client Sidebar

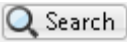
Exception Events are listed in a tabular form with the *Event ID*, *Description*, *Timestamp*, *Register*, *Cashier*, *Event Flag*, *Notes* columns enabled by default (See "Event Column Settings" on page 89 for more info on configuring VPOS Event Columns). New Events are highlighted in **Red**, Acknowledged Events are highlighted in **Yellow**. When using Event Flags, the Event ID column will highlight red or yellow depending on Acknowledged status. Double click on an exception in the list to open the Playback window.

Click the  (bottom-left) to export the current events list as a CSV to a destination of your choosing. Right-click on an Exception Event to view the following options:

Acknowledge	Acknowledge the currently selected Event or Events. If <i>Allow User to Acknowledge all</i>
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	<i>Events</i> is not enabled in the Settings, only one Event can be selected at a time.
Acknowledge All	Acknowledge all Events. If <i>Allow User to Acknowledge all Events</i> is not enabled in the Settings, this button will not be available.
Clear	Clear the currently selected Acknowledged Event from the list. If <i>Allow User to Clear Acknowledged Events</i> is not enabled in the Settings, this option will not be available.
Clear All	Clear all Acknowledged Events from the list. If <i>Allow User to Clear Acknowledged Events</i> is not enabled in the Settings, this option will not be available.
Show All	Show all Events in the list. This will show all previously cleared Events. When this option is enabled, Clear and Clear all will not be available.  Note: Events will be completely removed from the list depending on the <i>Local Database Size</i> in Settings.
Playback	Open the Playback window for this Exception Event.
Show Thumbnail	Open a window with a Thumbnail of the Priority Camera at the time the Exception Event was triggered.
Search for Transaction	Opens the Report Window to the Search for Transaction tab and search for the Receipt Number of the Exception Event.
Add / Edit Notes	Open the Add / Edit Notes window. In this window you can Add new notes, edit existing notes or clear the notes.
Set Event Flag	This option will open a cascade menu with the option to add a custom event flag, or clear the existing flag.
Apply As Filter	This option will apply the field that was right clicked on as a filter. This option can be done multiple times to apply a complex filter based on multiple criteria.
Clear Filter	Clear the currently applied filter. If no filter is applied, this option will not be available.

VPOS Event Search

To narrow down your V-POS Events list, 3xLOGIC has included a search utility to filter out events which are unrelated to a user's current task. Click the  button in the top left corner of the VPOS Events window. This will open the below VPOS Events Search Form

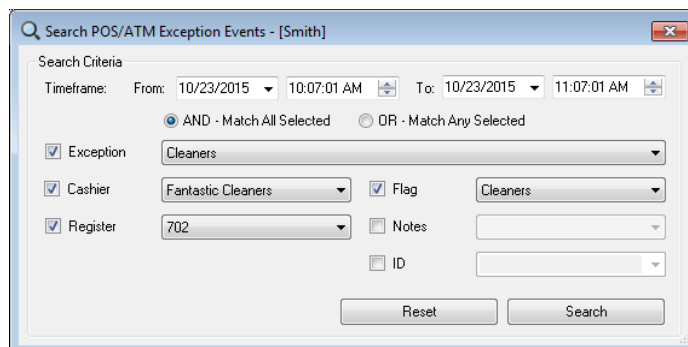


Figure 7-10:VPOS Events - Search Form

To perform a search, configure your desired *Timeframe*. Select your desired logical operator(AND, OR). Enable any desired filters and select the filter criteria from the available drop-down menus. Click *Search* to perform the search. Results will be displayed in the VPOS Events window.

7.2.1 Exception Event Playback

Double-click on an entry in the *Exception Events* window, or right click and choose Playback to open the Playback window. Exception Event Playback has several features embedded into the edge controls of the playback window. These features open a small settings pop-up(default placement is in the lower right hand corner of the playback window) where you can configure the desired settings. Available exception event playback edge-controls include:

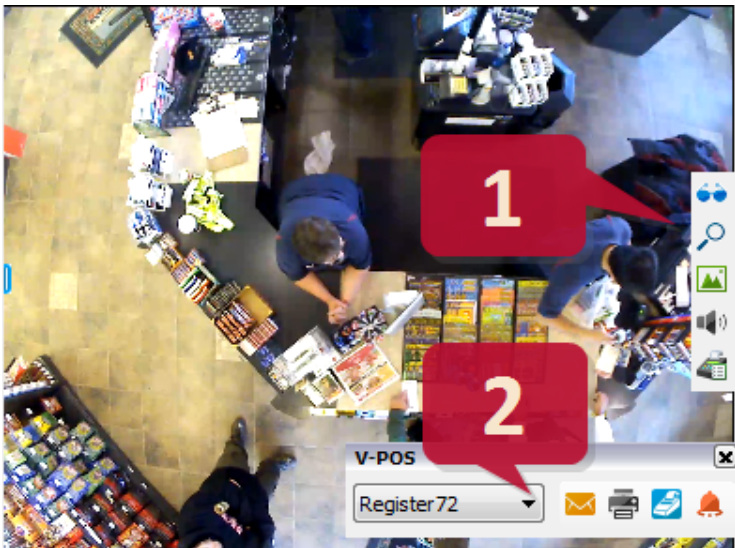





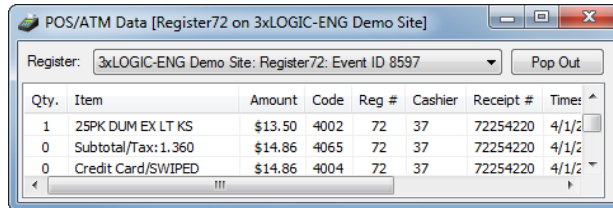


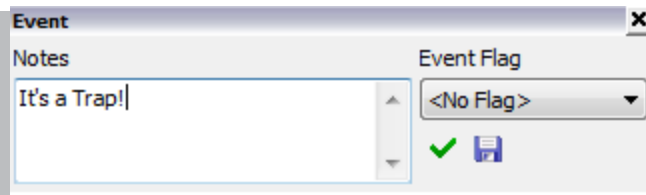


Figure 7-11:Playback Window - Right-Hand Edge Controls and V-POS Tools Pop-Up

The below options (1,above) are available from the right-hand edge control. Please note these controls auto-hide by default and appear on cursor-over.

	Smart Search (See section 9.4 of "Live Viewer Window Edge Controls" for more info on Smart Search)
	Zoom Controls
	Image Adjustment (for brightness and contrast).
	Opens the Audio window which displays current volume levels of recorded sound via standard audio gauge.
	Toggle V-POS Playback Pop-up . Pop-up will open by default if playback was retrieved via the VPOS events window.

Below is a description of the different features accessible through the VPOS pop-up (2, above.)

Camera 	V-POS Exception Events can require views from multiple cameras. Select a camera from the drop down list to open another playback window queued up to the same time frame as the Exception Event.
Email Still	A <i>Still Image</i> of the selected camera can be Emailed as a POS/ATM Report. This report is the same as the Printed Exception Report which includes still image of the current frame, in the print

	options window; check Include Notes to print the Event Flag and Notes with the Still Image, check Include Data to print the receipt data with the Still Image. This can be emailed as a Bitmap, JPEG or no image included POS/ATM Report.
<div>Print</div> 	Print the selected VPOS Data.
<div>Show Receipt</div> 	<div>Open the V-POS Data window. This window will show the receipt with the item that triggered the Exception Event. The Line item that triggered the Exception will be highlighted in red text.</div> <div></div> <div>Figure 7-12: POS/ATM Live Data Window</div> <div> Note: This window can also be docked to the left sidebar, similar to the VPOS Exception Events window.</div>
<div>Event ...</div> 	<div></div> <div>Figure 7-13: V-POS Event Details Window</div> <div><ul style="list-style-type: none">■ Notes-Insert any notes regarding the event.■ Event Flag - The user-defined flag name for the event.■ Acknowledge - Acknowledge the selected event.■ Save - Save the event data.</div>

7.3 V-POS Settings

The Settings window is where V-POS is configured. Some options are not available for configuration from VIGIL Client.

7.3.1 General Tab

The V-POS Settings General tab is pictured below.

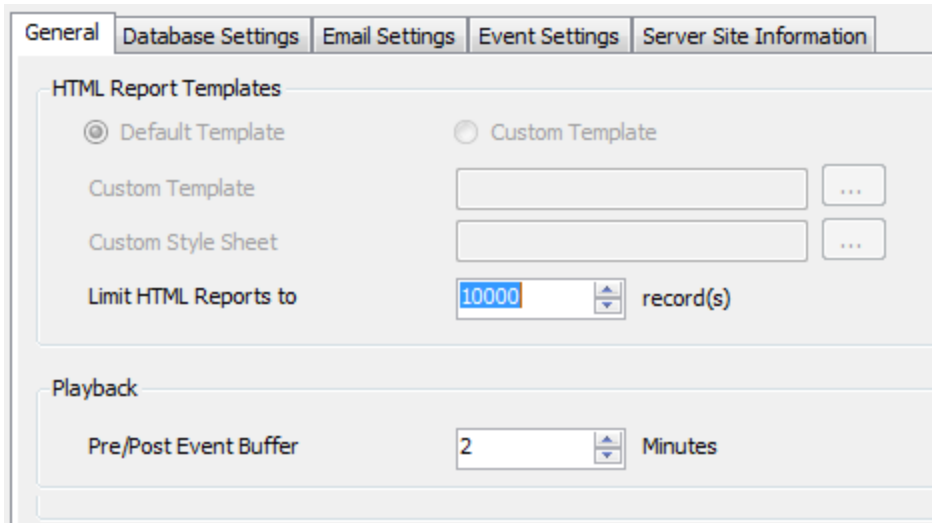



Figure 7-14:V-POS Settings - General Tab

Limit HTML Reports to X Records	Enter the maximum number of records to load into a report.  Note: Although possible, exceeding 10,000 records will seriously affect system response times when trying to load a report.
Pre / Post Event Buffer	When you Playback an <i>Exception Event</i> , this setting determines how much footage to display pre and post the record that triggered the <i>Exception Event</i> .

7.3.2 Database Settings Tab

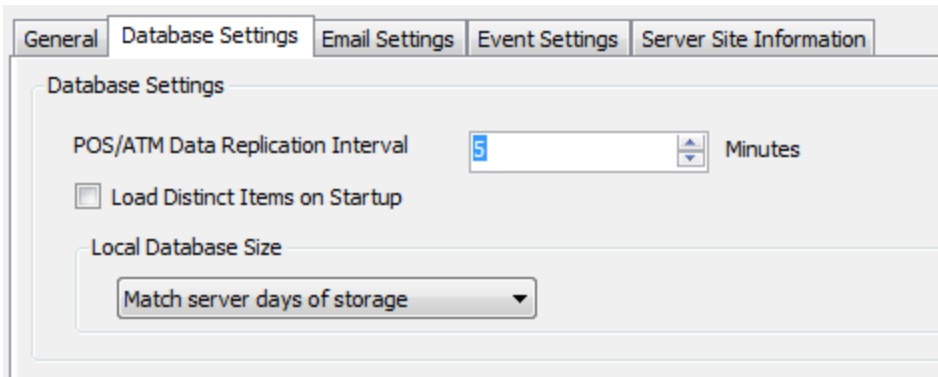



Figure 7-15:V-POS Settings - Database Settings Tab

POS/ATM Data Replication Interval	Configure the time in Minutes between database replications from the VIGIL Server data-base to the V-POS database.
Load Distinct Items	When enabled, V-POS will search for unique item descriptions from the database on

on Startup	<p>startup. This list of items will be available from the Item drop down menu in the Exceptions and Reports forms.</p> <p> Note: Using this feature when there are a large number of distinct item descriptions can cause system performance issues when starting V-POS.</p>	
Local Database Size	Limit by Number of records	Limit the size of the V-POS replicated Database by number of records.
	Limit by number of days	Limit the size of the V-POS replicated Database by number of days.
	Match server days of storage	Limit the size of the V-POS replicated Database by matching the days of footage on the VIGIL Server. This is the recommended setting.

7.3.3 Email Settings Tab

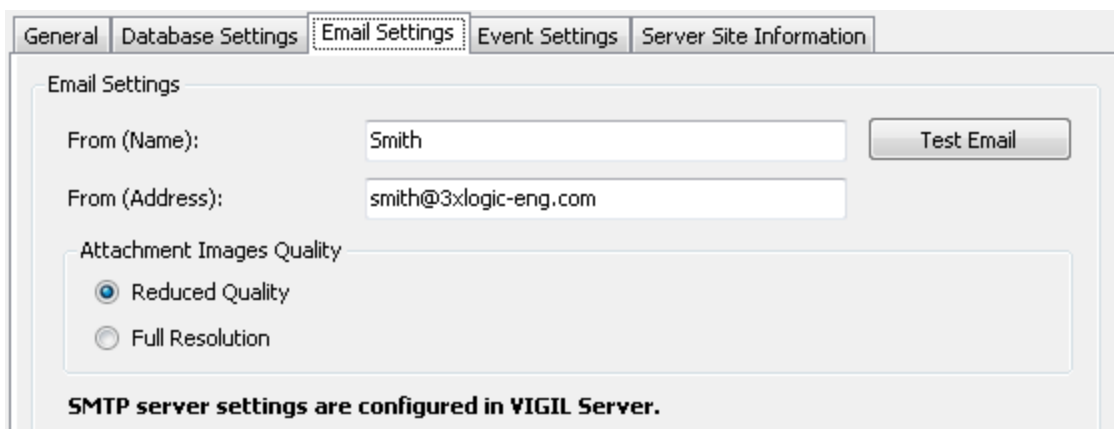


Figure 7-16:V-POS Settings - Email Settings Tab

From (Name)	The Name that will be associated with emails sent from this Server.
From (Address)	The From Address that will be associated with emails sent from this Server.
Attachment Images Quality	Select whether to send attached images at Reduced (CIF) or Full Resolution.

7.3.4 Event Settings Tab

Custom Flags can be created to mark Exception Events in the Event Window. Flags can be assigned a colour so they can be easily located in the VPOS Exceptions windows.

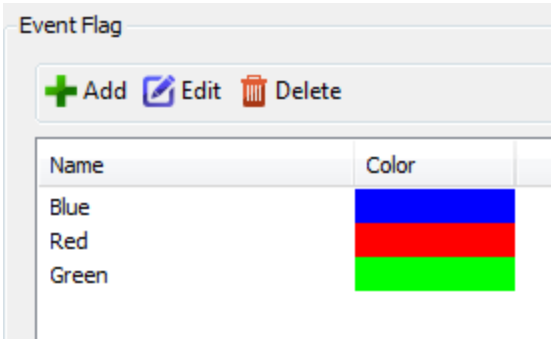


Figure 7-17:VPOS Settings - Event Settings Tab - Add / Edit Event Flag Window

Add / Edit	Opens the Add / Edit Event Flag window. On that window you can Enter a Name for the Flag and select a custom color for the flag.
Delete	Click to Delete the selected Flag.

Event Column Settings

To configure which columns are displayed in the VPOS Events window, check off the desired column category. Use the *Move Up* and *Move Down* buttons to organize the columns in the order you would like them displayed in the VPOS Events window.

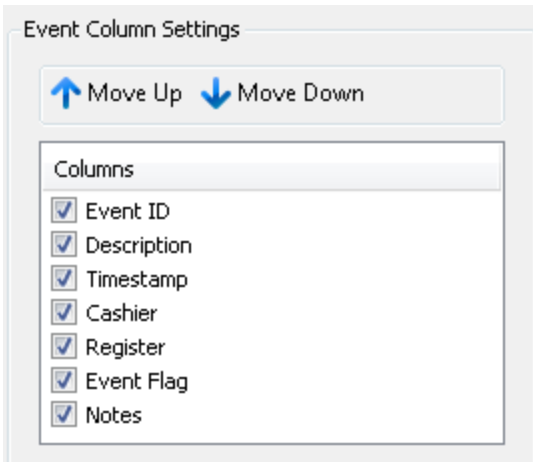


Figure 7-18:VPOS Event Column Settings

Event Configuration Options

Event configuration options are described below:

Events

☒ Allow User to Acknowledge All Events ☐ Allow User to Clear Acknowledged Events


☒ Popup Event Screen ☐ Acknowledge events older than day(s)

☒ Allow flag and notes modification in event window

☐ Only acknowledge events on playback

☐ Acknowledge on View

Figure 7-19:VPOS Settings - Event Settings Tab - Event Configuration Options

Allow User to Acknowledge all Events	Enable this option to allow access to the Acknowledge All button on the Events window, as well as be able to select multiple Events and Acknowledge them with the Acknowledge button.
Popup Event Screen	This option is not available in Client as the Exception Event screen is only updated when it is opened.
Allow flag and notes modification in event window	Enable this option to add the ability to Add / Edit Notes and set the Event Flag when right click on an Event in the Event Window. When disabled, you will only be able to Add /Edit notes and Set the Event Flag from the Event Playback window.
Close playback window when save event flag or notes	When this option is enabled, the Event Playback window will close when you click the Save button.
Only acknowledge events on playback	When this option is enabled, the option to Acknowledge the Exception Event will only be available footage has been played. The Exception Event can then be acknowledged from the Acknowledge button on the Playback Window.
Acknowledge on View	Events are automatically acknowledged when they are viewed by a Client User.
Allow User to Clear Acknowledged Events	<p>Enable this option to enable the Clear and Clear all buttons in the Exception Events window.</p> <p> Note: Cleared Events are not removed from the database, and can be seen by clicking the Show All button.</p>
Acknowledge events older than xx day(s)	Enable this options and set a number of days. This will automatically acknowledge any Exception Events older than the specified number of days.

7.3.5 VIGIL Server Site Information Tab

The VIGIL Server Site Information tab is where Contact Information for the VIGIL Server site can be specified. This information will be included with HTML based reports, enable the check box to also include this information with Text based reports.

GeneralDatabase SettingsEmail SettingsEvent SettingsServer Site Information

Site Contact Info

Site Name

VIGIL Server - Big V Pharmaceuticals Store 1

Site Location

Brisk Valley, Washington

Site Contact

Paul Magoo

Phone Number

555-555-5555

☒

Include Server Site Information in Text-Based Reports

Figure 7-20:VPOS Settings - Server Site Info Tab

7.4 V-POS Search and Reports

Manual Reporting can be configured using the same criteria as are available for Pre-Defined Exception Events. Manual Reports are presented in easy to read HTML reports that can be Printed, Emailed or Exported.

7.4.1 VPOS Search / Report Types

Manual VPOS Reports can be created using 3 different methods; a *Manual Query*, Running a *Pre-Defined Exception Event* as a Manual Query or *Searching for Transaction by Receipt*.

The screenshot shows the 'POS/ATM Search - [Smith]' window. It features a 'Search Criteria' section with a 'Timeframe' set from 6/14/2017 10:52:01 AM to 11:52:01 AM. Below this are three search methods: 'Manual Query' (selected), 'Predefined Exception Query', and 'Search for Transaction by Receipt'. The 'Search for Line Items' section includes 'Primary Item' and 'Secondary Item' filters with various options like 'Item', 'Quantity', 'Cashier', 'Conn #', 'Value', 'Code', 'Register', and 'Void Followed by No Sale'. There are also 'Video Analytics Filter' and 'Custom Search' sections. At the bottom, there are buttons for 'Back to Last', 'Reset', and 'Search', along with 'Order Results' set to 'Descending'.

Figure 7-21:V-POS Search / Report Window

The proceeding portions of this section will cover each type of query, however, common controls shared between all three VPOS search / report types are described below:

Above Query Section	
From / To	Specify the start date / time and end date / time for the Manual Report. If there is no POS/ATM Data during the specified time frame you will receive a <i>No Data</i> warning which states there was no data that matched your criteria available. Please note that searches spanning long periods of time may generate slowly.
Quick Search	Select a pre-defined time interval from the drop down menu.
Below Query Section	
Order Results	Choose whether to order report results in <i>Ascending</i> or <i>Descending</i> order.
Back to Last	Click this button to toggle between the two most recent queries.
Reset	Click this button to Reset the search criteria to default values.
Search	Click this button to Generate the HTML Report using the configured criteria.

Navigate through the remaining portions of this section for more information on the available VPOS Search / Report types.

Manual Query

Manual Query

Predefined Exception Query

Search for Transaction by Receipt

Search for Line Items

Primary Item

AND - Match All Selected

OR - Match Any Selected

Item

Value

Any Price

\$0.00

\$0.00

Case Sensitive

Whole Dollar Amounts

Quantity

Any Quantity

0

Code

Cashier

Register

Lookup Register

Conn #

Void Followed by No Sale

Secondary Item

Item

In Same Transaction

In Next Transaction

Video Analytics Filter

Enabled

Camera

2MP-VD_BackDoors

Rule Name

No Active Rule

Value

Greater Than Or Equal To

0

Custom Search

Enabled

Save

Delete

Figure 7-22:VPOS Search - Manual Query Form


Note: Any search criteria left blank will not be used for the *Manual Query Report*.

Search for Line Items - Primary Item	
Filter Method - OR / AND	Logical operators that will assist in searching with multiple criteria. By default, this is the <i>OR</i> operator, which will match results in any of the used POS/ATM data criteria fields. Alternatively, the <i>AND</i> operator will match results in all of the used POS/ATM data criteria fields.
Item	Enter a full or partial item name to search for. To add additional items that must be included in the results, insert the text [AND] or use a "," character between items. To add an OR operator, insert the text [OR] or use a " " character between items. To exclude an item, insert the text "[NOT]" or the "!" character before the item name. If the <i>Load Distinct Items on Startup</i> setting is enabled, a list of valid items will be available from the drop down menu.
Case Sensitive	Enable this option to make the item field Case Sensitive. When enabled, only items matching the case used in the item field will be reported. Example: " Item" will only report back "Item", not "item" or" ITEM."
Value	Matches results in the <i>Amount</i> column. By default, <i>Any Price</i> is selected. If you want to match a certain value, select an operator and input a value. Results will include entries that match the defined value operator. The available operators are; <i>Greater Than</i> , <i>Greater Than or Equal To</i> , <i>Equal To</i> , <i>Less Than or Equal To</i> , <i>Less Than</i> and <i>Between</i> . When the <i>Between</i> operator is selected, input two values into the provided fields. Results will include entries that fall between the two specified value fields. Example: If the operator <i>Greater Than or Equal To</i> is used with the value of \$20.15, any Data with a value of 20.15 and higher will be returned.
Quantity	Matches results in the <i>Quantity</i> column. By default, <i>Any Quantity</i> is selected. If you want to

93

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	match a certain value, select an operator and input a value. The available operators are; <i>Greater Than</i> , <i>Greater Than or Equal To</i> , <i>Equal To</i> , <i>Less Than or Equal To</i> and <i>Less Than</i> . Example: If the operator <i>Greater Than or Equal To</i> is used with the value of 5, any POS/ATM data with a Quantity of 5 and higher will be returned.
Code	Matches results in the <i>Code</i> column. You can manually type in a code to search for, or select NS (No Sale) or VX (Void) from the drop down menu.
Cashier	Matches results in the <i>Cashier</i> column. Enter a Cashier Name or Number to search for.
Register	Matches results in the <i>Register</i> column. Click on the <i>Lookup Register</i> button to display a list of Register to Priority Camera mappings configured on the VIGIL Server, double click a Register in the list to auto fill the Register field. The Register field is used for matching up the POS/ATM records to the appropriate video footage.
Connection	Matches results in the <i>Connection</i> column.
Whole Dollar Amounts	Enable this option to only include Whole dollar amounts in the HTML Report. Example: \$5.00 will show in the report, but \$5.25 will not.
Void Followed by No Sale Transactions	Enable this option to configure the HTML report to search for transactions that contain a Void followed by a No Sale.
Search for Line Items - Secondary Item	
Item	Enter a secondary item to include in the query. <ul style="list-style-type: none"> ■ In Same Transaction - Toggle this option to only return results if the secondary item is included in the same transaction as the primary item. ■ In Next Transaction - Toggle this option to only return results if the secondary item is included in the transaction which proceeds the primary item.
Video Analytics Filter	
Enabled	Enable this option to enable the use of <i>Video Analytics Rules</i> configured on the VIGIL Server. Combining Video Analytics with POS Data in Exception Reports allows for powerful Exception reporting such as empty analytics zone (Customer not Present) during a Refund transaction.
Camera	Select the camera which the Video Analytics rule is configured on.
Rule Name	Select the rule from the list of rules configured on the selected camera.
Value	Select an operator and input a value. The available operators are; <i>Greater Than</i> , <i>Greater Than or Equal To</i> , <i>Equal To</i> , <i>Less Than or Equal To</i> and <i>Less Than</i> . <div>  Example: When using an Occupancy Count rule on the VIGIL Server, use the operator <i>Less Than or Equal To</i> with a value of 0. If the rule reports back that the <i>Occupancy</i> is 0, then it can be assumed that a customer is not present during this transaction. </div>
Custom Search	
Enabled	Check this box to enable the use of custom searches. A <i>Custom Search</i> may be selected from the drop-down menu.

Predefined Exception Query

Click the drop down to select a Predefined Exception to use when generating an HTML Report. Only exceptions with *Display in Reports Predefined Exceptions List* will be available in this drop down.

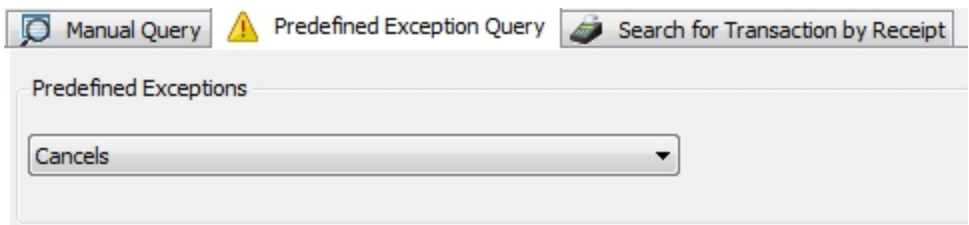


Figure 7-23:V-POS Search - Predefined Exception Query Drop-Down

Search for Transaction by Receipt

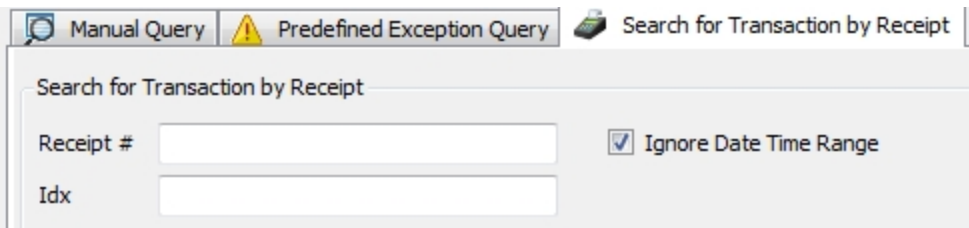


Figure 7-24:VPOS Search - Search for Transaction by Receipt Form

Receipt #	Type in text that will match results in Receipt # column. This report will only contain the specified Receipt. Select the <i>Ignore Date Time Range</i> to ignore the predefined date / time range and return all available results matching the entered criteria
IDX	Type in text that will match results in the IDX column. An IDX# is assigned to each line item in the POS/ATM Database. If the IDX refers to a line item with a receipt number, the Report will contain the receipt.

7.4.2 Report Results

The report is presented in an HTML table with each column corresponding to the data fields from the POS/ATM data. Up to fifty results are presented per page of the report. Depending on the number of results returned by the query, several pages may exist. Pages can be navigated using the controls in the bottom left.

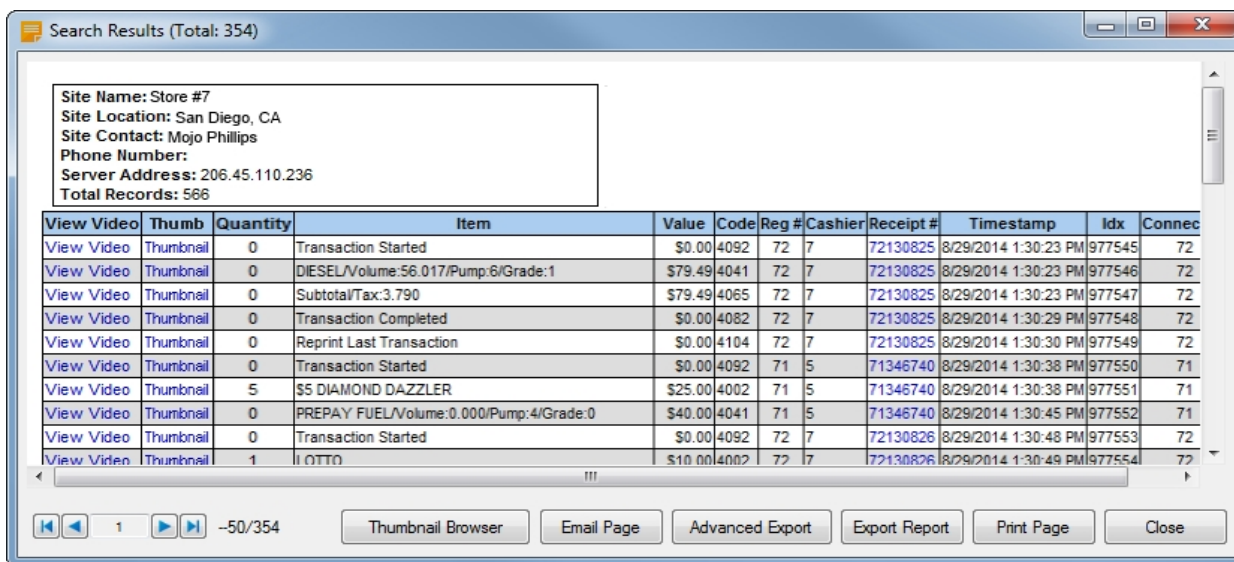
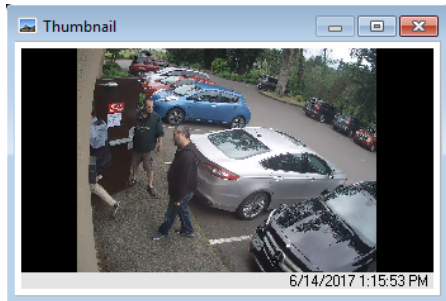




Figure 7-25:VPOS Search - Report Results Window

View Video	Click the <i>View Video</i> hyperlink to begin viewing footage surrounding the chosen VPOS event.
View Thumbnails	<p>Opens the related thumbnail in a small preview window. A timestamp is also provided in the lower right-hand corner of the window.</p> 
Receipt #	The receipt number of an entire POS transaction. All items processed in a single transaction will share the same receipt number. Click on a Receipt # hyperlink to filter the report to feature all items with that receipt number.
IDX	The VPOS database index number of the item. Items processed in a transaction together will have separate IDX numbers.
	Use this control to navigate through the report pages.
Thumbnail Browser	Click this button to open the Thumbnail Browser. The Thumbnail browser displays a thumbnail for each individual time stamp in the Report.

	 Note: The browser can take a varying amount of time to initialize depending on Camera Resolutions and Internet / Network speeds.
Email Page	Click this button to Email the current report page to a list of recipients. An SMTP Server must be configured in the VIGIL Server's <i>Email Overview Settings</i> tab.
Advanced Export	Click this button to export the entire report, organized by receipt, as either a .txt or .html file.
Export Report	Click this button to export the entire report as either a .txt or .html file.
Print Page	Click this button to print the current report page. The printed page will appear as displayed in the Report Results window.

7.5 V-POS Quick Search

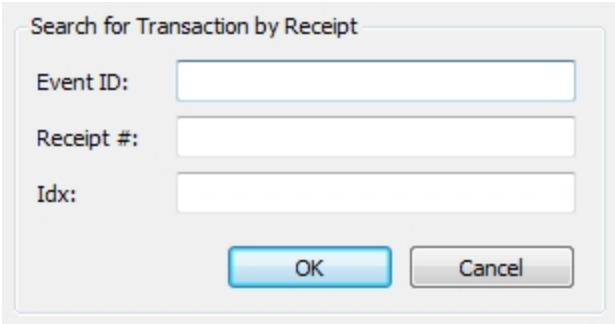


Figure 7-27:VPOS Quick Search Window

Event ID	Type in an Event ID. This will open an Exception Event Playback Window for the specified Event.
Receipt #	Type in a Receipt #. This will open a Playback window for the specified Receipt.
IDX	Type in an IDX number. An IDX# is assigned to each line item in the POS/ATM Database. This will open a Playback window for the specified IDX.

8 Digital Virtual Switch

The *Digital Virtual Switch* feature allows users to configure additional PC monitors to display up to 16 simultaneous live camera feeds per PC monitor. Users are able to access and control all cameras from VIGIL Server sites, whether they are analog, network, or PTZ cameras, all without the need for a KBD300 keyboard. To set up a virtual switch, see the section on the [Virtual Switch Tab](#) under *Settings*.

8.1 Virtual Switch Keypad

The virtual switch keypad allows users to add and remove cameras from a *Digital Virtual Switch*, change the switch layout, and control PTZ cameras in the virtual switch.



Note: The *Digital Virtual Switch* feature must be setup in the VIGIL Client settings before the keypad is available for use.

To access the *Virtual Switch Keypad*, select the context arrow from the Tools (default displayed tool is *Exports*) icon menu button and select *Switch*.

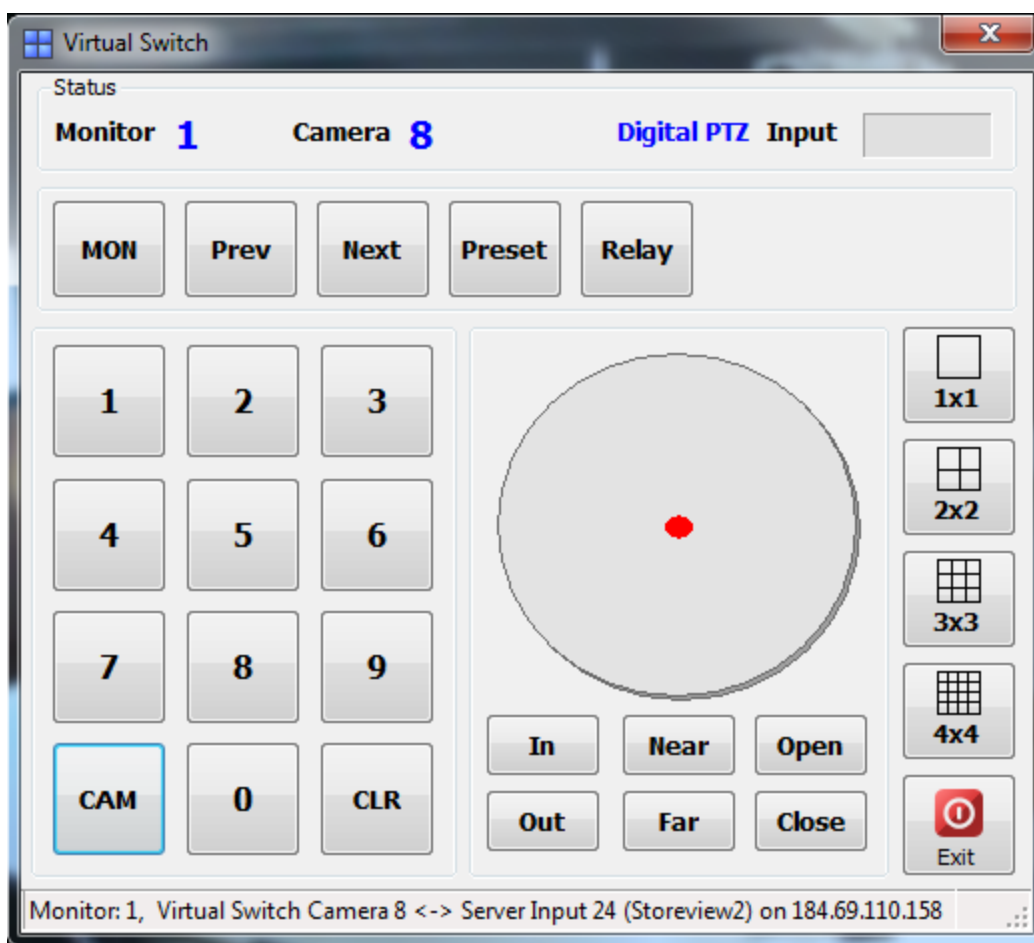



Figure 8-1: VIGIL Client - Digital Virtual Switch - Keypad

Monitor / Camera / Input	The currently selected monitor, camera, and input number will display here as settings are configured.
--------------------------	--

MON	Each frame available on the virtual switch is considered a virtual monitor. There are 16 virtual switch monitors per PC(physical) monitor. To select a virtual switch monitor, enter the monitor number and then press the <i>MON</i> button.
Prev / Next	Switches the currently selected camera to the previous / next camera on the virtual switch map.
Preset	To go to a camera preset, first select the monitor, and then press the preset number followed by the <i>Preset</i> button.
Relay	 Warning: This <i>Relay</i> button is not associated with traditional VIGIL Server relay functions. Contact 3xLOGIC Support for more info.
CAM	To add a camera to the virtual switch, select the virtual switch monitor number and then press the virtual switch input number followed by the <i>CAM</i> button.

Virtual Switch Keypad Hotkeys

The Virtual Switch can also be controlled via standard keyboard hot-keys. Each keypad function, along with the corresponding hotkeys are listed in the table below.

Function	Hotkey	Function	Hotkey
MON	.	Numerals	Same as number
Prev	-	In	N/A
Next	+	Near	N/A
Preset	/	Open	N/A
Relay	*	Far	N/A
CAM	Enter	Close	N/A
1x1 Layout	F5	2x2 Layout	F6
3x3 Layout	F7	4x4 Layout	F8

8.2 Virtual Switch Screen

The virtual switch screen is displayed on secondary monitors with the main monitor reserved for controlling the system without interrupting view of the virtual switch display. Cameras may be added and removed using the keyboard number pad and controlled on-screen using the mouse, or the virtual switch keypad.

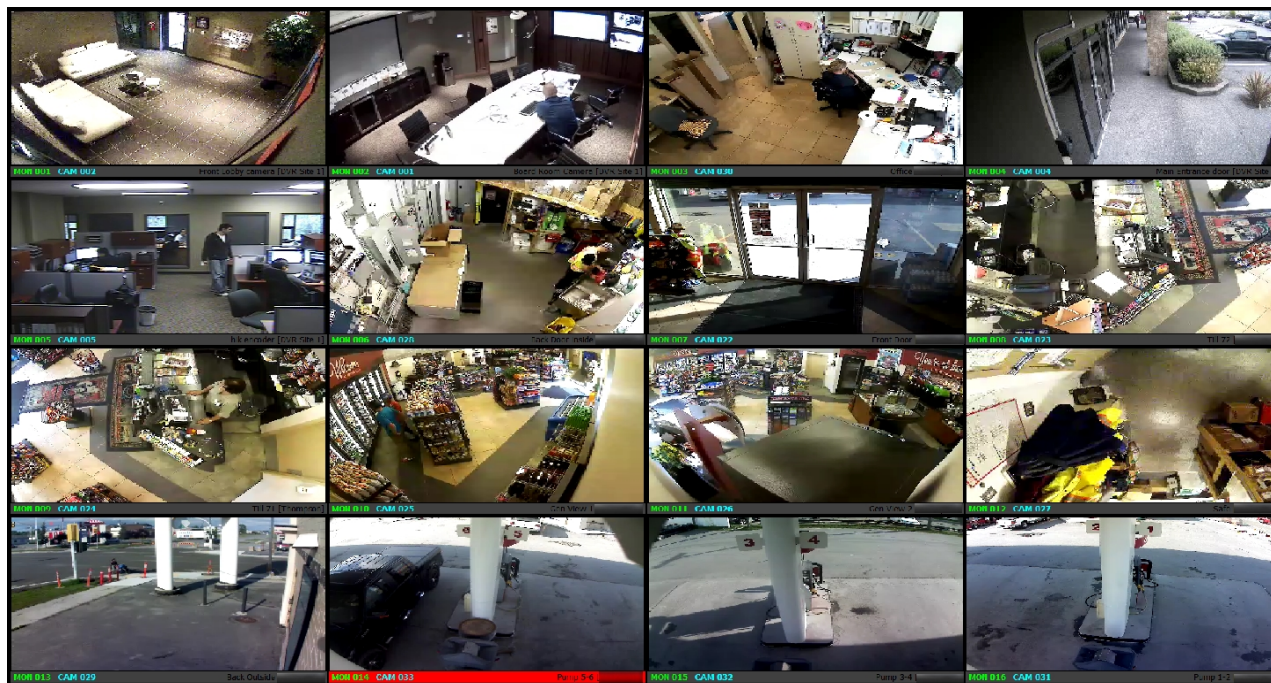


Figure 8-2: VIGIL Client - Digital Virtual Switch Screen

Under each camera is a control bar containing the virtual switch monitor number, the virtual switch input number, the camera name and the VIGIL Server site (pictured below.) The control bar can be clicked on to set focus on that monitor (highlighted in red, as seen in the above example), or double clicked on to set that monitor to *Full Screen Mode / Open in Live Viewer Window on Main Screen* (configurable in Settings).

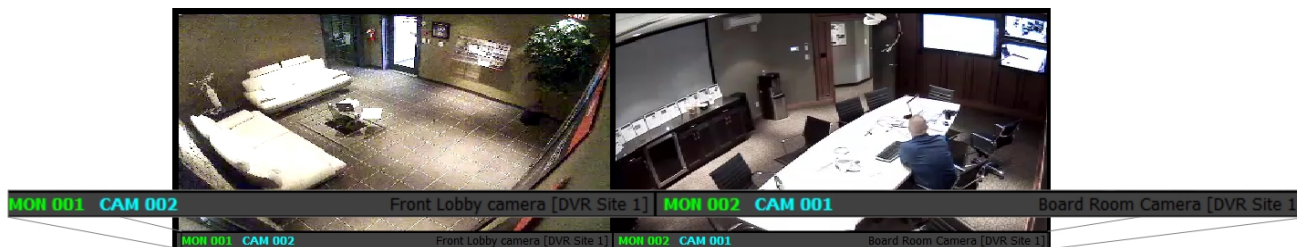



Figure 8-3: Digital Virtual Switch - Camera Frame Info Bar



Right-clicking on a monitor in the virtual switch provides a context menu with the following options:

Copy	Copy a still shot of the video feed to the Windows clipboard.
Enable On-Screen Display	Enables On-Screen display of POS/ATM data. This option will only be available if the camera is configured as a Priority camera for POS/ATM on the VIGIL Server.
Digital PTZ	Enable this feature for zoom and pan control on fixed cameras. This option is available and enabled by default for all cameras that do not have alternative camera control setup in the VIGIL Server camera settings.

Priority Audio	If a <i>Priority Audio</i> channel is configured for the camera on VIGIL Server, toggle this option to listen to live audio.
Analytics	Select which Video Analytics information will be displayed on the live video feed.
Speed	Select the display speed for the camera. Options are: <i>Slow (1fps)</i> , <i>Medium (5fps)</i> , <i>Fast (10fps)</i> , <i>Turbo (20fps)</i> <i>Maximum</i> , and <i>Frame by Frame</i> .
Relays	<p>Interfaces to the server relays. Relays can be toggled on or off, corresponding to closed and open states respectively.</p>  Note: Relays must first be configured on the VIGIL Server to enable this option. See the VIGIL Server users guide for more information.
Quick Search	Retrieve recent footage from the camera for preset intervals of one, five, or ten minutes. This will open the <i>Search</i> window and begin playback of the selected camera and time interval.
Audio Talk	Opens the audio talk window. Audio Talk must be configured and associated with the Camera on VIGIL Server for this option to be available. See "Audio Talk" on page 76 for further details.
Sub Stream / RapidStream	Toggle between <i>Main Stream</i> and <i>Sub Stream</i> if the camera supports a <i>Sub Stream</i> . If the camera does not support a Sub Stream, the RapidStream option will be available. RapidStream is CPU intensive on the VIGIL Server and will be disabled if CPU usage exceeds a defined threshold. See the VIGIL Server Users Guide for more details.

9 Searching and Playback

VIGIL Client offers a robust set of tools for searching and playing video footage and data. To open the *Search* window, either click *Search* on the main VIGIL Client icon toolbar, or select *Search | Search Footage and Data* from the main menu.

Each of the *Search* window sections can be minimized by clicking the double arrows  in the title bar. When a section is already minimized, it can be restored using the  double arrows. Two different search result styles, *Tabular* and *Visual* search results exist for your convenience. See "Video Search Results" on page 104 for more information on search result styles.

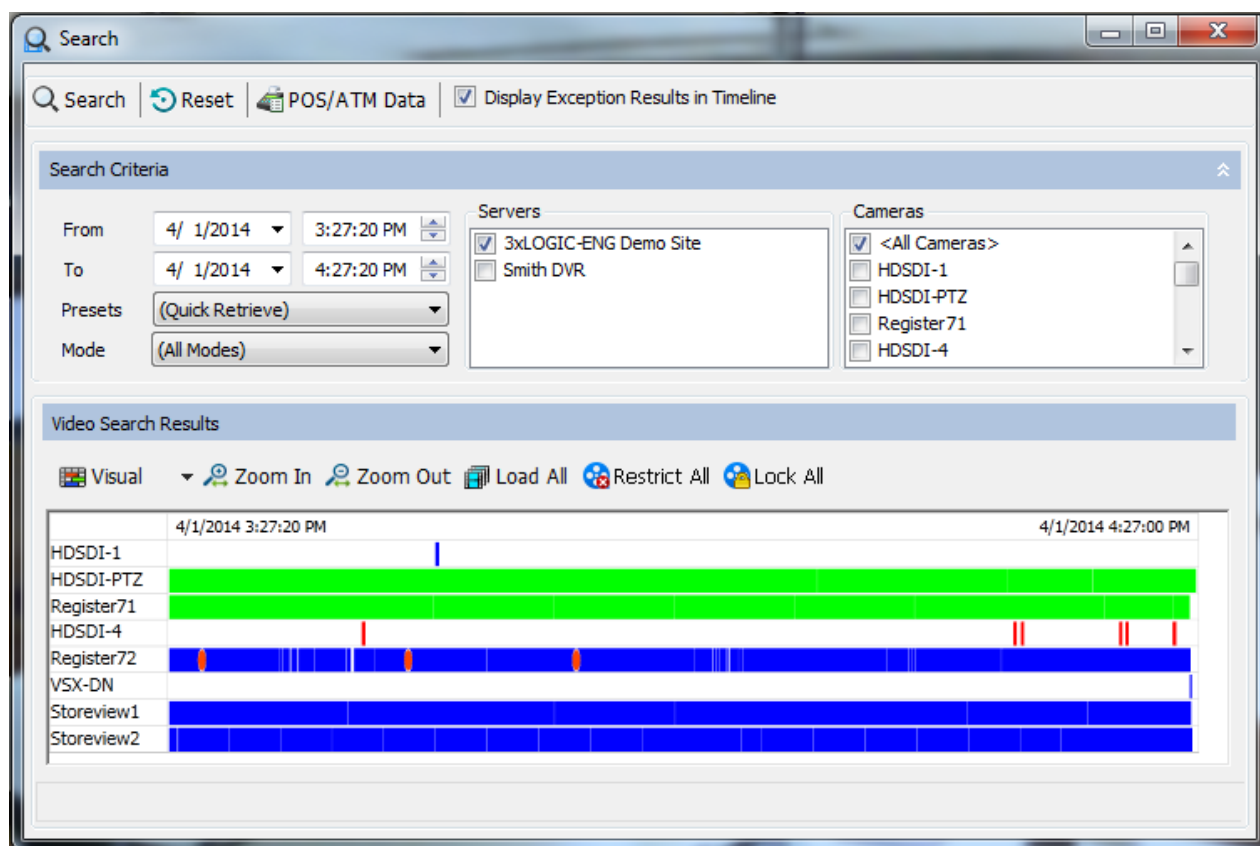


Figure 9-1: VIGIL Client - Search Window



Note: If *Enable Auto Search by Default* is enabled in the *VIGIL Client Settings | Search Tab*, then the last hour of footage will be pulled from all active cameras on the selected Server. This feature is enabled by default.

9.1 Searching Video

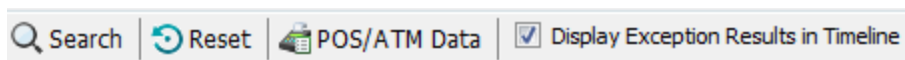




Figure 9-2: VIGIL Client Search - Video Search Tools

Search	Performs a search based on the current criteria.
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Reset	Resets all search criteria and POS/ATM data filters to their default values. The <i>From / To</i> time defaults to the past hour from when <i>Reset</i> is clicked.
POS/ATM Data	If POS/ATM Data is configured on the VIGIL Server, this button will open the <i>POS/ATM Data Filter</i> and <i>Data Search Results</i> sections. Click the <i>POS/ATM Data Filter</i> section title bar  to specify the <i>POS/ATM Data</i> search criteria.
Display Exception Results	Check this box to enable exception results in to be displayed in the visual search results.



Note: If *Enable Auto Search by Default* is enabled in the *VIGIL Client Settings / Search Tab*, than the last hour of footage will be pulled from all active cameras on the selected Server. This feature is enabled by default.

9.1.1 Search Criteria

When first opened, the *Search* window defaults to a search of all cameras, recording in all modes, from the last hour. Click the *Search* button to retrieve all footage meeting the specified criteria.

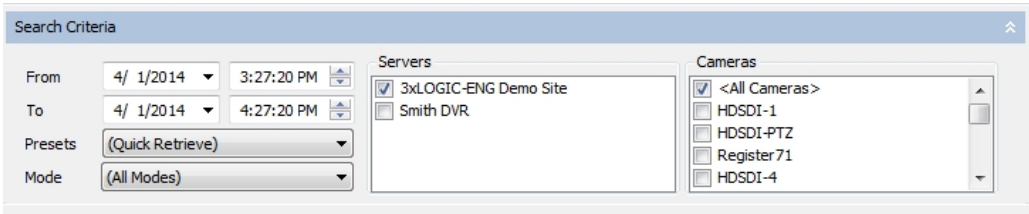



Figure 9-3:VIGIL Client Search - Search Criteria

From / To	You can specify the start date / time and end date / time of your search. By default, VIGIL Server allows you to search across multiple days. This can be changed to default to One Day in the <i>VIGIL Server Settings</i> on the Server.
Servers	Select the connected Server you wish to perform the search on.
Cameras	Select the cameras you wish to perform the search on.
Presets	This drop-down menu includes preset search intervals in hourly increments from 1 hour up to 8 hours. Additionally, selections for 15 and 30 minutes can be added by checking <i>Quick Retrieve Short Intervals</i> in the <i>Settings / Search Tab</i> . When a selection is made, the <i>From / To</i> times are adjusted accordingly. Selecting <i>Custom Search</i> opens the <i>Custom Search</i> window where searches that are performed frequently can be created or run.
Mode	<div> <p>Making a selection from this drop-down menu will restrict the returned footage to only the selected type: <i>All Modes</i>, <i>Constant</i>, <i>Motion</i>, <i>All Alarms</i>, <i>Digital Input Alarms</i>, <i>Motion Alarms</i>, <i>POS/ATM Alarms</i> or <i>Video Analytics (VA) Alarms</i>.</p> <div>  <p>Note: When selecting Video Analytics Alarm mode, please note that retrieved footage will surround <i>Alarm</i> events associated with VA rules, not all instances of video analytics being utilized.</p> </div> </div>

9.1.2 Video Search Results

After completing a search, the results are displayed in the *Video Search Results* pane as seen below. This pane is expandable and collapsible if the *POS/ATM Data Search* is enabled. Two separate modes exist for displaying search results. *Visual* and *Tabular*.

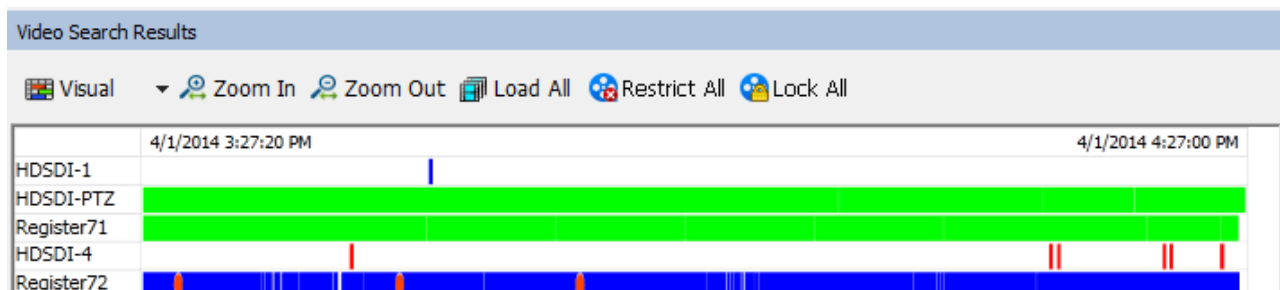



Figure 9-4: Search Results - Visual Display

Click this button or use the drop-down menu to switch between *Visual* and *Tabular* display options.



Server	Camera	Started	Finished
3xLOGIC-ENG Demo Site	HDSDI-1	2014-04-01 15:42:48	2014-04-01 15:43:01
3xLOGIC-ENG Demo Site	HDSDI-PTZ	2014-04-01 15:27:20	2014-04-01 16:27:00
3xLOGIC-ENG Demo Site	Register71	2014-04-01 15:27:20	2014-04-01 16:26:38
3xLOGIC-ENG Demo Site	HDSDI-4	2014-04-01 15:38:31	2014-04-01 16:25:51

Figure 9-5: Search Results - Tabular Display

Visual / Tabular	Click this button or use the drop-down menu to switch between <i>Visual</i> and <i>Tabular</i> display options.
	Visual display is a graphical representation of the search results. The visual footage chart shows the period of time searched with footage recorded displayed as blocks of color representing the recording mode: Green for Constant, Blue for Motion or Red for Alarm. A red oval () is displayed within the visual timeline to represent a VPOS exception.
	When the mouse is moved within the chart, a line is drawn indicating the point in time under the cursor, which is displayed below the <i>Video Search Results</i> . Clicking within the chart will begin playback of the selected camera at that time, clicking in a white section of the chart will begin playback of the next available footage.
	Tabular display is a table with the start and end dates and times of the available video footage. Clicking on a table row will begin playback of the selected camera. The tabular display cannot show gaps in video footage.
Zoom In	Allows you to zoom in on the Visual display <i>Video Search Results</i> for greater precision.
Zoom Out	Allows you to zoom out on the Visual display <i>Video Search Results</i> for a wider view.
Load All	Load all results into the playback view.
Restrict All	Restrict all playback footage in the results from being viewed by users without the <i>View Restricted Video</i> permission. See "Manage Restricted Video" on page 35 for more information on managing footage once it has been flagged as restricted

Lock All	Lock all playback footage in the results from being scavenged by the VIGIL Scavenger Service. The footage will remain in stored on in the Server's data drive, regardless of its age. See "Manage Locked Video" on page 36 for more information on managing footage once it has been flagged as locked.
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9.2 Searching POS/ATM Data

In addition to searching Video Footage, if the server has also been configured to record POS/ATM Data, you can search that data in VIGIL Client. Click the  POS/ATM Data button to open the POS/ATM Data Filter section, then click the POS/ATM Data Filter title bar  to open the POS/ATM Data search criteria section.

POS/ATM Data Filter

Search for Line Items

Item

Value

Any Price

0.00

0.00

Code

Register

Cashier

Quantity

Terminal

OR


AND

Search for Transaction

Receipt Number

Idx

Figure 9-6:VIGIL Client Search - POS/ATM Data Filter

 **Note:** If the currently connected Server has a VPOS module registered, the above window will be replaced with the VPOS Search window. See "VPOS Search / Report Types" on page 92

9.2.1 Search for Line Items

Use the *Search for Line Items* section to find specific POS/ATM Data within the date and time indicated in the *Search Criteria* section. When searching for line items, normal search criteria are also included (i.e. *From* and *To* date / times, selected cameras).

Item	Type in text to search by <i>Item</i> . Use the drop-down menu to select a recently searched item, remembers last 10 searched for items.
Code	Type in text to search by <i>Code</i> .
Register	Type in a number to search by <i>Register Number</i> .
Connection	Type in a number to search by <i>Connection Number</i> .
Quantity	Type in a number to search by <i>Quantity</i> .
Value	Matches results in the <i>Amount</i> column. By default, <i>Any Price</i> is selected. If you want to match a certain value, select an operator and input a value. Results will include entries that match the defined value operator. The >= operator means “more than or equal to” the value that you input. For example, if the operator >= is used with the value of \$20.15, any POS/ATM data with the value of 20.15 and higher will be returned. The <= operator means “less than or equal to”, while the = operator simply means an exact value.

	When using the <i>Between</i> operator, input a value into each of the value boxes. Results will be entries that fall between the listed prices.
Cashier	Type in text to search by cashier number or name.
OR / AND	Logical operators that will assist in searching with multiple criteria. By default, this is the <i>OR</i> operator, which will match results in any of the used POS/ATM Data criteria fields. Alternatively, the <i>AND</i> operator will match results in all of the used POS/ATM Data criteria fields.

9.2.2 Search for Transaction

This type of search looks for a unique line item or receipt number and disregards the other criteria.

Receipt Number	Type in text that will match results in <i>Receipt #</i> column. The search results will include 10 seconds before the start of the receipt and 10 seconds after the end of the receipt.
IDX	Type in text that will match results in <i>IDX</i> column. If the <i>IDX</i> contains a receipt number, the POS/ATM data returned will be that receipt number and all <i>IDX</i> values corresponding to it within one hour. If there is no receipt number for the searched <i>IDX</i> value, the returned results will be based on the timestamp of that <i>IDX</i> . The search results will be +/- 10 seconds from the timestamp of the <i>IDX</i> .

After completing a POS/ATM data search, a *POS/ATM Data Receipt* window will be opened.



Note: POS/ATM Data can also be displayed on the Video Playback Window in an OSD Format.

Register: 3xLOGIC-ENG Demo Site: Register72: Register 72							Pop Out
Qty.	Item	Amount	Code	Reg #	Cashier	Receipt #	Timestamp
1	\$20-\$200 MILLIONS	\$20.00	4002	72	37	72254104	3/28/2014 2:
0	Subtotal/Tax:0.130	\$2.98	4065	72	37	72254104	3/28/2014 2:
0	Cash Tender	\$5.00	4003	72	37	72254104	3/28/2014 2:
0	Transaction Completed	\$0.00	4002	72	37	72254104	3/28/2014 2:

Figure 9-7:POS/ATM Data Receipt

The *POS/ATM Data Receipt* window presents POS/ATM Data in tabular form with these columns:

Qty	The quantity of the item purchased.
Item	The item purchased.
Amount	The price of the item purchased.
Code	The transaction type code associated with the transaction.
Reg #	The cash register number.
Cashier	The cashier currently logged in to the POS system.
Receipt #	The receipt number of the current receipt.
Timestamp	The time at which the Point of Sale event occurred.

There are six options available when a line in the *POS/ATM Data Search* tab is right-clicked:

Copy Line	Copies the selected data record to the Windows clipboard.
Export All Records	Opens the <i>Select Destination</i> window where an export destination is selected. After making a selection, the <i>POS/ATM Export Settings</i> window opens. Select the time periods to export or select <i>Export All</i> to export all data records. Once complete, click <i>OK</i> to begin the export process. Click <i>Cancel</i> to exit without exporting.
Print All Records	Prints the <i>Live POS/ATM Data</i> to the default printer.
Search for Transaction by Receipt	Narrow the search results to display only the results that match the receipt number of the record that was right clicked on.
Search for Transaction by IDX	Narrow the search results to display on the results that match the receipt number that the IDX of the record right clicked on is a member of.
Reset Column Order	Resets the order of the <i>POS/ATM Data</i> columns if they have been rearranged.

9.3 Custom Search

A *Custom Search* that includes specified search criteria can be created and saved. The *Custom Search* window can be accessed from the *Presets | Custom Search* drop-down menu. It can also be opened from the toolbar menu (*Search | Custom Search*). When selected, the *Custom Search* window will appear.

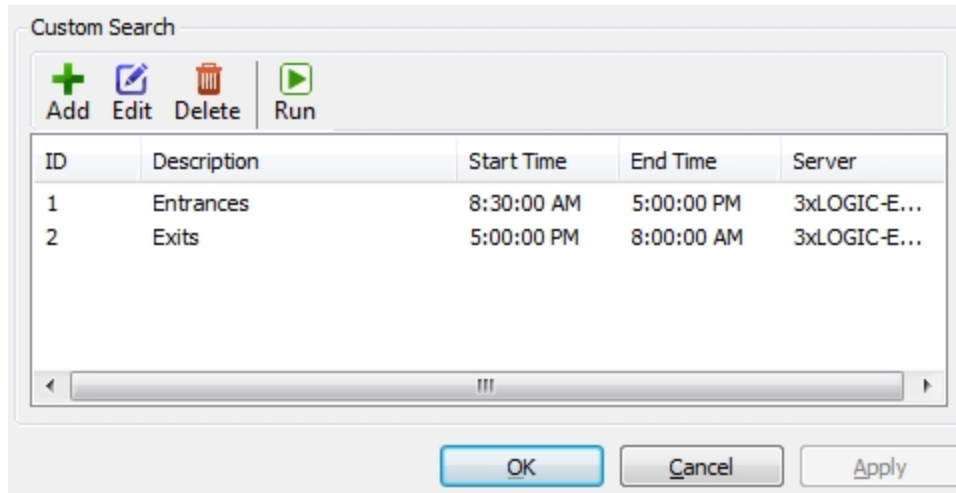


Figure 9-8: VIGIL Client Search - Custom Search List

Add	Opens the <i>Add Custom Search</i> window. Once a <i>Custom Search</i> has been added, click <i>Apply</i> to save the search.
Edit	Opens the <i>Edit Custom Search</i> window for the selected search. Select an entry and click <i>Edit</i> . Once a <i>Custom Search</i> has been edited, click <i>Apply</i> to save the changes.
Delete	Deletes an existing <i>Custom Search</i> . Select an entry and click <i>Delete</i> .
Run	Runs an existing <i>Custom Search</i> . Select an entry and click <i>Run</i> .

Add / Edit a Custom Search

Description	The name of the search that will appear in the <i>Custom Search</i> list.
Server	Select the server the custom search will be run on from the drop down list.
Time Filter	The start time and end time to be searched.
Cameras	Select the camera(s) to search, or select <i>All Cameras</i> .
Data	<p>Include Data – When enabled, the <i>Custom Search</i> will include the POS/ATM data criteria specified.</p> <p>OR / AND - Logical operators that will assist in searching with multiple criteria. By default, this is the <i>OR</i> operator, which will match results in any of the POS/ATM data criteria fields. The <i>AND</i> operator will only match results that have matched results in all of the POS/ATM data criteria fields.</p>

Description:

Server: 3xLOGIC-ENG De

Time Filter

Start Time: 4:29:33 PM

End Time: 5:29:33 PM

Cameras

☒ <All Cameras>

☐ HDSDI-1

☐ HDSDI-PTZ

☐ Register 71

☐ HDSDI-4

☐ Register 72

☐ Cam6

☐ Cam7

☐ Cam8

Data

☐ Include Data

Item:

Code:

Value: 0.00 0.00

Cashier: Register:


☐ OR ☒ AND

OK

Cancel

Figure 9-9:VIGIL Client Search - Custom Search - Add / Edit Custom Search

Click *OK* to return to the main *Custom Search* window.



Note: You must save Custom Searches before they can be run. To do this press the *OK* or *Apply* buttons.

9.4 Search Monitor Output History

The *Search Monitor Output History* feature can be accessed from the Search top bar menu. Mouse-over *Search* in the top bar menu and select the *Search Monitor Out History* item from the drop-down.

The *Search Monitor Output History* feature can be utilized to search for all footage viewed on a specific virtual switch monitor within the defined timeframe. For more information regarding the VIGIL Client *Virtual Switch* feature, See "Digital Virtual Switch" on page 98


Server	Camera	Started	Finished	
Smith	1.3MP-PIR_Lobby	12/9/2014 11:23:12 AM	12/9/2014 11:28:53 AM	
Smith	2MP_MVD_Training	12/9/2014 11:28:53 AM	12/9/2014 11:28:59 AM	
Smith	2MP-D_Devs	12/9/2014 11:28:59 AM	12/9/2014 11:29:02 AM	
Smith	2MP-VD_BackDoors	12/9/2014 11:29:02 AM	12/9/2014 11:31:04 AM	
Smith	2MP-VD_BackDoors	12/9/2014 11:44:03 AM	12/9/2014 2:39:56 PM	
Smith	2MP-VD_BackDoors	12/9/2014 2:39:56 PM	12/9/2014 2:40:00 PM	

Figure 9-10: Search Monitor Output History Window

Search Monitor Output History	
From / To	Specify the start date / time and end date / time of your search
Monitor	Select the desired monitor to be searched.
Search	Begin the search process.
Reset	Reset Search Criteria.
View Stitched Cameras	View all of the search results together as a stitched playback video.

9.5 Video Playback

To play recorded video footage, double-click a camera from the *Video Search Results* pane. A *Playback Window* will open in the viewing area with the video footage queued up. Multiple Playback and Live Windows can be open at the same time if *Allow Client to Stream Live and Playback Streams Simultaneously* option is enabled (See the [Playback Tab](#) section under Settings).

Alternatively, if *Separate Pages for Live and Playback* is enabled in the VIGIL Client *Settings>Startup tab*, the playback window will open on a separate *Playback Page*. Live video will be suspended during playback to ease bandwidth strain but can be resumed by clicking the *Suspend/Resume All Live Feeds* button() at the bottom of the *Cameras Side-bar*.

Depending on settings and user preference, multiple playback streams can be synchronized together. Synchronized playback streams are indicated by a yellow frame and can be controlled via the *Playback Controls* in the *Synchronized Visual Timeline*.

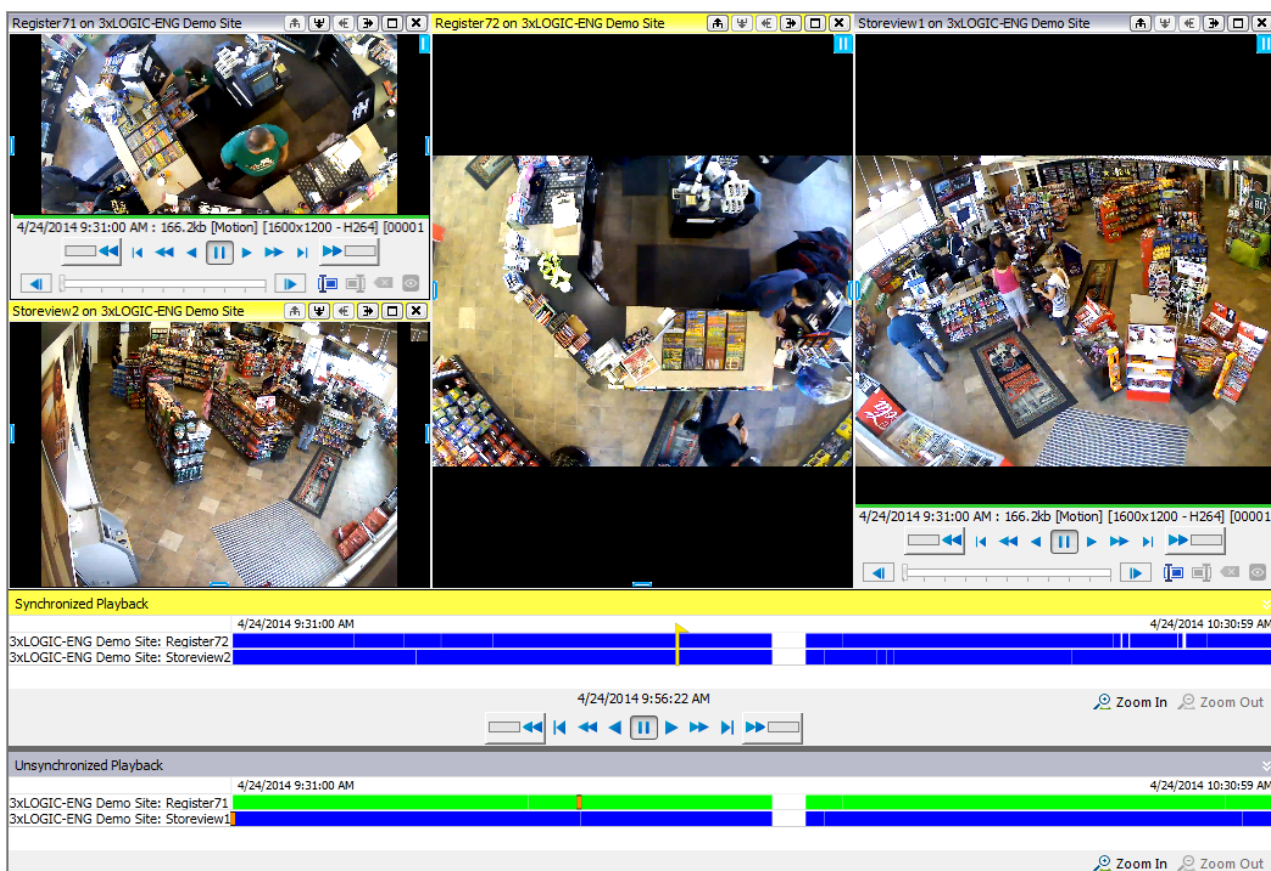


Figure 9-11: VIGIL Client Playback Viewer

9.5.1 Playback Window Edge Controls

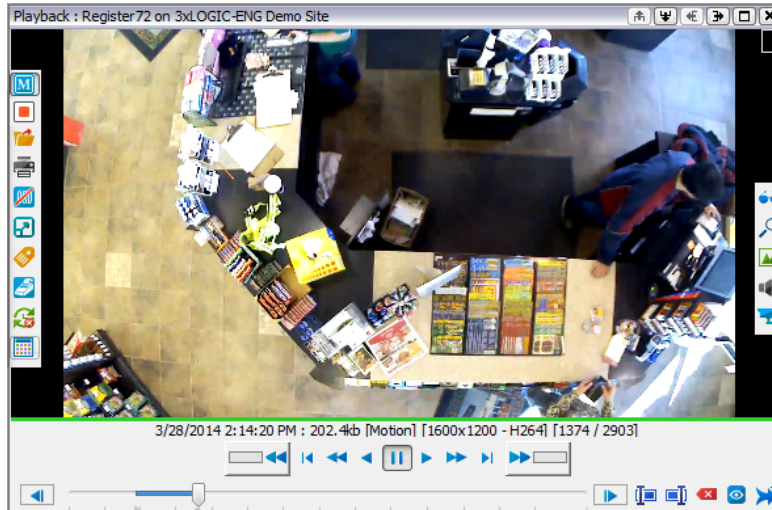



Figure 9-12:VIGIL Client - Playback Window Edge Controls



Note: When *Auto-Hide Controls* from the right-click menu, indicator tabs -  -will be used to indicate the location of the hidden controls. The controls will be visible upon mouse-over of the indicator tab.

Top



Figure 9-13:Playback Window Edge Controls - Top Bar -Synced(Yellow) Unsynced (Grey) and Stitched(Orange)

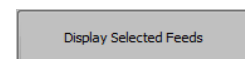
Use the resizing buttons to adjust playback window frame size (same as the [Live Viewer Window Edge Controls](#)).

Yellow coloration indicates the selected window is currently synchronized with other playback streams. See "Playback Synchronization Controls" on page 115 for more info on synchronized playback. A grey coloration means the window is not synchronized with any other playback footage. An orange coloration indicates the playback frame contains a stitched playback file. See "Stitched Playback" on page 120 for more information on assembling and viewing stitched playbacks.

















Note: When viewing large selections of video, hold the *Ctrl* key and click on the top bar of a playback window frame to select an individual playback stream. A user may select multiple playback streams using this method. A selected playback stream's frame will appear red. as pictured below:


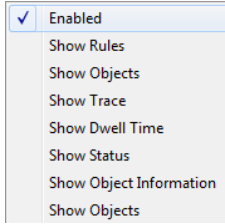









When streams are selected in this method, the *Display Selected Feeds* button (pictured right) will appear at the bottom right-hand corner of the VIGIL Client interface. Click it to close all unselected Playback streams.



Left

 <p>Disk Caching Status</p>	<p>These icons inform the user of the current Playback Footage Disk Caching. The  icon indicates that caching is still in progress. A user may click this icon to cancel caching, potentially improving system performance. The  icon indicates that caching is complete.</p> <p>Playback disk caching can be enabled via the VIGIL Client Playback Settings.</p>
	<p>Click this button to change the stream type of the current window:</p> <ul style="list-style-type: none">  Sub stream enabled. Clicking this will switch the camera back to mainstream.  Main stream enabled. Clicking this will switch the camera to sub-stream or RapidStream dependent on camera ability.  Rapid stream enabled. Clicking this will switch the camera back to mainstream.
 <p>Enable / Disable Screen Record Mode</p>	<p>Enable / Disable Screen Recording Mode. Enabling this feature will begin recording all user action within the camera frame(Digital PTZ actions, footage scrubbing, fast-forward / rewind, etc.) Upon Enabling this feature, the user will be prompted to name the resulting file and pick a destination to save the recording to. The file will be saved to the chosen destination after Screen Record mode has been disabled.</p>
 <p>Save Still Image/Export Motion Video</p>	<p>This button opens a drop-down from which a user may save a still of the current footage frame or export the selected footage. See the Exporting section for more information.</p>
 <p>Save Still Shot to Last Export Destination</p>	<p>Save a JPEG still to the most recently used export destination</p> <p> Note: If no still shot export destination has been used since running VIGIL Client, this button will not appear.</p>
 <p>Print Still Image</p>	<p>Use this button to send a screenshot of the current screen to a printer.</p>
 <p>Enable / Disable OSD</p>	<p>Use this button to enable / disable OSD Display for the current playback window.</p> <p> Note: If utilizing OSD with a high-frame rate camera (~30FPS), playback rate may slow on some systems when several OSD line items are visible simultaneously.</p>
 <p>Full-Screen</p>	<p>Use this button to play the current playback window in Full-Screen Mode.</p>
 <p>Tag Footage</p>	<p>Use this button to add a tag to the current video feed for quick finding later. When choosing to tag footage, VIGIL will prompt the user to ask if they would also like to Restrict the footage so only users with sufficient permissions can view it. For more information, review the Tagged Footage section.</p>

 <p>Video Analytics Display</p>	<p>Click to open a menu where the user can enable / disable various analytics display options (pictured right.)</p> <div data-bbox="1198 163 1421 384">  </div> <p>Figure 9-14:Video Analytics Display Menu</p>
 <p>Show Receipt</p>	<p>Opens the Playback POS/ATM Data Window/ Receipt. This receipt functions in the same manner as the Live POS/ATM Receipt. Please See "Left Edge Controls" on page 63</p>
 <p>Synchronize/Unsync</p>	<p>Left-click - Sync / Unsync Playback- Synchronize or Unsync the current playback feed with the synchronization pool. If no synchronization pool exists, VIGIL will create a sync pool with the selected playback feed's timestamp as the principle synchronization timestamp. This pool will be represented by a visual timeline at the bottom of the playback window (See "Bottom / Playback Controls" on page 118 for more info on the <i>Visual Timeline</i>)</p> <p>Right-click - Synchronization Options Menu- Receive a menu of available synchronization pool options. See "Playback Synchronization Controls" on the next page.</p> <p> Note: If <i>Default Synchronized Playback</i> is enabled, all playback streams will be automatically synchronized. For more information regarding the <i>Default Synchronized Playback</i> option, See "Playback Tab" on page 147</p>
 <p>Digital PTZ Preset</p>	<p>Click this button to open a menu of the playback camera's <i>Digital PTZ Presets</i>.</p> <p>Selecting a preset will open the preset in the current playback viewer. The preset will not open in a separate playback viewer. See "Digital PTZ Presets" on page 10 for more info.</p> <p>This control will not be visible if the camera has no digital presets configured.</p>
 <p>Playback Thumbnail Browser</p>	<p>Opens the Playback Thumbnail Browser.</p> <p> Note: This option is only available if the Playback Thumbnails option is enabled in the VIGIL Client Settings> Playback tab.</p> <p>Please See "Playback Thumbnail Browser" on page 116 for more information.</p>
 <p>infinias Door Events</p>	<p>This button is only available when infinias mode is enabled and the active playback was pulled from a camera associated with a door. Clicking this button opens the Door Events menu.</p> <ul style="list-style-type: none"> ■ Door Events - Opens the infinias Door <i>Playback Events</i> window loaded with all infinias Door Events that occur during the playback clip. Click on an event in the list to jump to the correspondent time in the playback video. Select an Event Filter to filter the window to only events of the selected type. The infinias Playback Events window is dockable.

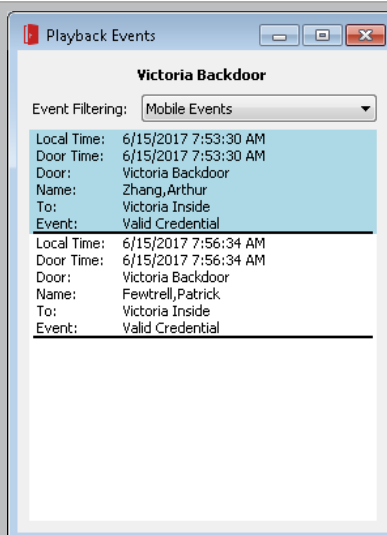


Figure 9-15: infinias Playback Events window.

- **Event Filtering** - Choose an event filter (filters are configured infinias-side) or select *All Events*. Only events that match the selected event type will be displayed. This is a global setting and will be applied to all open infinias components that feature events filtering. See "infinias Settings" on page 141 for more information on Events and Event Filtering

Playback Synchronization Controls




The *Synchronize* and *Unsync* button respond differently to left or right click. While left-clicking will simply sync or unsync the selected playback stream with the current synchronization pool, right-clicking presents the user with an advanced set of *Playback Synchronization Options*.

Unsyncronized Camera Options:


- **Unsync All Playbacks** - Unsync all streams currently in the synchronization pool.
- **Sync this Playback** - Sync this stream with the streams currently in the synchronization pool
- **Sync this Playback and Set Camera Timestamp**- Sync this stream with the streams currently in the synchronization pool using the selected streams timestamp as the principle synchronization timestamp.
- **Sync All Playbacks**- Add all remaining unsynchronized playback streams to the synchronization pool . This option will only be available when a principle timestamp has been configured.
- **Sync All Playbacks and Set Camera Timestamp**- Add all remaining unsynchronized playback streams to the synchronization pool using the selected streams timestamp as the principle synchronization timestamp.

Synchronized Camera Options:

- **Unsync Playback**-Unsyncronize the selected stream from the synchronization pool
- **Unsync All Playback** - Unsync all streams currently in the synchronization pool.
- **Sync All Playbacks**- Add all remaining unsynchronized playback streams to the synchronization pool . This option will only be available when a principle timestamp has been configured.
- **Sync All Playbacks and Set Camera Timestamp**- Add all remaining unsynchronized playback streams to the synchronization pool using the selected streams timestamp as the principle synchronization timestamp.

Note: When a stream frame displays the  button in its edge controls, it is already synchronized. Click-




ing the button will unsynchronize the feed from other playback feeds. The  button indicates that a camera is currently unsynchronized. Click the button to synchronize the camera into the active synchronization pool. If no pool exists, the pool will be created using this camera's timestamp as the principal timestamp of the synchronization pool. All cameras added to the synchronization pool after this point will be synchronized based on the principal camera's timestamp.

Playback Thumbnail Browser

Playback thumbnails can now be enabled in the VIGIL Client Playback Settings. These thumbnails can be utilized as visual indicators to quickly narrow down sections of video and locate specific points-of-interest within longer playback footage clips .

The Playback Thumbnail Browser can be opened from the Playback Left Edge Control tab:

- Select the  button to open the browser. The browser will deploy as pictured below.

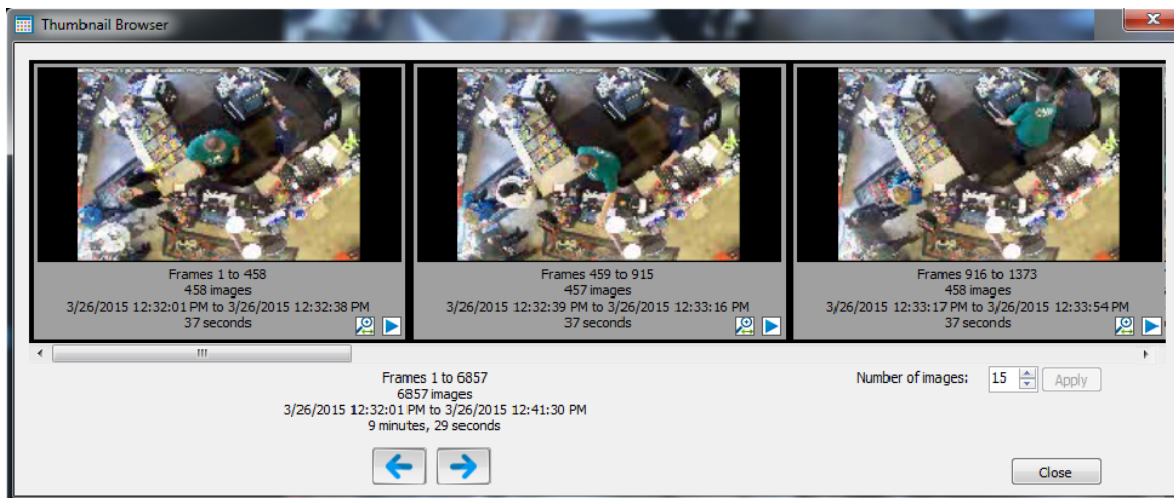




Figure 9-16:VIGIL Client - Playback - Playback Thumbnail Browser

Each thumbnail contains Frame, Time and Date and Footage Duration information. The following tools can be accessed from the Playback Thumbnail Browser.

 Expand Thumbnail	Opens a new set of thumbnails(using your <i>Number of Images</i> settings) within the timeframe of the originally selected thumbnail image.
 Playback From Thumbnail	Begin playback footage from the time depicted in the selected thumbnail.
Number of Images	Select the number of thumbnail images to evenly split the footage across. Example: If 8 is the chosen value for a 6400 frame playback file, than 8 thumbnails would be produced, each representing 800 frames.



After expanding a thumbnail, use the Back and Forward arrows to navigate the separate levels of expanded thumbnails. These buttons will only become active after at least one thumbnail expansion.

Right

Smart Search – Use this to open the *Smart Search Toolbox*.

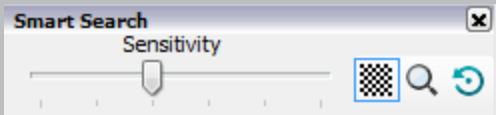





Figure 9-17:Smart Search Tools

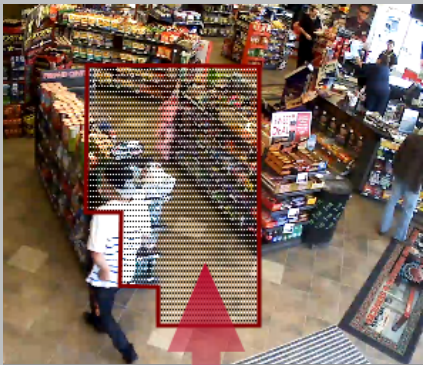
To perform a Smart Search, you must first define or “mask” a motion detection region. To do this, click the



Show Mask Button and draw a mask on the playback image (when Show Mask is enabled, the bottom playback controls will auto-hide as to not obscure any

portion of the footage). Click the  *Search* button to perform the search. Once the search is complete, only video frames that contain motion in the masked region will be loaded for playback. Use the  buttons to skip back / forward to the next Smart Search frame.

Click the *Reset* Button () to clear the Smart Search Area and show the previously loaded footage. You may use the *Sensitivity Slider* to select higher or lower levels of motion sensitivity for the Smart Search Area.





Smart Search Mask

Figure 9-18:Smart Search Mask

Zoom – Use this button to enable the *Zoom Tool*. When the Zoom Tool is active, your cursor will change to the zoom icon and a black rectangle will display around the cursor. Left Click on the video feed to digitally zoom in on the area highlighted by the black rectangle. Right Click to Zoom out. Alternately, you may use the Zoom In or Zoom Out buttons in the *Zoom Toolbox*. To exit Zoom Mode, close the *Zoom Toolbox*.



Adjust Image – Use this button to display the Adjust Image Toolbox.

Use this toolbox to adjust the Brightness or contrast of the image. Toggle the  *Grayscale Button* to enable / disable Grayscale. Click the  *Reset Button* to view the footage in its original state.

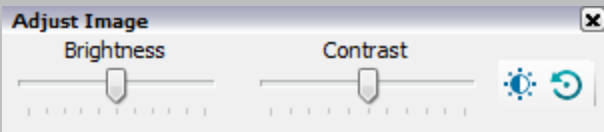

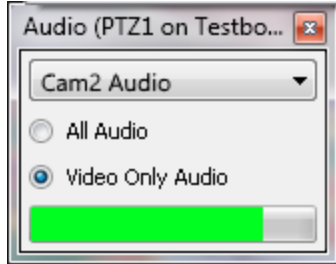




Figure 9-19:Image Adjustment Tools

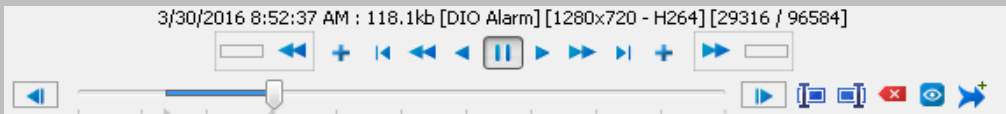


	<p>Audio – Use this button to open the Audio Toolbox.</p> <p>Selecting an audio channel from this toolbox allows you to playback recorded audio along with video footage.</p>	 <p>Figure 9-20:Audio Tools</p>
	<p>All Audio – When selected, all audio from the specified channel is played back even when there is no corresponding video footage for the playback time. This mode is disabled when Synchronized Playback is enabled unless only a single playback stream is loaded in the viewer.</p> <p>Video Only Audio – When selected, audio from the specified channel is played back only when there is corresponding video footage for the playback time.</p> <div style="display: flex; align-items: center;">  <p>Audio Level Meter – The <i>Audio Level Meter</i> indicates the signal strength of the currently playing audio.</p> </div>	
	<p>Add Playback– Use this button to open a list of cameras . Select a camera from the list to instantly open playback from the selected camera using the timerange from the current playback.</p>	












Bottom / Playback Controls

Hovering over the bottom section displays the bottom playback edge controls for the current video feed. At the top of this control, a red or green buffering status bar indicates the amount of footage that has been buffered. Red indicates a partially buffered video while green indicates the video has been buffered in its entirety.



Note: If the selected Playback stream is currently *Synchronized* with other playback streams, only the video scrub bar and the footage marker controls will be available in the bottom edge controls. Playback controls will be located in the Synchronized Visual Timeline bar near the bottom of the *Playback* page for synchronized playback streams. See "Visual Timeline" on page 120

 <p>Figure 9-21:VIGIL Client - Playback Controls</p>	
<p>1/14/2013 1:51:08 PM : 088.5kb [Constant] [640x480 - H264] [39657 / 88901]</p> <p>Information about the camera feed is displayed below the buffering status bar. This information includes the playback status, the date and time of the footage, the frame rate if currently playing, the record mode of the footage, the resolution and recording CODEC of the footage, the current frame number, and the total number of frames.</p>	
	<p>Click-and-drag(hold down the mouse button)your cursor left or right across the box to increase / decrease speed.</p>
	<p>Add 5 minutes (or another custom value defined in the Playback Settings) of footage to the start / end of the active playback.</p>

	Skips to the very beginning or end of the video footage.
	Plays back all footage backward or forward at maximum speed without skipping any frames.
	Plays all open video footage backward or forward
	Pauses all open video footage
	Click-and-drag the slide-bar to move to a different point in the video clip.
	Skips one 10th of the footage if clicked while playing the video footage. While paused or stopped, click to play back frame by frame. The mouse scroll wheel can also be used to do this by selecting the play-back slide-bar.
 Start / End Range	Position the footage navigation slider at the beginning of the sub-range and click the <i>Start Range</i> button. You will notice a small marker appear below the starting point. Next, navigate to the end of the sub-range and click the <i>End Range</i> button. 
 Clear	Removes the sub-range markers. If the sub-range is cleared when the <i>View</i> button is latched on, the playback will return from the sub-range to the fully loaded footage.
 View	Loads the sub-range for playback. The playback information will indicate that a sub-range is currently displayed. All of the playback controls will operate on only the sub-range of footage. This option will only function after playback markers have been set.
 Add to Stitched	Add the marked sub-range of file to the current Stitched Playback assembly list. See "Stitched Playback" on the facing page for more information.

Note: When the VIGIL Client playback viewer window size becomes too small to display all edge controls, playback controls and playback tools, the controls will be consolidated into drop-down menus that can be accessed by clicking their respective context arrows. Playback tools will be moved to floating windows. When the window is re-sized large enough to accommodate the controls on-screen, the viewer will revert to its original state.

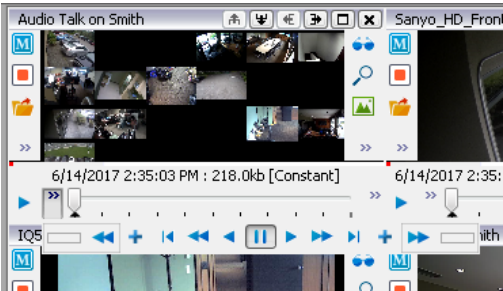


Figure 9-22:Consolidated Playback Controls

9.5.2 Visual Timeline

When video feeds are pulled for playback, footage timelines are compiled at the bottom of the screen in a unified visual timeline for both *Unsynchronized* and *Synchronized* video streams. The camera names are listed to the left of the timeline. Time-stamps for the footage are displayed above the timeline to the left and right edges and recording type is indicated via colour for each individual playback (see color definitions overlaid on the below screenshot).

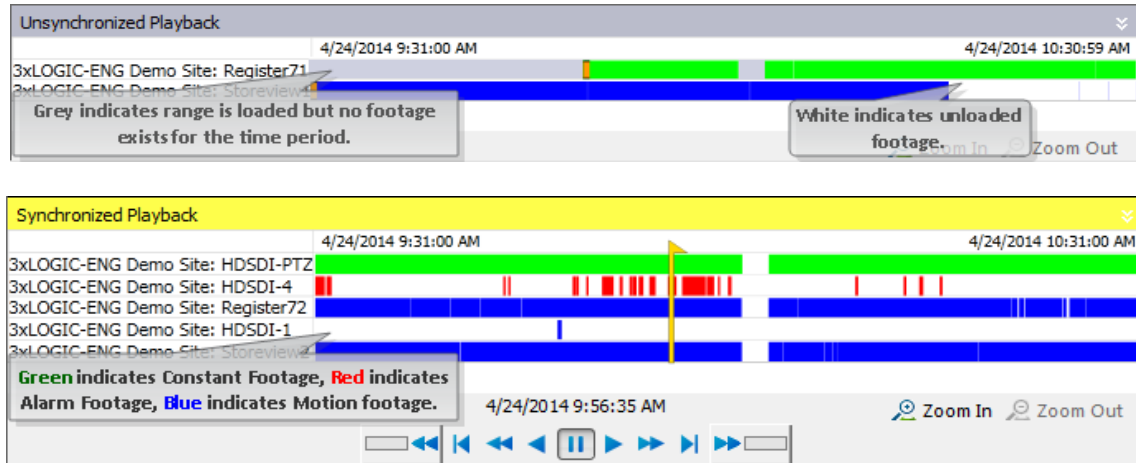


Figure 9-23: VIGIL Client Playback - Visual Timeline - Unsynced (Gray Header) and Synced (Yellow Header)





Note: All Synchronized playback stream's share a set of *Playback Controls* which are located in the *Synchronized Visual Timeline* bar. These control all currently synchronized playback streams.

Playback Controls for unsynchronized playback footage are located directly in the individual playback stream's window and control only that selected stream.

A yellow slide-bar shows the current position in playback. Click on a position in the timeline to reposition the orange slide-bar and move to a different point in the video clip(s). Moving the slidebar in the *Synchronized Visual Timeline* will adjust all synchronized playback stream footage.

In the *Synchronized Visual Timeline*, the timestamp for the current playback position is displayed below the timeline. Timestamps for unsynchronized playback streams are displayed in the bottom edge playback controls of each individual stream. If *Default Synchronized Playback* is disabled, the visual timeline will only appear when one or more

streams has been added to the synchronization pool. Click the  or  button on either to hide / reveal the corresponding visual timeline.

9.5.3 Stitched Playback

VIGIL stitched playback allow users to export several camera playback sub-ranges (or entire playback files if necessary) into a stitched footage playback file. This enables a VIGIL user such as a loss prevention officer to quickly assemble a seamless video export containing chronological camera-by-camera footage of a recorded event, intrusion, exception, etc...

To assemble a stitched playback video:

1. Open multiple playback files via your preferred method.

On each playback file:

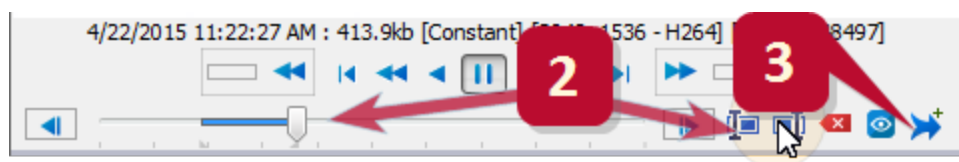



Figure 9-24:VIGIL Client - Stitched Playback - Marking Footage of Stitched Playback Assembly

2. Mark the desired footage sub-range to be included in the final stitched playback file.
3. Click the *Add to Stitched* icon . This will open the Stitched Playbacks assembly list if it has not already been deployed.

Repeat the above steps for all desired footage.



Note: Footage is not auto-organized chronologically and will appear in the order it was added to the Stitched Playback window assembly list.

When all sub-ranges have been added, navigate to the *Stitched Playbacks Window*.

Stitched Playbacks Window

The Stitched Playbacks window contains an assembly list of all footage sub-ranges designated to be stitched. This window may be docked with the sidebar(as pictured left, left side of image). When all desired entries are present in the list:

1. Click the *Move Up* or *Move Down* buttons to re-arrange and finalize the order of the stitched playback.
2. Click the *View Stitched* button to assemble the stitched playback. This will open the Stitched Playback file in its own playback frame(pictured left, right side of image)

A user may interact with the playback as they would any other playback file(review, export, etc...) When a stitched playback file is exported, a text file containing camera names and timestamps from all included playbacks will also be exported.

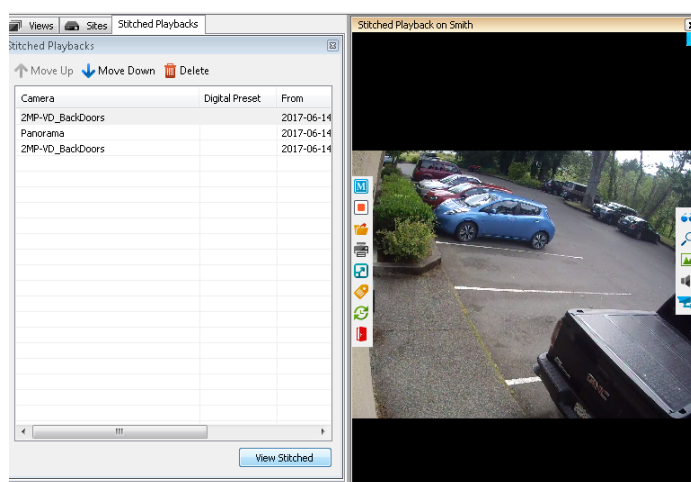


Figure 9-25:VIGIL Client - Stitched Playback - Stitched Playbacks Window(Left) and an assembled Stitched Playback File(right)

9.5.4 Controlling Playback Video with Digital PTZ:

Cameras can be controlled during playback using the digital PTZ camera control just like in a Live Viewer Window. Because digital PTZ controls the camera through the software, it can be used for both live and playback video. The digital PTZ controls will work for every camera that is loaded for playback regardless of the camera control type specified in the settings.

9.5.5 Playback Right-Click Menu

- Save still image or motion video ▶
- Copy
- Auto Hide Controls
- Synchronized Playback ▶
- Restrict Video ▶
- Lock Video ▶
- Digital Presets ▶
- Close

Save Still Image or Motion Video	Opens <i>Export</i> options for the current <i>Playback</i> stream. See "Exporting" on page 124
Copy Full	Copies a still-shot of the full camera image to the system clipboard. This option will only be present if the targeted "camera" is a <i>Digital PTZ Preset</i> .
Copy Preset	Copies a still-shot of the Digital PTZ Preset portion of the camera image to the system clipboard. This option will only be present if the targeted "camera" is a <i>Digital PTZ Preset</i> .
Copy	Copies a still shot of the current image to the Windows clipboard. If the image is zoomed in, a Copy Zoomed option will be available as well. If <i>Show Camera Details on Copied Images</i> is enabled in the Playback Tab of the VIGIL Client Settings, then camera information will be included on the still image. See "Playback Tab" on page 147 for more info on enabling the <i>Show Camera Details on Copied Images</i> setting. This option will be absent if the targeted "camera" is a <i>Digital PTZ Preset</i> .
Auto Hide Controls	When this is enabled (default), edge controls only appear when hovering over the associated edge. When it is disabled, edge controls will always be visible.
Synchronized Playback	Opens a sub-menu featuring available synchronization controls. See "Playback Synchronization Controls" on page 115 for more information.
Restrict Video	Mousing over this option allows the user to restrict the current footage so only users with sufficient permissions can view it. <ul style="list-style-type: none"> ■ Entire Playback - Restrict the entire playback timeframe currently loaded in the viewer for either the <i>Currently Selected Camera</i> or <i>All Displayed Cameras</i>. ■ Marked Region Only - Restrict the marked region of playback for either the <i>Currently Selected Camera</i> or <i>All Displayed Cameras</i>.
Lock Video	Mousing over this option allows the user to lock the current footage to prevent it from being scavenged by the VIGIL Scavenger Service, regardless of its age. <ul style="list-style-type: none"> ■ Entire Playback - Lock the entire playback timeframe currently loaded in the viewer for either the <i>Currently Selected Camera</i> or <i>All Displayed Cameras</i>. ■ Marked Region Only - Lock the marked region of playback for either the <i>Currently Selected Camera</i> or <i>All Displayed Cameras</i>. <p>When choosing to lock footage, VIGIL will prompt the user to ask if they would also like to</p>

	Restrict the footage so only users with sufficient permissions can view it.
Digital Presets	Opens a list of available Digital PTZ presets for the current camera. Select a preset to open it in the playback viewer. This menu option will be absent if no Digital PTZ Presets exist for the target camera.
Close	Closes the <i>Playback Window</i> .
For cameras using the <i>360 Dewarping PTZ Camera Control</i> type, the video can be manipulated in the playback window using the following right-click menu options:	
Source Video Only (Rotate Disabled)	This option is enabled by default. This feature allows users to zoom in and move cameras during playback. Click on an area of interest and then use the mouse scroll to zoom in. Click-and-drag to move the image after it is zoomed in.
Source Video Only (Rotate enabled)	This feature allows users to zoom in and rotate cameras during playback. Click on an area of interest and then use the mouse scroll to zoom in. Or, click-and-drag to rotate the image.
360 View and Source Video	This feature splits the playback image into 4 quadrants. The first quadrant shows the full image, and the second, third and fourth quadrants show different zoomed sections of the image. To load an area of interest in one of the zoom quadrants, click on a zoom quadrant and then click on the first quadrant to load that section. The zoomed sections can be clicked on directly and then rotated.

10 Exporting

Video footage can be saved either as a single frame still shot or as a video file. Audio and POS/ATM data can be saved either embedded within video footage or in a separate document. This process is referred to as “exporting”.




Note:1) To export footage there must be at least one export destination configured.

2) If *Export Auditing* is enabled on the VIGIL Server, required information must be entered before selecting the destination folder for both images and video exports.

10.1 Still Image Exporting

Single frame shots can be saved in either Bitmap (BMP) or JPEG (JPG) format. BMP images retain all of the original image detail, but are typically much larger than JPG images as a result. JPG images are compressed and are typically indistinguishable from the original image when the JPG quality is 70 or greater.

	Click to open the Export Menu and Select Still Image. You may choose a <i>Local Destination</i> (A destination on your current system) or a <i>Remote Destination</i> (a destination on the connected VIGIL Server.)
Bitmap / Bitmap Full Image / Bitmap Cur- rent Image	Saves the still image as a BMP image. Select the export destinations and enter a filename. Click <i>Save</i> when finished or <i>Cancel</i> to exit without saving. If the "camera" is a Digital PTZ Preset, there will be options to export the <i>Full</i> camera image or the <i>Current</i> digital preset portion of the image only.
JPEG / JPEG Full Image / JPEG Current Image	Saves the still image as a JPG image. Select the export destination and enter a filename. Additionally, you may select a quality setting for the JPG image by adjusting the slider. Closer to the left side means a lower quality, smaller sized file; further to the right means a higher quality, larger sized file. For the most part, the default compression setting is the best choice. Click <i>Save</i> when finished or <i>Cancel</i> to exit without saving. If the "camera" is a Digital PTZ Preset, there will be options to export the <i>Full</i> camera image or the <i>Current</i> digital preset portion of the image only.

Still Image Export Destination Selection Window

Select the destination you want to save the image to. You can select multiple destinations by checking the corresponding boxes, as well as create sub-directories by using the *New Folder* button.

When exporting a Bitmap, the quality slider will not be visible.

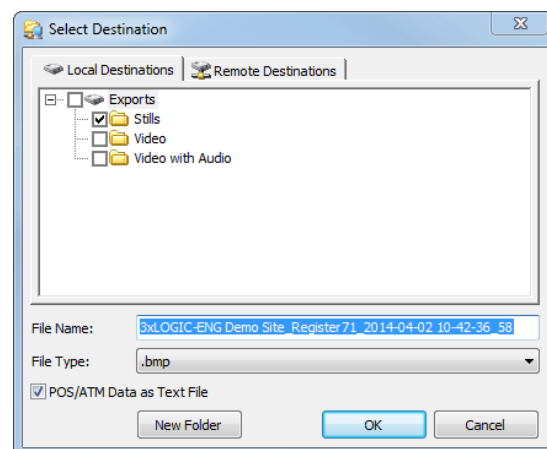





Figure 10-1: Still Image Exports - Destination Selection Window

10.2 Video Exporting

Video footage can be exported in Microsoft AVI Video format or in Authentic Video format which uses 3xLOGIC’s Motion JPEG AZTECH format. Both formats can also be exported using RapidStream compression and a number of different video codecs.

Video clips exported in Authentic Video format can be played using the 3xLOGIC DV Player program. AVI format video clips can be played using any media player that supports standard AVI format(i.e. Windows Media Player). The Authentic Video format is recommended when exporting video clips as evidence since the authenticity of the clip can be verified using DV Player.

VIGIL Client allows exports to include the VIGIL DV player installation kit file to ensure Authentic Video playback capability on any Windows system.

	<p>Click to open the <i>Export</i> Menu and select <i>AVI Video</i> or <i>Authentic Video</i>. You may choose to export the <i>Currently Selected Camera's</i> footage or alternatively, footage from <i>All Displayed Cameras</i>. After making your selection, the Select Destination window will open. See "Video Export Destination Selection Window" below for more information on the Video Export Select Destination window.</p>
AVI	<p>Saves the current video footage as an AVI video. Select the export destinations and enter a filename.</p> <p>Clicking the <i>Advanced</i> button on the Select Destination window will open the <i>CODEC Settings</i> window that allows you to set the image size the video will be saved at. The ... button will open another window where you can select and configure the CODEC used during the encoding process.</p> <p>Toggle <i>Embed Playback Information</i> on to burn-in an OSD time stamp and site name in the AVI video.</p> <p>Toggle <i>Blur Faces</i> on to blur faces in the AVI export. This feature is useful for protecting the identity of bystanders captured in the video.</p> <p>Click <i>OK</i> when finished or <i>Cancel</i> to exit without saving.</p> <div><p>Note: A user may export RapidStream quality footage by choosing the AVI (RapidStream) option from the Export drop-down.</p></div>
Authentic Video	<p>Saves the current video footage as a MJPEG. Select the export destinations and enter a filename. Click <i>Save</i> when finished or <i>Cancel</i> to exit without saving.</p> <div><p>Note: A user may export RapidStream quality footage by choosing the Authentic (RapidStream) option from the Export drop-down.</p></div>

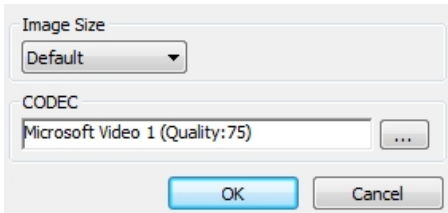


Figure 10-2:AVI Export - Advanced Settings

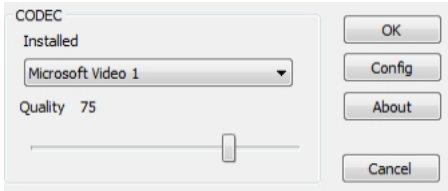
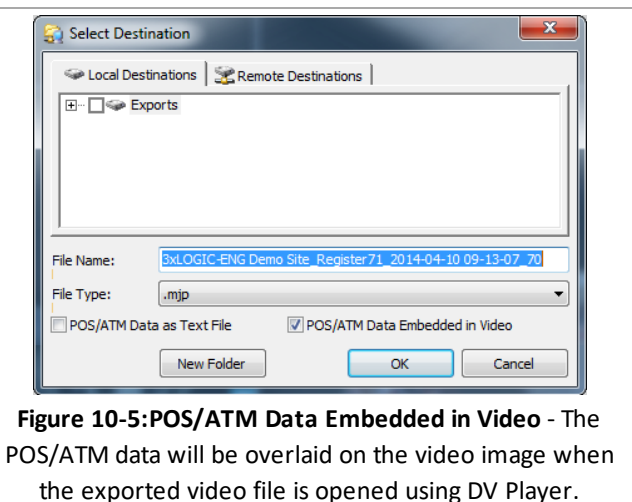
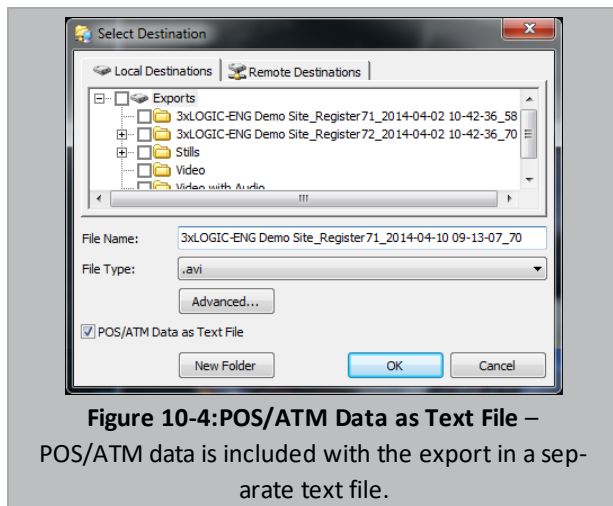


Figure 10-3:AVI Export- CODEC Settings

Video Export Destination Selection Window

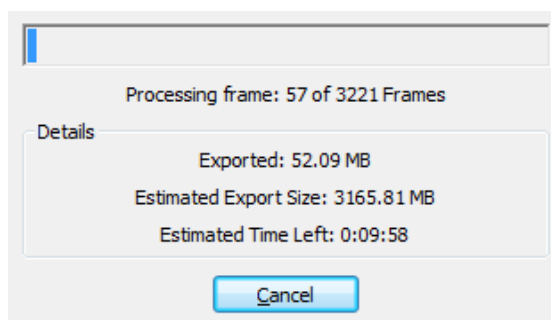
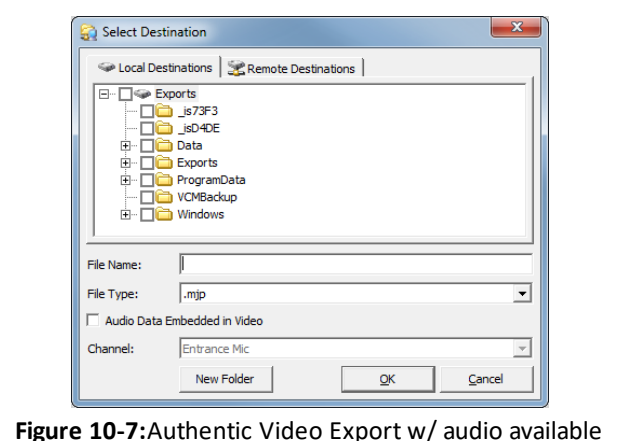
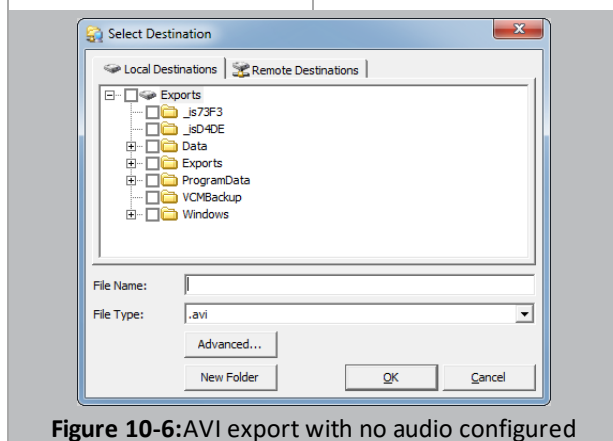
After choosing the format of your export, the Select Destination window will open. You may choose a *Local Destination*(A destination on your current system) or a *Remote Destination*(a destination on the connected VIGIL Server.)

You can select multiple destinations by checking off the appropriate boxes, , as well as create sub-directories by clicking the *New Folder* button. Select *OK* to begin the export. Depending on the export format, the user will be presented with one of the below *Select Destination* windows.




Audio Data Embedded in Video

Exports any audio on the selected channel with the video file.



Exported files will have the camera name and timestamp from the host camera appended to the filename. Export progress will be displayed as pictured above. The progress window can be minimized so you can continue working in the VIGIL Client UI throughout the export process. You may also view progress from the *Server Exports* window located in the *Cameras Sidebar*.

10.3 Audio Exporting

Click the  export button and select *Audio as WAV File*.

This will allow you to export audio in .wav format with no accompanying video footage, Use the *From* and *To* date and time boxes to select the range of the audio footage to export, and select the audio channel to export from the *Channel* drop-down menu.

Audio Export - Destination Selection Window

You may choose a *Local Destination*(A destination on your current system) or a *Remote Destination*(a destination on the connected VIGIL Server.) Multiple destinations may also be chosen by checking off the appropriate boxes next to desired destination.

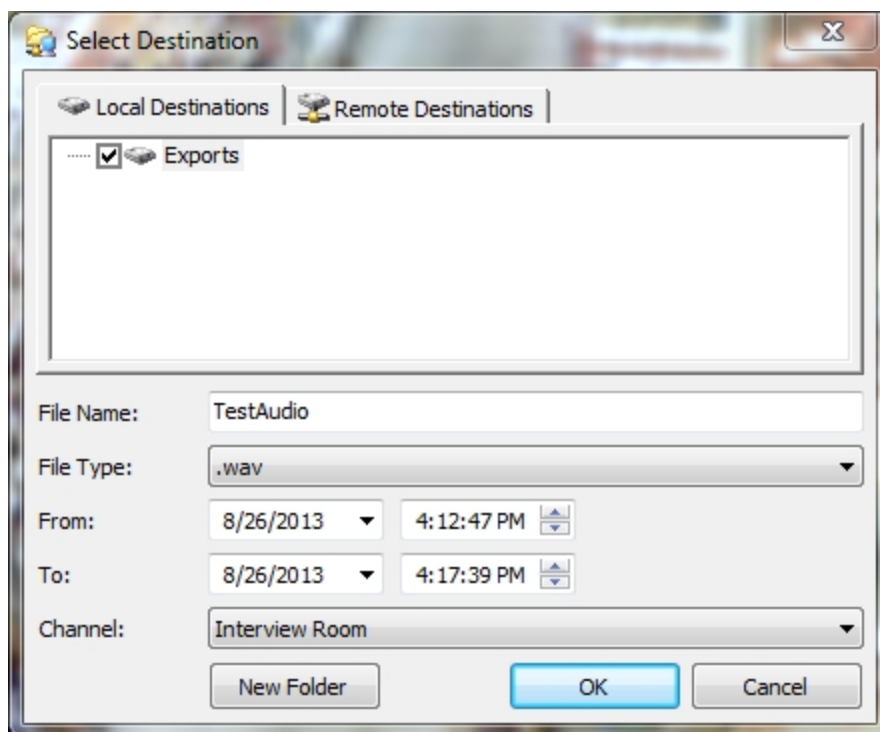


Figure 10-9:Audio Exports - Destination Selection Window

10.4 Export File Browser

The Export File Browser provides a thumbnail file browser for exported video footage and still shots. File navigation is similar to Windows Explorer. To open the Export File Browser window, select the *Exports* option from the Icon Menu toolbar in the main VIGIL Client window.

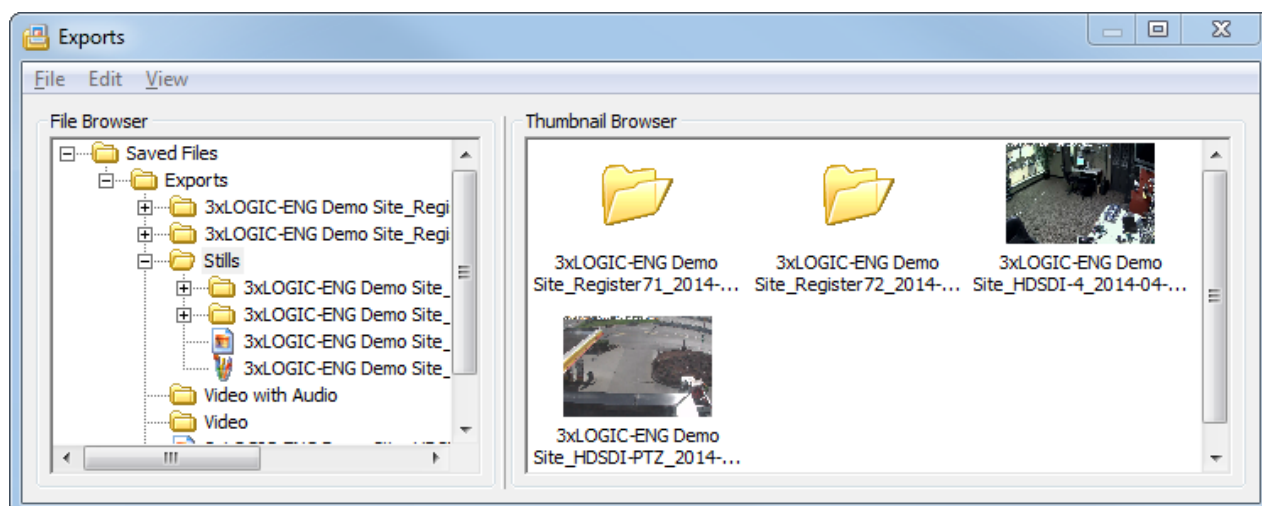








Figure 10-10: VIGIL Client - Export File Browser

Find a File or Folder	<p>To search for a file or folder, go to <i>Edit Find</i>, enter a file or folder name, and click <i>OK</i>. Go to <i>Edit Find Next</i> to select the next file or folder with the given name.</p> <p> Note: If you would like to search for a file or folder using only a partial name, enter an asterisk (*) for the part of the name that is not defined. For example, enter *cam1* to search for files or folders that contain "cam1" in their name; enter cam1* to search for names that begin with "cam1".</p>
Open a File	<p>Double-click the desired file in the File Browser or Thumbnail Browser. This will open the file using the default program as configured in the Windows file associations. VIGIL Server includes an internal viewer for .BMP and .JPG files.</p>
Open in External Application	<p>Right-click the desired file in the File Browser or Thumbnail Browser and select <i>Open in External Application</i>. This will open the file using the default program as configured in the Windows file associations.</p>
Copy a File	<p>Right-click the desired file in the File Browser or Thumbnail Browser and select <i>Copy item(s)</i>. This will open the <i>Select Destination</i> window that allows you to save another copy of the file to an export destination. You can also <i>Copy</i> from the <i>File</i> menu.</p> <p> Note: To select multiple folders, hold down the Control key as you make your selection.</p>
Delete a File	<p>Right-click the desired file in the File Browser or Thumbnail Browser and select <i>Delete item(s)</i>. You can also use the menu to delete a file by selecting the file and going to <i>File Delete item(s)</i>.</p> <p> Note: To select multiple folders, hold down the Control key as you make your selection.</p>

Copy a Folder	<p>Right-click on a folder in the File Browser and select <i>Copy item(s)</i>. You can also <i>Copy</i> from the <i>File</i> menu.</p> <div>Note: To select multiple folders, hold down the Control key as you make your selection.</div>
Delete a Folder	<p>Right-click on a folder in the File Browser and select <i>Delete item(s)</i>. You can also use the menu to delete a folder by selecting the folder and going to <i>File Delete item(s)</i>. Only empty folders can be deleted.</p> <div>Note: To select multiple folders, hold down the Control key as you make your selection.</div>

**Note:** For export folders to show in the browser, at least one export destination must be configured in Settings | Destinations tab.

11 Site Map

The *Site Map* utility provides a graphical interface to a site's cameras by displaying their location on a map. For more information on creating and using site maps, please refer to the Site Map Designer Section.

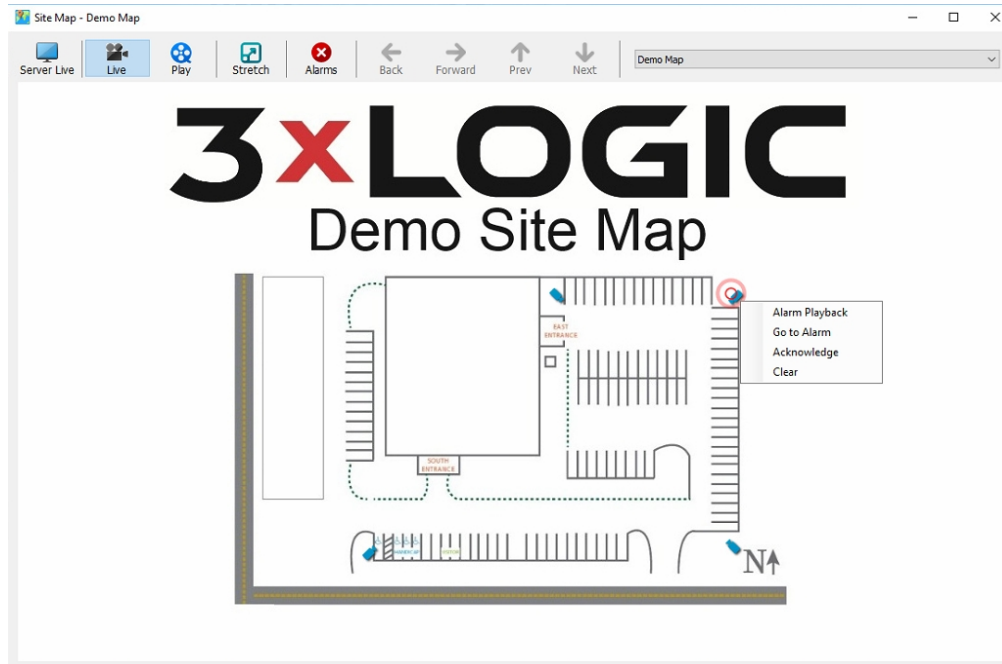




Figure 11-1: VIGIL Client - Site Map

Monitor	Select an analog output monitor on the VIGIL Server that will display the camera.
Live	Displays cameras in the <i>Live Viewer</i> window.
Play	Toggles the playback controls: <ul style="list-style-type: none"> ■ Reset – Resets the search criteria to default (previous hour). ■ Quick Retrieve – Search from preset time intervals. ■ From / To - Start and end date / time interval to search.
Stretch	Toggles the site map between normal and full screen.
Alarms	Launch the alarm handler.
Prev / Next	Switch to the previous / next site map.
Back / Forward	Moves back / forward in the site map navigation history.
Drop-down Menu	Use this drop-down menu to select from multiple site map files.
	Changes the view to the selected camera. The display depends upon which display feature is set (<i>Monitor</i> , <i>live</i> , or <i>playback</i>).
	Changes the display to the corresponding layout, which contains multiple cameras.

Right-click an alarm hotspot to open the alarm context menu. Available options include: *Alarm Playback*, *Go to Alarm*, *Acknowledge* and *Clear*.

12 Server Alarms

VIGIL Servers can be configured to send alarms to VIGIL Client. When VIGIL Client receives an alarm, the *Server Alarms* window is displayed. The *Server Alarms* window displays a list of alarms received by VIGIL Client from connected VIGIL Servers. It also allows quick playback of alarm footage by selecting an entry and clicking the *Playback* button. To open the *Server Alarms* window, select *Alarms* from Client's icon menu toolbar.



Note: The *Server Alarms* window will automatically appear as a response to an alarm event if you have *Automatically Display Inbound Alarms From Server* enabled in the *Alarms* tab of the settings window.



Note: The TCP/IP port used by *VIGIL Client* to receive *Server Alarms* is 22830.

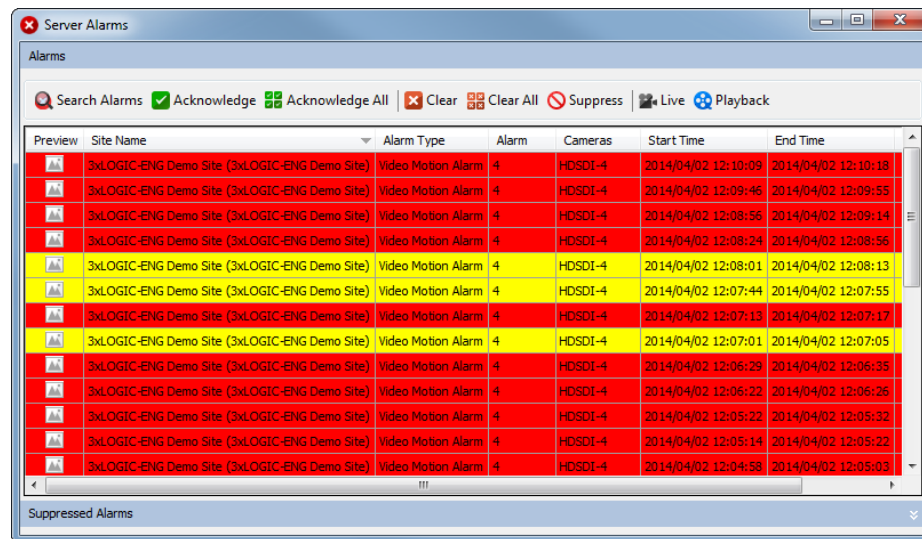


Figure 12-1:VIGIL Client - Server Alarms Window

Alarms are listed in a tabular form with the site name and IP Address, type of alarm, camera number, alarm number, and the start and end date / time of the alarm. New alarms that have not yet been acknowledged are shown in red. Acknowledged alarms are displayed in yellow.







Search Alarms	Search for cleared alarms.
Acknowledge	Acknowledges the selected alarm and changes its highlighted color to yellow.
Acknowledge All	Acknowledges all visible alarms and changes their highlighted color to yellow.
Clear	Clears the selected alarm from the <i>Alarms</i> window.
Clear All	Clears all alarms from the <i>Alarms</i> window.
Suppress	Opens the <i>Suppressed Alarm</i> window where alarms can be suppressed so that no new notifications from the suppressed alarm will display until the alarm suppression expires or is deleted.
Live	Loads live video footage of the camera that corresponds to the selected alarm in the <i>Live Viewer</i> .
Playback	Plays back the video footage for the selected alarm. The playback footage will begin at the alarm Start Time and end at the alarm End Time.

Server Alarms Window - Right-Click Menu

In the alarm right-click menu all of the above features are available as well as the *Export Image* feature. Once an alarm thumbnail has been opened the *Export Image* feature will become available. When selected, the *Select Destination* window displays where the user can choose an export destination to save a copy of the thumbnail image.

12.1 Preview Alarms

Click on the thumbnail icon in the *Preview* column to show a thumbnail snapshot image of the alarm event. Click on the expanded thumbnail to minimize it.

	To view an alarm thumbnail, the server from which the alarm was received must be connected. Click on the disconnected  icon to automatically connect to the server.
	The grayscale thumbnail icon represents a thumbnail that has not yet been viewed. Click on the icon to view the thumbnail.
	The colour thumbnail icon represents a thumbnail that has been viewed, but has been minimized. Click on the icon to open the thumbnail.
	The grayscale thumbnail icon with a yellow exclamation point represents a thumbnail display attempt where no thumbnail was currently available. For example, if the minute of video footage was still in process of being written on the VIGIL Server system. Click on the thumbnail again after a moment to retry the thumbnail display request.
	The alarm thumbnail snapshot displays the first frame of the alarm footage.

12.2 Suppress Alarms

While an alarm is suppressed, no new notifications from the suppressed alarm will display until the alarm suppression expires or is deleted. While the alarm is suppressed, the *Suppressed Alarms* title bar flashes as a reminder that there are suppressed alarms.

Right-click on an alarm received from a VIGIL Server system and select Suppress to configure the suppression criteria.

The *Expires In* fields will designate the amount of time that alarms which meet the configured criteria will continue to be suppressed. Select *Never Expires* to always suppress alarms that fit the configured criteria.

Click the *Suppressed Alarms* title bar in the *Server Alarms* window to expand or collapse the *Suppressed Alarms* list.

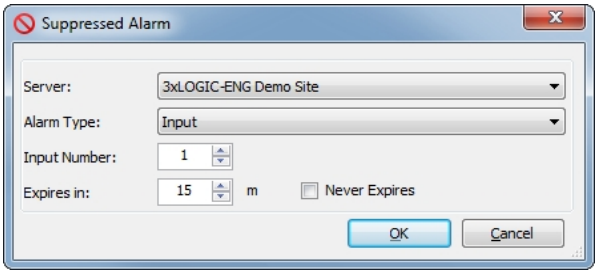

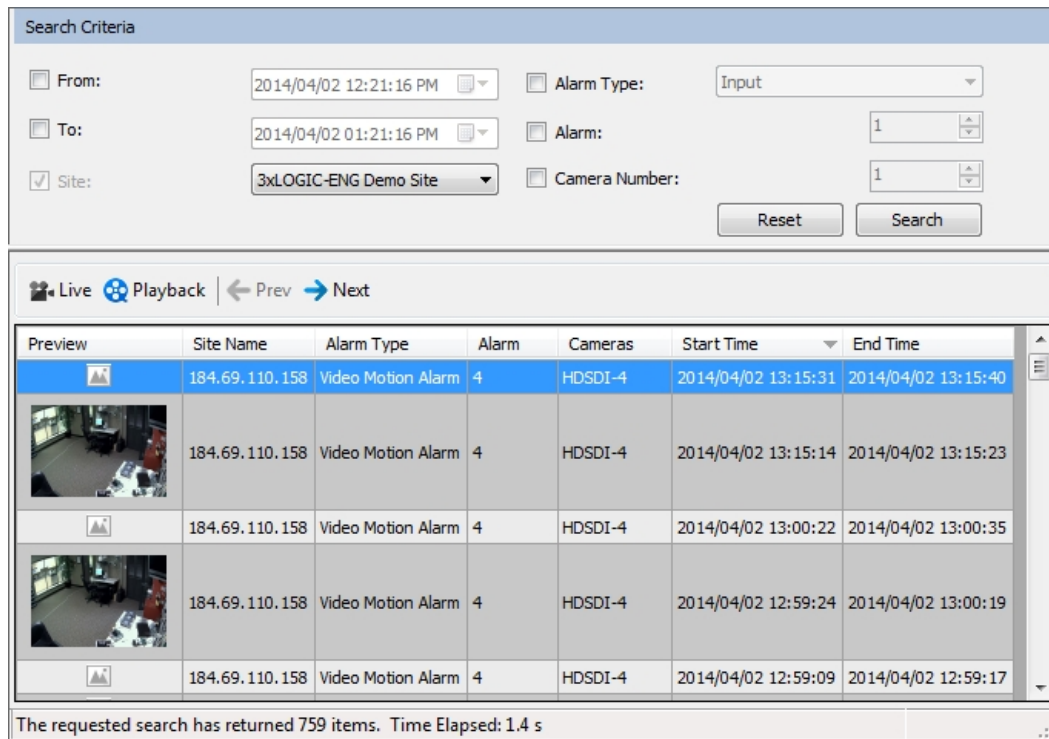


Figure 12-2:VIGIL Client - Server Alarms - Suppressed Alarm Window

12.3 Search Alarms

Click  **Search Alarms** to open the *Search Alarms* window where a variety of criteria can be used to search for an alarm event.


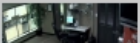


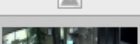


Search Criteria

☐ From: 2014/04/02 12:21:16 PM ☐ Alarm Type: Input
☐ To: 2014/04/02 01:21:16 PM ☐ Alarm: 1
☒ Site: 3xLOGIC-ENG Demo Site ☐ Camera Number: 1

Reset Search

Live Playback ← Prev → Next

Preview	Site Name	Alarm Type	Alarm	Cameras	Start Time	End Time
	184.69.110.158	Video Motion Alarm	4	HDSDI-4	2014/04/02 13:15:31	2014/04/02 13:15:40
	184.69.110.158	Video Motion Alarm	4	HDSDI-4	2014/04/02 13:15:14	2014/04/02 13:15:23
	184.69.110.158	Video Motion Alarm	4	HDSDI-4	2014/04/02 13:00:22	2014/04/02 13:00:35
	184.69.110.158	Video Motion Alarm	4	HDSDI-4	2014/04/02 12:59:24	2014/04/02 13:00:19
	184.69.110.158	Video Motion Alarm	4	HDSDI-4	2014/04/02 12:59:09	2014/04/02 12:59:17

The requested search has returned 759 items. Time Elapsed: 1.4 s

Figure 12-3:VIGIL Client - Server Alarms - Search Alarm Form

Click *Search* to search for all alarm events on the system. The results can be narrowed down with the following options.

From / To	Check the <i>From</i> and /or <i>To</i> box and enter the time range to search for alarm events.
Site	Select the Site to search alarms from.
Alarm Type	Check this box and select an alarm type to search for from the drop-down menu.
Alarm	Check this box and enter an alarm number to search for.
Camera Number	Check this box and enter a camera number to search for.
Reset	Resets the search criteria to default.
Search	Searches for alarm events that match the search criteria.
Live	Loads the live video feed of the camera that corresponds to the selected alarm in the <i>Live Viewer</i> .
Playback	Plays back the video footage for the selected alarm. The playback footage will begin at the alarm Start Time and end at the alarm End Time.
Prev	Navigates to the previous page
Next	Navigates to the next page

13 Settings

The *Settings Window* can be opened from the Settings top bar menu. Mouse-over the *Settings* menu item and select *Settings* from the drop-down list.

13.1 Startup Tab

The *Startup* tab controls the behaviour of VIGIL Client when it first opens.

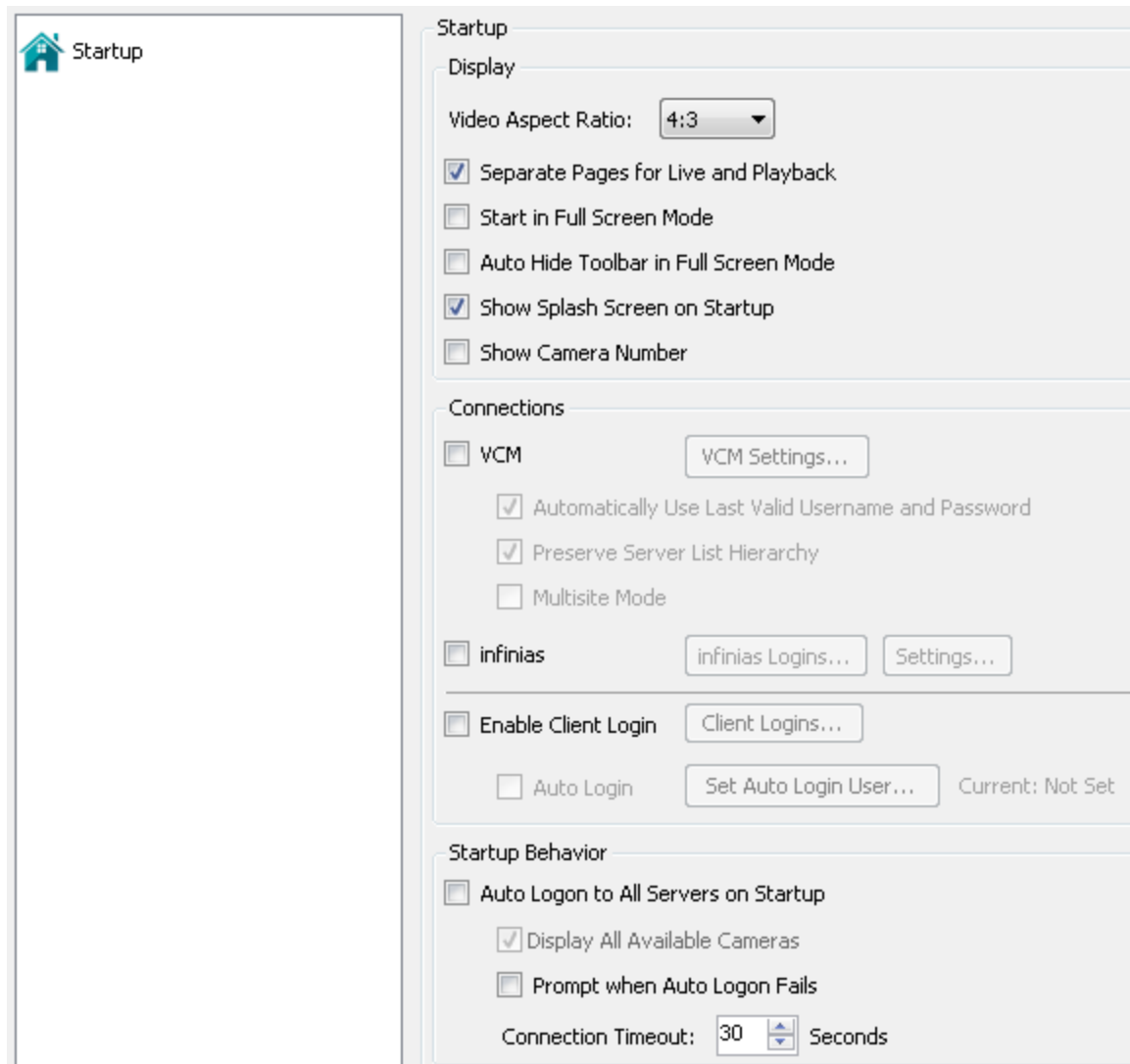




Figure 13-1: VIGIL Client Settings - Startup Tab

Display	
Video Aspect Ratio	Select 4:3 or 16:9 depending on the resolution of your video feeds.
Separate Pages for Live and Playback	Enabling this option create separate <i>Live</i> and <i>Playback</i> pages which can be toggled from the <i>Icon Menu Toolbar</i> .
Start in Full Screen Mode	Start VIGIL Client in <i>Full Screen Mode</i> . For more information, See "Live Viewer" on page 60 for more info.

Auto Hide Toolbar in Full Screen Mode	Enable this option to make the toolbar controls hide until hovered over while VIGIL Client is in <i>Full Screen Mode</i> . For more information, See "Live Viewer" on page 60 for more info.
Show Splash Screen on Startup	When enabled, the VIGIL Client splash screen is automatically displayed when the program is launched.
Show Camera Number	When enabled, camera numbers will be included in all instances of camera names across the VIGIL Client UI (tree view, playback search window, live and playback windows, alarm window).
Connection Settings	
VCM	Toggle this option to enable <i>Managed by VCM</i> mode. When enabled, VIGIL Client will retrieve its Site list from a VIGIL VCM Server as opposed to the list constructed by the local user. After disabling Managed by VCM mode, the site list will once again be populated by VIGIL Server's which were added locally. For more information, see the Managed by VCM Mode section below.
Automatically Use Last Valid Username and Password	When <i>VCM</i> mode is enabled, enabling this option will allow VIGIL Client automatically use the last known valid user credentials to login to the VCM.
Preserve Server List Hierarchy	When <i>VCM</i> mode is enabled, enable this option to add the VCM's Server list to Client using the same organizational hierarchy as the host VCM.
Multisite Mode	<p>When <i>VCM</i> mode is enabled, toggling <i>Multisite Mode</i> on will allow the user to utilize all of VIGIL Client's configured VCM's Server lists to construct its Site list.</p> <p>If two or more of the VCMs manage the same VIGIL Server, VCM will only display one instance of the VIGIL Server in the Client's Site list. When a duplicate of a VIGIL Server is removed, the remaining instance of the VIGIL Server will be nested under the hierarchy of the first VCM to manage it, as per the order of Client's configured VCMs list.</p>
infinias	<p>When <i>infinias</i> mode is enabled, an <i>infinias</i> tree node giving a visual representation of the provided <i>infinias</i> user's door controller scope will appear in the Client sidebar treeview.</p> <p>Door commands will also now be available in the live viewer and playback left-edge controls for associated cameras, when right-clicking an associated camera's name in the sidebar or by right-clicking in an associated camera's live viewer.</p> <p> Note:Cameras associated with a door will display the  icon. The icon may change color depending on door status.</p>
Enable Client Log On	When enabled, a username and password will be required to log on to VIGIL Client. For more information, see the Enable Client Log On section below.
Auto Logon	If Enable Client Log On is enabled, Auto Logon will automatically login the selected user upon Client Startup. For more information, see the Enable Client Log On section below.
Startup Behaviour	
Auto Logon to All Servers on Startup	When enabled, VIGIL Client automatically connects to all servers when the program is launched.
Display All Available Cam-	When enabled, VIGIL Client will launch up to 36 available cameras in the <i>Live Viewer</i> .

eras	This feature requires <i>Auto Logon to All Servers on Startup to be enabled</i> .
Prompt when Auto Logon Fails	When enabled, if VIGIL Client cannot connect to a Server site due to incorrect login credentials, it will prompt so that the user can enter the correct username and password.
Connection Timeout	Enter the number of seconds to attempt a network connection before the attempt is stopped. This setting applies to all connections except for a footage search, which has an individual setting in the <i>Search</i> tab.

13.1.1 Managed by VCM

With *Managed by VCM* mode, VIGIL Client can be configured to pull its list of Servers from a VCM Server. This keeps the list up to date with all VIGIL Servers the user has access to, effectively eliminating the need to constantly update the Servers list locally on the Client

If *Preserve Server List Hierarchy* is enabled (located under Managed by VCM in the VIGIL Client [Startup Settings](#)), the VIGIL Client Sidebar Sites Tab will be organized according to the managing VCM's Server Group hierarchy. If the *Pre-serve Server List Hierarchy* option is not enabled, a flat list of all of the VCM's managed Servers will be pulled.

To enable *Managed by VCM* mode, toggle the *VCM* check box in the VIGIL Client *Startup Settings* tab and open the VCM Settings (click the *VCM Settings...* button).

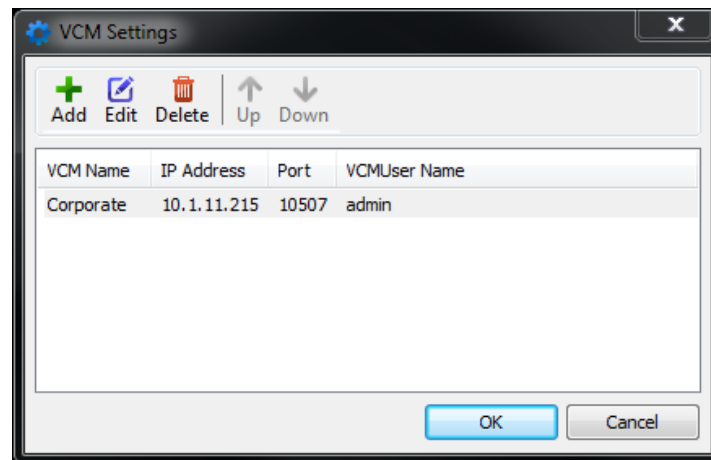


Figure 13-2:VIGIL Client - Managed by VCM Mode -VCM List

Add /Edit a VCM Server


Click the  to add a new VCM Server.

Figure 13-3:VIGIL Client - Managed by VCM Mode - Add / Edit VCM Server form

VCM Name	Enter a Descriptive Name for the VCM Server, this name will show in the Connection window when Client is launched.
IP Address	Enter the IP Address for the system the VCM Server Service is running on.
Port	Enter the Port for the VCM Server Service. The default is 10507.
Use VCM Login / Use VIGIL Server Login	<div><div>■ Use VCM Login</div> - If this option is selected, the form will allow the user to enter VCM Server login details. As a result, all Servers monitored by the VCM will be added to the VIGIL Client Server list.<div>■ Use VIGIL Server Login</div> - If this option is selected, the form will allow the user to enter a VIGIL Server login associated with the target VCM Server. As a result, only Servers the VIGIL Server user has permission to access will be added to the VIGIL Client Server list.</div>
VCM User Name / Password	Enter a Valid Username and Password that exist on the VCM Server. The list of VIGIL Servers provided by the VCM Server will be based on the permissions of the VCM User.
VCM Server Group	Enter the VIGIL Server's VCM Server Group. This field is only available when the <i>Use VIGIL Server Login</i> is selected.
Always Prompt for Log On	Requires user to enter credentials for VCM Server every time VIGIL Client is launched.
Test Connection	Click to test that the IP and Port information is correctly configured.

Managed by VCM - Server List

When VIGIL Client starts, the user will be prompted (pictured below) to select a VCM Server to connect to and retrieve the VIGIL Server List. Alternatively, *Local Settings* can be selected to load the VIGIL Server list that was locally configured on the VIGIL Client.

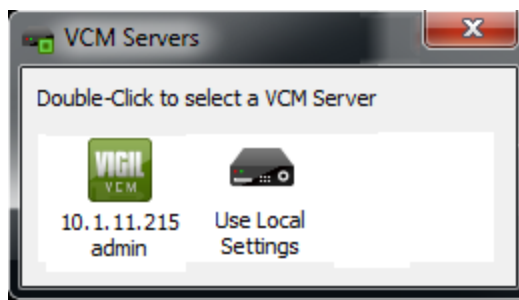


Figure 13-4:VIGIL Client - Managed by VCM Mode - VCM Server List

13.1.2 infinias Access Control

When *infinias* has been toggled on in the *VIGIL Client Settings - Startup Tab*, a user may add an infinias login account. Both infinias CLOUD and infinias Intelli-M users are supported. See "infinias Login" on page 140 for more information.

Once an account has been successfully added, an infinias tree node giving a visual representation of the provided infinias user's door controller scope (as configured in infinias CLOUD or Intelli-M) will appear in the Client sidebar treeview.

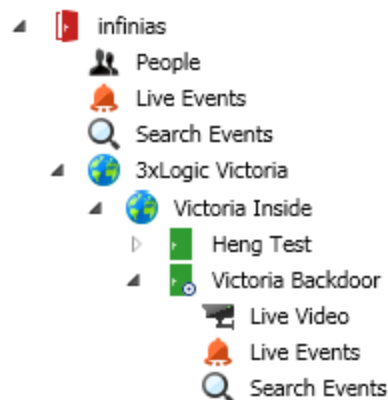
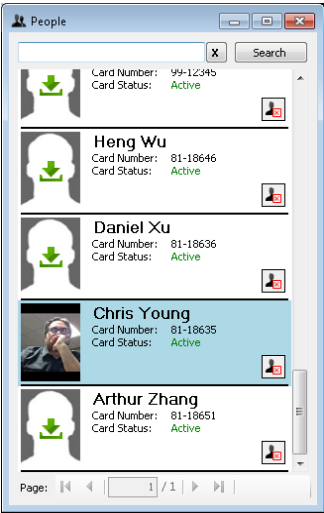




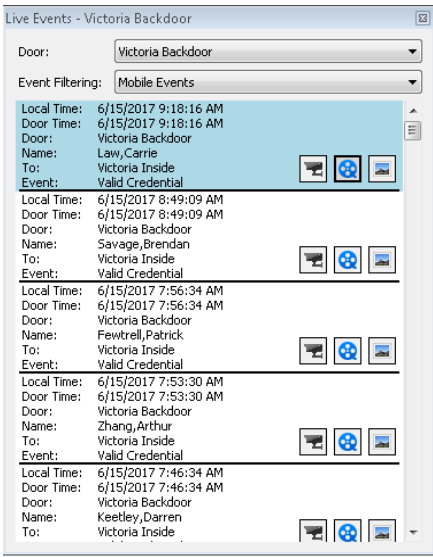



Figure 13-5:VIGIL Client Sidebar - infinias Scope

A user will be able to see all doors and scopes for which they have sufficient permissions to view. Under infinias, a user can open the *People*, *Live Events*, and *Search Events* tools. Doors (green door icon in the above example) can be expanded and the user can also access Live Events and Search Events, filtered directly to the chosen door. *Live Video* can also be launched for a door, opening the door's associated camera in the VIGIL Client live viewer.

All tools are described further below:

infinias Tool	Description
People	Opens the infinias People window. All infinias user accounts the current user has permissions to see will be listed in this window.

	<div></div> <p>Figure 13-6:infinias People Window</p> <ul style="list-style-type: none">■ Use the Search feature to quickly locate a specific user.■ Click the  icon to download the user's avatar thumbnail from the infinias Server.■ Select the  button to suspend a user. A suspended user can only be unsuspended from the infinias system and cannot be restored via VIGIL Client.■ Use the page controls at the bottom of the window to navigate results spanning multiple pages.
Live Video	Opens the door's associated camera in the Client Live Viewer.
Live Events	<p>Opens up the infinias door <i>Live Events</i> window. If opened from a Door's expanded menu, the list will be filtered to show only events from the selected Door. This window can be docked into the sidebar.</p> <p>Use the <i>Door</i> and <i>Event Filtering</i> drop-downs to filter your search. Event Types (in the Events filtering menu) can only be configured by an infinias Admin and cannot be configured in VIGIL Client.</p>

	 <p>Figure 13-7: infinias Live Events Window</p> <ul style="list-style-type: none">  - Opens a live feed of the door's associated camera.  - Opens camera playback from the event.  - Opens a still frame captured during the event.
<p>Search Events</p>	<p>Opens the infinias Search Events window. If opened from a Door's expanded menu, the Search will be filtered to the selected door. See "Searching infinias Events" on page 142 for more information.</p>

- If a user right-clicks a door, they can *Refresh Status* to update the door's status, or perform a *Momentary Unlock*.

Several Door command and infinias tools will also be available across the VIGIL Client interface: in the live viewer and playback left-edge controls for associated cameras, when right-clicking an associated camera's name in the sidebar or by right-clicking in an associated camera's live viewer. These controls are detailed in their respective sections of this user guide.



Note: If Client as Main Interface is enabled on the local VIGIL Server, only the local VIGIL Server will be visible in your infinias treeview, regardless of how many sites your account has access to.

infinias Login

Click *infinias Logins...* to interface an infinias access control account with VIGIL Client. The below window will deploy.

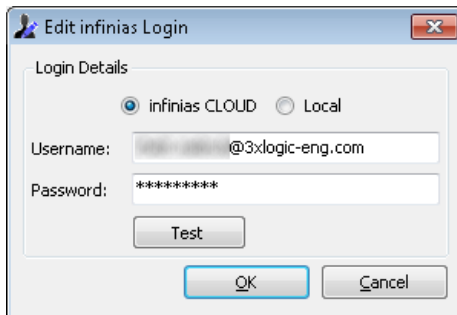


Figure 13-8:infinias Login

Select the correct account type. For CLOUD account, select infinias CLOUD. For Intelli-M Access accounts, select local. Local accounts will also need to provide the correct URL for connection with the local Intelli-M Server.

Enter in appropriate credentials for the desired account and click OK to login.

infinias Settings

Clicking *Settings...* in the infinias section of the VIGIL Client Settings- Startup Tab launches the infinias settings window.

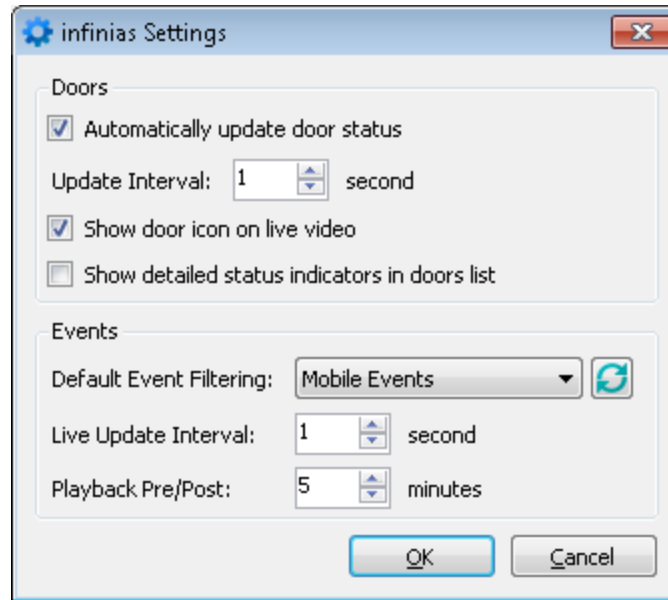


Figure 13-9:VIGIL Client Startup Tab - infinias - Settings

From this window, a user can configure global infinias *Door* and *Event* settings. Available settings are detailed below:

Door Settings	
Automatically Update Door Status	Automatically update door status without requiring a VIGIL Client refresh. Set a custom <i>Update Interval</i> , measured in second.
Show door icon on live video	Display an infinias Door icon (lower-right) for associated cameras in the VIGIL Client Live Viewer
Show detailed status indicators in door list	Color code the infinias door icon to indicate detailed door status. Statuses include: <ul style="list-style-type: none">■ Red Door Closed - Door is in lock-down.■ Red Door Open - Door has been held or forced open.■ Yellow Door Open - Door unlocked manually (overridden).■ Blue Door Open - Door has been unlocked normally.■ Green Door Closed - Door was last closed normally.
Event Settings	
Default Event Filtering	Set the default for event filtering. When the events list is launched, results will be automatically filtered to the selection.
Live Update Interval	Set the live update interval. VIGIL Client will poll the infinias Server for new events based on the configured interval.
Playback Pre/Post	The amount of video playback time to be included before and after an event.

Searching infinias Events

Selecting Search Events from underneath the infinias treeview menu will launch the infinias Search Events window. If launched from a Door's expanded treeview menu, the Search Events form will be automatically filtered to return results from the chosen door.

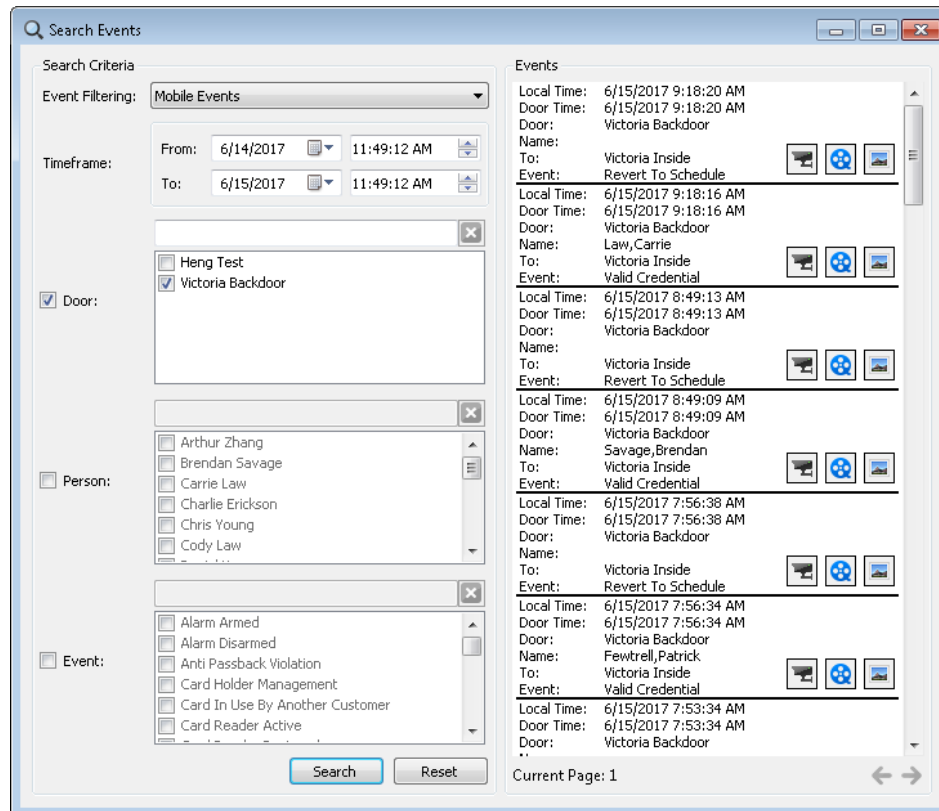




Figure 13-10:infinias Search Events Window


To perform an event search:

1. Set a timeframe by configuring appropriate *To* and *From* values.
2. Choose any appropriate filters. Available Filters include *Door*, *Person* and *Event*. If the search was launched from a door's expanded treeview, the door will already be selected as a preference. Use the provided search boxes to locate specific doors, people or events. Event Filters can be created for specific events in the same manner as Doors or People, or can be chosen for specific Event Types (configured infinias-side) using the *Event Filtering* drop-down at the top of the window.
3. When you have input the desired search criteria, click *Search*.

A list of results will populate the left window pane. Event information for each entry includes *Local Time*, *Door Time*, *Door*, *Person's Name*, *To* and *Event Name*.


The following tools can be accessed for each event listing:

-  - Opens a live feed of the door's associated camera.
-  - Opens camera playback from the event.

-  - Opens a still frame captured during the event.

13.1.3 Enable Client Login

VIGIL Client by default uses no authentication which allows any system user to have full access to the Client Software. When the *Enable Client Log On* option is checked, VIGIL Client supports two levels of User Authentication; Administrative Users who have full access and Users who have no access to the Settings window or to VIGIL Server settings. Click the *Manage Log Ons* button to open the *Manage Log Ons* window.

 **Note:** When creating a set of user credentials, 3xLOGIC highly recommends the use of a secure, complex password containing a mix of uppercase and lowercase letters, numbers and special characters. VIGIL will prompt any user when an insecure password is detected.

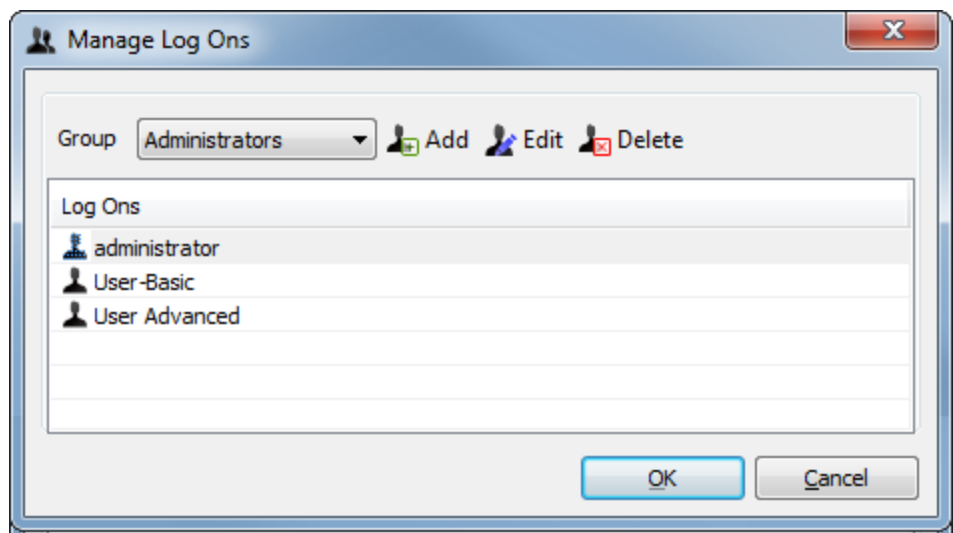


Figure 13-11:VIGIL Client - Enable Client Login - Manage Log Ons Window

13.2 Main Interface Tab

The *Main Interface* tab contains settings related to *Client as Main Interface* mode. This settings tab is only visible when Client as Main Interface has been enabled on the local VIGIL Server. Settings configured here are only active when Client as Main Interface is enabled.

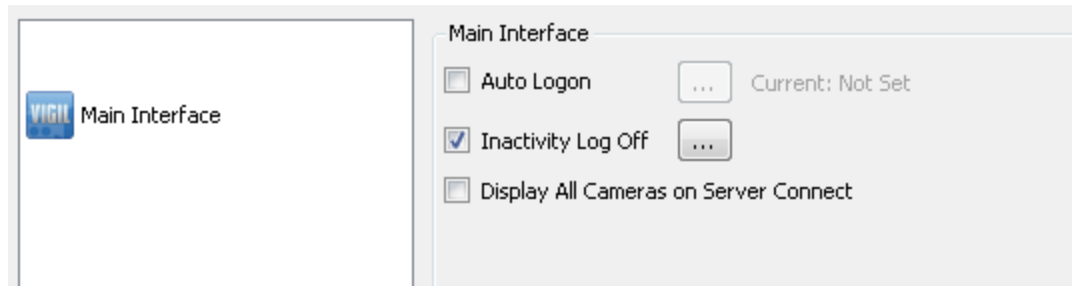
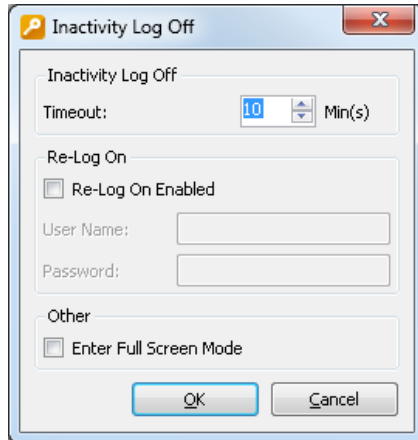


Figure 13-12: VIGIL Client Settings - Main Interface

Settings are described below:

Auto Logon	Enable this setting to set the auto logon user. This user will be automatically logged on when Client is started. Click the ... button to configure the user.
Inactivity Log Off	<p>Enable this option to have the active user logged out after a pre-defined amount of inactivity. Click the ... button to launch the settings window.</p>  <p>Figure 13-13: Inactivity Log Off Settings.</p> <p>Configure the inactivity <i>Timeout</i> value. The user will be logged out when they are inactive for this amount of time.</p> <p>Toggle <i>Re-Log on Enabled</i> and enter user credentials to log-in to a different user when an inactivity log-off has occurred. This setting is useful to re-log on a user with sufficient viewing permissions so cameras remain visible on-screen.</p> <p>Enable <i>Enter Full-Screen Mode</i> to force the system into full-screen mode when a user is logged out due to inactivity.</p>
Display All Cameras on Server Connect	Enable this option to automatically display all server cameras when logging into a VIGIL Server.

13.3 Live Tab

The *Live* tab controls how the *Live Viewer* windows function.

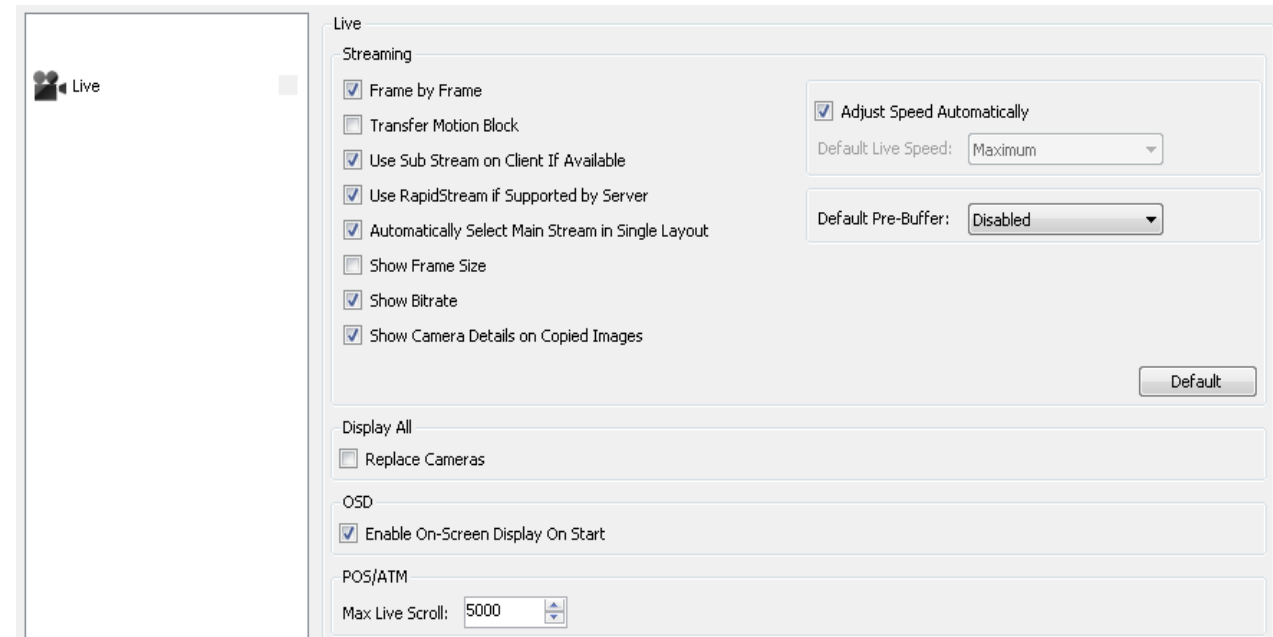



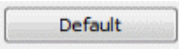


Figure 13-14:VIGIL Client Settings - Live Tab

Frame by Frame	<p>Enables faster decoding of streams from MPEG4 cameras.</p> <p> Note: This setting may have an adverse effect on non-MPEG4 cameras.</p>
Transfer Motion Block	<p>Enables the transfer of motion block information for use with the SDK.</p> <p> Note: Enabling this feature is not recommended.</p>
Adjust Speed Automatically	<p>Automatically adjusts the live video speed for each camera according the number of Live Viewer windows open and the CPU usage percentage to maintain the optimum level of video performance.</p>
Use Sub Stream If Available	<p>When enabled, if a camera has the sub stream available, the Live Viewer will open the sub stream instead of the main stream by default.</p>
Use RapidStream if Supported by VIGIL Server	<p>If Allow RapidStream in Client is enabled on the VIGIL Server, enable this option for the Live Viewer to open the RapidStream instead of the main stream by default.</p>
Show Frame Size	<p>Show the frame size of a feed in Live Viewer</p>
Show Bitrate	<p>Show the bitrate of a feed in Live Viewer</p>
Automatically Select Main Stream In Single Layout	<p>When enabled, if a camera has the sub stream being displayed in a multi- layout, when the camera is switched to a single layout, the main stream will be displayed. This affects both the Classic Mode Live Viewer and the virtual switch display.</p>
Show Camera Details	<p>When enabled, camera info, date and timestamp will be included on still images gen-</p>

on Copied Images	erated by right-clicking a footage frame and selecting <i>Copy</i> .
Adjust Speed automatically / Default Live Speed	<p><i>Adjust Speed Automatically</i> is enabled by default. Disable this option to choose a custom default live speed.</p> <p>Available default speeds include <i>Slow (1fps)</i>, <i>Medium (5fps)</i>, <i>Fast (10fps)</i>, <i>Turbo (20fps)</i> or <i>Maximum</i> as the default live video speed. A lower live speed will use less CPU.</p> <p> Note: For cameras capable of 60 FPS, the <i>Maximum</i> settings will only use 30 FPS. 60 FPS must be enabled via the camera's web interface.</p>
Default Pre-Buffer	<p>When enabled, a user can set the default pre-buffer. The higher the pre-buffer, the smoother the video will be, however, live is delayed by the configured pre-buffer value.</p> <p>Automatic, 50ms, 100ms, 250ms, 500ms, 1000ms, 2000ms buffers are available.</p>
	Reset all Streaming Settings to their default values.
Show Site and Camera Name	When enabled, the VIGIL Server site and camera name will display in full screen live mode. This option is for the Classic Mode Live Viewer.
Maximize	When enabled, the Classic Mode Live Viewer window will automatically open maximized.
Replace Cameras	When enabled, choosing the Display All option when right-click on a Site, will replace cameras in the Live Viewer, if not enabled, the cameras will only display enough to fill the live viewer. This option is for the Classic Mode Live Viewer.
Enable On-Screen Display on Start	When enabled, POS/ATM OSD will automatically display when a camera that is set as a POS/ATM Priority camera is displayed in the Live Viewer.
Max Live Scroll	The entered value is the maximum number of POS entries on the Live POS Receipt before they begin to overwrite. Default value is 5000.

13.4 Playback Tab

The *Playback* tab grants the users several options related to the retrieval and viewing of playback footage.

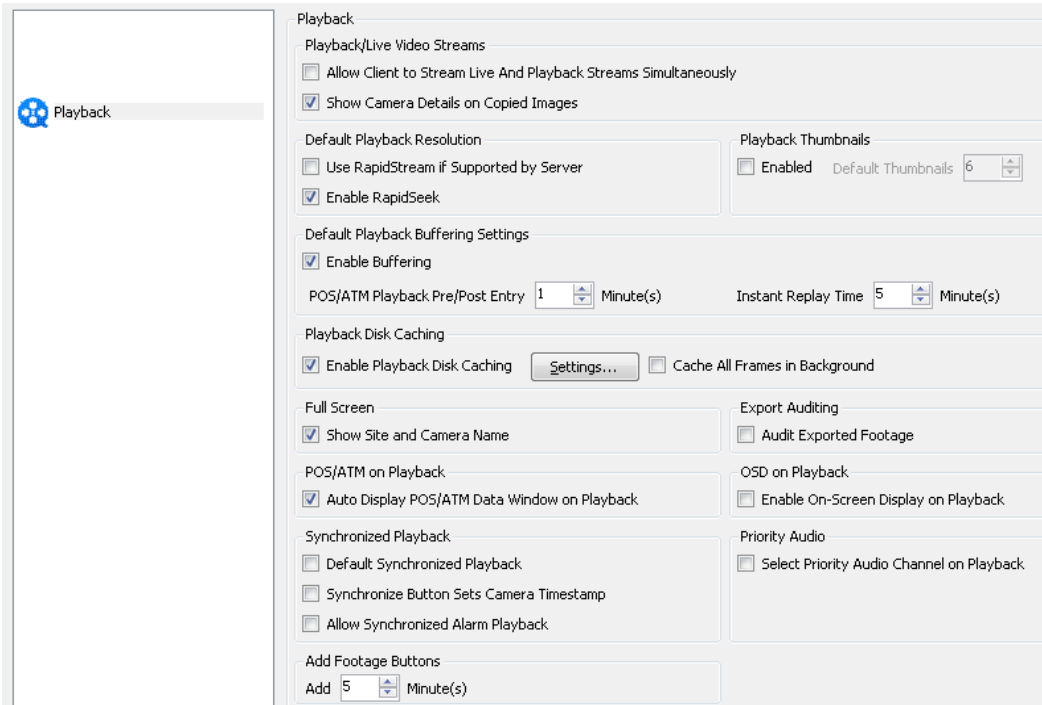







Figure 13-15:VIGIL Client Settings - Playback Tab

Allow Client to Stream Live and Playback Streams Simultaneously	Enables VIGIL Client to stream live footage and playback recorded video footage simultaneously. To conserve server resources, leave this option disabled. Alternatively, the <i>Suspend/Resume All Live Feeds</i> button(Live Tab, bottom of Camera Treeview) can be used.
Show Camera Details on Copied Images	When enabled, camera info, date and timestamp will be included on still images generated by right-clicking a playback footage frame and selecting <i>Copy</i> .
Use RapidStream if Supported by VIGIL Server	If <i>Allow RapidStream in Client</i> is enabled on the VIGIL Server, enable this option for the Playback Window to open the RapidStream instead of the Main Stream by default.
Enable RapidSeek	Enable VIGIL RapidSeek, intended for low-bandwidth environments. RapidSeek allows for efficient scrubbing of high-megapixel footage. By lowering image quality as a user scans through footage, RapidSeek allows for a lossless image and eliminates guess work when searching for points-of-interest in your footage. RapidSeek will auto-disable when footage is pre-buffered.
Playback Thumbnails	Click <i>Enabled</i> to enable the Playback Thumbnail Browser. See "Playback Thumbnail Browser" on page 116 for more information.
Default Thumbnails	Select the default number of thumbnails to divide footage with using the Playback Thumbnail Browser.
Enable Buffering	Check <i>Enable Buffering</i> to allow buffering of playback video while paused or while a single stream is playing.

	 Note: When playing back multiple streams(synchronized or unsynchronized), buffering is not utilized by VIGIL Client regardless of the status of the <i>Enable Buffering</i> option. This is to improve performance of footage retrieval.	
POS/ATM Playback Pre / Post Entry [X] Minutes	How much footage to display before and after a selected POS/ATM record.	
Instant Replay Time [X] Minutes	Amount of footage to be loaded when <i>Instant Replay</i> is selected.	
Enable Playback Disk Caching	<p>When searching footage, this feature stores the footage in the configured cache location. If the footage already exists in the cache, the cached footage is displayed instead of retrieving the footage again from the server.</p> <p>If this option is enabled, a  icon will appear in the Playback window(up-left) as well as the left-side playback edge controls. This icon indicates that disk caching is incomplete. It may be clicked in the left-hand edge control to cancel disk caching for the active playback footage.</p> <p>It is replaced with the  icon when caching is complete.</p>	
	Cache Location	To configure this setting, clicking the <i>Settings</i> button. The location where the cached files will be stored. VIGIL Client deletes Cache files automatically when the cache is full.
	Max Cache Size	To configure this setting, clicking the <i>Settings</i> button. The maximum amount of hard drive space that will be used by VIGIL Client Playback Disk Caching. The default cache size is 528 Mb.
	 Note: If the cache is located on the same drive as the operating system, ensure there is enough available disk space for the operating system and other programs to function properly.	
Cache all Frames in Background	When video playback is paused, all frames in the video will be cached instead of the default 1 minute cache.	
Show Site and Camera Name	Displays the site and camera name for each camera when in <i>Full Screen</i> mode.	
Audit Exported Footage	When enabled, every export will be logged to the file %LOCALAPPDATA%\CSI Tech\Vigil Client\VigilClientExports.log.	
Auto Display POS/ATM Data Form on Playback	When enabled, the user will be presented with a POS/ATM Data form when viewing playback on applicable cameras.	
Enable On-Screen Display on Playback	<p>When enabled, camera playback streams will feature <i>On-Screen Display</i> data if enabled from the playback's left-edge control toolbar.</p>  Note: If utilizing OSD with a high-frame rate camera (~30FPS), playback rate may slow on some systems when several OSD line items are visible simultaneously.	
Default Synchronized Playback	<p>When enabled, multiple streams loaded for playback will be synchronized during playback.</p> <p>Disable this feature to improve playback load times and enable the playback sync pool feature</p>	

	where specific camera streams currently in the playback window can be synced to one another while others can remain independent of the synchronization pool.
Synchronize Button Sets Camera Timestamp	When this option is enabled, clicking the <i>Synchronize</i> button (from a camera's playback left-edge control toolbar) will cause VIGIL to use the target camera's timestamp as the principal synchronization pool timestamp.
Allow Synchronized Alarm Playback	Enabling this option allows alarm event playback to be synchronized with the current synchronization pool.
Select Priority Audio Channel on Playback	When enabled, if a camera is polled for playback, VIGIL Client will automatically playback that camera's priority audio channel along with the footage. If this feature is not enabled, audio will be disabled on playback.
Add Footage Buttons - Add x Minute(s)	Set the value of the "Add x Minutes to Start / End of Footage" playback control feature. This feature allows a user to instantly add a custom amount of time to the beginning or end of an open playback. See "Bottom / Playback Controls" on page 118 for more info.

13.5 Search Tab

The *Search* tab controls how searching of Video Footage and POS/ATM data functions.

Figure 13-16:VIGIL Client Settings - Search Tab

Enable Visual Search by Default	Show <i>Visual Search</i> results by default instead of <i>Tabular Search</i> Results. For more information, See "Video Search Results " on page 104
Short Intervals	When enabled, the Quick Retrieve drop-down menu in the <i>Search</i> window displays short intervals of 15 and 30 minutes in addition to the selection of an hour, 2 hours, 4 hours, and 8 hours.
Enable Server Time	When the Server and Client are in different time zones, enable this option to use the Servers time in the From / To section of the Search Window.
Enable Auto Search by Default	When enabled, opening the <i>Search</i> window will automatically pull the last hour of footage from all cameras on the active Server without the need to manually execute the search.
Connection Timeout: [X] Minutes	Select the amount of minutes to wait for video search results from the server before displaying a Connection Timeout message.
Alarm Playback Pre / Post Event	Set the amount of time to playback prior to / past an Alarm when playing Alarm footage in the Server Alarms window.
Remember the last: [X] number of search items	In the <i>POS/ATM Data Filter</i> section within the <i>Search</i> window, previously searched items are listed in the <i>Items</i> drop-down menu. Use the arrows to select how many search items will be remembered.

13.6 Alarms Tab

The *Alarms* tab controls the notification settings for alarms received from connected servers.

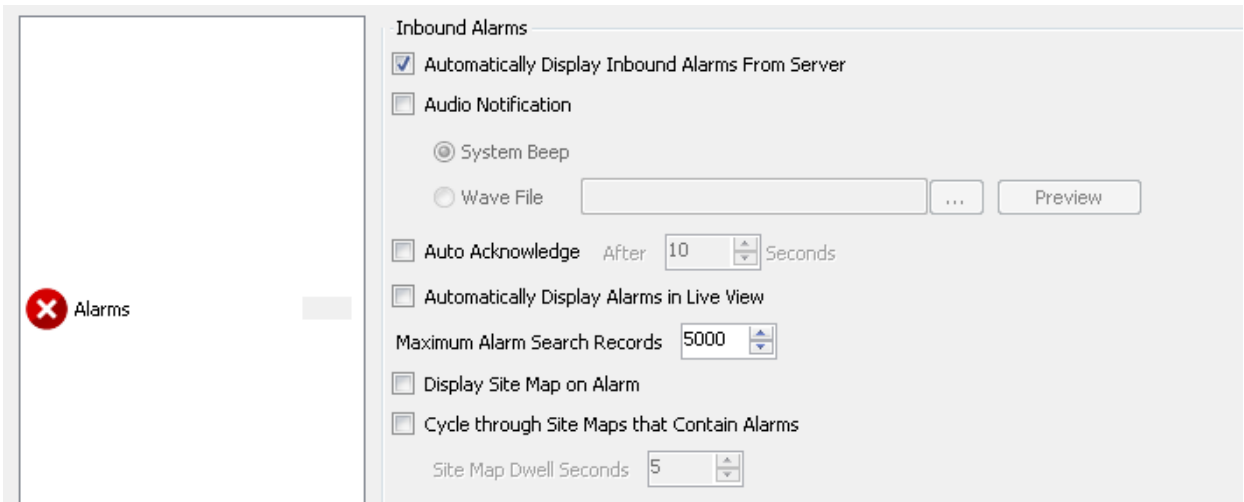


Figure 13-17:VIGIL Client Settings - Alarms Tab

Automatically Display Inbound Alarms From Server	When enabled, the <i>Alarms</i> window will automatically pop up when inbound alarms from VIGIL Server are received.		
Audio Notification	Instructs the system to beep or play a Wave file when an incoming alarm is displayed.		
	System Beep	A system beep is played.	
	Wave File	Uses an audio WAV file instead of a system beep.	
		...	Browse to the WAV file that will be played.
		Preview	Plays the selected WAV file. Changes into a <i>Stop</i> button after WAV file begins playing; click to stop.
Auto Acknowledge	Automatically acknowledge alarm notifications after the specified number of seconds.		
Automatically Display Alarms In Live View	When enabled, the live camera feed corresponding to an alarm event will automatically be displayed in the <i>Live Viewer</i> window. If the live view layout is full, the camera feed will replace another that does not currently have an alarm event. If the site is not connected, it will reconnect and display the live camera feed.		
Maximum Alarm Search Records	Set the maximum number of alarms to display in the Server Alarms window. When the number of alarms to display in the Server Alarms window is reached, oldest alarms will be removed from the window as new alarms are received. The range for this setting is 500 - 100,000; setting this number too high can cause performance issues on systems.		
Display Sitemap on Alarm	When enabled, the sitemap will deploy when an alarm is received with the related alarm hotspot highlighted.		
Cycle Through Sitemaps that Contain Alarms	When enabled, if multiple alarms are active across multiple sitemaps, VIGIL Client will cycle through the sitemaps. Set the <i>Site Map Dwell Second</i> value to configure how long Client will display a sitemap before cycling to the next map.		

13.7 Hardware Tab

The *Hardware* tab contains settings specific to the video rendering hardware installed on the client system.

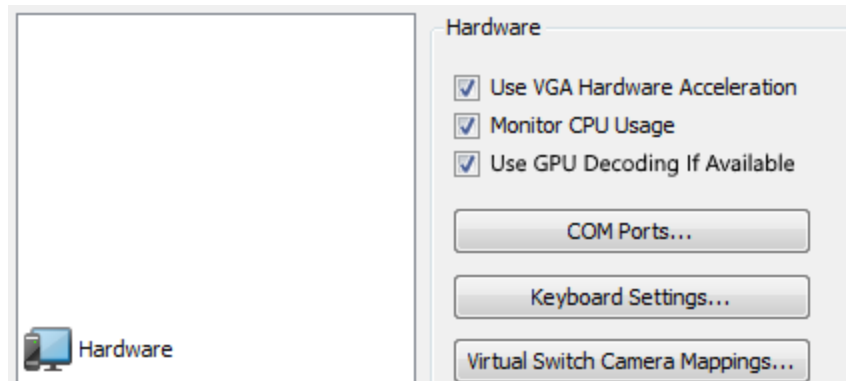



Figure 13-18: VIGIL Client Settings - Hardware Tab

Use VGA Hardware Acceleration	Enable or disable <i>VGA Hardware Acceleration</i> .
Monitor CPU Usage	Enable or disable the CPU Usage bar at the bottom of the main window.
Use GPU Decoding If Available	<p>Enable this option to allow GPU Decoding.</p> <p> Note: GPU Decoding will try to utilize graphics card resources to display Live channels with DirectX when more than one camera is displayed. This will result in lower CPU usage but will also only allow Digital PTZ and Dewarping while a single camera is displayed. Only cameras using correctly formed H.264 CODEC streams can use this method, and not all GPU or graphics drivers will fully support this feature. If you encounter problems it is recommended to verify you have the latest drivers for your graphics card and that the camera is using H.264. If you experience difficulties, please contact your technical support representative.</p>
COM Ports	Opens the <i>COM Port Settings</i> window, where COM Port settings can be configured. Select the desired <i>COM Port</i> from the drop-down menu and adjust the <i>Baud Rate</i> , <i>Data Bits</i> , <i>Stop Bits</i> and <i>Parity</i> to match that of the connected hardware.
Keyboard Settings	Allows you to add, edit, or remove a special camera control keyboard, such as the Pelco KBD300A.
Virtual Switch Input Mappings	Opens the <i>Virtual Switch Input Mappings</i> window where you can add, edit, delete, auto map, or print virtual switch input mappings. This feature allows you to view the mapped cameras using the VIGIL Client Virtual Switch control pad or a KBD300 by entering the monitor number and virtual switch input number.

13.8 Destinations Tab

Video Still / Motion Export Destinations are used to store exported video footage. You must set up destinations here before you can save video footage or still images.

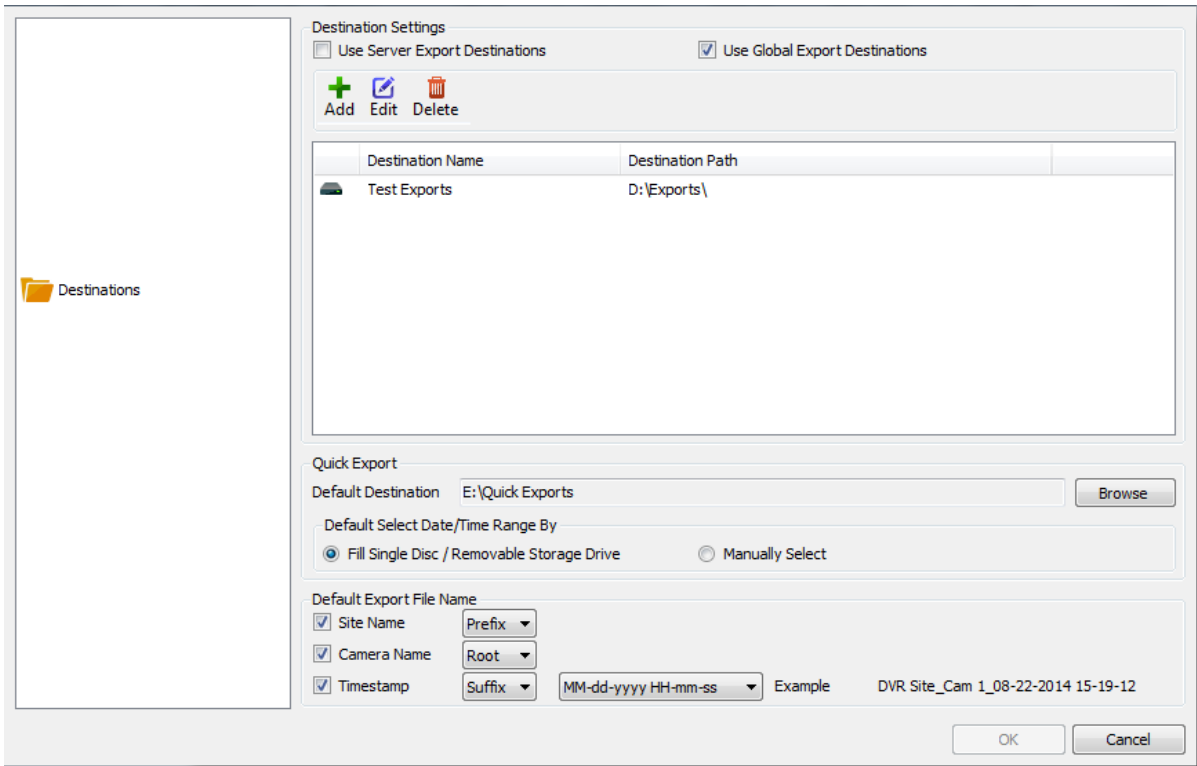




Figure 13-19:VIGIL Client Settings - Destinations Tab

Use VIGIL Server Export Destinations	Select this option to use the export destinations of connected VIGIL Servers.  Note: Deleting these destinations does not delete their Windows folder or the folder's contents.
Use Global Export Destinations	Select this option to use a Global Export Destination. A global destination is any destination configured via the VIGIL Client, outside of the selected Server.  Note: Deleting these destinations does not delete their Windows folder or the folder's contents.

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

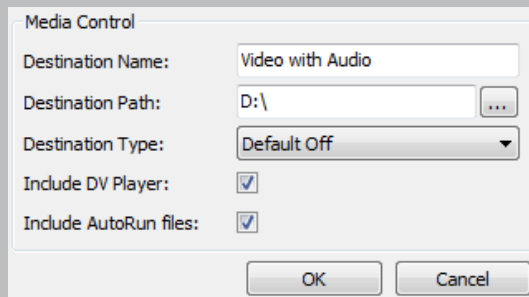


Figure 13-20: Destinations Tab - Media Control

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.

Include DV Player	Saves the Digital Video (DV) Player to the same destination each time an export is done. This setting is normally used for CD-R or DVD-R media type destinations.
Include AutoRun Files	Due to some Anti Virus applications detecting all Auto Run 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.

Quick Export

Configure default setting for the VIGIL Client Quick Export feature.

Default Destination	Set the default destination for Quick Exports. For more information on the Quick Export feature, See "Quick Export" on page 12.
Default Select Date / Time Range	Set the default method for selecting the Date / Time range of a Quick Export. Fill Single Disc / Drive - Fill a single disc or drive with as much footage as the chosen storage directory allows, up to the configured end date. Manually Select - Manually configure the footage time parameters.

Default Export File Name

Configure the default file name for Exported files. The user can choose to include the *Site Name*, *Camera Name* and *Timestamp* in the file name, as well as their placement within the file name by setting them as the *Prefix*, *Root* or *Suffix* of the file name. Also, the date style can be configured (mm-dd-yyyy or dd-mm-yyyy, etc...)

After configuring these settings, an example of an export file name based on the chosen settings is provided.

13.9 Audio Tab

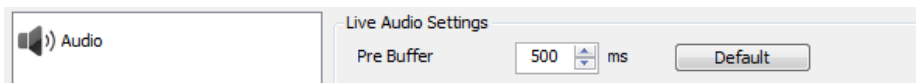


Figure 13-21:VIGIL Client Settings - Audio Tab

The Audio tab controls the buffering of audio streams.

Pre Buffer	The number of milliseconds to buffer when streaming live audio. Use the arrows to change the pre buffer. Clicking <i>Default</i> resets this count to 500 ms.
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13.10 Chat Tab

The Chat tab controls the audio buffering for the chat utility.

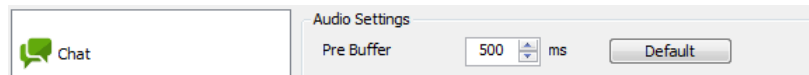


Figure 13-22:VIGIL Client Settings - Chat Tab

Pre Buffer	The number of milliseconds to buffer when streaming live audio. Use the arrows to change the pre buffer. Clicking <i>Default</i> resets this count to 500 ms.
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13.11 Sitemaps Tab

The *Sitemaps* tab instructs VIGIL Client where to locate sitemap files.

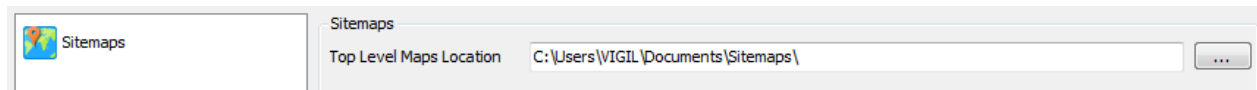



Figure 13-23:VIGIL Client Settings - Sitemaps Tab

Top Level Maps Location	Enter the path to the top level sitemaps or click the  button to browse to the location.
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13.12 Virtual Switch Tab

The *Virtual Switch* tab allows configuration of up to eight digital (PC) or analog monitor outputs.

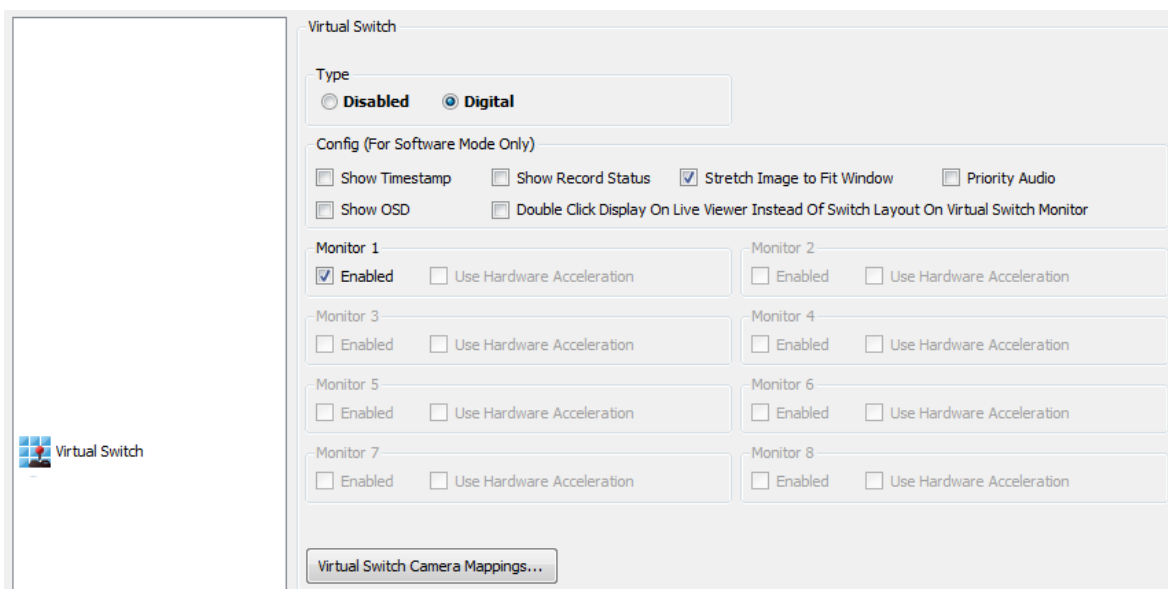


Figure 13-24: VIGIL Client Settings - Virtual Switch Tab

Disabled	<i>Disable the Virtual Switch feature.</i>
Digital	The digital virtual switch feature allows users to configure additional PC monitors to display up to 16 simultaneous live camera feeds per PC monitor. Users are able to access and control all cameras from VIGIL Server sites, whether they are analog, network, or PTZ cameras, all without the need for a KBD300 keyboard.
Config (For Software Mode Only)	
Show Timestamp	Displays the video time on the monitor output screen.
Show Record Status	Displays coloured camera borders that indicated the recording mode on the monitor output screen. Blue for motion, yellow for dwell time, green for constant, and red for alarm.
Stretch Image to Fit Window	Stretches the camera image to fit the virtual switch monitors (i.e. camera spots).
Priority Audio	Enable this to automatically play the <i>Priority Audio</i> channel associated with a selected video stream when the video stream is added to the virtual switch monitor.
Show OSD	Enable this option to display OSD data on applicable cameras currently displayed on the Virtual Switch monitor(s).
Double Click Display On Live Viewer...	When enabled, double-click on a <i>Monitor</i> on the <i>Virtual Switch</i> and it will open in a <i>Live Viewer</i> window on the Main Monitor. When disabled, double-click on a <i>Monitor</i> on the <i>Virtual Switch</i> and it will change to <i>Single Monitor Layout</i> . Double-click again to return to previous layout.

Monitor Settings	
Enabled	Enables the corresponding monitor output.
Use Hardware Acceleration	When enabled, the monitor will use hardware acceleration, if applicable.

13.12.1 Virtual Switch Camera Mappings

Opens the *Virtual Switch Camera Mappings* window where you can add, edit, delete, auto map, or print virtual switch input mappings. This feature allows you to view the mapped cameras using the VIGIL Client Virtual Switch control pad or a KBD300 by entering the monitor number and virtual switch input number.

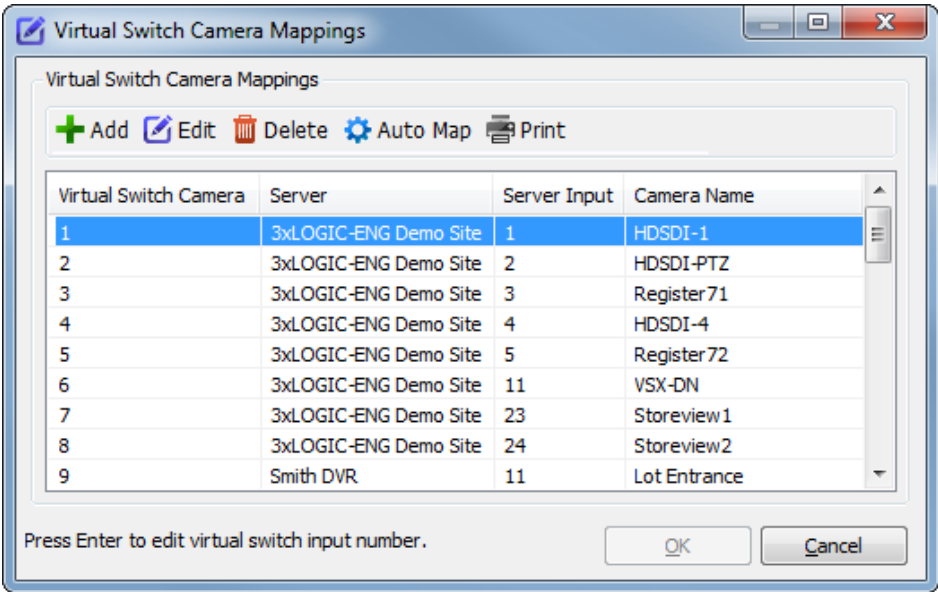


Figure 13-25:Virtual Switch - Camera Mappings Window

	Opens the <i>Add / Edit Virtual Switch Input Mapping</i> window where you can add / edit a virtual switch input mapping by specifying the input number, server name, and camera number.	
	Deletes the selected destination.	
	Automatically maps virtual switch inputs for all detected servers. Note: If you click <i>Auto Map</i> when there are existing virtual switch input mappings, you will be prompted if you would like to overwrite the mappings. Click <i>Yes</i> to overwrite the existing mappings, or click <i>No</i> to add new mappings to existing ones.	
	Prints the virtual switch input mappings to the default printer.	

Figure 13-26:Add / Edit Virtual Switch Camera Window

13.13 Help Menu

This sections allows you to configure customizable help icons for display on your icon bar.



Figure 13-27: VIGIL Client Settings - Help Menu Tab

Enable Custom Help	Enable the ability to create custom help menu items.
Enable Replace About Button	Enable this option to allow one of the custom help menu items to replace the About button in the Icon Menu Toolbar.
Custom Help Menu Item	
Show on Help Menu	Enable this option to have the custom Help Menu item appear in the Help drop-down menu. If this option is left disabled, users will not be able to access the custom help menu item.
Enable Replace About Button	Enabling this option will allow the selected custom Help Menu item replace the About button in the Icon Menu toolbar. Only one of the five custom Help Menu items may utilize this feature at a time. When enabled, the About window may be accessed via the Help menu drop-down.
Custom Help Action	<p>Set a directory path to the command you are planning to assign to your custom icon. Click the ... button to browse the list of commands directly.</p> <p>Essentially, the chosen command is what will run when the new custom icon is clicked. Files that are commonly mapped to custom help icons include .exe, .chm, and .htm.</p>
Parameters	Enter the command line argument(s) that specify an action to take. If no additional actions are required, leave this box blank(i.e. you have assigned a .exe to your custom icon, you could set it to <i>Run as Administrator</i> .)
Menu Text	This text will display as a label for your new custom help icon.

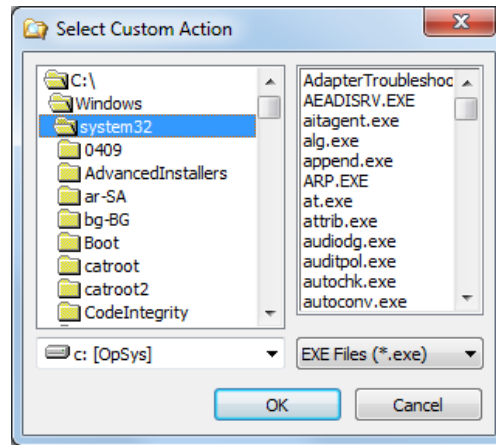


Figure 13-28: Select Custom Action Window

14 Site Map Designer

The *Site Map Designer* is a utility that allows the user to configure graphical displays of the site with associated cameras. To open the *Site Map Designer* from the Start Menu: *Programs | VIGIL | Site Map Designer*.

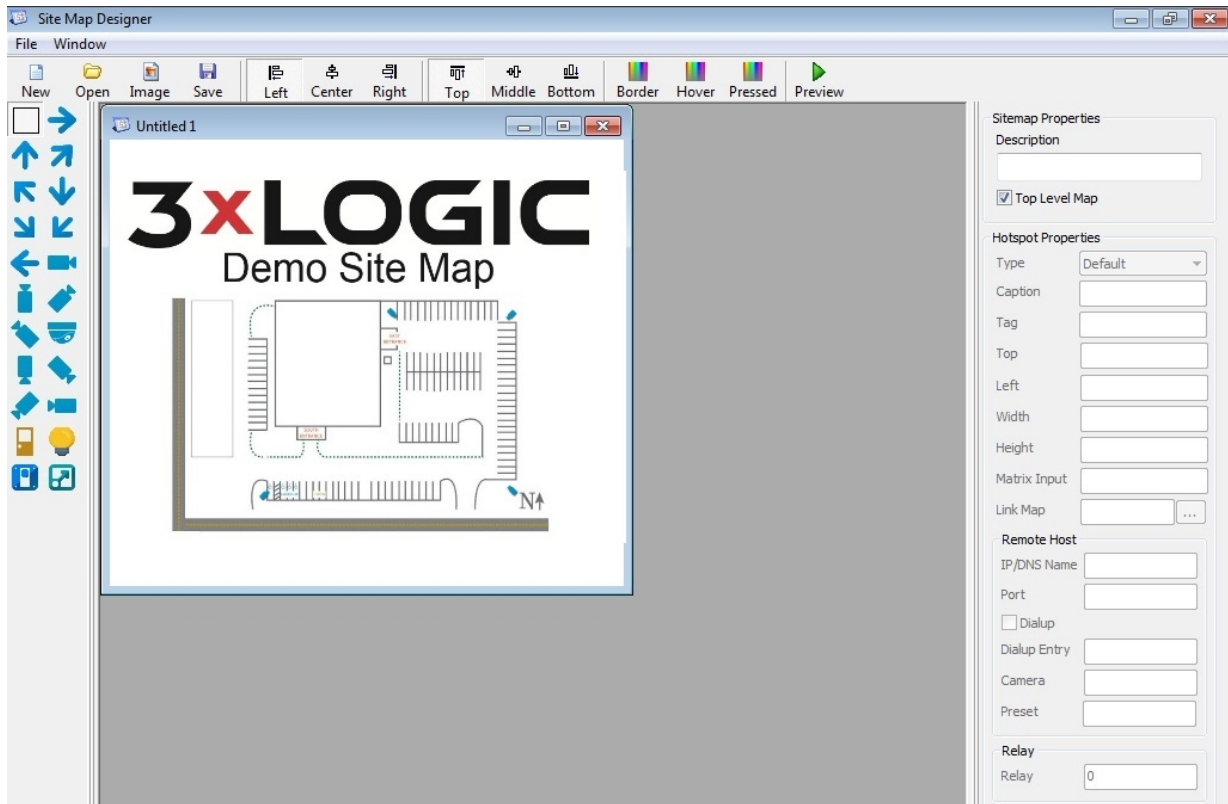


Figure 14-1: VIGIL Site Map Designer

Creating a New Site Map

1. Before beginning a new site map, create an image (JPG or BMP) file. This file will be used as a background picture for the site map.
2. Click the *Image* button on the toolbar or select *File | Load Background Image* from the menu.







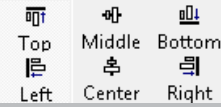



Opening an Existing Site Map

1. Click the *Open* button on the toolbar or select *File | Open* from the menu.

Saving a Site Map

1. To save a site map, click the *Save* button from the toolbar or select *File | Save As...* from menu. Site map files are normally stored in the *C:\Program Files\VIGIL\Client* directory.

14.1 Site Map Designer Icons and Buttons

Hot Spot 	<p>With this icon selected, drag a box on the site map to define a new hot spot. To delete a hot spot, select the hot spot you wish to remove and click the <i>Delete</i> key.</p>
Fixed Camera 	<p>Select an existing hot spot on the site map and click the icon or drag a box with the icon selected to place a fixed camera on the site map. When setting up these cameras, specify the appropriate remote host and camera number in the control settings.</p>
Dome (PTZ) Camera 	<p>Select an existing hot spot on the site map and click the icon or drag a box with the icon selected to place a pan/tilt/zoom camera on the site map. When setting up these cameras, specify the appropriate remote host and camera number in the control settings.</p>
Map Link 	<p>Select an existing hot spot on the site map and then click the icon or drag a box with the icon selected to place a map link icon.</p>
Directional 	<p>Select an existing hot spot on the site map and then click the icon or drag a box with the icon selected to place a directional icon on the site map. For example, can be used to provide directional links to adjacent maps.</p>
Relays 	<p>Select an existing hot spot on the sitemap and then click the icon or drag a box with the icon selected to place a relay on the site map. It provides a toggle for relays on the site map. It is also polled every 5 seconds for its current state.</p>
Alignment 	<p>Select a hot spot and then use a combination of the horizontal and vertical alignments to move the icon into any position within the hot spot.</p>
Color 	<p>Use these buttons to change the default colours of the hot spot borders for each state (normal, mouse over, mouse click).</p> <p> Note: These changes affect all hot spots on the site map.</p>
	<p>Click the <i>Preview</i> button to view the site map in runtime mode.</p>

14.2 Site Map / Hot Spot Properties



Note: Press the *Tab* key or select a different input box after each setting has been made to make sure the changes occur.

Sitemap Properties

Description	A brief description of the site map.
Top Level Map	<i>Top Level Maps</i> are listed as a home map in Gatekeeper.

Hotspot Properties

Hot Spot Types	Default	Select <i>Default</i> for a PTZ or a fixed camera hotspot.
	Live Only	Select <i>Live Only</i> for camera hotspots that link to a camera that is connected to the Matrix Switch but not to a VIGIL Server.
	Link	Select <i>Link</i> for a hotspot that links to another map.
	Relay	Select <i>Relay</i> to trigger an output relay from a DIO device configured on the VIGIL Server.
Caption	The text that is displayed when the mouse is moved over the camera.	
Tag	Use the <i>Tag</i> section to make any notes about this camera. This information is not displayed in the site map.	
Top/Left/Width/Height	Size and position of the hot spot in pixels.	
Matrix Input	For <i>Live Only</i> cameras; the Matrix Input number of the camera.	
Link Map	For link hot spots, the location of the site map where the link leads to.	

Remote Host

IP/DNS Name	The IP Address or DNS Name of the VIGIL Server.
Port	The data port of the VIGIL Server.
Dial-up	Enable this option if the connection to the VIGIL Server is a dialup connection.
Dialup Entry	For dialup connections only; the dialup entry of the dialup connection.
Camera Number	The VIGIL Server camera number of the selected camera.
Preset	For controllable cameras, enter a preset number for the camera to go to this preset when the hotspot is clicked. Presets will only function when the Site Map <i>Monitor</i> button is latched on.

Relay

Relay	The number of the relay switch that will be toggled when the hotspot is clicked.
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15 DV Player

VIGIL Server allows video exports to include the *VIGIL DV Player* to ensure playback software is available for *Authentic Video* (MJP) exports. VIGIL DV Player can play up to 16 playbacks simultaneously.

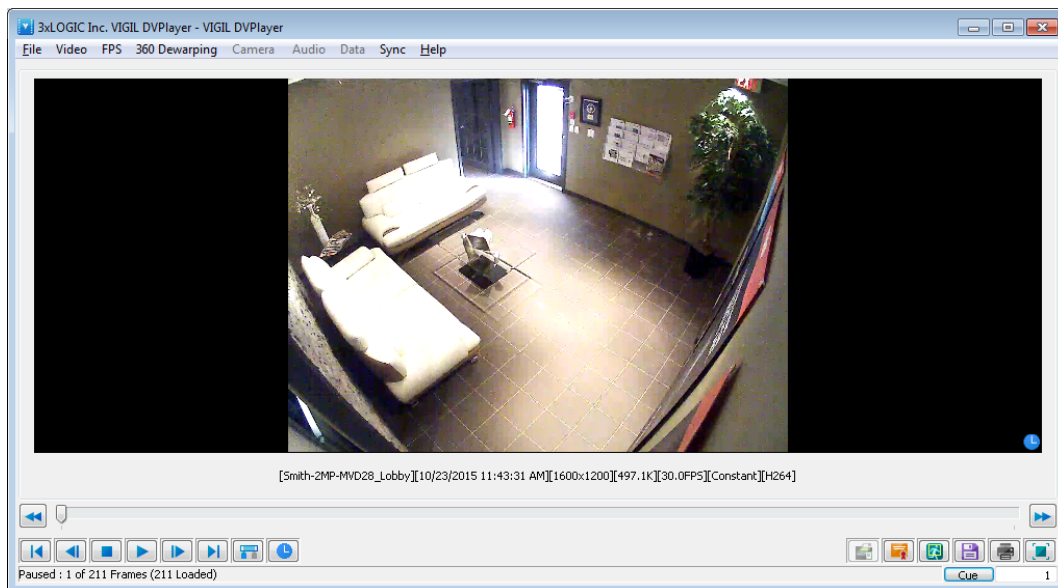










Figure 15-1:VIGIL DV Player

A number of controls have been provided to make navigation and advanced features more accessible:

	Click and hold down the <i>Fast Backward</i> or <i>Fast Forward</i> button to playback as quickly without skipping any frames. Right-click either button to set the a variable speed value. Available values include 2x, 3x, 5x, 10x, 15x, 30x, 60x and 120x.
	Skips to the very beginning / end of the video footage.
	If clicked while playing the footage, skips one 10 th of the footage. While paused or stopped, click to playback frame by frame.
	<i>Stop / Play</i> the video footage.
	Click-and-drag the pointer on the slider bar to advance or rewind the video footage. The mouse scroll wheel can also be used to do this.
	During playback, if only a sub-range of the loaded footage is of interest, it can quickly be selected by using markers.
	Synchronize the currently selected playback. If no other clips are synchronized, the current clip's timestamp will be treated as the principle synchronization timestamp (all other clips will by synchronized to the clips current position)
	Deploy the POS/ATM Search window. This button is only available when one or more of the current playback clips contains embedded POS data.
	Click to authenticate the video to ensure that it has not been tampered with. If the video has been tampered with, a red X and an error message will be displayed.

	 Note: The authentication feature on the DV Player will only detect errors for video frames that have been tampered with since the export. If the video was altered before the export, authentication errors will not be found.
	If <i>Video Analytics</i> information has been embedded in the video File, what information is displayed can be selected.
	Save a still image in <i>BMP</i> or <i>JPG</i> format, export video in <i>AVI</i> , <i>Authentic Video (MJPEG)</i> or <i>VIGIL Server File Stream</i> format, or <i>Audio</i> only.
	Select <i>Print Still Image</i> to print the current frame or select <i>Print Data</i> to print the currently displayed data.
	Rotate the video 90 degrees in the indicated direction.
	To zoom in, move the cursor over the video. A zoom outline will be displayed to indicate the region that will be magnified. Left-click to zoom in on the image or right-click to zoom out.
	Switch to <i>Full Screen</i> playback. Double-click or press <i>Esc</i> to return to windowed mode.
	Cues the video to a specific frame, enter a frame number and click the <i>Cue</i> button.

To view multiple streams, drag-and-drop files over the player or select multiple files when loading footage from within the *DV Player File Browser*.

When footage files are being loaded, an orange progress bar will be visible at the bottom of the video frame. When all frames are successfully loaded, the bar will turn blue to signal completion.

Top Menu Bar

Options from the various top menus are described below:

File	<ul style="list-style-type: none"> ■ Open File... - Open a single file for playback. This will replace the currently active playback file. ■ Open Folder... - Open a folder featuring multiple playback files. DV Player will open as many files in the folder as possible, up to a maximum of 16. These files will replace any active playback files. ■ Add File... - Add a single file for playback. This will open a second playback frame (up to a maximum of 16) ■ Add Folder...Add a folder of playback files. DV Player will open as many files in the folder as possible, up to a maximum of 16. These files will open in their own separate playback frame and will not replace active playback files. ■ Close File... - Close the currently selected playback file. ■ Close All Files... - Close all open playbacks.
Video	<p>The <i>Video</i> menu features all standard video controls that are accessible from the playback controls toolbar. Options unique to this menu include:</p> <ul style="list-style-type: none"> ■ Visual Track Settings - Set the sensitivity level of the visual motion tracker. ■ Visual Tracking - Toggle <i>Visual Tracking</i> on or off. When toggled on, a visual tracking box will surround reas of motion within the image. ■ Real-time Authentication - When toggled on, playback files are authenticated in real

	<p>time. Altered frames will produce a large red x across the video.</p> <ul style="list-style-type: none"> ■ Use VGA Hardware Acceleration - Enable this option to use video graphics adapter hardware acceleration for playback footage. This setting will reduce CPU usage and is enabled by default. ■ Field - When a playback file features NTSC Interlacing, select the interlacing field to display. Alternatively, both fields can be displayed.
FPS	<ul style="list-style-type: none"> ■ Play at Recording FPS - Playback files using the recording's FPS. ■ Play at User Assigned FPS - Playback files using a custom, user-assigned FPS. ■ Max Full FPS Channels - Enter the maximum number of permitted channels to run a full FPS simultaneously.
360 Dewarping	The 360 Dewarping Menu provides standard 360 Dewarp options for the user. See "DV Player" on page 162
Camera	The <i>Camera</i> menu allows a user to select a quadrant to focus on when a playback file contains a 2x2 decoded layout displaying footage from multiple analog camera
Audio	The <i>Audio</i> menu provides a user with available audio channels. Only one audio channel from the active playbacks can be enabled at once.
Data	<p>The <i>Data</i> menu contains a number of option related to playback file POS/ATM Data and on-screen display of POS entries:</p> <ul style="list-style-type: none"> ■ POS/ATM Search - Open the POS/ATM Search window. See "POS Receipt View and POS Search" on the next page ■ Toggle On-Screen Display - Toggle the On-screen Display of POS Receipt on or off. ■ Columns - Select the visible POS Receipt columns for OSD. ■ Dwell Time - Select the amount of time a POS item remains in the on-screen display. The default dwell time is set to <i>Infinite</i>. ■ Font Size - Select the OSD Font Size. ■ Number of Lines - Select the maximum amount of POS item lines to display in OSD. ■ Export... - Export the selected playback file's POS data to the local system (.txt format).
Sync	<p>The <i>Sync</i> menu features all standard Playback Synchronization controls:</p> <ul style="list-style-type: none"> ■ Default Synchronized Playback - Toggle this option to synchronize playback files automatically. ■ Unsync Playback - Unsyncronize the currently selected playback file from the synchronization pool. ■ Unsync All Playbacks - Unsync all files currently in the synchronization pool. ■ Sync this Playback - Sync this playback with the other playbacks currently in the synchronization pool ■ Sync this Playback and Set Camera Timestamp - Sync this playback with the playbacks currently in the synchronization pool using the selected playback's timestamp as the principle synchronization timestamp. ■ Sync All Playbacks and Set Camera Timestamp - Add all remaining unsynchronized playbacks to the synchronization pool using the selected playback file's timestamp as the principle synchronization timestamp.
Help	<ul style="list-style-type: none"> ■ About - Open the <i>About</i> window which provides DV Player copyright and version information.

POS Receipt View and POS Search

When a .mjp clip is exported with embedded POS data, the file can be played back in DV Player and will feature a POS Data receipt view built-in to the left-side of the DV Player UI.

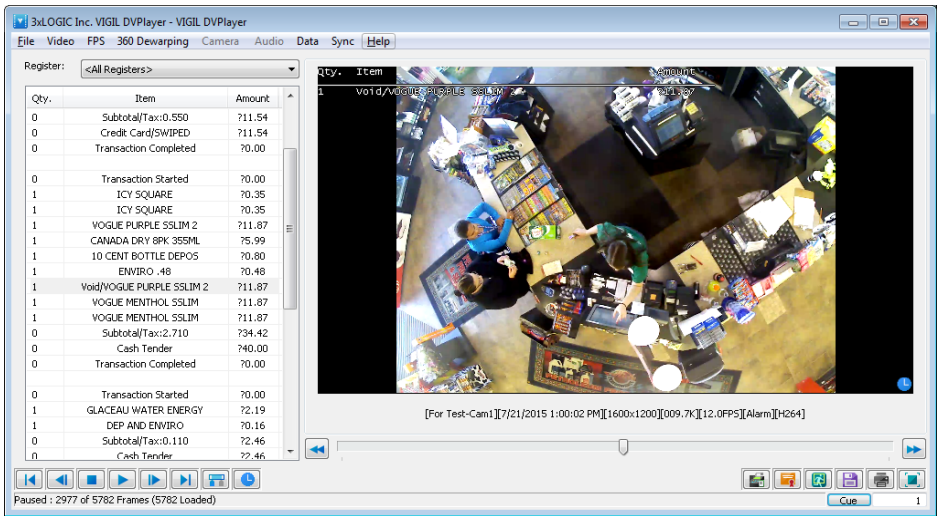



Figure 15-2:VIGIL DV Player - Embedded POS/ATM Receipt View

Double-click an entry in the receipt to be instantly taken to that item's corresponding portion of the footage.

Click the  to open the POS/ATM search form. Use the POS/ATM search function to locate items of interest within the .mjp playback clip.

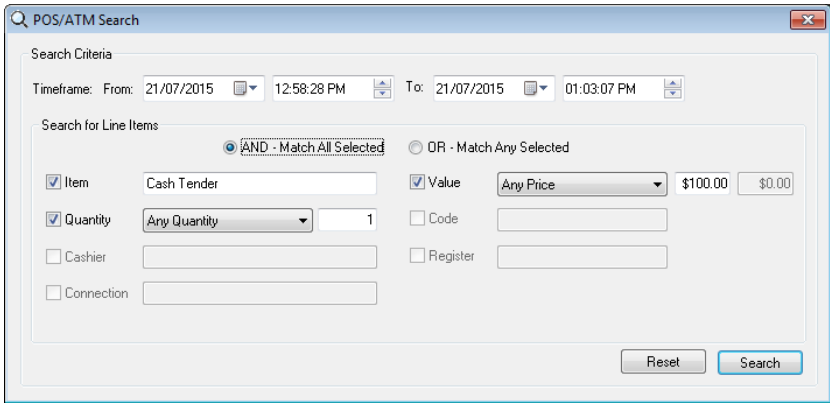


Figure 15-3:VIGIL DV Player - POS/ATM Search

The DV Player POS/ATM Search feature functions identically to standard POS/ATM search in VIGIL Server(See "Searching POS/ATM Data " on page 105 for more information on operating the POS/ATM search.) This search feature is not integrated with the VIGIL POS database and will only return results from within the current .mjp clip(s).

360 Dewarping

The DV Player also contains 360 Dewarping functionality. When a .mjp clip is exported froma 360 camera and is loaded in DV Player, simply select your desired Dewarp mode from the 360 Dewarping top menu and manipulate the footage as desired. Available Dewarp modes include:

- **Panorama View (for Wall Mounted 360 camera)** - Dewarps the image into a panoramic view.
- **Source Video Only (Rotate Enabled)** - Does not dewarp the image but the image can be rotated.
- **Source Video Only (Rotate Disabled)** - Does not dewarp the image and does not allow the image to be rotated.
- **360 View and Source Video** - Opens four separate frames, one containing the original source video and three dewarped images. Click within a dewarp framed and use standard Digital PTZ commands to alter its field-of-vision.

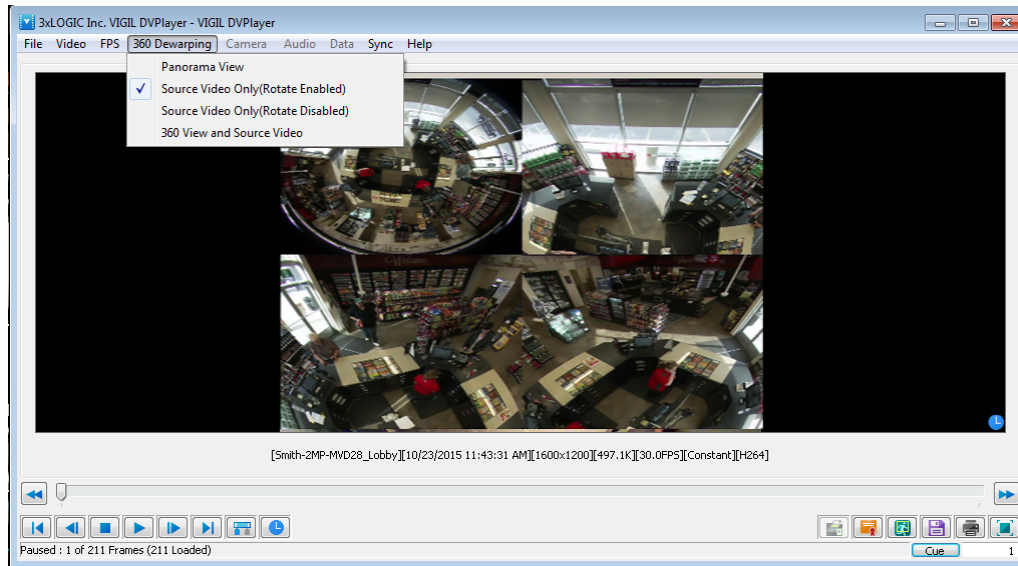


Figure 15-4:VIGIL DV Player - 360 Dewarping

16 Language Switcher

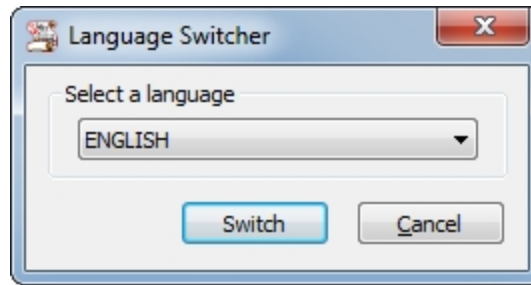


Figure 16-1:VIGIL Language Switcher

VIGIL Client can be run in English, French, Spanish, Chinese and Hebrew. The *Language Switcher* can be run from the Windows Start menu.

To begin:

1. Select *Programs | VIGIL | Language Switcher*.
2. Select the desired language from the drop-down menu and click *Switch*.

A prompt will show informing that a system reboot is required to complete the language change. Choose the following:

- Click *Yes* to reboot immediately.
- Click *No* to have the update applied the next time the system is restarted.



Note: The prompt will display in the language that is being switched to.

17 Contact Information

3xLOGIC has offices in Victoria BC, Canada and in Westminster, Colorado, 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:

3xLOGIC Technical Support:

Toll Free: (877) 3XLOGIC

(877) 395-6442

Email: helpdesk@3xlogic.com

Website: www.3xlogic.com

3xLOGIC USA Main Office:

290-12000 Pecos Street

Westminster, CO 80234

United States. (303) 430-1969

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