

System Galaxy Addendum

Integrated Video Plugin Solutions

- ❖ LENSEC Perspective VMS/PVMS®
- ❖ Panasonic Video Insight 7 (VI7)
- ❖ Digital Watchdog DW Spectrum®
- ❖ Discovery / OWS
- ❖ WiseNet Wave

OCTOBER 2019



System Galaxy Setup Guide

Configuring System Galaxy to
integrate with
3rd Party Video Plugins

1ST Edition-R7 / Oct 2019

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From Rev. 11.0 (or higher)

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Graphics and illustrations by Technical Writer. Screenshots used in this guide are for instructional reference only. Concept and Topology diagrams are original design of illustrator unless otherwise indicated.

Scope

This guide covers known requirements and instructions to configure the System Galaxy software to integrate with 3rd Party Video Plugins.

SG 10.5.6 Introduced LENSEC Perspective VMS and Video Insight 7 plugins.

SG 11.0.2 introduced DW Spectrum and Discovery OWS plugins.

SG 11.1.0.2 introduced WiseNet Wave plugin.

Always consult the manufacturer's documentation for requirements and capabilities related to the product (i.e. OS, install/set up, speed, bandwidths, camera models and features, codecs, etc.).

The availability of features, cameras, video controls etc. are controlled by the 3rd Party Plug-ins and may change without notice. Contact authorized Tech Support if any questions arise.

Galaxy Control Systems

3 North Main Street
Walkersville MD 21793

www.galaxsys.com

Table of Contents

Chapter 1: Overview & Requirements	4
SUPPORTED FEATURES.....	4
Supported Video Plugin Solutions.....	4
Table of Features for Plugin- enabled Video Viewers.....	5
GENERAL NOTICES	5
SYSTEM PRODUCT REGISTRATION:	5
CLIENT USER-RIGHTS TO CAMERAS @ THE VMS SYSTEM:.....	5
ENABLING VIDEO ON A “PER WORKSTATION” BASIS:.....	5
AUTOMATIC LIVE FEED FROM ARMED INPUT/DOOR:	5
AVAILABILITY OF CAMERA CONTROLS & VIDEO CONTROLS:	5
MANAGING ASSETS:	5
NETWORK TIME SYNCHRONIZATION:	5
Video Plugin Requirements.....	6
OS, IT, & PC REQUIREMENTS.....	6
GALAXY PRODUCT-LEVEL AVAILABILITY.....	6
GALAXY SYSTEM & CLIENT-SIDE REQUIREMENTS.....	6
Chapter 2: Registering and Configuring the Video Plugin Solution	8
QUICK STEPS: ADD & SET UP THE VIDEO-PLUGIN.....	8
STEP-1 About the VMS Install and Camera Setup.....	9
STEP-2 Installing the Video-Plugin Files	9
STEP -3 Verifying GCS Services	9
STEP -4 Registering System Galaxy for 3 rd Party DVR Support.....	10
STEP -5 Configuring the Client Gateway Connection Settings	11
STEP -6 Enabling & Disabling Video Support at a Client Workstation	12
STEP -7 Automatically Call-up Live Video for Armed Alarms (workstation-specific)	13
STEP -8 Adding a VMS Unit to System Galaxy	14
ADDING A VIDEO-PLUGIN VMS UNIT (and Cameras).....	14
EDITING CONNECTION SETTINGS FOR AN EXISTING VMS UNIT	15
STEP -9 Checking the Hardware Tree for Imported Cameras	16
STEP -10 Linking Cameras to Hardware (Inputs & Doors	17
LINKING A CAMERA (and Cameras).....	17

Revision History –

Date	Revisions	Descriptions
JAN 2018	SG 10.5.6 1 st Edition (R4)	<u>This guide provides setup information for 3rd Party VMS using the Video-API Plugin to connect and call-up video from within System Galaxy (SG).</u> <ul style="list-style-type: none"> LENSEC PVMS integration is added to the SG Video API Plugin. This integration requires the SG Client to have full user rights to all cameras. NOTE SCREEN SHOTS USE LENSEC AS EXAMPLE. ALL ARE SIMILAR. <p><i>For general instructions on the operation and behavior of System Galaxy's Video Viewer, reference the general SG DVR Guide. The main DVR guide covers how to call video from various locations in System Galaxy Client (i.e. events, reports, devices, alarms, etc.).</i></p>
MAR 2018	SG 10.5.6 (R5)	Added Video Insight 7 VMS Video-API Plugin solution to the table / instructions.
SEP 2018	SG 11.0.2 (R6)	Added Discovery OWS and DW Spectrum Video-API Plugin solutions to the table / instructions.
APR 2019	SG 11.1.0.2 (R7)	Added WiseNet Video-API Plugin solution to the port table / instructions.

Chapter 1: Overview & Requirements

This guide covers how to install and set up Video Plugins to integrate video systems (VMS/NVS) with SG Video Viewer.

Galaxy's Web API Video Plugin Solution allows 3RD Party VMS Manufacturers to create *video api plugins* that integrate their Video Systems with System Galaxy using the GCS Web API Service.

Once the 3rd Party Plugin files are installed and System Galaxy is configured, the SG Operator can launch the 3rd Party Video Viewer from within SG and view live or recorded video. The live and recorded video is retrieved using the same operator commands and call-up rules that apply to traditional DVR method.

SUPPORTED FEATURES

The following lists supported features using the Galaxy embedded video viewer.

- play live video from a camera-linked device (reader or input in the hardware tree, graphic icon, alarm event)
- play live video from a selected camera (from hardware tree, graphic icon, alarm event)
- auto pop-up live video (from an alarm event – configuration required)
- the embedded Video Viewer supports the playback controls written by the 3rd Party producer.
- single camera view and multi-camera grid.
- Pan / tilt / zoom / speed / focus / presets / controls

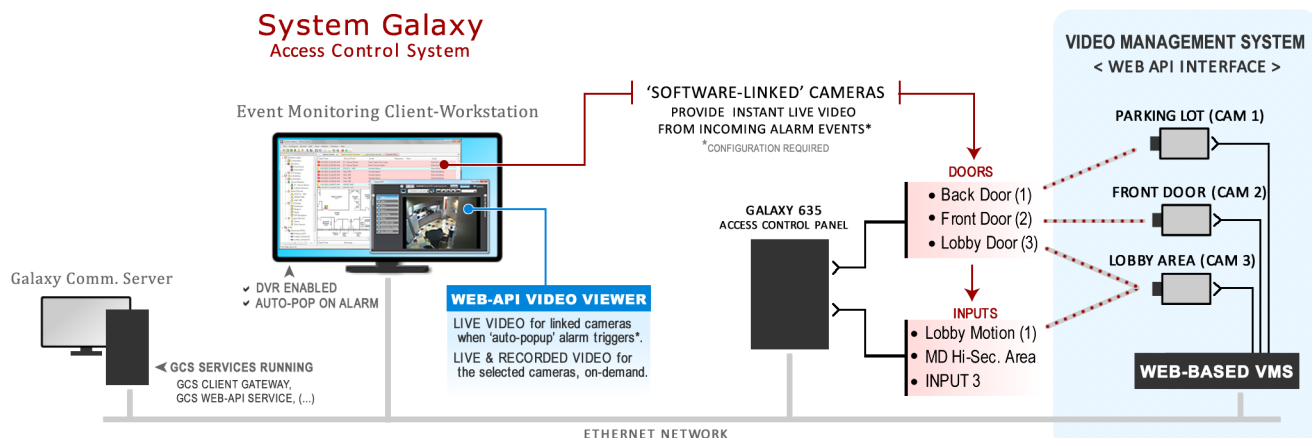
NOTICE: Appearance & available controls of 3rd Party Video Viewers (i.e. style, PTZ, presets, iris, speed, etc.) will vary from brand to brand, based on the designs implemented by 3rd Party developers. See [List of Features](#) table for more info.

SUPPORTED FEATURES

SG Video Viewer supports live and recorded video and can be launched from a camera-linked device (reader or input).

1. **Video Viewer auto-launches** (Live Video) when triggered by incoming alarm events (configuration required).
2. **Video Viewer manually launches** (Live Video) when the Operator invokes the '**View Video**' command from the Hardware Tree, the Device Graphic screen, Alarm Event window, or recorded playback from an Event Report screen.

FIGURE 1 - SYSTEM DIAGRAM: System Galaxy integrated with a Video Management System



Supported Video Plugin Solutions

3 RD Party Video-Plugin Solutions	Galaxy OEM Solutions
<ul style="list-style-type: none"> • LENSEC Prospective VMS (PVMS) • Panasonic Video Insight 7 VMS (V17) NEW • DW Spectrum IPVMS NEW • WiseNet Wave NEW 	<ul style="list-style-type: none"> • Discovery OWS (OEM) NEW



See the **SG DVR Guide** for "PC-based Video Solutions", which include OEM and 3rd Party Solutions.



SUPPORT: Consult authorized Tech Support for newer Video API Solutions, since new plugins are added periodically.

Table of Features for Plugin- enabled Video Viewers

SUPPORTED VIEWERS* **	VIEWER		CAMERA FUNCTIONS(1)		VIDEO & CAMERA CONTROLS (2)			RECORDED VIDEO FUNCTIONS (2)	
	API VIEWER	OTHER	IMPORT CAMERAS	MULTI-CAM GRID VIEW	PTZ	FOCUS	PRESET	SEARCH RANGE	PLAYBACK CTLs. (PB. CLOCK / RATE)
					SPEED	+ IRIS	CLEAR / SET		
LENSEC Prospective VMS (default port = 8085)	YES PVMS	--	YES	YES	YES <i>IN SETTINGS</i>	FOCUS ONLY	PRESET ONLY	FROM START DATE - TIME	YES
Panasonic Video Insight 7 (default port = 9000)	YES	--	YES	YES	YES <i>IN SETTINGS</i>	FOCUS ONLY	PRESET ONLY	FROM START DATE - TIME	YES
DW Spectrum (default port = 7001)	YES	--	YES		YES		YES	FROM START DATE - TIME	PLAY
Galaxy Discovery OWS (default port = - - - -)	YES	--	YES	YES	YES <i>SLIDE BAR</i>			FROM START DATE - TIME	YES
WiseNet Wave (default port = 7002)	YES	--	YES	YES					

* Video Viewer appearance and controls are determined by the developers of the 3rd Party VMS Integration & Plugin solutions. Galaxy Web-API Kit offers all features.
** Contact Technical Support for information on new or existing Plugins and VMS solutions.
(1) Functions may vary by camera models. (2) Controls may vary by 3rd Party developer of their VMS solution.

GENERAL NOTICES

» **SYSTEM PRODUCT REGISTRATION:**

Galaxy supports 3rd Party VMS using the **DVR Support** option which is enabled in System Registration by an Authorized Dealer and according to the customer's purchase agreement.

- **3rd Party DVR option** is available with **Corporate** and **Enterprise** product level registration.
(Professional-level = uses the Galaxy DVR (OEM PC-based solutions))
- You must also configure the Unit Count.

» **CLIENT USER-RIGHTS TO CAMERAS @ THE VMS SYSTEM:**

For certain VMS solutions the SG Client must have full user-rights to all cameras, while other brands may support limited rights. See **Chapter 2** for details.

» **ENABLING VIDEO ON A "PER WORKSTATION" BASIS:**

Viewing video must be enabled and disabled on a "per workstation" basis.

» **AUTOMATIC LIVE FEED FROM ARMED INPUT/DOOR:**

Automated video pop-up requires a) the camera to be correctly linked to a hardware device and b) enabling of workstation options.

» **AVAILABILITY OF CAMERA CONTROLS & VIDEO CONTROLS:**

Controls are available in Video Viewers based upon the 3rd Party development. Additionally, camera controls (such as PTZ, Iris, etc.) may be dynamically disabled based upon **type of camera** or **camera settings** at the VMS unit for each video channel.

» **MANAGING ASSETS:**

Follow the VMS manufacturer's instruction manuals for saving and backing up video assets (historic video files).

» **NETWORK TIME SYNCHRONIZATION:**

System Galaxy is NTS compliant. The VMS must use the same time-source as System Galaxy. Consult the manufacturer's instructions for your VMS to determine whether the unit can reside on a domain and how to apply time synchronization.

Video Plugin Requirements

This is a list of the known requirements that apply to the System Galaxy integration with the video plugins. Use these requirements for planning, installing, or trouble-shooting purposes. They are not intended as a substitute for following instructions. Keep in mind that the manufacturer of the VMS may also have requirements that need to be met.

- 👁 Always consult the manufacturer's requirements and documentation.
- 👁 For a full list of OS, PC, and System requirements for System Galaxy clients, see the [System Galaxy Specifications Guide](#)
- 🔒 **To prevent security issues, you should change the default port number set by the manufacturer.**

GALAXY PRODUCT-LEVEL AVAILABILITY

SG 11.0.0.1 (or higher)	PROFESSIONAL	CORPORATE	ENTERPRISE	UNIT COUNT
3RD PARTY VIDEO PLUGIN SOLUTIONS	--	✓	✓	DVR LIMIT MUST BE ENTERED
GALAXY OEM VIDEO PLUGIN SOLUTIONS	✓	✓	✓	

NETWORK REQUIREMENTS

1. **Network Time Synchronization:** The Video System should be using the same NTS time-source as System Galaxy. This requirement ensures the video timestamps will match the timestamps of the corresponding SG events.
2. **Network Security:** At the **SG Server** or **Client Workstation(s)**, you must unblock the correct port number for the Video System. This includes unblocking ports at switches and routers and creating exceptions in Windows Firewall and your Security/Malware applications.
3. **Network Performance:** You must also meet requirements and best-practice for speed, bandwidth, peak demands, and security. Also see your VMS manufacturer's documentation.
4. **Network Connectivity:** You must know the correct IP address or URL address of the unit you are installing (i.e. IP Address, DNS name, URL Address, or cloud address). Some addresses may include "https://" with the IP Address.
5. **Security Permissions:** You must give the appropriate user-rights to the login credentials that SG will use to connect to the VMS. (For LENSEC PVMS, you must give user-rights to all cameras.)

GALAXY SYSTEM & WORKSTATION REQUIREMENTS

1. Before you can add the VMS and cameras to SG, you must have installed the unit and configured the cameras.
2. **Video Plugin files:** must be installed on every SG Client that will support video monitoring via on-demand or auto-popup. Plugin files install in the **VideoAPIplugins** folder during Part-3 of the Galaxy Install Suite.
 - » (for Example: C:\\GCS\System Galaxy\\VideoAPIplugins\\Lensec... \\).
 - » See the configuration chapter for details on your specific brand of VMS solution.
3. The **GCS Web API Service** must be running and configured to "start automatically". The service is installed on the main communication server.
4. In **SG System Registration screen ...**
 - » **DVR Support option** must be enabled (available in Corporate or Enterprise product levels)
 - » **Units field** must have the correct number of units (per the customer purchase agreement).

[Continue on next page ...](#)

5. In **SG System Settings** screen ...
 - » **General tab:** the **DVR ENABLED option** must be “checked” at each client that needs video support.
 - » **General tab:** the **Does Not Support Monitoring option** must be “unchecked” at each client if you want the operator to manually command View Video from the Alarm Event screen.
 - » **Alarm Options tab:** the **Automatically Call-Up DVR Video option** must be “checked” at each client if you want the Video Viewer to automatically launch when an alarm event happens at a camera-linked device.
6. In **SG Client Gateway Settings** screen: the **GCS Web API Service** settings are automatically set according to installation defaults. This can be edited if you decide to use a different port than the default 8000.
7. In **Hardware > DVRs > Video API** screen, you must select the *appropriate brand* of your VMS solution.
 - » You must correctly add the port number, IP Address, VMS login credentials. Some brands may need to include the “http://” prefix with the IP Address. If using a cloud system, you will need to enter the full path to the cloud unit using the correct syntax – consult with the customer’s IT department and the VMS vendor tech support as needed.
 - » You must give the VMS Unit a unique name in System Galaxy.
 - » You must click the [Test Connection] button to connect and import cameras*.
 - » After you save the unit and camera list, it will appear in the Hardware Tree along with the cameras. You may need to refresh the hardware tree by re-opening it from the View menu.
 - » **NOTE: changing or deleting a unit is done from the typical DVR Programming screen.**

* **User Rights:** For certain VMS solutions (including Lensec), the System Galaxy login credentials (in the VMS Config screen) will need to have full user-rights to all cameras at the VMS unit, before the video-feed will work properly. See chapter 2 for list of names that require full rights. Solutions not listed may provide unique or partial rights.

Chapter 2: Registering and Configuring the Video Plugin Solution

This chapter describes the registration and configuration of the VMS in System Galaxy.

Use the QUICK STEPS List to guide and validate your work. *Each Quick Step has a correlating section in this chapter with the instructions on how to perform the steps.*



QUICK STEPS: ADD & SET UP THE VIDEO-PLUGIN

- STEP 1.** Install the VMS and connect and configure all cameras.
- STEP 2.** Install the client-side Video Plugin files (this is done during System Galaxy install Part-3⁽¹⁾).
- STEP 3.** Configure the *GCS Web API Service* to start automatically⁽²⁾, (refresh services).
- STEP 4.** System Registration⁽³⁾: the **3rd Party DVR option & DVR Limit** must be set (PC restart required).
- STEP 5.** Configure the Client Gateway⁽⁴⁾ to connect to the *Web API Service*. (restart to initialize)
- STEP 6.** Enable 'DVR Support'⁽⁵⁾ option in SG System Settings screen (client-specific/restart to initialize).
- STEP 7.** Configure the Alarm Settings⁽⁶⁾ in System Settings screen (client-specific/restart to initialize).
- STEP 8.** Add the connection settings & login credentials to the VMS in Video Plugin screen.
- STEP 9.** Check the Hardware Tree to confirm the unit and cameras were added (refresh HW Tree as needed)
- STEP 10.** Link cameras to the hardware (doors/inputs) in the appropriate SG programming screens.
After initial system programming is completed, the SG Operator can begin using the VMS features.

- 👁 See the **System Galaxy DVR Guide** for more information on using the Operator Commands.
- 👁 See the **VMS Manufacturer's Guide** for instructions on how to operate the 3rd Party Video Viewer

FOOTNOTES:

- (1) Part-3 of the **SG Software Install Suite** installs the **GCS services** and **client-side Video Plugins** on the computer. Part-1 and -2 of the SG Install Suite must be completed before part-3 on every computer using the appropriate choices, based on the role (i.e. communication server, database server, client workstation). SG software installation is described in the SG Installation Procedure.
- (2) Only one instance (no duplicates) of the **GCS ClientGW Service & Web API Service** can be running.
- (3) System-wide Registration is done at Communication Server and set up according to purchase agreement. Workstation Registration is done at each computer.
- (4) Configuring Client GW connection parameters to the Web API Service only needs to be done once at the Comm Server.
- (5) The option to enable and disable the Video interface is found on the General tab of the System Settings screen. This option only affects the local client workstation. You can enable Video at one workstation and disable it at others. When checked, the video interface and operator commands are operational. When unchecked the Video programming screens are disabled at the local workstation. This does not affect .
- (6) Alarm settings, including the "Automatically Call-up Video on incoming alarm" must be configured at each and every workstation. These settings can be uniquely different from one client workstation to the next.



SEE: the **System Galaxy Software Installation Procedure** for instructions on how to install System Galaxy software. These installation instructions are found on the HELP module or online.



SEE: your **Manufacturer's VMS Documentation** for instructions on how to install and configure the VMS and camera hardware or associated components.

STEP-1 About the VMS Install and Camera Setup

1. The VMS unit and any camera configuration should be completed **before** you add it to System Galaxy.
2. You must create a login credentials to the VMS for the System Galaxy client. You must provide the appropriate level of user-rights to the *SG login credentials*, which may vary from one brand to the next.
 - » **LENSEC PROSPECTIVE:** the SG Login needs user-rights to all the cameras.

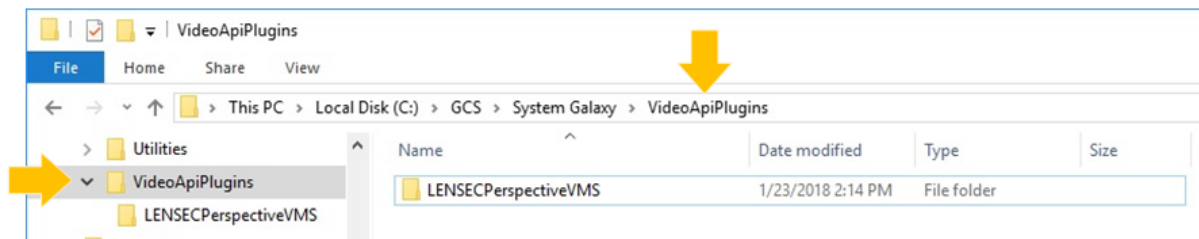


SEE: the brand *Manufacturer's DVR Documentation* for instructions on how to install and configure the DVR and camera hardware or client-side components associated with branded DVRs.

STEP-2 Installing the Video-Plugin Files

Follow the important notes below:

- Plugin files are automatically installed on each client during part-3 of the SG software install.
- If you are installing a *Video API Plugin* that was not originally included with your version of SG, you may be able to obtain and install the plugin files you need without upgrading SG. See your authorized tech support to obtain the plugin files and determine if an upgrade is needed.
- Each brand of Plugin Files are installed inside the VideoApiPlugins folder. Each brand has its own subfolder which is installed directly in the path of "C:\GCS\System Galaxy\VideoApiPlugins\".



The VideoApiPlugins folder (showing the Lensec subfolder for example). Each brand would have their own subfolder under the VideoApiPlugins folder.

STEP -3 Verifying GCS Services

The GCS Web API Service is installed on the Galaxy Communication Server. As of SG 11x the *GCS WebAPI Service* is installed to run/start automatically and therefore should be running once the installation is completed.

1. You can verify the GCS WebAPI Service is running by opening the Windows "Services" screen from the PC Control Panel.
2. Scroll down to the GCS WebAPI Service and see that it is running and configured to start automatic.

NOTICE: If your version of SG does not default the *GCS WebAPI Service* to run automatic, then right-click the service and select 'Properties' from the menu. Set the startup type as "Automatic" and save your changes. Start or restart the *GCS WebAPI Service*.

STEP -4 Registering System Galaxy for 3rd Party DVR Support

(Certified Dealer required) The *Video Plugin support* is enabled via the **3rd Party DVR option** in the System Registration.

- **New Installs:** the *3rd Party DVR option* should be included in customer purchase agreement & registration code.
- **Upgrades:** the *3rd Party DVR option* can be added to an existing system, or the *DVR Limit* can be increased with a new purchase agreement and new **registration code**. Contact customer support for assistance

❖ Open the System Registration screen - from the SG menu **Configure ▶ Options ▶ Registration ▶ System**.

1. In the **System-Wide Features**, you must enable the **3rd Party DVR option**.

- If your Video Plugin is a Galaxy OEM product, then check the **Galaxy DVR option**
- If your Video Plugin is a third-party product, then check the **3rd Party DVR option**
- Only enter a unit count in the **DVR Limit field** for 3rd Party; per the customer purchase agreement.

NOTE: You can register both 3rd Party DVRs and Galaxy OEM DVRs if the customer has multiple DVRs/VMs; or is upgrading an existing system. Follow the customer's purchase order.

2. Complete the normal registration process and enter the new **Registration Code**

3. Click **[Apply]** button, then click **[OK]** button.

4. Restart System Galaxy software application after system and workstation registration is complete.

FIGURE 2 - PRODUCT REGISTRATION SCREEN – DVR SUPPORT OPTION

The screenshot shows the 'Product Registration' window with the 'System Registration' tab selected. The 'System-Wide Features' section is expanded, and the '3rd Party DVRs' checkbox is checked. The 'DVR Limit' dropdown is set to '4'. The 'Registration Code' field contains 'T2BGF5J'. The 'Apply' button is highlighted with a blue box and an arrow pointing to it from a callout box.

Callouts in the image:

- Enabled the 3rd Part DVR option. Also, set the [DVR limit] to the correct number.** (Points to the '3rd Party DVRs' checkbox and the 'DVR Limit' dropdown)
- Enter the correct Registration Code. After you have completed all other settings.** (Points to the 'Registration Code' field)
- Click the APPLY button.** (Points to the 'Apply' button)



SUPPORT: Dealers may use the *GCS Online Registration* website 24/7, or contact customer service. A valid maintenance agreement is required for upgrading systems. Dealer online logon is required.

STEP -5 Configuring the Client Gateway Connection Settings

(optional) This section covers editing the Client Gateway Settings to change the port number for the Web API Service.

NOTICE: In SG 11.0.2 or higher, the *Web Services Setting* is defaulted to enabled and SG auto-detects the URL. The field remains editable in case administrators need to change this URL or Port at some future time. If the default Port needs to be changed, then the administrator must also update the appSettings config file also.

IMPORTANT:

- » A master-operator login is required to change this setting.
- » This is a *system-wide setting* and applies to all workstations in the Galaxy system. Only needs setting once.

❖ Open the Client Gateway screen - SG menu **Configure ▶ Options ▶ Client Gateway**

1. The **'Use Web Services'** option must be checked.
2. You can change the port number for the *Web Services URL*. The default is **8000 for http**.

TIP: If you are using https, you can change the port to the default 8443 without having to edit the appSettings file, since the https default port is already configured in the appSettings file. However, if you are using some other port number (not 8000 or 8443), you will need to edit the appSettings file.

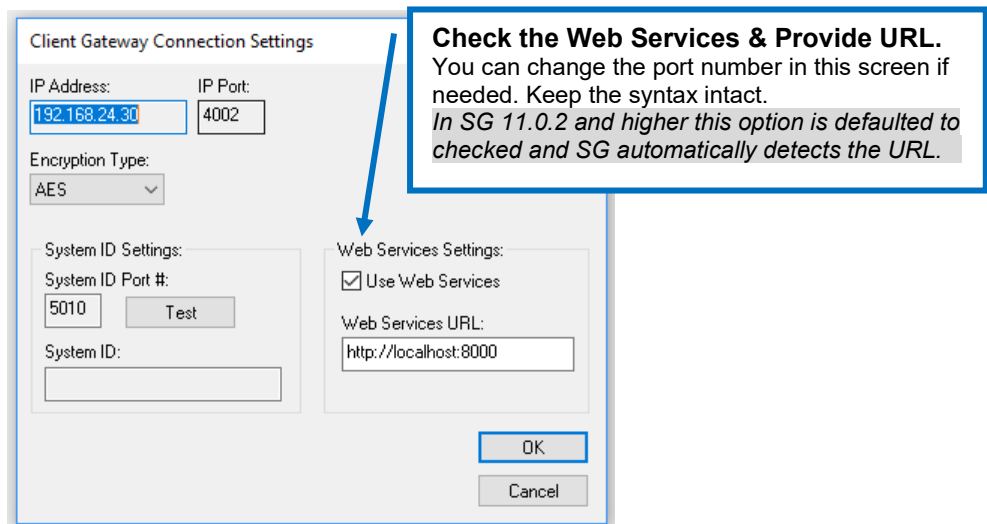
IMPORTANT: Be careful to preserve the syntax. There must be a colon (:) between the IP and Port number.

3. Click **OK** to save your changes and exit the screen.
4. If you changed the Port to a non-default value, then you must also update the appSettings file to match. The appSettings file is in the C:\GCS\System Galaxy\OptionalServices\WebServices folder. Open the file in Notepad and change the appropriate port number depending on whether you are using http or https port (http 8000 vs https 8443).

IMPORTANT: Preserve the syntax. There must quotation marks around the Port number "nnnn".

5. After you changed **the port, you must restart System Galaxy software and refresh the Services ...**
 - Restart GCS Web API Service
 - Restart GCS ClientGW Service

FIGURE 3 – CLIENT GATEWAY CONNECTION SETTINGS SCREEN – WEB SERVICE SETTINGS



STEP -6 Enabling & Disabling Video Support (workstation-specific)

The “**DVR Enabled**” option controls the Video Support at the local client-workstation. This option must be enabled regardless of which brand of DVR/VMS you are using.

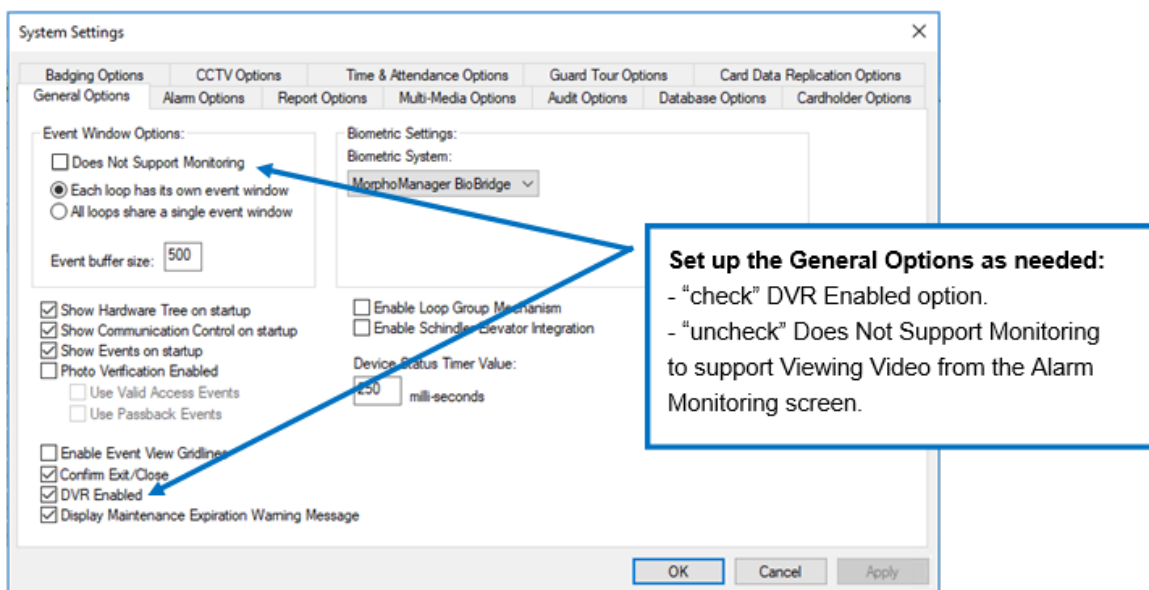
- Enabled (checked) = allows the Video Viewer to launch or pop open at the local workstation.
- Disabled (unchecked) = prevents the Video Viewer from launching or popping open at the local workstation.

IMPORTANT:

- » Enable DVR option is ON (checked) by default; (disable it only at workstations where you want to prohibit video).
- » A master-operator login is required to change this option in System Settings.
- » These are *workstation-specific settings* and will not affect other workstations in the Galaxy system.

- ❖ Open the System Settings screen - SG menu **Configure ▶ Options ▶ System Settings**
 1. Select the ‘General Options’ tab.
 2. “Uncheck” the **Does Not Support Monitoring** option to allow the Event screens to display so that the operator can ‘view video’ from Alarm Events at the local workstation.
 3. Place a “check” in the **DVR Enabled** option to enable Video Support at the local workstation. (Unchecked = disables Video Support (i.e. user cannot view video, and cannot add/edit a VMS Unit or cameras)
 4. Click **APPLY** button to save changes.
 5. Proceed to the next step to continue configuring Alarm Options (Automatic Call-up on Alarm);
Or click **OK** to exit System Settings. NOTE: if exiting, restart System Galaxy to initialize the changes.

FIGURE 4 – ENABLE DVR SUPPORT IN SYSTEM SETTINGS SCREEN



STEP -7 Automatically Call-up Live Video for Armed Alarms (workstation-specific)

The **“Automatically Call-Up Video”** option controls whether SG automatically calls-up video for a *device-linked camera (reader or input)* when the device is both ‘armed’ and in the active ‘armed alarm’ state. However, there are additional conditions that must be true, before the video will be called-up. See table below for a breakdown of the required factors.

- Enabled (checked) = SG will launch Video Viewer and call-up live video from *device-linked camera* for ‘armed alarm’ event.
- Disabled (unchecked) = SG will never auto-call-up video for armed alarms.

Table: Auto Call-up Video for Armed Alarms = the 5 A’s

SYSTEM SETTING	DEVICE PROGRAMMING AND CONDITIONS				VIDEO RESULT
“Auto Call-up Option”	CAMERA LINKING	DEVICE PROPERTY	STATE	CONDITION	
Is it Assigned?	Is it Associated to device?	Is it Acknowledgeable?	Is it Armed?	Is it Active?	Is video called up?
True (checked)	True (Linked)	True (checked)	True (Armed)	True (Active/Alarm)	YES (all conditions true)
False (unchecked)	True (Linked)	True (checked)	True (Armed)	True (Active/Alarm)	NO (not assigned)
True (checked)	False (unlinked)	True (checked)	True (Armed)	True (Active/Alarm)	NO (not assoc.)
True (checked)	True (Linked)	False (unchecked)	True (Armed)	True (Active/Alarm)	NO (not ACK’d)
True (checked)	True (Linked)	True (checked)	False (Not Armed)	True (Active/Alarm)	NO (not armed)
True (checked)	True (Linked)	True (checked)	True (Armed)	False (Idle/Safe)	NO (not active)

Video is automatically called-up only if these 5 conditions are All True! If any condition is false, video is not automatically called.

IMPORTANT:

- » A master-operator login is required to change this option in System Settings.
- » This is a *workstation-specific* setting and will not affect other workstations.
- » The **‘Automatically Call-up DVR Video’** feature will call video for cameras that are associated (linked) to an input or reader if they are armed and set to require acknowledgement when an active alarm condition happens.
- » **Alarm Priority:** Be aware that if you are using alarm priorities, that the live feed comes from the camera with the highest priority, and not necessarily from the most recent incoming event.

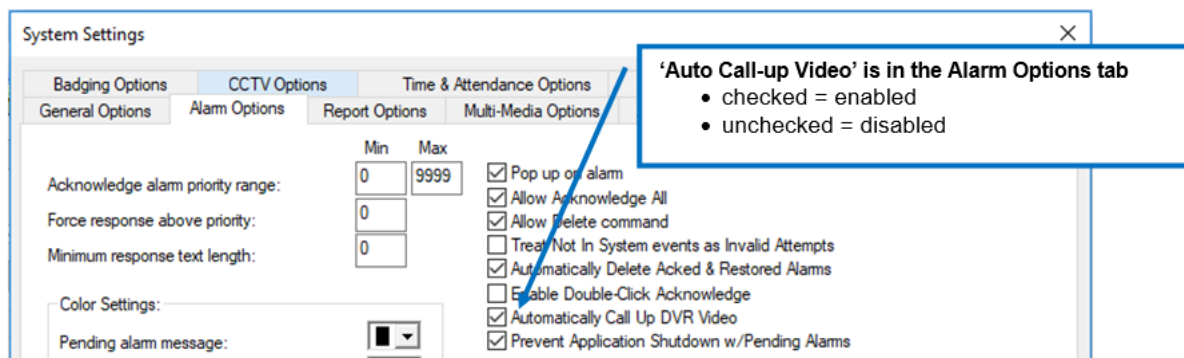
❖ Open the Client Gateway screen - SG menu **Configure ▶ Options ▶ Client Gateway**

1. Select the ‘Alarm Options’ tab.
2. “Check” the **‘Automatically Call-up DVR Video’** option to enable it. (Unchecked means the option is disabled.)

NOTE: the Pop-up on alarm option is optional. It allows SG to pop the Alarm Event window into focus when an armed alarm happens, which will interrupt whatever the user is doing. The Video Viewer will auto-start and call-up video regardless of whether this option is checked.

3. Click the **APPLY** button and **OK** button to save your changes.
4. Restart the System Galaxy software to initiate the changes.

FIGURE 5 – ENABLE DVR SUPPORT IN SYSTEM SETTINGS SCREEN



STEP -8 Adding a VMS Unit to System Galaxy

The Video System and Connection Information

PREREQUISITES

- » The VMS unit and all the cameras must already be correctly installed /configured (**including camera names**).
- » SG Login Credentials (Username/Password) must be created at the VMS Unit with the user-privileges to cameras. (For LENSEC PVMS: the SG LOGIN must have full user-rights to all cameras at the VMS unit).
- » The correct client-side video plugins must be installed, and the *GCS Web API Service* must be running.
- » System Galaxy must be correctly registered for the 3rd Party DVR Support.
- » The SG ***DVR ENABLED option*** must be checked (is System Settings Screen/General tab).
- » The Web API Service must enabled and configured in the Client Gateway Settings screen.
- » Brands will vary for programming requirements. Contact Tech Support for assistance if needed.

ADDING A VIDEO-PLUGIN VMS UNIT (and Cameras)

❖ **Open the Video Plugin Screen** - from SG menu **Configure ▶ Hardware ▶ DVR's ▶ Video Plugins**

1. Select the appropriate Video Plugin brand (such as LENSEC, Panasonic, etc.).
2. Click the **[OK]** button to open to the VMS programming screen.
3. Enter a unique and meaningful **name** in the [Name] field (i.e. "Lensec PVMS 01"). FYI: This name will be displayed elsewhere in SG, such as DVR Properties, Camera Programming, Camera Linking of the Reader & Input screens).
4. *For OWS brand, you must choose the Web Services option and add the Service's URL, Company, Stun Server, Recorder.*
5. Enter the **IP Address** or DNS Name of the VMS Unit. (May require https:// to be included with IP Address.)
6. Enter **IP Port Number** if it should be different from the default value automatically shown.
7. Enter the **User Name & Password** (login credentials): The login used here must exist at the VMS Unit and must allow viewing and controlling video and cameras.
8. Click the **TEST and SAVE CONNECTION** buttons, which will connect the VMS and import the camera list.
9. Click **SAVE SYSTEM DATA** button to save the VMS connection settings and the camera names into the SG database.
10. **Restart System Galaxy software as appropriate to initiate the system.**

FIGURE 6 – VMS PLUGIN SCREEN & PORT# TABLE

Call Tech Support for assistance, as needed.

Type of Video System	Dflt Port	Vendor Codes	Viewer
LENSEC Perspective	8085	normal	Lensec Viewer
Video Insight 7 (VI7)	9000	normal	VI7 Viewer
DW Spectrum *	7001	normal	DW Viewer
OWS Discovery OEM	--	normal	OWS Viewer
WiseNet Wave *	7002	normal	WiseNet

* may require "https://" to be included with IP Address

CameraGuid	Name	CameraIdNumber	PtzSupported	Presets	PtzCapabilities	DvrGuid	VideoSystemUid	CurrentIns
5	Customer 1000 - Camera 1	5	<input type="checkbox"/>		None	00000000-0000-0000-0000-000000000000	c220de04-9f7d-45eb-ac68-2e0bada6b510	314b132e-39cf-422f-b4b
8	Customer 1000 - Camera 2	8	<input type="checkbox"/>		None	00000000-0000-0000-0000-000000000000	c220de04-9f7d-45eb-ac68-2e0bada6b510	4fe64115-5956-447b-b2f
4	Customer 1000 - Camera 3	4	<input checked="" type="checkbox"/>	(v)	None	00000000-0000-0000-0000-000000000000	c220de04-9f7d-45eb-ac68-2e0bada6b510	3576074d-e6cc-4411-a83
11	Customer 1001 - Camera 4	11	<input type="checkbox"/>		None	00000000-0000-0000-0000-000000000000	c220de04-9f7d-45eb-ac68-2e0bada6b510	f84e4383-0a0e-440d-88f

EDITING CONNECTION SETTINGS FOR AN EXISTING VMS UNIT

If you need to change the IP connection settings of a VMS unit after it has been added to System Galaxy, then you must do it in the traditional DVR Programming screen.

❖ Open the DVR Programming Screen - from the SG menu [Configure](#) ▶ [Hardware](#) ▶ [DVR's](#)

1. Select the appropriate VMS UNIT in the [Select DVR] droplist
2. Click the **[Edit] button** in the DVR screen
3. Make the needed changes.
4. Click the **[Apply] button** to save settings.

FIGURE 7 – DVR PROGRAMMING SCREEN & TABLE

The screenshot displays the DVR Programming screen with the following fields and controls:

- Select a DVR:** A dropdown menu showing "Lensec PVMS 01".
- Name:** A text input field containing "Lensec PVMS 01".
- ID Number:** A text input field containing "3".
- DVR Type:** A dropdown menu showing "LENSEC Perspective VMS".
- Vendor Code:** A dropdown menu showing "Normal DVR (NORMALDVR)".
- Connection Settings:**
 - IP Address or DNS Name:** A text input field containing "212.118.8.121".
 - IP Port #:** A text input field containing "8085".
- Security Settings:**
 - User Name:** A text input field containing "admin".
 - Password:** A text input field.
 - Confirm Password:** A text input field.
 - Show Password Characters
- Buttons:** A vertical stack of buttons on the right side: "Add", "Edit", "Delete", "Apply", and "Cancel".



Use the [delete] button to delete an existing Unit's configuration.

STEP -9 Checking the Hardware Tree for Imported Cameras

Cameras should have been imported when you added the VMS in the prior step.

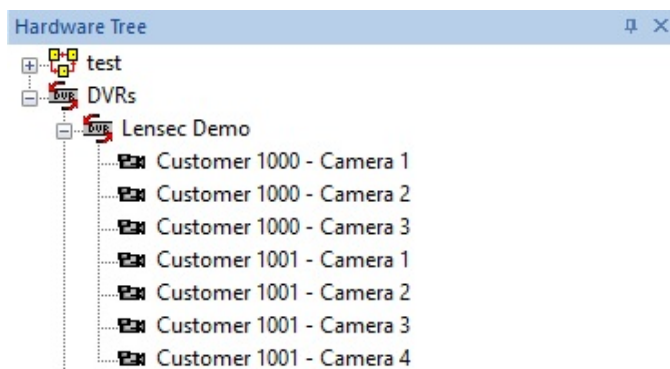
PREREQUISITES

- » The DVR unit and all the cameras are correctly installed /configured (**including camera names**).
- » You must have added the NVR / DVR unit to System Galaxy (see prior section) and met all the requirements listed.
- » You must be able to connect to the NVR / DVR unit.

❖ **Launch System Galaxy and sign-in** - the Hardware Tree should be showing the VMS you just added.

1. **Click the [+] button** to expand the “**DVRs**” list in the Hardware Tree, you should see all the cameras you imported in the prior step.
2. Now you can start linking cameras to the readers / inputs as desired.

FIGURE 8 – HARDWARE TREE



- 👁 See the **SG DVR Guide** for instructions on linking cameras to hardware, and on how to retrieve live or recorded video using SG Operator commands.
- 👁 See the **VMS manufacturer’s documentation** for instructions on how to use their VMS Viewer

STEP -10 Linking Cameras to Hardware (Inputs & Doors)

This section requires you to have already taken care of the prerequisites (listed below):

PREREQUISITES

- » The VMS unit and all the cameras must already be correctly installed /configured (**including camera names**).
- » SG Login (Username & Password) must be created at the VMS Unit with the appropriate user-privileges to cameras. (For LENSEC PVMS: the SG LOGIN must have full user-rights to all cameras at the VMS unit).
- » The correct client-side video plugins must be installed, and the GCS Web API Service is running.
- » System Galaxy is correctly registered for the 3rd DVR Support.
- » The SG ***DVR ENABLED option*** is checked (is System Settings Screen/General tab).
- » If you are supporting Auto-Callup on Alarm, you must have enabled the option in System Settings.
- » If you are linking a camera to an input, you must have configured the input to need acknowledging to support alarm callups.

LINKING A CAMERA (and Cameras)

❖ **Open the Device Properties Screen** - from SG menu **Configure ▶ Hardware ▶ Doors (... or Inputs)**

1. With the device screen open, click the EDIT button.
2. Select the ***DVR Camera Settings*** tab.
3. Choose the VMS Unit and select the desired Camera.
4. Click APPLY to save the settings.

FIGURE 9 – DOOR PROPERTIES – Camera Settings tab

The screenshot shows the 'Door Properties - Camera Settings' tab. At the top, there are dropdown menus for 'Loop:' (635 Test) and 'Control Unit:' (All Controllers). Below these are fields for 'Reader Name:' (Lobby Entrance) and 'Reader Type:' (HID ProxPro). A 'Notes:' text area is also present. On the right side, there are buttons for 'Edit', 'Apply', 'Cancel', 'Reports', and 'Scheduled Actions'. Below the main form, there are several tabs: 'General', 'Timing/Schedules', 'Relay 2 Settings', 'Alarm Options', 'Passback/Who's In', 'Group/Interlock Options', and 'CCTV Events'. Underneath these tabs, there are two dropdown menus: 'Select DVR:' (Lensec PVMS 01) and 'Select Camera:' (Customer 1000 - Camera 1).

FIGURE 10 – INPUT PROPERTIES – Camera Settings tab

The screenshot shows the 'Input Properties - Camera Settings' tab. At the top, there are dropdown menus for 'Port Type:' (Digital I/O Board (8 Inputs, 4 Outputs)) and 'Clust: 002, Cont: 001, B: 5, S: 2, I: 01'. Below these are fields for 'Input Name:' (DIO Input 1 (Snibby Button)) and 'ARM Schedule:' (** NEVER **). There is also a 'Mode:' dropdown (Normal Input) and a checked checkbox for 'Show In Tree'. On the right side, there is a 'Operate' button. Below the main form, there are several tabs: 'Link to I/O Groups', 'Options', 'CCTV Events', 'Graphic Symbols', and 'DVR Camera Settings'. Underneath these tabs, there are two dropdown menus: 'Select DVR:' (Lensec PVMS 01) and 'Select Camera:' (Customer 1000 - Camera 2).