
VIEWPOINT USER GUIDE

VERSION 4.5.3



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INTRODUCTION & SYSTEM REQUIREMENTS

ViewPoint works in conjunction with CompleteView* to stream a targeted PC's desktops or attached webcams as a video feed. Up to 8 desktops or webcams may be streamed from a single PC. CompleteView treats the streams as it would any physical IP camera, allowing for live viewing, playback, PTZ control, and all other functionality associated with a camera connected to CompleteView. ViewPoint comes pre-installed on any model of GuardStation in the PowerProtect line, but may also be purchased separately. ViewPoint is only available for use with Trial, Pro, and Enterprise editions of CompleteView. For organizations wishing to deploy ViewPoint in a dynamic, large-scale environment, optional Local License Server software is available that will validate and activate ViewPoint licenses locally. See the Local License Server section of this document for more information.

*Unless specified, the concepts and procedures described herein are applicable to any version of CompleteView.

This manual covers four primary topics:

- Installation of ViewPoint
- Licensing of ViewPoint
- Configuration of ViewPoint
- Configuration of CompleteView

A basic knowledge of standard Microsoft Windows functionality is presumed, as is operational knowledge of CompleteView.

System Requirements

ViewPoint requires Microsoft .NET Framework 4.5 and Microsoft Visual C++ 2015 Redistributable Package to operate. Either or both prerequisites will be automatically installed during ViewPoint installation (presuming an Internet connection), if necessary, but are nearly always already present on most current platforms.

In order to take advantage of hardware accelerated encoding ("High performance (HW)"), Windows 10 will need to be installed along with one of the following hardware components:

- Intel CPU with Intel Quick Sync Video
- NVIDIA GPU with NVENC
- AMD GPU with VCE

In addition, ViewPoint opens up TCP ports 8100 and 554 during installation. ViewPoint uses port 554 for RTSP by default.

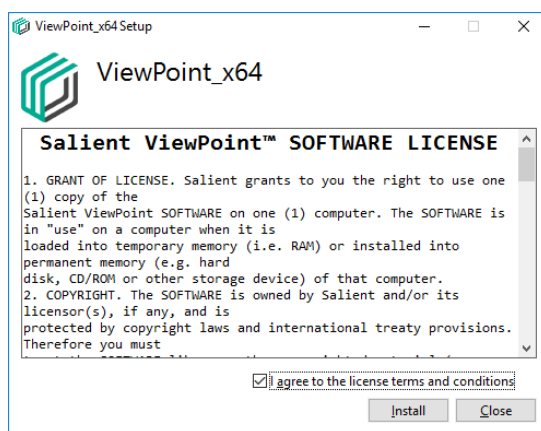
INSTALLING VIEWPOINT

Installing ViewPoint follows the standard Microsoft Wizard procedure, as detailed below. In addition, ViewPoint may be run as a "silent" install, as detailed in the Silent Installation, Licensing & Configuration section.

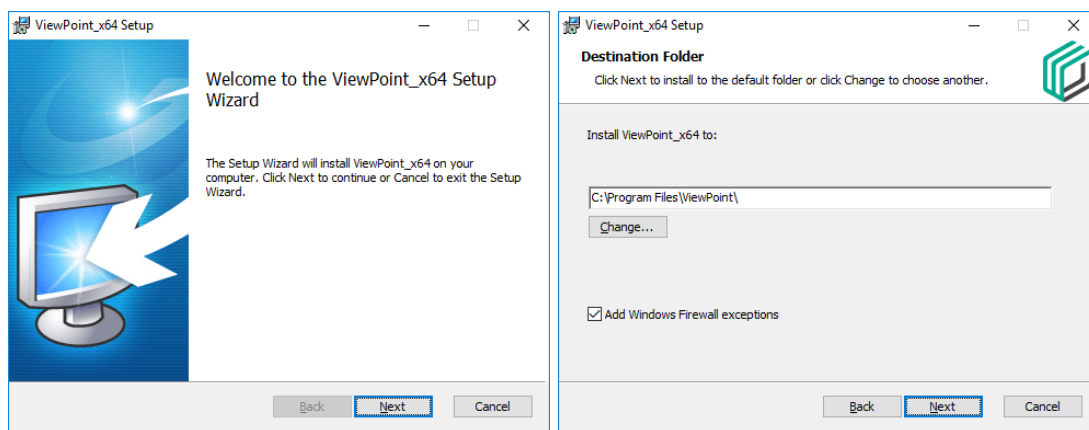
Double click on either the 64 or 32 bit installer, SetupViewPoint_x64_X.X.X.exe or SetupViewPoint_x86_X.X.X.exe.

Note: If installing ViewPoint on a PC without an Internet connection, Microsoft .NET Framework 4.5, [located here](#), may need to be downloaded to a machine with a connection. Copy to then install .NET on the target PC before installing ViewPoint.

Read and agree to the software license by selecting the check box, and click Install to continue.

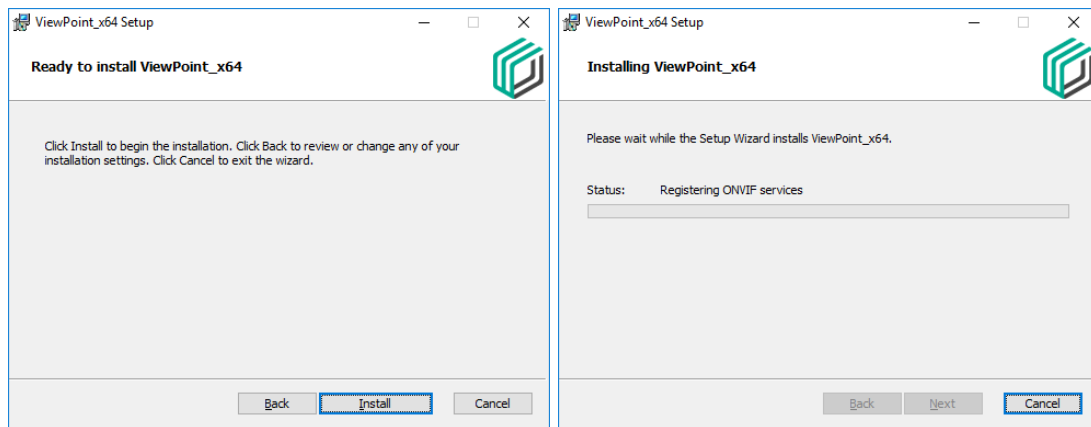


Click Next. Leave the "Add Windows Firewall exceptions" box checked*. Enter or accept the destination folder, and click Next.

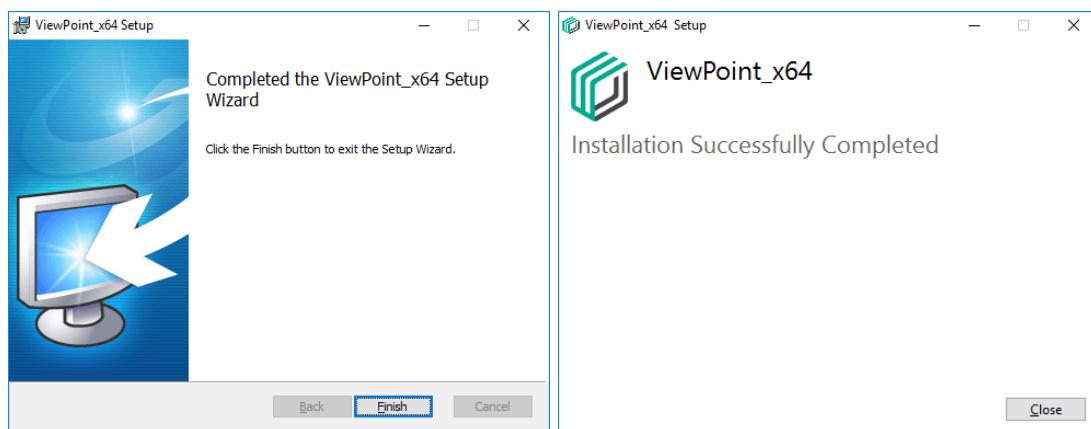


*For more information, see Introduction & System Requirements.

Select Install, and the installation will proceed.



When completed, click Close.



ViewPoint installation is now complete.

VIEWPOINT LICENSING

After successful installation of ViewPoint (and its dependencies), ViewPoint requires licensing. Licensing requires both license importation and activation, which can be accomplished multiple ways. All licensing may be completed using the ViewPoint interface after installation, or via the command line, as described in Silent Installation, Licensing & Configuration. Whether using the interface or command line, licensing and activation may be completed via:

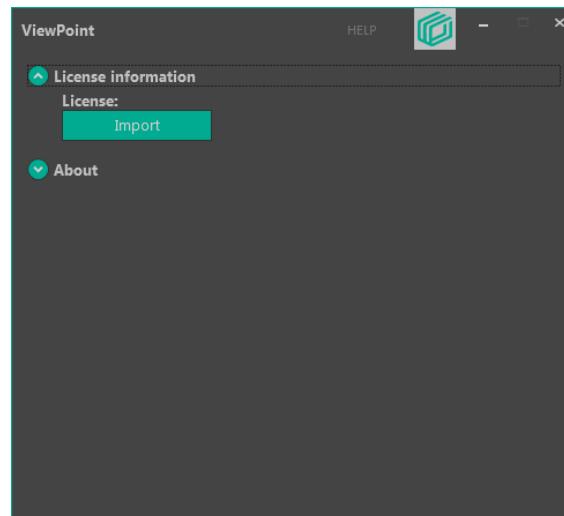
- Online Method
- Offline Method
- Local License Server*

*For enterprise level deployments (100+ systems) the use of the ViewPoint Local License Server may be beneficial. **The Local License Server is not required for ViewPoint functionality.** Refer to the Local License Server Introduction & Installation section for more information.

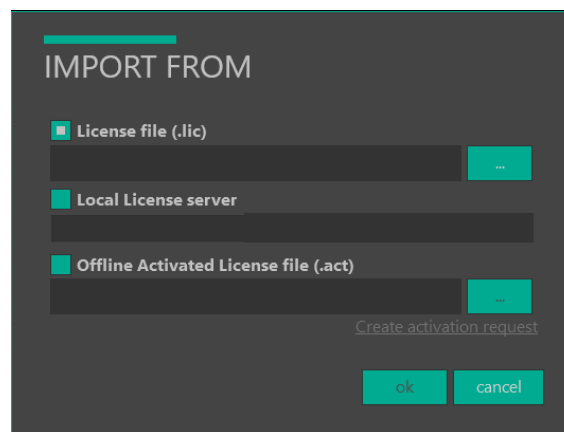
LICENSE IMPORTATION - ONLINE METHOD

The steps described in this section presume the PC has an Internet connection. See License Importation - Offline Method for machines without an Internet connection. ViewPoint may also be deployed and configured remotely, as described in the Remote Deployment and Configuration section.

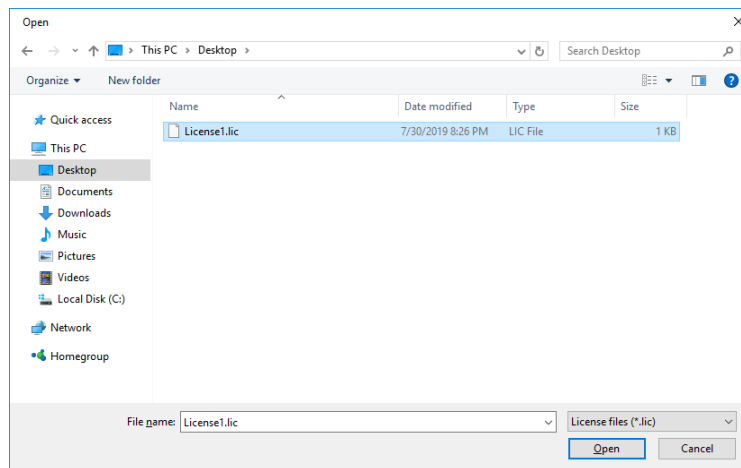
After purchasing ViewPoint, a license file will be sent via email. Save the license file to the target PC's local hard drive. Launch ViewPoint, if necessary, and select the License information section. Click Import. If a system was purchased with ViewPoint pre-installed, the software is already licensed, and the License Importation and License Activation sections may be skipped.



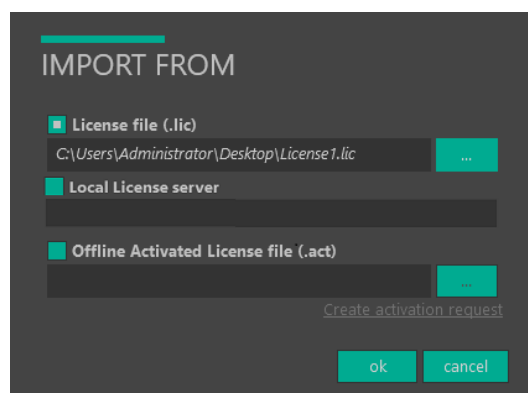
Select License file (.lic).

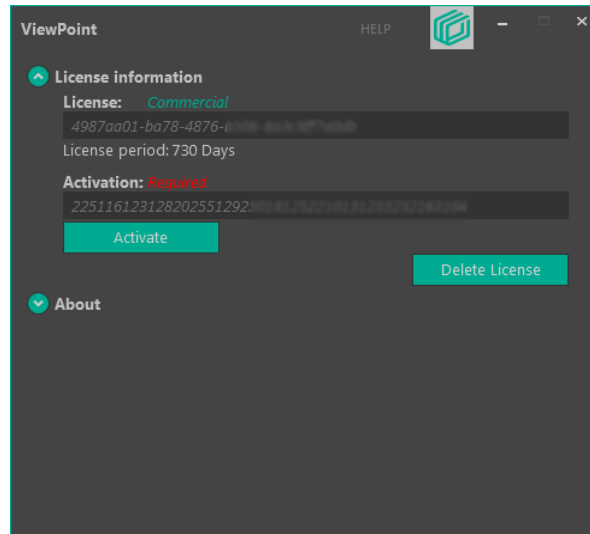


Browse to the location on the target PC's drive to which the license file was saved, and select it. Click Open.



The license file name will populate in the field. Click ok to import. A confirmation message will be displayed.

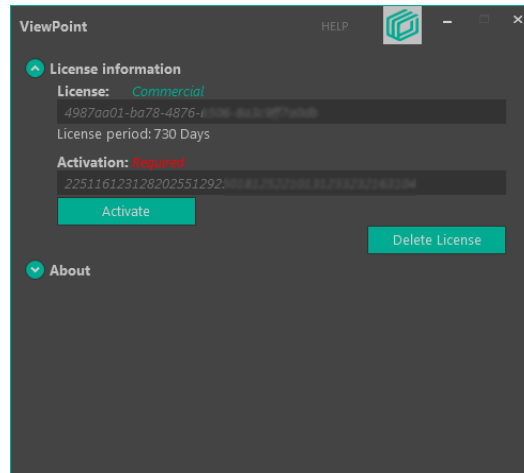




License importation is complete. It must now be activated.

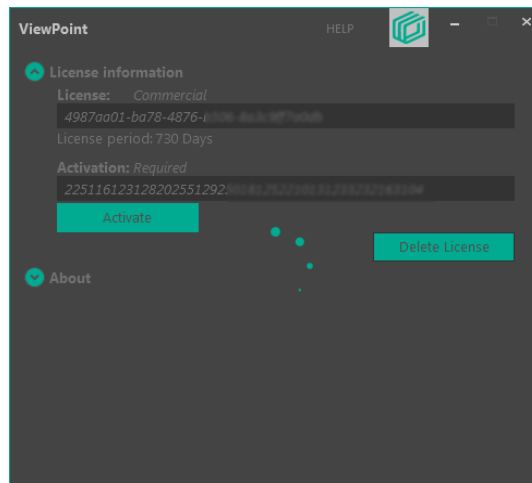
LICENSE ACTIVATION

After successfully importing ViewPoint's license, the license must be activated. Click Activate to proceed.



Click yes to proceed.

ViewPoint will then connect to the online activation server and validate the imported license.



A notification will be displayed upon successful activation of the license.

After successful activation, ViewPoint is ready for configuration.

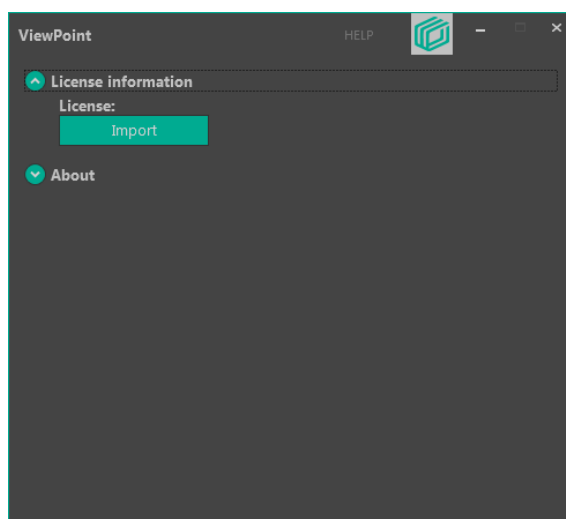
LICENSE IMPORTATION - OFFLINE METHOD

The steps described in this section presume the PC has no Internet connection. See License Importation - Online Method for machines with an Internet connection. ViewPoint may also be deployed and configured remotely, as described in the Remote Deployment and Configuration section.

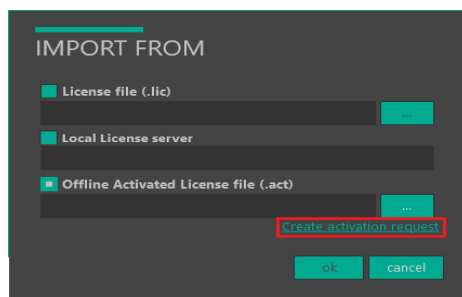
Offline activation of ViewPoint consists of three basic steps:

1. Generating Offline Activation Request file (.req)
2. Binding Offline Activation Request file (.req) with License file (.lic) at [License Activation Portal](#)
3. Importation of Activated License (.act)

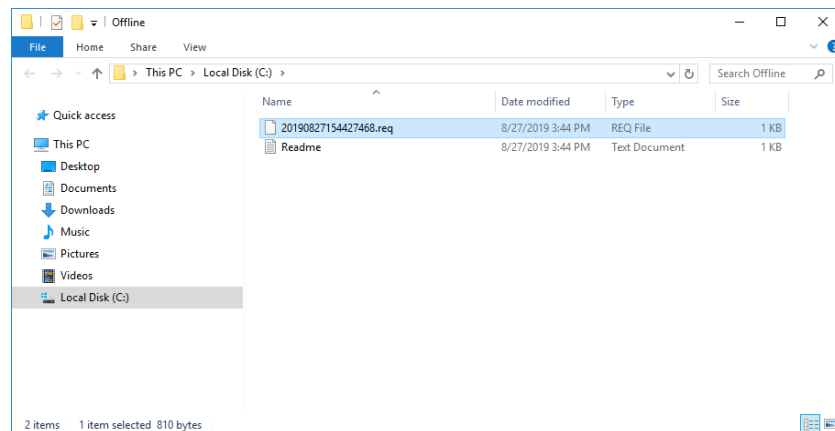
After installation, launch ViewPoint, if necessary, and select the License information section. Click Import.



Select Offline Activated License file (.act), and click "Create activation request".




Save the generated .req file to a thumb drive or other removable media.



Take the removable media to a machine with Internet connectivity, and browse to the [License Activation Portal](https://www.activation-service.net/) (<https://www.activation-service.net/>).

Licenses activation service

Offline Activation



Activation request file:

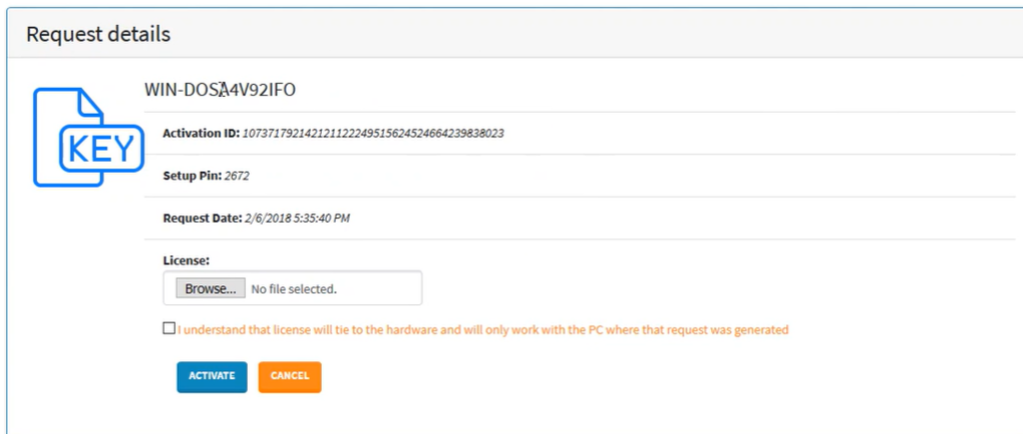
Choose File

No file chosen

Activation ID:

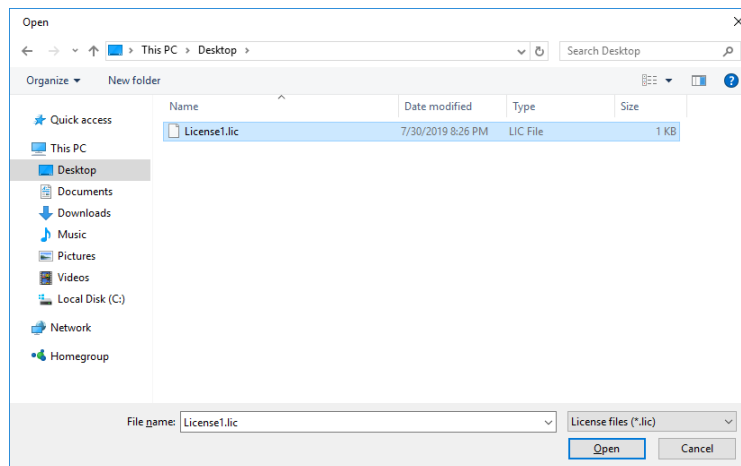
Setup Pin:

Select "Choose File", browse to the media on which the .req file was stored, and select it. The various fields will populate, based on the .req file.

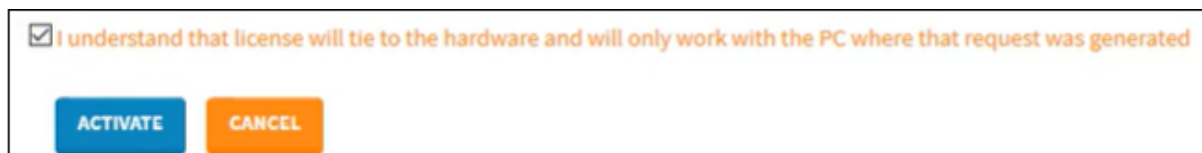


The "Request details" form displays information for a request titled "WIN-DOS4V92IFO". It includes a blue "KEY" icon, an "Activation ID" (107371792142121122249515624524664239838023), a "Setup Pin" (2672), and a "Request Date" (2/6/2018 5:35:40 PM). A "License:" section features a "Browse..." button and the text "No file selected.". Below this is a checkbox labeled "I understand that license will tie to the hardware and will only work with the PC where that request was generated". At the bottom are "ACTIVATE" and "CANCEL" buttons.

Next, select "Browse", and select the presented license (.lic) file.

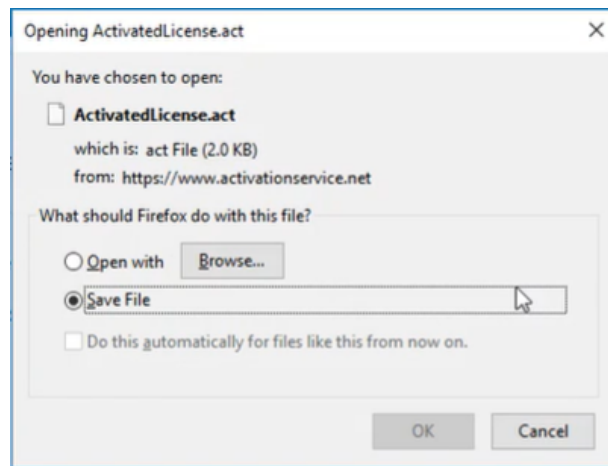


Check the "I understand that license..." box, and click "Activate".



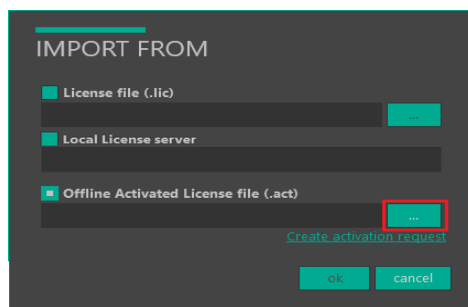
This section shows the checkbox for the license agreement, which is now checked. The text reads: "I understand that license will tie to the hardware and will only work with the PC where that request was generated". Below the text are the "ACTIVATE" and "CANCEL" buttons.

From the next screen, save the ActivatedLicense.act file to the removable media.



Take the removeable media to the target PC, and copy the ActivatedLicense.act file to it.

From the Import From screen, select the ellipses, browse to the .act file, select it, and click "ok".



A confirmation message will be displayed upon successful importation.

Note: The offline method both creates and activates the license. The activation process may be skipped.

SILENT INSTALLATION, LICENSING & CONFIGURATION

Administrators may use the following sets of commands to perform a silent installation and configuration of ViewPoint on a workstation. The installation process presumes the installer is running the commands as an administrator from the command line. Remote deployment is available in versions 4.5.3 and later.

Silent Installation and Configuration

During the silent installation process, there are three ways to license and configure ViewPoint, examples of which are described below. Descriptions of the pertinent command line switches can be found at the bottom of this section. Note that the use of any of the switches is optional, and their respective functions can be performed within the application after launch, detailed in other sections of this document.

Silent Installation Online Method

The online method described below presumes the ViewPoint workstation has an Internet connection and the license (.lic) file has been acquired, as described in the License Importation - Online Method section, above.

Steps:

1. Run `SetupViewPoint_x64_X.X.X.exe /install /quiet` as an administrator on the target machine.
2. Copy the license file into the installation directory.
3. From the installation directory (usually `..\ProgramFiles\ViewPoint\`), run `ViewPoint.exe /ImportLic xxx-xxx-xxx.lic /SetCameraUsername CameraUser /SetCameraPassword CameraPass /SetAppPassword appPass /SetHiddenMode 1`.

In the example above, hidden mode is active. To access ViewPoint, press control + alt + d. To unlock ViewPoint, enter the password set by the `/SetAppPassword` switch, in this case "appPass".

Silent Installation Offline Method

The offline method presumes the ViewPoint target machine does not have an Internet connection, but Internet access is available on another computer in order to send and receive activation requests and activated license files.

Steps:

1. Run `SetupViewPoint_x64_X.X.X.exe /install /quiet` as an administrator on the target machine.

2. From the installation directory (usually `..\ProgramFiles\ViewPoint\`), run `ViewPoint.exe /CreateReq my.req`.
3. Save and send the offline activation request (.req) file to the activation portal, as described in the License Importation - Offline Method section of this document.
4. Once received, copy the activated license file (.act) to the ViewPoint installation directory on the target machine.
5. From the installation directory, run `ViewPoint.exe /ImportAct ActivatedLicense.act` (optional switches omitted).

Silent Installation Local License Server Method

This method presumes the presence on the local network of a Local License Server. See the ViewPoint Local License Server Introduction & Installation section of this document for more information.

Steps:

1. Run `SetupViewPoint_x64_X.X.X.exe /install /quiet` as an administrator on the target machine.
2. From the installation directory (usually `..\ProgramFiles\ViewPoint\`), run `ViewPoint.exe /LicServer http://172.18.21.10:8188 /SetCameraUsername CameraUser /SetCameraPassword CameraPass /SetAppPassword AppPass /SetHiddenMode 1`.

SILENT INSTALLATION CONFIGURATION SWITCHES

SWITCH	PARAMETER
<code>/ImportLic</code>	To be used for online activation. Specify the name of the license (.lic) file to be applied to ViewPoint.
<code>/CreateReq</code>	To be used to generate an offline activation request file (.req). Specify the name of the file to be created.
<code>/ImportAct</code>	To be used to activate an offline ViewPoint installation. Specify the name of the activated license (.act) file to be used.
<code>/LicServer</code>	To be used with a Local License Server. Specify the IP address and port of the LLS. Default port is 8188.
<code>/SetCameraUsername</code>	Specifies the username of the camera as created in CompleteView during the Add Camera process. See here for CompleteView 4.X or here for CompleteView 20/20.
<code>/SetCameraPassword</code>	Specifies the password of the camera username created above. Default credentials are "admin/admin".

SWITCH	PARAMETER
/SetAppPassword	Specifies the password for the ViewPoint user interface. Defaults to no password.
/SetHiddenMode	Toggles hidden mode. 1 = enabled, 0 = disabled. If enabled, use control + alt + d to access the ViewPoint UI.

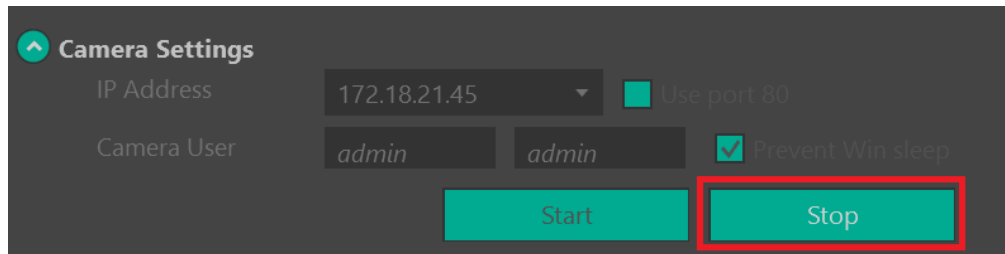
VIEWPOINT CONFIGURATION

After successfully installing and licensing ViewPoint, its configuration may now be customized as desired. It's possible that no configuration will be required, as ViewPoint comes pre-configured to work with CompleteView after installation. Note that silent deployment also allows for configuration of ViewPoint during installation. Refer to Silent Installation, Licensing & Configuration for more information.

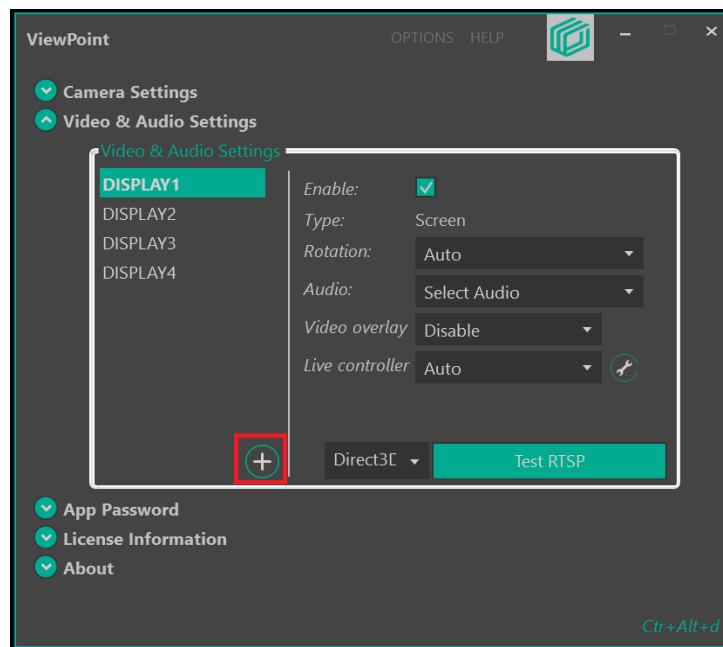
ADDING A MEDIA SOURCE

Use the steps below to add a system's desktop or attached webcam to ViewPoint. Refer to the following sections for configuration information.

Verify that all media streams are currently inactive. From within Camera Settings, select Stop.

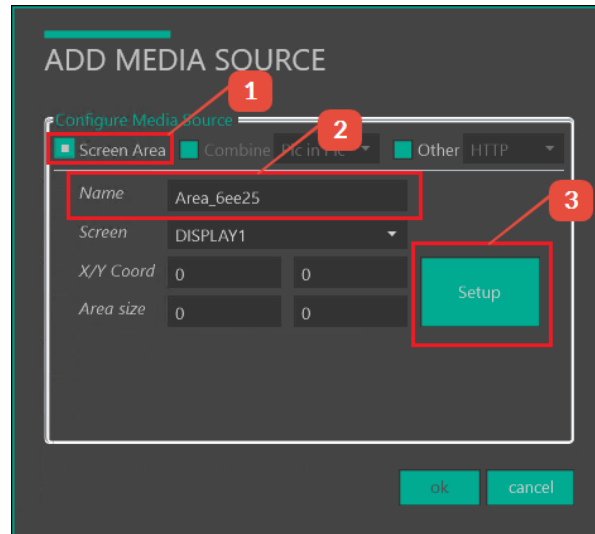


Expand Video & Audio Settings, and click the Add button.

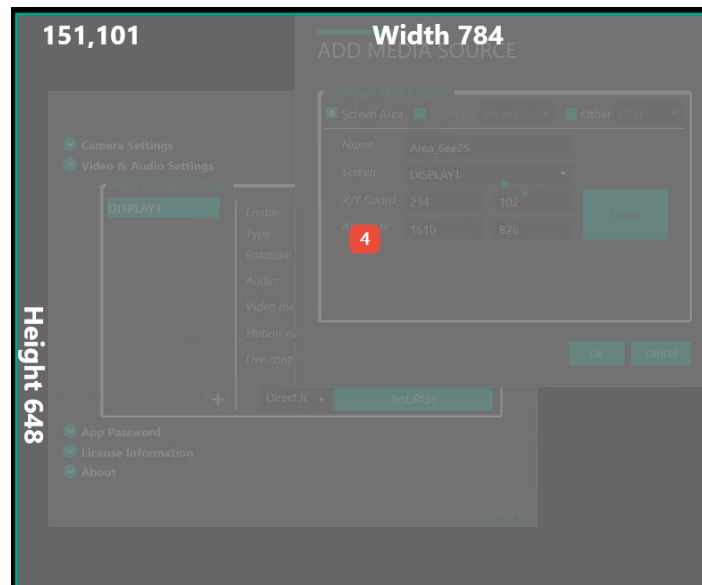


Add Screen Area

To add either a section of or an entire desktop area:

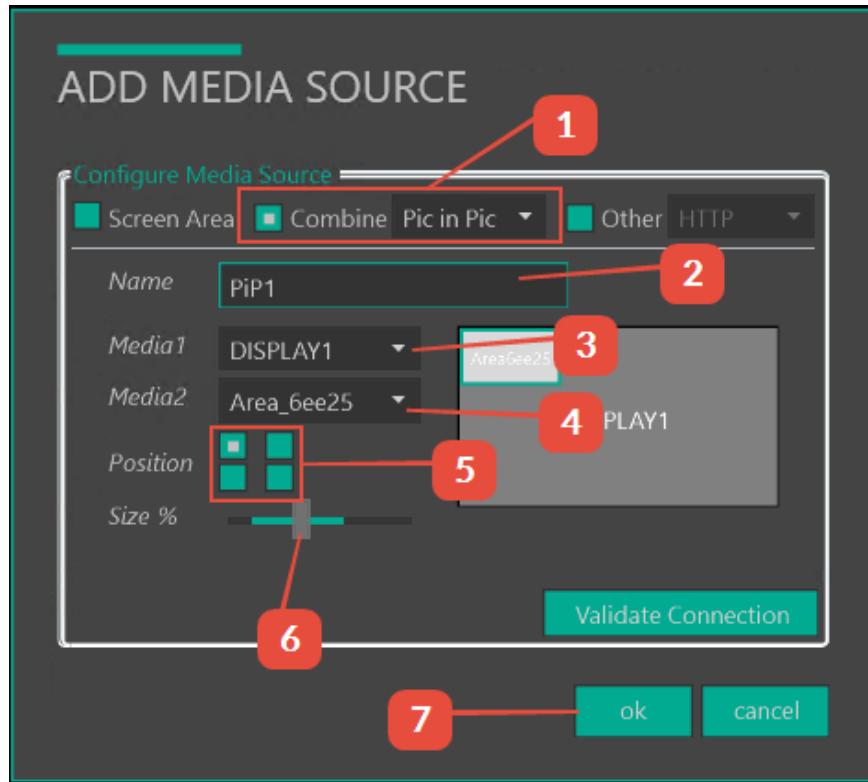


1. Select Screen Area
2. Optionally enter a name
3. Click Setup
4. Size the window to encompass the desired area, then press Enter on the keyboard.
5. Click ok in the Add Media Source window to save.



Combine Picture in Picture

To display picture in picture (PiP), multiple streams must be available for display.



1. Select Combine Pic in Pic
2. Optionally enter a name
3. Select the base media upon which the PiP will be displayed.
4. Select the media to display in the PiP window.
5. Select the position within the base media in which to display the PiP stream.
6. Use the slider to scale the PiP to the desired size.
7. Click ok

Other Streams

ViewPoint is capable of displaying streams from HTTP, RTSP, and Audio sources.

ADD MEDIA SOURCE

Configure Media Source

☒ Screen Area ☒ Combine ☐ Pic in Pic ☒ Other HTTP

Name

Source URL

User/Pass

Resolution x

Encoder ☒ Multipartdemux

1. Select Other, then HTTP, RTSP, or Audio only from the dropdown menu.
2. Provide the required information for the selected stream type.
3. Click ok.

CAMERA SETTINGS

ViewPoint's Camera Settings section displays configuration information for the stream to be sent to CompleteView, detailed below.

Supply the Camera User credentials to CompleteView during setup. If desired, the ID and password maybe changed by stopping the camera stream, changing the credentials, and restarting the stream.

The list of camera streams emanating from the target PC are enumerated here along with their respective port information and Video Source name. Most target PCs will have only one "Started Camera".

The screenshot shows a 'Camera Settings' window with a dark background. At the top left is a green circle with a white upward arrow. Below it, the title 'Camera Settings' is in white. The settings are as follows: 'IP Address' is a dropdown menu showing '172.18.23.95'; 'Camera User' has two input fields, both containing 'admin'; 'Use port 80' is a checked checkbox; 'Prevent Win sleep' is a checked checkbox. At the bottom are three buttons: 'Safely close RDP' (red), 'Start' (blue), and 'Stop' (blue).

CAMERA SETTINGS

IP address	IP address of local machine. Used as camera IP address in CompleteView.
Use port 80	Forces ViewPoint to use port 80 for communication with CompleteView.
Camera User	Used as Username and Password in CompleteView.
Prevent Win sleep	Prevents Windows from going to sleep while ViewPoint is running, in order to maintain the stream.
Safe close RDP	Allows streaming to persist on PCs when RDP session gets disconnected. See below for more details.
Start	Starts the stream to CompleteView.
Stop	Stops the stream to ViewPoint. The stream must always be stopped before configuration, and restarted after changes are made.

Once again, before making any changes to ViewPoint's configuration, its video stream must be stopped. Click the Stop button to do so. After the desired changes have been made, click Start to resume the video stream.

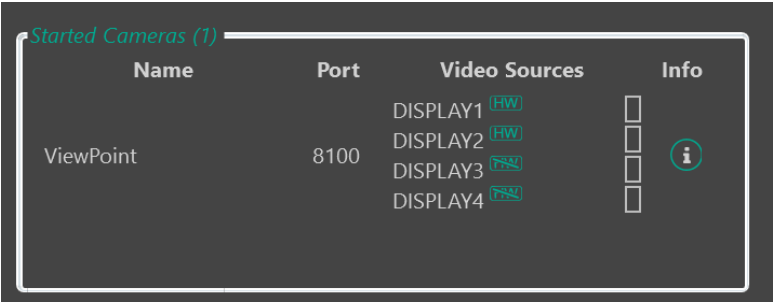
In most cases, the default settings are appropriate for use with CompleteView.

Safe Close RDP

When closing an RDP session, Windows may automatically stop updating the user's desktop or log the user out. In those cases, ViewPoint will not be able to capture the desktop and will either transmit a black screen or stop sending the live feed. Transmitting the desktop continues once the RDP session get reconnected.



ViewPoint 4.2.2 and newer allows maintaining the stream on PCs when the RDP session gets disconnected. To do so, click the Safe close RDP button. Once this button is pushed, ViewPoint will redirect the current RDP session into the console and disconnect the RDP client.

Started Cameras



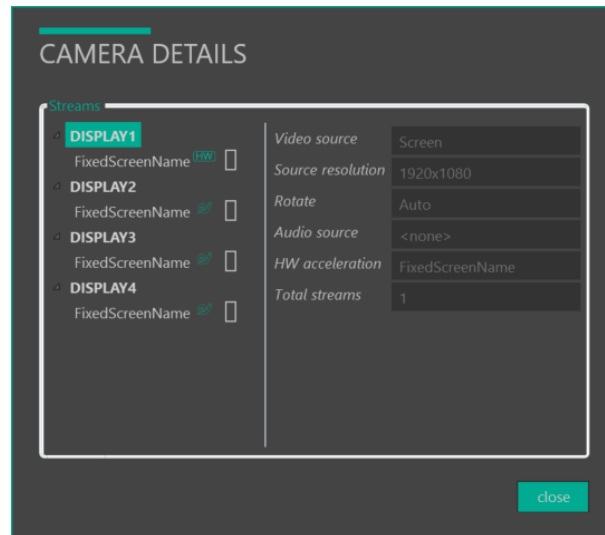
The Started Cameras section enumerates the various "cameras" and their respective streams coming from the PC.

STARTED CAMERAS

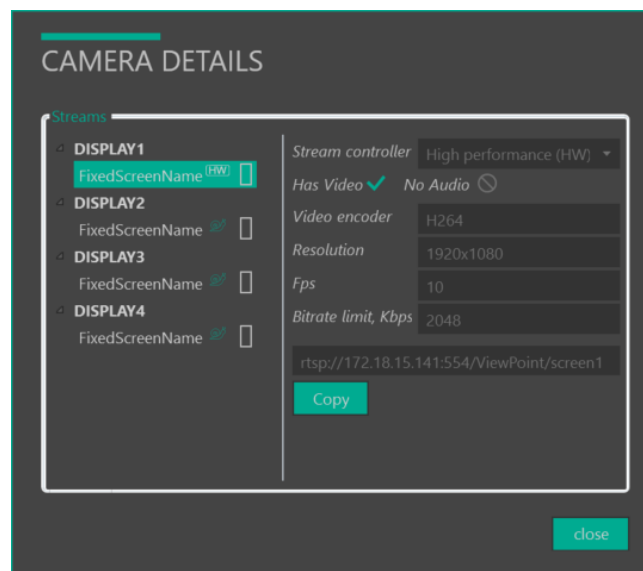
Name	Identifies the name of the camera stream.
Port	The port over which ViewPoint is streaming.
Video Sources	Identifies the source of the video stream. If hardware acceleration is enabled and functioning, an "HW" icon is displayed.
Connected Clients	 When moused over, displays IP address of connected CompleteView server.
Info	 When clicked, launches the Camera Details window, discussed in the next section.

CAMERA DETAILS

Clicking on the Info button will launch Camera Details, where the settings configured in Video & Audio Settings are displayed for the selected camera. Once again, the stream must be stopped before editing configurations. To configure these settings, see Video & Audio Settings for details.

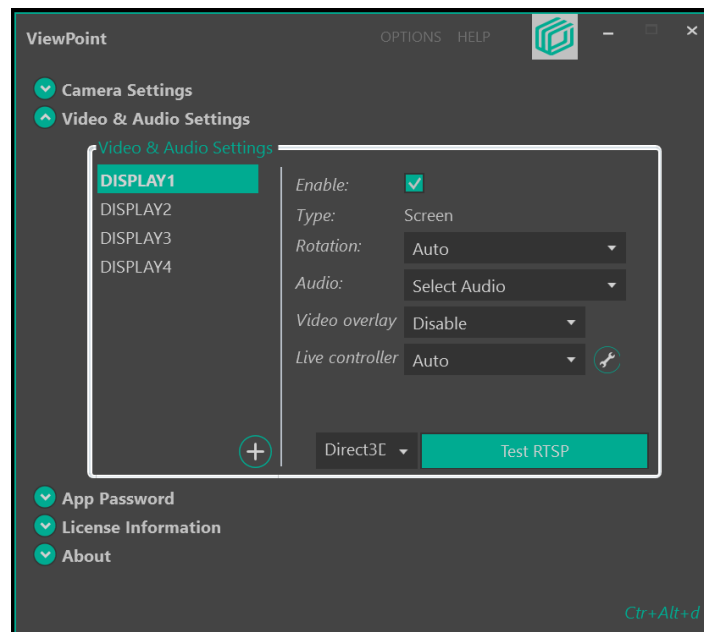


Selecting a given stream will display its controller, encoder, and other information. From here, the stream's RTSP URL may be copied for use. Once again, the stream must be stopped for configuration, and configuration is done in Video & Audio Settings.




VIDEO & AUDIO SETTINGS

The Video & Audio Settings section allows configuration of many functions of ViewPoint. Each is listed below, and some functions will be discussed further. To make changes, stop the ViewPoint camera.



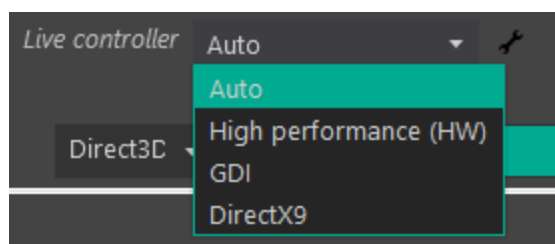
VIDEO & AUDIO SETTINGS

Enable	Enables or disables the stream
Type	Describes the source type of the stream (Desktop or Webcam).
Rotation	Dictates how the stream will be oriented in CompleteView. Selecting Auto will stream the desktop as it appears on the native monitor. 90 degree rotations and vertical and horizontal flips are available as well.
Audio	Selects audio source
Video overlay	Enables or disables video overlay. Select enable, then click the wrench icon to edit settings. Settings include Cursor, Timestamp, and User text overlays (enter text if enabled).
Live controller	Live controller captures and encodes particular media sources. Select enable, then click the wrench icon to edit settings. See section below.

Add Media Source	 Adds a new stream from the current video source. See section below.
Video engine	Direct3D should be used for normal operation. OpenGL is available for testing purposes.
Test RTSP	Tests the RTSP stream. Select the stream you wish to test, and click ok. A series of cascading windows will be displayed, if the stream is working. Click ok to stop the test.

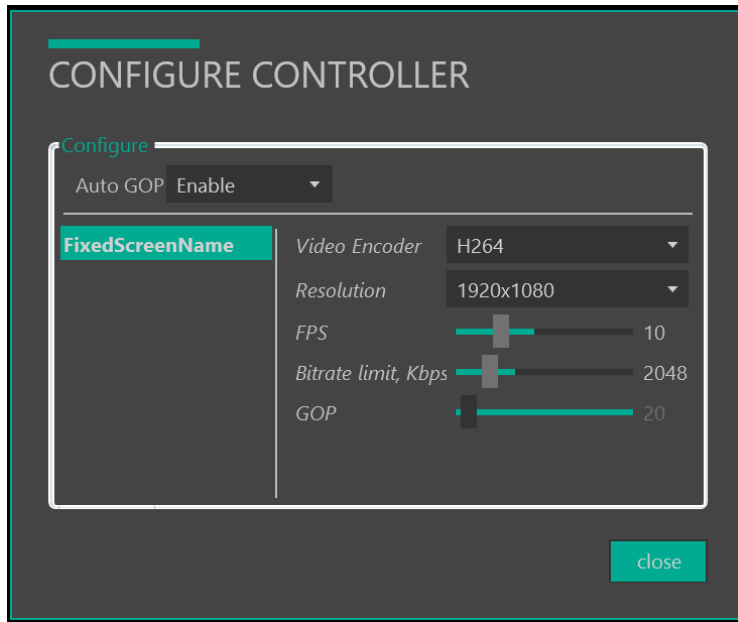
Live Controller

Auto, High performance (HW), GDI, or DirectX 9 may be selected. Configuration is detailed in the next section.



LIVE CONTROLLER OPTIONS

Auto	If Auto is selected, ViewPoint will first try to use "High performance (HW)" controller. If "High performance (HW)" controller was not able to initiate either Full acceleration or partial acceleration, ViewPoint will switch to GDI controller. Generally speaking, Auto should always be used and is the default setting.
High performance (HW)	Detects supported Intel QSV, NVIDIA NVENC, or AMD VCE enabled devices and enables hardware for streaming.
GDI	Manually selects GDI for encoding.
DirectX9	Manually selects DirectX9 for encoding.



CONFIGURE CONTROLLER

Auto GOP	Enable or Disable. Disabling allows manual GOP size configuration via the slider below.
Video encoder	H.264 or Jpeg. Use H.264 whenever possible.
Resolution	Select the desired resolution of the stream. If a supported HW acceleration device is available, resolutions up to 4K can be enabled in the configuration file. See below for more information.
FPS	Select the desired framerate (10 fps recommended).
Bitrate limit, Kbps	Use the slider to select the bitrate limit for the stream.
GOP	If Auto GOP is disabled, select the Group of Pictures (GOP) size for the stream (not present when using Jpeg as encoder).

Enabling 4K Resolution

ViewPoint is capable of streaming 4K video to the CompleteView server. 4K is disabled by default. **It is strongly advised that only systems utilizing GPU acceleration attempt to stream 4K. Systems attempting to stream 4K without GPU acceleration may experience significant loading of the CPU causing extremely poor system performance.**

Steps:

1. Close ViewPoint.
2. With a text editor, open ViewPoint.exe.Config, located in the ViewPoint installation directory.
3. Locate the following segment:

```
<setting name="VideoResolutionLimit" serializeAs="String">  
    <value>FHD</value>  
</setting>
```

4. Change the highlighted value from FHD to DCI4K:

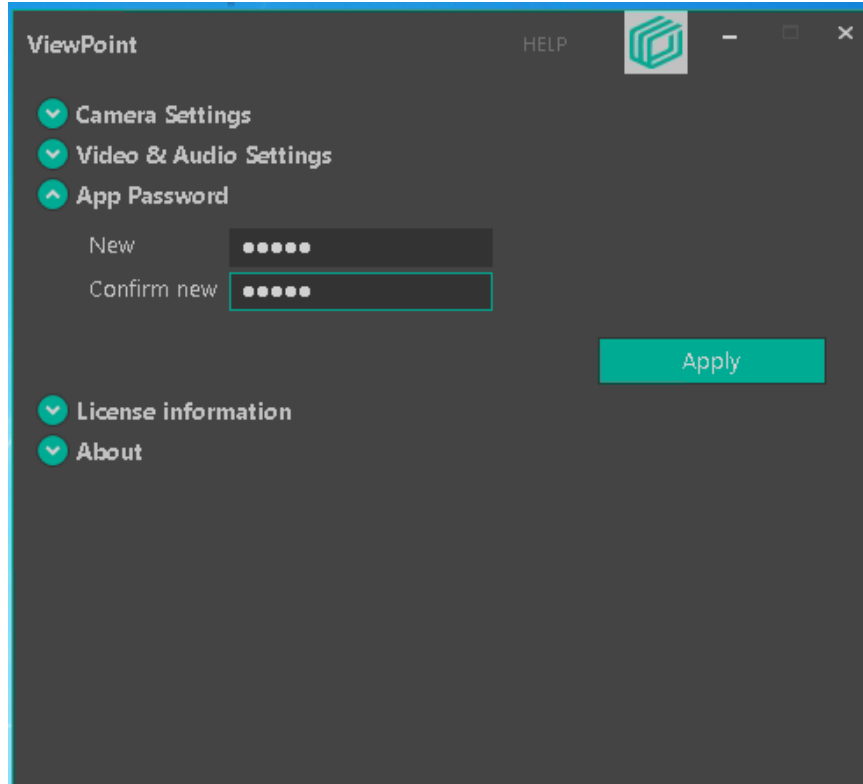
```
<setting name="VideoResolutionLimit" serializeAs="String">  
    <value>DCI4K</value>  
</setting>
```

5. Save and close ViewPoint.exe.Config
6. Launch ViewPoint, open Camera Details, and verify the resolution list has been updated.

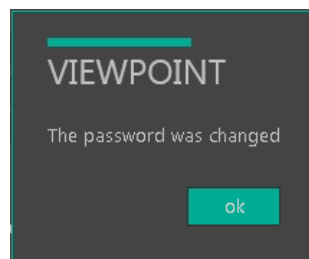
APP PASSWORD

ViewPoint comes pre-configured with no password. For security reasons, it is strongly advised that the password be changed. Note that the password only controls access to the local installation of ViewPoint, and not the camera setup in CompleteView.

Select the App Password section. Enter the current password (if prompted to do so), then enter the new, more secure password, once in the New field and again in the Confirm new field. Click Apply.

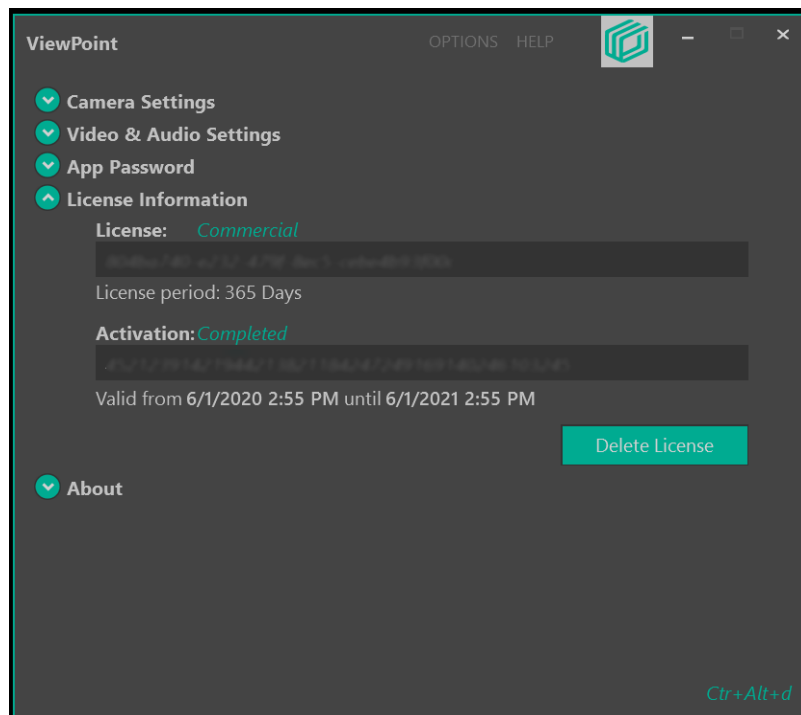


After successfully changing the password, a confirmation notification will appear.



LICENSE INFORMATION

The License information section details the license type, activation status, and validity.

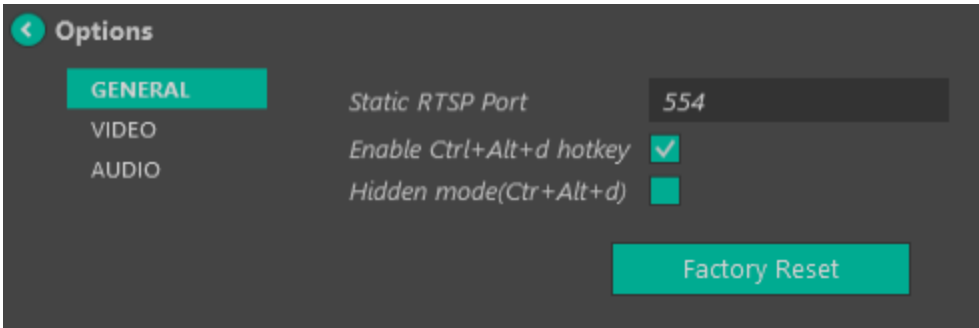


VIEWPOINT OPTIONS

The following sections detail the various, application-wide options available in ViewPoint. Select OPTIONS from the top menu to access the GENERAL, VIDEO, and AUDIO options.



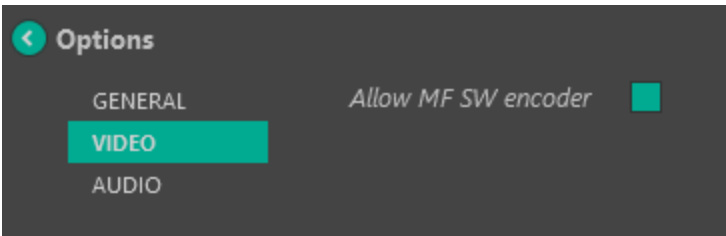
General



GENERAL OPTIONS

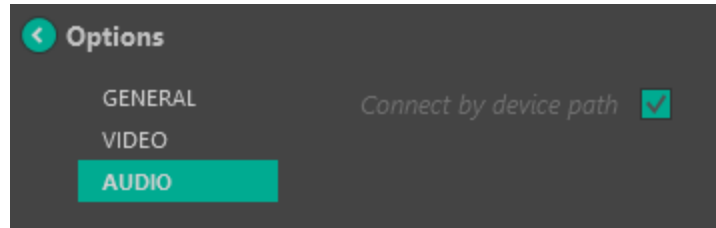
Static RTSP Port	Allows assignment of a particular RTSP port. Should only be used when necessary.
Enable Ctrl+Alt+d hotkey	When enabled, allows ViewPoint to be brought up using the listed key combination.
Hidden mode(Ctrl+Alt+d)	When enabled, prevents ViewPoint from appearing in the system tray.
Factory Reset	Resets ViewPoint to factory defaults, retaining only the license information.

Video



Allow MF SW encoder - If ViewPoint fails to use a hardware encoder, ViewPoint will switch to Windows embedded Media Foundation H.264 video encoder (not recommended). If disabled, ViewPoint will switch to native software encoder if a HW encoder isn't found.

Audio



Connect by device path - In audio enabled systems, will use the machine's URL on the network for audio streaming.

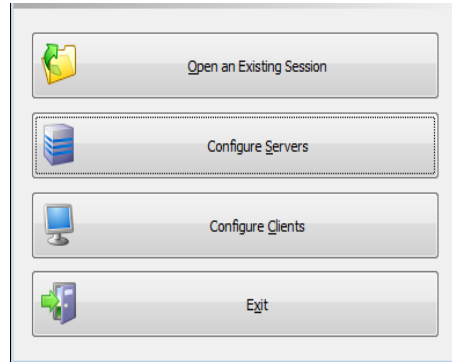
COMPLETEVIEW CONFIGURATION

CompleteView handles ViewPoint like any other IP camera. Basic understanding of CompleteView functionality is presumed, but detailed below are the steps required to add a ViewPoint desktop stream from a target PC.

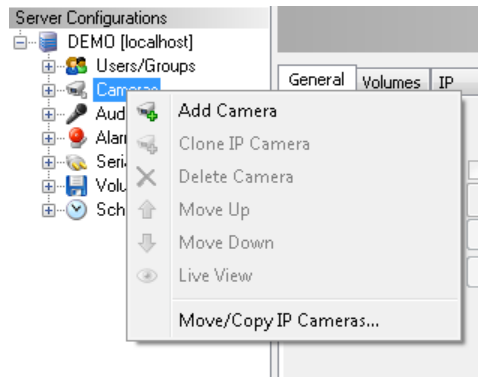
Once again, CompleteView version 4.7.3 or newer is required to function with ViewPoint. Both CompleteView 4.X and CompleteView 20/20 will be discussed.

ADDING A VIEWPOINT CAMERA IN COMPLETEVIEW 4.X

Launch CompleteView System Configuration, select Configure Servers, and log into the appropriate server as an administrator.



Right click on Cameras and choose Add Camera.



Enter a meaningful camera name, and click Ok.

Select the IP tab. In the Manufacturer drop down menu, select ViewPoint. In the Model drop down menu, select either Desktop or Webcam. Enter the IP address of the "camera" / target PC (as shown in the IP address field of the Camera Settings section). Enter the Username and Password in the appropriate fields (default admin / admin). All other settings should be left to defaults. Note that only H.264 video is supported from ViewPoint cameras at this time.

The screenshot shows a web-based configuration interface for an IP camera. The interface has a top navigation bar with tabs: General, Volumes, IP, PTZ, Motion/Alarm, Audio, Email, Analytics, Edge Storage, and Advanced. The 'IP' tab is currently selected.

Camera Configuration Section:

- Manufacturer:** ViewPoint (dropdown)
- Model:** Desktop (dropdown)
- Address (Hostname/IP):** 172.17.1.16
- Camera ID:** 1 (dropdown)
- HTTP Port:** 80
- RTSP Port:** 554
- Configure Camera:** (button)
- Username:** admin
- Password:** (masked with dots)
- Image Path:** /ViewPoint/screen1
- View Image:** (button)
- Timeout (s):** 3 (spinner)
- Retries:** 0 (spinner)
- Time Zone:** (UTC-06:00) Central Time (US & Canada) (dropdown)
- Protocol:** TCP (radio button selected), UDP (radio button)

Stream Type:

- ☐ MJPEG
- ☐ MPEG4
- ☒ H.264

Stream Processing:

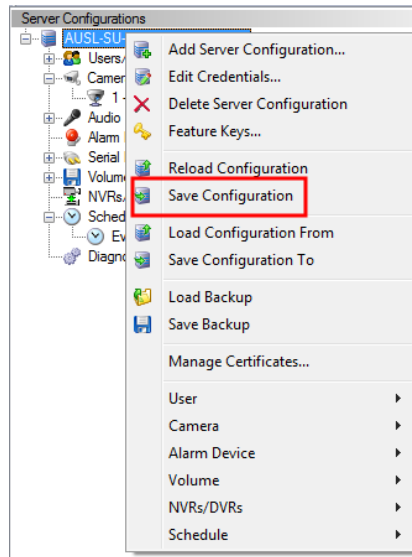
- ☐ Disable
- Disabling stream processing increases server performance but also disables these features:
 1. Server Motion Detection
 2. Dynamic Resolution Scaling
 3. Transcode or Recompress Video
 4. Camera Preview in Setup
 5. Video Analytics
 6. Email notification
 7. Live View Digital PTZ
 8. Stream Properties Overlay
 9. Timestamp Overlay
 10. Camera Name Overlay

Compression of Recorded Video:

- ☒ Store original video from camera
- ☐ Recompress video

To add subsequent streams from the ViewPoint desktop, follow the steps above, and associate the appropriate stream to the appropriate Camera ID (e.g. DISPLAY1 = Camera ID 1, DISPLAY2 = Camera ID 2, etc.).

After entering the requisite information, save the configuration by right clicking the server name, and selecting Save Configuration.



The ViewPoint camera has now been added to CompleteView. Add the camera to views as you would any other camera in CompleteView. Consult CompleteView documentation for further explanation.

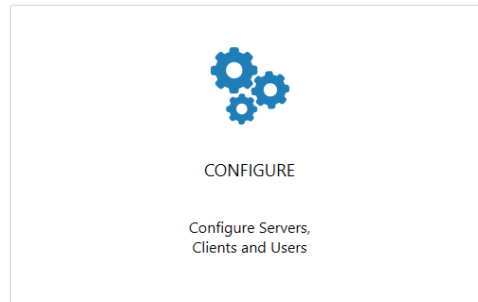
Note that only CompleteView users with administrative privileges may view or review video from a ViewPoint camera.

It should also be noted that the camera will only stream to CompleteView when a user is logged into the target PC.

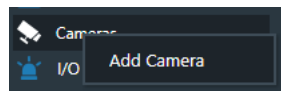
ADDING A VIEWPOINT CAMERA IN COMPLETEVIEW 20/20

A ViewPoint stream is added to CompleteView 20/20 like any other camera.

Launch the Desktop Client as an administrator, and select Configure.



Select the desired Recording Server, Right click on Cameras and choose Add Camera.



Enter the following information:

ENABLE	ID	CAMERA NAME	TYPE	DEVICE	DRIVER	CHANNEL	USER NAME	PASSWORD	RESOLUTION	COMPRESSION	FPS	SCHEDULE	STATUS
<input checked="" type="checkbox"/>	1	Front Desk	Network	172.18.15.141	ViewPoint Desktop	1	admin	*****	Auto	H264	8	Recording Sched...	

The **Camera Name** should be something meaningful to delineate the stream's origins. Select Network for **Type**. For **Device**, enter the IP address of from the PC's desktop, as found under **Camera Settings** in ViewPoint. Select ViewPoint and Desktop (or Webcam) for the **Driver**. Select the proper **Channel** for the desired stream (usually channel 1, but multiple "cameras" may be added to CompleteView 20/20 in order to add multiple streams from ViewPoint). Use the **User Name** and **Password** from the **Camera User** fields in **Camera Settings**. Unless specifically necessary, leave the Resolution, Compression, and FPS fields as default. Set the Schedule as appropriate. Save the configuration.

The ViewPoint camera has now been added to CompleteView 20/20. Add the camera to views as you would any other camera in CompleteView 20/20. Consult CompleteView 20/20 documentation for further explanation.

Note that only CompleteView 20/20 users with administrative privileges may view or review video from a ViewPoint camera.

It should also be noted that the camera will only stream to CompleteView 20/20 when a user is logged into the target PC.

VIEWPOINT LOCAL LICENSE SERVER INTRODUCTION & INSTALLATION

For organizations wishing to deploy ViewPoint in a large-scale environment, optional software is available that will assign and activate ViewPoint licenses from a local server.

Note: The ViewPoint Local License Server is not required for full functionality of the ViewPoint Client, and is intended for use in specific environments. It does not interact with any other Salient software, and is used only for ViewPoint license management. Please contact your Salient representative for more information.

License Server System Requirements

ViewPoint License Server runs only in a 64 bit environment.

- Windows 10, Windows 8, Windows 8.1, Windows Server 2012, Windows Server 2012 R2, Windows Server 2016

In addition, port 8188 for incoming connections and port 8189 for the License Manager application must be open.

Architecture Overview

The License Server consist of 3 main parts, which will be detailed in their own sections.

1. Windows Service – “ViewPoint Local License Service”
2. Database – “ProgramData\ViewPoint\LLS\LicensePool.mdf”
3. License management utility – “LicenseManager.exe”

Installation

The installation process is automatically handled by the setup application. Double click “SetupViewPointLLS_x64_x.x.x.exe”. The setup application performs the following:



- Installs .NET4.5 if required
- Installs SqlLocalDB 2017 if required
- Installs ViewPoint Local License Server Windows Service

- Installs ViewPoint License Management Utility
- Initializes \LicensePool.mdf database
- Registers services on <http://localhost:8188/EnterpriseLicenseServer> and <http://localhost:8189/EnterpriseLicenseServerManager>
- Create firewall rules for ports 8188 and 8189

Local License Server Windows Service

The Windows Service hosts two web services:

<http://localhost:8188/EnterpriseLicenseServer> which processes license requests from ViewPoint.

<http://localhost:8189/EnterpriseLicenseServerManager> which manages the license pool and configuration commands from “LicenseManager.exe”.

The service is configured to run under the “Local Service” account and auto starts upon Windows boot up. It installs to \ViewPoint\LLS\LicenseWebService and utilizes configuration file:

\ViewPoint\LLS\LicenseWebService\LocalLicenseServer.exe.config

Windows Service is configured to run under “Local Service” account and AutoStart with Windows

License Service registers license requests from ViewPoint instances and assigns a license for each request.

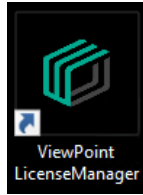
Local License Server Database

ViewPoint Local License Server utilizes a MS SQL 2017 database for the storage of all licenses, requests from ViewPoint, and license assignments within the organization.

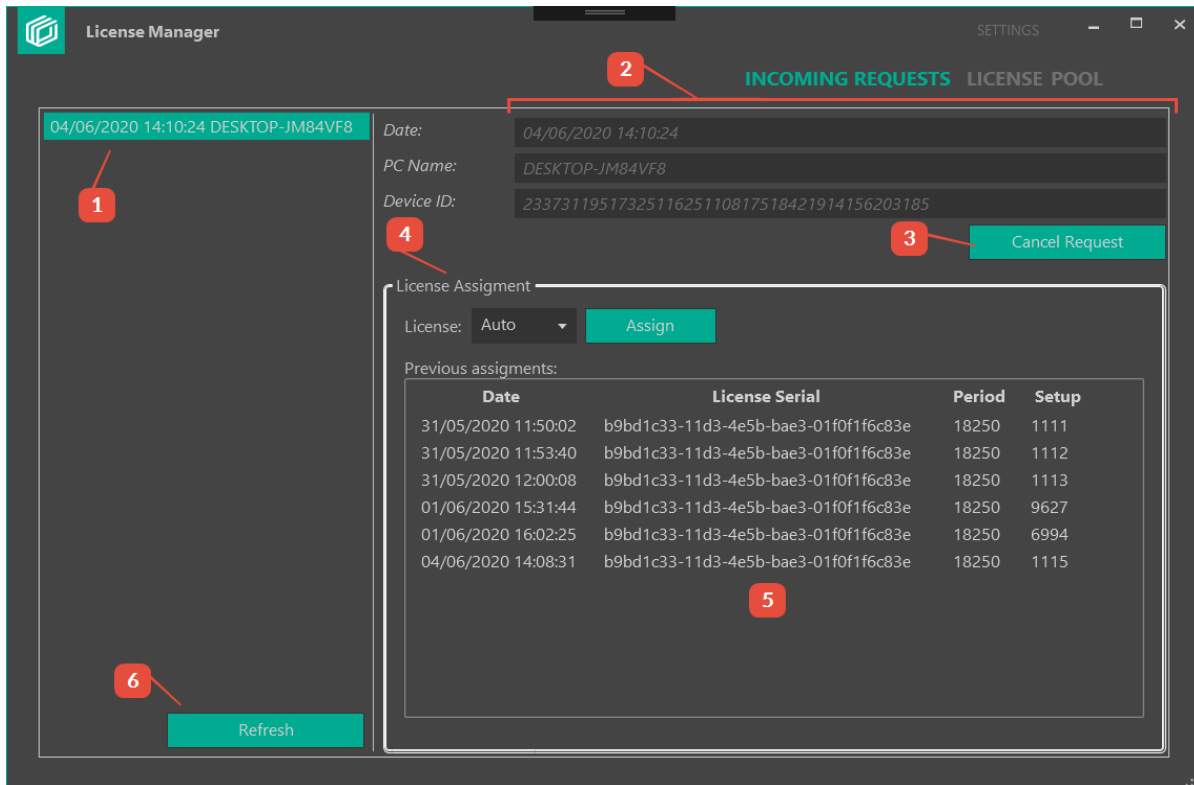
The database is the key element of the data consistency and correct functionality of the Local License Server. The information is stored locally and doesn’t sync with the Internet-based ViewPoint Local License Server. The organization is responsible for keeping the database secured and for backup management. It is currently not possible to recreate the local server license assignment history and perform correct license assignment in the event the local database is compromised or deleted.

Local License Server Management Utility

The Management Utility is responsible for adding licenses to the License Pool, performing licensing for non-assigned machines for initial assignments, configuring Local License Service, and displaying assignments history. Double click the icon to launch the utility.



Incoming Requests

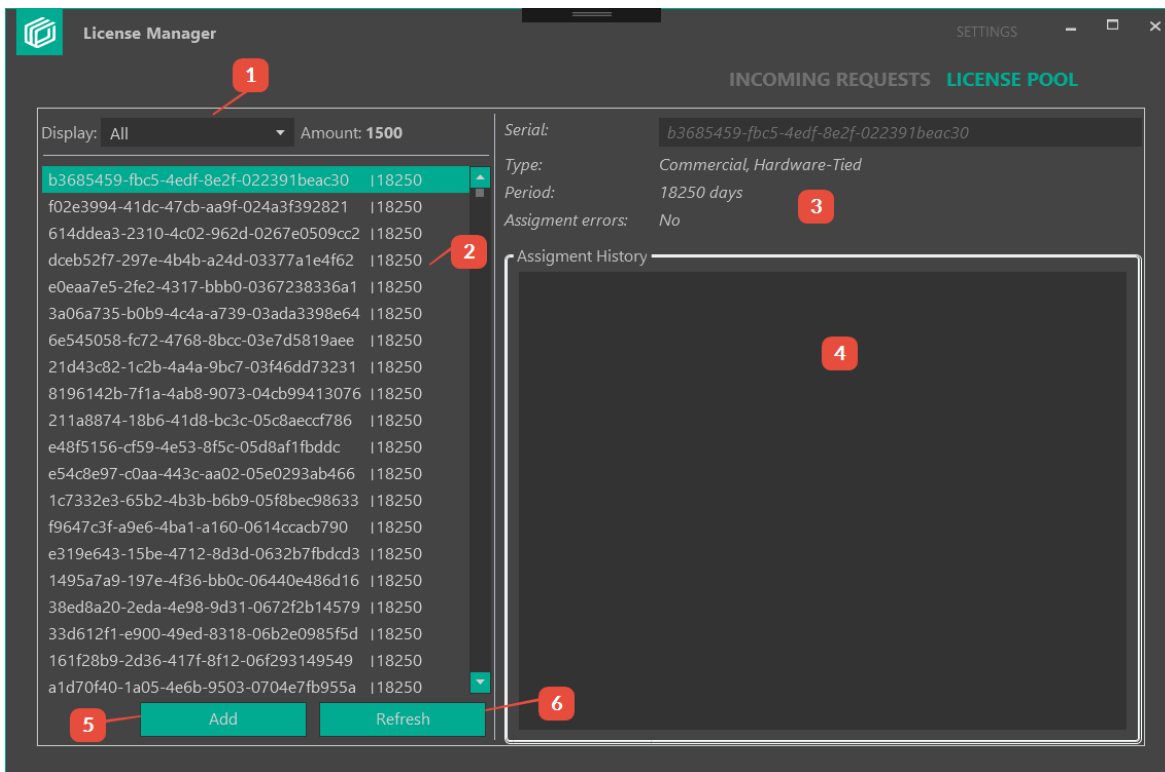


1. Incoming license requests
2. Date, PC Name, and Device ID of the selected incoming request
3. Click to reject the request. The ViewPoint instance will receive notification of the rejected request.
4. ViewPoint License Assignment area. There are 2 ways to assign a license:
 - **Auto** (recommended) - The License Management utility will determine if a license is already assigned to a ViewPoint instance. If so, the same license will be assigned again. If there are no previous assignments, then the software will try to assign the first unassigned license. If the remote ViewPoint server reports an error during license

assignment, the software will use the next unassigned license and repeat the process for up to 5 licenses.

- **Manual** - The software will let the administrator to select a license for assignment
5. Previous assignments for the selected PC. The data will be displayed only if there are any previous assignments, and only if the configuration setting “Auto assign know DeviceID” is unchecked.
 6. Refresh the list of requests from ViewPoint instances

License Pool

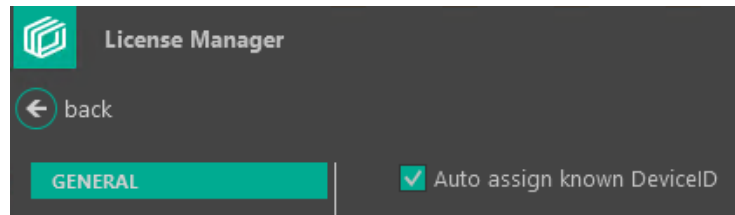


1. Display options.
 - All licenses in the pool
 - Only Unassigned
 - Only Assigned
2. The list of the licenses in the pool. Each item contains license serial and duration, in days. Assigned licenses are marked as unavailable. Licenses which encountered assignment

errors are marked in red.

3. Properties of the selected license
4. Assignment history of the selected license. Contains information about assignment errors and successful assignments.
5. Add licenses to the pool
6. Refresh the pool

Settings



Contains “Auto assign known DeviceID”. Each time ViewPoint is installed, the new SetupID is generated. Every new SetupID requires license reactivation with Remote ViewPoint server. When this setting is checked, the Local License Server performs license reactivation automatically with Remote ViewPoint server and doesn’t push the license assignment request to the administrator.

VIEWPOINT CLIENT LICENSE ACTIVATION FROM LOCAL LICENSE SERVER

If using a Local License Server, expand the License Information dropdown, and click Import. Select Local License Server, and enter the IP address of the server. Click Ok. License importation and activation will take place automatically.

IMPORT FROM

☐ License file (.lic)

☒ Local License server
http://172.18.21.88:8188

☐ Offline Activated License file (.act)

[Create activation request](#)

ok cancel