ProHawk®

ProHawk Vision Server Administrations Guide

ProHawk®

More Than Meets The Eye™

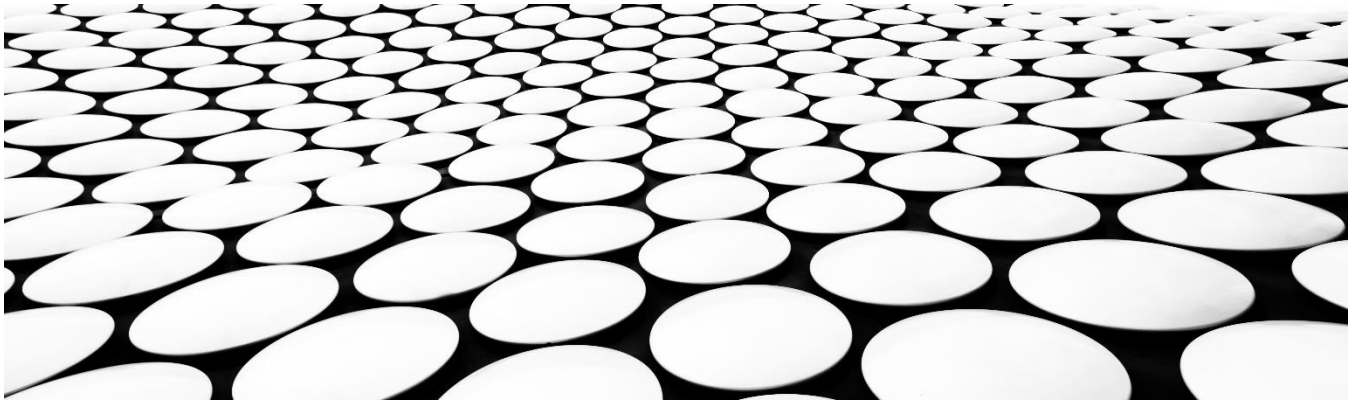


Table of Contents

1 Introduction

ProHawk® Vision Server

The ProHawk® Vision Server Administrators Guide provides an information and instructions for configuration and integration of the ProHawk Vision Server. We have tried to make this overview clear, easy to understand, and informative. We value the relationship that we have with our users and believe this guide with be valuable in expediting the setup of ProHawk Vision Server.

ProHawk Vision Server receives video delivered by an RTP/RTSP stream. ProHawk Vision Server processes and clarifies the image, then will deliver it again as an RTP/RTSP stream. The CODEC of video corresponding to reception and distribution is limited now to H.264 only. ProHawk Vision Server provides a browser-based management console to setup and configure the ProHawk Vision Server. ProHawk Vision Server provides an operator's console with various parameter controls that can be changed by accessing the ProHawk Vision Server Client user Interface with a web browser. There is a current limitation in if the RTSP video it receives contains sound; ProHawk Vision Server will not deliver the sound with the improved video stream.

This is the 6.0.0 release of ProHawk Vision Server.

2 System Requirements

Following are the systems requirements for ProHawk Vision Server to operate properly:

- 64-bit Multicore CPU
- 8GB RAM (16GB or more recommended; 2GB per stream recommended)
- Windows 10, Windows Server 2012, Windows Server 2016, Windows Server 2019, Ubuntu 18.04.3 LTS, Ubuntu 20.04.1 LTS
- NVIDIA Quadro, Tesla, GRID, GeForce or RTX products with Kepler, Maxwell, Pascal, Turing, Volta or Ampere generation GPUs

ProHawk Vision Server includes and requires the following external libraries:

- Microsoft Visual C++ 2015-2019 Redistributable (x64) runtime
- Microsoft .NET Framework 4.8 Redistributable
- OpenCV 4.4.0
- NVIDIA CUDA 11.0

ProHawk Vision Server supports 64-bit (x64) architectures and 64-bit ARM architectures. ProHawk Vision Server does not support 32-bit (x86) architectures.

3 Directories & Files

There will be several directories created after extracting the ProHawk Vision Server setup into the C:\Program Files\ProHawk\Vision Server main folder. Following are the folders and their descriptions:

Folder	Description
docs	Documentation files: ProHawk Vision Server Users Guide.pdf.
VisionServerClientService	A folder containing the ProHawk Vision Server client and associated files.
VisionServerService	A folder containing the ProHawk Vision Server web server service and associated files.
Web	Runtime client web page files.

4 Genetec Integration

This section covers the basic integration of ProHawk Vision Server. Before running ProHawk Vision Server you must make sure the ProHawk Vision Server service is running first. The ProHawk Vision Server service is setup at install and automatically configured to start when the system boots up.

4.1 Validate Service Setup

To check the status of the ProHawk Vision Server service, *type* "**services**" into the Windows search, and hit the **Enter** key. Below shows the Windows Services window with the ProHawk VisionServerServiceManager highlighted in Blue. The VisionServerServiceManager Status should be "Running" and the Startup Type should be "Automatic". (*Figure 1*)

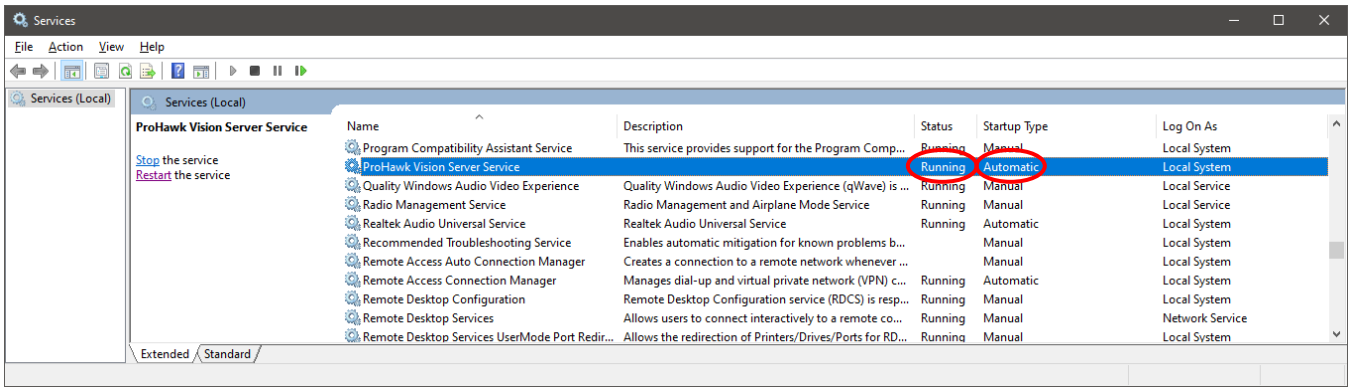


Figure 1

4.2 ProHawk Vision Server Service Manager

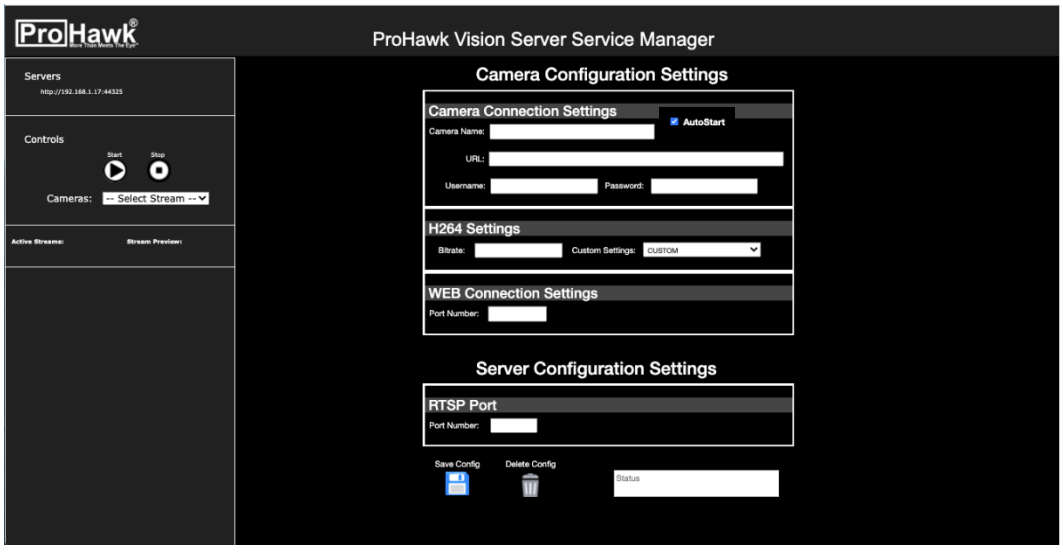


Figure 3

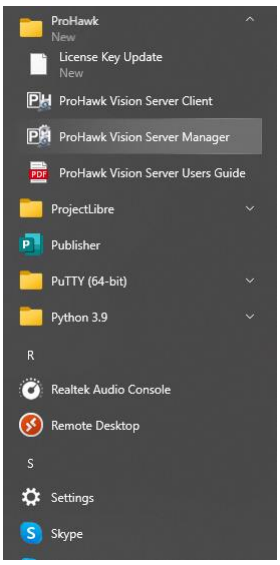


Figure 2

Once the service is running, you can run the ProHawk Vision Server Manager to configure the camera streams. You can run the ProHawk Vision Server Manager by either *clicking* on the **start menu** (*Figure 2*), or *enter* **localhost:44325/visionservermanager.aspx** into the browser (*Figure 3*)

4.2.1 **Service Manager Page**

There are five main sections in the ProHawk Vision Server Service Manager: Configuration Settings for a camera stream, Configuration Settings for the Server, Manage Camera Configurations, Status, and Camera Control. Below (*Figure 4*) is the Vision Server Service Manager configuration page with the five sections are highlighted that contains all the settings held for each stream in a properties file. The default VDOT.PROPERTIES stream is in the C:\Windows\System\config\systemprofile\AppData\Roaming\VisionServerConfigurationFiles\ folder.

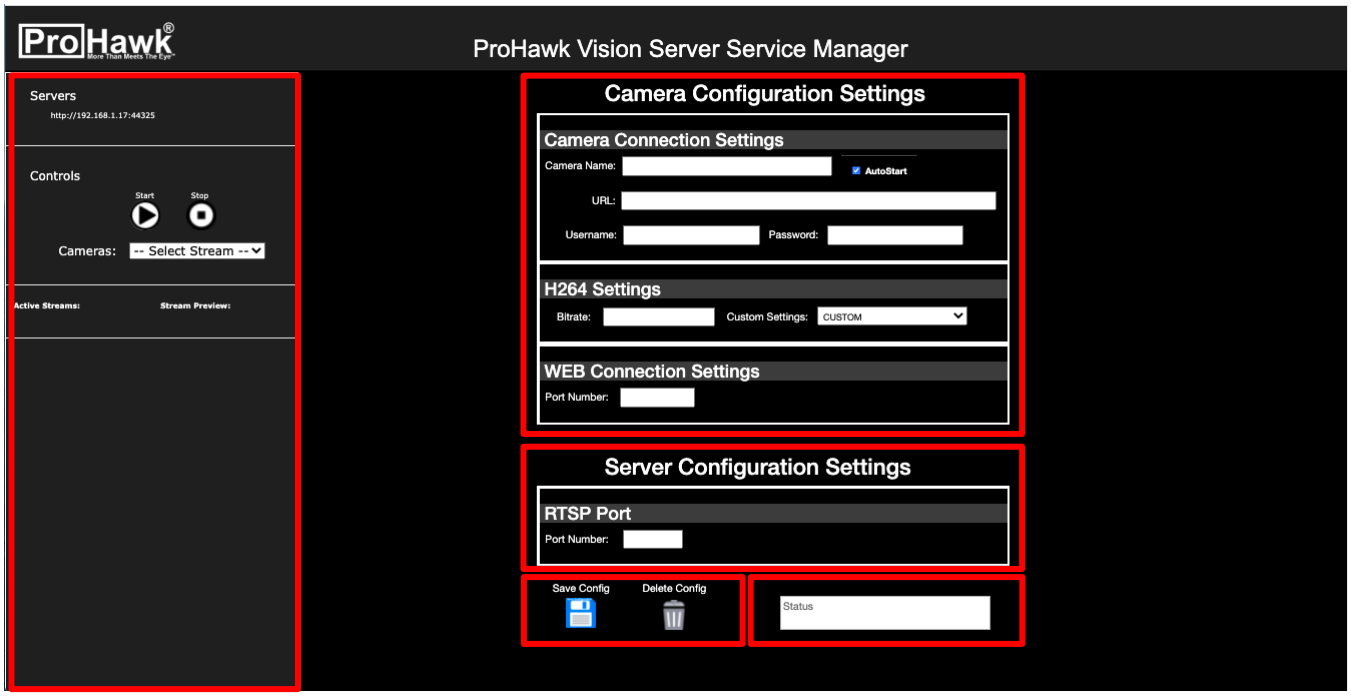


Figure 4

This is provided to allow you to quickly test to see if the system is operational. To start the VDOT camera feed, *select* "**VDOT**" from the dropdown list from Available Streams. *(Figure 5)*

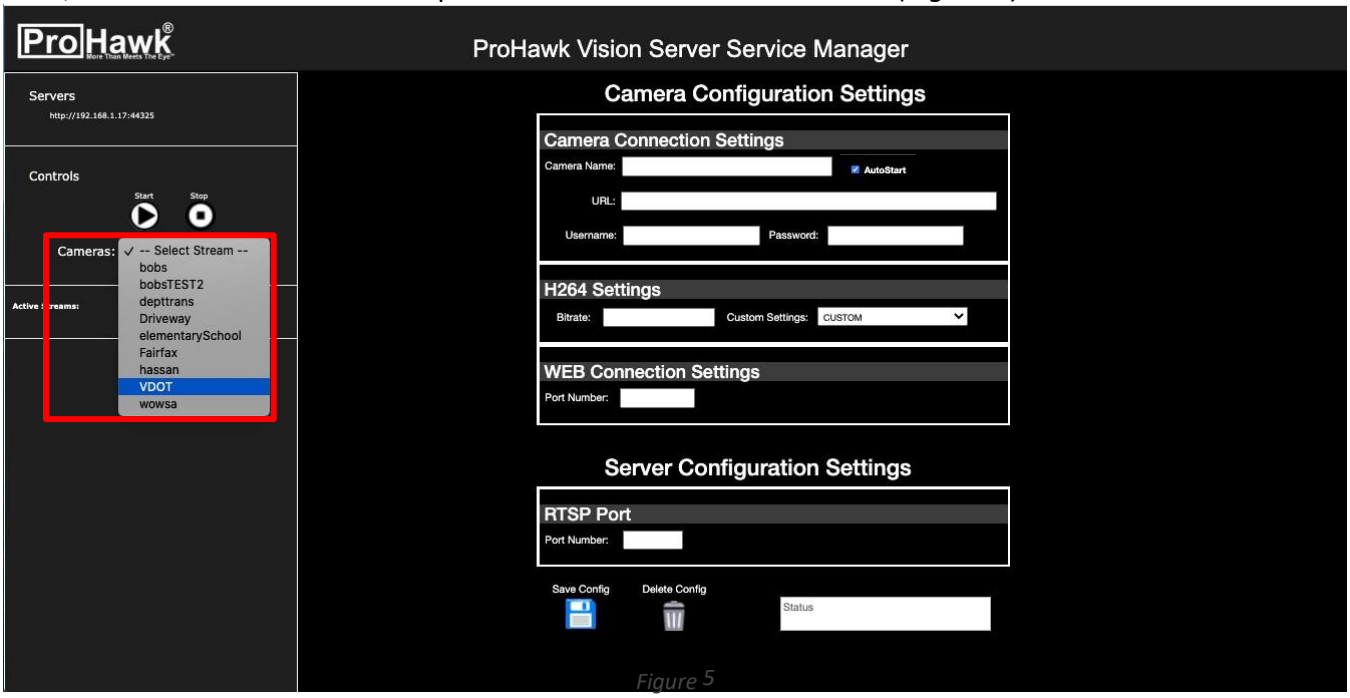


Figure 5

When VDOT is selected as the Available Stream, the Configuration Settings section will contain the camera streams configuration seen below. *(Figure 6)*

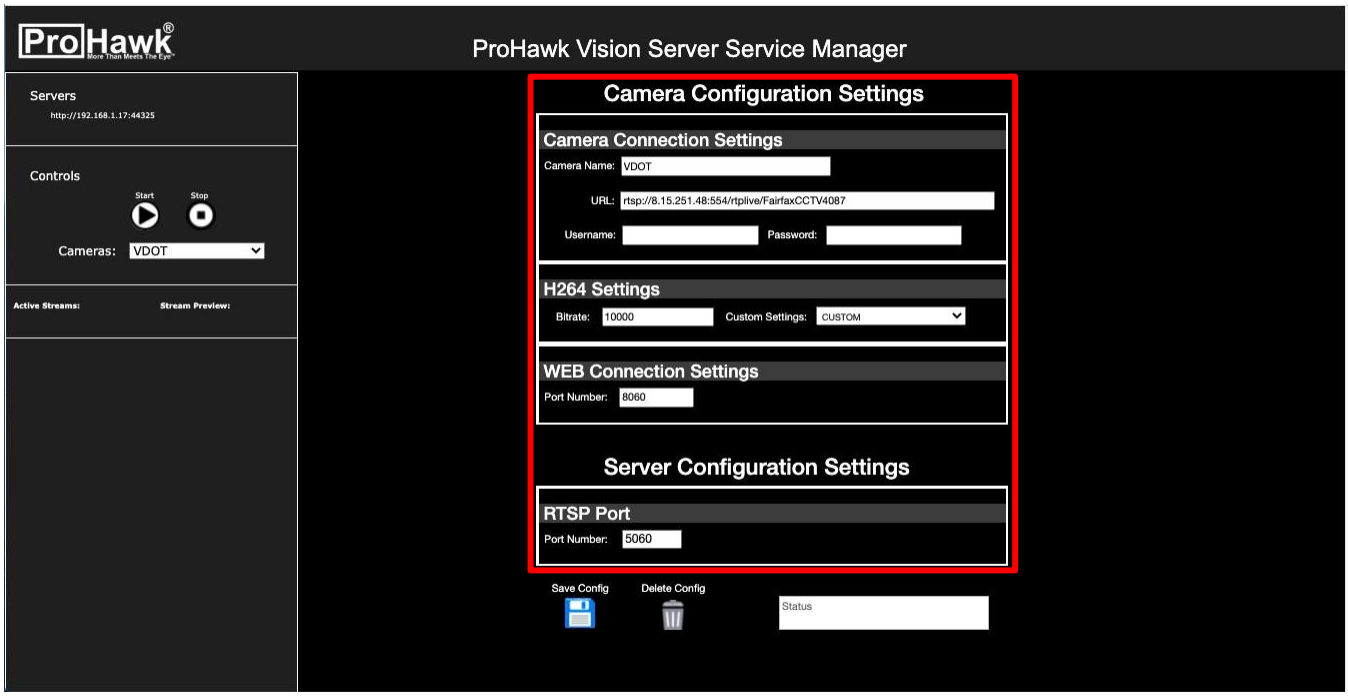


Figure 6

4.2.2 **Camera Connection Settings**

This is the configuration information of the camera stream to be restored by ProHawk Vision Server. Below shows the Camera Connection Settings windowpane highlighted. *(Figure 7)*

4.2.2.1 Camera/Stream Name

The Camera/Stream Name of the RTSP stream output by ProHawk Vision Server service. If the stream name is omitted, it is automatically set to "stream". When set to "stream", connect to the rtsp://<IP address of PC where ProHawk Vision Server operates>/stream from an external application such as VLC. This is the same as the rtsp_server.name in the camera streams configuration properties file.

4.2.2.2 Auto Restart

This checkbox, when enabled (checked), automatically starts the camera stream when the Vision Service starts.

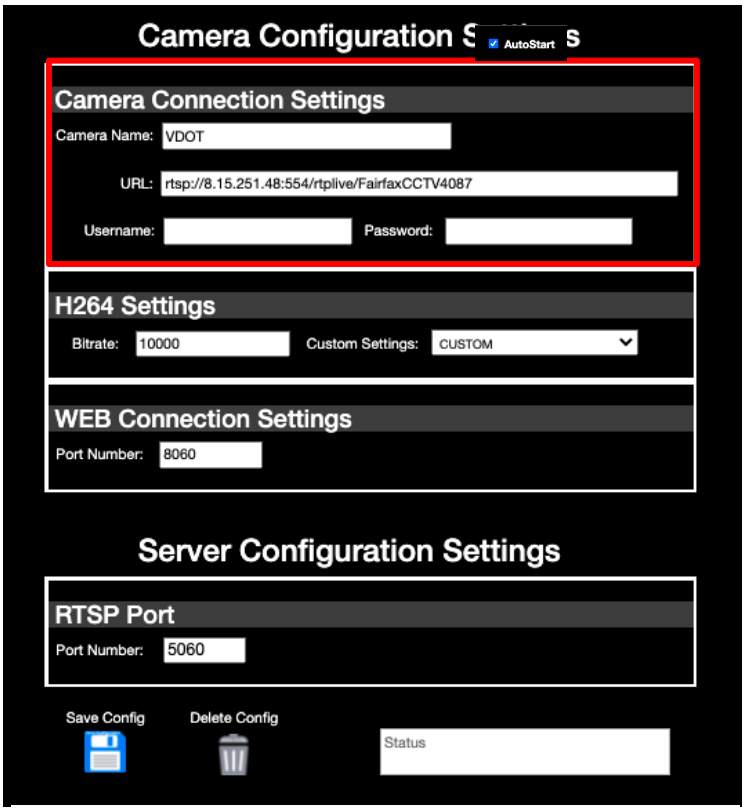


Figure 7

4.2.2.3 URL

The URL of the RTSP camera to connect to the ProHawk Vision Server service (e.g. rtsp://192.168.1.42/axis-media/media.amp) If this setting is omitted, the ProHawk Vision Server web server will not start. This is the same as rtsp_client.url_to_connect in the camera streams configuration properties file.

4.2.2.4 Username

The Username for the camera authentication with the ProHawk Vision Server service when connected. The setting can be omitted if there is no authentication. This is the same as the rtsp_client.username in the camera streams configuration properties file.

4.2.2.5 Password

The Password for the camera authentication the ProHawk Vision Server service. The setting can be omitted if there is no authentication. This is the same as the rtsp_client.password in the camera streams configuration properties file.

4.2.3 H264 Settings

This is the configuration information of the output stream format for the ProHawk Vision Server service. Below highlights the H264 Settings.

4.2.3.1 Bitrate

The bit rate (unit:bps) for encoding H.264 output video stream with the ProHawk Vision Server. If the bit rate is omitted, it is automatically set to “5000000”. This is the same as setting file H.264 encode bitrate. *(Figure 8)*

4.2.3.2 Custom Settings

The Custom Settings dropdown list contains pre-defined bitrate for the associated resolution and framerate of the video.

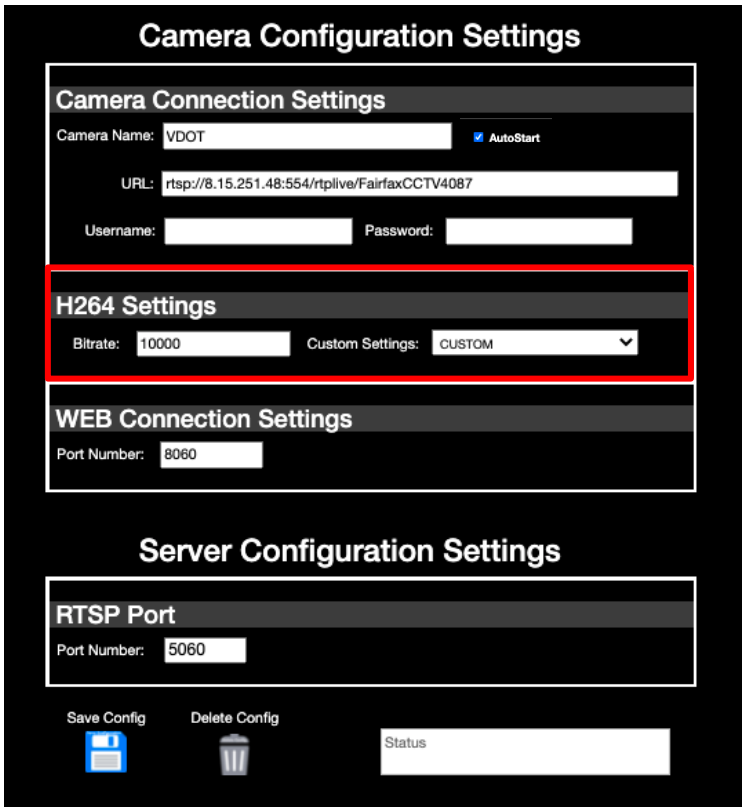


Figure 8

4.2.4 WEB Connection Settings

This is the configuration information of the ProHawk Vision Server Manager service. Figure 9 to the right highlights the WEB Connection Settings.

4.2.4.1 Port Number

The web server port number for connecting to the ProHawk Vision Server Manager User Interface. If the port number is omitted, it is automatically set to "44325". This is the same as the web_server.port in the configuration properties file. *(Figure 9)*

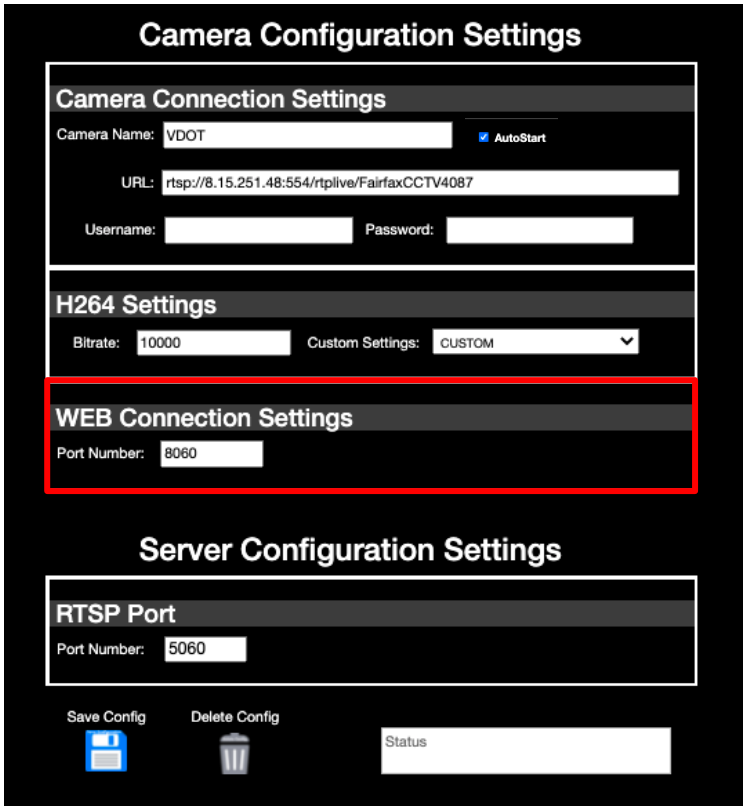


Figure 9

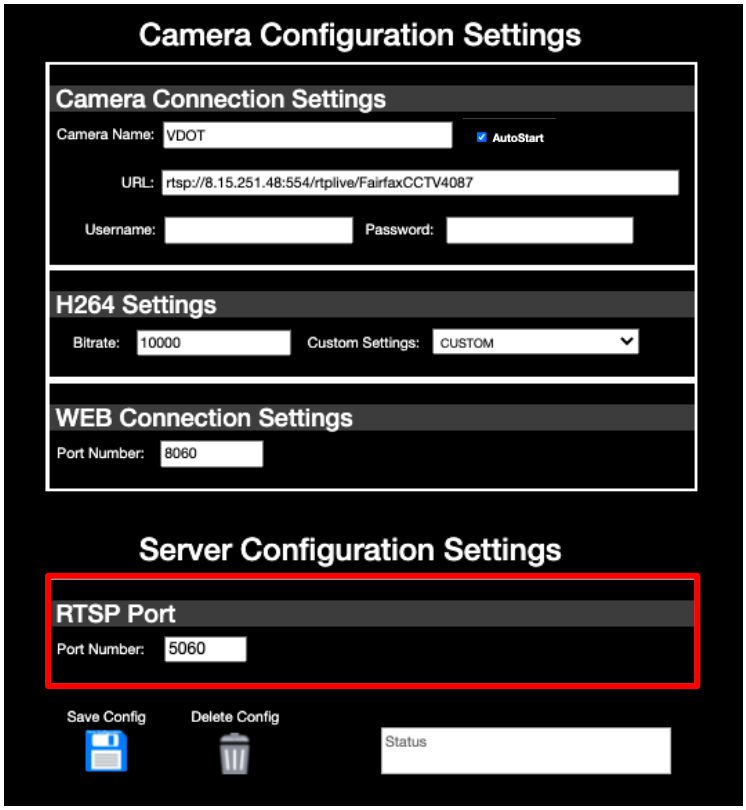


Figure 10

4.2.5 Server Configuration Settings

This is the configuration information of the restored video stream output by the ProHawk Vision Server service. To the left highlights the RTSP Publishing Settings section. (*Figure 10*)

4.2.5.1 RTSP Port

The distribution port of the RTSP stream output by the ProHawk Vision Server service. If the distribution port number of the RTSP server is omitted, it is automatically set to "554". If it is set to other than 554, for example 55400, connect to the URL rtsp://<IP address of PC where the ProHawk Vision Server operates >:55400/Camera Name for external application such as VLC. This is the same as the rtsp_server.port in the camera streams configuration properties file. *(Figure 10)*

4.2.6 **Manage Camera Configuration**

The Manage Camera Configuration is the section to manage the camera stream to be restored by ProHawk Vision Server service. The ProHawk Vision Server Management Controls include:

- Save Camera Configuration
- Delete Camera Configuration

To the right shows the Camera Management Controls for a configured and saved camera configuration. *(Figure 11)*

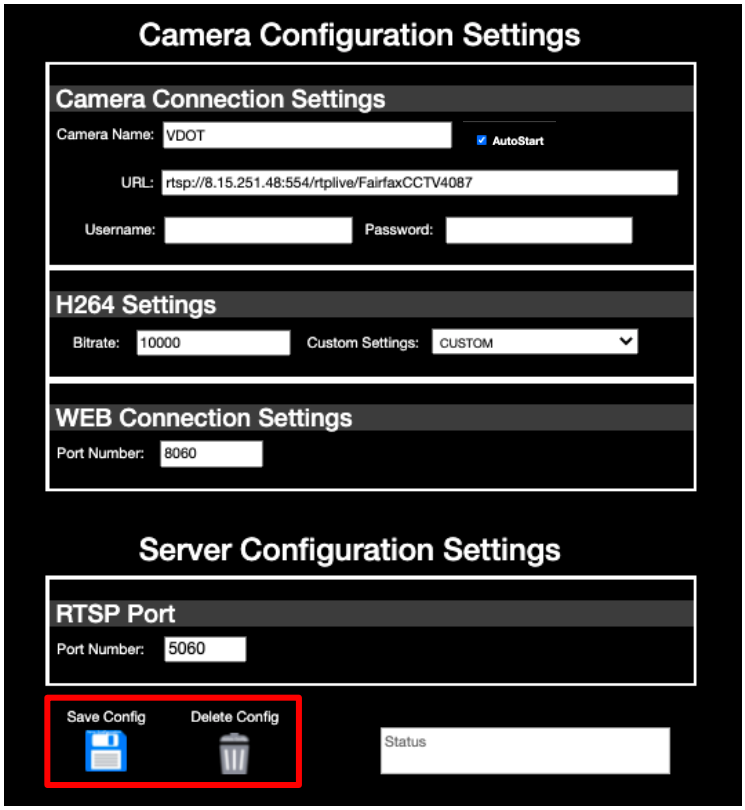


Figure 11

4.2.6.1 **Save Camera Configuration**

Click on the **Save Config icon** to save the configuration settings for a camera stream. The saved configuration becomes effective after Start Selected Stream in performed.

4.2.6.2 **Delete Camera Configuration**

Click on the **Delete Config icon** to delete the Active Camera Configuration on the ProHawk Vision Server service.

4.2.7 Camera Control

The Camera Control section provides a list of the active camera streams to start and stop computer vision restoration. It also provides a list of active cameras or streams that are being restored with ProHawk Vision, and a small preview window of the camera stream. It also provides the management address URL for the ProHawk Vision Server. (*Figure 12*)

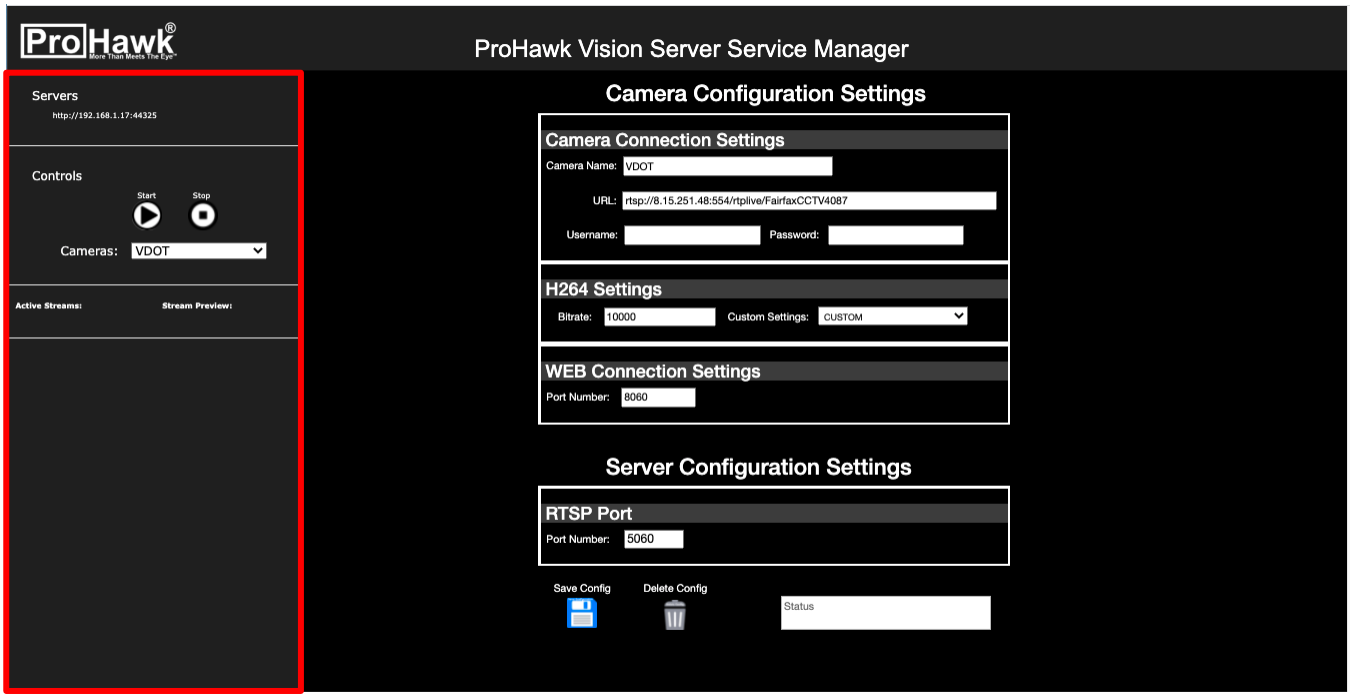


Figure 12

4.2.7.1 Servers

The Camera Control section contains a Servers panel, that contains a list of the ProHawk Vision Server(s) on the network. The list contains the URL to access and control a ProHawk Vision Server, including the IP address and port number. (*Figure 13*)

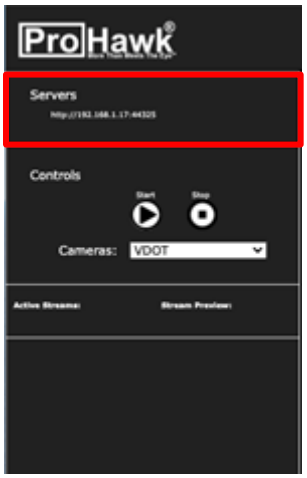


Figure 13

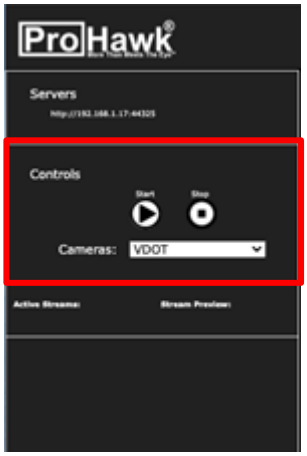


Figure 14

4.2.7.2 Controls

The Controls panel in the Camera Control section provides a dropdown list of cameras and/or streams with buttons to start and stop ProHawk Vision restoration processing. (*Figure 14*)

4.2.7.2.1 Camera

The Camera control provides a dropdown list of cameras and/or streams to start and stop ProHawk Vision Server restoration processing. *Click* on the **Cameras Dropdown** list to display the Active Streams available to the ProHawk Vision Server service. To the right shows the list of Active Streams that are available. On initial installation, there will only be the VDOT stream. As you add more streams, they will become available in this list. *Select* a camera/stream on the **Cameras Dropdown** menu list. (*Figure 15*)

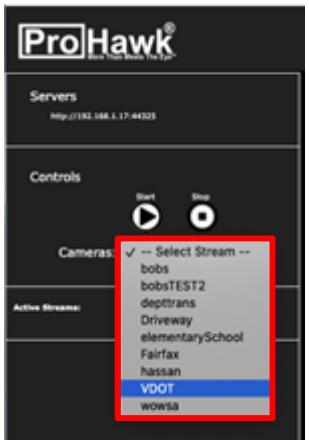


Figure 15

4.2.7.2.2 Start Button

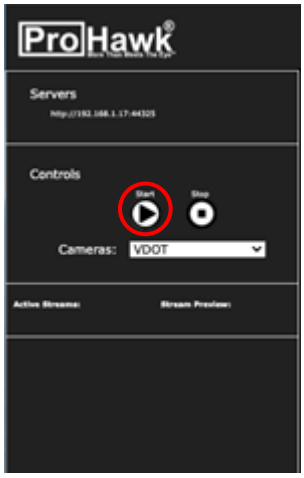


Figure 16

Once a camera or stream has been highlighted and selected from the Cameras Dropdown list, *click* on the **Start Button icon** to begin a restoration processing on the camera or stream. (*Figure 16*)

4.2.7.2.3 Active Streams & Preview

Once the camera/stream is selected, to the right you will see the Active Stream populated and the live stream Preview Pane will display a thumbnail stream. *(Figure 17)*

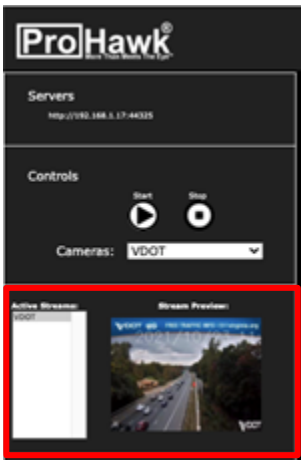


Figure 17

4.2.7.2.4 Stop Button

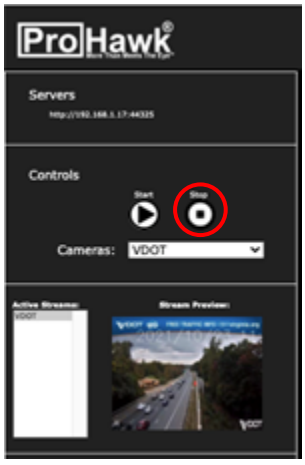


Figure 18

When a camera or stream is processing, and you want to stop ProHawk Vision Server restoration, *click* on the **Stop Button icon** to stop the Active Stream on the ProHawk Vision Server service. *(Figure 18)*

A browser popup window will ask you to confirm stopping the stream. Click on the **OK** button to confirm stopping the stream. (*Figure 19*)

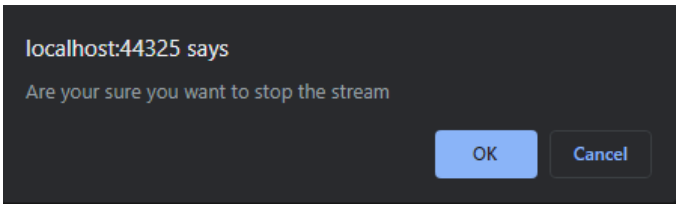


Figure 19

5 ProHawk Vision Server Client

Once you have a stream activated in the Vision Server Manager, you will be able to run the ProHawk Vision Server Client without issue. The ProHawk Vision Server Client provides a preview of the video camera stream and the controls for enhancing the video. You can open and run the ProHawk Vision Server Client by either *clicking* on the **start menu** (*Figure 20*), or *enter* **localhost:44325/rtspclient.aspx** into the browser *(Figure 21)*

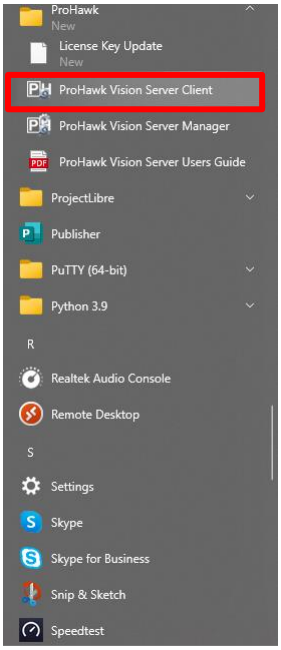


Figure 10

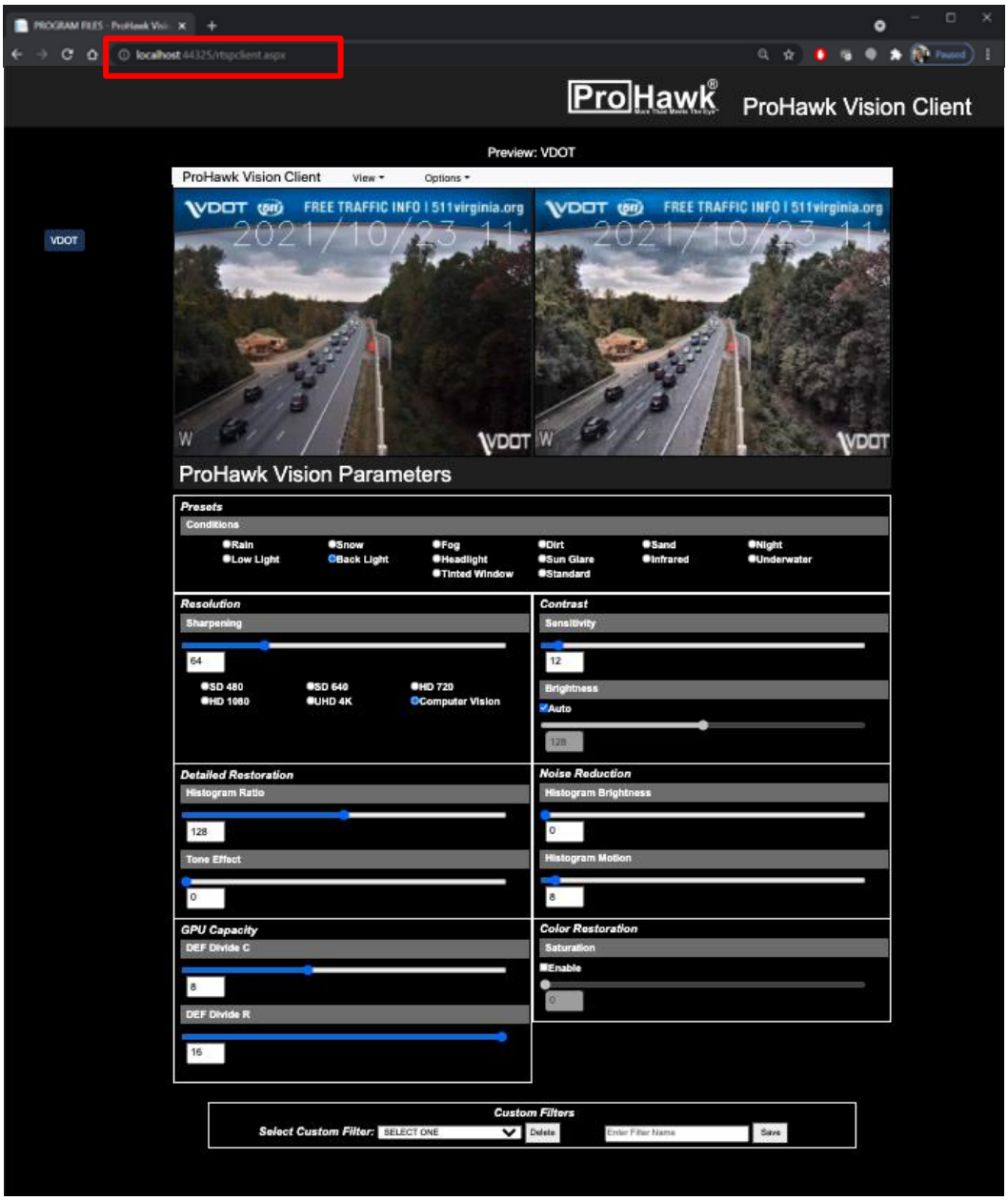


Figure 21

5.1 ProHawk Vision Server Client User Interface

Once you have successfully accessed the ProHawk Vision Server Client, below shows the five main sections to the ProHawk Vision Server Client User Interface: *(Figure 22)*

1. Menu Bar
2. Camera Selection
3. Camera Preview
4. Vision Server Restoration Parameters
5. Custom Filters

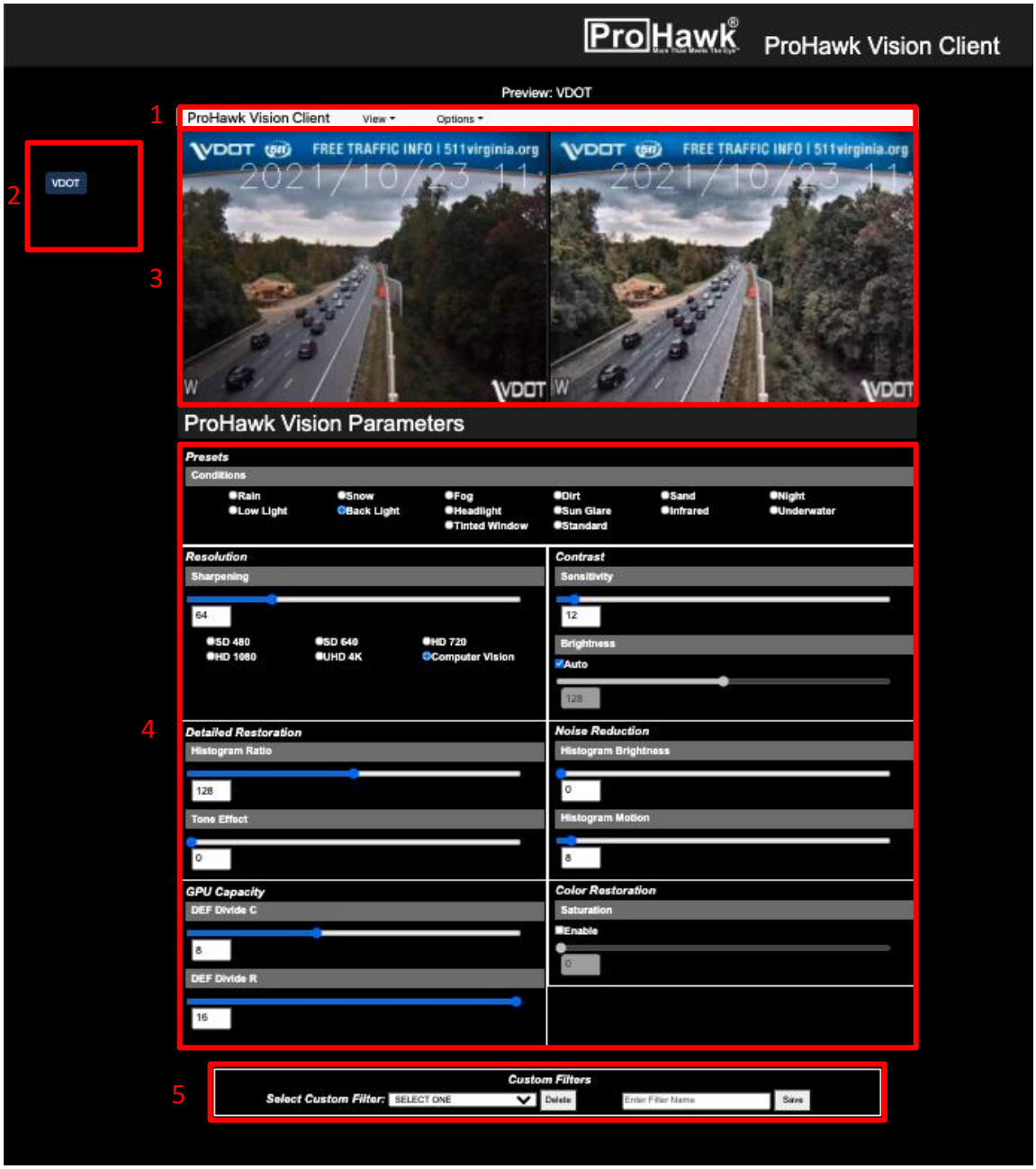


Figure 22

5.2 Menu Bar

ProHawk Vision Server Client provides a menu bar for quick navigations that conserves more vertical space for the user interface. People are also accustomed to reading left to right across a screen, so the horizontal menu bar is efficient for users to read.

5.2.1 View Menu

The ProHawk Vision Server Client provides several viewing options accessible through the **View** menu (*Figure 23*). The available **View** menu options and their default View options settings are:

- **Enhanced View - On**
- **Side-by-Side View - On**
- **External Enhanced View - Off**
- **Unenhanced External View – Off**

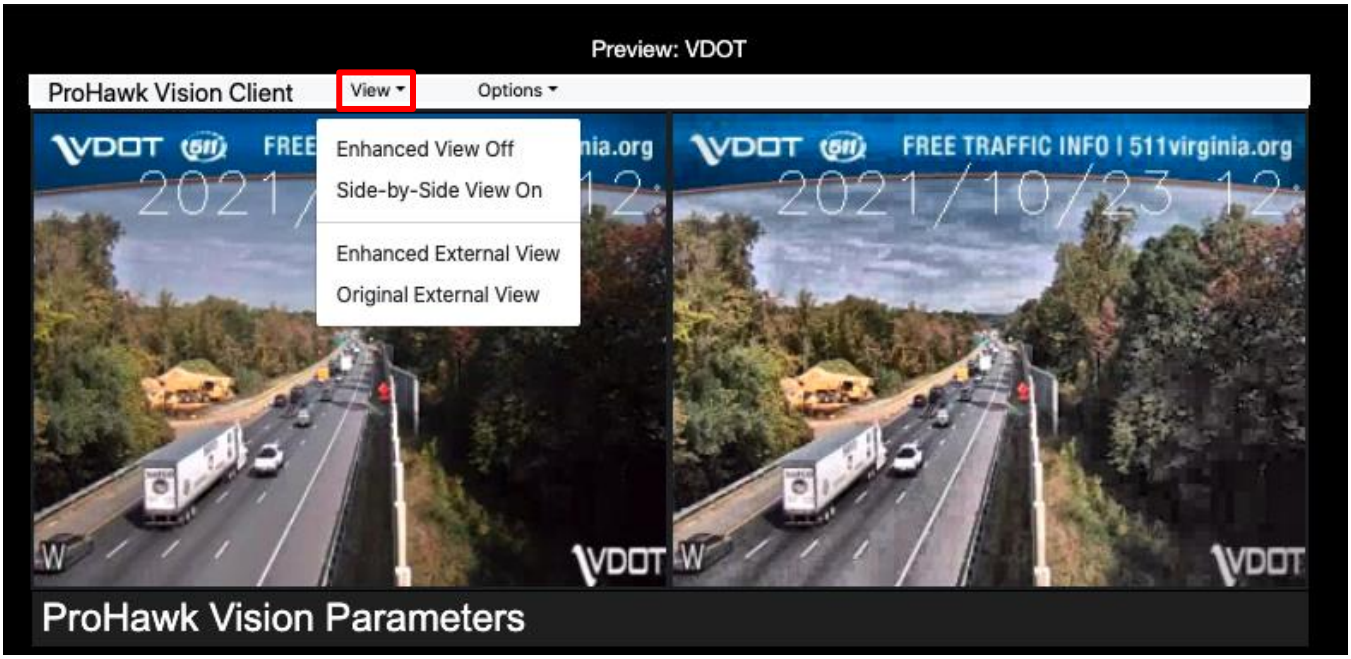


Figure 23

This section of the ProHawk Vision Users Guide will describe the **View** menu options above in Figure 23.

5.2.1.1 Enhanced View

The **View** menu **Enhanced View** menu option is turned **On** by default. (*Figure 24*) The **Enhanced View** menu option toggles the ProHawk Vision restoration filter **On** and **Off**. When the **Enhanced View** menu option is selected, it will toggle the **Enhanced View** menu option **Off**.

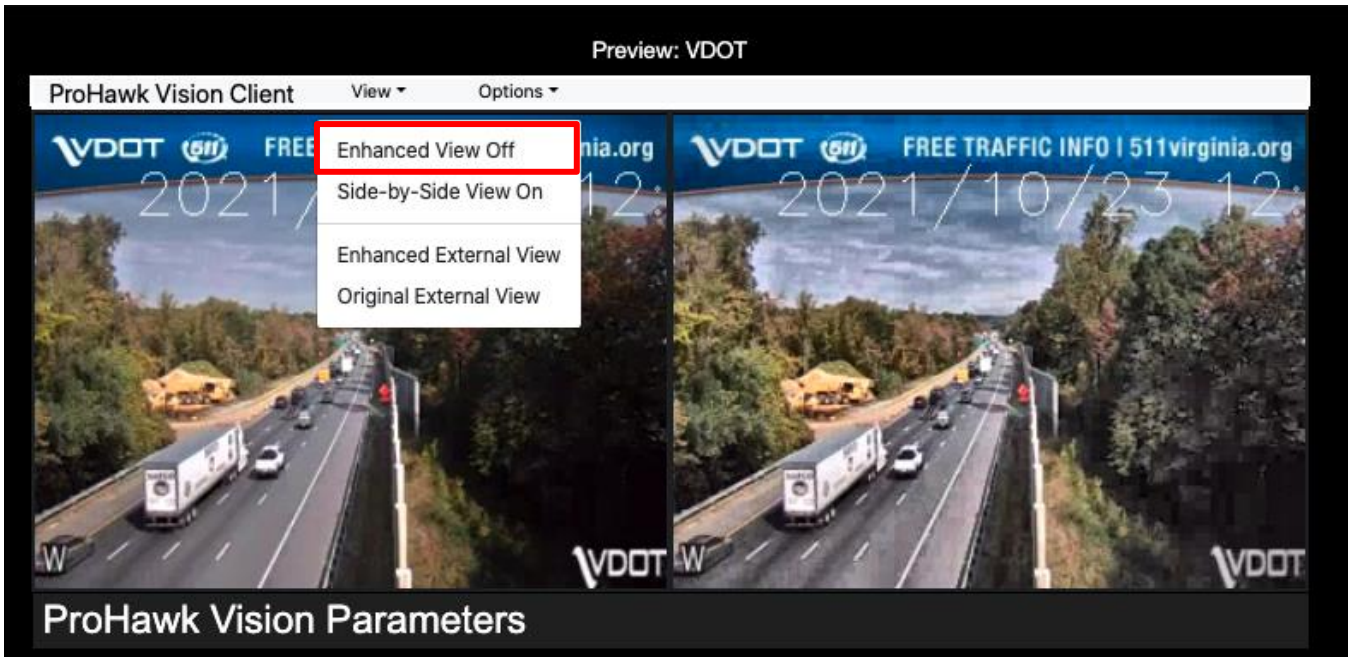


Figure 24

5.2.1.2 Side-by-Side View

Once the video stream is selected, ProHawk Vision will simultaneously display both the original (source) stream on the left and the restored (enhanced) stream on the right. The example below shows how the user interface displays the imagery side-by-side. (*Figure 25*)

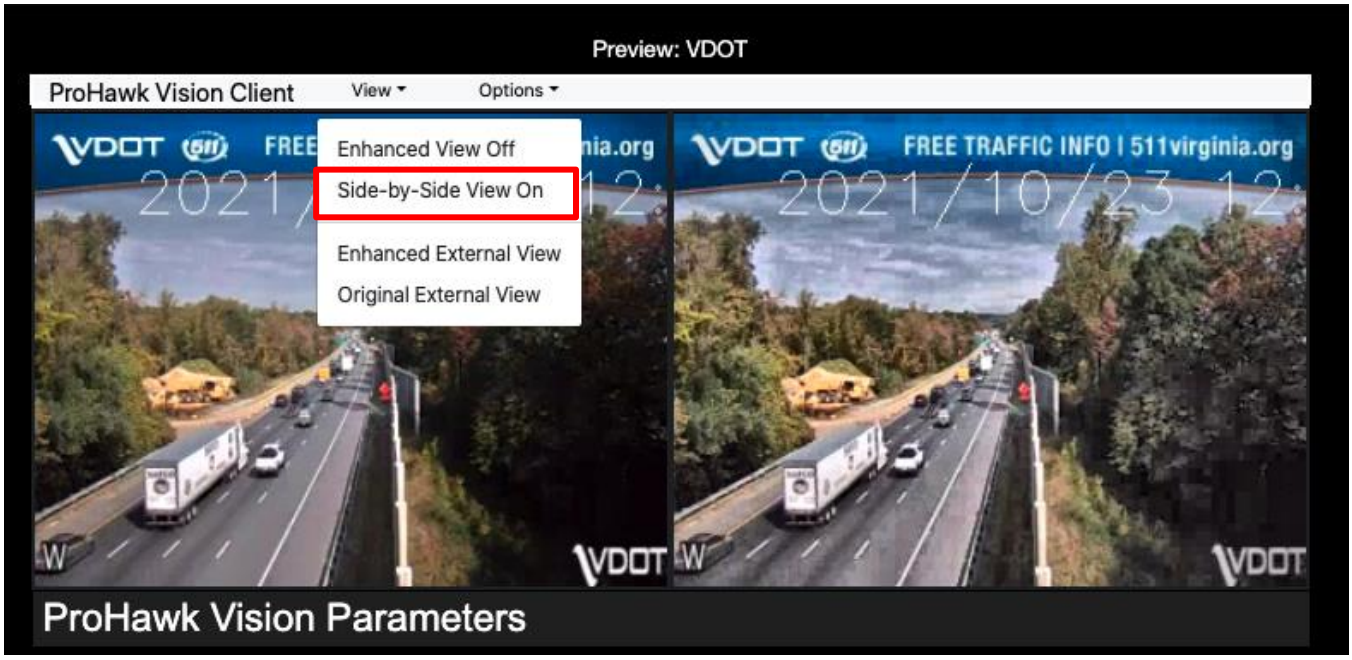


Figure 25

5.2.1.3 Enhanced External View

The ProHawk Vision Server Client provides the **Enhanced External View, View** menu option, to open a separate window with only that ProHawk Vision Server restored imagery displayed. *Click* on the **Enhanced External View, View** menu option. This will allow you to view a ProHawk Vision restored video stream in full screen mode. (*Figure 26)*

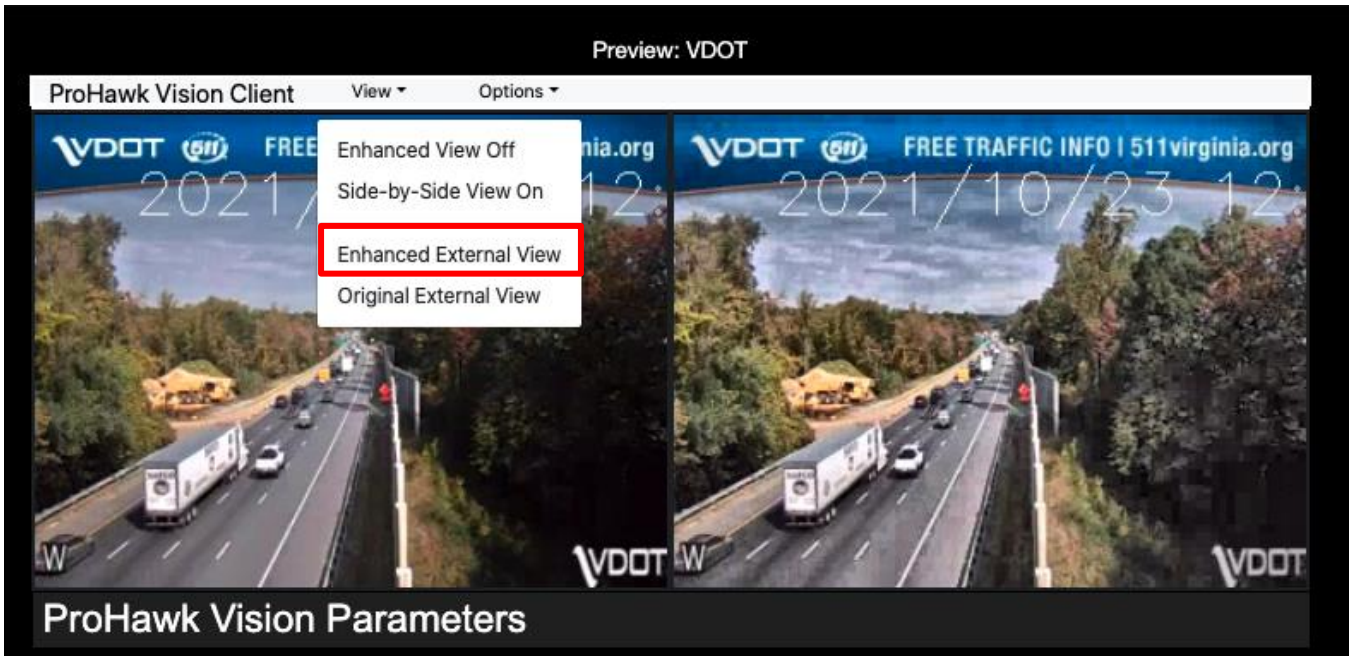


Figure 26

Choosing this option will open another tab with a full-sized image of the enhanced stream. Since it is on another tab, you can move the tab to a new window. If multiple screens are available, the new window can be on the second monitor. You can create a new tab for both the Enhanced External view and the Original External view. (*Figure 27*) This view allows you to enlarge or reduce the image/stream size using the magnifying icons on the upper right.

Figure 27

5.2.1.4 Original External View

ProHawk Vision provides the **Original External View, View** menu option, to open a separate window with only that original imagery displayed. *Click* on the **Original External View, View** menu option. This will allow you to view a ProHawk Vision original video stream in full screen mode. (*Figure 28*)

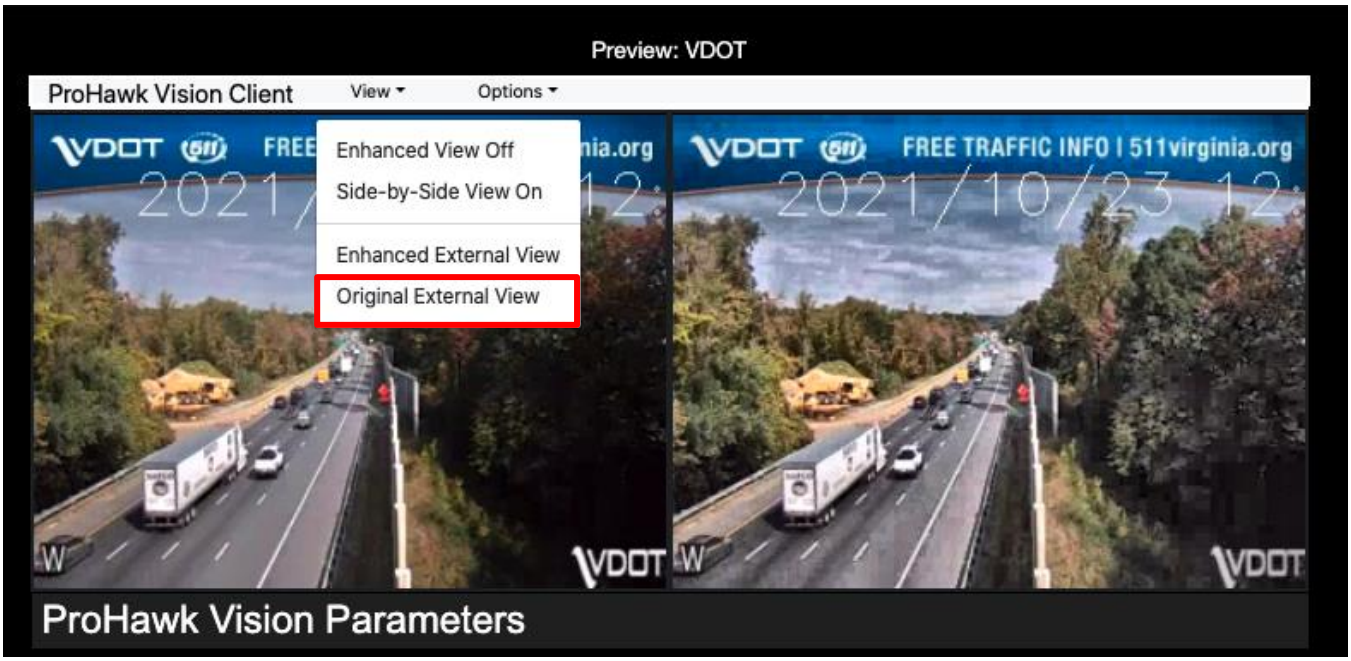


Figure 28

5.2.2 Options Menu

The ProHawk Vision Server Client provides several viewing options accessible through the **Options** menu (*Figure 29*). The available **Options** menu options and their default View options settings are:

- **Disable Enhancement Off – On**

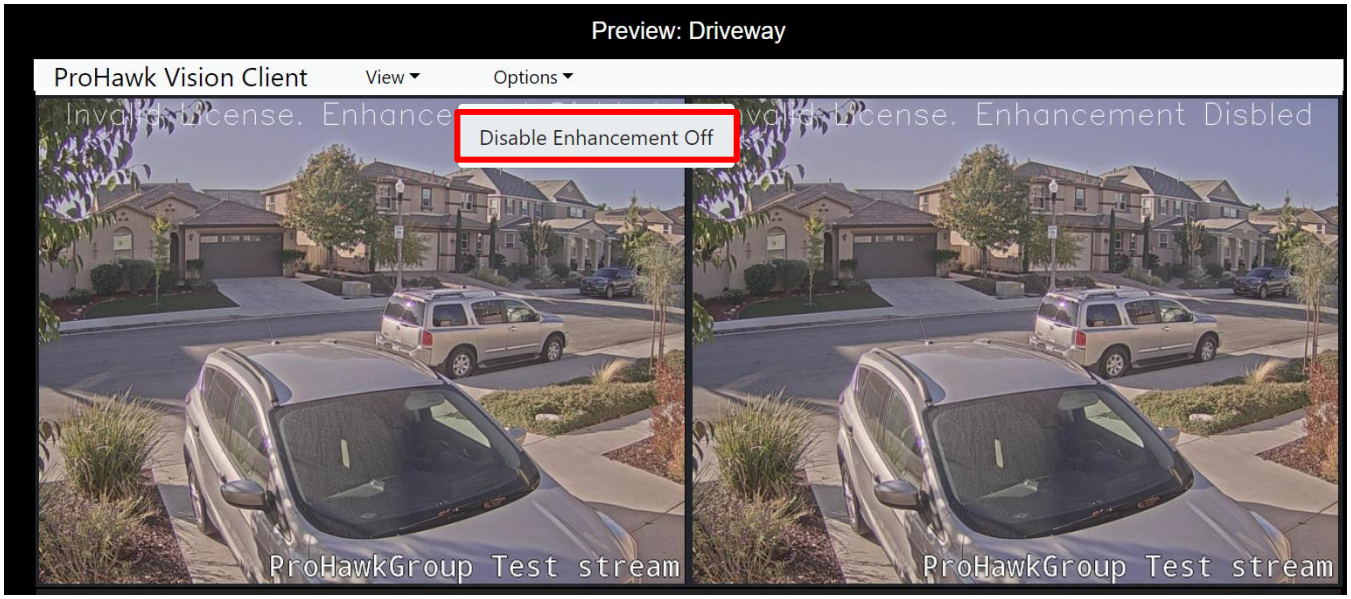


Figure 29

5.2.2.1 Disable Enhancement Off

The **Options** menu **Disable Enhanced Off, Options** menu option is turned **On** by default. The **Disable Enhancement Off** menu option toggles the ProHawk Vision restoration filter **On** and **Off**. When the **Disable Enhancement Off** menu option is selected, it will toggle the **Disable Enhancement Off** menu option **Off**.

5.3 Camera Selection

The Stream Selection section contains buttons with the names of the camera streams that have been setup in the ProHawk Vision Server Manager. To view and restore a stream, *click* on the button with the **name of the stream** you want to view and/or restore. The VDOT buttons is present, but if more streams were invoked, they would be listed right below the VDOT button. (*Figure 30*)

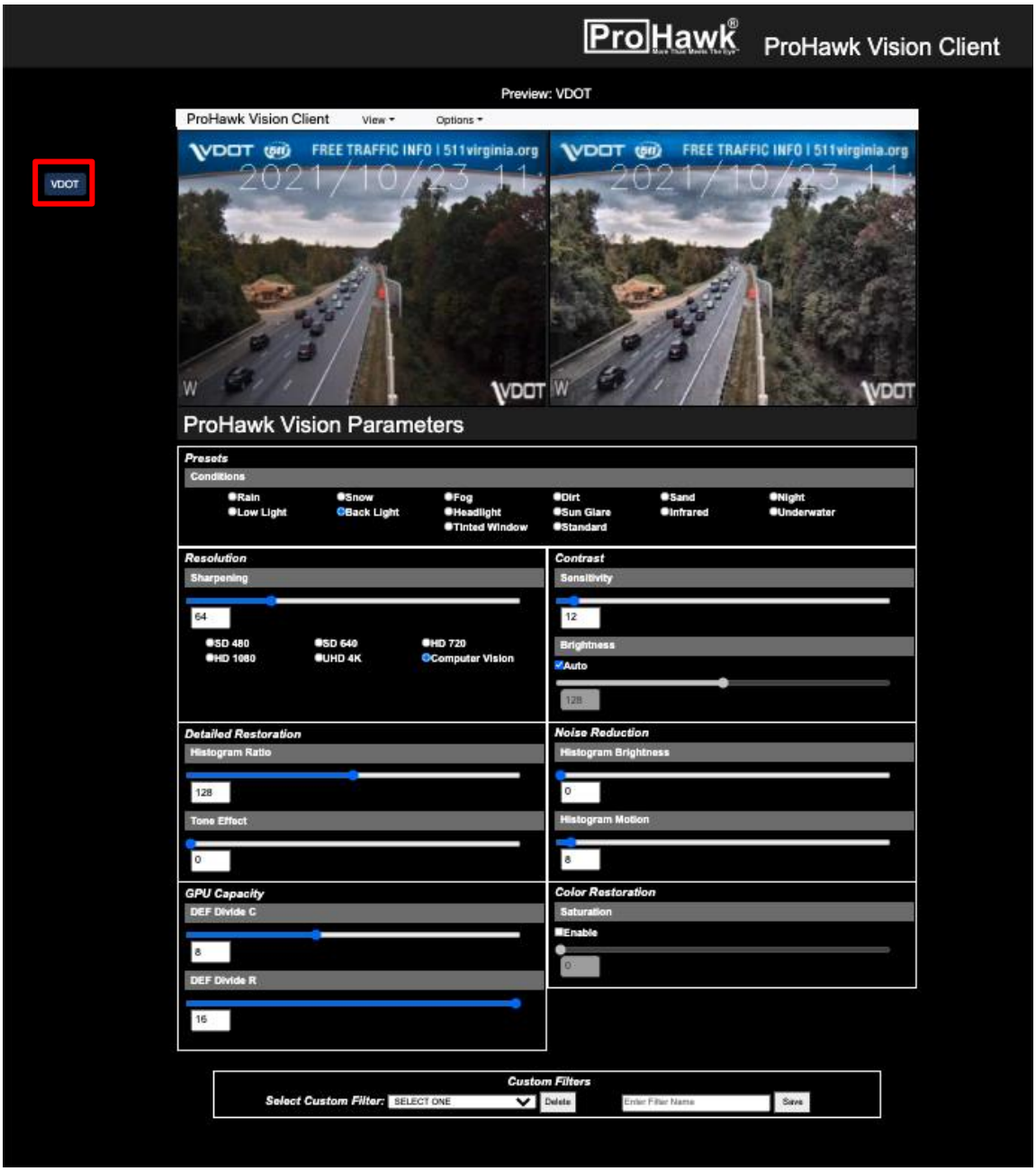


Figure 30

5.4 Camera Preview

The Stream Preview provides a real-time view of the original video stream and the restored video stream, in a side-by-side view format seen below. (*Figure 31*)

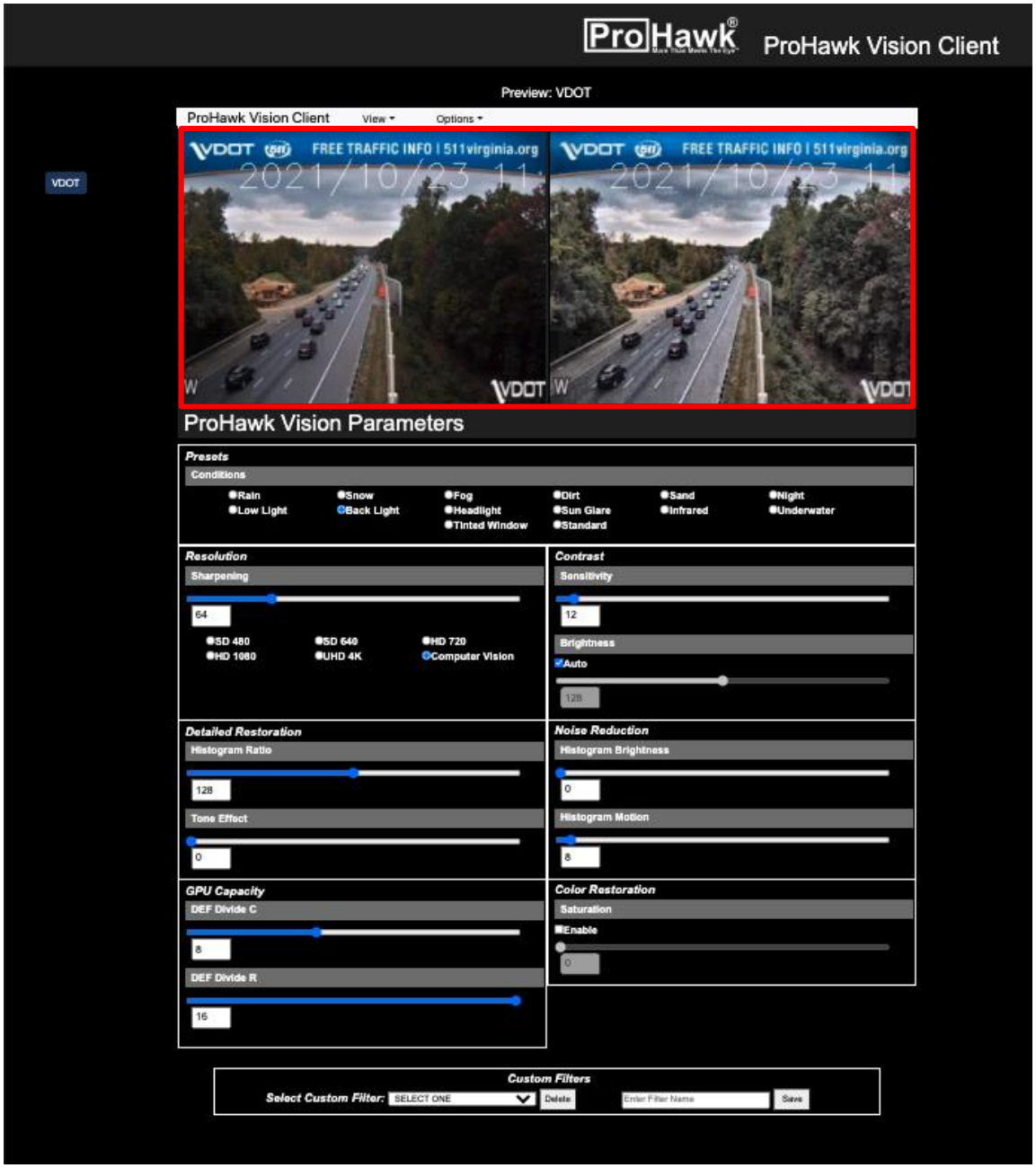


Figure 31

5.5 Vision Server Restoration Parameters

5.5.1 Presets Conditions

The Presets Conditions radio buttons allow for quick results based on a range of preconfigured settings to meet a variety of conditions. One-click on any of the radio button instantly restores the video stream to the challenging visual condition. Below highlights the Preset Conditions that ProHawk Vision Server can accommodate. *(Figure 32)*

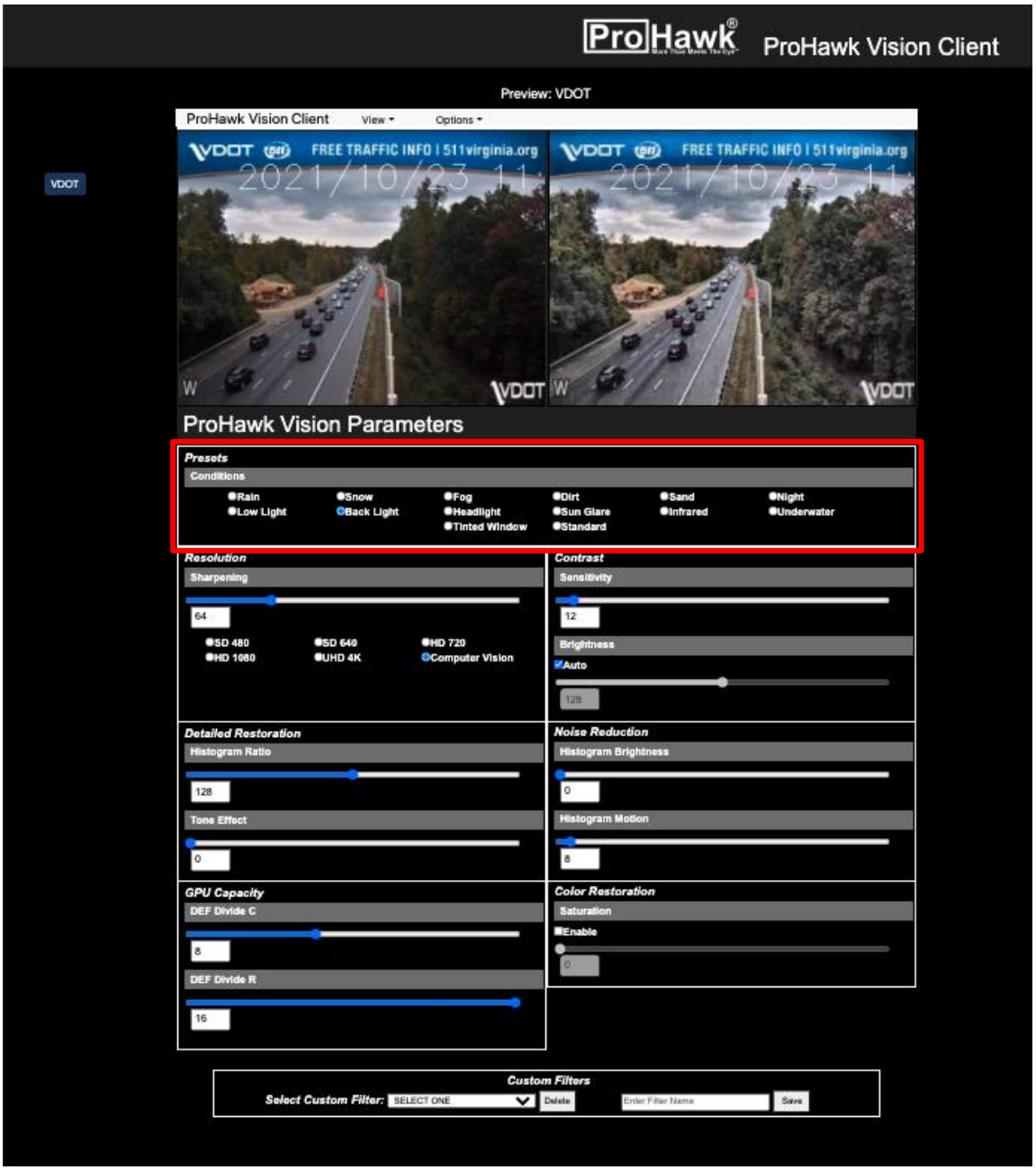


Figure 32

Following are the details on each preset condition.

5.5.1.1 Rain

Preset for improved visibility in footage shot in the rain.

5.5.1.2 Snow

Preset for improved visibility in footage shot in snowy weather conditions.

5.5.1.3 Fog

Preset for improved visibility in footage shot in the fog.

5.5.1.4 Dirt

Preset for improved visibility in footage shot in the dirt.

5.5.1.5 Sand

Preset for improved visibility in footage shot during a sandstorm.

5.5.1.6 Night

Preset for improved visibility in footage shot in the night.

5.5.1.7 Lowlight

Preset for improved visibility in footage shot in low light conditions.

5.5.1.8 Backlight

Preset for improved visibility in footage shot with excessive backlight.

5.5.1.9 Headlight

Preset for improved visibility in footage shot with excessive headlight.

5.5.1.10 Sunglare

Preset for improved visibility in footage shot with too much sun glare.

5.5.1.11 Infrared

Preset for improved visibility in footage shot in infrared.

5.5.1.12 Underwater

Preset for improved visibility in footage shot underwater.

5.5.2 Detail Parameters

The Detail Parameters are the individual restoration capabilities that ProHawk Vision Server supports. These are specific adjustments that may have an impact on details to be revealed. Many times, when looking for specific details in compromised imagery or video, these parameters can be individually adjusted to achieve hidden details. ProHawk Vision Server Detail Parameters allows the user to adjust the ProHawk parameters individually. *(Figure 33)*

Figure 33

5.5.3 Resolution

The Resolution parameter setting controls how the ProHawk Vision Server service will process video according to the resolution of the source device or desired restoration results output by the system.

5.5.3.1 Sharpening

Sharpening specifies the range to be referred to from the pixel to be processed in radius (pixel). Sharpening considers the width and height of the radius of processing range of the ProHawk Vision Server. The smaller the setting is, the clearer the contrast for details will become, but it will result in a painting-like image as the contrast for the entire screen is averaged. Generally, set it low to emphasize small parts and fine details, or high if natural image quality is desired, or when there is too much noise. Set it in the middle under normal circumstances for a 1080p video. Set it lower between 20-30 for SD 480p-720p video. Set it higher between 128-256 for UHD 4K-8K video. Set higher to increase Edge Sharpening for computer vision and analytics applications.
Range: 1-256 *(Figure 34)*

Figure 34

5.5.4 Detailed Restoration

The Detailed Restoration parameters for the ProHawk Vision Server service enable fine tuning and revealing details in hidden areas of video. *(Figure 35)*

5.5.4.1 Tone Effect

The Detailed Restoration Tone Effect parameter expands the luminance range of the ProHawk Vision Server service. The Detailed Restoration Tone Effect is for adjusting the contrast of the Tone Effect. It is available if the Contrast Brightness parameter is turned OFF.

Figure 35

Set the Detailed Restoration Tone Effect to 0 under normal conditions, gradually increase it until optimal results achieved. When the setting is high, it may cause fuzzy outlines to appear more noticeable on top of buildings into the sky. When it is set low to 0, it does not expand the luminance range. When it is set high to 256, it will expand the luminance range to the maximum capacity of the ProHawk Vision Server service.
Range: 0-256

5.5.4.2 Histogram Ratio

Detailed Restoration Histogram Ratio adjusts the ratio/percentage for combining the input image and histogram image. The Detailed Restoration Histogram Ratio parameter adjusts the level of ProHawk Vision Server service restoration effect. Images and video are improved in low contrast situations such as fog, rain, or snow, and in situations of too much contrast such as backlight or direct sunlight, or in darkness at night. The higher the setting is, the clearer the contrast will become, but the noise may also increase. This parameter specifies the Detailed Restoration Histogram Ratio between the original image and the processed image. Set it at 128 (50%) under normal circumstances. When set to 256, the image is processed by the ProHawk Vision Server service 100%. The Detailed Restoration Histogram Ratio defaults to 0.
Range: 0-256

5.5.5 GPU Capacity

The GPU Capacity parameters provide adjustment, see below, for optimal operation tuned to the capacity, throughout, and performance of the NVIDIA GPU being used. (*Figure 36*)

5.5.5.1 DEF Divide C

Divide Circle is the number of divisions of circles in the Vision Filter processing range. Specify how many divisions are to be referenced from the processing target pixel to the radius specified by Radius. The number of divisions and processing time are proportional.
Typically, 8 is the optimal setting, but in some cases where the video has many 45-degree lines, the image quality can be improved by setting to an odd number.
Range: 3-16

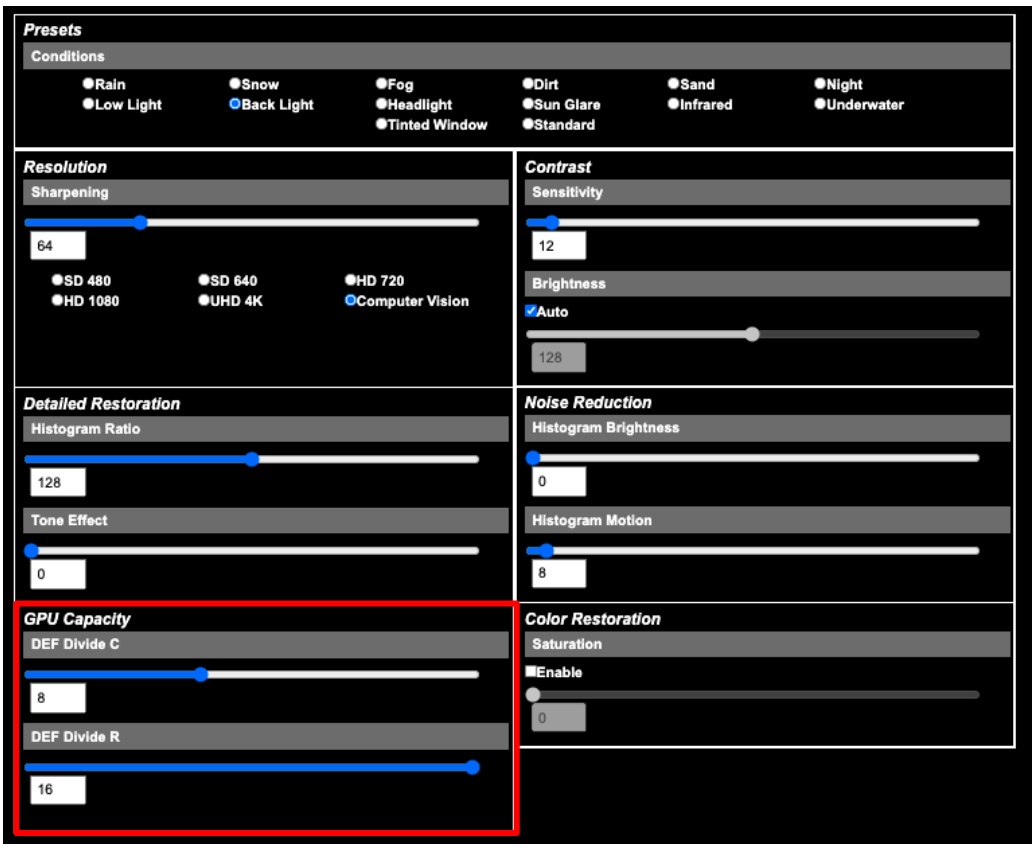


Figure 36

5.5.5.2 DEF Divide R

Radius is the number of divisions of radius of processing range of the ProHawk Vision Server service. When referring to the pixel to be processed, it specifies how many surroundings to divide. The number of divisions and processing time are proportional.
Range: 1-16

5.5.6 Contrast

The Contrast parameters provide for adjustment to the contrast of the ProHawk Vision Server service. (*Figure 37*)

5.5.6.1 Sensitivity

Figure 37

Contrast Sensitivity limits the luminance range of the ProHawk Vision Server service. Set to a lower number reduces the level of residual image effect due to movement compensation. This is a threshold to recognize an object as a moving pixel(s). The Contrast Sensitivity parameter defines the distance allowance between the adjacent pixels (for example, luminance 10 and luminance 11 becomes luminance 15 by the ProHawk Vision Server service…the distance 5 is calculated from the luminance 10) limiting the slope of the brightness fluctuation amount. This parameter allows for local contrast adjustments to the imagery enabling higher contrast viewing. Set it at 16 under normal circumstances.

Decrease the Contrast Sensitivity value if random noise is noticeable in the video. When the Contrast Sensitivity setting is lower, the ProHawk Vision Server service becomes more sensitive to changes and residual image is reduced, but with less noise elimination effect. Raise the Contrast Sensitivity setting higher to obtain better contrast or if contrast is insufficient. If the video is dark, the setting should be turned higher. When the setting is higher, the ProHawk Vision Server service becomes less sensitive, and with more noise elimination effect, yet residual image would become more noticeable. If it is dark and noise is conspicuous, reduce the Contrast Sensitivity to between 8 to 12, while also increasing the Contrast Brightness. When the Contrast Sensitivity is set to 256, the Tone restoration is turned OFF, Contrast Brightness and Detailed Restoration Tone Effect are disabled.
Range: 1-256

5.5.6.2 Brightness

Contrast Brightness changes the luminance range of the ProHawk Vision Server service. Contrast Brightness is for automatically adjusting the brightness of the tone effect according to the screen area. In typical use cases, unless there is conspicuous noise, set the Contrast Brightness to automatic by selecting the Auto checkbox. This overrides the Contrast Brightness slider bar, adjustment is automatic.

When Contrast Brightness is ON and Contrast Sensitivity is set low for dark video that is noisy, the entire screen is adjusted by a fixed brightness. When Contrast Brightness is set in the middle to 128, the ProHawk Vision Server service will adjust brightness by 50%.
Range: 0-256

5.5.7 Noise Reduction

The Noise Reduction parameters reduce or remove noise from compromised videos. *(Figure 38)*

5.5.7.1 Histogram Brightness

Noise Reduction Histogram Brightness adjusts the ratio/percentage brightness information for combining the ProHawk Vision Server service processed image and histogram image. The parameter adjusts the ratio versus the histogram. The larger the number, the more impact the histogram produces on the result by accumulating more processed images. When set to 0, it will adjust the ProHawk Vision Server processed image 100%. The Noise Reduction Histogram Brightness parameter default is 0.
Range: 0-256

Figure 38

5.5.7.2 Histogram Motion

The Noise Reduction Histogram Motion parameter adjusts the level of residual image reduction effect due to movement compensation. This is a threshold to recognize an object as a moving pixel(s). When the setting is lower, the ProHawk Vision Server service becomes more sensitive to changes and residual image is reduced, but with less noise elimination effect. When the setting is higher, it would become less sensitive, and with more noise elimination effect, yet residual image would become more noticeable. Specify parameters for reducing noise by adapting to the motion of the image.

In most conditions, setting ProHawk Vision Server service between 1024-3072 works well. On a fixed camera/sensor, decrease ProHawk Vision Server service to detect moving objects, and increase Noise Reduction Histogram Brightness. The Noise Reduction Histogram Motion should always be ON if Noise Reduction Histogram Brightness is ON under normal circumstances. The setting of Noise Reduction Histogram Brightness ON and Motion Adaptive Threshold is OFF should be used only when it is desired to remove the movements of snow or rain, etc. using a fixed camera.
Range:0-256

5.5.8 Color Adjustment

The Color Adjustment parameter reveals vivid color in dark video scenes. *(Figure 39)*

5.5.8.1 Saturation

Color Adjustment Saturation changes the magnification in the ProHawk Vision Server service. The Color Adjustment Saturation parameter adjusts the level of the ProHawk Vision Server service color correction effect. Turn the Color Adjustment Saturation ON under normal circumstances with slight color correction.

Figure 39

It may be turned OFF if it becomes difficult to see the image with color restoration when the entire screen has color such as being in the ocean, etc. Set it higher temporarily to check color only when it is difficult to recognize color in video due to a dark video or a foggy video. Specify

parameters for emphasizing color information that tends to be lost due to sharpening. When 'Enable' is checked, the color restoration function is enabled. The Color Adjustment Saturation parameter defaults to 0.
Range: 0-512

5.5.9 **Off**

Reset all video parameters to the default Off state.

5.5.9.1 Custom Filters

The Custom Filter option allows you to create a re-usable filter, based on any of the Presets and adjusting any of the sliders to determine what the filter does. (*Figure 40*)

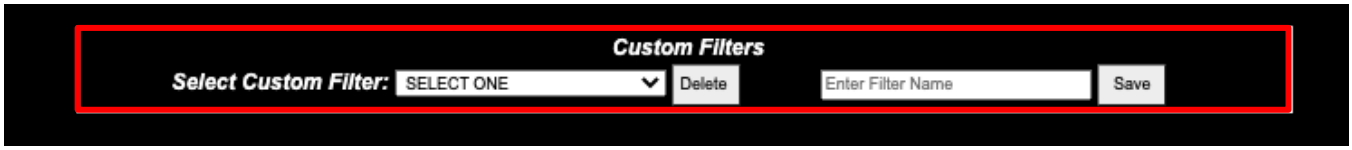


Figure 40

Once you have modified the restored stream to your liking, create a name for your filter and *click* on the **Save** button. *(Figure 41)*

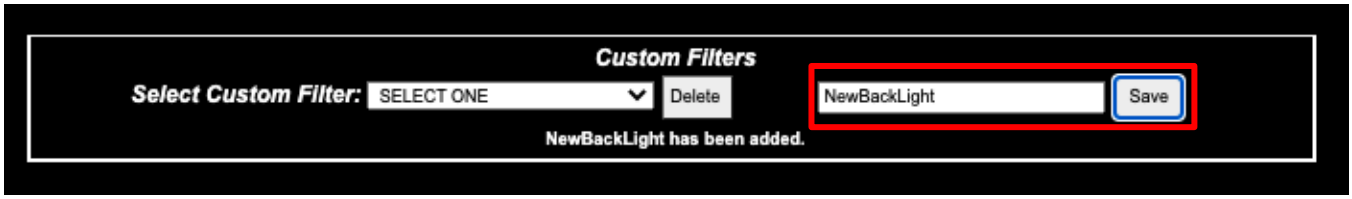
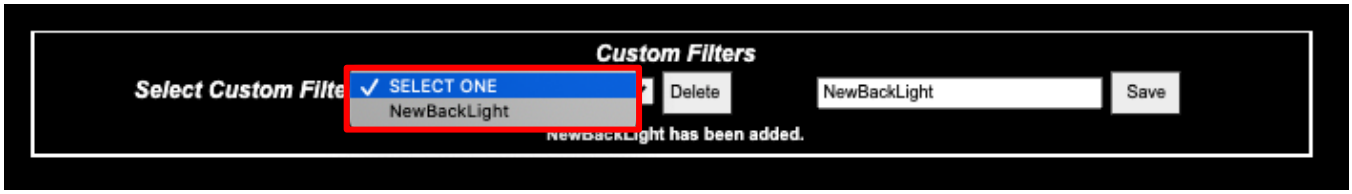


Figure 41

You will then see that your filter has been added to the list of Custom Filters. If you then select one of the filters, the restored stream will then display the changes. To reset the stream, simply click on any of the presets. (*Figure 42*)



Figures 42

6 License Key Update

Figure 43

The ProHawk Vision Server License Key Update program allows you to upgrade and update your license key. To access the ProHawk Vision License Key Update program, *click* on the **ProHawk Vision Server License Key Update**, **Start Menu** option. This will run the ProHawk Vision Server License Key Update application. (*Figure 43*)

6.1 License Key

Enter the 25-character license key, then *click* the **Next >** button. (*Figure 44*)

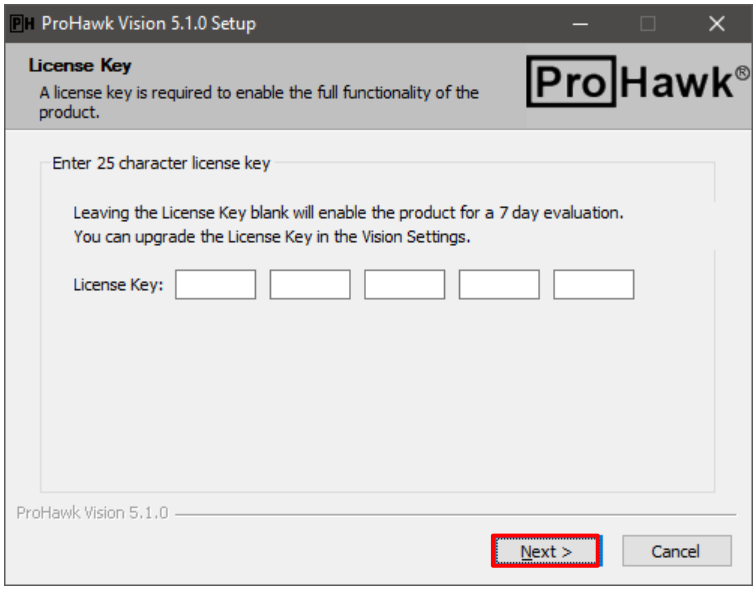


Figure 44

6.2 Product Registration

Fill in the registration information form, then *click* the **Close** button to complete. (*Figure 45*)

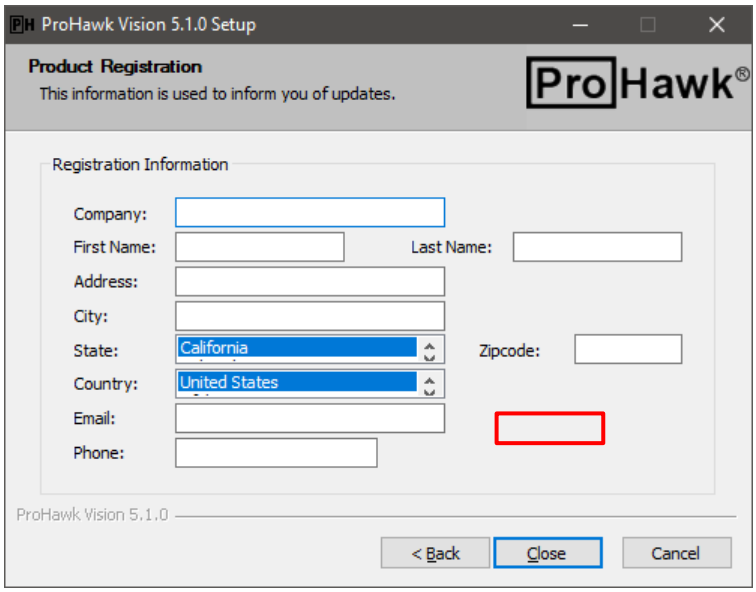


Figure 45

7 Uninstaller

This section covers the removal of ProHawk Vision Server application from your computer.

7.1 Initiate Uninstaller

To begin the uninstaller, go to your Windows Settings/Apps & Features. *Select* the **ProHawk Vision Server v5.1.0.** Then *select* the **Uninstall** button. (*Figure 46*)

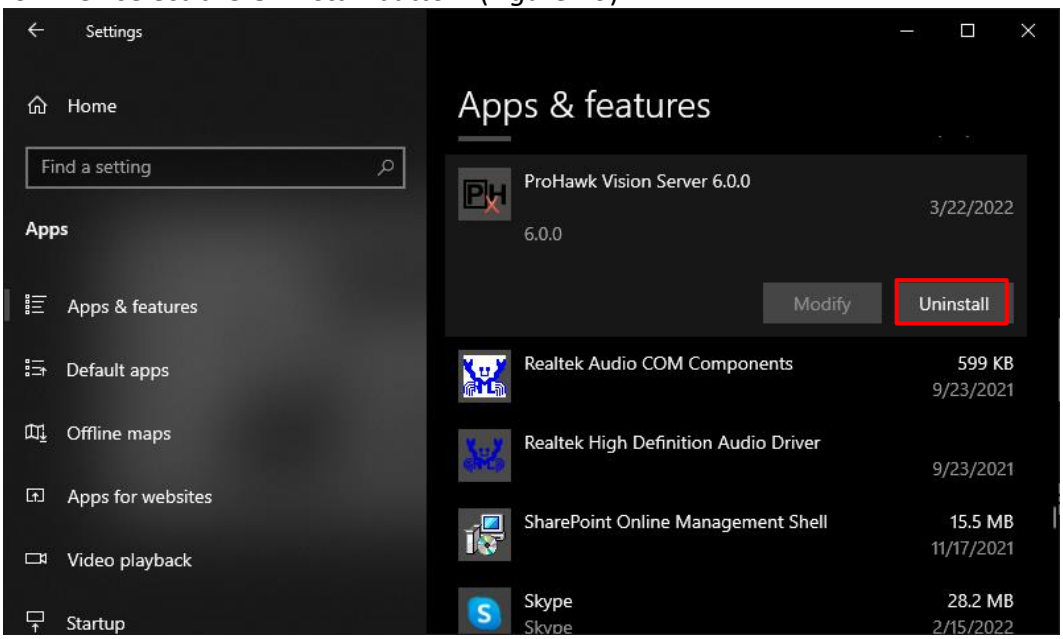


Figure 46

You will be prompted by Windows "This app and its related info will be uninstalled." *Click* on the **Uninstall** button. (*Figure 47*)

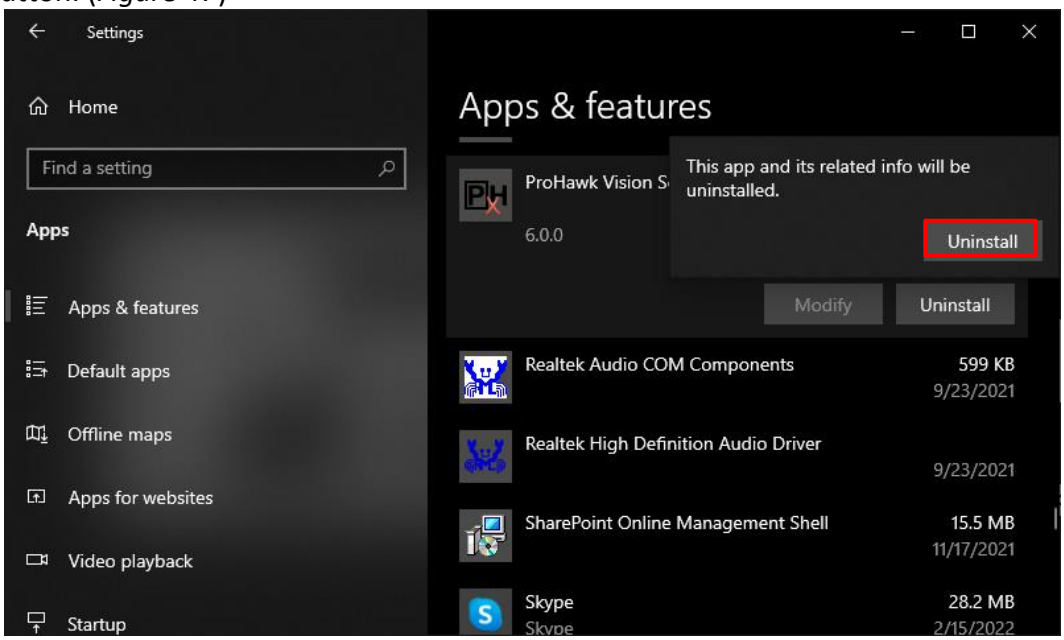


Figure 47

7.2 Confirm Uninstall

To confirm uninstall, *click* the **Yes** button in the prompt that displays. If you do not wish to uninstall *click* the **No** button. (*Figure 48*)

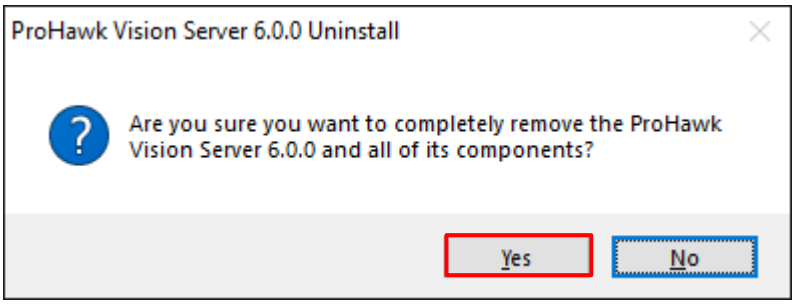


Figure 48

7.3 Uninstalling

An uninstall dialog will appear after confirming uninstallation. Wait for uninstaller to finish running its processes. If you wish to end the uninstallation at any time you may *click* the **Close** or **Cancel** button. (*Figure 49*)

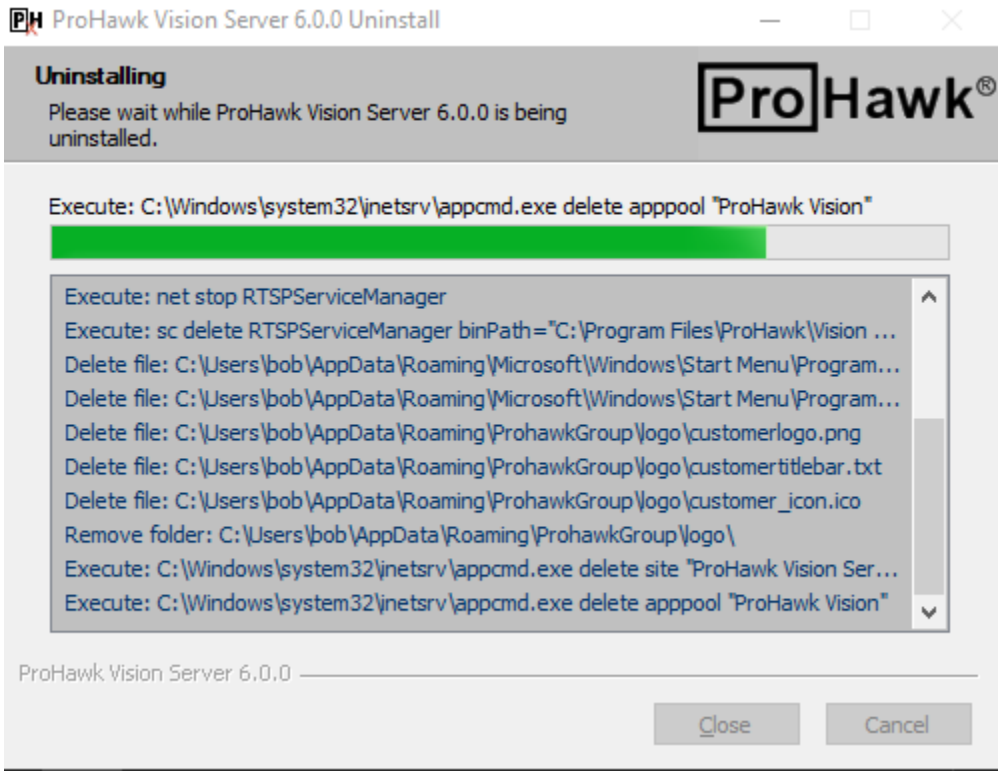


Figure 49

7.4 Firewall Rule Removed

The uninstaller will notify with a dialog will tell you that ProHawk Vision Server rule has been successfully removed from your systems Windows Firewall. *Click* **OK** to continue the uninstallation. (*Figure 50*)

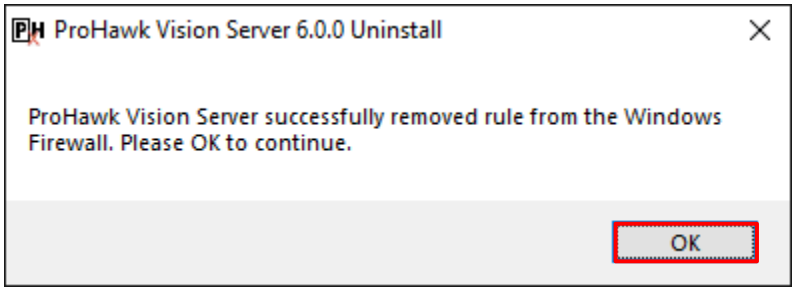


Figure 50

7.5 Configuration Information Removal

The uninstaller prompt with a dialog to ask you if you want to completely remove the ProHawk Vision Server configuration information. *Click* **Yes** to remove the configuration information or *Click* **No** to preserve the configuration information. (*Figure 51*)

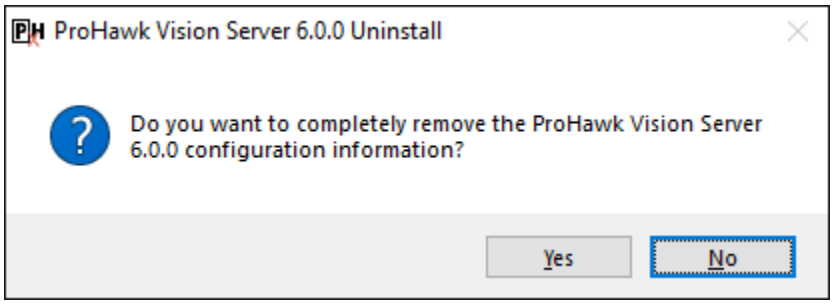


Figure 51

7.6 Finish Uninstalling

When the uninstaller is finished a dialog will tell you that ProHawk Vision Server has been successfully removed from your system. *Click* **OK** to finish the uninstallation. (*Figure 52*)

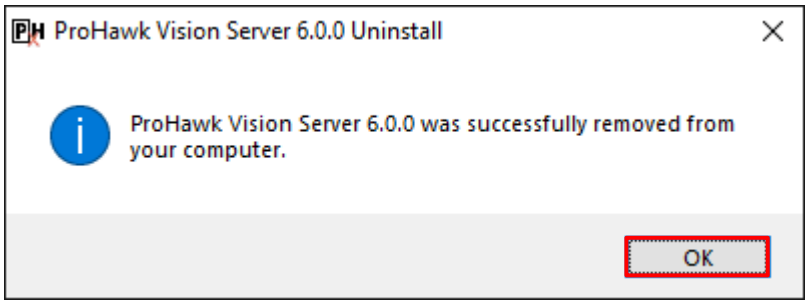


Figure 52