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# SightLine

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APPLICATIONS

## Video Management Software

PN: EAN-Video-Management-Software

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The following notifications are used throughout the document to help identify important safety and setup information to the user:

 **CAUTION:** Alerts to a potential hazard that may result in personal injury, or an unsafe practice that causes damage to the equipment if not avoided.

 **IMPORTANT:** Identifies crucial information that is important to setup and configuration procedures.

 *Used to emphasize points or reminds the user of something. Supplementary information that aids in the use or understanding of the equipment or subject that is not critical to system use.*



## Contents

1	Overview .....	1
1.1	Associated Documents .....	1
1.2	SightLine Software Requirements .....	1
1.3	Application Bit Requirements .....	1
2	VMS Software and Protocol Compatibility .....	2
3	Video Management Software .....	2
3.1	Configuring SLA-Hardware for RTSP Sessions .....	2
3.2	Milestone XProtect Essential+ Software .....	2
3.2.1	Configuring Milestone to stream RTSP .....	2
3.3	Datastead Software .....	5
3.4	Exacq Vision Software .....	6
3.5	Valerus from Vicon Software .....	7
3.5.1	Valerus Configuration Summary .....	7
3.6	DW Spectrum Software .....	8
3.7	Running the Client .....	8
3.8	AxxonNext Software .....	8
4	Troubleshooting .....	12
4.1	Windows Services .....	12
4.2	Questions and Additional Support .....	12

## List of Tables

Table 1:	Application Bits Requirement Table .....	1
Table 2:	Protocol Compatibility .....	2



## 1 Overview

This document reviews third party Video Management Software (VMS) packages that connect and receive video from SightLine products.

### 1.1 Associated Documents

[EAN-Startup Guide 1500-OEM](#): Describes steps for connecting, configuring, and testing the 1500-OEM video processing board on the 1500-AB accessory board.

[EAN-Startup Guide 3000-OEM](#): Describes steps for connecting, configuring, and testing the 3000-OEM video processing board on the 3000-IO interface board.

[EAN-Network Configuration](#): Describes how to assign a static IP address to the board, set telemetry destinations and ports, and provide configuration information for both the 3000-OEM and the 1500-OEM video processing boards.

[EAN-RTSP](#): Describes how to use various commercial off-the-shelf media players and VMS (Video Management System) software to stream video from the RTSP server running on both either the 1500-OEM or 3000-OEM systems.

[EAN-Digital-Video-Input](#): Describes how to configure the SLA-hardware for digital video input.

[Interface Command and Control \(IDD\)](#): Describes the native communications protocol used by the SightLine Applications product line. The IDD is also available as a local download on the [Software Download](#) page.

Panel Plus User Guide: Provides descriptions of all the settings in the Panel Plus application. (Located in the Panel Plus application in the *Help* menu.)

### 1.2 SightLine Software Requirements

Recommend firmware version 2.23.10 and above.

**ⓘ IMPORTANT:** The Panel Plus software version should match the firmware version running on the board.

### 1.3 Application Bit Requirements

The functions described in this EAN require Application Bits (app bits) purchased from SightLine. App bits reside on the hardware unit and are enabled with a license file provided by SightLine at initial unit purchase or during a license upgrade process. License files use a hardware ID that is applicable to a specific hardware serial number. For questions and upgrade support contact [SightLine Sales](#).

**Table 1: Application Bits Requirement Table**

Function	Min SW Version	Required Application Bit(s)
Encoding	ALL	IP Encoding. 0x0004



## 2 VMS Software and Protocol Compatibility

Table 2: Protocol Compatibility

		RTSP (NT=Not Tested, NS=Not Supported)					
RTP MJPEG		RTP H.264	RTP MPEG2-TS H.264	RTP MPEG2-TS MPEG-4	TCP Mode	Multicasting	RTP MJPEG
VMS Software (3rd Party client software)	<a href="#">Milestone</a>	Yes	Yes	No	No	Yes	No
	<a href="#">DW Spectrum</a>	Yes	Yes	No	No	Yes	No
	<a href="#">Vicon-Valerus</a>	Yes	Yes	No	No	No	No
	<a href="#">ExacqVision</a>	Yes	Yes	No		Yes	No
	<a href="#">Luxriot</a>	Yes	Yes	No	No	Yes	No
	<a href="#">Video Insight VMS</a>	NT	NT	NT	NT	NT	NT
	<a href="#">Mobotix</a>	NS	NS	NS	NS	NS	NS
	<a href="#">Axxonsoft</a>	Yes	Yes	Yes		Yes	Failed

When not using RTSP, use the SDP file to receive the stream.

## 3 Video Management Software

### 3.1 Configuring SLA-Hardware for RTSP Sessions

Before using any type of Video Management Software, the SLA-hardware will need to be configured for RTSP sessions. See the [EAN-RTSP](#) for more information.

### 3.2 Milestone XProtect Essential+ Software

A free thirty-day trial of [XProtect Essential+](#) is available from the Milestone website (registration is required). Follow the manufacturer’s instructions to install the client and server software.

#### 3.2.1 Configuring Milestone to stream RTSP

1. Open the XProtect management client.
2. From the site navigation sidebar, expand the server tree and select *Recording Servers*.
3. Right click the server entry in the *Recording Servers* tree and select *Add Hardware*.
4. Once the *Add Hardware* wizard has launched, select *Manual* and click *Next* to continue.

- Manual**  
Detects hardware models for manually entered IP addresses and host names



- If RTSP authentication is configured, enter credentials to connect to the RTSP server. Disregard the *(Factory Default)* entry. These credentials cannot be modified or removed. Click *Next* to proceed.

Include	User Name	Password
<input checked="" type="checkbox"/>	(Factory Default)	••••••••

Ignore the *(Factory Default)* entry in the credentials list.

- Expand the *Universal* category in the driver list. Select the *Universal 1 channel driver* (1500-OEM or single channel 3000-OEM) or *Universal 16 channels driver* (dual channel 3000-OEM). Click *Next* to continue.



- Enter the IP address of the SLA device and port 554. Select the appropriate universal driver from drop-down menu and click *Next* to proceed.

1500-OEM and 3000-OEM (single channel):

	Address	Port	Hardware model
▶	192.168.1.178	554	Universal 1 channel driver

3000-OEM (dual channel):

	Address	Port	Hardware model
▶	192.168.1.178	554	Universal 16 channels driver

- The wizard will detect and add the configured device. Click *Next* when the process is complete.
- Enable the root hardware device and camera port 1 (1500-OEM and single channel 3000-OEM) or camera ports 1-2 (dual channel 3000-OEM). Uncheck all other devices and click *Next* to continue.

Hardware to Add	Enabled	Name
Universal 16 channels driver - 192.168.1.178		
Hardware:	<input checked="" type="checkbox"/>	Universal 16 channels driver (192.168.1.178)
Camera port 1:	<input checked="" type="checkbox"/>	Universal 16 channels driver (192.168.1.178) - Camera 1
Camera port 2: <span style="background-color: #0056b3; color: white; padding: 2px;">3000-OEM (dual channel)</span>	<input checked="" type="checkbox"/>	Universal 16 channels driver (192.168.1.178) - Camera 2

- Select a default group for the camera(s) and click *Finish* to close the *Add Hardware* wizard.

Default camera group:

Default camera group

Click the folder to select a default group for the camera(s). The *Add Hardware* wizard cannot complete the device setup process until each camera is assigned to a group.



11. Expand the new *Universal* driver group in the *Recording Server* tree, right click on *Camera 1*, and uncheck *Enabled*.

12. Select the *Settings* tab within the *Properties* window and configure the following settings:

- Delivery Mode: *Multipart Stream*
- Keep Alive type: *Default*
- Retrieval Mode: *Streaming*
- Video stream 1 / Codec: *H264*
- Video stream 1 / Connection URL:
  - Leave blank for 1500-OEM
  - *Network 0* for 3000-OEM
  - */net1* for 3000-OEM Network 1
- Video stream 1 / RTSP Port: *554*
- Video stream 1 / Streaming Mode: *RTP over RTSP (TCP)*


<b>General</b>	
Delivery Mode	Multipart Stream
Keep Alive type	Default
Retrieval Mode	Streaming
<b>Video stream 1</b>	
Codec	H264
Connection URI	
RTSP Port	554
Streaming Mode	<b>RTP over RTSP (TCP)</b>

**Example Net0 RTSP Configuration  
1500-OEM / 3000-OEM**

<b>General</b>	
Delivery Mode	Multipart Stream
Keep Alive type	Default
Retrieval Mode	Streaming
<b>Video stream 1</b>	
Codec	H264
Connection URI	<b>/net1</b>
RTSP Port	554
Streaming Mode	<b>RTP over RTSP (TCP)</b>

**Example Net1 RTSP Configuration  
3000-OEM**

13. Right click the camera entry in the *Recording Servers* tree and check *Enabled* to start streaming.

 For dual channel 3000-OEM, repeat steps 11-13 for *Camera 2* to configure *network 1* streaming.

14. When correctly configured, previews of the stream(s) will appear in the preview window (if shown).



### 3.3 Datastead Software

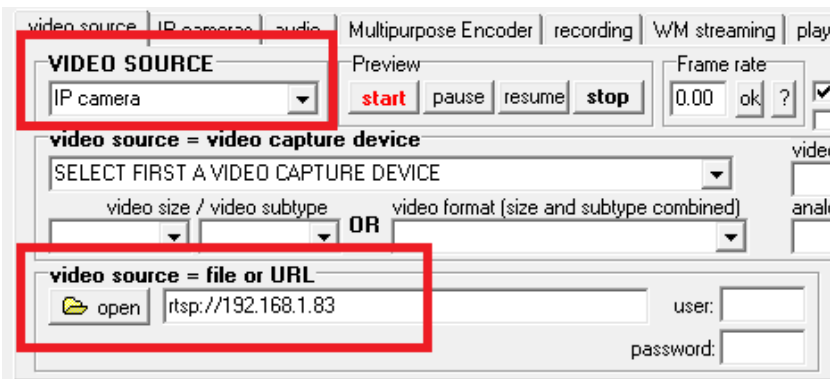
From the Datastead Software [website](#) download and install the Datastead software package.

1. In the Datastead software:

a. Set *Video Source* to *IP camera*.

b. Set video source URL to the IP address of the SightLine hardware:

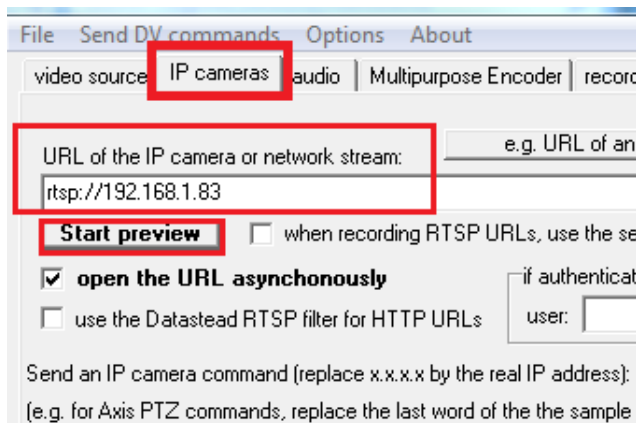
- EXAMPLE: `rtsp://192.168.1.83`                   **## 1500 and 3000**
- EXAMPLE: `rtsp:// 192.168.1.83/net0`       **## 3000**
- EXAMPLE: `rtsp:// 192.168.1.83/net1`       **## 3000**



2. Click the *IP cameras* tab.

3. Set the URL of the IP camera or network stream.

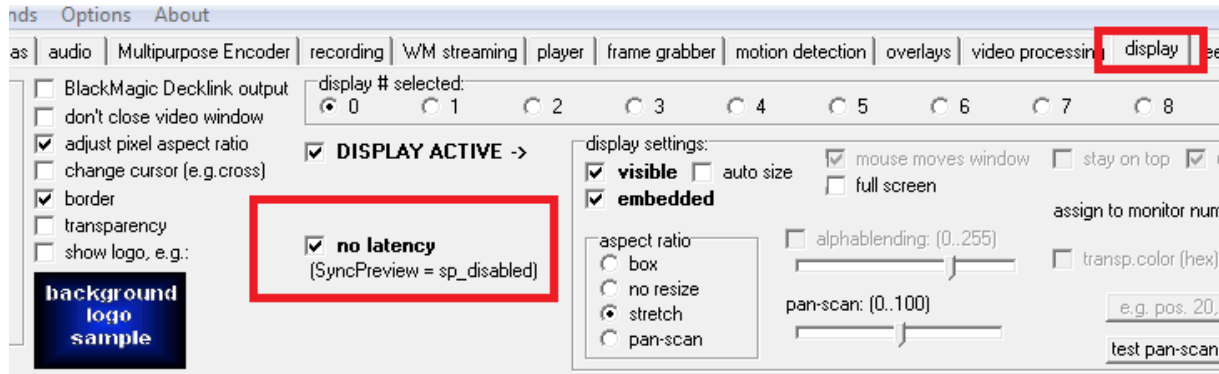
4. Click *Start preview* to begin streaming.



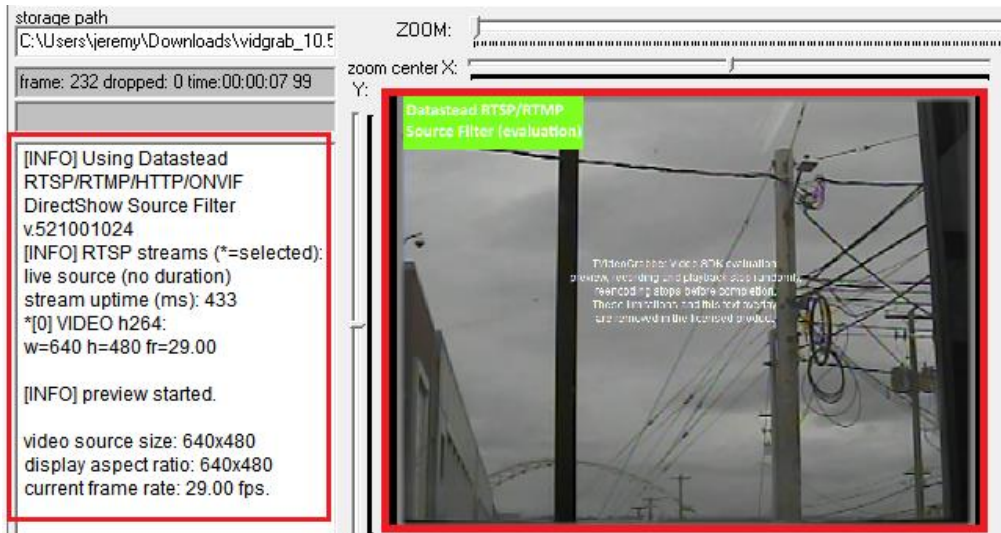




5. Click on the *Display* tab and enable the *no latency* option.



Video is shown in the preview window with basic information about the video codec.



### 3.4 Exacq Vision Software

From the Exacq [website](#) download and install the Client and Server software applications.

1. After installing, open the client and click the gears in the upper right corner.
2. On the right panel, go to *exacqVision Server » Configure System » Add IP Cameras*.
3. Click *New*. Add the following IP camera information in the left panel:
  - a. Device Type: *RTSP*
  - b. Hostname/IP Address: *rtsp://<IP address>*
  - c. Username: *<blank>*
  - d. Password and Password Confirm: *<blank>*
4. The application adds the camera and displays the status as *connected*. Click *Apply*.
5. The camera recording and stream should appear below *Add IP Camera* on the right.



**Application and PC Crash:** When connecting to the Sightline board, the exacqVision application crashes and causes the PC to crash.

To keep the PC from crashing:


1. Run *services.msc*
2. Edit the properties in the *exacqVision Server* service.
3. Go to the *Recovery* tab and change the *Second failure* option to *Restart the service*.

### 3.5 Valerus from Vicon Software

From the Vicon [website](#) download and install the Valerus software application. Follow the installation instructions in the [Software Installation and Upgrade Guide](#).

 For more information about the Valerus software application see the [User Guide](#).

1. After installing the player and launcher, ensure the following Windows services are running:
  - Windows process activation service
  - World wide web publishing service
2. Launch the Valerus software application.
3. Choose *All-In-One* or *Application server*, and then save the settings.

 Comprehensive configuration and user instructions are available in the [User Guide](#). A configuration summary is shown in the next section.

#### 3.5.1 Valerus Configuration Summary

1. Open the Valerus launch application.
2. Open Internet Explorer 11 and enter the following:
  - URL bar: *localhost/login*
  - User name: *admin*
  - Password: *1234*
3. Add NVR first (in the *Discovered* list). Click *Add* and *Apply*.
4. Add the RTSP device manually (ONVIF devices are discovered automatically).
5. In the *Protocol* tab choose *Generic RTSP*. Enter the server details. Keep port 554.
6. To stream the URL enter: */net0* or */net1*
7. All other settings remain at their defaults. Click *Apply* and close. The software application connects to the RTSP server.
8. To view the video, the video player must be enabled. Go to *Resources » Video Channels » Channel properties » Show player*.



### 3.6 DW Spectrum Software

DW Spectrum software is available from the DW Spectrum [website](#).

*The installer asks for an admin password and system name that the client will use to connect to the server.*

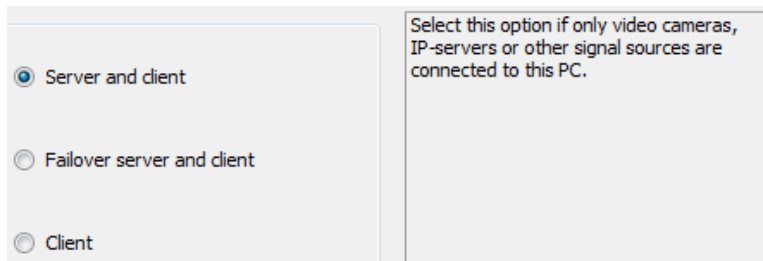
### 3.7 Running the Client

1. Run the client by clicking opening the DW Spectrum application.
2. Enter the admin password for the first time. The application automatically discovers ONVIF servers.
3. Add an RTSP camera by right clicking on *Servers » Add devices*.
4. Enter the RTSP URL and click *Scan* to add the new camera.
5. Double click on the newly added camera to view the video.

### 3.8 AxxonNext Software

Install the AxxonNext Software.

1. Select *Server and client*.

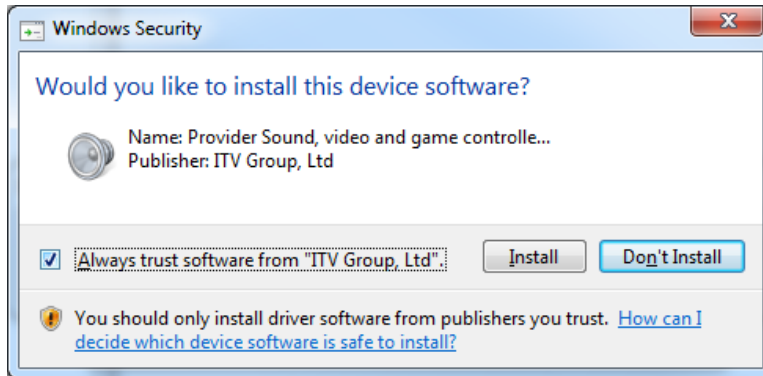


2. Select the following components.

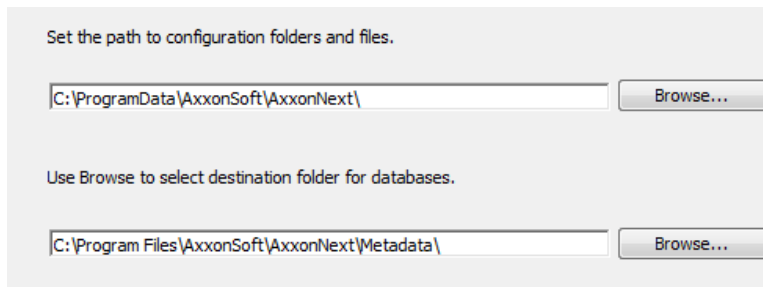
Components	State	Install?
Prerequisites		<input type="checkbox"/>
Drivers		<input checked="" type="checkbox"/>
Guardant drivers	Uninstalled	<input checked="" type="checkbox"/>
Base product		<input checked="" type="checkbox"/>
Axxon Detector Pack x64	Uninstalled	<input checked="" type="checkbox"/>
Axxon Driver Pack x64	Uninstalled	<input checked="" type="checkbox"/>
AxxonNext	Uninstalled	<input checked="" type="checkbox"/>



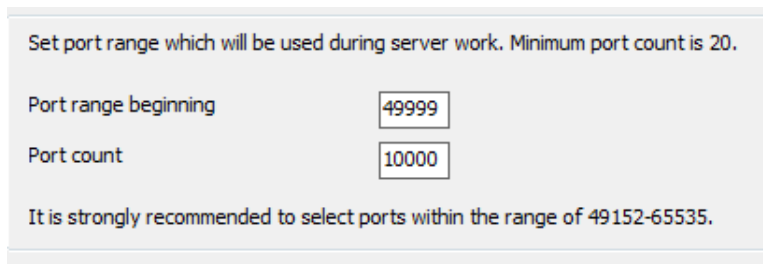
3. If prompted to trust the install, click *Install*.



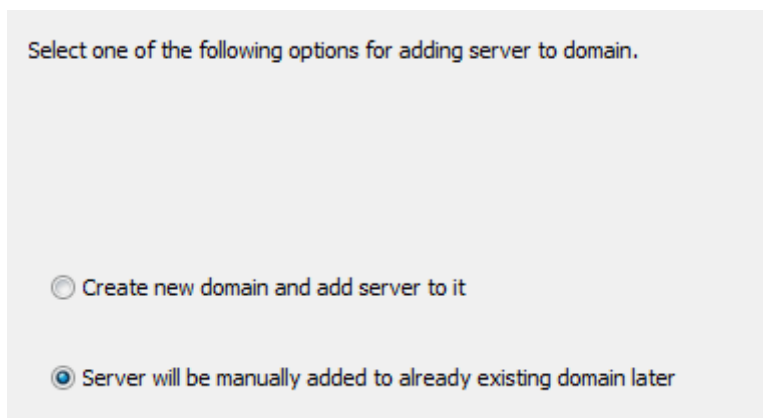
4. Accept the default paths.



5. Accept the default port range settings.



6. Select *Server will be manually added*.





7. Confirm the AxxonNext software successfully installed.

AxxonNext v. 4.0.0.4316 is successfully installed on your PC. Click Finish to exit.

Attention!  
 On starting the software package an authorization window will appear.  
 Please specify the following default values in appropriate fields:  
 User name: root  
 Password: root

8. To start the server, click the *AxxonNext* icon from the desktop.



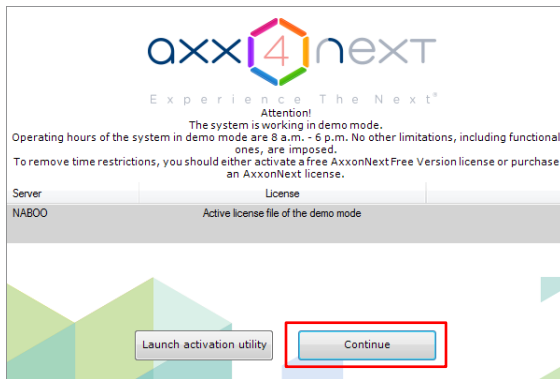
9. Login using the default credentials.

Server name or IP address: LOCALHOST 49999

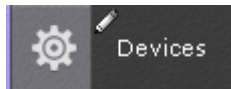
Username: root  
 Default username: root

Password: ●●●●  
 Default password: root

10. Continue using the demo mode version of the application. Confirm any additional prompts.

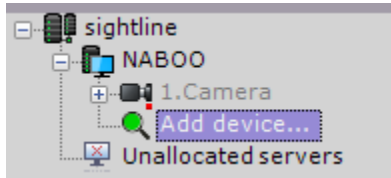


11. To connect to the SightLine hardware, Click the *Devices* icon.





12. Select *Add device...*



13. Enter the following SightLine hardware IP address.

Add device manually:		
IP address	Port	Vendor
192.168.1.181	80	RTSP
Device type	Model	
IP device	<b>RTSP Device</b>	

14. Click the + button to add the device.



15. Once the device has been added, the video will start streaming.



## 4 Troubleshooting

### 4.1 Windows Services

Many VMS packages leave additional support software hanging around. Disable extra services that may not be useful.

Offline Files	The Offline ...	Started	Automatic	Local System...
Plug and Play	Enables a c...	Started	Automatic	Local System...
postgresql-9.5			Automatic	Network S...
Power	Manages p...	Started	Automatic	Local System...
Print Spooler	Loads files t...	Started	Automatic	Local System...

Service name: postgresql-9.5

Display name: postgresql-9.5

Description:

Path to executable:

"C:\Program Files\Common Files\AxonSoft\PostgreSQL.NGP\bin\pg\_ctl.e

Startup type:

SQL Server (SQLEXPRESS)	Provides sto...		Disabled	Network S...
SQL Server VSS Writer	Provides th...		Disabled	Local System...

### 4.2 Questions and Additional Support

For questions and additional support, please contact [Technical Support](#). Additional support documentation and Engineering Application Notes (EANs) can be found on the Support pages of the SightLine Applications [website](#).