

# Axon Evidence Local Hardware and Software Requirements

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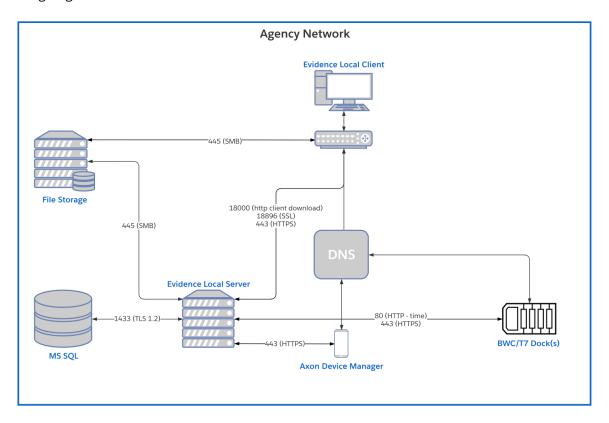
# **System organization overview**

Axon Evidence Local is an on-premises digital evidence management system. This guide provides information on common Evidence Local system installations and the system requirements for the installations.

Evidence Local has flexible deployment options that can be configured to fit your agency needs. This section provides an overview of the available deployment options for the server, client, file storage, and docking stations for Axon Body-Worn Cameras (BWC) and TASER 7 devices. Evidence Local also supports Axon Respond for agencies that use Axon Body 3 cameras. Contact your Axon Representative for more detailed information on system organization options.

#### Standard installation

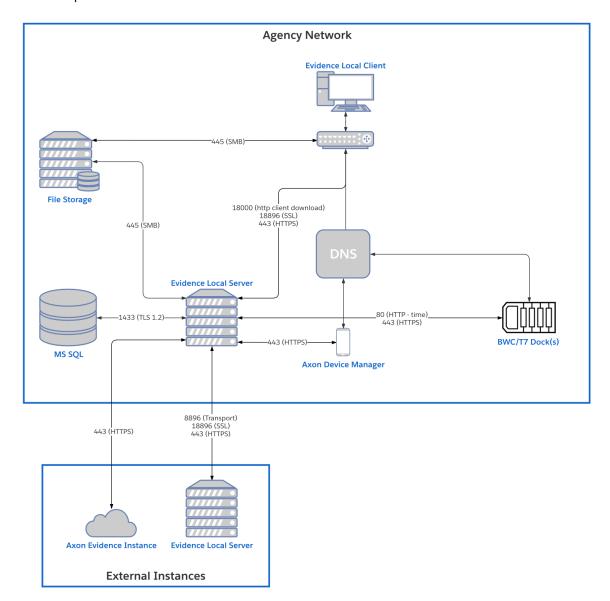
The standard installation is for a completely on-premises solution with no external access. This installation provides the option of using the Axon Device Manager mobile app for assigning devices.



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#### **External server instances**

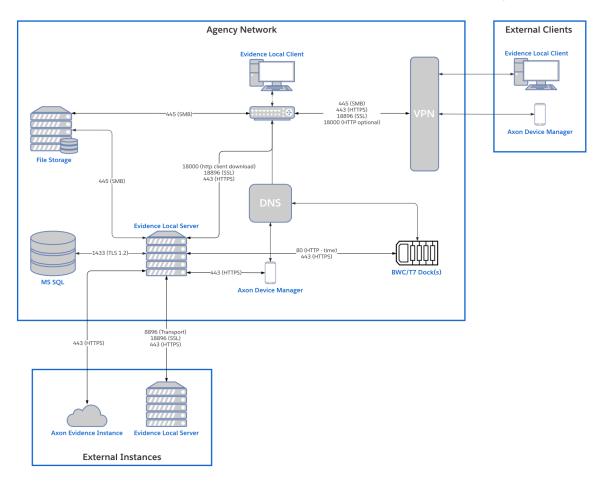
This installation provides the ability to link to external servers. This allows for the use of Server Destinations in Evidence Local, where system administrators can set up rules that automatically transfer copies of files to another Evidence Local server, or Axon Evidence, when a specified rule criterion is met.



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#### **External client instances**

This installation provides the ability for Evidence Local client use outside of your agency's network. It can also be used with external server instances, but that is not a requirement.

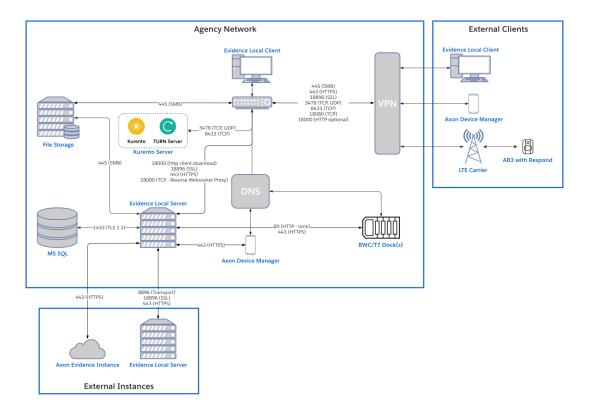


# **Evidence Local with Axon Respond**

Axon Respond allows users with the correct permissions to see the location of Axon Body 3 cameras on the Axon Respond map. Axon Respond+ adds the ability to livestream from the cameras while recording is in-progress. This installation provides an integration between Evidence Local and Axon Respond and Respond+. This installation has additional setup

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requirements and users must be able to access the internet to view the Axon Respond map and livestream.



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# **System requirements**

This section describes system requirements and firewall permissions. Custom configurations may have additional requirements. Contact your Axon Representative for any questions.

## Server hardware

The following table outlines the hardware and software requirements for the server portion of an Evidence Local installation. This is the system that will store and manage agency evidence.

	Minimum	Recommended	
Processor	1x 8-Core Intel Xeon (3.60 GHz)	2x 16-Core Intel Xeon (2.40 GHz)	
Memory <sup>1</sup>	16 GB RAM ECC	64 GB RAM ECC	
Internal drive <sup>2</sup>	8 TB	72 TB	
Network	10/100 ethernet Gigabit ethernet		
Video	Integrated graphics		
Monitor	SVGA (800 x 600) WXGA (1024 x 768)		
Operating system	Windows Server 2016 v1709	6 v1709 Windows Server 2019	
SQL database <sup>3</sup>	SQL Express 2016 <sup>3</sup>	SQL Server 2019	
Concurrent AB2 devices <sup>4</sup>	160	400	
Concurrent AB3 devices <sup>4</sup>	50	150	

<sup>&</sup>lt;sup>1</sup> Error Code Correction (ECC) memory is encouraged to maximize system reliability.

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<sup>&</sup>lt;sup>2</sup> Relates to storage for Axon Commander Server and Operating System. It does not include recommended drive for evidence storage.

<sup>&</sup>lt;sup>3</sup> Agencies with TASER 7 devices cannot use SQL Express due to the large amount of log data for those devices. SQL Server 2019 must be used with TASER 7 installations.

<sup>&</sup>lt;sup>4</sup>The maximum number of devices that can upload evidence to Evidence Local at the same time.

# Server hardware for Axon Respond+ (livestreaming)

There are additional requirements for agencies using Axon Respond+ livestreaming. These requirements assume the Kurento server will be installed as a virtual machine (VM). See the requirements on the next page if the Kurento server will be a separate server.

	Minimum	Recommended
Processor	1x 8-Core Intel Xeon (3.60 GHz)	2x 16-Core Intel Xeon Silver (2.40 GHz)
Memory <sup>1</sup>	16 GB RAM ECC	64 GB RAM ECC
Internal drive <sup>2</sup>	8 TB	72 TB
Network	10/100 Ethernet	Gigabit Ethernet
Video	Integrated Graphics	
Monitor	SVGA (800 x 600)	WXGA (1024 x 768)
Operating system	Windows Server 2016 v1709 Windows Server 2019	
SQL database <sup>3</sup>	SQL Express 2016 <sup>3</sup>	SQL Server 2019
Concurrent AB2 devices <sup>4</sup>	80	200
Concurrent AB3 devices <sup>4</sup>	25 80	
Concurrent livestreaming <sup>5</sup>	10	40

<sup>&</sup>lt;sup>1</sup> Error Code Correction (ECC) memory is encouraged to maximize system reliability.

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<sup>&</sup>lt;sup>2</sup> Relates to storage for Axon Commander Server and Operating System. It does not include recommended drive for evidence storage.

<sup>&</sup>lt;sup>3</sup> Agencies with TASER 7 devices cannot use SQL Express due to the large amount of log data for those devices. SQL Server 2019 must be used with TASER 7 installations.

 $<sup>^4\</sup>mbox{The}$  maximum number of devices that can upload evidence to Evidence Local at the same time.

<sup>&</sup>lt;sup>5</sup> The maximum number of livestreams that can be viewed at the same time.

#### Standalone Kurento server hardware

These are the requirements if the Kurento server will be installed on a separate server.

	Minimum	Recommended
Processor	1x 8-Core Intel Xeon 2x 32-Core Intel Xeon Silver (2.40 GHz)	
Memory <sup>1</sup>	8 GB RAM ECC 16 GB RAM ECC	
Internal drive	500 GB 500 GB	
Network	10/100 ethernet Gigabit ethernet	
Video	Integrated Graphics	
Monitor	SVGA (800 x 600) WXGA (1024 x 768)	
Operating system	Ubuntu 16.04 Ubuntu 16.04	

 $<sup>^{\</sup>rm 1}$  Error Code Correction (ECC) memory is encouraged to maximize system reliability.

# **Client hardware**

The following table outlines the hardware and software requirements for the Evidence Local Client. This is the system used to access and view the evidence stored on a department's central server.

	Minimum	Recommended
Processor	Intel Core i3-530 (2.93 GHz)	Intel Core i7-2600 (3.4 GHz)
Memory	4 GB RAM	8 GB RAM
Internal drive <sup>1</sup>	80 GB HDD	120 GB SSD
Network	10/100 ethernet	Gigabit ethernet
Video	Integrated graphics	256MB dedicated graphics (x16 PCI-Express Card)
Monitor	WXGA (1024 x 768)	UXGA (1600 x 1200)
Operating system	Windows 10 64 Bit Windows 11 64 Bit	
Optical media	16x DVD+/-RW Drive	

<sup>&</sup>lt;sup>1</sup> Relates to storage for Evidence Local Server and Operating System. It does not include recommended drive for evidence storage.

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# Firewall permissions

The following ports are required to be open on Evidence Local installations. Please take note of the ports required for the Server and for the Clients.

## **Evidence Local server**

Туре	Name	Protocol	Port
Outbound	Evidence Local – Beacons	UDP	8881
Inbound	Evidence Local – Transporter (v1) Protocol	TCP	8896
Inbound	Evidence Local – Transporter (v2) Protocol	TCP	18896
Inbound	Evidence Local – Web Server	TCP	18000
Inbound	HTTPS Communication with Axon Products	TCP	443
Inbound	<u>Livestreaming – Reserve Websocket Proxy</u>	TCP	18080

# **Evidence Local Kurento livestreaming server**

**Note**: These\_rules could be applied to Evidence Local Server if a Kurento server is installed via VM inside the Evidence Local server.

Туре	Name	Protocol	Port
Inbound	<u>Livestreaming – Kurento Websocket</u>	TCP	8433
Inbound	Livestreaming – Kurento and coTURN service	TCP	3478
Inbound	Livestreaming – Kurento and coTURN service	UDP	3478
Inbound	Livestreaming – Kurento connection	UDP	49152 - 65535
Outbound	Livestreaming – Kurento connection	UDP	49152 - 65535

# **Evidence Local client**

Туре	Name	Protocol	Port
Outbound	Evidence Local – Transporter (v1) Protocol	TCP	8896
Outbound	Evidence Local – Transporter (v2) Protocol	TCP	18896
Outbound	Evidence Local – Web Server	TCP	18000

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#### **Axon Commander web client**

Туре	Name	Protocol	Port
Outbound	Evidence Local – <u>HTTPS</u>	TCP	443
Outbound	<u>Livestreaming – Reserve Websocket Proxy</u>	TCP	18080
Outbound	Livestreaming – Kurento Websocket	TCP	8433
Outbound	Livestreaming <u>–</u> Kurento and coTURN service	TCP	3478
Outbound	Livestreaming <u>–</u> Kurento and coTURN service	UDP	3478

## File sharing (if applicable)

In some instances, the client, server, and network attached storage systems may connect through a firewall. In these instances, it is important to ports are open for file access. The network storage configuration can vary depending on configuration. However, for most systems using Windows File Sharing (via SMB) the following settings might be required.

Туре	Name	Protocol	Port
Inbound	Direct Hosted SMB	TCP	445
Outbound	Direct Hosted SMB	TCP	445

# SQL server (if applicable)

Depending on the configuration and location of the SQL server and your agency's firewall, some special configuration might be required to ensure communication with the Microsoft SQL server. If the SQL Server is installed on the same machine as the Evidence Local server, firewall configuration is not typically required.

If your server configuration results in the Evidence Local server and SQL server being on separate machines that pass through a firewall, see the Microsoft article <u>Configure the Windows Firewall to Allow SQL Server Access</u> to understand how to best determine and manage your port requirements.

# Axon Dock (if applicable)

Туре	Name	Protocol	Port
Outbound	Axon Dock – HTTPS	TCP	443
Outbound	Axon Dock – Time Synchronization	TCP	80

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