GUARDPOINT XI PREREQUISITES

Installation, server, SQL, network and client requirements for GuardPoint XI

Customer Installation Guide

2026 Edition

Please review these requirements with the customer's IT team before installation or hardware purchase.

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> **Important:** The requirements in this document are general guidance. Final sizing should reflect controller count, cardholder volume, event volume, integrations, reporting and database growth.

I. Introduction

GuardPoint XI operates using a server/client architecture. A typical installation consists of a GuardPoint XI Server, a Microsoft SQL Server database and, where required, additional GuardPoint XI Workstations. The standard GuardPoint XI Server installation includes Microsoft SQL Server Express 2025, which is the default and recommended option. GuardPoint XI can also be configured to connect to an existing compatible Microsoft SQL Server installation.

Before installing GuardPoint XI, ensure that the computer meets the requirements below, Windows is fully updated and the installation is being carried out using an account with local Administrator permissions. For new installations, Sensor Access recommends business-grade hardware from a recognised manufacturer.

GuardPoint XI Setup installs the Visual C++ runtime, the Microsoft .NET 10 Desktop Runtime and the ASP.NET Core Runtime automatically. The Microsoft Edge WebView2 Runtime, which is required by the GuardPoint XI GUI, is built into Windows 11.

> **Windows Server:** The Microsoft Edge WebView2 Runtime must be installed separately on Windows Server before installing GuardPoint XI.

> **Pending restart:** Setup stops and shows the reason if a Windows restart is pending. Restart Windows before starting the installation.

II. Choosing the Correct Server Specification

The hardware required will depend on the size and complexity of the GuardPoint XI installation. A small or standard access control system does not normally require a dedicated Xeon server. Modern Intel Core processors provide more than sufficient performance for many GuardPoint XI installations. Larger installations, particularly systems using multiple workstations, large cardholder databases, extensive reporting, API integrations, CCTV, biometrics, Active Directory, lifts or other integrations, should use the higher specification.

1. GuardPoint XI Server

Component	Small / Standard Installation	Medium / Large Installation
Processor	Intel Core i5 10th Generation or newer, or equivalent current Intel processor	Intel Core i7 10th Generation or newer. Intel Core i9, Core Ultra 7/9 or current Intel Xeon processors are also suitable
CPU	Minimum 6 cores / 12 threads	Minimum 8 cores / 16 threads. More cores are recommended for larger or integration-heavy systems
Memory	16 GB RAM	32 GB RAM minimum
Storage	NVMe SSD required	NVMe SSD required
Storage capacity	500 GB free disk space minimum, allowing for the GuardPoint XI databases, journal and backups	500 GB free disk space minimum. Storage should be sized according to database growth, journal retention and backup requirements
Graphics	Graphics hardware and monitor are optional if the GuardPoint XI GUI will not be used on the server	Graphics hardware and monitor are optional if the GuardPoint XI GUI will not be used on the server
Network	Ethernet adapter, minimum 100 Mbit. Gigabit Ethernet recommended	Gigabit Ethernet recommended
Operating system	Windows Server 2025 or later	Windows Server 2025 or later
Architecture	64-bit	64-bit

For a new computer purchase, Sensor Access would normally recommend an Intel Core 12th Generation processor or newer, although a suitable 10th Generation processor remains acceptable as a minimum specification.

> **Recommendation:** For medium, large or business-critical installations, a dedicated server is recommended.

2. Virtual Servers

GuardPoint XI may also be installed within a virtual server environment.

The virtual machine should be allocated CPU, memory and storage resources equivalent to the physical-server requirements above.

Care should be taken where the host runs multiple virtual machines. GuardPoint XI and SQL Server should have sufficient dedicated resources available and should not depend on heavily contended CPU, RAM or storage.

3. GuardPoint XI Workstation / Client

A GuardPoint XI Workstation normally has a lighter workload than the main GuardPoint XI Server. These requirements apply to workstations in server mode or client mode.

Component	Requirement
Processor	Intel Core i5 10th Generation or newer, or equivalent current Intel processor
CPU	Minimum 6 cores / 12 threads
Memory	16 GB RAM
Storage	NVMe SSD with 500 GB free disk space minimum
Graphics	Full HD 1920 × 1080 or higher
Network	Ethernet adapter, minimum 100 Mbit. Gigabit Ethernet recommended
Operating system	Windows 11 with the latest updates, or later

A higher specification workstation may be appropriate where the computer is also displaying multiple CCTV streams, complex graphical maps or running other demanding applications alongside GuardPoint XI.

4. Visitor Client [VMS]

The GuardPoint XI Visitor interface is browser based and does not require the GuardPoint XI application to be installed on the device. It can be accessed from a desktop PC, laptop, tablet or compatible smartphone.

Component	Requirement
Device	Any device capable of displaying the GuardPoint XI Visitor Web Page
Operating system	No specific operating system requirement
Browser	Any up-to-date browser: Google Chrome, Microsoft Edge or Mozilla Firefox
Network	Wired Ethernet or Wi-Fi with reliable access to the GuardPoint XI Server. A wired connection is preferable at busy visitor sign-in points where consistent connectivity is important
Display	No specific resolution requirement; the device must be capable of displaying and operating the web interface

The device must be able to communicate reliably with the GuardPoint XI Server over the relevant network connection.

5. Microsoft SQL Server

The standard GuardPoint XI Server installation includes Microsoft SQL Server Express 2025. This bundled local SQL Server Express 2025 installation is the default and recommended option. GuardPoint XI may also be connected to a separately installed compatible version of Microsoft SQL Server.

Component	Requirement
Default bundled database	Microsoft SQL Server Express 2025 (default and recommended)
Compatible external SQL versions	Microsoft SQL Server 2019 or later (2019, 2022 or 2025)
Editions	SQL Server Express or SQL Server Standard
Small / Standard installations	SQL Server Express is normally suitable
Larger installations	SQL Server Standard should be considered where database size, event volume or system requirements exceed SQL Express capabilities
SQL Express database limit	50 GB per database
Storage	NVMe SSD required
Remote SQL Server	The GuardPoint XI Server and Workstations must have reliable network communication with the SQL Server

SQL Express capacity: SQL Server Express 2025 has a 50 GB limit per database. Event volume and journal growth should be considered when selecting the SQL edition.

Upgrading from GuardPoint10: The SQL Server upgrade is optional and is not carried out automatically. To upgrade, select the SQL Server Express 2025 option during installation. Setup can then upgrade the bundled SQL Server Express instance installed by previous GuardPoint10 versions (.\AC8SQL) and migrate the databases automatically.

This upgrade applies only to that default SQL Server Express instance. Where the customer uses their own custom or full SQL Server instance, upgrading it is the customer's responsibility.

Before upgrading SQL Server, the customer must make sure that no other applications use databases hosted on that SQL Server instance, as they may be affected or become incompatible after the upgrade.

Unless there is a specific requirement to use an existing or separately managed SQL Server, Sensor Access recommends using the SQL Server version supplied with the current GuardPoint XI installer. Contact Sensor Access Technical Support if you need help.

III. Network and Firewall Ports

The required ports depend on the GuardPoint XI components and integrations being used.

Component	Ports
GuardPoint XI Server or server-mode workstation	3322 (Bio), 4567, 4568, 7654, 10695 (API), 49999 (SQL)
Client-mode workstation	7654 only
SQL Server	1433, 1434, 49999 (UDP/TCP)
Controllers	1001 (Tibbo) or 10001 (Lantronix)
Biometric readers (AcsSupremaCore)	51211
Tools: DS Manager (Tibbo)	65534
Tools: DeviceInstaller (Lantronix)	9999, 1-1024, 14000-14009, 30704 and 30718

Watchdog: Instead of opening ports, add a Windows Firewall program exception for C:\Program Files\GuardPointXI\WatchdogGui\ACSWatchdogCoreGUI.exe.

Optional: the cloud health reporting feature requires outbound internet access. It can be switched off in Options > System & SQL > System health.

Additional ports may be required for CCTV or other integrations.

Before installation: Firewall and network-security rules should be confirmed before the GuardPoint XI installation begins.

IV. Controller Communications

Item	Requirement
Controller firmware	Firmware from 2016 or later
Tibbo controller communication	TCP 1001
Lantronix controller communication	TCP 10001
Tibbo DS Manager	TCP 65534
Lantronix DeviceInstaller	9999, 1-1024, 14000-14009, 30704 and 30718
Suprema biometric readers (AcsSupremaCore)	TCP 51211

V. Antivirus and Endpoint Security

Antivirus, endpoint-security and application-control software can interfere with GuardPoint XI installation and operation. Real-time scanning can also affect performance where GuardPoint XI is continuously creating and processing transaction files.

We recommend adding the following GuardPoint XI locations to the antivirus or endpoint-security exclusions:

Location	Purpose
C:\Program Files\GuardPoint XI\	GuardPoint XI application files
C:\ProgramData\ACS\	GuardPoint XI services, configuration and transaction-processing data
C:\ProgramData\ACS_Core\	GuardPoint XI core services data

Where Microsoft SQL Server is installed locally, SQL Server directories may also require appropriate exclusions in accordance with the site's IT and security policy.

Where the endpoint-security product supports process or service exclusions, the following GuardPoint XI services should also be permitted to operate without interference:

- AcsApiServiceCore
- AcsSecComServiceCore1
- ACSServerCore
- AcsSupremaCore
- AcsWatchdogCore

If security software prevents installation, real-time protection may need to be temporarily paused while GuardPoint XI and SQL Server are installed. Any protection that has been disabled should be re-enabled once installation is complete and the appropriate exclusions have been configured.

> **Managed IT environments:** All exclusions and security-policy changes should be agreed with the customer's IT department.

VI. NVMe Storage Compatibility and SQL Server Installation

NVMe SSDs are required for GuardPoint XI due to their performance. However, some newer NVMe drives and Windows configurations can report a physical sector size that is not compatible with Microsoft SQL Server, including the SQL Server Express 2025 edition supplied with GuardPoint XI.

This can cause the SQL Server stage of the GuardPoint XI installation to fail even though the computer otherwise meets or exceeds the recommended specification.

Typical symptoms include:

- SQL Server failing during installation.
- The SQL Database Engine failing to start.
- SQL setup reporting a database engine startup or recovery error.
- GuardPoint XI installation failing while the SQL components are being installed.

If SQL installation fails: If the computer uses an NVMe drive, check the storage sector size before assuming there is a problem with GuardPoint XI.

Support article: check the Sensor Access support article on SQL Server installation failures.

This article explains how to check the sector size being reported by Windows and, where required, apply the relevant configuration change. The procedure is based on Microsoft's documented guidance for SQL Server compatibility with larger disk sector sizes.

Caution: Any registry changes should only be carried out by a suitably qualified engineer or IT administrator. The computer must be restarted after applying the change.

VII. Installation Sizing and Support

The specifications in this document are intended as general guidance for typical GuardPoint XI installations.

Actual requirements can vary significantly depending on the number of controllers, cardholders, workstations, transactions, integrations, database size, reporting requirements and other applications running on the same hardware.

Need sizing advice? For unusual, high-availability or particularly large installations, or where there is any uncertainty regarding the proposed server, SQL configuration or system architecture, please consult support@sensoraccess.co.uk before purchasing or configuring the hardware.

Sensor Access Technical Support can review the proposed installation and advise on an appropriate specification.

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