

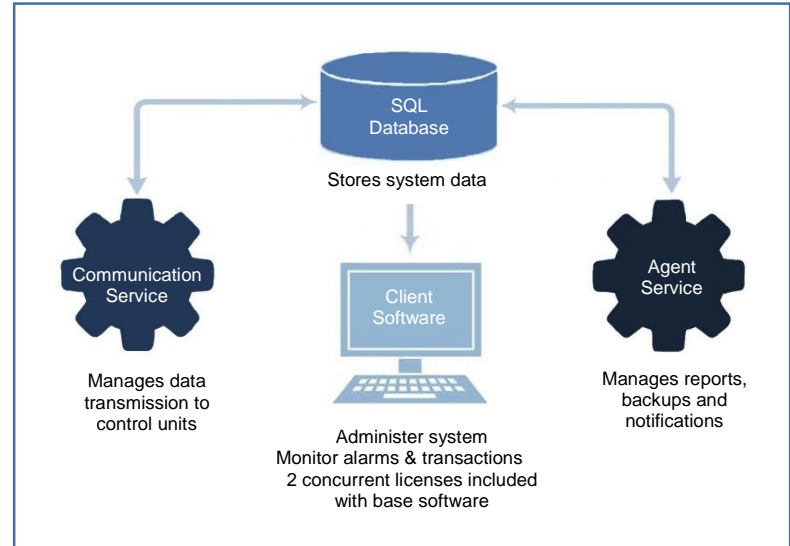
## FOR ACCESS CONTROL SYSTEMS WITH 1 to 100 DOORS

The following document outlines the system hardware and software requirements to operate Aurora software and ensure appropriate system performance.

### CONFIGURATION NOTES

- Keyscan Aurora consists of the following modules: Client Software, SQL Database, Aurora Communication Service and Aurora Agent Service
- Hardware and Software Specifications below assume that all primary modules are installed on a single PC

For systems greater than 100 doors, please refer to the [Keyscan Aurora System Architecture Document](http://www.keyscan.ca/Aurora.html) for information about system expansion, server and large system infrastructure. ([www.keyscan.ca/Aurora.html](http://www.keyscan.ca/Aurora.html))



## SPECIFICATIONS

	RECOMMENDED MINIMUM REQUIREMENTS (HARDWARE & SOFTWARE)		
<b>CPU Processor</b>	Intel Core i7-4770 3.4GHz or faster		
<b>Memory</b>	8 GB RAM 1600MHz DDR3 NON-ECC or greater		
<b>Hard Drive</b>	500 GB of available space 7.2K RPM SATA		
<b>Network Adapter Card</b>	Ethernet port – 1GB network card		
<b>Video Card</b>	AMD RADEON HD 8490 1GB		
<b>Operating Systems Supported</b>	<b>For 1 to 5 IP connected access control units</b>	For systems that require fewer than 5 IP connected access control units, select Windows Desktop OS Software. Windows 7 and 8 support 20 concurrent TCP connections.	Windows 8 Professional 32-bit or 64-bit Windows 7 SPI 32-bit or 64-bit Ultimate, Enterprise, Professional
	<b>For 5 or more IP connected access control units</b>	For systems that require more than 5 IP connected access control units, choose a Windows Server Operating System for the host PC. Windows Desktop OS supports a maximum of 5 dedicated IP connections for access control. Windows Server OS removes the IP connection limit and provides greater communication flexibility when using more than 5 IP connected control units.	Windows Server 2012 64-bit Datacenter, Essentials, Standard, Foundation Windows Server 2008 R2 64-bit Datacenter, Essentials, Standard, Foundation
<b>DVD Drive</b>	8X Internal for software installation DVD burner for backup and secondary storage		
<b>Peripherals</b>	Monitor: System compatible with 1024 x 768 or higher resolution – single or dual monitor Keyboard: System compatible Mouse: System compatible USB Port (optional)		

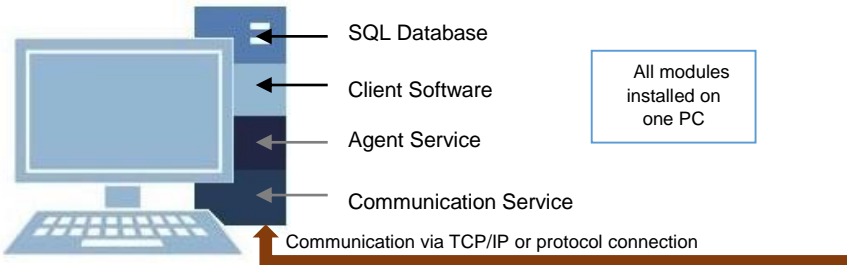
## ADDITIONAL NOTES

<b>UPS Backup</b>	Recommended
<b>Additional System Performance</b>	Overall system performance will improve as CPU Processor, RAM or hard drive read / write specifications exceed minimum stated requirements provided.
<b>Virtual Machine Server</b>	<ul style="list-style-type: none"> <li>• Keyscan Aurora supports virtual machine topology, providing that all licensed and required Keyscan software applications are allocated sufficient server resources for proper system performance and that the VM software / server is supported by qualified IT personnel</li> <li>• For best results in VM, dedicate hardware use on the network card and serial or USB port for Keyscan image</li> <li>• <i>Virtual machine topology does not always provide optimal system performance</i></li> </ul>

## COMPUTER HARDWARE CONFIGURATION

Keyscan Aurora Access Control Management Software may be configured for operation on a single computer (for systems up to 100 doors) or on multiple servers (for systems greater than 100 doors) offering a flexible and scalable delivery platform using a LAN/WAN (TCP/IP) infrastructure to communicate with the access control units.

### 1. Single Computer Configuration

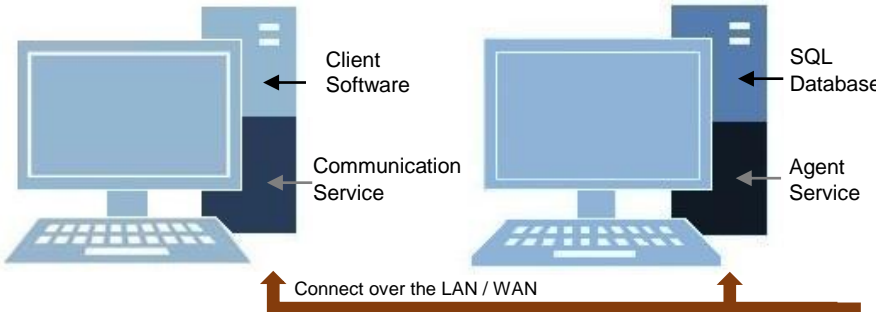


**Configuration:** All Aurora modules, Client Software, SQL Database, Agent Service and Communication Service can be installed on one computer.

**Environment:** This type of configuration is better suited to small access control system environments with fewer readers, credential holders and site transaction volumes.

Refer to the SPECIFICATIONS outlined on page 1 for single computer configuration hardware and software requirements.

### 2. Multi-Computer Configuration



**Configuration:** Aurora modules are separated onto two computers.

**Environment:** Keyscan recommends this alternative when a single computer configuration no longer meets performance requirements. For best performance in environments where there is:

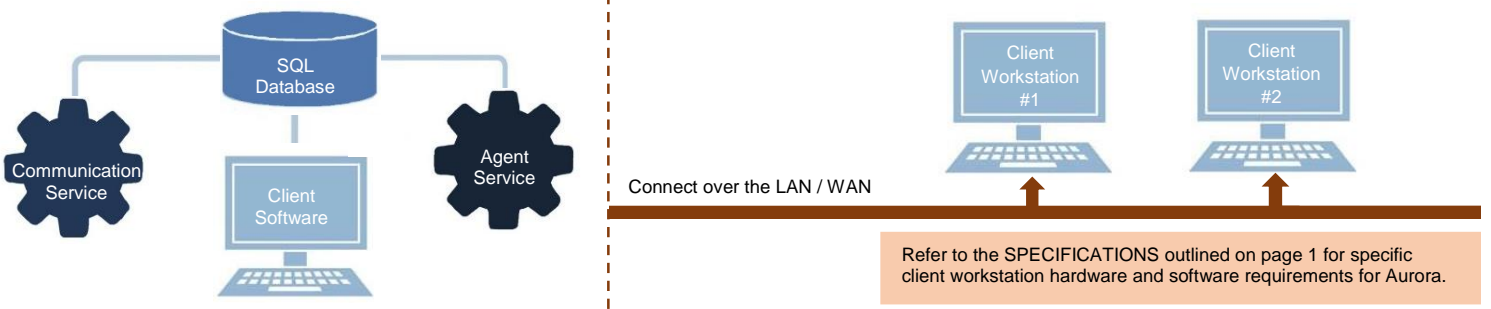
- **High Transaction Traffic:** Separate the SQL Database and Agent Service modules onto one computer and install Client Software and Communication Services onto another computer (as shown).
- **High Access Control Unit Count:** Separate Communication Service onto one computer and install Client Software, Agent Service and SQL Database onto another computer.

Refer to the SPECIFICATIONS outlined on page 1 for both identified workstations.

- Image shown outlines a multi-computer configuration for a system with high transaction traffic
- Communication & Agent Services must remain running (the computer on which they are installed must remain on at all times) in order to ensure communication to the control units for report collection.
- SQL Database and Agent Service must be installed on the same computer
- **For systems greater than 100 doors, please refer to the Keyscan Aurora System Architecture Document for information about large system infrastructure.** ([www.keyscaan.ca/Aurora.html](http://www.keyscaan.ca/Aurora.html))

## CLIENT WORKSTATION CONFIGURATION

Additional clients may be installed on other workstations providing they have a network path to the server with the Keyscan Database SQL Server 2012 Express over the LAN/WAN. Keyscan Aurora provides 2 client licenses with the base software package, allowing the 2 users to operate Aurora software concurrently.



Refer to the SPECIFICATIONS outlined on page 1 for specific client workstation hardware and software requirements for Aurora.