

Visual-Eyes Hardware Requirements

The latest version of the Visual-Eyes software requires specific hardware specifications to function at its optimal capacity. These requirements are listed below:

Physical Database Host

Office Size	Processor Speed (minimum) Intel or AMD	CPU Cores (minimum)	CPU Cache (L3)	RAM	Storage
1-10 computers	3GHz	4	8 MB	8 GB (minimum)	500GB disk space (Data + Links) 7200 rpm(HDD) or SSD
10+ computers	3Ghz	6	12 MB	16 GB (minimum)	500GB disk space (Data + Links) 7200 rpm(HDD) or SSD

Notes:

UPS, anti-virus and firewall protection are recommended

CD/DVD RW drive is optional

Hard Drives:

Two separate hard drives from two different manufacturer batches are recommended (if possible).
Write Cache **must** be enabled.

Backups: Data backup and archiving is the responsibility of the clinic.

Data Sharing: We do not recommend sharing the database or application folders from the database host to avoid issues with direct access or ransomware attacks.

Virtual Machine

Due to the nature of Virtual Machines, we have established minimum thresholds to ensure that your instance is provided with the necessary resources to operate within our parameters.

	Minimum Processor Speed (Intel or AMD)	CPU Cores (minimum)	CPU Cache	RAM	Storage
VM Instance	2GHz	2	4MB	8 GB (minimum)	500 GB
VM Host	3Ghz	8	12MB	16 GB (minimum)	SSD Drive(s) Required

Notes:

If the VM host's resources are taxed, it may slow down the VM for the VE server. In these cases, clinic staff may find that the program is slowing down, but we will have no way of knowing why, as it will appear that nothing is taxing the VM. It will be up to your IT administrator to ensure that the VE server receives sufficient resources to operate effectively.

RAID

- If using a RAID, use RAID10 to maximize performance with the FirebirdSQL system (RAID 1 and RAID5 alone can result in performance loss).
- If using a RAID, the controller **must** have a write cache that is enabled, as this directly impacts Firebird SQL performance.
- Larger databases may require a separate physical HDD or SSD for the Windows OS if SSD storage is used for system data. Please confirm with Visual-Eyes Support before implementing the OS and Data Server onto the same SSD
- Feel free to contact our office for more information about RAID. When looking for a RAID solution, we recommend a hardware RAID controller card instead of a Windows-controlled RAID. We also suggest that any RAID controller installed on your server be duplicated on another machine as a precaution in the event of a server hardware failure. We believe that RAID arrays are a good solution; however, we also suggest installing a secondary hard drive outside of your RAID array to store database log files.

Server Operating System

The operating system MUST be one of the following:

- **Microsoft Windows 10 Professional 64-bit / 11 Professional 64-bit**
- **Windows Server 2012 / Server 2016 / Server 2019 / Server 2022 / Server 2025*******
 - **If you are using these environments, please be aware of the following:**
 - If you are using a virtual (software-based) SCSI controller, ensure that write cache is enabled.
 - Microsoft Exchange Server, Domain Controller, Terminal Server, and SharePoint Server cannot be run on the same physical computer as the Visual-Eyes database host; these services are typically enabled by default in Small Business Server.
 - SQL Server and SQL Server Express present a known conflict with the Firebird Database Server (where we store VE data) and cannot be placed on the same server.
 - Other database systems may also be unable to share a server with Visual-Eyes, such as Zeiss Forum. We strongly recommend running these from another machine, where it should pose no issue.
 - Please Note: We do not support running a terminal services environment with network workstations. This configuration is known to cause issues in Visual-Eyes, including slowdowns and freezing.
 - On an ongoing basis, you should maintain sufficient free space on your server to accommodate the VE databases (FDB files) several times over; otherwise, we may be unable to update or optimize your data.

***** Not thoroughly tested with VE services, but initial compatibility confirmed

Workstations

Computer Location	Processor Speed (minimum) Intel or AMD	CPU Cores (minimum)	RAM (minimum)	Storage (minimum)	Anti-Virus 16:9 1080p Monitor (recommended)	UPS Serial ports (if required for equipment interface)**** Full-size keyboard (with Number Pad, Page Up/Page Down/Insert keys)
Elsewhere	2GHz	2	8 GB	250 GB 7200 rpm	✓	
Pre-Test & Exam	2GHz	4	16 GB	250 GB 7200 rpm	✓	✓

Notes:

- Please note that Visual-Eyes is designed to run on a full install desktop computer. Please do not run the software on a thin client.
- **** Please contact our office if you are concerned that your equipment may be compatible with Visual-Eyes.

Operating System: 64-bit Windows 10, 11 or newer

Network

- 100Mbit minimum, 1Gbit preferred.
- Although Visual-Eyes is compatible with wireless networks, they can be unreliable, and we therefore recommend that any PC running Visual-Eyes be on a wired connection.

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