

# AMS System Specifications for Small Offices (Up to 5 Computers)

American Medical Software runs on both 32 bit and 64 bit Windows operating systems. Speakers and/or headphones are required to hear audio from videos.

Additional products from Actian Software are necessary prior to installation of the AMS software. Version 13.2 or higher of Actian Zen is the required minimum. Offices with 6 or more computers require the Actian Zen Client/Server Engine. Actian products are available to AMS clients at a discount from Goldstar Software. Contact Bill Bach or Mary Jo Van Simpa at 708-647-7665 or sales@goldstarsoftware.com. Helpful hints for installing and using the AMS system with Actian Zen are available at [http://www.goldstarsoftware.com/apps\\_ams.asp](http://www.goldstarsoftware.com/apps_ams.asp).

Due to staggering number of additional SNOMED codes associated with ICD-10, all **Electronic Medical Records systems** are advised to meet the **"Recommended"** hardware specifications located below. Failure to do so may result in poor system performance and extremely long load times when searching the SNOMED database.

## Minimum Requirements

The following requirements are the minimum system requirements for running the AMS software. Minimum system requirements are defined as: If the user configures their system using the minimum specifications for their specific requirements (users, remote sessions), under a full load, the software should continue to work in an acceptable manner on any given workstation. For example, if the maximum number of users are running normal day to day operations, a user in the software should still expect to receive a response from a patient search in less than four seconds. Of course, choosing hardware with much faster computing power will improve the performance of the software!

## Recommended

These are the recommended specifications, not the minimum. Anything below these recommended specifications could result in poor system performance that cannot be "fixed" by AMS in any way due to poor hardware. As time goes on your AMS data size will continue to grow. With this in mind, you should increase your hardware's power accordingly in order to handle the higher demand required for processing larger volumes of information.

Server		
Operating System	Microsoft® Windows 11 or 10. Other Windows operating systems are not recommended. Operating systems not supported by Microsoft are not supported by AMS due to Microsoft support termination.	Microsoft® 64-bit Windows Server 2019 or 2016. Other Windows operating systems are not recommended. Operating systems not supported by Microsoft are not supported by AMS due to Microsoft support termination.
Database Server	Actian Zen v13.2 Workgroup Engine is required	Actian Zen v15 Workgroup Engine
Processor	Intel Core2 Duo L-8400, AMD Athlon 64 3200+ or better <i>(Quad Core Q9400 recommended)</i>	Intel Core i5-3470 3.2GHz LGA 1155 77W Quad-Core Desktop Processor equivalent or higher
Memory	4 GB RAM	8 GB DDR3 RAM or higher
Hard Drive	200+ GB of free hard drive space	500 GB of free hard drive space or higher <i>(2 Drives in Raid 0 configuration is recommended)</i>
Screen Resolution	1024 x 768 resolution at 16-bit color depth or higher required	1920 x 1080 resolution at 32-bit color or higher
Date Format	Computers MUST use US Standard MM/DD/YYYY date format.	Computer MUST use US Standard MM/DD/YYYY date format.
Language	Windows language MUST be set to English (U.S.)	Windows language MUST be set to English (U.S.)
Workstation		
Operating System	Microsoft® Windows 10.	Microsoft 64 bit Windows 11.
Database Server	Actian Zen v13.2 Workgroup Engine required	Actian Zen v15 Workgroup Engine
Processor	AMD Athlon 1640B or better (Dual Core will improve Performance)	Intel Core i5-3470 3.2GHz LGA 1155 77W Quad-Core Desktop Processor equivalent or higher
Memory	2 GB RAM	4 GB DDR3 RAM or higher

Hard Drive	40 GB Free disk space	250 GB of free hard drive space or higher
Screen Resolution	1024 x 768 resolution at 16-bit color depth or higher	1024 x 768 resolution at 16-bit color depth or higher
Date Format	Computers MUST use US Standard MM/DD/YYYY date format.	Computers MUST use US Standard MM/DD/YYYY date format.
Language	Windows language MUST be set to English (U.S.)	Windows language MUST be set to English (U.S.)
<b>Laptops and Tablet PCs</b>		
Laptops	Laptops MUST have the same requirements as shown above for workstations.	Laptops MUST have the same recommendations as shown above for workstations.
Tablet PCs	Tablet PC's should be using the Microsoft Windows 10 or 11 operating system.	Tablet PC's should be using the Microsoft Windows 10 or 11 operating system.
Laptops/Tablet PC's as Server	Laptops/Tablets are not acceptable for use as a server computers.	Laptops/Tablets are not acceptable for use as a server computers.
<b>Networking</b>		
Internet Protocol Suite	TCP/IP	TCP/IP
Network Interface Card	100 Mbps Network Interface Card capable of supporting full-duplex operation.	100 Mbps Network Interface Card capable of supporting full-duplex operation.
Network Permissions	All workstations must have Full Control NTFS permissions and Full Control share permissions to the AMS data folder.	All workstations must have Full Control NTFS permissions and Full Control share permissions to the AMS data folder.
<b>Wireless</b>		
Routers	Administrators should choose only routers that have WPA2 encryption capabilities. WPA2 contains the necessary security to ensure PHI is not compromised (i.e. 256-bit AES encryption, SHA-1 hashing, password/key authentication). Furthermore, a proper diagnostic of the facility and coverage should be performed to ensure that the wireless connection is strong, stable, and uninterrupted throughout EVERY room of the office. Low-end routers for home use (typically found on generic store shelves) should be left for home. Consult your IT professional about higher quality routers for business use.	Administrators should choose only routers that have WPA2 encryption capabilities. WPA2 contains the necessary security to ensure PHI is not compromised (i.e. 256-bit AES encryption, SHA-1 hashing, password/key authentication). Furthermore, a proper diagnostic of the facility and coverage should be performed to ensure that the wireless connection is strong, stable, and uninterrupted throughout EVERY room of the office. Low-end routers for home use (typically found on generic store shelves) should be left for home. Consult your IT professional about higher quality routers for business use.
<b>Peripherals</b>		
Printers	For the printing of statements and the various forms generated by the AMS software, the HP LaserJet 3000 or 4000 Series printers are recommended. Inkjet printers, non HP-HP LaserJet printers, dot matrix printers, and HP LaserJet 1000 Series printers are not supported.	For the printing of statements and the various forms generated by the AMS software, the HP LaserJet 3000 or 4000 Series printers are recommended. Inkjet printers, non HP-HP LaserJet printers, dot matrix printers, and HP LaserJet 1000 Series printers are not supported.
Internet Access	For Electronic Claims Processing and downloading AMS Updates, an internet connection is required. Broadband internet connections (specifically Cable) are recommended. DSL is acceptable but generally performs poorer than cable.	For Electronic Claims Processing and downloading AMS Updates, an internet connection is required. Broadband internet connections (specifically Cable) are recommended. DSL is acceptable but generally performs poorer than cable.
Scanners	The Electronic Medical Records scanning interface can acquire images directly from MOST TWAIN compliant scanners. However, scanners are typically set to scan/deposit images in to a predetermined folder destination that the scanner interface them imports from. In this case, almost any scanner is acceptable.	The Electronic Medical Records scanning interface can acquire images directly from MOST TWAIN compliant scanners. However, scanners are typically set to scan/deposit images in to a predetermined folder destination that the scanner interface them imports from. In this case, almost any scanner is acceptable.

Reserve Power Supply	<p>Uninterruptible Power Supply (UPS) – AMS required our client’s Information Technology (IT) professional to properly install and configure a UPS on the client’s server computer which has an interface to that server computer which will, in the event of an extended power loss, start a shutdown sequence within Windows prior to a total power failure. As part of the Microsoft Windows shutdown sequence a stop command is sent to the Pervasive service running on the server which closes all active transactions to the database and gracefully end the Pervasive Database Engine. This will help prevent data corruption or loss due to AC power failure in addition to extending the life and reliability of the connected server hardware and operating system. Consult your IT professional to help determine the required runtime and capacity of the UPS to allow enough time to properly execute the shutdown procedure.</p>	<p>Uninterruptible Power Supply (UPS) – AMS required our client’s Information Technology (IT) professional to properly install and configure a UPS on the client’s server computer which has an interface to that server computer which will, in the event of an extended power loss, start a shutdown sequence within Windows prior to a total power failure. As part of the Microsoft Windows shutdown sequence a stop command is sent to the Pervasive service running on the server which closes all active transactions to the database and gracefully end the Pervasive Database Engine. This will help prevent data corruption or loss due to AC power failure in addition to extending the life and reliability of the connected server hardware and operating system. Consult your IT professional to help determine the required runtime and capacity of the UPS to allow enough time to properly execute the shutdown procedure.</p>
<b>Backups</b>		
Backup Solutions	<p>For backing up the AMS data files, USB Flash drives (also known as “thumb drives” or “memory sticks”) are highly recommended due to their durability and versatility for use with the integrated AMS backup program. Tape Backups/Online backups are acceptable backup medias, however the proprietary backup software used by these devices is NOT directly supported by AMS and may require the assistance of whoever installed it in order to extract or retrieve backup data.</p> <p>NOTE: Due to the limited life cycle and durability of CDs, DVDs, CD-RWs, and DVD-RWs, they are NOT recommended. External Hard Drives are more reliable but are also not recommended.</p>	<p>For backing up the AMS data files, USB Flash drives (also known as “thumb drives” or “memory sticks”) are highly recommended due to their durability and versatility for use with the integrated AMS backup program. Tape Backups/Online backups are acceptable backup medias, however the proprietary backup software used by these devices is NOT directly supported by AMS and may require the assistance of whoever installed it in order to extract or retrieve backup data.</p> <p>NOTE: Due to the limited life cycle and durability of CDs, DVDs, CD-RWs, and DVD-RWs, they are NOT recommended. External Hard Drives are more reliable but are also not recommended.</p>

**Please Note:** AMS does not support the implementation, configuration, maintenance, or training of computer hardware products. AMS will ONLY provide assistance with issues originating from or through its software products.