Revised as of February 16, 2010

The information in this document applies to Sage MAS 200 ERP Version 4.40. Detailed product update information and support policies can be found on the Sage Online Web site at: www.sagesoftwareonline.com

This document is intended to cover all information regarding the compatibility of various operating systems with Sage MAS 200 as of February 16, 2010. Any operating system not listed should be considered *incompatible*.

Note: It is critical that before and during an installation, this document be thoroughly reviewed, along with the *Sage MAS 200 Installation and System Administrator's Guide* and other documents found by clicking the Installation Information link of the main Sage MAS 90 and 200 Support Web page. This Web page can be found on the Sage Online Web site at <u>www.sagesoftwareonline.com</u>. If development partner or Extended Solutions customizations or modifications have been made to your Sage MAS 200 software, coordinate with your Sage business partner and your development partner before installing Sage MAS 200.

For information about integrated solutions compatibility, refer to the Integrated Solutions Compatibility Matrix on the Sage Online Web site at: <u>www.sagesoftwareonline.com</u> Web site content can change at any time. Sage has no control over, and cannot be responsible for, the content of other companies' Web sites.

If your platform is not listed in the matrices below, it is not supported.

Supported Workstations	Remarks		
Windows 7 (32-bit)	 Notes: Windows 7 compatibility testing is currently in process for Sage MAS 90 and 200. We expect compatibility information to be published by the end of March 2010. 		
Windows Vista (32-bit)	Note:		
Service Pack 2	 Only Windows Vista Business, Enterprise, and Ultimate are supported. 		
	 Sage recommends installing Sage MAS 200 Workstation Setup to a location other than the C:\Program Files folder (for example, C:\Sage Software). 		
	 Windows Vista Home Basic and Windows Vista Home Premium editions are not supported. 		
Windows XP Professional			
Service Pack 2-3			
Windows XP Tablet PC Edition			
Service Pack 2-3			

Microsoft Dedicated Servers	Defined as operating system software specifically designed to be used as a network server (not peer-to-peer).			
Supported Servers	Remarks			
Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2	 Notes For the best results, install Sage MAS 200 on a dedicated member/application server. Although supported, certain Windows server configurations are not recommended due to possible instability and performance issues. Support from Sage Customer Support may be limited in the following circumstances: 			
Windows Server 2008 R2 (64-bit)	 Running Sage MAS 200 on a Windows server acting as an Active Directory domain controller managing a large number of user accounts, computer accounts, group policies, organizational units, remote sites, or other network resources. 			
Windows Small Business Server 2008 (32-bit and 64-bit) Standard and Premium	 Running Sage MAS 200 on any server actively running other applications or services, such as e-mail (for example, Exchange Server), IIS, fax programs, SQL Server, or other software. 			
Windows Server 2003 (32-bit) Standard and Enterprise	 Running Sage MAS 200 on any Windows Small Business Server operating system, regardless of the number of user accounts and computer accounts it is managing as an Active Directory domain controller. Small Business Server runs Exchange Server by default, and has been a factor in many reported cases of instability and performance issues. Instability may also result if Small Business Server is further configured to run other applications concurrently, such as IIS, Shared Fax Services, and SQL Server. 			
Service Pack 2	 Sage MAS 200 will run on a Windows Server 2008 64-bit server in 32-bit compatibility mode. 			
Windows Server 2003 R2 (32-bit) Service Pack 2	 Sage MAS 200 can be installed to the Windows Server 2008 64-bit Programs folder for 32-bit applications (C:\Program Files (x86)), or to any user defined folder. The Installation Wizard defaults to the C:\Sage Software folder. 			
Windows Small Business Server 2003 (32-bit) Service Pack 2	 If a Windows Server 2008 64-bit server is used as the IIS Server to connect to Sage's eBusiness Web Engine, the Application Pool specified for the Web site must have True selected for the Enable 32-Bit Applications option. The Fax Server Role is supported only for Windows Server 2008 32-bit edition. 			
	 The eBusiness Web Services service can only be installed on a Windows Server platform, such as Windows Server 2003 or 2008. For more information, see the <i>eBusiness Web Services Installation and Reference Guide</i> found by clicking the Documentation link of the Sage MAS 90 and 200 autorun window. 			
	Recommendations			
	 Due to unresolved issues with the NWLink IPX/SPX protocol, avoid using this protocol unless necessary. Refer to the Microsoft's Knowledge Base article 161080 at <u>support.mcrosoft.com</u> for more information. 			
	Not Supported			
	 Service Pack 1 on Windows Server 2003 is not supported. 			
	 Using a server operating system as a Sage MAS 200 workstation is not supported (not even as a client to another server). This configuration can be utilized for testing. 			
	 Sage MAS 200 was not designed for any version of Windows Datacenter Server and is not supported on this platform. 			
	 Windows Server 2003 R2 64-bit is not supported with Sage MAS 200. 			
	 64-bit Terminal Services or Citrix is not supported. 			

Microsoft Dedicated Servers	Defined as operating system software specifically designed to be used as a network server (not peer-to-peer).	
Supported Servers	Remarks	
Virtual Servers For more information, see <u>Virtualization with Sage MAS 90, 200 and 500</u> .		

Terminal Services/Citrix Servers	Remarks		
Supported Servers			
 Windows Server 2008 (32-bit) Terminal Services Service Pack 2 Windows Server 2003 (32-bit) Terminal Services Service Pack 2 Citrix Presentation Server 4.5 	 Notes Terminal Services or Citrix must be installed on a supported version of Windows Server, such as version 2003 or 2008. Windows thin clients are supported with Terminal Services and Citrix. For more information, refer to www.microsoft.com For more information on Terminal Services/Citrix, see the Miscellaneous Notes section in this document. 		
Citrix XenApp 5.0	 Not Supported Service Pack 1 on Windows Server 2003 is not supported. Installing Sage MAS 200 on the same server as Terminal Services or Citrix is not supported. 64-bit Terminal Services or Citrix is not supported. 		

Sage MAS 200 ERP Version 4.40 Supported Platform Matrix Revised as of February 16, 2010

Miscellaneous Notes

- 1. Running Windows from a shared network drive and/or attaching to the server as a Windows diskless workstation is not supported.
- 2. When running Sage MAS 200 over a local area network (LAN) environment, the ping timings will vary depending on the speed and configuration of the network. Typical ping timings with 1,800 bytes of data should be between 20–30 milliseconds or faster. Unacceptable ping speeds are over 40 milliseconds.
- 3. In the Sage MAS 200 client/server environment, integrated applications do their processing at the workstation, not at the server. As a result, users may experience performance issues when running integrated applications from remote locations. Some of the applications affected include Crystal Reports, FRx, and F9.

Sage MAS 200 uses client-based ODBC processing for Crystal forms and reports, which may result in slow performance for remote workstations, particularly those with low bandwidth connections. To determine the cause of extremely slow performance related to remote Crystal printing, the user must determine whether the issue is report design or client-based ODBC processing. If the same Crystal form or report that runs slowly from a remote location also runs slowly from a workstation located on the same LAN as where the server is located, the issue is most likely report design. If the same Crystal form or report that runs slowly from a remote location runs fast from a workstation on the LAN, the problem may be client-based ODBC processing. Sage MAS 200 includes a client/server based ODBC driver. This can be used instead of the client ODBC driver for faster processing.

Note: If the report was created using Business Insights Reporter (BIR) without runtime filters, and the report was not further modified with Crystal Reports, it is not likely to be a report design issue because reports created using the BIR run off a single pre-populated view.

- 4. Virtual private network (VPN) and wide area network (WAN) connections should be set up as point-to-point connections, as opposed to Internet connections, for better stability and performance. If an Internet connection is used, ensure the Internet Service Provider (ISP) can provide a guaranteed bandwidth; otherwise, users may experience dropped sessions and lost connections. With any type of low speed WAN connection, for each remote user, select the Low Speed Connection check box in User Maintenance.
- Always run Workstation Setup after installing, re-installing, or upgrading the Windows operating system, and verify that the Windows printers in Control Panel > Printers are still operational.
- 6. Verify that all hardware involved in running Sage MAS 200 is on your operating system vendor's Hardware Compatibility List. Incompatible hardware can cause severe data corruption. For more information, refer to the Microsoft Hardware Compatibility List at: <u>http://www.microsoft.com/whdc/hcl/default.mspx</u>
- 7. The e-Business Manager module may have additional separate program fixes for the Web Engine. You should apply the latest Web Engine bundle. For the latest program updates, go to the Sage Online Web site at: www.sagesoftwareonline.com

If third-party enhancements are installed, always contact your development partner to verify compatibility before installing any updates. Also note that some program fixes are specifically excluded from the program fix collection and should be installed only if you are experiencing the problem they address.

- 8. The eBusiness Web Services service can only be installed on a Windows Server platform, such as Windows Server 2003 or 2008. For more information, see the *eBusiness Web Services Installation and Reference Guide* found by clicking the Documentation link of the Sage MAS 90 and 200 autorun window.
- 9. Always validate compatibility of Extended Solutions and development partner enhancements before upgrading.
- 10. Sage is committed to supporting future Microsoft operating systems as they are released to market for all Sage MAS 200 modules; however, Sage does not support betalevel operating systems. As new operating system levels are scheduled for general release, Sage will verify their compatibility, and this document will be updated when Sage's evaluations are completed.

- 11. Suggestions for faster remote printing of Crystal reports over a WAN and virtual private network (VPN) are:
 - Using the Sage MAS 200 Client/Server ODBC driver provided with Sage MAS 200
 - Using Citrix or Terminal Services
 - Using non-graphical forms (those not based on Crystal Reports) if available
- 12. Sage requires a guaranteed minimum bandwidth of 128 Kbps per user for running Sage MAS 200 through a low speed remote connection. For each user, 256k or higher is recommended. Select the Low Speed Connection check box in the Sage MAS 200 User Maintenance task.
- 13. If a VPN connection is used, keep in mind the following:
 - VPN solutions are either software-based, hardware-based (such as a VPN firewall), or a hybrid of both.
 - If a hardware-based solution is used on Level 3.x, verify that it supports secure, encrypted connections for applications that use back channels.
 - Software-based VPNs result in slower connection speeds due to the security overhead of encrypting the data. Hardware-based solutions run faster.
 - Low-speed connections are subject to considerable performance issues when using a software-based VPN. It may cause the connection to have a bandwidth of less than 128 Kbps. For information on guaranteed bandwidth requirements, see miscellaneous note above.
 - Printing or previewing Crystal Reports and forms will require the Client Server driver (see miscellaneous note 3), or a Terminal Server or Citrix connection.
- 14. TCP/IP must be installed and properly configured so that you can ping by computer name and IP address from the workstation to the server. The server must be able to ping the workstation by IP address. You must be able to use the Windows TELNET.EXE utility or equivalent to communicate with the Application Server on a specific port ID and IP address, or on a specific port ID and name from all workstations to the server. If this cannot be done, you must contact your Microsoft support organization. Sage Customer Support cannot assist with this task. For more information on connection requirements, refer to your *Sage MAS 200 Installation and System Administrator's Guide*.
- 15. The Sage MAS 200 Application Server is a Windows Sockets application that listens on a single port (typically port 10000). You must open this port on your firewall/router so clients can connect to the Application Server properly. The client does not listen back on its own port, so opening ports for clients is not necessary. Also, the Application Server is compatible with Network Address Translation (NAT).
- 16. If the Sage MAS 200 Application Server is configured to run as a service and you are experiencing "connection timed out" errors, white screens, hanging, or slow performance, but only after a certain number of Sage MAS 200 users are in the system, review document <u>SS3003-A</u> on Sage Online at <u>www.sagesoftwareonline.com</u>. If you are running the Application Server on the desktop instead of running it as a service, the same problem may occur in a very large multi-user environment. If that is the case, review document SS3003-A on Sage Online.
- 17. Wireless local area networks (WLANs) are not recommended for desktop or laptop connections, because using a wireless LAN may result in dropped packets and lost connections.
- 18. The Microsoft Fax Services feature provided with Windows Server 2003 and 2008, Windows XP, and Windows Vista is supported for Paperless Office and batch faxing. For more information, refer to the Integrated Solutions Compatibility Matrix on the Sage Online Web site at: www.sagesoftwareonline.com

Recommended Minimum System Configuration				
	Recommended Minimum ¹			
Single User/Client Workstation	Processor	Physical Memory (RAM)	Available Memory (RAM) ²	
Workstation (client) operating system versions not listed in this document will not be supported with Sage MAS 200 version 4.40.				
Windows XP Professional	Intel Pentium 4 class 1.8 GHz	1 GB	512 MB	
Windows XP Tablet PC Edition	Intel Pentium class	1 GB	512 MB	
Windows Vista (Business, Enterprise, and Ultimate editions)	Intel Core 2 Duo	2 GB	512 MB	
Network Bandwidth (for multi-user systems)	Recommended Minimum			
	100 Base-T – 100 Mbps at Full Duplex			

¹ The recommended minimum is designed to ensure that the systems used for Sage MAS 200 are capable of providing adequate performance with a standard complement of normally installed applications, such as virus protection software.

² Regardless of the recommended minimums specified above, users should check the available memory on the workstation prior to installing Sage MAS 200 and use the Windows Task Manager to check the Available Physical Memory on the Performance tab. A minimum of 256 MB of physical RAM should be available to Sage MAS 200 when all other applications that will be used with Sage MAS 200 are loaded. A minimum of 512 MB of RAM should be available if using Windows Vista. Sage cannot guarantee acceptable performance when running Sage MAS 200 concurrently with other applications that consume system resources required for Sage MAS 200 to perform at an optimum level. Refer to the article "How to determine memory" on the Sage Online Web site at: www.sagesoftwareonline.com

Recommended Minimum System Configuration					
	Recommended Minimum ¹				
Terminal Services and Citrix	Processor	Memory (RAM)			
Windows 2008 Terminal Services Windows Server 2003 Terminal Services Citrix Presentation Server 4.5 Citrix XenApp 5.0	Intel Pentium 4 class 1.8 GHz Dual-core processor or better recommended	Recommended minimum and as required by Terminal Services or Citrix, plus 128 MB per concurrent user ³			
	Recommended Minimum ¹				
Supported Servers	Processor	Memory (RAM)			
Windows Server 2003 Windows Server 2003 R2 (32-bit) Windows Small Business Server 2003 (32-bit)	Intel Pentium 4 class 2.4 GHz Dual processor recommended	1 GB + 90 MB per concurrent user			
Windows Server 2008 Standard (32 and 64-bit) Windows Server 2008 Enterprise (32 and 64-bit)	Intel Pentium 4 class 2.4 GHz or Dual processor recommended	2 GB + 90 MB per concurrent user			

³128 MB is based on an average of three concurrent tasks per user (Sage MAS 200 Desktop plus two additional tasks, such as Sales Order Entry or Customer Maintenance). Averages of more than three concurrent tasks per user will require additional RAM.