Revised as of June 3, 2010

The information in this document applies to Sage MAS 200 ERP Level 3.71 through version 4.30. Sage generally supports only the current Sage MAS 200 level and one prior major level. As of the version 4.10 release, Sage MAS 200 Levels 3.70 and prior are no longer supported by Sage. For more information, see the Miscellaneous Notes section in this document. Alternative support options may be available through your Sage business partner. program fixes, service packs, and service updates will continue to be made available for the current versions of the software only. Sage reserves the right to provide solutions to the most current releases. Detailed information about support policies can be found on the Sage Online Web site at: www.sagesoftwareonline.com

The Supported Platform Matrix is intended to cover all information, as of June 3, 2010, regarding the compatibility of various operating systems with Sage MAS 200. Any operating system not listed should be considered *incompatible*. If your platform is not listed, Sage Customer Support cannot provide support for you on that platform.

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 www.sagesoftwareonline.com. 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 performing installations.

For information about integrated solutions compatibility, refer to the Integrated Solutions Compatibility Matrix on the Sage Online Web site at: www.sagesoftwareonline.com

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 and 64-bit) Professional, Enterprise, and Ultimate	 Notes Only versions 4.30.0.18 and higher support Windows 7. Sage MAS 200 version 4.30 requires Product Update 18 or higher and LM4046-T located on the Sage Online Web site at: www.sagesoftwareonline.com Sage recommends installing Sage MAS 200 to a location other than the C:\Program Files folder (for example, C:\Sage Software). Not Supported The items listed here are intended to be used for clarification purposes only, and are not intended to represent a comprehensive list of exclusions. Windows 7 Home Basic and Windows 7 Home Premium editions are not supported. Windows 7 is not supported for Sage MAS 90 version 4.20 and lower.

Supported Workstations	Remarks		
Windows Vista (32-bit)	Notes		
Business, Enterprise, and Ultimate	 Only versions 4.10.1.15 and higher support Windows Vista. 		
Service Pack 2	Sage MAS 200 version 4.10 is Windows Vista-capable with Service Update 15 and the version 4.10 <u>Vista Update</u> . After installing the update, reinstall workstation setup for Sage MAS 90 and 200 on ALL workstations. The Vista update can be located on the Sage Online Web site at: <u>www.sagesoftwareonline.com</u> with the supported platform matrices.		
	 Sage MAS 200 version 4.20 is Windows Vista-capable with Service Update 4 and higher. Some third-party programs (for example, FRx, SageCRM, Sage FAS) will require an updated PVXCOM.EXE patch <u>LM4037-T</u> located on the on the Sage Online Web site at: <u>www.sagesoftwareonline.com</u> with the service packs and program fixes. 		
	 Sage MAS 200 version 4.0x and 3.71 are not supported with Windows Vista. 		
	 Sage recommends installing Sage MAS 200 to a location other than the C:\Program Files folder (for example, C:\Sage Software). 		
	Not Supported		
	The items listed here are intended to be used for clarification purposes only, and are not intended to represent a comprehensive list of exclusions.		
	 Windows Vista Home Basic and Windows Vista Home Premium editions are not supported. 		
	 Windows Vista 64-bit version is not supported. 		
Windows XP Professional	Notes		
Service Pack 2-3	Windows XP Service Pack 2 enables the Windows Firewall by default. When launching Sage MAS 200 Level 3.x or higher, a Windows Security Alert message appears: "Do you want to keep blocking this program?" Click Unblock to add ProvideX for Windows to the exception list. You can alternatively configure the firewall manually by selecting the Windows Firewall shortcut from the Control Panel. In the Windows Firewall window, click the Exceptions tab, and then click Add Program. In the Add Program window, add the local PVXWIN32.EXE to the exception list. For more information, search the Sage InfoSource Knowledgebase on Sage Online using the keywords: "Is Windows XP SP2 supported?"		
Windows 2000 Professional Service Pack 4	Notes		
	The client must be installed on the local workstation and must be configured for TCP/IP.		
Windows XP Tablet PC Edition	Notes		
Service Pack 2-3	Windows XP Tablet PC Edition is supported only with Sage MAS 200 version 4.x.		

Supported Servers	Remarks		
Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2	 Notes Only Sage MAS 200 version 4.30 is supported with Windows Server 2008. Sage MAS 200 is not a 64-bit application so it executes, by default, in a 32-bit mode when running on a 64-bit operating system. 		
Windows Server 2003 (32-bit) Standard and Enterprise 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. During the installation to Windows Server 2008, the default installation path is C:\Sage Software. No issues were found by installing to the C:\Program Files folder. 		
Windows Server 2003 R2 (32-bit) Standard and Enterprise Service Pack 2	 If a Windows Server 2008 64-bit is used as the IIS Server to connect to the Sage Web Engine, the Application Pool specified for the Web site must have True selected for the Enable 32-Bit Applications option. Microsoft Fax Services on Windows Server 2008 64-bit versions require Service Update 18 and <u>LM4046-T</u>. 		
Windows Small Business Server 2003 (32-bit) Standard and Premium Service Pack 2	 Paperless Office requires Product Update 4.30.0.18 or higher and <u>LM4046-T</u> located on the Sage Online Web site at: <u>www.sagesoftwareonline.com</u> Recommendations 		
Windows 2000 Server Windows 2000 Advanced Server Service Pack 4	 Sage MAS 200 should be installed 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: 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 2000 Service Pack 4	 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. 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. 		

Supported Servers	Remarks	
	Not Supported	
	The items listed here are intended to be used for clarification purposes only, and are not intended to represent a comprehensive list of exclusions.	
	 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 is not designed for any version of Windows Datacenter Server and is not supported on this platform. 	
	 Windows Server 2003 R2 64-bit and Windows Server 2008 R2 64-bit are not supported. 	
	 Printing to the following devices is not supported when running Sage MAS 200 with Windows Server 2008 64-bit: Deferred, Export/Email, Office Merge, and redirected printers on a Terminal Server. 	
	 Due to unresolved issues with Microsoft's implementation of NWLINK IPX/SPX protocol, this protocol should be avoided on Windows networks unless necessary. For more information, refer to the Microsoft Knowledge Base Article 161080 on Microsoft's Web site at: www.microsoft.com 	
Virtual Servers	 Microsoft Virtual Server is supported only with Sage MAS 200 version 4.30 and higher. For more information, see <u>Virtualization with Sage MAS 90, 200 and 500</u> located on the Sage Online Web site at: <u>www.sagesoftwareonline.com</u> 	

Terminal Services/Citrix	Remarks		
Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2 Terminal Services	 Notes Only Sage MAS 200 version 4.30 is supported with Windows Server 2008 with Terminal Services or Citrix. Terminal Services or Citrix must be installed on a supported version of Windows Server, such as version 2003 or 2008. 		
Windows Server 2003 (32-bit) Standard and Enterprise Service Pack 2 Terminal Services Windows Server 2003 R2 (32-bit) Standard and Enterprise	• For Sage MAS 200 versions 4.10.1.x and 4.20, Crystal Reports version 10.0 and Crystal Enterprise version 10.0 are supported if Windows Server 2003 is used as the Terminal Services/Citrix Server.		
	■ For Sage MAS 200 versions prior to 4.10, Crystal Reports version 8.5 is supported with Windows Server 2003 Terminal Services/Citrix server. There are no known issues with this configuration; however, SAP BusinessObjects does not support Crystal Reports version 8.x or Crystal Enterprise version 8.x with Windows Server 2003, and any discovered defects will not be corrected by Sage. Although SAP BusinessObjects supports Crystal Reports 9 with		
	Windows Server 2003, it is not compatible with Sage MAS 200 and is not supported.		
Service Pack 2 Terminal Services	 Windows thin clients are supported with Terminal Services and Citrix. For more information, refer to www.microsoft.com 		
W. 1 2000 C	• For more information on Terminal Services/Citrix, see the Miscellaneous Notes section in this document.		
Windows 2000 Server Windows 2000 Advanced Server	• 64-bit Terminal Services and Citrix are supported with 4.30 with product update 18 or higher and <u>LM4046-T</u> located on the Sage Online Web site at: <u>www.sagesoftwareonline.com</u>		
Service Pack 4 Terminal Services	Not Supported The items listed here are intended to be used for clarification purposes only, and are not intended to represent a		
Citrix Presentation Server 4.5	comprehensive list of exclusions.		
Citrix Presentation Server 4.0	■ Service Pack 1 on Windows Server 2003 is not supported.		
	 Installing Terminal Services or Citrix on the same server as Sage MAS 200 is not supported. 		
	 Do not use Windows Server 2003 as the IIS server if you are using Crystal Enterprise version 8.0. 		

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Miscellaneous Notes

- 1. Sage generally only supports the current Sage MAS 200 version and one prior major release of the software. As of the Sage MAS 200 version 4.10 release, support for Levels 3.70 and prior has been discontinued. Support for version 3.71 will be discontinued on September 30, 2010.
- 2. Running Windows from a shared network drive and/or attaching to the server as a Windows diskless workstation is not supported.
- 3. 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 20 30 milliseconds or faster. Unacceptable ping speeds are over 40 milliseconds.
- 4. 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.
 - For example, prior to version 4.10, Sage MAS 200 used 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 workstation located on the same LAN as the server, 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. Starting with version 4.10, 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 running on version 4, and the report was created using Business Insights Reporter (BIR) without runtime filters, and was not further modified with Crystal Reports, it is not likely to be a report design issue because reports created using BIR run off of a single pre-populated view.

5. The Sage MAS 200 implementation of Crystal Enterprise (CE) allows thin-client Web reporting through Sage MAS 200. Sage MAS 200 uses CE to process Crystal forms and reports across the Internet or through an intranet for remote users. This implementation of CE provides server-based ODBC processing on the host/application server, which results in better performance; however, it does not directly support many of the CE features, such as using the browser to select and dynamically run reports from a Web page, publishing reports, and scheduling reports.

Note: The Sage MAS 200 implementation of CE does not support:

- The multi-part feature of graphical forms
- Printing of Accounts Payable or Payroll checks
- Custom reports that use parameter fields
- 6. 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 in version 4.x.

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- 7. 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 note above.
- 8. 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 versions 4.10.1.x and 4.20
 - Using Citrix MetaFrame or Terminal Services
 - Using Crystal Enterprise provided with Sage MAS 200 (see note #8)
 - Using nongraphical forms (those not based on Crystal Reports) if available
- 9. 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 User Maintenance window in version 4.10.1.x or higher.
- 10. 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 also be able to use the MPING.EXE utility (Level 3.71) or the Windows TELNET.EXE utility or equivalent to communicate with the host program or 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.
 - Note: MPING.EXE is not available on Sage MAS 200 version 4.x. Use TELNET.EXE or an IP port scanning utility instead.
- 11. 11. In Sage MAS 200 version 4.x, the Application Server (known as the Host on Level 3.x) 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 version 4.x clients is no longer necessary as it was in previous versions. Also introduced in version 4.x, the Application Server is compatible with Network Address Translation (NAT).
 - In Sage MAS 200 Level 3.x, the Host (known as the Application Server in version 4.x) listens on a single port (typically port 10000). You must open this port on your firewall/router so clients can connect to the host properly. The host creates a back channel on the connection to send data back to the client, which listens on a single random port from 10000 11999. These ports must remain open on the client side and cannot be blocked by firewalls/routers. If this creates a security concern or is not possible, (for example, running through an ISP) consider using a VPN connection so that all data transmissions are rerouted through a single VPN port.

Additionally with Level 3.x, due to the dual listening port scheme, Dynamic NAT and IP masquerading are not compatible; however, Static NAT may be compatible depending on the capabilities of your firewall software or router. You must create a static mapping table that maps every internal client IP address for ports 10000–11999 to a translated external IP address for the same range of ports. Repeat this for every Sage MAS 200 workstation. The process of creating a static mapping table varies. Sage Customer Support cannot provide assistance in this task. As an alternative, you can use static IP addresses on the workstations.

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- 12. If the Sage MAS 200 Host/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 SS3003-A on Sage Online at www.sagesoftwareonline.com. If you are running the Host/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.
- 13. If you experience ghost tasks or the inability to use the Kill selected task button in the Master Console window, refer to Resolution IDs 465052, 409919, and 435889 in the Sage InfoSource Knowledgebase on Sage Online at: www.sagesoftwareonline.com
- 14. 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, see the Microsoft Hardware Compatibility List at: www.microsoft.com/whdc/hcl/default.mspx
- 15. For Sage MAS 200 version 4.10, download and apply both Service Pack 1 and the current service update.

Note: As of Sage MAS 200 version 4.10, the e-Business Manager module may have additional separate program fixes for the Web Engine; apply the latest Web Engine bundle. For the latest program updates, go to the Sage Online Web site at: www.sagesoftwareonline.com

For Sage MAS 200 version 3.71, 4.00, and 4.05, download and apply the program fix collection for your version from Sage Online. Regardless of the version, if third-party enhancements are installed, contact your development partner to verify compatibility before installing the program fixes. Some program fixes are specifically excluded from the program fix collection and should be installed only if you are experiencing the problem they address. Also, some program fixes must be applied at each workstation in addition to being applied at the server.

- 16. Sage is committed to supporting future Microsoft and Novell operating systems as they are released to market for all Sage MAS 200 modules; however, Sage does not support beta-level operating systems. As new operating system levels are scheduled for general release, Sage will verify their compatibility and this matrix will be updated when Sage's evaluations are completed.
- 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, 2008, Windows XP, and 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

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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.x.			
Windows 7 (32 and 64-bit) Professional, Enterprise, and Ultimate	Intel Core 2 Duo	2 GB ³	512 MB
Windows Vista Business, Enterprise, and Ultimate	Intel Core 2 Duo	2 GB ³	512 MB
Windows 2000 Professional Windows XP Professional Windows XP Tablet PC Edition	Intel Pentium 4 class 1.8 GHz	For version 3.71.x-4.20.x: 512 MB ³ For version 4.30 and higher: 1 GB	For version 3.71.x-4.20.x: 256 MB For version 4.30 and higher: 512 MB
Network Bandwidth (for multi-user systems)	Recommended Minimum		
	100 Base-T – 100 Mbps at Full Duplex		

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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

³ 1 GB or more RAM may be required depending on the number of Sage MAS 200 users, or if you are running a large number of concurrent tasks or applications. For Windows Vista or Windows 7, additional RAM may be required.

Recommended Minimum System Configuration				
	Recommended Minimum ¹			
Terminal Services and Citrix	Processor	Memory (RAM)		
Windows Server 2008 Terminal Services	Intel Pentium 4 class 1.8 GHz	Recommended minimum and as required by		
Windows Server 2003 Terminal Services	Dual-core processor or better recommended	Terminal Services or Citrix, plus 128 MB per concurrent user ²		
Windows 2000 Terminal Services		100000000000000000000000000000000000000		
Citrix Presentation Server 4.5				
Citrix Presentation Server 4.0				
Cummouted Courses	Recommended Minimum			
Supported Servers	Processor	Memory (RAM)		
W. 1 G 2000 (22 1 (41.))	For version 3.71.x-4.10.x:	1 GB + 90 MB per concurrent user		
Windows Server 2008 (32 and 64-bit) Standard and Enterprise	Intel Pentium 4 class 2.4 GHz			
Windows Server 2003 (32-bit)	Dual processor recommended			
Standard and Enterprise	For version 4.30 and higher:			
Windows Server 2003 R2 (32-bit) Standard and Enterprise	Intel Core 2 Duo			
Windows Small Business Server 2003 (32-bit) Standard and Premium				
Windows 2000 Server				
Windows 2000 Advanced Server				
Windows Small Business Server 2000				

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.

² 128 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.