Revised as of July 24, 2014

The information in this document applies to Sage ERP MAS 90 Version 4.50. Detailed product update information and support policies can be found on the Customer Portal at: <u>http://na.sage.com/log-on/</u>

This document is intended to cover all information regarding the compatibility of various operating systems with Sage ERP MAS 90 as of July 24, 2014. Any operating system not listed should be considered *incompatible*.

**Note:** It is critical that before and during an installation, this document is thoroughly reviewed, along with the *Sage ERP MAS 90 Installation and System Administrator's Guide* and other documents found by clicking the Installation Information link of the main Sage ERP MAS 90 and 200 Support Ports page. This Web page can be found on the Customer Portal at <a href="http://na.sage.com/log-on/">http://na.sage.com/log-on/</a>. If development partner or Extended Solutions customizations or modifications have been made to your Sage ERP MAS 90 software, coordinate with your Sage business partner and your development partner before installing Sage ERP MAS 90. For information about integrated solutions compatibility, refer to the Integrated Solutions Compatibility Matrix on the Customer Portal at: <a href="http://na.sage.com/log-on/">http://na.sage.com/log-on/</a>.

Sage ERP MAS 90 4.50 phone and web case support (retirement) end date is September 30, 2015. For more information, see Supported Versions document located here, <a href="https://partners.sagenorthamerica.com/irj/go/km/docs/sageKM/Sage%20MAS%2090%20and%20200/Assets/Sage%20100%20ERP%20Supported%20Versions.pdf">https://partners.sagenorthamerica.com/irj/go/km/docs/sageKM/Sage%20MAS%2090%20and%20200/Assets/Sage%20100%20ERP%20Supported%20Versions.pdf</a>

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			
The following information applies to all standalone (single user) workstations, peer-to-peer workstations, and client workstations attached to Windows servers, unless indicated otherwise.				
Peer-to-Peer Networks: In a peer-to-peer network whe computer acting as the file server is a dedicated machine	ere the computer acting as the file server is not dedicated, only 2 concurrent user seat accesses will be supported. If the ne, a 5 concurrent user maximum is allowed.			
Windows 8.1 (32 and 64bit) Professional and Enterprise	<ul> <li>Notes</li> <li>Microsoft C++ 2008 SP1 has to be installed prior to Sage ERP MAS 90 Installation.</li> <li>Sage CRM 7.1 Patch H Hotfix1 and above is supported.</li> <li>Refer KB 20216, if the following issue occurs, "The wrong version of Crystal Reports is installed on this workstation. Please re-run Workstation Setup"</li> </ul>			
Windows 8 (32 and 64bit) Professional and Enterprise	<ul> <li>Notes</li> <li>Microsoft C++ 2008 SP1 has to be installed prior to Sage ERP MAS 90 Installation.</li> <li>Sage CRM 7.1 Patch H Hotfix1 and above is supported.</li> </ul>			
Windows 7 (32 and 64-bit) Professional, Enterprise, and Ultimate Service Pack 1	<ul> <li>Notes</li> <li>Sage recommends installing Sage ERP MAS 90 to a location other than the C:\Program Files folder (for example, C:\Sage).</li> </ul>			
	<b>Not Supported</b> The items listed here are intended to be used for clarification purposes only, and are not intended to represent a comprehensive list of exclusions.			
	<ul> <li>Windows 7 Home Basic and Windows 7 Home Premium editions are not supported.</li> </ul>			

Windows Vista (32-bit) Business, Enterprise, and Ultimate Service Pack 2	<ul> <li>Notes</li> <li>Sage recommends installing Sage ERP MAS 90 to a location other than the C:\Program Files folder (for example, C:\Sage).</li> </ul>		
	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.		
	<ul> <li>Windows Vista Home Basic and Windows Vista Home Premium editions are not supported.</li> <li>Windows Vista 64-bit version is not supported.</li> </ul>		
	Operating System software specifically designed to be used as a network server (not peer-to-peer)		
ERP Supported Servers	Remarks		
Windows Server 2012 R2 (64-bit) Standard and Essential	<ul> <li>Notes</li> <li>Sage ERP MAS 90 is a 32 bit application and will run seamlessly on a 64-bit operating system utilizing the WOW(4, 96, -) is a second second</li></ul>		
Windows Server 2012 (64-bit) Standard	<ul> <li>WOW64 x86 emulator.</li> <li>If eBusiness Manager is installed, the ISAPI Plug-in must be installed manually for new Sage ERP MAS 90 installations.</li> </ul>		
Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2	<ul> <li>If a Windows Server 2008 64-bit server is to be 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.</li> <li>Workstations from remote sites are supported only through Terminal Services or Citrix. Running Sage ERP MAS 90 over a Virtual Private Network (VPN) and/or a Wide Area Network (WAN) or through any other</li> </ul>		
Windows Server 2008 R2 (64-bit) Standard and Enterprise Service Pack 1	<ul> <li>remote means is not supported.</li> <li>The eBusiness Web Services service can only be installed on Windows Server 2003, 2008, or SBS 2011. Note that while the Sage 100 ERP 4.50 Server is supported on Windows Server 2012, the eBusiness Web Services is not. Users who are looking to make use of eBusiness Web Services should not install Sage 100 ERP 4.50</li> </ul>		
Windows Server 2003 (32-bit) Standard and Enterprise Service Pack 2	Server on Windows Server 2012. For more information, see the eBusiness Web Services Installation and Reference Guide found by clicking the Documentation link on the Sage ERP MAS 90 and 200 Autorun window.		
Windows Server 2003 R2 (32-bit) Standard and Enterprise Service Pack 2	<ul> <li>Refer KB <u>20216</u>, if the following issue occurs in Windows 2012 R2 Server, "The wrong version of Crystal Reports is installed on this workstation. Please re-run Workstation Setup"</li> </ul>		
Windows Small Business Server 2011	<ul> <li>Recommendations</li> <li>Sage ERP MAS 90 should be installed on a dedicated member/application server. Although supported, certain</li> </ul>		
Standard and Premium	Windows configurations are <b>not recommended</b> due to possible instability and performance issues. Support from Sage Customer Support may be limited in the following circumstances:		
Windows Small Business Server 2008 Standard and Premium	<ul> <li>Running Sage ERP MAS 90 on a Windows Small Business Server or 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.</li> </ul>		
Windows Small Business Server 2003 R2 (32-bit) Standard and Premium	<ul> <li>Running Sage ERP MAS 90 on any server actively running other applications or services, such as e- mail (for example, Exchange Server), IIS, fax programs, or other software.</li> </ul>		

Not Supported The items listed here are intended to be used for clarification pur comprehensive list of exclusions.• Service Pack 1 on Windows Server 2003 is not supported.• Using a server operating system as a Sage ERP MAS 90 We another server).• Sage ERP MAS 90 is not designed for any version of Windom platform.• Windows Server 2003 R2 64-bit is not supported.	orkstation is not supported (not even as a client to
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Sage CRM Supported Servers	Remarks
Windows Server 2012 R2 (64-bit) Standard Windows Server 2012 (64-bit)	<ul> <li>Notes</li> <li>Microsoft SQL Server is required for Sage CRM Server.</li> <li>Sage CRM can be installed on MS SQL Server 2005, 2008 (32- and 64-bit) 2008 R2 and 2012 SP1 Standard and Enterprise editions. SQL Server 2012 is supported with CRM 7.1 Patch H Hotfix1 and above.</li> <li>Sage CRM Server cannot be installed on a server running Microsoft Exchange or Lotus Notes Domino.</li> </ul>
Standard	<ul> <li>Sage CRM 7.1 Patch H Hotfix1 and above supports Windows Server 2012 &amp; 2012 R2.</li> </ul>
Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2	<ul> <li>Outlook Plug-In for Sage CRM</li> <li>To install CRM Outlook Integration, download the Outlook plug-in from within CRM in the My CRM menu &gt; Preferences tab. The user must be an Administrator or Power User of the client machine to install the Outlook plug-in.</li> </ul>
Windows Server 2008 R2 (64-bit) Standard and Enterprise Service Pack 1	<ul> <li>If installing the CRM Outlook Integration in a Terminal Services environment, administrator rights are required on the Terminal Services machine. All instances of Internet Explorer and Outlook must be closed to install the plug-in. At the time of the installation, exclusive access to the server is required for each user. After the plug-in is installed, administrator rights are no longer required.</li> </ul>
Windows Server 2003 R2 (32-bit) Standard and Enterprise Service Pack 2	CRM Outlook client integration is supported only for e-mail accounts running on Microsoft Exchange Server.

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Terminal Services/Citrix Supported Servers	Remarks		
Windows Server 2012 R2 (64-bit) Standard Terminal Services Windows Server 2012 (64-bit) Standard	<ul> <li>Notes</li> <li>Windows Server 2008 R2 Remote Desktop Services is a new name for former Terminal Services Service.</li> <li>Terminal Services or Citrix must be installed on a supported version of Windows Server, such as 2003, 2008 or 2012.</li> <li>Windows thin clients are supported with Terminal Services and Citrix. For more information, refer to:www.microsoft.com</li> </ul>		
Terminal Services	• For more information on Terminal Services/Citrix, see the Miscellaneous Notes section in this document.		
Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2 Terminal Services	<ul> <li>Sage CRM Notes</li> <li>Running Sage CRM through Terminal Services or Citrix is only supported when run through a remote session to the Desktop and not as a Published Application.</li> <li>Sage CRM is supported on XenApp 5.0 32-bit version only.</li> <li>Sage CRM 7.1 SP2 supports Citrix XenApp 6.0 32 bit only.</li> </ul>		
Windows Server 2008 R2 (64-bit) Standard and Enterprise Service Pack 1 Remote Desktop Services	<ul> <li>Recommendations</li> <li>Sage ERP MAS 90 Server can be installed on the same server as Terminal Services or Citrix, or on a separate server. If Sage ERP MAS 90 is installed on a separate server from the Terminal Services/Citrix server, use 100 Mbps or better network components to connect the two servers.</li> </ul>		
Windows Server 2003 (32-bit) Standard and Enterprise Service Pack 2 Terminal Services	<ul> <li>Not Supported</li> <li>The items listed here are intended to be used for clarification purposes only, and are not intended to represent a comprehensive list of exclusions.</li> <li>Service Pack 1 for Windows Server 2003 is not supported.</li> </ul>		
Windows Server 2003 R2 (32-bit) Standard and Enterprise Service Pack 2 Terminal Services	<ul> <li>Running Sage CRM on a Terminal Services session from a Terminal Services or Citrix server installed on a Windows Server 2003 is not supported.</li> <li>Citrix does not support Citrix XenApp 5.0 on Windows Server 2008 R2.</li> </ul>		
Citrix XenApp 5.0 Citrix XenApp 6.0 Citrix XenApp 6.5			
Virtual Platforms			

Notes

 All supported Operating Systems listed under the Supported Workstations, ERP Supported Servers and Sage CRM Supported Servers sections are supported when hosted on these Citrix virtual platform products.

Hardware and software requirements (minimum and recommended) for Sage ERP MAS products apply to virtual environments as well.

• Some third party products might not support the same virtualization platforms as Sage ERP MAS products. For verification, please check with the third party vendor.

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#### **Miscellaneous Notes**

- Antivirus software on your workstations and server should be configured to exclude files with the extensions SOA, LIB, M4T, M4L, DD, DDE, M4P, PVC, XEQ and DDF. If antivirus software is configured to scan compressed CAB files, performance issues *may* occur. You *may* want to exclude scanning of CAB files and network drives. Also, you should not have ..\MAS90\\*.\* files on the server scanned simultaneously by multiple instances of antivirus software. Desktop/Home versions of antivirus software that are not supported by the publisher for business use are also not supported by Sage. Desktop/Home versions typically have less configurable options (such as exclusion of file extensions over the network) for tuning the automatic, background, memory resident scans.
- 2. If you are using Symantec Antivirus Corporate or Enterprise Edition, review Resolution ID 415534 in the Sage Knowledgebase.
- 3. Verify that you install the correct driver for your network adapter card (NIC), and use only high-quality cards. Using an incompatible or outdated driver or a low-quality card can cause serious data corruption issues.
- 4. 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.
- 5. Verify that all hardware involved in running Sage ERP MAS 90 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>www.microsoft.com/whdc/hcl/default.mspx</u>
- 6. The eBusiness 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 Customer Portal at: <u>http://na.sage.com/log-on/</u>
- 7. If third-party enhancements are installed, always contact your development partner to verify compatibility before installing any updates. 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 be installed only on a Windows Server platform, such as Windows Server 2003 and 2008. For more information, see the *eBusiness Web Services Installation and Reference Guide* found by clicking the Documentation link on the Sage ERP MAS 90 and 200 Autorun window of the install CD.
- 9. Always validate compatibility of development partner enhancements before upgrading.
- 10. Sage is committed to supporting future Microsoft operating systems as they are released to market for all Sage ERP MAS 90 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 document will be updated when Sage's evaluations are completed.
- 11. For more information about performance, log on to the Customer Portal at <a href="http://na.sage.com/log-on/">http://na.sage.com/log-on/</a>, and review Resolution ID 415534 "Slow Performance when running Sage MAS 90 Version 4.0 across a network" in the Sage Knowledgebase.
- 12. 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.
- 13. The Microsoft Fax Services feature provided with Windows Server 2003, 2008, 2012 and 2012 R2, Windows Vista, Windows 7, Windows 8 and Windows 8 .1 are supported for Paperless Office and batch faxing. For more information, refer to the Integrated Solutions Compatibility Matrix on the Customer Portal at: <u>http://na.sage.com/log-on/</u>

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Recommended Minimum System's Hardware Configuration			
	Recommended Minimum <sup>1</sup>		
Single User/Client Workstation	Processor	Physical Memory (RAM)	Available Memory (RAM) <sup>2</sup>
Workstation (client) operating system versions not listed in this document will not be supported with Sage ERP MAS 90 version 4.50.			
Windows 8.1(32 and 64 bit) Professional and Enterprise	Intel Core 2 Duo	2 GB	512 MB
Windows 8 (32 and 64 bit) Professional and Enterprise	Intel Core 2 Duo	2 GB	512 MB
Windows 7 (32 and 64-bit) Professional, Enterprise, and Ultimate	Intel Core 2 Duo	2 GB	512 MB
Windows Vista Business, Enterprise, and Ultimate	Intel Core 2 Duo	2 GB	512 MB
Network Bandwidth (for multi-user systems)	Recommended Minimum		
	100 Base-T – 100 Mbps at Full Duplex		

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<sup>&</sup>lt;sup>1</sup>The recommended minimum is designed to ensure the systems used for Sage MAS 90 are capable of providing adequate performance with a standard complement of normally installed applications, such as virus protection software.

<sup>&</sup>lt;sup>2</sup> Regardless of the recommended minimum specified above, users should check the available memory on the workstation prior to installing Sage MAS 90 and use the Windows Task Manager to check the Available Physical Memory on the Performance tab. Sage cannot guarantee acceptable performance when running Sage MAS 90 concurrently with other applications that consume system resources required for Sage MAS 90 to perform at an optimum level.

Revised as of July 24, 2014 Recommended Minimum System Configuration for ERP and Sage CRM Servers			
	Recommended Minimum <sup>1</sup>		
ERP and Sage CRM Supported Servers	Processor	Memory (RAM)	Additional Requirements
Windows Server 2012 R2 (64-bit) Standard Windows Server 2012 (64-bit)		2 GB + 4-6 MB per concurrent user	100 Mbps network connection
Standard Windows Server 2008 (32 and 64-bit) Standard and Enterprise Windows Server 2008 R2 (64-bit) Standard and Enterprise			
Windows Server 2003 R2 (32-bit) Standard and Enterprise	East (4 hit sustants)		
Additional ERP Only Supported Servers	For 64-bit systems: Intel or AMD 64-bit capable, such as Intel Xeon or Quad-Core AMD	Memory (RAM)	Additional Requirements
Windows Server 2003 (32-bit) Standard and Enterprise Windows Small Business Server 2003 R2 (32-bit) Windows Small Business Server 2008 (32 and 64-bit) Windows Small Business Server 2011 (64-bit)	For 32-bit systems: Intel Pentium 4 class 2.4 GHz Dual processor recommended	1 GB + 4-6 MB per concurrent user	100 Mbps network connection
Terminal Services and Citrix		Memory (RAM)	Additional Requirements
Windows Server 2012 R2 Terminal Services Windows Server 2012 Terminal Services Windows Server 2008 R2 Remote Desktop Services Windows Server 2008 Terminal Services Windows Server 2003 Terminal Services Citrix XenApp 5.0 Citrix XenApp 6.0 Citrix XenApp 6.5		Recommended minimum and as required by Terminal Services or Citrix, plus 128 MB per concurrent user <sup>2</sup>	100 Mbps network connection
ERP and Sage CRM Web Servers	Processor	Memory (RAM)	Additional Requirements
Windows Server 2012 R2 Windows Server 2012 Windows Server 2008 R2	Intel or AMD 64-bit capable, such as: Intel Xeon or Quad-Core AMD Opteron	2 GB 2 GB 2 GB	Internet Information Services 8.0 Internet Information Services 8.0 Internet Information Services 7.0
Windows Server 2008	Intel Pentium 4 class 2.8 GHz	2 GB	Internet Information Services 7.0
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<sup>&</sup>lt;sup>1</sup>The recommended minimum is designed to ensure the systems used for Sage MAS 90 are capable of providing adequate performance with a standard complement of normally installed applications, such as virus protection software.<sup>2</sup>128 MB is based on an average of three concurrent tasks per user (Sage MAS 90 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.

Windows Server 2003	Intel Pentium 4 class 2.8 GHz	1 GB	Internet Information Services 6.0
E-mail Servers	Processor	Memory (RAM)	Additional Requirements
Microsoft Exchange Server 2003	Intel Pentium 4 class 2.8 GHz	2 GB	100 Mbps network connection
Microsoft Exchange Server 2007 (32-bit)			
Microsoft Exchange Server 2010 SP2 (64-bit)			
(Sage CRM 7.1 Patch H Hotfix1 and above is Supported.)			