Revised as of February 28, 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 February 28, 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 90Installation 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 <u>http://na.sage.com/log-on/</u>. 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: <u>http://na.sage.com/log-on/</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
The following information applies to all standald indicated otherwise.	one (single user) workstations, peer-to-peer workstations, and client workstations attached to Windows servers, unless
	k where the computer acting as the file server is not dedicated, only 2 concurrent user seat accesses will be supported. If the machine, a 5 concurrent user maximum is allowed.
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>
	<ul> <li>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. </li> <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>
	<ul> <li>Not Supported <ul> <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>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> </li> </ul>

Microsoft supported servers defined as Operating System software specifically designed to be used as a network server (not peer-to-peer)				
ERP Supported Servers	Remarks			
Windows Server 2012 (64-bit) Standard	<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 WOW64 x86 emulator</li> </ul>			
<ul> <li>Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2</li> <li>Windows Server 2008 R2 (64-bit) Standard and Enterprise Service Pack 1</li> <li>Windows Server 2003 (32-bit) Standard and Enterprise Service Pack 2</li> <li>Windows Server 2003 R2 (32-bit) Standard and Enterprise Service Pack 2</li> <li>Windows Small Business Server 2011 Standard and Premium</li> <li>Windows Small Business Server 2008 Standard and Premium</li> <li>Windows Small Business Server 2003 R2 (32-bit) Standard and Premium</li> </ul>	<ul> <li>If eBusiness Manager is installed, the ISAPI Plug-in must be installed manually for new Sage ERP MAS 90 installations.</li> <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 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 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.</li> <li>Recommendations         <ul> <li>Sage ERP MAS 90 should be installed on a dedicated member/application server. Although supported, certain Windows configurations are not recommended due to possible instability and performance issues. Support from Sage Customer Support may be limited in the following circumstances:                 <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> <li>Running Sage ERP MAS 90 on any server actively running other applications or services, such as email (for example, Exchange Server), IIS, fax programs, or other software.</li> </ul> </ul></li> </ul></li></ul>			
	<ul> <li>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. </li> <li>Service Pack 1 on Windows Server 2003 is not supported.</li> <li>Using a server operating system as a Sage ERP MAS 90 Workstation is not supported (not even as a client to another server). </li> <li>Sage ERP MAS 90 is not designed for any version of Windows Datacenter Server and is not supported on this platform.</li> <li>Windows Server 2003 R2 64-bit is not supported.</li> </ul>			

Sage CRM Supported Servers	Remarks
Windows Server 2012 (64-bit) Standard	<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 Standard and Enterprise editions. SQL Server 2012 is supported with CRM 7.1 Patch H Hotfix1 and above.</li> </ul>
Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2	<ul> <li>Sage CRM Server cannot be installed on a server running Microsoft Exchange or Lotus Notes Domino.</li> <li>Sage CRM 7.1 Patch H Hotfix1 and above supports Windows Server 2012.</li> </ul>
Windows Server 2008 R2 (64-bit)	Outlook Plug-In for Sage CRM
Standard and Enterprise Service Pack 1	<ul> <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 2003 R2 (32-bit) Standard and Enterprise Service Pack 2	<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> <li>CDM Outlook client integration is supported only for a meil access to the server is required for each user.</li> </ul>
	CRM Outlook client integration is supported only for e-mail accounts running on Microsoft Exchange Server.

Terminal Services/Citrix Supported Servers	Revised as of February 28, 2014 Remarks
<ul> <li>Windows Server 2012 (64-bit) Standard</li> <li>Windows Server 2008 (32 and 64-bit) Standard and Enterprise Service Pack 2 Terminal Services</li> <li>Windows Server 2008 R2 (64-bit) Standard and Enterprise Service Pack 1 Remote Desktop Services</li> <li>Windows Server 2003 (32-bit) Standard and Enterprise Service Pack 2 Terminal Services</li> <li>Windows Server 2003 R2 (32-bit) Standard and Enterprise Service Pack 2 Terminal Services</li> <li>Windows Server 2003 R2 (32-bit) Standard and Enterprise Service Pack 2 Terminal Services</li> </ul>	<ul> <li>Notes <ul> <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 or 2008.</li> <li>Windows thin clients are supported with Terminal Services and Citrix. For more information, refer to:www.microsoft.com</li> <li>For more information on Terminal Services/Citrix, see the Miscellaneous Notes section in this document.</li> </ul> </li> <li>Sage CRM Notes <ul> <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> </li> <li>Recommendations <ul> <li>Sage ERP MAS 90 Server can be installed on the same server as Terminal Services or Citrix server, use 100 Mbps or better network components to connect the two servers.</li> </ul> </li> <li>Not Supported <ul> <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> </li> </ul>
Citrix XenApp5.0 Citrix XenApp 6.0	<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>
Virtual Platforms	Remarks
Citrix XenServer 5.0 Citrix XenServer 5.6	<ul> <li>Notes</li> <li>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.</li> <li>Hardware and software requirements (minimum and recommended) for Sage ERP MAS products apply to virtual environments as well.</li> </ul>
VMWare Workstation 6.0 VMWareESX 4.1 VMware vSphere Hypervisor (ESXi) 4.1	<ul> <li>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.</li> </ul>
Microsoft Virtual PC 2007 Windows Virtual PC Windows Server 2008 R2 Hyper-V	

Revised as of February 28, 2014

#### 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: <a href="https://www.microsoft.com/whdc/hcl/default.mspx">www.microsoft.com/whdc/hcl/default.mspx</a>
- 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, 2008 and 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 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 <u>http://na.sage.com/log-on/</u>, 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 and 2012, Windows Vista, Windows 7 and Windows 8 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>

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(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			

<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.

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 (64-bit)		2 GB + 4-6 MB per	100 Mbps network connection	
Standard		concurrent user		
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)	For 64-bit systems:			
Standard and Enterprise	Intel or AMD 64-bit capable, such as	Memory (RAM)	Additional Deguinements	
Additional ERP Only Supported Servers	Intel Xeon or Quad-Core AMD	1  GB + 4-6  MB per	Additional Requirements           100 Mbps network connection	
Windows Server 2003 (32-bit)	Opteron	concurrent user	100 Mbps network connection	
Standard and Enterprise		concurrent user		
Windows Small Business Server 2003 R2 (32-bit)				
Windows Small Business Server 2008 (32 and 64-bit)	For 32-bit systems:			
Windows Small Business Server 2011 (64-bit)	Intel Pentium 4 class 2.4 GHz			
(Theory Shah Dushess Server 2011 (OF Shy	Dual processor recommended			
Terminal Services and Citrix		Memory (RAM)	Additional Requirements	
Windows Server 2012 Terminal Services		Recommended minimum	100 Mbps network connection	
Windows Server 2008 R2 Remote Desktop Services		and as required by		
Windows Server 2008 Terminal Services		Terminal Services or Citrix,		
Windows Server 2003 Terminal Services		plus 128 MB per		
Citrix XenApp 5.0		concurrent user <sup>2</sup>		
Citrix XenApp 6.0				
ERP and Sage CRM Web Servers	Processor	Memory (RAM)	Additional Requirements	
Windows Server 2012	Intel or AMD 64-bit capable, such as:	2 GB	Internet Information Services 8.0	
Windows Server 2008 R2	Intel Xeon or Quad-Core AMD Opteron	2 GB	Internet Information Services 7.0	
Windows Server 2008	Intel Pentium 4 class 2.8 GHz	2 GB	Internet Information Services 7.0	
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				
Microsoft Exchange Server 2007 (32-bit)	Intel Pentium 4 class 2.8 GHz	2 GB	100 Mbps network connection	
Microsoft Exchange Server 2010 SP2 (64-bit)		2.00	100 mops network connection	
(Sage CRM 7.1 Patch H Hotfix1 and above is Supported.)				

<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 Sale's Order Entry or Customer Maintenance). Averages of more than three concurrent tasks per user will require additional RAM.