Sage 500 ERP

Version 2023

Compatibility and Resource Guide

Last Revised: October 2022

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Introduction

Sage 500 ERP is an enterprise level, multi-user client/server accounting software application and development platform. To correctly operate the software, certain requirements must be satisfied regarding the environment in which the software functions. These requirements include a database engine running on a server platform, a network backbone to handle remote data requests, and a client platform to present the user interface. The charts contained in this document represent supported compatibility of Sage 500 ERP with various platforms and third-party products. This information will help you properly configure and update the environment in which you operate Sage 500 ERP.

Support is provided for the product combinations indicated because they have been proven to operate under either fundamental or full functional testing protocols. If you are using an operating system, SQL Server version, service pack, or product that is not listed in this guide, Sage Customer Support may not provide full support for the product combination being used in conjunction with Sage 500 ERP if the issues are found to be caused by the product combination. For more information on issues that should be addressed to Sage Customer Support, see the Introduction to Customer Support Web page accessed via Sage Customer/Partner portal at: https://www.sage.com/en-us/support/resources/.

This compatibility document should be thoroughly reviewed prior to the installation of Sage 500 ERP, or implementation of any third-party products that are to be used in combination with this product. For information on known issues and installation instructions, refer to the Sage on-line knowledgebase or see the *Sage 500 ERP Installation and System Configuration Guide* accessed via: <u>https://customers.sagenorthamerica.com/</u>. For product overviews, see the Products page on the Sage Web site at: <u>https://www.sage.com/en-us/products/sage-500/</u>.

How to Use This Guide

This guide is divided into two sections: matrices containing compatibility information and text describing requirements and system configuration.

The compatibility information in the first section is in a table format. The matrix provided by each table details supported operating systems and database engines, the service packs and tested updates, as well as compatible add-on applications and tools. Review the information and notes.

The requirements detail the minimum configuration for servers and clients, as well as requirements for the systems you use with Sage 500 ERP. Review this text carefully as it also contains licensing information on Microsoft Windows, Microsoft SQL Server, and Sage 500 ERP.

Document Style Information

Links to publications stored on Web sites and cross-references to information are referenced in this guide. Click the <u>underlined</u> text to access information on Web sites when you are connected to the Internet, or to access bookmarks to other sections of this guide.

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Sage 500 ERP Support Information

Mailing Address

Sage Mid-Market Accounting Solutions 271 17th Street Northwest Atlanta, Georgia 30363 United States

Phone Numbers

U.S./Canada Support	800.854.3415
Corporate	866.996.7243

Support Hours of Operation

Monday through Friday 6:00 am – 5:00 pm PDT

Web Site Resources

Several on-line resources are available for Sage 500 ERP. These resources can be accessed using Sage Customer or Partner portal (as applicable) at: <u>https://customers.sagenorthamerica.com</u> or <u>http://na.sage.com/log-on/</u>.

Engage with Sage—online!

Need training? Have questions? Want guidance? We're here to help. Join industry peers, certified partners, and Sage pros online today.

http://www.sage.com/na/~/media/site/support/pdfs/infographics/SSS_IG_CSSTrifectaInfographic.pdf

Self-Service Product Registration at:

http://registration.sagesoftware.com/registration/IssueRegistration.asp

Product Information at: <u>http://www.sage.com/en-us/products/sage-500/</u>

Product Solutions Directory (Sage 500 ERP add-ons) at: <u>http://www.sage.com/en-us/products/sage-500-erp</u>

Sage 500 Community Forums at: <u>https://www.sagecity.com/us/sage500_erp</u>

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Compatibility Information

The following applies to various compatibility sections in this document:

- Service Packs refer to updates from Microsoft or another third-party provider. In contrast, Sage delivers periodic updates to Sage 500 ERP that are known as Product Updates. Sage Product Updates are cumulative and require only the latest update to be installed.
- For additional guidelines and installation instructions, see the Sage 500 ERP Installation and System Configuration Guide (install.pdf). From a default installation, this file can be found in C:\Program Files (x86)\Sage Software\Sage MAS 500 Client\User Guides. Also, refer to the Product Lifecycle Schedule for the version and platform retirement dates available through Sage Customer and Partner portals.
- Sage 500 ERP is normally regression tested only with generally available major releases of Microsoft operating systems, database servers and Office[™] products. Service packs, critical updates, patches, and hot fixes released by Microsoft that affect systems, or services necessary for operation of Sage 500 ERP may also be tested under functional testing protocols and will be noted in the matrix, but historically have not been found to impact Sage 500 ERP operations. Less severe updates are generally not tested or certified with Sage 500 ERP. Review the patch information contained in this guide carefully.
- Sage 500 ERP is optimistically supported with updates available for supported operating system editions and components; however, if after due diligence, an operating system or component problem cannot be resolved, and that operating system contains untested updates, Sage Customer Support may defer to the supported updates within this guide. Major SQL Server versions are less likely to work with Sage 500 ERP due to the extensive use of SQL Server features and the on-going changes to the database engine and obsolescence of commands, components, etc.
- Quality assurance testing is performed with the latest updates available for Sage 500 ERP with the latest supported updates to Windows, SQL Server, MDAC, and others listed in this guide. Previous updates to these components are not tested with current updates of Sage 500 ERP. To ensure a compatible environment, apply the latest supported updates listed in this guide with the latest Sage 500 ERP update. The minimum service pack listed is generally that which was available when this version of Sage 500 ERP was initially released.
- Sage 500 Versions 2023 and prior do not support Roaming Profiles.

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SQL Server Platforms

- Developer Edition is supported on demo, test, and development systems only.
- Other editions are supported on demo, test, and production systems with some exceptions as noted below.

SQL Server 2016 Editions	SQL Server 2017 Editions	SQL Server 2019 Editions
Developer	Developer	Developer
Express	Express	Express
Standard	Standard	Standard
Enterprise Edition	Enterprise Edition	Enterprise Edition

Please see Microsoft's supported OS platforms for

- SQL Server 2019: <u>SQL Server 2019: Hardware & software requirements SQL Server | Microsoft Docs</u>
- SQL Server 2017: <u>SQL Server 2016 & 2017: Hardware & software requirements SQL Server | Microsoft Docs</u>
- SQL Server 2016: <u>SQL Server 2016 & 2017: Hardware & software requirements SQL Server | Microsoft Docs</u>

SQL Server Platform Notes

- Production systems are those used in the daily operation and data entry tasks performed within Sage 500 ERP. Only the Developer, Express, Standard, Business and Enterprise Editions of SQL Server are supported in this role. For additional information on licensing, see <u>Hardware and Licensing Considerations</u>.
- In production systems, Sage 500 ERP client should not be installed on the server where SQL Server is installed.
- Check the system requirements from Microsoft for current Windows and SQL Server edition compatibility.
- Developer systems provide an enterprise platform on which to prepare, demonstrate, or test functionality modifications. The Developer Edition of SQL Server should be used for this purpose only and is not supported in a production environment.
- Demonstration or test systems are defined as those on which the Sage 500 ERP databases are installed for the purpose of demonstrating or testing functionality within the software.
- SQL Server 2017 Express is automatically installed when using the Sage 500 ERP Express Install when no version of SQL Server is present. This allows for demonstration or use of the functionality within the software without the need to install another edition of SQL Server. Use the Express Install for creating demonstration systems or production systems that will use SQL Server 2017 Express. You must choose a Windows Server edition of the operating system for the production SQL Server to service multiple clients (non-local).

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- For SQL Server required settings, see <u>SQL Server Configuration Requirements</u> prior to installing SQL Server.
- Data Import Manager requires SQL Server Agent to run and is therefore not available with SQL Express.
- The encryption algorithm TRIPLE_DES, was deprecated in SQL 2016, and was the method used by Sage 500 for credit card processing. We have updated to use AES.

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SQL Server Service Packs and Cumulative Updates

SQL Server service packs are not being produced as of SQL 2017. Instead, going forward, only cumulative updates are being offered.

Unless otherwise indicated, the list below indicates what updates we tested for SQL Server. We optimistically support future updates. It is likely that we do not retest older SQL Server versions with later service packs.

SQL Server 2019			
	Cumulative Update	Remarks	
SQL Server Express 64-bit	3		
Standard Edition 64-bit	3	 Supported with the Sage 500 ERP Enterprise Editions, or the Sage 500 ERP Standard Edition together with the SQL Server upgrade option. Service packs should be applied to clients with SQL Client Utilities and SQL servers. 	
Enterprise Edition 64-bit	3	 Supported with the Sage 500 ERP Enterprise Editions, or the Sage 500 ERP Standard Edition together with the SQL Server upgrade option. Service packs should be applied to clients with SQL Client Utilities and SQL servers. 	

SQL Server 2017				
	Cumulative Update	Remarks		
SQL Server Express 64-bit	6			
Standard Edition 64-bit	6	 Supported with the Sage 500 ERP Enterprise Editions, or the Sage 500 ERP Standard Edition together with the SQL Server upgrade option. Service packs should be applied to clients with SQL Client Utilities and SQL servers. 		
Enterprise Edition 64-bit	6	 Supported with the Sage 500 ERP Enterprise Editions, or the Sage 500 ERP Standard Edition together with the SQL Server upgrade option. Service packs should be applied to clients with SQL Client Utilities and SQL servers. 		

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SQL Server 2016			
	Service Pack	Remarks	
Standard Edition 64-bit	sp1	Supported with the Sage 500 ERP Enterprise Editions, or the Sage 500 ERP Standard Edition together with the SQL Server upgrade option.	
Enterprise Edition 64-bit	sp1	Supported with the Sage 500 ERP Enterprise Editions, or the Sage 500 ERP Standard Edition together with the SQL Server upgrade option.	

SQL Server 2016 no longer supports the TRIPLE_DES encryption algorithm; the algorithm used by Sage 500 ERP's Credit Card module. We have updated the encryption to use AES.

SQL Server Demo and Test Platform Notes

- When registering Sage 500 ERP demonstration, test, or development systems, select the proper license type in the Maintain Site task according to the following:
 - Demonstration Select this license type if you are a Sage partner.
 - Developer Select this license type if you are a Sage 500 ERP Customization Tools developer.
 - Test Select this license type if you are a Sage 500 ERP user.
- Developer editions are supported with Sage 500 ERP Customization Tools.
- Express editions are supported with Sage 500 ERP Small Business**, Standard, or Enterprise SQL Server license.
- Standard editions are supported with Sage 500 ERP Standard or Enterprise SQL Server license.
- Enterprise editions are supported with Sage 500 ERP Enterprise SQL Server license.
- Data Import Manager requires SQL Server Agent to run and is not available with SQL Express.

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If you are disabling the TLS 1.0 and 1.1 protocols depending on your SQL Server version, you may need to verify you are at a certain build/release level or later for your SQL Server to support these settings. Below are the specific levels required for TLS 1.2 support for SQL Server 2014 and SQL Server 2012. SQL Server 2016 and later support TLS 1.2 with their initial release.

Operating System Service Packs

These service packs are supported on systems where the Sage 500 ERP client, Internet Applications, or databases are installed.

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The server operating system, for the most part, is driven by the SQL Server version you are using and what Operating Systems it supports. See the SQL Server versions for links to the full hardware and software requirements for each support SQL Server version.

Windows Server Operating Systems			
	Minimum Service Pack	Remarks	
Windows Server 2012 64-bit	None		
Windows Server 2012 R2 64-bit	None		
Windows Server 2016 64-bit	None		
Windows Server 2019 64-bit	None		
Windows Server 2022 64-bit	None		

Production Client Operating Systems

Windows OS	Windows 8 32-bit	Windows 8 64-bit	Windows 8.1 32-bit	Windows 8.1 64-bit	Windows 10 32-bit	Windows 10 64-bit	Windows 11 64-bit
Minimum Service Pack	None	None	None	None	None	None	None

Data Import Manager must be used on an operating system supported by the SQL Server version you are using. So, for example, if you use SQL 2016 Enterprise, you will need to put the client on one of the server operating systems Windows 2012 or 2016.¹

¹ See <u>SQL Server 2016 & 2017: Hardware & software requirements - SQL Server | Microsoft Docs</u> for Microsoft's information on SQL Server 2016 and 2017. See <u>SQL Server 2019: Hardware & software requirements - SQL</u> <u>Server | Microsoft Docs</u> for information on SQL Server 2019. You should check with Microsoft for supported operating systems for your versions of SQL Server to run Data Import Manager, since it requires the Integration Services portion of SQL Server.

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Thin-Client Solutions Notes

- Customers do use terminal services; However, we do not test Windows Terminal Service environments.
- Client operating systems are typically where the client software is installed. Use the client install for this purpose.
- Windows Terminal Services is currently required for installation and operation of Citrix. For more
 information, see relevant subjects at: <u>https://www.citrix.com</u> or <u>https://docs.microsoft.com/en-us/windowsserver/remote/remote-desktop-services/welcome-to-rds</u>

MDAC Service Packs and updates

MDAC	Service Pack	Remarks
2.8	SP1	Installed with Sage 500 ERP client.

Note: Service packs and other supported updates for MDAC should be applied to all the clients.

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Internet Applications Server Platforms

	Windows Server 2012 All Editions (64-bit)	Windows Server 2012/R2 All Editions (64-Bit)	Windows Server 2016 All Editions (64-bit)	Windows Server 2019 All Editions (64-bit)	Windows Server 2022 All Editions (64-bit)
Business Insights Dashboard	Х	Х	Х	Х	х

*Supported on demonstration systems only.

*Filter criteria options not supported for Business Insights Dashboard on Internet Explorer 9 and Edge

Internet Applications Server Platform Notes

- Production systems are those used in the inquiry and data entry tasks performed within the Sage 500 ERP Internet Applications. Terminal Services servers are not supported as production IIS servers.
- Demonstration or test systems are defined as those on which the Sage 500 ERP Internet Applications are installed for the purpose of demonstrating or testing functionality within the software. These are typically single-user systems employing the Express Edition of SQL Server.
- Review the Sage 500 ERP Internet Applications Guide for primary guidelines and installation instructions.
- The Internet Applications are not supported on a server running Active Directory Service (ADS). This service causes permission conflicts with certain components on which the Internet Applications rely. This is also inadvisable from a security perspective because of the nature of making this type of information available over the Internet.
- Internet Applications with IIS versions above 7.0 require Classic ASP in your Web Services Extensions and to select the Run WWW service in IIS 5.0 isolation mode option in your Web site properties window. See the installation subjects in the Sage Online Knowledgebase for additional information.

Internet Applications Client Browser Notes

- The Internet Applications are designed to work by connecting from your local browser to the site over the Internet or an intranet. These applications are not generally designed for multi-user access from a single thin-client platform like Terminal Services or Citrix.
- Users should add the Web site you use for Internet Applications to their list of trusted sites. Also, edit the trusted zone security settings to enable scripting for controls not marked as safe for scripting.
- Review the <u>Sage 500 ERP Internet Applications Client Browser How-To Blog</u> on Sage City for primary guidelines and setup instructions when using IE 11 or Edge Browsers.

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Virtualization Environments

The table below summarizes environments where customers have successfully implemented Sage 500 ERP with virtual products. We do not have all virtual environments in house to test and troubleshoot each one but will assist in any way we can to implement them as needed.

Company	Product	Compatibility
		Yes
Citrix	XenApp 7.5/7.6	(On all supported server OS)
VMware	VMWare Workstation 9.0 or newer	Yes (On all supported server OS)
VMware	VMWare Server 3.5 or newer	Yes (On all supported server OS)
Microsoft	Terminal Services Windows 2012 (64-bit)	Yes
Microsoft	Terminal Services Windows 2012 R2 (64-bit)	Yes
Microsoft	Virtual PC 2007 or newer	Yes (On all supported client OS)
Microsoft	Hyper-V	Yes (Server 2012 and Server 2012 R2)
Microsoft	Hyper-V R2 (SP1)	

Virtualization Support Notes

- Hardware and software requirements (minimum and recommended) for Sage 500 ERP apply to virtual environments as well.
- Third party products might not support the same virtualization platforms as Sage 500 ERP. For clarification please check with the vendor.

Integrated Products

	Product Version	Remarks		
Sage HRMS	10.70	Primary support could be obtained from the <u>https://www.sagecity.com/global-resources</u>		
Sage Fixed Assets	2023.1	 Product and General Ledger links are supported by the <u>https://www.sagecity.com/global-resources</u> Includes Accounts Payable and Purchase Order asset tracking integration. For more information, see the Fixed Asset Accounting information in the Sage 500 ERP Help system. Accounts Payable and Purchase Order links (FAS SDK) are available to download and are supported by Sage 500 ERP Customer Support. 		
Sage Sales Tax	TBD	 As of October 2022 the supported version of Sage Sales Tax has not been finalized Sage 500 ERP adapter download will be made available by Avalara. Primary AvaTax support is obtained from Avalara at: <u>https://www.avalara.com/us/en/index.html</u> 		
Sage Intelligence Reporting	7.70.76	 Server install issues When using TLS 1.2 (must temporarily enable TLS 1.0/1.1 do the install then you can re disable them) Please contact Sage 500 customer support at <u>SAGE500ERP.Support@sage.com</u> for the new SIR client installer 		
Sage Enterprise Intelligence	TBD	Primary support could be obtained from the <u>https://www.sage.com/en-us/products/enterprise-intelligence/</u>		
Sage Exchange Desktop	2.0	Product download available at <u>https://www.sageexchange.com/install/sed2/</u>		

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Integrated Products Notes

• For Supported Client, Server, 32- and 64-bit compatibility, refer to the Integrated Product's Web site from the <u>Specialized Business Solutions Division</u>.

Following is the List of known compatibility pre-requisites for Paya Connect Desktop (Sage Exchange Desktop) 2.x, which uses .Net 4.6.x and TLS 1.2.

Windows OS Version	.NET 4.6	TLS 1.2
Microsoft Windows 11	✓	✓
Microsoft Windows 10	✓	✓
Microsoft Windows 8/8.1	✓	✓
Microsoft Windows 2012 Server	✓	✓
Microsoft Windows 2016 Server	✓	✓
Microsoft Windows 2019 Server	✓	✓
Microsoft Windows 2022 Server	\checkmark	\checkmark

Third-Party Application Compatibility

	Product Version	Link/Update Version	Remarks
<u>Crystal</u> <u>Reports[®] for</u> <u>Sage</u>	XI R2	N/A	Runtime components are installed with the client. Sage 500 ERP 500 uses SAP Crystal Reports 13.0.21 runtime, and if other Sage products are installed on the same machine, a utility may need to
SAP Crystal Reports	13	N/A	be run to make each use the proper, installed, version of Crystal. Please contact support if you install other Sage products and experience a reporting issue.
			Includes Microsoft Project compatibility.
	2016		 Microsoft Office 2016, 2019 or Office 365 is required to interact with the pivot table and chart data elements in Sage 500 ERP Business Insights. For additional information, see the Microsoft
Microsoft	2010		Office Compatibility section of this guide.
Office Standard & Professional	2019		 Microsoft Office 2010 and older is not supported by Sage 500 ERP v2023 due to Microsoft's Extended End of Life support has passed for these products.
	365		• Office Online will not supported by Sage 500 ERP v2023, office needs to be installed on the machine.
			Office 365 includes version 2016 and 2019.
Microsoft			• Displays and manipulates graphic elements in Business Insights Analyzer.
Office Web Components	2003	Svc Pack 2	• For additional information, see the <u>Microsoft Office Web</u> <u>Components Compatibility</u> section of this guide.
.NET Framework	4.6.2	N/A	Installed with the Sage 500 ERP client.

Development Tools and Controls

Tool/Control	Manufacturer	Version	Function	Remarks
<u>Crystal</u> <u>Reports[®] for Sage</u>	SAP AG	XI R2	Report designer used to build reports.	Specific version used by Sage 500 is 13.0.21.
SAP Crystal Reports		13	 Runtime components are called from the report engine to display reports. 	
<u>ERwin</u>	Computer Associates	3.5.2 Service Pack 3	CASE tool used in designing database schema and referential integrity.	Files included with Application Framework are saved as version 2.6 (lowest compatibility).
ImageMan	<u>GigaSoft</u>	7.2	Used in MRP Planning user interface in Manufacturing.	Included in the suite of controls from GigaSoft.
.NET Windows Controls	<u>Infragistics</u>	NetAdva ntage WinForm 2014: Vol 1 ASP.Net From 2010: Vol 3	.NET control used in Sage 500 ERP Desktop and Business Insights.	Source code is not distributed for Sage 500 ERP Desktop or Business Insights.
MadCap Flare	Madcap software	2021 r3	Online Help and What's This? Help authoring tool.	Help files are included with the module source code.
ScheduleB oard	<u>GigaSoft</u>	3.0.0.2	Used in Schedule Generation user interface in Manufacturing.	Included in the suite of controls from GigaSoft.
Sheridan 3D (threed32. ocx)	Infragistics	1.0.41.0	Suite of controls used throughout user interface.	Included with the Customization Tools Application Framework and Visual Studio.
Spreadshe et Control (SPR32x30 .ocx)	FarPoint	8.0.14	Grid control used throughout user interface.	License is not included with the Application Framework and must be purchased separately from FarPoint Technologies. (http://www.fpoint.com)
Visual Studio Enterprise Edition	Microsoft	6.0 Service Pack 6	Module user interfaces are written in Visual Basic 6.0.	 Enterprise Edition is required. Professional Edition is incompatible.

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Visual	Microsoft	2017	.NET Framework used to	Review required .NET Framework
Studio			develop Sage 500 ERP	version in the Third-Party
2017			Desktop, Business Insights,	Application Compatibility section of
Enterprise			Data Import Service, and	this guide.
_			Credit Card Processing.	

Hardware and Licensing Considerations

The Windows Server, SQL Server, and Sage 500 ERP edition you use needs to correspond to your business requirements. Review the following information and edition limitations carefully before purchasing your systems and licenses.

Windows Licensing

The Windows Server operating systems are available in different editions with each having different licensing costs and limitations. Review the following information on Windows Servers at Microsoft's Web site:

https://www.microsoft.com/en-us/licensing/product-licensing/windows-server

You should review the following documentation on Microsoft's Web site for additional details on licensing and purchasing Windows Server operating systems:

- Windows Server 2012
- <u>Windows Server 2012 R2</u>
- Windows Server 2016
 - <u>System requirements</u>
 - Edition comparisons
- Windows Server 2019
 - <u>System requirements</u>
 - Edition comparisons
- Windows Server 2022
 - <u>System requirements</u>
 - Edition comparisons

The SQL Server and Sage 500 ERP licensing sections of this guide will also help you in determining your requirements. The <u>Comprehensive Product Licensing</u> section contains additional information on licensing a complete Sage 500 ERP solution to meet your needs.

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SQL Server Licensing

When choosing an edition of SQL Server, review the following feature comparison documentation on Microsoft's Web site: <u>https://docs.microsoft.com/en-us/sql/sql-server/editions-and-components-of-sql-server-</u> <u>2019?view=sql-server-ver16</u>

For additional details on licensing and purchasing SQL Server:

- <u>Common SQL Server questions</u>
- Feature comparison
- Supported feature by edition

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Sage 500 ERP Licensing

The platform and SQL Server edition you use normally corresponds to the Sage 500 ERP edition you license. Also examine limitations in the user range, available modules, companies and warehouses allowed. Upgrades to the SQL Server edition on which you can run Sage 500 ERP are also allowed.

	Sage 500 ERP Edition			
	Enterprise	Standard	Small Business**	
Customer Profile	250+ Employees \$75m and up	20 – 500 Employees \$25 – \$100m	10 – 100 Employees \$1 – \$50m	
User Range Permitted	Any	<= 30	<= 10	
Database Platform	SQL Server 2017 Enterprise Edition or Standard	SQL Server 2017 Standard Edition	SQL Server 2016 Express	
Typical Server OS Platform	Windows Server 20016 Standard, Advanced or Enterprise Edition	Windows Server 2016 Standard Edition	Windows Server 2016 Standard Edition	
Modules <u>Not</u> Available	None	Source Code	Alerts*, Multicurrency*, Allocations*, Active Planner*, Software Development Kit (SDK), Source Code	
Maximum Number of Companies in System	Unlimited	Unlimited	4	
Maximum Number of Warehouses in Each Company	Unlimited	Unlimited	4	

*Enhanced SQL Option required.

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The Sage 500 ERP Small Business Edition automatically installs SQL Server 2016 Express when using the DB Express Install feature. This database engine is added to the system when no other SQL Server version is detected; therefore, you do not need to purchase SQL Server separately.

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The Sage 500 ERP version you purchase can also be used with lower versions of SQL Server but not with higher versions unless you upgrade the SQL Server version with which you have licensed Sage 500 ERP. For example, Sage 500 ERP Standard Edition with SQL Server Standard licensing can be used with SQL Server Standard Edition and Express, but not SQL Server Enterprise Edition; however, the Sage 500 ERP Standard Edition with the SQL Server Enterprise Edition license can be run on SQL Server Enterprise, as well as all lower versions of SQL Server.

Comprehensive Product Licensing

The following table presents compatibility information inclusive of the Sage 500 ERP, Windows Server, and SQL Server editions without a separate SQL Server version upgrade. Recommended platform configurations are also included. Review the previous sections of this guide for licensing details, and <u>**Small Business is</u> no longer for New Customer sales.

SQL Server Hardware Requirements with the <u>Hardware Recommendation Matrix</u> for information on typical hardware configurations.

Sage 500 ERP Edition	Windows Edition	SQL Server Edition	IIS Recommendation	Recommended SQL Server Platform
Small Business**	Windows Server 2022/2019/2016/2012/2012 R2 Standard, Advanced/Enterprise	Express	Windows Server 2012/2012 R2 /2016/2019/2022 Web or Standard Edition	Windows Server 2012/2012 R2/ 2016/2019/2022 Standard Edition
Standard	Windows Server 2022/2019/2016/2012/2012 R2 Standard, Advanced/Enterprise	Standard Express	Windows Server 2012/2012 R2/2016 /2019/2022 Web or Standard Edition	Windows Server 2012/2012 R2/ 2016/2019/2022 Standard Edition
Enterprise	Windows Server 2022/2019/2016/2012/2012 R2 Standard, Advanced/Enterprise	Enterprise, Standard, or Express	Windows Server 2012/2012 R2/ 2016/2019/2022 Web or Standard Edition	Windows Server 2012/2012 R2/ 2016/2019/2022 Standard or Enterprise Edition

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SQL Server Hardware Requirements

Sage 500 ERP has certain platform and hardware configuration requirements. Verify that your servers and clients meet the minimum hardware configuration outlined. Supported operating systems and their updates are detailed in the <u>SQL Server Platforms</u>, <u>Production Client Operating</u> <u>Systems</u>, and the <u>Internet Applications Server Platforms</u> sections of this guide.

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Hardware

Sage recommends name-brand hardware over generic equivalents for both the client machines and servers. The benefit of quality, performance, and level of support from the mainstream manufacturers far exceeds the usually minor difference in cost over generic hardware. Most major manufacturers also have specification tools for OLTP or SQL servers that can be used to help define the hardware requirements.

In addition, Microsoft supports only hardware that appears on their Hardware Compatibility Listings (HCL). Verifying that your hardware appears on the HCL ensures Microsoft support. 64-bit Itanium processor is not supported by Sage 500 ERP. For information on Microsoft's compatibility list, refer to the Microsoft web site at: http://www.microsoft.com/whdc/hcl/default.mspx

Minimum Requirements

The following table details guidelines for Windows, SQL Server, and Sage 500 ERP edition, and the hardware you typically require. You must meet or exceed Ram and disk space minimums above the operating system minimum requirements.

Sage 500 ERP Edition	Windows Edition	SQL Server Edition (Default Edition)	Minimum Requirements	Recommended Minimum
Small Business**	Windows Server 2012 / 2012 R2 / 2016 / 2019 Standard / Advanced / Enterprise	SQL Server Express	See Minimum requirements from Microsoft for Appropriate System	See Recommendations from Microsoft for Appropriate System
Standard	Windows Server 2012 / 2012 R2 / 2016 / 2019 Standard / Advanced / Enterprise	Standard or SQL Server Express	See Minimum requirements from Microsoft for Appropriate System	See Recommendations from Microsoft for Appropriate System
Enterprise	Windows Server 2012 / 2012 R2 / 2016 / 2019 Standard / Advanced / Enterprise	Standard or Enterprise	See Minimum requirements from Microsoft for Appropriate System	See Recommendations from Microsoft for Appropriate System

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Variations in SQL Server edition and Sage 500 ERP edition licensing are allowed. Licensing variations are typically used to upgrade the SQL Server edition. For example, Sage 500 ERP Standard edition can be purchased with a SQL Server Enterprise edition upgrade. The default SQL Server editions listed are those compatible with corresponding Sage 500 ERP editions and do not require a separate upgrade.

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Recommendation Matrix

Use the following matrix as an approximate guide to help in determining the Sage 500 ERP and SQL Server editions. Typical usage scenarios are detailed with number of users, amount of data created per year, and module groups purchased.

Configuration	Sage ERP MAS 500 Edition	SQL Server Edition	Server Operating System Edition
1-10 users < 1 GB data Core, Dist	Small Business**	SQL Server Express	Standard
11-30 users 1-5 GB data Core, Dist, Mfg	Standard	Standard	Standard
11–30 users 6-10 GB data Core, Dist, Mfg	Standard	Enterprise	Standard
31–60 users 2-4 GB data Core, Dist, Mfg	Enterprise	Standard	Standard
31–60 users 1-5 GB data Core, Dist, Mfg	Enterprise	Enterprise	Standard
31–60 users 6-15 GB data Core, Dist, Mfg	Enterprise	Enterprise	Standard- Enterprise
61–100 users 6-15 GB data Core, Dist, Mfg	Enterprise	Enterprise	Enterprise
61–100 users 16-30 GB data Core, Dist, Mfg	Enterprise	Enterprise	Enterprise
61–100 users 31+ GB data Core, Dist, Mfg	Enterprise	Enterprise	Enterprise
101+ users	Enterprise	Enterprise	Enterprise

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Additional Notes

- For more information, review the performance subjects in the Sage Online Knowledgebase, and general publications regarding SQL Server performance.
- These recommendations provide for generally adequate performance and require expertise in the configuration of hardware, SQL Server, and in working with Sage 500 ERP. Review this information, the referenced documentation, and consult certified hardware and SQL Server professionals for advice on the appropriate configuration for your business needs.

SQL Server Configuration Requirements

Sage 500 ERP requires that Microsoft SQL Server be installed on operating systems with supported service packs as specified in the <u>SQL Server Platforms</u> and <u>Operating System Service</u> <u>Packs</u> sections of this guide.

For a complete overview of the installation process, see the *Sage 500 ERP Installation and System Configuration Guide*. The Sage 500 ERP Database Utilities are installed at the SQL Server or a workstation where the SQL Client Utilities have been installed. The Sage 500 ERP Database Utilities are used to create or upgrade Sage 500 ERP databases.

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Configuration Options

This section covers memory management and other SQL Server setting information. To view or change these settings, use SQL Server Management Studio. The amount and configuration of memory on the SQL server will affect system performance.

Memory

Refer to the <u>Minimum Requirements</u> section of this guide for minimum and recommended memory configurations. Follow Microsoft's recommendations for a dedicated SQL server when using fixed memory.

General recommendations:

- Exceed minimum requirements (see <u>Minimum Requirements</u>)
- Dedicate your server (Microsoft article Optimizing Server Performance)
- Allow SQL Server to manage the memory (Microsoft article Server Memory Options)

For detailed information on configuring your SQL Server options, see article SQL Server Configuration Parameters by Microsoft Press located at: <u>https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/server-configuration-options-sql-server?view=sql-server-ver16</u>. Observe the requirements noted in the <u>Minimum Requirements</u> and <u>Database</u> <u>Sizes and Settings</u> sections of this guide.

Required Settings

The following table shows the supported Microsoft SQL Server configuration for Sage 500 ERP.

Setting	Requirement
SQL Collations	SQL Server : Dictionary order, case-insensitive, for use with 1252 Character Set.
Default language for user	English
Allow nested triggers	Selected
Query governor cost	0
Y2K support	1950 and 2049
Minimum concurrent user connections	15 x <number client="" connections="" of=""></number>
Default Connection Options	None of the Attribute values selected
Use Windows NT fibers	Unselected

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Security and Domain Configuration

Sage 500 ERP supports both SQL Server and Windows Authentication security settings in SQL Server. You can create SQL Server users by creating Sage 500 ERP users or by granting access rights to users who have existing logins in domains or on the SQL Server. There are a number of methods that can be used in configuring security. For additional information, see the *Sage 500 ERP Installation and System Configuration Guide*, and the System Manager Maintain Users and Maintain Security Groups Help system.

Database Options and Sizing

You need to configure databases used by Sage 500 ERP to certain minimum sizes. The databases affected by these requirements are the following:

- SQL Server tempdb database
- SQL Server master database
- Application and Internet Application databases you use with Sage 500 ERP

SQL Server allows you to define growth parameters to automatically expand your database. For more information on dynamic resizing in SQL Server, refer to the SQL Server Books Online.

Master and Msdb Databases

The master and msdb databases in SQL Server should have at least 50 percent free space. You also should set the following options:

Setting	Recommendation
Database and transaction log	Automatically grow
Database and transaction log	Unrestricted growth
Database	Simple

Tempdb Database

Sage 500 ERP uses tempdb extensively; therefore, the tempdb size must be at least 1024 MB or greater depending on your data processing volume. You also should set the following options:

Setting	Recommendation
	Automatically grow
Database and transaction log	Unrestricted growth or limit to amount of free drive space
Database	Simple

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New Sage 500 ERP Databases

When running the Sage 500 ERP Database Creation Utility, the program recommends a minimum database size for the databases. For production environments, you should change the application database size to at least 500 MB.

Use SQL Server's automatic resizing features to ensure that databases can accommodate the volume of transactions you require, or manually resize the databases to avoid the processing delays the autogrow option can cause.

Database Sizes and Settings

If you do not define growth parameters when you create the database, the databases and transaction logs cannot be smaller than the sizes specified in the Database Creation Utility. If you need to increase sizes later on, you can do so manually using the following recommendations:

Database or Log	Recommended Size or Increase
Application database	25 MB for every 5,000 expected General Ledger transactions (includes subsidiary module data)
Log size	Minimum 20% to 30% of the database size

Set the following options for the Sage 500 ERP application databases:

Setting	Requirement		
Database and transaction log	Automatically grow in megabytes: 20		
	Unrestricted growth or limit to amount of free drive space		
Database	Recovery Model: Simple (when backup is performed once a day)		
	Auto update statistics		
	Torn page detection		
	Auto create statistics		
	Database level 110 for SQL Server 2012		
	Database chaining (required for all Sage 500 ERP databases)		

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Existing Sage 500 ERP Databases (Upgrades)

If you are upgrading existing Sage 500 ERP databases, they need to meet the following minimum requirements:

Database	Amount of required available data space	
Application database	100 MB of available data space	

Review the Upgrading Existing Databases section of the *Sage 500 ERP Installation and System Configuration Guide* and the Sage Software Online Knowledgebase article titled How to upgrade Sage 500 ERP (Resolution ID: 144) for additional upgrade recommendations.

Local Client Requirements

Sage 500 ERP requires Windows operating systems with supported service packs or other updates as specified in the

- (Only English versions and locales are currently tested and supported.)
- A default print device for each Windows user account (required for Crystal Reports)

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Microsoft Office Compatibility

The following Microsoft Office applications are required for the following Sage 500 ERP applications or features. For version compatibility, see the <u>Third-Party Application</u> section of this guide.

Sage 500 ERP Application	Microsoft Office Application	
Business Insights (export functions)	Microsoft Excel, Word	
Data Migrator (Assisted Company Setup)	Microsoft Excel	
Data Porter	Microsoft Excel	
Document Email	Microsoft Outlook*	
Business Insights Dashboard	Microsoft Office	
Export grid functionality	Microsoft Excel	
Sage 500 ERP Office	Microsoft Office	
Data Import Manager	Microsoft Excel, Access	

* Optional. Also supported with SMTP

If you have not installed any Microsoft Office applications, you can install them after installing the Sage 500 ERP client software, but you will need to register the MS Office DLL manually. For instructions, refer to the Registering the DLL File for Microsoft Office section of the *Sage 500 ERP Installation and System Configuration Guide*.

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Microsoft Office Web Components Compatibility

The following Microsoft Office and Microsoft Office Web Components are required for the following Sage 500 ERP applications or features. For additional version compatibility information, see the <u>Third-Party Application</u> section of this guide.

Sage 500 ERP Application/Function	Web Components Version	Display	Manipulate
Business Insights Data View	v11	x	x
Business Insights Pivot Table	v11	x	x
Business Insights Chart	v11	x	x

You can install versions of the Web Components that differ from your Microsoft Office version, but the Microsoft Office version controls your ability to work within the application. For example, you can display pivot table data elements with Microsoft Office and Web Components, but you cannot manipulate those data elements.

You can download the Microsoft Office Web Components, or activate this feature using instructions from Microsoft. Click the link below that corresponds to your Office version.

• <u>Microsoft Office 365</u>

You must have a license to use the Microsoft Office Web Components. For information on configuring the web components settings, see the Microsoft article <u>Managing Office Web</u> <u>Components</u>.