PKF SMITH COOPER SYSTEMS

Sage Business Partner

System Requirements and Prerequisites

Sage 200 Professional 2024 R2

01332 959 008 | www.pkfscs.co.uk

This document provides information about the system requirements for Sage 200 Professional in an on-premise deployment, as per the standard Sage (UK) Limited Sage 200 System Requirements document.

This document also provides PKF Smith Cooper Systems' recommended system requirements for running Sage 200. These recommendations are based on our experiences of implementing Sage 200 and are designed to allow the suite to perform to the highest capacity with a high level of activity.

Sage 200 is a system made up of core modules and optional market-specific modules, which integrate with the core modules. When determining your system requirements ensure you have considered all modules to be used as different modules have different system requirements.

Also consider the number of users that will be using Sage 200 at any one time and the type of activities a user may run.

Supported Operating Systems

	Server	Client
Windows 11 (Professional and Enterprise editions)	x	✓
Windows 10 (32 bit and 64 bit) (Professional and Enterprise editions)	x	✓
Windows Server 2022 (Standard, Essentials and Datacenter editions)	✓	✓
Windows Server 2019 (Standard, Essentials and Datacenter editions)	✓	✓

Remote Desktop Services

Sage 200 Professional is designed around a 'rich client' architecture that is best suited to deployment over a local area network. Sage 200 is supported in a Microsoft Remote Desktop Services environment with the following considerations:

As Sage 200 is best suited to deployment on a local area network, where possible we recommend you run large batch processes such as Update Waiting Postings, Month End or Year End on a high specification client joined to the local area network.

For Remote Desktop Services servers hosting Sage 200 client sessions, we recommend:

- At least 600MB memory per user on the Server, for each client session running occasional or one-off tasks, such as an account enquiry or price check.
- At least 1GB memory for each client session processing for any prolonged period, for tasks such as checking in stock, or creating purchase orders.
- You should run large batch processes and updates on local area network, or out of hours.
- The application must be deployed using **'Session based desktop deployment'** with a published remote desktop.
- 'Virtual machine based desktop deployment' is not supported.
- Sage 200 is only supported when publishing the whole desktop environment through Remote Desktop Services.
- Delivering Sage 200 as a **RemoteApp** solution is **not** recommended. Publishing Sage 200 as a RemoteApp will be the responsibility of your IT provider not PKFSCS.

PLEASE NOTE SAGE 200 IS NOT SUPPORTED WITHIN THIN CLIENT ENVIRONMENTS SUCH AS CITRIX.

This is due to the variety of ways that a thin client environment may be configured, and it is not practical or feasible for Sage to test them all. If you encounter issues while running Sage software in a thin client environment, you will be required to reproduce the issues in a standard environment.

Supported Versions of Remote Desktop Services

	Server	Client
Windows Server 2022	✓	✓
Windows Server 2019	✓	✓

Note: *The application must be deployed using 'session based desktop deployment' with a published remote desktop. 'Virtual machine based desktop deployment' is not supported.*

Installation Options for virtualised platforms

Server hosted virtualisation

All elements of Sage 200 are supported in a virtualised environment if the following conditions are met:

- The underlying virtualisation platform has been accredited by the Microsoft Windows Server Virtualisation Program
- The host operating system is one of the supported operating systems outlined earlier in this document.

Sage 200 is supported when running in a virtualised environment which is running one of the supported operating systems outlined earlier in this document.

The server hosting the virtual machines must be a sufficient specification to run both the underlying operating system and the virtual machine that Sage 200 is running on.

Client hosted virtualisation

Sage 200 clients are supported in a client hosted virtualised environment, provided the virtualised environment is running a supported version of windows (i.e. Sage 200 client running in a Windows 11 VM, hosted on a Mac OS).

Hosting

Sage 200 is only supported in a hosted environment where the entire solution is hosted, and users connect to the system via Remote Desktop Services.

Other

- Please ensure that Static memory is applied of at least 8GB to the Sage Server(s) for Sage 200 Installation.
- Dual Cores should be assigned to the Sage Server(s)
- We recommend that VMWare Carbon Black is not enabled on the Sage Server.

If Sage 200 is to be implemented within a hosted environment, then you will need to purchase Subscriber Access Licenses (SAL) under the Microsoft Services Provider License Agreement (SPLA).

SPLA licencing is not available for sale via Sage as the Sage and Microsoft ISV agreement allows the sale of Client Access Licences (CAL) only and Microsoft have confirmed that a CAL licence does not cover hosted scenarios. ISV Licences do not permit hosting nor do any CALS purchased under a Microsoft Volume Licensing Agreement.

VPN and WAN Connections

Due to the amount of network communication between the Sage 200 client, the Sage 200 server, and the back-end SQL server, Sage do **NOT** support running the Sage 200 Suite over a Wide Area Network (WAN) or Virtual Private Network (VPN) connection, where locally installed Sage 200 client machines communicate with a remote Sage 200 server.

This is because the additional latency added to each network packet results in unacceptable performance and can result in database timeouts.

Supported Versions of Microsoft SQL Server

The number of SQL user licences which must be purchased for use with Sage 200 is the number of concurrent users who will use Sage 200.

Microsoft SQL Server should be installed with a Server Authentication of **Mixed Mode** and Server Collation must be **Latin1_General_CI_AS**. SQL Server must support TLS 1.2, and the Default Language must be set to **English** and NOT British English.

The following versions of SQL are currently supported with Sage 200 Professional:

- **Microsoft SQL Server 2022** – Standard and Enterprise Editions
- **Microsoft SQL Server 2019** – Standard and Enterprise Editions

Note: *We recommend Microsoft SQL Server is installed using the Default Service Accounts set up by the SQL Server installation.*

Sage 200 Business Intelligence
Microsoft SQL Server and Analysis Services must be installed on the same machine with the same instance name.

SAGE 200 PROFESSIONAL IS NOT SUPPORTED WHEN SQL SERVER IS INSTALLED ON A DOMAIN CONTROLLER.

Supported Editions of Microsoft Office

The following editions of Microsoft Office are supported with Sage 200 Professional 2023 R2:

- Microsoft Office 2019 (32-bit and 64-bit) – Standard, Home and Business, Small Business Premium, Professional Plus and Enterprise Editions
- Microsoft Office 2021 (32-bit and 64-bit) – Standard, Home and Business, Small Business Premium, Professional Plus and Enterprise Editions
- Microsoft 365 (32-bit and 64-bit) – Business Standard, Apps for Enterprise and Enterprise Editions

Note: *Microsoft 365 Home and Personal editions are* ***not*** *supported. The Microsoft license agreement specifically for bids its use for "commercial, non-profit, or revenue-generating activities."*

Note: *A Microsoft 365 Business standard, Enterprise (E1, E3 or E5) or Office 365 Education (A1, A3, A5) subscription is required for Sage connected apps. This includes Sage Contact, Microsoft Power BI, and Microsoft Power Automate.*

Note: *Your Microsoft 365 subscription must include Azure Active Directory Premium P1/P2.*

Note: *To use Microsoft Power Automate Sage recommend a Power Automate per user plan.*

The following table explains how various functions integrate with Microsoft Office.

	2021		2019		Office 365		
	32-bit	*64-bit*	*32-bit*	*64-bit*	*Desktop (32- Bit)*	*Desktop (64-Bit)*	*Online App*
Excel Reporting	✓	✓	✓	✓	✓	✓	x
Send to Excel	✓	✓	✓	✓	✓	✓	✓
Opening Attachments	✓	✓	✓	✓	✓	✓	x
Send Email (not from Report Designer)	✓	x	✓	x	✓	x	x
Report Designer – Output to email	✓	x	✓	x	✓	x	x
Sage Contact, Power BI, Power Automate	x	x	x	x	✓	✓	✓
Sage 200 BI	✓	x	✓	x	x	x	x

Browser and Mobile Support

The following devices and browsers have been tested by Sage, other may be compatible but have not been tested:

Compatible Browsers	Desktop	Web Portal	Self Service
Microsoft Edge on Windows desktop PCs and tablets	✓	✓	✓
Google Chrome on Windows Desktop PCs and Android Tablets	✓	✓	✓
Apple Safari on tablets (iOS)		✓	✓

Sage 200 Desktop

Sage 200 includes dynamic summary pages and workspaces which are accessed via the Sage 200 Desktop application.

Sage 200 Self Service

Sage 200 Self Service allows web browser access for functions such as Purchase Order Authorisation and Web Timesheets and Expenses (WTE) as well as Workspaces.

Note: The **Sage 200 Self Service web site** is only accessible from your internal network. This is because the Sage 200 SSL certificates used to secure these sites are based on the machine name and are not accessible externally. For information about making this externally accessible please **contact us**.

Minimum Hardware Requirements

Below are the **minimum** specifications for each of the machine types in a Sage 200 Professional deployment. Users with large databases or high numbers of concurrent users will require higher specifications.

Due to the wide variation of companies that use Sage 200, it is not possible to give exact specifications for each system. Factors such as the concurrent number of users, size of the database and estimated growth should all be taken into consideration when sizing a server.

When tasks are processed, CPU and memory resources are used on both the client and the server. Therefore, the specification of both machines will affect the overall performance of the system.

Sage 200 Professional Installed on a single server

Sage 200 Server	Processor	Disk	Memory	Network
Sage 200 Server with Microsoft SQL Server	Dual-core 2.6GHz or equivalent	7,200rpm SATA with 4GB disk space after SQL Server is installed	4GB	Gigabit Ethernet

Sage 200 Server with CRM	Processor	Disk	Memory	Network
Sage 200 Server with Sage CRM	Dual-core 2.6GHz or equivalent	7,200rpm SATA with 16GB disk space after SQL Server is installed	8GB	Gigabit Ethernet

Sage 200 Client	Processor	Disk	Memory	Network
Sage 200 Client	Dual Core 1.6GHz or equivalent	7,200 rpm SATA with 500MB disk space required. (1GB if Graphical planner to be run)	2GB	Gigabit Ethernet

Please note it is possible to have a multi-server environment. This may be to have separate Database and File/Web Server or to have separate Sage 200 and Sage CRM servers, in an environment with Sage CRM.

PKF Smith Cooper Systems Recommended Hardware Requirements

Sage 200 Server	Processor	Disk	Memory	Network
Sage 200 Server with Microsoft SQL Server	Quad Core or higher	7200rpm SSD 500GB+ Disk Space	64GB +	Gigabit Ethernet

Sage 200 Client	Processor	Disk	Memory	Network
Sage 200 Client	Intel Core i7 or equivalent or higher	7,200 rpm SATA with 200GB+ disk space.	16GB +	Gigabit Ethernet

Installation Prerequisites for Sage 200

Before Sage 200 is installed you must make sure the following prerequisites are installed on your system. You must also make sure the installations of Microsoft SQL Server (if not being installed by Smith Cooper) and Microsoft Internet Information Services (IIS) have the required settings.

PLEASE NOTE PKF SMITH COOPER SYSTEMS REQUIRE THESE TO BE SET UP AND CONFIGURED PRIOR TO US INSTALLING SAGE 200

Server Configuration and set up prerequisites

- The server compute name cannot be longer than 15 characters.
- All Server machines must have the regional and language settings set to English (UK) or English (Ireland).
- All Server machines must follow Microsoft naming conventions (Start with a letter, end with a letter or digit and have as interior characters only Letters, Digits and Hyphens.
- Machines running Sage 200 must have a c:\ drive although Sage 200 can be installed and run from a drive other than c:\.
- Your Domain Controller must NOT be set to Read Only
- Microsoft Internet Information Services (IIS) v10 or greater must be enabled (See required Settings below).
- Microsoft DotNet Framework v4.8 or later MUST be installed on Server machines.
- Microsoft DotNet Framework v4.5 (or later) features with HTTP Activation MUST be enabled.
- Sage 200 server machines must have Windows Identity Foundation.

Required Settings for IIS

	IIS v8 or above
Common HTTP Features	Default Document
	Directory Browsing
	HTTP Errors
	HTTP Redirection
	Static Content
Application Development	.Net Extensibility 4.5 (or later)
	ASP
	Application Initialization
	ASP.NET 4.5 (or later)
	ISAPI Extensions
	ISAPI Filters
Security	Request Filtering
	Windows Authentication
Web Management Tools	IIS Management Console

Web Management Tools > IIS 6 Management Compatibility	IIS 6 WMI Compatibility
	IIS 6 Metabase compatibility and IIS 6 Configuration compatibility
.Net Framework 4.5 Features	WCF Services
	HTTP Activation

Client Configuration and set up prerequisites

- All Client machines must have the regional and language settings set to English (UK) or English (Ireland).
- All Client machines must follow Microsoft naming conventions (Start with a letter, end with a letter or digit and have as interior characters only Letters, Digits and Hyphens.
- Machines running Sage 200 must have a c:\ drive. Sage 200 can be installed and run from a drive other than c:\.
- Microsoft DotNet Framework v4.8 or later MUST be installed on Client machines (even if older versions are installed).
- If using BI Microsoft DotNet Framework 3.5 must be installed on Client machines.
- Microsoft Visual C++ 2015-2019 Redistributable (x86) - 14.24.28127 is installed.
- Microsoft Visual C++ 2013 Redistributable (x86) – 12.0.40664.
- Microsoft Visual C++ 2010 x86 Redistributable (for Manufacturing client only).

SQL Server Configuration

If Smith Cooper are **NOT** installing SQL Server, please note the following installation pre-requisites:

- SQL Server must support TLS 1.2
- Microsoft SQL Server should be installed as a Named Instance.
- Microsoft SQL Server running in Mixed Mode (SQL Server and Windows Authentication mode). The Server Collation must be set to Latin1_General_CI_AS.
- The Default Language for SQL server must be set to English. Do not set it to British English.
- If using Sage 200 BI, SQL Server and Analysis Services must be installed on the same machine with the same instance name.

Note: *Before installing SQL ensure your server Regional and System Locale settings are correct as these can impact the collation options available.*

Firewall settings

Sage 200 runs a variety of programs and services that can be affected by security firewall settings. The following table details the ports that need to be opened in order for Sage 200 to function correctly.

Server	Port	Details
Database Server (Default SQL Instance)	TCP Port 1433	*Default SQL Instance*
Database Server (Named SQL Instance)	UDP Port 1434	*Named SQL Instance*
File Server	TCP Port 139	*File & Print Sharing*
	TCP Port 445	*File & Print Sharing*
	TCP Port 137	*File & Print Sharing*
	TCP Port 138	*File & Print Sharing*

	TCP Port 10443	*HTTPS*
	TCP Port 443	*HTTPS*
Sage 200 Self Service	TCP Port 10444	*HTTPS*

Additional firewall settings if you have a named SQL instance or dynamic ports

Follow the steps below if you have named SQL instance or are using dynamic ports:

1. Find the port number:

    a) Open Start > All Programs > Microsoft SQL Server version > Configuration Tools > SQL Server Configuration Manager.

    b) Select SQL Server Network Configuration > Protocols for <your instance Name>.

    c) Right-click TCP/IP and select Properties.

    d) Select the IP Addresses tab and scroll down to the IPAll group.

    e) The current port is the TCP Dynamic Ports number.

2. Set your Firewall to exclude this port number.

Access to URLs

You will need to allow access to these URLs, all using HTTPS.

- licensing.services.sage.com (server)
- licensing2.services.sage.com (server)
- 200aproproductstore.blob.core.windows.net (server)
- www.google.com (server)

  Used to check for an internet connection before Sage 200 connects to the licensing server.
- regulatory-reports.sagecompliance.com (server and client)

  Used for VAT submissions (MTD).
- www.sagetokenservice.com (server and client)

  Used for Sage bank feeds.
- eu.sagebankdrive.com (server and client)

  Used for Sage bank feeds.
- api-money.sage.com (server and client)

  Used for Invoice Payments.
- sandbox.opayo.eu.elavon.com (server and client)

  Used for Opayo (formerly Sage Pay).
- live.opayo.eu.elavon.com (server and client)

  Used for Opayo (formerly Sage Pay).
- www.elavon.co.uk (server and client)

  Used for Opayo (formerly Sage Pay).
- api.network.sage.com (server and client)

  Used for Sage Network.
- api.sbc.sage.com (server and client)

  Used for Sage Network.
- network.sage.com (server and client)

Used for Sage Network.

Application files

If you control and restrict the applications that can be run in your environment, you will need to allow certain application files to run for Sage 200 and its utilities.

Sage 200 client installer / Sage 200 Manufacturing client installer

- setup.exe
- NDP472-KB4054530-x86-x64-AllOS-ENU.exe
- vcredist_x86.exe

Sage 200 client / Sage 200 Manufacturing client

- CefSharp.BrowserSubprocess.exe.deploy
- NominalLinkLauncher.exe.deploy *(Manufacturing Client Only)*
- RunElevatedInstallOperations.exe.deploy
- Sage.Manufacturing.AutomatedMrpRun.exe.deploy *(Manufacturing Client Only)*
- Sage.Manufacturing.OperationTimes.exe.deploy *(Manufacturing Client Only)*
- Sage.MMS.Launcher.Remote.exe.deploy
- Sage200Desktop.exe.deploy
- Sage200Desktop.exe.manifest.deploy *(Manufacturing Client Only)*
- Sage200WorkspaceDesigner.exe.deploy
- SageReportDesigner.exe.deploy

Note: The .deploy files are used for ClickOnce applications.

Sage 200 System Administration installer

- NDP472-KB4054530-x86-x64-AllOS-ENU.exe
- setup.exe

Sage 200 System Administration

- SAALauncher.exe.deploy

Sage 200 suite installer

- aspnet_regiis.exe
- Sage200API.exe
- Sage200EBanking.exe
- Sage200SelfService.exe
- SSLCertificateUtil.exe
- vcredist_x86.exe

Sage 200 BI

- BIEnableDisable.exe
- IAEngineMakeRx.exe
- RegisterXll.exe

- Sage200BIAdminUtility.exe
- ScheduledUpdateCubes.exe

SQL User

If SQL is installed and configured for Smith Cooper, please create the following SQL User, with SQL Admin Rights:

- PKFSCSSQL (Please advise the password prior to installation)

Windows User Accounts and Groups

For Sage 200 Professional, users access the Sage 200 Desktop and Sage 200 System Administration using their windows user account log on details. Windows User accounts are also used to access Sage 200 services.

Before installing Sage 200 the following groups and users need to be created within Active Directory.

Groups

- Sage200Admins
- Sage200Users

Users

- S200Services *(member of Sage200Admins)*
- S200SecuredServices *(member of Domain Users Group only)*
- S200BI *(member of Sage200Admins and Domain Administrator or Local Administrator on the Sage Server)*
- SCITSS *(member of Sage200Admins and Domain Administrator or Local Administrator on the Sage Server), (SQL Admin rights)*

Passwords

It is the responsibility of you and your IT support to ensure secure passwords are provided to PKF Smith Cooper Systems for the above accounts prior to installation.

Note: *Sage 200 is designed to run in a domain based network. The only scenario where Sage 200 is supported in a workgroup network is where all elements of Sage 200 are installed on a single server and accessed by clients on the local area network.*

PLEASE ADVISE PKF SMITH COOPER SYSTEMS IF MULTIPLE DOMAIN CONTROLLERS EXIST ONSITE.

ANY OLD DOMAIN CONTROLLERS MUST BE FULLY DECOMISSIONED.

The Good Sage Guys to Deal With

01332 959 008 | www.pkfscs.co.uk
Prospect House, 1 Prospect Place, Millennium Way, Derby, DE24 8HG