SIMS

**SIMS
Technical
Roadmap**

October 2023

Version 1.0

Contents

Introduction

Thank you for your viewing of this updated SIMS Technical Roadmap. The September 2023 version of the document has updates covering the following topics as outlined in the table below:

Date	Changes Made	Updated by	Next planned review date
10/10/2023	• Inclusion of support for Windows Server 2022 • Inclusion of support for SQL Server 2022 • Inclusion of support for MS Office 2021 LTSC / O365	T Jones	
19/12/2022	• Inclusion of support for SQL2019 • Recommendations around SQLExpress	T Jones	Summer 2023
13/06/2022	• .NET Framework 4.7.2 and SIMS7 • Removal of IE 11 support • Windows 11 Workstation Only for SIMS7 • SQL2016 and PX • Discover using SQL Compact Edition 3.5	P Featherstone	-
15/11/2021	Clarification on SQL Versions	P Featherstone	Spring 2022
01/11/2021	Simplifying .NET Framework, Office, and SQL versions. Addition of SIMS Connected details.	P Featherstone	Spring 2022

Roadmap Key Code

- Not supported by ESS

- Support provided only where the additional conditions are met

- Supported by ESS

What does the red 'Not supported by ESS' indicator mean?

'Not supported by ESS' means that we are either no longer testing our software on the stated platform or we have not finished testing our software on the stated platform. This does not necessarily mean that our software will not work on the stated platform but it does mean that we will be unable to support any issue raised by customers. For the most robust SIMS experience, we advise all customers to keep to a supported platform.

What does the yellow indicator mean?

Technologies marked as yellow are either considerations for future support or considerations for retirement of a technology. Typically, where a new technology is supported, an older version of the technology is retired so that ESS is testing the same number of overall technologies and platform scenarios.

A Typical School

The following information is provided to run SIMS and FMS in most typical schools. These components on the server would include: SQL, Document Management Server, SIMS Services Manager (SSM), InTouch, and SOLUS3. Separate sections for other products such as Partnership Exchange or TeacherApp are covered later in this document. If you are unsure about any of these specifications, then please contact your SIMS Service Desk.

Minimum Hardware Specification Guidance

Component	Requirement
SIMS Server	
Computer and Processor	Quad Core processor or higher recommended for optimum performance. A minimum of four v-cores should be assigned to virtual servers.
Memory (minimum recommended)	8GB or higher (16GB+ recommended for optimum performance in Secondary schools). If a virtual server is in use, this should be statically assigned memory, not dynamically.
Disk space guidance [#]	We appreciate that each school will have different server configurations and setups, so we feel it's best to advise on the disk requirements for each separate element that is needed to run our software. It will then be for the server administrator to decide on what requirements are needed for their setup given the following advice: **SQL Server Requirement** We estimate as a minimum that you should allow 150Gb for all SQL databases required for your setup. **File Share Requirement** Please allow 10-20GB for the SIMS Applications and Setups folder. **SOLUS3 Repository** There is an ability to clear down the SOLUS3 repository so sizes in use in schools will vary, we advise customers should allow for 10Gb of storage space **Docstorage Requirement** For the Docstorage drive, this will vary so greatly by customer, we therefore advise schools should consider 50Gb as minimum. **General Guidance** If a virtual server is in use, then the virtual hard drive files should be statically sized.
Drive	We no longer send software out on physical media, however, ISO mounting software if not supported by server OS is required for software installation.
Display	1280x720 or higher monitor resolution.
Backup of whole system required?	Yes. You are reminded that it is critical that backups are moved to an alternative media on a daily basis, i.e. that one is kept in a physically separate place from the server that is backed up. Customers need to ensure that they have a disaster recovery plan (DRP). This includes where they will source a replacement server and what they will do whilst the system is down. The DRP is only worthwhile if, on a termly basis, the backups are restored to another machine and proven to work. SIMS data backups stored offsite must be stored in an encrypted format. ESS recommends Redstor Backup Professional software for the backup of SIMS. SIMS and Backup Professional are fully integrated to provide seamless, offsite backup for SIMS data. If using Redstor Backup Professional to backup and protect SIMS, you will need to ensure that you have enough disk space available on the server or workstation. The free space available on the device needs to be 150% of the amount of SIMS data (i.e. if you have 1GB of SIMS data, you will need 1.5GB of free disk space).

	If using other solutions by other providers, it is essential that you work with those service providers to ensure the backups are GDPR compliant.
Other information	It is not recommended that servers be used normally as workstations except in small schools. Non-dedicated servers are unlikely to be suitable with more than five concurrent users of SIMS. ESS recommends the purchase of a dedicated database server (not used for other domain roles in the school) where there are 20 or more concurrent users, or where the network server is of a low specification. A whole school network will almost certainly require a dedicated database server. The use of Lesson Monitor and/or Assessment Manager in each classroom usually means that a dedicated database server running a Full SQL Server edition of Standard or higher is required. Internet access is required. SOLUS details can be found in KB0046733.
SIMS Workstation	
Computer and processor	Quad Core 2.4GHz processor or higher recommended for optimum performance.
Memory (minimum recommended)	8Gb or higher for main SIMS machines. 4GB is acceptable for a casual SIMS use machine.
Disk space guidance #	Workstations will need 1.5GB free including 500MB on system partition for third-party components in the Windows directory. Workstations using FMS should allow for an additional 150MB.
Display	1280x720 (1280x1024 or higher for optimum experience).
Operating system and software	Operating System — 32-bit and 64-bit versions of Windows 10 Pro. The PC will require a minimum of Microsoft .NET Framework 4.7.2 to be present. From the Autumn 2022 release of SIMS7, if the minimum .NET Framework of 4.7.2 is not met, SIMS will not load and the user will be prompted to install it as required. Software — Microsoft Office 2016 or later. Adobe Acrobat Standard and Adobe Acrobat Pro, At present we do not support Adobe Document Cloud.
Other	Internet access is required.

Disk space guidance does not include the generic 15-25% hard drive space to be free for the general and smooth running of servers/workstations.

SIMS Software Support

System	Spring 2023	Summer 2023	Autumn 2023	Spring 2024	Summer 2024	Autumn 2024	Additional Notes	
Server Operation System								
Windows Server 2012	Green	Green	Maroon	Maroon	Maroon	Maroon	Microsoft Extended Support End Date: 10/10/2023.	ESS will only support Windows Server where the Desktop Experience (GUI) is installed. We do not support servers where only the Core installation has been carried out.
Windows Server 2012 R2	Green	Green	Maroon	Maroon	Maroon	Maroon		
Windows Server 2016	Green	Green	Green	Green	Green	Green	Microsoft Extended Support End Date: 12/01/2027.	
Windows Server 2019	Green	Green	Green	Green	Green	Green	Microsoft Extended Support End Date: 09/01/2029.	
Windows Server 2022	Maroon	Maroon	Maroon	Orange	Green	Green	We are aware that some schools have moved to Server 2022 already and in those instances we will support through our Escalations team where issues arise from Spring 2024.	
Workstation Operation System								
Windows 10 Pro (32 / 64 bit)	Green	Green	Green	Green	Green	Green	Microsoft Support End Date 14/10/2025.	
Windows 11	Green	Green	Green	Green	Green	Green	Windows 11 cannot install our supported versions of SQL i.e. SQL2012, SQL2014, and SQL2016.	
SOLUS3								
SOLUS 3.12.59	Green	Green	Maroon	Maroon	Maroon	Maroon		
SOLUS 3.12.72	Green	Green	Green	Green	Green	Maroon	Support for SOLUS 3.12.72 will cease from Autumn 24	
SOLUS 3.12.	Maroon	Maroon	Maroon	Green	Green	Green	Final version number pending release	
Microsoft Office								
Office 2013 SP1	Maroon	Maroon	Maroon	Maroon	Maroon	Maroon	ESS recognises that a local installation of Office applications under the O365 license takes place in schools. While our testing does not cover this scenario specifically, we continue to monitor any difficulties schools may raise via the Service Desk.	
Office 2016	Green	Green	Green	Green	Green	Green		
Office 2019	Green	Green	Green	Green	Green	Green		
Office 2021 LTSC	Maroon	Maroon	Maroon	Green	Green	Green	Office 2021 LTSC supported from Spring 2024 where the application is locally installed.	
Office 365	Maroon	Maroon	Maroon	Orange	Orange	Orange	Integration with O365 is supported provided the applications are locally installed.	

**We have been made aware of a compatibility issue surrounding File Collaboration in One Drive affecting the reporting output from SIMS. This is due to be resolved in the Spring 2024 release.

SIMS SQL Support

System	Spring 2023	Summer 2023	Autumn 2023	Spring 2024	Summer 2024	Autumn 2024	Additional Notes
Additional Notes							Not supported by ESS — *Maroon* Support provided only where the additional conditions are met — *Orange* Supported by ESS — *Green*
SQL Server Details							
SQL Server 2012 (SP4) (KB4018073) - 11.0.7001.0	Orange	Orange	Orange	Orange	Orange	Orange	SP4 Support End Date 12/07/2022. SP4 Extended Security Update End Date 08/07/2025 (not applicable to Express Versions)
SQL Server 2014 (SP3) (KB4583462) - 12.0.6433.1	Green	Green	Green	Green	Maroon	Maroon	Microsoft Extended Support End Date: 09/07/2024 – Spring 2024 Release of SIMS **is likely** to be the last version of SIMS supported on this SQL Customers are recommended to set the SIMS database to use compatibility mode 110 for maximum performance
SQL Server 2016 (SP3) (KB5003279) - 13.0.6300.2	Green	Green	Green	Green	Green	Green	Microsoft Extended Support End Date: 14/07/2026 Customers are recommended to set the SIMS database to use compatibility mode 110 for maximum performance
SQL Server 2017	Maroon	Maroon	Maroon	Maroon	Maroon	Maroon	Although available, schools are recommended to install SQL2016 and set the SIMS database to compatibility level 110 for SQL2012
SQL Server 2019 (RTM-CU16) – 15.0.4223.1	Green	Green	Green	Green	Green	Green	Microsoft Extended Support End Date: 8/1/2030 Customers are recommended to set the SIMS database to use compatibility mode 110 for maximum performance Includes support for enabling enforced encryption for SQL Connections
SQL Server 2022	Maroon	Maroon	Maroon	Orange	Green	Green	We are aware that some schools have moved to SQL2022 already and in those instances we will support through our Escalations team where issues arise from Spring 2024. Full migration tooling will be available from the Summer 2024 release.

Additional notes on SQL 2012 support

SQL 2012 SP4 extended support end date set by Microsoft is 12/07/2022, therefore **ESS can only support an on-premise SQL 2012 Express installation up to and including the Spring 2022 version of SIMS**, this has been communicated in this document for over 2 years. Microsoft will continue to provide extended security updates (ESU) for SQL 2012 (not express) up to 08/07/2025. Customers will need to ensure they have the right support package in place with Microsoft to ensure their instance of SQL 2012 is covered by the ESU. ESS cannot be responsible for a customer's installation of SIMS products on SQL 2012 after the Spring 2022 release where these agreements with Microsoft are not in place. The following is a quote from Microsoft:

> *Eligible customers with Software Assurance under an Enterprise Agreement can purchase Extended Security Updates for Windows Server 2012/2012 R2 and SQL Server 2012 running on-premises.*

What about SQL 2012 Express

SQL 2012 Express is a license-free version of SQL. Extended Security Updates are not applicable to SQL 2012 Express.

Resources

- SQL 2012 Lifecycle: https://docs.microsoft.com/en-us/lifecycle/products/microsoft-sql-server-2012
- SQL 2012 Extended Security Updates FAQ: https://www.microsoft.com/en-us/windows-server/extended-security-updates

SQL Express Edition

SQLExpress cannot be used as a database server if the database size exceeds 10Gb, and is **not** recommended if any of the following are true:

- Number of users is greater than twenty
- School intends to make extensive use of InTouch
- The customer wishes to take advantage of database servers that have more than one CPU or more than four cores

Can customers buy Extended Security Updates for SQL Server 2008 R2 or 2012 Express or Developer Edition?

No. Customers cannot buy Extended Security Updates for SQL Server 2008 R2 Express or Developer Edition. Customers who have Extended Security Updates for SQL Server production workloads are permitted to apply updates to their servers running SQL Server Developer edition solely for development and test purposes.

SQL Compatibility Mode

We are aware that some customers experience issues with performance when running SQL2016 in its native mode. Following on guidance and direction from the EPG group, if you are experiencing this, we recommend changing the compatibility level to 110 within SQL Server Management Studio. We have made KB0036825 available for more information.

Azure SQL

We are aware that some schools and support units have subscriptions in Azure, we do not support SIMS in an Azure SQL Managed Instance or as an Azure SQL Database.

Microsoft .NET Framework Support

The version of the .NET Framework supported by each server or workstation operating system will vary and it is best that the most recent guidance and advice is retrieved from the following page on the Microsoft Website: https://docs.microsoft.com/en-us/dotnet/framework/get-started/system-requirements. Headline versions that will impact SIMS users can be outlined as follows:

System	4.7.2	4.8.X	Additional Notes
Server Operating Systems			
Windows Server 2016	✓	✓	4.6.2 is preinstalled, later versions installed separately
Windows Server 2019	✓	✓	4.7.2 is preinstalled but not necessarily enabled
Windows Server 2022	✓	✓	
Workstation Operating Systems			
Windows 10	✓	✓	
Windows 11	✗	✓	

ESS now requires a minimum version of 4.7.2 to be installed on servers and workstations using the ESS suite of SIMS products. From the Autumn 2022 release of SIMS7, if the minimum .NET Framework of 4.7.2 is not met, SIMS7 will not load and the user will be prompted to install it as required.

LDAP Signing and Channel Binding requirements

Microsoft is not enforcing LDAP Signing and Channel Binding Changes as outlined in this Microsoft KB: https://support.microsoft.com/en-us/help/4520412/2020-ldap-channel-binding-and-ldap-signing-requirements-for-windows

TLS requirements

Our suite of products supports TLS 1.2.

Additional Information for the TeacherApp

TeacherApp requires SIMS Services Manager to be running on a server with a minimum version of .NET Framework 4.7.2.

SIMS Connected

For the best experience of using SIMS Connected, we recommend that you use the latest version of your browser. Chrome, Safari, Firefox or Microsoft Edge are supported and compatible. Your browser must support HTML5 and the .pdf format must be supported to enable printing on any printer connected to the device.

SIMS Connected is accessible from Windows or Mac OS machines, iOS or Android tablets, and Chromebooks without any additional software requirements.

For the 3rd Party VPN Connector, we currently use OpenVPN.

System	April 2019	October 2019	Additional Notes
Version 2.3.2	🟪	🟪	We support the 3rd Party VPN Connector on version 2.4.6 or higher.
Version 2.3.3	🟩	🟪	
Version 2.4.6	🟩	🟩	
Version 2.4.7	🟪	🟩	

Hosted SIMS

For the best experience of using the Hosted SIMS service, we recommend that for client access you use:

- Microsoft Remote Desktop App 8.1 or later (Mac, Android)
- Microsoft Remote Desktop client for Windows 8.1 or later
- Google Chrome (latest version) is supported, but feedback suggests that it does not provide the best user experience with repeated downloads of the RDP clients.

For the 3rd Party VPN Connector, we currently use OpenVPN

System	April 2019	October 2019	Additional Notes
Version 2.3.2	🟥	🟥	
Version 2.3.3	🟩	🟥	We support the 3rd Party VPN Connector on version 2.4.6 or higher.
Version 2.4.6	🟩	🟩	
Version 2.4.7	🟥	🟩	

Chromebook support on Hosted SIMS

We now support newer versions of Chromebooks when using Windows RDP Client from the Playstore. At the time of publication, we are satisfied that we are in a position where we can support Chromebooks on Chrome OS Version 79.0.3945.86 and Windows RDP Application Version 8.1.76.413. We know that customers will find easier ways to connect a Chromebook to Hosted SIMS and we would love to know about this.

Initial Setup Video: https://youtu.be/erHuCGHgYrY
Connecting after initial setup Video: https://youtu.be/t3NjAvi0j4k
How To Documentation: KB0026422

Chromebook Support Notes

Though we will support Chromebooks accessing Hosted SIMS on supported versions of the Chrome Operating System and Remote desktop clients. We will only be able to provide best endeavours support to any issues that we determine to be environmental. This includes but not withstands, accessing file structures, and printing to both local and network printers.

Chromebook-Supported Operating System and Applications

Given how Chromebooks are updated, we will be performing routine checks to ensure that our test environment is on the latest version of both the Chrome Operating System and the RDP applications. Please see KB0027191 for versions of the Chrome Operating System Hosted SIMS has been tested on.

SIMS Online Solutions Browser Support (not native Apps)

System	Chrome	Internet Explorer*	Firefox	Safari	Edge	Phone Size Browser	Tablet Size Browser	Additional Notes
Options Online	✓	✗	✓	✓	✗	✗	✗	
SchoolView	✓	✗	✓	✓	✓	✗	✓	
SIMS Parent, SIMS Student	✓	✗	✓	✓	✓	✗	✗	
SIMS Finance	✓	✗	✓	✓	✓	✗	✓	
FMS Hub	✓	✗	✓	✓	✓	✗	✗	To ensure secure access, HMRC Fraud Prevention Headers works best with Edge, ESS does not support Internet Explorer.
Hosted Discover via .xbap application	✗	✗	✗	✗	✗	✗	✗	Please see the additional information below
SIMS Services Manager (SSM)	✓	✗	✓	✓	✓	✗	✗	

Hosted Discover via .xbap application

Microsoft ended its support for Internet Explorer 11 in June 2022 to favor the Edge browser. We have undertaken some testing of the Hosted Discover (.xbap) application and as long as the user has added the Discover .xbap pages to the "Internet Explorer mode pages" in the Default browser settings for Edge, we have found that Hosted Discover continues to work.

Discover and SQL Compact Edition

When installing Discover, some elements of SQL Compact Edition (SQLCE) 3.5 were originally installed and used. This version of SQLCE is no longer supported by Microsoft. For the SIMS Summer 2022 installation files of Discover, we have removed the use of the legacy SQLCE 3.5 files. This therefore means that customers can re-install Discover without SQLCE 3.5 files. Please ensure you understand the following three scenarios:

If you are using SQL 2012 Express
Your SIMS, FMS, and Discover installation is not supported if you are using SQL 2012 Express on the Summer 2022 versions of the software

If you are using SQL 2012 Licenced with ESU in place
If you choose to re-install Discover on your SQL 2012 instance, SIMS and Discover will not successfully transfer data between the systems. If you wish to continue to use Discover you can:

- Remain on SQL 2012 and your current Discover installation and accept the risk of SQLCE 3.5 files being used. ESS **cannot** be responsible for any data issues or breaches, this risk has to be accepted by the school
- Consider updating your SQL version that is running SIMS and Discover to SQL 2014 or later and re-install Discover

If you are using SQL 2014 or later
Reinstalling Discover to have an installation without the SQLCE 3.5 files present works on SQL2014 (Licensed and Express) and later

SIMS Parent and Student App

We support the following versions of Android and iOS operating systems upon which our applications are installed. For Android, we support OS version 7 – 13 only. All previous versions are no longer supported, and any device operating on the older versions will not receive further updates. For Apple, we support version iOS version 11 onwards. On the server where SIMS Services Manager is installed to exchange data between the solutions, .NET Framework 4.7.2 is required as a minimum.

SIMS Partnership Exchange

SIF Agent – Server 2019 and SQL2016. If SIMS is working on the server, then the agent will work.

Zone Integration Server (ZIS) – The operating system must have IIS version 8 installed with IIS6 compatibility mode enabled. Part of the ZIS is a SQL database, ESS now supports up to SQL2016 on our roadmap.

Monitor - Server 2019 and SQL2016. If SIMS is working on the server, then the agent will work. The monitor setup is a read-only version of SIMS.

SIMS.net Version Statement

In line with the terms and conditions that govern the customer's SIMS agreement and Contract we will support the current and previous version of SIMS.

Where applicable the below terms will apply:

4.7.1) ensure that Main Releases, Software Updates, and corrections are installed by the Locations as soon as practical and always within a timescale that will ensure that only the most recent version or the immediately preceding version are in use at any time. ESS retains the right to refuse to accept a support call where older versions are in use;

The Support Services do not include:

6.8.1   diagnosis or rectification of problems associated with the other systems, software, or equipment of the Customer or any third party;

6.8.2   rectification of any defects or errors resulting from modifications to the Software and/or Hosted Services by any person other than ESS;

6.8.3   remedial action required to any version of the Software other than the most recent Main Release patched to include all subsequent Updates or all but the most recent Update;

6.8.4   fixes required to any version of the Software other than the most recent Main Release patched to include all subsequent Updates including the most recent Update;