In confidence

SIMS Technical Roadmap

Lancashire County Council

EDUCATION DIGITAL SERVICES

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Introduction

The purpose of this guide is to provide customers with a detailed overview of any software and hardware infrastructure they might need to run the SIMS Product suite. It has been developed in line with customer feedback to enable Local Authorities, Support Teams, Schools and Academies to effectively plan their future support of SIMS.

This document is based on information provided by ESS in their Annual SIMS Technical Roadmap and has been reviewed by them in August 2022. It provides schools with an overview of what changes we expect in 2022 and upcoming months.

Please Note: LCC Education Digital Services is not responsible for the SIMS Technical Roadmap and this could be subject to change at any time by ESS however, we hope that this document helps you understand and prepare for up-and-coming changes. Full details are available from ESS's website https://www.ess-sims.co.uk/ but if you have any questions or need support from your LCC Education Digital Services SIMS support team please don't hesitate to contact us.

Date	Changes Made	Updated by	Next planned review date
25/08/2022	• .NET Framework 4.7.2 and SIMS7 requirements	P Featherstone	-
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
03/06/2021	Update to Browser Support in relation to the FMS Hub	P Featherstone	Autumn 2021
04/05/2021	Update to .NET Framework, LDAP, TLS, SOLUS3, SQL updates, Parent and Student App	P Featherstone	Autumn 2021
06/03/2020	Update to hosted SLG status, hosted SIMS and Chromebook support and Office 2019 testing outcomes	P Featherstone	September 2020
25/09/2019	Updates made to screen resolution, partnership exchange, hosted SIMS and SOLUS	P Featherstone	May 2020
17/04/2019	Updates to all areas and inclusion of minimum hardware details previously held in a separate document	P Featherstone	September 2019

1 What support is ending in the next 12 months?

1.1 Roadmap Key Code

▮ (dark red)	- Not supported by ESS
▮ (orange)	- Support provided only where the additional conditions are met
▮ (green)	- Supported by ESS

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

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

LCC Education Digital Services will only support schools that are on supported software.

1.3 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.

2 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 TeacherApp are covered later in this document. If you are unsure about any of these specifications, then please contact the Education Digital Services Service Desk.

2.1 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, <u>not</u> 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 to 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 on ensuring the backups are GDPR compliant.
Other information	It is not recommended that servers are 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 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. **25/08/22 UPDATE:** From the Summer 2022 release of SIMS7, if the minimum .NET Framework is of 4.7.2 is not met, SIMS will not load and the user will be prompted to install it as required. Originally this requirement was planned for Autumn 2022, but was released in Summer 2022, earlier than planned and earlier than we had originally informed customers. Software — Microsoft Office 2016 or later. Adobe Reader DC or above.
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 server/workstations.

3 Detailed Roadmap

3.1 SIMS Software Support

System	Spring 2022	Summer 2022	Autumn 2022	Spring 2023	Summer 2023	Autumn 2023	Additional Notes
Server Operation System							
Windows Server 2012	green	green	green	green	green	maroon	Microsoft Extended Support End Date: 10/10/2023.
Windows Server 2012 R2	green	green	green	green	green	maroon	Microsoft Extended Support End Date: 10/10/2023.
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.
Workstation Operation System							
Windows 8.1	maroon	maroon	maroon	maroon	maroon	maroon	ESS stopped support on the Summer 2021 release.
Windows 10 Pro (32 / 64 bit)	green	green	green	green	green	green	Microsoft Support End Date 14/10/2025.
Windows 11	maroon	green	green	green	green	green	SIMS Workstations only. Windows 11 cannot install our supported versions of SQL i.e. SQL2012, SQL2014 and SQL2016.
SOLUS3							
SOLUS 3.12.50	maroon	maroon	maroon	maroon	maroon	maroon	URLS in SOLUS 3.1250 ceased on 5th November 2021.
SOLUS 3.12.59	green	green	green	green	green	green	
Microsoft Office							
Office 2010	maroon	maroon	maroon	maroon	maroon	maroon	ESS stopped support on the Summer 2020 release.
Office 2013 SP1	green	green	green	maroon	maroon	maroon	ESS recognise that a local install of Office applications under the O365 licence 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	

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.

3.2 SIMS SQL Support

Additional Notes
- Not supported by ESS (maroon)
- Support provided only where the additional conditions are met (orange)
- Supported by ESS (green)

System	Spring 2022	Summer 2022	Autumn 2022	Spring 2023	Summer 2023	Autumn 2023	Additional Notes
SQL Server Details							
SQL Server 2012 (SP4) (KB4018073) - 11.0.7001.0	green	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	green	green	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
SQL Server 2016 (SP2) (KB5001092) - 13.0.5888.11	green	green	maroon	maroon	maroon	maroon	Microsoft Support End Date: 11/10/2022
SQL Server 2016 (SP3) (KB5003279) - 13.0.6300.2	maroon	green	green	green	green	green	Microsoft Extended Support End Date: 14/07/2026
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	maroon	maroon	maroon	maroon	maroon	maroon	

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 licence 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

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. However, they can move their workloads to Azure and get the Extended Security Updates for no additional charges above the cost of using the Azure service. Also, 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.

3.3   Microsoft .NET Framework Support

The version of .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	Additional Notes
Server Operating Systems			
Windows Server 2012	✔	✔	4.5.1 is preinstalled, later versions installed separately
Windows Server 2016	✔	✔	4.6.2 is preinstalled, later versions installed separately
Windows Server 2019	✔	✔	4.7.2 is preinstalled but not necessarily enabled
Workstation Operating Systems			
Windows 8.1	✔	✔	Windows 8.1 is not supported on the SIMS Summer 2021 version and onwards
Windows 10	✔	✔	
Windows 11	✖	✔	

ESS now require a minimum version of 4.7.2 to be installed on servers and workstations using the ESS suite of SIMS products.

25/08/22 UPDATE: From the Summer 2022 release of SIMS7, if the minimum .NET Framework is of 4.7.2 is not met, SIMS will not load and the user will be prompted to install it as required. Originally this requirement was planned for Autumn 2022, but was released in Summer 2022, earlier than planned and earlier than we had originally informed customers.

3.4   SQL Compatibility Mode

ESS are aware of some customers experiencing issues with performance when running SQL2016 in its native mode. Following guidance and direction from the EPG group, if you are experiencing this, we recommend changing the compatibility level to 110 within SQL Management Studio. Please contact Education Digital Services for more information.

3.5   TLS Requirements

ESS' suite of products support TLS 1.2, which is backwards compatible with TLS 1.0.

3.6   Azure SQL

ESS are aware that some schools have subscriptions in Azure, but they do not support SIMS in an Azure SQL Managed Instance or as an Azure SQL Database.

4 Additional Information for the TeacherApp

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

5 Additional Information for the Document Management Server

While the SIMS Document Management Server Service works on earlier versions of .NET Framework, we recommend that a minimum of 4.7.2 is now used.

6 SIMS Online Solutions Browser Support (not native Apps)

System	Chrome	Internet Explorer*	Firefox	Safari	Edge	Phone Size Browser	Tablet Size Browser	Additional Notes
SIMS Activities	green	red	green	green	red	red	red	
Options Online	green	red	green	green	red	red	red	The online services may work against these systems marked as red, but are not tested against them, hence no support.
SIMS Pay	green	red	green	green	green	green	red	
SchoolView	green	red	green	green	green	red	green	*From June 2022, support for Internet Explorer from Microsoft will end. Therefore ESS cannot support any application being used via this same browser.
SIMS Parent, SIMS Student	green	red	green	green	green	red	green	
SIMS Homework	green	red	green	green	red	red	red	
SIMS Finance	green	red	green	green	green	red	green	
FMS Hub	green	red	green	green	green	red	red	To ensure secure access, HMRC Fraud Prevention Headers works best with Edge, ESS does not support Internet Explorer.
Hosted Discover via .xbap application	red	red	red	red	red	red	red	Please see additional information below
SIMS Services Manager (SSM)	green	red	green	green	green	red	red	

6.1 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, ESS 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.

7 SIMS Parent and Student App

ESS support the latest and previous versions of Android and iOS operating systems upon which their applications are installed. 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.

8 SIMS.net (core) Version Statement (extract from the contract)

In line with the terms and conditions of the SIMS Annual Maintenance and Contract ESS will support the current and previous version of SIMS.

The customer shall 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.