

# SIMS Technical Roadmap

May 2021

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#### Introduction

Thank you for your viewing of this updated SIMS Technical Roadmap. We apologise that were unable to make an update in September of 2020 as planned, but have consulted with our various stakeholders on providing an update this Spring. The main updates to this document are:

- .NET Framework
- LDAP and TLS Settings
- SOLUS3 Support
- Parent and Student App

The information included within this document is subject to change and will be reviewed every six months.

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

#### Roadmap Key Code

- Not supported by ESS
- Will be confirmed in a future release of the Technical Roadmap
- 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 <u>all</u> 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, TeacherApp or SLG 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<br>Memory (minimum<br>recommended) | Quad Core processor or higher recommended for optimum performance. A minimum of four v-cores should be assigned to virtual servers.<br>8GB or higher (16GB+ recommended for optimum performance in Secondary schools). If a virtual server is in use, this should be statically assigned memory,<br>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<br>We estimate as a minimum that you should allow 150Gb for all SQL databases required for your setup.  |  |  |  |  |  |  |  |
|   | File Share Requirement<br>Please allow 10-20GB for the SIMS Applications and Setups folder.  |  |  |  |  |  |  |  |
|   | SOLUS3 Repository<br>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  |  |  |  |  |  |  |  |
|   | <b>Docstorage Requirement</b><br>For the Docstorage drive, this will vary so greatly by customer, we therefore advise schools should consider 50Gb as minimum.   |  |  |  |  |  |  |  |
|   | General Guidance<br>If a virtual server is in use, then the virtual hard drive files should be statically sized.   |  |  |  |  |  |  |  |
| Drive<br>Display  | We no longer send software out on physical media, however, ISO mounting software if not supported by server OS is required for software installation. 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 requires access to the http protocol on dl.capitasolus.co.uk and solusmanager.sims.co.uk and all sub-folders therein.   |
| SIMS Workstation                 |  |
| Computer and processor           | Quad Core 2.4GHz processor or higher recommended for optimum performance.  |
| Memory (minimum<br>recommended)  | 8Gb or higher for main SIMS machines. 4GB acceptable for a casual SIMS use machine.  |
| Disk space guidance <sup>#</sup> | 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<br>software | Operating System — 32-bit and 64-bit versions of Microsoft Windows 7 Professional (SP1), Windows 8 Pro and Windows 10 Pro.   |
| Solewale                         | The PC will require a minimum of Microsoft .NET Framework 4.5.2 to be present.   |
|                                  | Software — Microsoft Office 2013 (32-bit and 64-bit) and Office 2016. 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.

## SIMS Software Support

| System  | Spring 2021 | Summer 2021 | Autumn 2021 | Spring 2022 | Summer 2022 | Autumn 2022 |   | Notes  |  |
|---|-------------|-------------|-------------|-------------|-------------|-------------|---|--|--|
| Server Operation System                               |             |             |             |             |             |             |   |  |  |
| Windows Server 2008 SP2                               |             |             |             |             |             |             | Microsoft Carvice Dack Support End Date: 14/01/2020 ESS stepped support on the Supmor 2020 release  |  |  |
| Windows Server 2008 R2 SP1                            |             |             |             |             |             |             | Microsoft Service Pack Support End Date: 14/01/2020, ESS stopped support on the Summer 2020 release   |  |  |
| Windows Server 2012                                   |             |             |             |             |             |             | Microsoft Extended Support End Date: 10/10/2023   |  |  |
| Windows Server 2012 R2                                |             |             |             |             |             |             | Microsoft Extended Support End Date. 10/10/2023   | ESS will only support Windows Server where the Desktop<br>Experience (GUI) is installed. We do not support servers where |  |
| Windows Server 2016                                   |             |             |             |             |             |             | Microsoft Extended Support End Date: 12/01/2027   | only the Core installation has been carried out  |  |
| Windows Server 2019                                   |             |             |             |             |             |             | Microsoft Extended Support End Date: 09/01/2029   |  |  |
| SQL Server Details                                    |             |             |             |             |             |             |   |  |  |
| SQL Server 2012 (SP4-GDR) (KB4583465) - 11.0.7507.2   |             |             |             |             |             |             | Microsoft Extended Support End Date: 12/07/2022   |  |  |
| SQL Server 2014 (SP3-GDR) (KB4583463) - 12.0.6164.21  |             |             |             |             |             |             | Microsoft Extended Support End Date: 09/07/2024   |  |  |
| SQL Server 2016                                       |             |             |             |             |             |             | Microsoft Service Pack Support End Date: 09/01/2018   |  |  |
| SQL Server 2016 SP1                                   |             |             |             |             |             |             | Microsoft Service Pack Support End Date: 09/07/2019   |  |  |
| SQL Server 2016 (SP2-CU17) (KB5001092) - 13.0.5888.11 |             |             |             |             |             |             | Microsoft Extended Support End Date: 14/07/2026   |  |  |
| SQL Server 2017                                       |             |             |             |             |             |             | Although available, our focus is to optimise SIMS queries to run in SQL 2016 natively   |  |  |
| SQL Server 2019                                       |             |             |             |             |             |             |   |  |  |
| Workstation Operation System                          |             |             |             |             |             |             |   |  |  |
| Windows 7 Pro (32 / 64 bit)                           |             |             |             |             |             |             | Microsoft Extended Support End Date: 14/01/2020, ESS stoppe   | d support on the Summer 2020 release   |  |
| Windows 8.1 Pro (32 / 64 bit)                         |             |             |             |             |             |             | Microsoft Extended Support End Date: 14/01/2021   |  |  |
| Windows 10 Pro (32 / 64 bit)                          |             |             |             |             |             |             | No published end dates from Microsoft   |  |  |
| SOLUS3  |             |             |             |             |             |             |   |  |  |
| SOLUS 3.1201  |             |             |             |             |             |             |   |  |  |
| SOLUS 3.1241  |             |             |             |             |             |             | The SIMS Summer 2021 release onwards will only be deploy tested on 3.1250. We must stress that continued use and support of 1241 is no longer supported |  |  |
| SOLUS 3.1250  |             |             |             |             |             |             | 3.1241 is no longer supported.  |  |  |
| Microsoft Office                                      |             |             |             |             |             |             |   |  |  |
| Office 2010   |             |             |             |             |             |             | ESS stopped support on the Summer 2020 release  |  |  |
| Office 2013 SP1                                       |             |             |             |             |             |             |   |  |  |
| Office 2016   |             |             |             |             |             |             |   |  |  |
| Office 2019   |             |             |             |             |             |             | Testing on Office 2019 has been completed.  |  |  |

#### 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: <a href="https://docs.microsoft.com/en-us/dotnet/framework/get-started/system-requirements">https://docs.microsoft.com/en-us/dotnet/framework/get-started/system-requirements</a>. Headline versions that will impact SIMS users can be outlined as follows:

| East Server Operating Systems | 4.5.2 | 4.6 | 4.6.1 | 4.7.2 | 4.8 | Additional<br>Notes  |  |
|-------------------------------|-------|-----|-------|-------|-----|--|--|
| Windows Server 2008 SP2       |       |     |       |       |     |  |  |
| Windows Server 2008 R2 SP1    |       |     |       |       |     |  |  |
| Windows Server 2012           |       |     |       |       |     | 4.5.1 is preinstalled but not necessarily enabled, later versions installed separately |  |
| Windows Server 2016           |       |     |       |       |     | 4.6.2 is preinstalled but not necessarily enabled, later versions installed separately |  |
| Windows Server 2019           |       |     |       |       |     | 4.7.2 is preinstalled but not necessarily enabled, later versions installed separately |  |
| Workstation Operating Systems |       |     |       |       |     |  |  |
| Windows 7                     |       |     |       |       |     | Windows 7 is not supported on SIMS Summer 2020 version and onwards                     |  |
| Windows 8.1                   |       |     |       |       |     | Windows 8.1 is not supported on the SIMS Summer 2021 version and onwards               |  |
| Windows 10                    |       |     |       |       |     |  |  |

#### LDAP Signing and Channel Binding requirements

Microsoft are 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

#### SQL Compatibility Mode

We are aware that some customers experience issues with performance when running SQL2016 in it's 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.

#### **TLS requirements**

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

### 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.

#### Additional Information for the TeacherApp

A recent update to the TeacherApp will now require SIMS Services Manager to be running on a server with a minimum version of .NET Framework 4.6.1 but advise customers to use 4.7.2.

#### Additional Information for the Document Management Server

The SIMS Document Management Server Service will require .NET Framework Version 3.5. This is not usually enabled on Server 2012 R2 and newer.

#### SIMS Partnership Exchange

We continue to work with our testers and developers on this, we know that version 6 of the ZIS application will work on Server 2012 R2 and SQL 2014 where IIS version 8 is activated with Version 6 compatibility mode enabled. We continue to look into more recent versions of the ZIS application and will update customers when progress is made.

#### Hosted SIMS Learning Gateway

This service was shut down in December of 2019.

#### Self-Hosting SIMS Learning Gateway

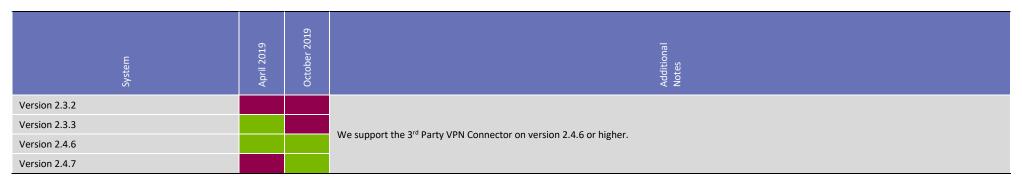
This service was discontinued for support from April 2020.

#### 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
- Internet Explorer (IE11 is recommended)
- 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 3<sup>rd</sup> Party VPN Connector we currently use OpenVPN



#### 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 better more easier ways to connect a Chromebook to Hosted SIMS and we would love to know about this. Please contact paul.featherstone@educationsoftwaresolutions.co.uk with any of your feedback.

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, 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   |
|---------------------------|--------|-------------------|---------|--------|------|--------------------|---------------------|--|
| SIMS Activities           |        |                   |         |        |      |                    |                     |  |
| Options Online            |        |                   |         |        |      |                    |                     |  |
| SIMS Pay                  |        |                   |         |        |      |                    |                     |  |
| SchoolView                |        |                   |         |        |      |                    |                     |  |
| SIMS Parent, SIMS Student |        |                   |         |        |      |                    |                     | The online services may work against these systems marked as red, but are not tested against them, hence no support. |
| SIMS Homework             |        |                   |         |        |      |                    |                     |  |
| SIMS Primary              |        |                   |         |        |      |                    |                     |  |
| SIMS Finance              |        |                   |         |        |      |                    |                     |  |
| SIMS Learning Gateway     |        |                   |         |        |      |                    |                     |  |

# SIMS Parent and Student App

We support the latest and previous versions of Android and iOS operating systems upon which our applications are installed. On the server where SIMS Services Manager is installed to exchange data between the solutions, .NET framework 4.6.2 is required as a minimum. 4.7.2 will be (as a new preferred) version in the coming 6 months as we foresee that in the future these SSM packages for Parent and Student App will take advantage of updates present in those versions.

#### SIMS.net (core) Version Statement

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

Contracts, the customer shall:

b) 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;