



# SIMS Teacher app Technical Overview

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Capita Children's Services  
Franklin Court  
Stannard Way  
Priory Business Park  
Cardington  
BEDFORD  
MK44 3JZ

<http://www.capita-sims.co.uk>

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# Introduction

## About the SIMS Teacher app

The SIMS Teacher app has been designed to make every day classroom administration tasks easy – the app makes it effortless for teachers to record attendance data for every pupil. The app already knows which class you're in and displays your pupils. Select all as present with a simple touch and you can get back to your class. If you need to mark a pupil late, the app automatically indicates the current number of minutes past the class start time.

By tapping a pupil's picture, a teacher will be able to record attendance, record achievement or behaviour points and record minutes late to class. They can also see at a glance if the pupil has been awarded behaviour points in a previous class that day, making teachers aware of those who are likely to misbehave in their lesson.

We have an exciting programme of new developments actively underway for the SIMS Teacher app, with a rolling plan of updates and releases over the coming year.

## What are the benefits of using the SIMS Teacher app for the school?

At SIMS we believe that great teaching matters and every school can be outstanding. The SIMS Teacher app helps teachers to focus more on what they do best... teach!

The SIMS Teacher app has been designed specifically to support teachers in achieving even more by simplifying key classroom activities and reducing time spent on classroom administration.

With real-time access to timetables and student information, the SIMS Teacher app helps to accelerate the flow of information throughout the school to extend improved teaching and learning.

By making everyday classroom tasks simple for teachers, they can spend more time on teaching and learning – supporting children to achieve their full potential.

## SIMS Teacher app platform availability

### Apple iOS (iOS7 & 8)

- Availability: Fully available at launch January 2015
- Release 3 functionality: attendance, achievement, behaviour, student details, search, timetable, emergency cover, assessment marksheets, offline access.

### Windows 8.1

- Availability: Expected after Easter 2015
- Release 2 functionality: attendance, achievement, behaviour, student details, search, timetable, emergency cover.

### Android (v4.4.2 +)

- Availability: Expected after Easter 2015
- Release 2 functionality: attendance, achievement, behaviour, student details, search, timetable, emergency cover.

# SIMS Teacher app features

## Overview

The SIMS Teacher app has not been designed to replicate the SIMS system on a tablet device – the focus and vision for the Teacher app is to provide key features and functions to help teachers with everyday classroom administration activities.

The key features available in the SIMS Teacher app include:

- ✓ Real-time seamless updates (read-write) with the school's SIMS system
- ✓ Easy class registration/attendance
- ✓ Record achievement and behaviour
- ✓ View student details
- ✓ Student and teacher search
- ✓ Integrated assessment marksheets
- ✓ Works in school or 'on-the-go', for example out on the school playing fields or school day trip

For the SIMS Teacher app launch, the following features and functionality will be available:

## Teacher app administration

- Secure 24/7/365 access to web-based Teacher app management console for the school
- Simple, secure device authorisation
- Simple, secure teacher account activation
- Ability to block a specific device immediately – preventing access to the school's SIMS system data

## Teacher access

- Access to the SIMS Teacher app from any location with a Wi-Fi connection
- Access to the SIMS Teacher app where no Wi-Fi connection is available (for a limited period and for selected data once an initial login has been made)
- Live, real-time access and updating with the school's SIMS system
- The ability for a teacher to login and view their entire own timetable today, for the week and academic year
- The ability for a teacher to take attendance/registration for a lesson (auto-updated back into SIMS in real-time)The ability for a supply/cover teacher can take attendance for lessons that have been assigned to their timetable from within SIMS
- The ability for a teacher to see the students for each class, either in a student image or a list view mode
- The ability for a teacher to automatically mark minutes late for an individual or a group of students (auto-updated back into SIMS in real-time)
- The ability to apply absence codes for an individual or a group of students – codes automatically populated from the school's SIMS system (auto-updated back into SIMS in real-time)
- The ability to search and add students to a lesson
- The ability to view basic details for each student, including photograph, preferred name, house, year group, registration group plus view the student's entire timetable
- Achievement – the ability for teachers to assign achievement information for an individual or a group of students (auto-updated back into SIMS in real-time)
- Behaviour – the ability for teachers to assign behaviour information for individual or groups of students

(auto-updated back into SIMS in real-time)

- The ability to see a record of a student's achievement/behaviour over a two week period in a simple easy-view interactive conduct graph
- The ability for a teacher to take attendance for any lesson in the school timetable (providing emergency cover)
- Access to student detail information, including- emergency (priority contacts) and key medical and dietary information automatically updated from the school's SIMS system in real-time.
- Integrated SIMS assessment marksheets to support the recording of assessment marks, grades and comments for any SIMS marksheet the teacher has permissions to edit.

# SIMS Teacher app: Technical Solution Overview

## Overview

The Capita SIMS Teacher app solution is a fully managed, securely hosted web delivered tablet application and supporting secure data services that integrate with a school's SIMS system, delivered utilising Microsoft's Windows Azure Platform located in Dublin.

Microsoft Windows Azure has G-Cloud Impact Level 2 (IL2) from the Cabinet Office for use across the UK Public Sector.

Data is securely transferred in real-time and encrypted between the school's SIMS system (locally or centrally hosted) via the web using standard secure HTTPS TCP/IP protocols to devices authenticated by the school. No school data is stored in the Azure platform (cloud) – data is only transferred via the Microsoft Windows Azure platform (Service Bus).

All data is securely transferred and processed within the EU and complies with UK data protection standards and requirements.

Once the school has provided the device authorisation and teacher account activation, the Teacher app service can be accessed by teachers via tablet devices. Teachers can access the Teacher app in school or remotely from their internet-connected tablet, or offline for selected data items and for limited time periods.

The SIMS Teacher app service takes full advantage of the elastic architecture built into the Microsoft Windows Azure platform, ensuring that all components of the service are scalable and resilient to cope with the planned and unplanned demand and un-expected events that will occur during the life of the service.

The SIMS Teacher app solution is managed in compliance with the principles of ITIL best practice, and maintained in accordance with the principals of continual service improvement. Regular management reporting, and sharing of key performance metrics, ensures that the continual service improvement cycle is embedded across all areas of the service.

## Security

All traffic to and from the SIMS Teacher app service is accessed using standard web protocols (HTTPS) and secured using the appropriate SSL certificates. Services are tiered following industry and software vendor best practice principles.

The network architecture is compliant to ISO27001 and utilises a multi-tier isolated VLAN design with fully managed software firewalls on each server, IDS/IPS, SQL firewalls, data encryption and load balancing to ensure security and performance for all users of the SIMS Teacher app service.

The SIMS Teacher app service is fully penetration tested at the application layer and externally by a nominated Security company every quarter.

The SIMS Teacher app service provides authentication in accordance with the UK government's National Technical Authority for Information Assurance (CESG) 'Guidance for End User Devices Security Guidance: General Security Recommendations':

1. **User to service:** The user is only able to access the SIMS Teacher app service after successfully authenticating to the service, via their device.
2. **Device to service:** Only devices which can authenticate to the SIMS Teacher app service are granted access.

## Hosting Environment

No school data is stored in the Microsoft Windows Azure platform (cloud) hosting environment – data is only transferred via the Azure platform (enterprise relay) between the school's SIMS system and devices authorised by the school.

Microsoft takes the physical security of their data centres very seriously, with stringent policies and procedures to ensure compliance with their own, and industry recognised security standards.

The controls include:

- **24 hour monitored physical security.** Datacentres delivering the Azure service are physically constructed, managed, and monitored to shelter data and services from unauthorised access as well as environmental threats.
- **Monitoring and logging.** Security is monitored with the aid of centralized monitoring, correlation, and analysis systems that manage the large amount of information generated by devices within the environment and providing timely alerts. In addition, multiple levels of monitoring, logging, and reporting are available to provide visibility to customers.
- **Patching.** Integrated deployment systems manage the distribution and installation of security patches.
- **Antivirus/Antimalware protection.** Microsoft Antimalware is built-in to Cloud Services to help identify and remove viruses, spyware and other malicious software and provide real time protection.
- **Intrusion detection and DDoS.** Intrusion detection and prevention systems, denial of service attack prevention, regular penetration testing, and forensic tools help identify and mitigate threats from both outside and inside of the Microsoft Windows Azure platform.
- **Zero standing privileges.** Access to customer data by Microsoft operations and support personnel is denied by default.
- **Isolation.** Azure uses network isolation to prevent unwanted communications between deployments, and access controls block unauthorized users.

The latest information on the Microsoft Azure Security policies can be found in the Azure Trust Centre:  
<http://azure.microsoft.com/en-gb/support/trust-center/security/>

These security controls are continually monitored, reviewed, and updated to ensure that the integrity of these controls is maintained at all times.

## Business Continuity and Disaster Recovery

The SIMS Teacher app service has 24-7-365 system availability except for scheduled maintenance (out of business hours).

The Teacher app service has layers of business continuity built into it, from the redundancy of individual components, to resilience across multiple data centres in separate geographical locations within the EU.

The solution takes full advantage of the elastic architecture built into the Microsoft Windows Azure platform, ensuring that all components of the service are scalable and resilient to cope with planned and unplanned demand and unexpected events that will occur during the life of the service.

Within this logical architecture all components will be delivered using a redundant and resilient architecture ensuring all aspects of the environment have appropriate fault tolerance.



Within the environment the following techniques are used;

- **Highly Available Hardware.** Servers delivering the Azure service are spread across multiple racks within the Windows Azure Data Centre. Each server utilises separate power feeds and connected via different switches.
- **Load Balancing.** Access to services is delivered by a load balancer which constantly monitors the service provided by each server. In the event of an individual server failure, traffic is automatically re-routed other functioning servers within the environment.
- The SQL infrastructure has been designed to use Microsoft Always-On Availability groups to deliver a highly available SQL solution.
- In addition, a full disaster recovery strategy and plan is in place, with regular testing ensure that disruption to the service is minimised in the event of a disaster occurring.

## Application Security:

The SIMS Teacher app is a securely hosted web delivered service via the web using standard HTTPS TCP/IP protocols, with 256-bit Secure Socket Layer (SSL) point-to-point encryption.

Data stored on the teacher's authorised device is encrypted using the international industry standard AES 256-bit encryption (Advance Encryption Standard). The encryption key is a combination of device specific information and a user PIN number sequence.

## The SIMS Services manager

The SIMS Teacher app service utilises the SIMS Services Manager to provide the data-interoperability element of the service. The SIMS Services Manager provides the link between the Teacher app service and the school's SIMS system.

The SIMS Services Manager has been designed to help provide a unified data transport service for hosted SIMS products to ensure they require minimal setup, configuration and involvement from the school or SIMS support team.

Schools participating with the Teacher app pilot programme successfully used the SIMS Services Manager first in self hosted and centrally hosted environments. The SIMS Services Manager (SSM) was automatically be delivered as part of the SIMS 2014 autumn release. It will install onto the SQL Server machine and automatically be pre-configured with School connection information. This helps the on-boarding process for systems which use it and should mean that only product specific instructions for turning on new systems such as SIMS Teacher app or products in the future will be needed.

The SIMS Services Manager requires .NET framework 4.5.2 but otherwise has the same pre-requisites as a SIMS Server on the SIMS technical roadmap.

The 'SIMSServicesManager' installer will be called as part of the SIMSSQLApplicationSetup.exe which is run on upgrade to autumn on the SQL Server via SOLUS3 and SOLUS2. It will silently install .NET framework 4.5.2 followed by 'SIMSServicesManager'.

Centrally hosted environments can use the SIMS Services Manager user interface as above to setup all of the connection and school information per site. Alternately, the support team can edit the settings.xml file located in the \ProgramData\SIMS\SIMS Services Manager. This is recommended if there are multiple sites to manage.

Further information about the SIMS Services manager is available through the SupportNet portal.

## The SIMS Data Service

This SIMS data service is installed within a school or centrally hosted location and is used to connect to the school's SIMS database – this provides data to the remote tablet application via a connection to the Azure Service Bus Relay. It is secured as follows:

- By default it runs under the Network Service account as part of the SIMS Service Manager. This can be changed by the installer of the SIMS Service Manager to a more restricted account.
- Windows accounts are encouraged for connection to the SIMS database but where SQL accounts are in use the usernames and passwords are encrypted using the Data Protection API (DPAPI) managed by the operating system.
- The use of the Azure Service Bus Relay means that no inbound connections need be opened by the school/hosted service. The school only requires an outbound connection
- In order to connect to its end point in the Azure Service Bus Relay it authenticates against the relay using a short life expiring Shared Access Signature which is supplied by the Service Bus Relay manager.
- The endpoint URL (none domain section) is randomized by the Service Bus Relay Manager each time the service starts up and requests endpoint creation.
- Once connection is established, calls to the data services via the Service Bus Relay are protected by the Web Token supplied via the login web services which identifies the connecting user within the SIMS database.
- The data services user this information to fully respect SIMS user permissions – therefore an accessing account needs to be enabled within the Teacher app management system and within the SIMS system.

## Capita Accreditations

The SIMS Teacher app service is managed in compliance with the principles of ITIL best practice, and maintained in accordance with the principals of continual service improvement.

Capita is accredited for:

- ISO 27001 – Information Security Management System (ISMS).
- ISO 9001 certification to deliver IT products and services which meet international quality standards.

# SIMS Teacher app Technical pre-requisites

## SIMS system

The SIMS Teacher app can be used alongside the following versions of SIMS:

- SIMS 2014 Autumn release (7.160 or 7.161)
- A SIMS Server that meets the Capita Children's Services recommended specification, which is available on SupportNET or on request.
- .NET Framework 4.5.2 installed (Full Profile) is required on the server hosting the service – this is automatically installed as part of the SIMS Service Manager
- A local or domain user account will be needed to run the service.
- Connectivity to the SIMS SQL Server

## SIMS Teacher app communication with Microsoft Azure

The SIMS Teacher App utilises the Microsoft Azure Service Bus for the secure, encrypted transmission of data. The SIMS Teacher App uses the 'Europe North' presence in the Microsoft Azure Service Bus platform.

The SIMS Teacher App requires internet connectivity (https connectivity) from the SIMS server to permit HTTP GET, HTTP POST and HTTP 1.1 Chunked Transfer Encoding - the SIMS Teacher App service will access the following URLs:

- <https://www.simsteachermanagement.co.uk>
- <https://www.simsteacherappactivation.co.uk>
- <https://setup.capita-sims.co.uk>
- <https://simsmobile.servicebus.windows.net>
- <https://www.capitacloudplatform.co.uk>

*Note: these URLs should be whitelisted where a proxy server is restricting access.*

The Teacher App service communicates to the Azure Service Bus via the following TCP destination ports:

- 443/tcp
- 80/tcp

Additionally, Microsoft advise allowing/opening the following TCP destination ports if connecting to the Azure service bus from behind a firewall or proxy server:

- 9350/tcp
- 9351/tcp
- 9352/tcp
- 9353/tcp

The SIMS Teacher App utilises the Microsoft Azure Service Bus 'Europe North' presence in the Microsoft Azure Service Bus platform.

The Azure Service Bus (Europe North) is identified by the following IP address blocks.

- 213.199.128.0/20
- 213.199.160.0/20
- 213.199.184.0/21
- 94.245.112.0/20
- 94.245.88.0/21

- 94.245.104.0/21
- 65.52.64.0/20
- 65.52.224.0/19
- 157.55.3.0/24

For successful communication between the SIMS Server and Microsoft Azure Service Bus, any firewall configuration must allow outbound access to the above IP/port specification and permit related responses. It is not necessary to allow unsolicited ingress from these IP addresses.

## Supported platform operating systems/devices:

The SIMS Teacher app will be compatible with the following platform operating systems and devices:

- apple iOS versions iOS 7 & iOS8
  - iPad 2
  - Third-Generation iPad
  - Fourth-Generation iPad
  - iPad mini
  - iPad Air 1 and 2
- Windows 8.1 (specific device compatibility will be confirmed)
- Android KitKat v4.4.2 or above (specific device compatibility will be confirmed)

### Devices

Capita SIMS does not provide devices (iPads or other devices) as part of the Teacher app service – schools are required to provide the devices to be used.

## Teacher app installation pre-requisites

- The person who completes the installation and configuration of the Teacher app services will need to have a Microsoft, Google or Office 365 account, which will also be used by the school administrator accessing the Teacher app management console.
- **Note:** if you are installing the Teacher app on behalf of a school – the Microsoft, Google or Office 365 account that is used to complete the installation will need to be provided to the school administrator to access the Teacher app management console
- The SA password for your SIMS SQL instance if the account logging into the server with does not have SQL Sys Admin permissions
- Credentials for a SIMS user with admin level access to SIMS.

## Teacher app administration pre-requisites

The school administrator who will administer the SIMS Teacher app within the school will require a Microsoft, Google or Office 365 account to access the SIMS Teacher app administration console. This is required to provide an additional layer of authentication and security for access.

Internet access and the use of a latest supported internet browser: Internet Explorer, Chrome, Firefox or Safari.

## Teacher pre-requisites

Teachers who access the SIMS Teacher app will need their own Microsoft, Google or Office 365 account. This is required to provide an additional layer of authentication and security for access to the Teacher app.

**Minimum bandwidth** - A minimum internet connection speed of 1Mb is recommended to access the Teacher app. The Teacher app can work over a stable 3G or 4G connection; however, it should be noted that 3G and 4G performance may vary, depending on location and network coverage.

# SIMS Teacher app Security and Authentication

## Authentication

The SIMS Teacher app service provides authentication in accordance with the UK government's National Technical Authority for Information Assurance (CESG) 'Guidance for End User Devices Security Guidance: General Security Recommendations':

1. **User to service:** The user is only able to access the SIMS Teacher app service after successfully authenticating to the service, via their device.
2. **Device to service:** Only devices which can authenticate to the SIMS Teacher app service are granted access.

## Security

The SIMS Teacher app is a securely hosted web delivered service, with data securely transferred in real-time and encrypted between the school's SIMS system (locally or centrally hosted) via the web using standard secure HTTPS TCP/IP protocols to devices authenticated by the school. No school data is stored in the Azure platform (cloud) – data is only transferred via the Microsoft Windows Azure platform (Service Bus).

All data is securely transferred and processed within the EU and complies with UK data protection standards and requirements.

All traffic to and from the SIMS Teacher app service is accessed using standard web protocols (HTTPS) and secured using the appropriate SSL certificates. Services are tiered following industry and software vendor best practice principles.

The network architecture is compliant to ISO27001 and utilises a multi-tier isolated VLAN design with fully managed software firewalls on each server, IDS/IPS, SQL firewalls, data encryption and load balancing to ensure security and performance for all users of the SIMS Teacher app service.

The SIMS Teacher app service is fully penetration tested at the application layer and externally by a nominated Security company every quarter.

## Device security

Capita SIMS recommends that the school has additional security policies in place to include the use of devices containing school data inside and outside of school premises. Furthermore, it is strongly recommended that the school incorporates additional device security measures that enable the school to remotely wipe, disable and locate a device.

Schools are advised to implement fully a MDM (Mobile Device Management) service allowing for centralised management of security policies, and at a minimum enforce:

- Device passcode
- Regular device passcode change
- Wipe on repeated device passcode failure
- Remote wipe
- Disable screenshot capture on the device

In addition, schools are advised to ensure the following are in-place for devices that are authorised for access to the SIMS Teacher app service:

- Security tag devices.
- Conduct a regular physical audit of devices.

- Supply users with best practice advice and a governance policy for use and storage of the devices.

## Device loss

In the event of a device loss, the following best-practice advice is recommended:

1. Immediately attempt a remote wipe of the device if possible.
2. Disable the teacher's SIMS account for at least 24 hours to be certain the session has expired.
3. Reset the SIMS password for the teacher.
4. Reset the Microsoft, Google or Office 365 account for the teacher.
5. Deactivate / revoke the device and the account in the SIMS Teacher app service management console.
6. Re-activate the user through a new device association and teacher account activation code after 24 hours.

## Two-step (2-factor) authentication for Administrator and Teacher Access

Capita Children's Services recommend that schools enable two-step (two-factor) authentication for their SIMS Teacher app administrator and teacher access account (Microsoft, Google or Office 365) as an extra layer of security.

Two-step authentication provides an increased level of security for Microsoft, Google or Office 365 accounts as additional information will be required to access an associated account.

Two-step authentication is enabled within the Microsoft, Google or Office 365 account (not within the SIMS Teacher app) and when setup, each time the user accesses the SIMS Teacher app they will be asked for two pieces of information in addition to their username. The user will be asked to enter their password plus a security code and they will only gain access to the system with these details.

Microsoft, Google or Office 365 will send a unique access code to the user's designated mobile phone via SMS, to a Microsoft or Google app, or via email. This code will provide secure access to the SIMS Teacher app system.

**Important Note:** Two-step verification is a great tool to help protect a Microsoft, Google or Office 365 account, but it does require the user to keep their account up to date and ensure all login details are kept securely. If the user's security information changes (phone or alternative email), it's important to update their Microsoft or Google account before they discard of any old information.

If the user knows their password but lose access to their secondary security proof, Capita Children's Services or Microsoft or Google customer support cannot update it for them. The user's only option is to go through a recovery process that enforces a 30 day wait before they regain access to their account –this is to ensure someone malicious hasn't used this as a way to take over their account.

If the user loses access to their password AND all OTHER security information, they will not be able to regain access to their account – this is a security measure. A new teacher app account will need to be setup in the management console and the teacher will need to re-authenticate with a different Microsoft or Google account.

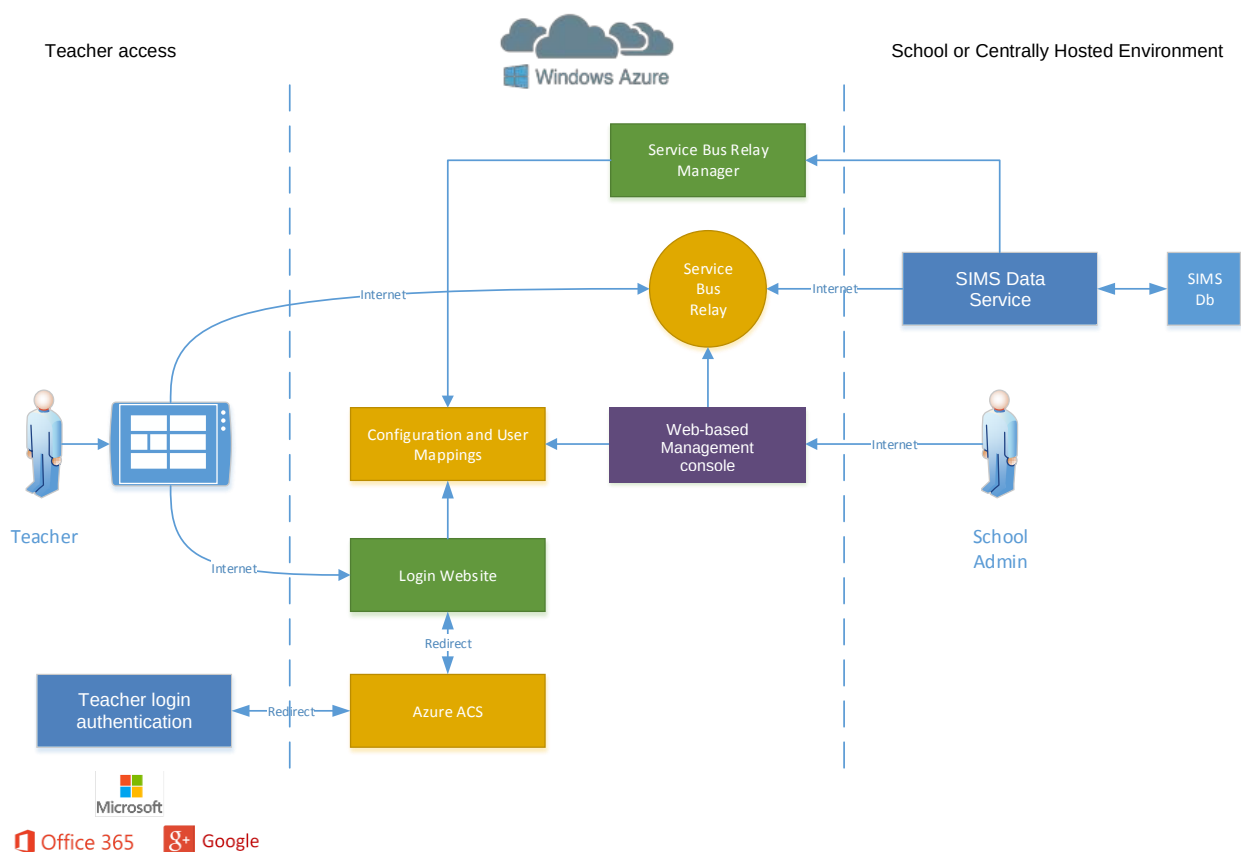
More information on how to enable two-step (two-factor) authentication for Microsoft accounts is available from the [Microsoft website](#).

More information on how to enable two-step (two-factor) authentication for Google accounts is available from the [Google website](#).

For information on how to keep information protected please also see <http://www.getsafeonline.org/>

# SIMS Teacher app Service High-level Architecture

The high level architecture of the SIMS Teacher app service is described in the diagram below:





# Setup and installation of the Teacher app

## School ordering of the SIMS Teacher app service

The Teacher app pricing is based on an annual pro-rata subscription, (1 or 3 year terms), with all subscriptions renewing on 1st April. Subscriptions are based on a charge per pupil, per year.

To sign-up for the SIMS Teacher app service, schools will complete an online order request form that will be available from the Capita SIMS website ([www.capita-sims.co.uk/teacherapp](http://www.capita-sims.co.uk/teacherapp)). The online order request will be processed by Capita Children's Services. We aim to process a school's order within a few working days of receiving the order request (excluding UK weekends and bank holidays).

If we require further information to help verify the school's order request, we will contact the school at the email address provided. Where further information is required or needs to be verified, it may take longer to process a school's order request.

The school contact who made the order request will receive an automatic email acknowledgment when an order request for the Teacher app has been received by Capita.

## Teacher app order confirmation and setup

Once a school's order has been verified and processed, the school will receive the following information:

### **1. Order confirmation & getting started details**

- The school contact who ordered the Teacher app will receive a confirmation email containing details of how to download the installation and setup information needed to get started with the SIMS Teacher app service for the school.
- This email should be forwarded by the school contact to their SIMS technical support for installation.
- The order confirmation email will provide a unique link (URL) for the school. The school's SIMS technical support will be able to access this link and download the installation and configuration files required to setup the Teacher app service onto the school's SIMS system.

### **2. SIMS Teacher app agreement summary (contract)**

- Following the school's order confirmation by email, they will receive a SIMS Teacher app agreement summary document (contract) from their SIMS contact - this will need to be signed and sent back to Capita Children's Services within 2 weeks of receiving the agreement document otherwise the SIMS Teacher app service may be suspended.

## About the SIMS Teacher app service setup

The Teacher app service configuration has been designed to be self-service by the school's SIMS IT support – there are **2 phases** to the setup and getting started with the app – these are outlined below, and are detailed further in supporting information the school will receive.

### PHASE 1 – Technical setup and configuration (completed by the school's SIMS IT support)

Step 1: Check the SIMS Teacher app pre-requisites

Step 2: Using the URL link within the Teacher app order confirmation email, register the school via the SIMS Teacher app setup site (<https://setup.capita-sims.co.uk>)

Step 3: Download the setup and configuration folder from the Teacher app setup site

Step 4: Create an External Access Account

*The External Access Account is needed to provide access from the SIMS Teacher app services to access the school's SIMS system.*

Step 5 Configure the SIMS Services Manager and the Teacher app services

### PHASE 2 – Managing devices and teacher access (managed by a school administrator)

Step 5: Access the online Teacher app management console – to create device association codes and teacher activation codes

Step 6: Download the Teacher app from the App Store and start using the app

Once the Teacher app services have been configured the school will be able to get started with the Teacher app in school. The school's data is provisioned and updated in real-time as part of the Teacher app service – there is no scheduled data synchronisation or manual refresh required for the Teacher app.

The school (or SIMS support team if offering an agreed service for the school) will have access to a web-based SIMS Teacher app administration console – this will allow an administrator to manage access for teachers – including activating devices and also activating teacher accounts to use the Teacher app for their school.

**Please note:** the installation and setup of the SIMS Teacher app and configuration of the SIMS Services Manager should be completed by a person with operational technical knowledge of the SIMS database for the school.

The person who completes the installation will need to have:

1. Access to the schools SIMS SQL database
2. SA (system administration) permissions
3. Access to the SA password for your SIMS SQL instance if the account logging into the server does not have SQL System Admin permissions
4. Admin level access to SIMS
5. Knowledge on how to apply patches using dbupgrade

## Devices

Capita SIMS does not provide devices (iPads or other tablet devices) as part of the Teacher app service – schools are required to provide the devices to be used by teaching staff.

# SIMS Teacher app frequently asked questions

## What does the SIMS Teacher app do?

The SIMS Teacher app has been designed to make every day classroom tasks easy – the app makes it effortless for teachers to record attendance data for every pupil. The app already knows which class you're in and displays your pupils. Select all as present with a simple touch and you can get back to your class. If you need to mark a pupil late, the app automatically indicates the current number of minutes past the class start time.

By tapping a pupil's picture, a teacher is able to record attendance, record achievement or behaviour points and record minutes late to class. They can also see at a glance if the pupil has been awarded behaviour points in a previous class that day, making teachers aware of those who are likely to misbehave in their lesson.

## What are the benefits of using the SIMS Teacher app for the school?

At SIMS we believe that great teaching matters and every school can be outstanding. The SIMS Teacher app helps teachers to focus more on what they do best... teaching.

- The SIMS Teacher app has been designed specifically to support teachers in achieving even more by simplifying key classroom activities and reducing time spent on classroom administration.
- With real-time access to timetables and student information, the SIMS Teacher app helps to accelerate the flow of information throughout the school to extend improved teaching and learning.
- By making everyday classroom tasks simple for teachers, they can spend more time on teaching and learning – supporting children to achieve their full potential.

## Does the school have to pay an installation or connection charge for the SIMS Teacher app?

No - the SIMS Teacher app has been designed to be self-service for the school/supporting SIMS IT support, which means Capita do not require an installation or connection charge.

## How Is the SIMS Teacher app installed/setup?

The SIMS Teacher app has been design to support a self-service or supported setup process. The necessary files to enable the SIMS Teacher app service will be available as an online download file, which can then be configured by the school's technical support team.

Once the Teacher app services have been configured in the SIMS Services Manager, the school will be able to get started with the Teacher app in school. The school's data is provisioned and updated in real-time as part of the Teacher app service – there is no scheduled data synchronisation or manual refresh required for the Teacher app.

The school will have access to a web-based SIMS Teacher app management console – this will allow an administrator at school to manage access for teachers – including activating devices and also activating teacher accounts to use the Teacher app for their school.

## What are the technical pre-requisites for the school to use the SIMS Teacher app?

Please refer to the [Teacher app technical pre-requisites](#) included within this document

## What devices can the school use for the SIMS Teacher app?

The SIMS Teacher app can currently be used on apple iPads with iOS 7 and iOS 8.

Windows 8.1 - specific device compatibility will be confirmed

Android KitKat v4.4.2 or above - specific device compatibility will be confirmed

### What is the minimum specification for tablet devices?

The SIMS Teacher app can be used on apple iPads (version iOS 7 or iOS 8), which is compatible with:

- iPad 2
- Third-Generation iPad
- Fourth-Generation iPad
- iPad mini
- iPad Air 1 & 2

Windows 8.1 - specific device compatibility will be confirmed

Android KitKat v4.4.2 or above - specific device compatibility will be confirmed

### How does the SIMS Teacher app talk to SIMS?

The SIMS Teacher app talks to the school's SIMS system via the SIMS Service Manager that is configured on the school's SIMS server. The SIMS Service Manager applies two layers of authentication (device and user) before allowing data to be transmitted. Transmitted data is encrypted so that it can only be decoded by the device it is being sent to.

### Is the data access through the Teacher app secure?

Yes – the SIMS Teacher app is a securely hosted web delivered service via the web using standard HTTPS TCP/IP protocols, with 256-bit Secure Socket Layer (SSL) point-to-point encryption.

Data stored on the teacher's authorised device is encrypted using the international industry standard AES 256-bit encryption (Advance Encryption Standard). The encryption key is a combination of device specific information and a user PIN number sequence.

All information accessed by the SIMS Teacher app is secure and only accessible by completing several security steps and automated checks.

The SIMS Teacher app only works with devices that the school has registered and provided an activation code for. The data is encrypted for the device and the user.

The SIMS Teacher app also works with two-factor (2FA) authentication where users accessing the app have this enabled. Two-factor authentication is setup within the users Microsoft, Google or Office 365 account and when enabled, each time a teacher access their SIMS Teacher app, they will be asked for two pieces of information in addition to their username. They will be requested for your password plus a security code and will only gain access to the system with these details.

### What happens with the data when the Teacher app is offline?

When a teacher logs in via their Microsoft/Google/Office 365 account they are required to enter a 4-digit PIN twice. On successful login the Teacher app will automatically perform a silent download of the teacher's lesson data for that day only – the cached data will be stored in a unique encrypted Offline Data Store on the device.

The offline data access is intended to provide teacher's with the ability to record attendance, behaviour and achievement information where no internet access is available, for example during a fire alarm drill, on the games field or out on a school day trip.

The SIMS Teacher app will work wherever there is an internet connection – in school or outside of school – the offline access is intended to provide a support for teachers where connectivity may be unavailable for short periods of time.

The following information is cached:

- Only the data for the logged-in teacher's data is cached for that working day only
- The teacher's timetable view for the week

- Each session and lesson in the timetable for the current day only
- Summary information for each student who is in a session/lesson for that day only
- Student detail information for each student who is in the teacher's session/lesson for that day only
- Information required to take attendance for each session and lesson in the day only
- Information required to record an achievement event
- Information required to record a behaviour event

### Is the cached data secure?

Yes - the information that is cached to allow offline access is stored on the device in a unique, separate secure and isolated storage location on the teacher's device. The folder is encrypted using key value pairs and AES 256bit encryption. The encryption key is a combination of the device specific information and the user entered PIN.

### Can any data cached offline get transferred to the Apple iCloud?

No - the information is stored in the teacher's SIMS Teacher app isolated storage location folder, which is encrypted and separate from other folders on the device and is not uploaded to external storage facilities, such as the iCloud, if the teacher's device gets backed up.

### How long is the data stored for when the Teacher app is offline?

The data cached for the teacher is only stored up until 00:00 hours on the day the teacher accesses the teacher app – this means that any lesson or student information is only stored for (1) the teacher who has successfully logged in and authenticated their access, and (2) up to 00:00 hours on the day of access.

Any lesson or student data cached on a device is deleted automatically at 00:00hrs daily. If a teacher records attendance, achievement or behaviour information whilst their device is offline, this data is stored securely and then updated automatically into the school's SIMS system once an internet connection is re-established.

### What are the support arrangements for the SIMS Teacher app?

Capita SIMS provides support for the Teacher app to schools as part of the subscription service; however, several SIMS support teams we are working with are planning to help support their schools by offering 1<sup>st</sup> line support. There is no rebate to SIMS support teams from Capita SIMS for first line support; however, several support teams we have spoken with are keen to ensure they are the first point of contact for schools for support calls to ensure continuity and consistency of support services – which benefits both the schools and the SIMS support unit.

### How does the SIMS Teacher app talk to SIMS?

The SIMS Teacher app talks to the school's SIMS system via the SIMS Service Manager that is configured on the school's SIMS server. The SIMS Service Manager applies two layers of authentication (device and user) before allowing data to be transmitted. Transmitted data is encrypted so that it can only be decoded by the device it is being sent to.

### Can the school Teacher app administrator/teachers enable two-factor authentication (2FA)?

Yes – Capita Children's Services recommend that schools enable two-factor authentication for their SIMS Teacher app administrator account as an extra layer of security.

Two-factor authentication provides an increased level of security for a Microsoft, Google and Office 365 accounts as additional information will be required in order to gain access. This would provide increased reassurance to both the school and the parents.

Two-factor authentication is enabled within the Microsoft, Google or Office 365 account and when setup, each

time an administrator or teacher accesses their SIMS Teacher app they will be asked for two pieces of information in addition to their username. They will be asked to enter a password plus a security code and will only gain access to the system with these details.

Microsoft and Google sends a unique access code to a designated mobile phone via SMS, to a Microsoft/Google app, or via email - this code will provide secure access to the Teacher app. Two-step verification protects you everywhere a Microsoft or Google account is used.

### **Can teachers use their existing school email address for a Microsoft/Google/Office 365 account?**

Yes – when creating a Microsoft/Google/Office 365 account teachers can use their own school email address (it does not have to be a Microsoft email address) and use their own password.

Teachers who already have a Google, Microsoft or Office 365 account can use their existing access details for the Teacher app.

### **Why do teachers need to register their email address with a Microsoft/Google/Office 365 account to access the SIMS Teacher app?**

When teachers first access the SIMS Teacher app, they will be required to choose either a Microsoft or Google account to authenticate their Teacher app account with. Once this has been done the teacher will be required to enter an activation code supplied by the school administrator plus a secondary piece of data from SIMS.

Once the successful activation has been completed, each time the teacher logs into the Teacher app, they will be required to sign-in with their selected Microsoft or Google details.

Capita have chosen to use Microsoft, Google and Office 365 identity provision, as many teachers will already have one of these accounts. This has the added advantage that teachers don't have to remember different usernames and passwords and they are always in control of your own access details.

The SIMS Teacher app uses the Microsoft/Google/Office 365 account for safety and to provide secure authentication when you log in to the app – we do not require any additional information from your Microsoft account, only what is needed for authentication.

### **Can teachers access the SIMS Teacher app when they are away from school?**

Yes – the SIMS Teacher app allows teachers to access the service anywhere they have an internet connection along as, (1) the device they are using has been authorised by the school (associated), and (2) their Teacher app access account has been activated successfully.

### **What is the SIMS Teacher app management console?**

The Teacher app management console is a web-based system accessible by authorised school administrators to manage device access and teacher account access. The management console is available online 24-7 and provides the interface where administrators can create association codes for device authorisation, and activation codes for teachers that are listed from within the school's SIMS system.

The management console allows the school administrator to immediately block access to the Teacher app service when required.

# SIMS Teacher app Data Sharing update

This section provides an update about the SIMS Teacher app data sharing, including the safeguarding and security of data used within the Teacher app service. This update will form part of a Data Sharing Agreement (DSA), which should be understood by all establishments using the SIMS Teacher app service.

## SIMS Teacher app Data Movement Overview

The SIMS Teacher app service operates with the SIMS system and interfaces data through the SIMS Services manager. Selected school information is transferred to the Teacher application on the authorised device through SIMS data service. The data from the device is wirelessly synchronised with the school's SIMS system with the Teacher app and supporting service ensuring the data is updated in real-time, including timetables, attendance information, student/pupil details and other related information used within the Teacher app.

## SIMS Teacher app Transfer and Use of Personal Information

The SIMS Teacher app does not cache personal information on the app. The following information lists the maximum available data that can be accessed using the SIMS Teacher app:

### Students/Pupils

- Forename
- Surname
- Preferred name
- Date of birth
- Family/Home contact details for each pupil/student, specifically:
  - Contact Name
  - Contact Address
  - Contact telephone number
  - Contact email address
- Medical information
- Dietary information
- Achievement data
- Behaviour data
- Timetable
- Pupil/student photograph
- Pupil student's academic house, year group and registration group

### Staff

- Forename
- Surname
- Timetable
- Teacher photograph

Capita SIMS takes data protection and the safety and security of data in the SIMS Teacher app very seriously, and takes all reasonable measures to ensure the safety and security of data in the SIMS Teacher app, including personal information to maintain compliance with relevant parts of the 1998 Data Protection Act.



# Capita SIMS Teacher app Privacy Statement

We take care to protect the privacy of customers and users of the SIMS Teacher app. This privacy policy explains how we transfer, store and use data used with the Teacher app.

The SIMS Teacher app is provided by Capita Business Services Limited, 71 Victoria Street, London, SW1H 0XA. Company No. 2299747, t/a Capita SIMS Franklin Court, Priory Business Park,

Bedfordshire, MK44 3JZ. We are responsible for ensuring that your data is adequately protected in relation to the operation of the SIMS Teacher app.

The data and associated information used within the SIMS Teacher app reflects only the data in your school SIMS system. Any inaccuracies in the SIMS Teacher app should be corrected within the data in the establishment's SIMS system. Updates will be reflected immediately within the SIMS Teacher app where end user devices are connected to the internet.

## What information is transferred?

The SIMS Teacher app securely transfers students, staff and parental contact and grouping information such as school record identifiers, names, date of birth, home/family contact details and recent conduct information.

## What is my information used for by the SIMS Teacher app?

The information present in the SIMS Teacher app is used for the specific purposes of recording attendance, behaviour and achievement and associating students and staff to timetable information. Emergency contact details are also available as well as any relevant medical and dietary information.

## How is information held by the SIMS Teacher app?

Data in the SIMS Teacher app is encrypted for Personal Information, including anonymous photos.

## How long will my information be held for by the SIMS Teacher app?

Any data cached for the teacher is only stored up until 00:00 hours on the day the teacher accesses the teacher app – this means that any lesson or student information is only stored for (1) the teacher who has successfully logged in and authenticated their access, and (2) up to 00:00 hours on the day of access.

Any lesson or student data cached on a device is deleted automatically at 00:00hrs daily. If a teacher records attendance, achievement or behaviour information whilst their device is offline, this data is stored securely and then updated automatically into the school's SIMS system once an internet connection is re-established.

## Microsoft, Google and Office 365 account authentication

The SIMS Teacher app uses Microsoft, Google and Office 365 accounts for safety and to provide secure authentication when you log in. We do not require any additional information from your Microsoft or Google account, only what is needed for authentication.

## Device information

We may collect device-specific information (such as your hardware model, operating system version).

## Log information

When you use the SIMS Teacher app service, we may automatically collect and store certain information in server logs. This may include:

- details of how you used the SIMS Teacher app service
- IP address
- device event information such as crashes, system activity, hardware settings, Operating system, browser language, the date and time of your request and referral URL



**Analytics information**

The SIMS Teacher app uses third-party analytics tools to help us measure traffic and usage trends for the SIMS Teacher app service. These tools collect information sent by your device or the SIMS Teacher app service that assists us in improving the Service. We collect and use this analytics information with analytics information from other Users so that it cannot reasonably be used to identify any particular individual user.

**Geo-Location Information**

Certain devices allow applications to access real-time location-based information (for example, GPS). Capita SIMS do not collect such information from your device at any time while you download or use the SIMS Teacher app service as of the date this policy went into effect.

**Third parties**

We will not disclose any personal information we collect about you to a third party without your consent.