1. Introduction

This document outlines the capabilities of the Online Productivity Suite – the Glow Office 365 (O365) tenancy.

2. Capabilities

2.1. A single tenancy

There is a requirement for the Glow O365 service to provide an online productivity suite that is available nationally across Scotland.

Currently this capability is met by service provider Microsoft who provide a nationally available, cloud hosted Office 365 tenancy for sole use of the Glow users.

2.2. Single sign-on Authentication via RM Unify

There is a requirement for the Glow O365 service to allow single sign-on user authentication from Glow's RM Unify instance. The authentication should support seamless logon to the Microsoft O365 service for pre-authenticated users and it should direct non-authenticated users to RM Unify.

Currently this capability is met by the Glow O365 service configuration and it's integration with RM Unify to allow single sign-on authentication.

2.3. Cloud Storage

There is a requirement for the Glow O365 service to provide private storage space, accessible only by each individual user. Storage should be available for each user to allow the storing of documents, pictures, videos or any other allowed media. Documents stored online should be capable of being shared with any Glow user. This capability should also be available on mobile devices if required.

Currently this requirement is being met by utilising OneDrive that is available through O365 as part of Glow. OneDrive offers an initial 1TB of cloud storage for each user in Glow (this can be expanded to 5TB and continuously upwards thereafter in increments of 5TB) from which sharing of documents, pictures, videos or any other allowed media is possible.

2.4. Email

There is a requirement for the Glow O365 service to provide the capability to send and receive email internally and externally. Users should be able to attach items to emails, set up email distribution groups, search for all allowed users of the Glow email system and email any user in Glow.

This requirement is met using Outlook as part of the O365 offering.

2.5. Calendar

There is a requirement for the Glow O365 service to provide the capability to organise appointments and events for both individuals and groups of users. Users should be able to share appointments, events or full calendars with any Glow user.

This requirement is met by the Calendar function in O365 linked to Outlook and the calendar functionality in SharePoint Online.

2.6. Blog

There is a requirement for the Glow O365 service to provide the capability to set up and maintain a blog for the purposes of an e-portfolio or record of learning and achievement throughout their school life. Students and Teachers should be able to share blogs with other users in Glow and externally with other interested parties.

This requirement is met by Blog sites created as part of SharePoint in O365. Sway can also be used to create blog content that can be shared within Glow and externally. There is also a separate Blogs service (based on WordPress) available within Glow.

2.7. Web Site Creation

There is a requirement for the Glow O365 service to provide the capability for each school, teacher, student and learning support staff to create and maintain websites. This should include a document library that can be shared amongst Glow users. Users must also have the capability to customise and develop these sites so that teachers and students can progress and develop their sites over time.

This requirement is met through O365 using SharePoint Online. SharePoint Online offers document management functions and website deployment capabilities. Only sharing with other Glow users is currently allowed.

2.8. Sharing

There is a requirement for the Glow O365 service to provide the capability to share Documents, Libraries and Sites with other users inside and outside of Glow. This will allow for collaboration and national learning.

This requirement is met using features of SharePoint, OneNote, O365 Groups, OneDrive, Yammer, Planner and Outlook email. External Sharing is currently turned off for these features but is being reviewed based on educational demand and is pending decision.

Created content may be shared externally by email, while Sway and Forms allow full public sharing with control retained by the creator of the Sway or Form to amend or revoke this at any time.

2.9. Collaboration

There is a requirement for the Glow O365 service to provide the capability to collaborate on the development of documents online and at the same time to facilitate joint work on the same or similar projects. This capability allows for faster more real-time learning. There also needs to be common spaces for gathering and storing information on a subject or work from a number of students to allow teachers to collect, review and give feedback online.

This requirement is met through Office Online, SharePoint Online, Sway, Planner, O365 Groups, Forms and Yammer.

In Office Online, users can simultaneously edit Word, Excel, PowerPoint or OneNote from inside the browser or desktop and view edits from other people in real time.

SharePoint Online allows users to collaborate through Lists, Libraries, Pages and other media while engaging in discussion through site feeds.

Sway allows creators of Sways to share edit links with other users, both internally and externally, to collaborate in the creation of content in real time.

Planner allows a group of teachers and/or learners to work together to achieve common objectives by organising, assigning and managing the tasks associated. Planner also offers group members the functionality of O365 Groups.

O365 Groups brings together threaded email conversations, a shared calendar, shared file storage, shared notebook which quickly and easily allows a group of teachers and/or learners to work together.

Forms allows teachers and pupils create quizzes, surveys and questionnaires that can be completed by other teachers and learners or by members of the public.

Yammer is an organisational social networking service that facilitates fast and focused discussion of questions, ideas, problems and experiences that promotes better collaboration within and across school boundaries.

Microsoft Teams provides a collaborative space allowing Glow users to communicate and share materials in a closed virtual environment. Class Teams allow teachers to distribute assignments and resources to pupils. It allows pupils to update distributed materials or upload other evidence of learning to share with their teacher or fellow pupils. Teachers then have a collated view of all such evidence and can provide formative feedback from a single point

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2.10.   National Discussion

There is a requirement for the Glow O365 service to provide the capability to post questions, updates or information on a national stage to enhance and expand learning outside of the school.

This requirement is met using Yammer. This allows users to make posts to public groups that can be seen by all users of Yammer and potentially every learner and teacher in Scotland. Yammer groups can also be made private to a selection of members or posts can be made in direct messages between users where more privacy is required.

Newsfeeds are also possible at a website level within SharePoint Online and O365 Groups offer the ability to discuss topics amongst group members.

2.11.   Personal Website area for each user

There is a requirement for the Glow O365 service to provide the capability to create and maintain their own personal website area for blogging, learning content gathering or any other teaching and learning use.

This requirement is met by each user having a MySite area within SharePoint Online where multiple different types of sub site can be deployed to meet users' needs.

Similarly, each user has a profile in each of SharePoint Online and Yammer that is populated with details of the user's role and school and this can be supplemented with details of interests and expertise. This profile is visible to other users and helps learners and teachers to identify one another and to collaborate based on common interests.

2.12.   Content creation and editing

There is a requirement for the Glow O365 service to provide the capability to create new word processing documents, spread sheets or presentations. This is a core part of the capability so that new material can be created and shared from within the solution provided.

This requirement is met by Office Online and Sway. There is the capability to create Word, Excel, PowerPoint and OneNote documents. This is possible within the online applications or from any document storage area including the user's OneDrive, O365 Group files and SharePoint document library.

Users can create Sways – a type of online, mobile friendly presentation - by accessing Sway from the app launcher. Learners building Sways about particular topics are given access to copyright friendly media such as images, videos and online discussions related to their topic.

2.13.   Search

There is a requirement for the Glow O365 service to provide the capability to search for content across all sites and areas they have access to from one location. This should include hash tags and document metadata.

This requirement is met by using the search capabilities in O365:-

In SharePoint Online, search allows searching of the entire tenancy or can be focused on individual sites with the option of filtering the results after searching. Search can be targeted at a great number of properties such as filename, title, contained text, tag, metadata, file type, people or site.

Delve, powered by OfficeGraph, gives each user a personalised search experience with access to all of their own recently worked-on content, links to all activity of closest colleagues and the ability to surface and present search results with personal relevance. Delve previews the searched content in 'cards' and also includes content added as links in Yammer. Delve allows users to pin content to Delve Boards for ease of content curation and future navigation.

Users can similarly search for content in their Email mailbox by sender, recipient, date, body text or attached files.

Yammer has a powerful search that will return Groups, Notes, Files, Topics, People and Conversation simultaneously that match a search term.

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2.14.   Media

There is a requirement for the Glow O365 service to provide the capability for users to upload, embed and use different types of media content, such as photo and video, across all sites and areas they have access to from one location.

This requirement is met by SharePoint, OneDrive, O365 Video and Sway.

Content in O365 Video allows transcoding of content such that uploaded videos are rendered in many different formats so that playback is customised for the viewing device. It also offers intelligent consumption of available bandwidth and a content delivery network to offer scale.

There are embedding options for Video, Sway, Yammer, PowerPoint, Word and Excel within SharePoint Online and a range of other external services such as Glow Blogs.

2.15.   Workflow

There is a requirement for the Glow O365 service to provide the capability for users to be able to track their progress in given tasks from different areas within a site and for alerts and workflows to be set up.

This requirement is met by Planner and SharePoint Online.

Planner allows collaboration in a group with visual representation of tasks assigned to teachers or pupils, task deadlines, checklists and status.

SharePoint Online allows configuration of alerts and workflows which automate other common tasks such as adding to lists, sending email and requesting approval.

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2.16. Security

There is a requirement for the Glow O365 service to provide the capability for users to restrict access or grant access to individuals or groups of users. There should also be areas of Glow where users data cannot be searched or any security information given away.

This requirement is met by the full security model provided within O365. Unless created in a shared public space, user created content is private by default and users can grant access to named individuals, groups or the entire tenancy. Users may search across the entire tenancy but will only return results and gain access to content they have permission to access. Similarly, users may search for other users across the entire tenancy. The core data that exists for every user comprises Name, School, Year of Intake and Email address.

2.17. Accessibility

The solution should remain as accessible as possible to all learners. This should include screen reading capability, non-mouse navigation, colour contrast and font size scaling.

O365 conforms to several accessibility standards but in the main most accessibility features are client or browser based and out with the remit of the service provided.

2.18. Online Meeting Creation & Hosting

There is a requirement for the Glow Meet service to allow teachers and educational partner organisations to create and host online meetings (web conferences). These meetings serve a number of purposes, broadly described as:

- Supporting professional development opportunities for staff
- Delivering learning opportunities for pupils with subjects delivered online
- Collaborations across classrooms
- Interviews with experts
- National collaboration opportunities with partner organisations

Currently this capability is being met by using Microsoft Skype for Business within the O365 tenancy. .

2.19. Online Event Hosting

There is a requirement for the Glow Meet service to allow Education Scotland and educational partner organisations to create and host online events (web conferences) to be broadcast to learners and teachers in Scotland.

Currently this capability is being met by Microsoft Skype for Business. The service allows Glow users to create meetings using the Skype for Business Web Scheduler, from your Glow Calendar or from your Outlook desktop client.

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2.20. Meeting/Event Privacy

There is a requirement for the Glow Meet service to allow event hosts to select the privacy level for a Meeting or Event, the privacy levels should be set as "Named Users" or "All Glow Users".

Currently this capability is being met by the Microsoft Skype for Business service which allows you to restrict options when setting up a meeting using the Skype for Business Web Scheduler or the Outlook desktop client. Meeting organisers can set participant options and actions.

2.21. Single sign-on Authentication via RM Unify - Glow Meet

There is a requirement for the Glow Meet service to allow single sign-on user authentication from Glow's RM Unify instance. The authentication should support seamless logon to the Glow Meet service for pre-authenticated users and direct non-authenticated users to RM Unify.

Currently this capability is met by Microsoft Skype for Business within the O365 tenancy.

2.22. Broadcast Users & Roles

There is a requirement for the Glow Meet service to have different types of users or roles who can administer the service, host meetings, host events and participate in meetings or events.

Currently this capability is met by Microsoft Skype for Business within the O365 tenancy.

2.23. Streaming AV

There is a requirement for the Glow Meet service to have multichannel, real-time streaming of audio & video as part of the meetings or events.

Currently this capability is provided by Microsoft Skype for Business within the O365 tenancy.

2.24. Real time conversation

There is a requirement for the Glow Meet service to allow for real time conversation and Q&A within meetings or events.

Currently this capability is provided by Microsoft Skype for Business within the O365 tenancy.

2.25. On Demand (meeting/event) video playback

There is a requirement for the Glow Meet service to allow for meetings and events to be recorded as a single channel video file for future on-demand playback.

Currently this capability is met by Microsoft Skype for Business within the O365 tenancy.

2.26.   Access via devices

There is a requirement for the Glow Meet service to allow users to utilise the rich capabilities of Online Meetings & Events from a range of devices.

Currently this capability is met by Microsoft Skype for Business within the O365 tenancy.

2.27.   Accessibility – Glow Meet

There is a requirement for the Glow Meet service to provide an accessible web conferencing service which meets accessibility standards and allows more open access to disabled users.

Currently this capability is met by Microsoft Skype for Business within the O365 tenancy.

3. Document control

Item	Details
Document Owner	Graham Swinney (Service Manager)
Approvers	Emma Pollock (Head of Delivery and Service Management)
Distribution	Glow Connect – About Glow/Glow Policy Documents eRDM / Objective
Version control	27 September 2016:- - Emma Pollock – Minor updates and approval 22 September 2016:- - Neil McCafferty updated to reflect service additions July-Sep. - Graham Swinney – peer review of above. 22 July 2016:- – Neil McCafferty updated to reflect current O365 capability - G Swinney. Review of document and format updated to be in line with other capability statements. DMG & Team Portal removed from Distribution Group 12 May 2017: - R. Oliphant - Review and minor updates. 10 October 18 - G. Routledge – Review and minor updates including removal of reference to Wikis and classroom. Inclusion of Glow Meet capability statement also incorporated into this verison