

# Gardens & Museums IT

Issue 13  
Spring 2023

## Welcome

Welcome to Issue 13, and the Spring 2023 Gardens & Museums IT Newsletter.

Winter is always quite a strange time - December is often filled with a lot of excitement and anticipation for the Christmas period and some extended time off. But, it's swiftly followed by January and February, which are months I often find quite mentally and physically challenging and they certainly seem to take their time to pass. So I'm glad to say that we are in Spring - though as I write this it is snowing outside!

The start of this year has been busy, and alongside standard business as usual activities we have been actively involved in some interesting new challenges and developments across the Gardens & Museums. Network changes, alongside a considerable number of AV and Commercial Systems activities have certainly kept us busy!

Our work within the AV and Commercial areas is growing and growing, with a variety of requests making use, and benefiting from the wide-range of skills which lay within our team. Please see pages 6, 7 and 8 for some of the AV and Commercial Systems activities we have been involved in over the winter months.

A recent new initiative within the team is holding IT Open Sessions. These have been planned for some time, but we finally started holding in February, with the one at the Ashmolean being particularly successful. Please see Page 9 for more on this, including our reasons for holding these, and what we hope to achieve.

So, please read on for more on the above, and all the other things that we have been up to recently.

All the best

Carl



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## What's been going on? And what's coming?

### Network Resilience

Network redundancy and resilience improvement work has continued to take place across the Gardens & Museums. This has included hardware changes and system updates.

### Apple SSO Integration Improvements

We have recently carried out some improvement work on the Single Sign On integration of the Gardens & Museums Managed Apple Computers.

We had found before this work that the SSO implementation had been working intermittently with some users SSO log in working fine, and others not at all.

The work, which took place with the support of our Jamf partner Trams, has been successful and now the SSO integration and log in process works as expected.



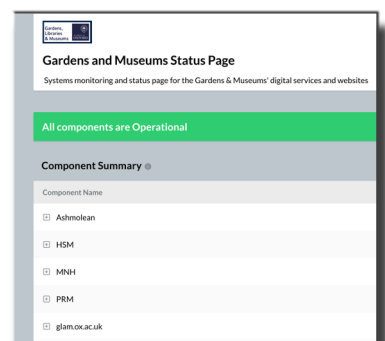
### Reuben College

Reuben College meetings related to the provision of IT and AV continue to take place as the date of building completion and occupancy comes closer.

### Gardens & Museums IT Status Page

The Gardens & Museums IT Status Page has recently been moved on to a new platform and re-designed as part of the process, incorporating monitoring for a number of key services and systems, including CMS and DAMS.

The status page is available to view here: <https://status.museums.ox.ac.uk/> and from the Service Status link on our website: <https://it.museums.ox.ac.uk/>.



### Harcourt Arboretum WiFi Cabling Work

The second phase of the external wi-fi deployment has begun at the Harcourt Arboretum.

This has required the digging of a trench from the tractor shed and through the arboretum to the woodland barn buildings, ready for electrical and network cabling to be installed.

The trenching work was undertaken in-house by the Arboretum team, and the project would not have been possible without them.



## What's been going on? And what's coming?

### Wi-Fi Project - Access Point Discovery

We continue to prepare for Wi-Fi Replacement Project, which is due to commence in the Summer.

A key component of this has been the identification of Wireless Access Points in use across the Gardens & Museums, which we continue to discover in some interesting places - as shown by this image.



### Ashmolean Finance Office Cabling & Connections

The Ashmolean Finance Office has recently been re-arranged, which required the re-connection of the computing equipment within the space. We took this as an opportunity to review the cabling within the office, and re-cable and re-connect the devices in a neat and uniform manner to improve office aesthetic and ensure safety.

### AV set up at Botanic Garden

We have recently been assisting the Botanic Garden with Hybrid Meetings in their Library. Please read Page 6 for more on this.

### Pitt Rivers Lecture Theatre

Further work has taken place in the Pitt Rivers Lecture Theatre - this time focussed on the aesthetic appearance of the space and how this could be improved. Further information is available on Page 7.

### Commercial Systems New Network

A new Commercial Systems Network has been provisioned and implemented across the Gardens & Museums. Please see Page 8 for more on this.

### Ashmolean Lower Floor Shop

Refurbishment of the Ashmolean Lower Ground Floor was recently completed, which required cabling and connectivity work. Please see Page 8 for more information on how we helped with this.

### Commercial Systems PDQ Deployment

New PDQ Terminals were deployed across GLAM in February, involving collaborative work between the GLAM Commercial Systems Team and Gardens & Museums IT. Please see Page 8 for more on this.



## MFA: Microsoft Authentication Application Update

The Microsoft Authenticator Application is one of the most popular and widely used mechanisms available to us to approve Multi Factor Authentication requests and accesses to Single Sign On services, which includes Nexus365 email and Microsoft Teams.

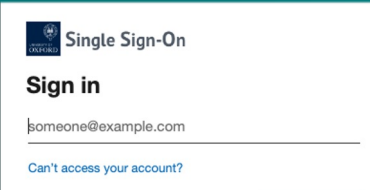
On the 22<sup>nd</sup> February Microsoft made an important change to the way the Microsoft Authentication Application works, and pertinently how you approve access to a Single Sign On service.

As the Microsoft Authentication Application is the recommended application for MFA approvals this change could have been quite impactful. Fortunately the change itself was quite minimal with the alteration in the approval mechanism, changing from 'approve' and 'deny' options, to requesting a number be entered to authenticate the request - with the number needed appearing on the device requesting access to the service. The steps to now approve access can be found below.

This change has not impacted those using the other available MFA methods (Text Message, Phone call, Hardware Token) but if you are currently not using the Microsoft Authentication Application and are interested in the possibility of doing so, you can find further information here:

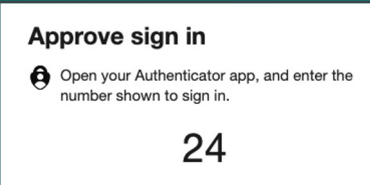
<https://help.it.ox.ac.uk/mfa#collapse3738196> .

**Step 1: Attempt to log in to University Single Sign On Service/System on device which needs access**



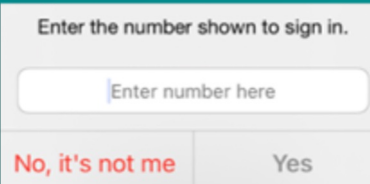
A screenshot of a 'Single Sign-On' login screen. It features the University of Oxford logo and the text 'Single Sign-On' and 'Sign in'. Below this is a text input field containing 'someone@example.com' and a link that says 'Can't access your account?'.

**Step 2: Once SSO Username and Password have been successfully entered on the device which needs access a number will be displayed on the screen**



A screenshot of an 'Approve sign in' screen. It contains a circular icon with a checkmark and the text 'Open your Authenticator app, and enter the number shown to sign in.' Below this, the number '24' is displayed in a large font.

**Step 3: The device which has the Microsoft Authentication Application installed will now pop up requesting the number be entered – please enter this number and once done select 'Yes', which will approve the authentication request**



A screenshot of a screen for entering the number shown to sign in. It has a text input field with the placeholder 'Enter number here'. At the bottom, there are two buttons: 'No, it's not me' and 'Yes'.

## University of Oxford VPN Update

The University of Oxford VPN is something that has become a common use application for many of us, with Remote Working and Working From Home now a regular aspect of our working practice. Towards the end of April, the University of Oxford will be making a change to how its VPN service works, aligning it with recent developments and improvements in security and log in. Thus far information which has been supplied to us about this change has been minimal, but we anticipate and expect regular updates regards this to be plentiful over the coming weeks as we get nearer to this time frame. And we will communicate this information alongside a confirmed date of change once we know more. An IT Services Project Page is available here: <https://projects.it.ox.ac.uk/vpn-replacement> .

For the time being we wanted to let you know why the change is being made, what is changing and any preparations which can be made beforehand.

### Reasons for the upgrade:

- To ensure continued hardware support for the Oxford VPN Service.
- To make essential improvements to security and to ensure the University's network is suitably protected.
- Single-Sign-On (SSO) & Multi Factor Authentication (MFA) Integration - users will log in with SSO credentials as opposed to Remote Access Account, to improve the log in experience and the service's security.



### What is changing?

- Cisco Client Access Only: Access to the new service will only be supported via the Cisco client. This means any in-built VPN clients, or non-Cisco applications will no longer work - this includes those on MacOS, iOS and Android devices.
- SSO and MFA Integration: The new service will integrate with SSO and MFA, so users will no longer use their Remote Access login (the Remote Access account will still be required for Eduroam access though).
- VPN Before Login Removal - this will no longer be available as it is incompatible with MFA. Currently it is used with CONNECT Computers for aspects of remote working, but a new solution is being worked upon by IT Services to replace this.

### What do users of the VPN Service need to do?

As there are many different use cases of the VPN and a number of different ways of connecting, IT Services will be sending out dedicated communications from the 13<sup>th</sup> of March. Please do look out for these messages and follow the guidance given. And if you do have questions or are concerned or confused about anything detailed please do not hesitate to get in touch.

Equally, if you have not ever used the Cisco AnyConnect VPN Client and would like to familiarise yourself with its use then it can be downloaded, installed and configured by following the guidance here: <https://help.it.ox.ac.uk/vpn#tab-2774281>. Please bear in mind that the current log in process (using Remote Access Account) will be different once the change has been fully implemented.

## Audio-Visual Systems & Services Update

Our engagement with the wide-ranging Audio Visual systems, services, technologies and projects continues to grow and grow. And over the winter months we've received a number of requests for help, assistance and advice alongside the numerous preventative AV activities that we've put in place since August, when the Gardens & Museums AV Systems & Services review began.

The value that we can add in this area continues to be seen throughout the Gardens & Museums, and the variety of requests that we've received have needed the attention from a number of the team to address, due to the differing skills needed to fulfil.

Please find below a few highlights of the period, which demonstrate the variety of competencies and skills which have been needed and used throughout the AV Systems & Services Review, and how we can actively assist with AV projects and work across the Gardens & Museums.

### Botanic Garden Library

An aspect which we were keen to address as part of the AV review was to provide a point of contact and expertise for the provisioning of AV in spaces across the Gardens & Museums, as opposed to outside consultants being contracted for simple installs. It is a wide and well-known University wide issue that significant amounts of money is being spent on consultancy for simple set ups and configurations, so we were very glad when the Botanic Gardens got in contact for some advice on how to provision AV and Hybrid Meeting connectivity In their Library.

Initially Calum and I visited the space and met with Heidi and Lauren to discuss their requirements, before suggesting a potential solution (a large wall mounted LED display and Panacast Video Conferencing System), and one which we could implement as a temporary set up for the Gardens to properly test before committing any money.

Shortly after we visited the space again and set up the temporary solution for testing, whilst also measuring the space in order to discuss the requirements with suppliers to ascertain costs and quotes to formally provision the solution.

### Ashmolean Egypt Interactive

A key aspect introduced as part of the AV Review was preventative maintenance checks and servicing of the known Interactives across the Gardens & Museums. This recently proved very beneficial at the Ashmolean Museum where one of these checks identified an issue with the Mummy Tomb Interactive within the Egypt Gallery.

Although the fault can't be fixed, mitigations have been put in place to keep the Interactive in service whilst a replacement machine is sourced.



## Audio-Visual Systems & Services Update

### Natural History Museum Tree of Life Interactive

The Tree of Life at the Natural History Museum is an incredibly popular interactive, and one which you often find children and adults crowding around to utilise.

When we were contacted with an issue with the interactive we understood the importance, and need to attend as soon as possible - which we did the following morning before 8AM. After a period of diagnostics we were able to replicate the fault and establish that a loose connection in the screen was causing the interactive to lose display.



We subsequently replaced the cable and using cable ties positioned the cable so that it is always in as upright position as possible which resolved the issue. Calum and I, alongside Museum Front of House continue to monitor the Interactive to ensure its continued function.

### Pitt Rivers Museum Lecture Theatre

Since the AV Systems & Services review began in August we have carrying out a series of phased improvement on the Pitt Rivers Lecture Theatre, and coincidentally the Pitt Rivers Museum Lecture Theatre was actually the first location that Calum worked in.

The latest phase of work was focussed on improving the aesthetic of the space, with key priorities being removing the existing equipment from the floor and installing in an AV cabinet. And further to this improving the cabling in the space.

Each task had its complications, but the cabling was certainly the more challenging, as it ran from two different points in the space - being across the ceiling and behind the projector screen and from a floor box and over the floor.

On analysis of the space we noticed that the majority of the cabling could be provisioned from the back of the room and incorporated with that already behind the projector screen - sadly with the exception of the cables connecting the two speakers.

On further review we looked at how the speaker cables ran under the floor, and carefully detached from the floor box and pulled through from the point that they went in to the floor. We were successful in this and were then able to provision the speaker cables alongside those behind the screen.



After some further cable tidying activities we completed, and had made a considerable and notable difference.

## Gardens & Museums IT and Commercial Systems Team - Collaborative Working

Over the course of my 5 years working in the Gardens & Museums I've had many opportunities to work with the Commercial Systems Team. Helen and I originally shared the same working space, so we got to know each other very well, and Helen was a great support when I originally started here, so I've always tried to help Helen and her team when I can.

One significant advantage to the Commercial Systems and AV Service review, and the temporary additional resource that this has brought alongside a Gardens & Museums IT formalised engagement with the Commercial Systems is that it has given us the opportunity to work together more, and formally look at ways we can help each other, as well as improving the Commercial Systems in place, such as Point of Sale and Contactless Donations.

This arrangement is already showing its value and benefit. And since it commenced in August, and in particular since December we have worked closely, collaboratively and successfully on a number of projects and improvements across the Gardens & Museums, of which you can find details below.

### Commercial Systems Network

One piece of work, which not only underpinned other recent Commercial Systems projects, but is also a significant security and service improvement was the design and implementation of a Commercial Systems Virtual Network. This network is to be utilised solely for Commercial System devices, to enhance the security of this equipment, and the critical activities which take place on them. Implementing this change required considerable work across the estate, and at times to ensure there was no impact to commercial operations.

### Ashmolean Lower Ground Shop Refurbishment

As many of you will be aware the Ashmolean Lower Ground Floor Shop has recently been refurbished to great effect.

Initially we worked closely with the project to ensure that designs and development incorporated power and network sockets in the correct places.

And for the install we worked directly with the Commercial Systems Team to configure new Point Of Sale devices for the space, as well as carry out cabling and installation activities to make everything work.



### PDQ Terminal Replacement Project

Towards the end of February the PDQ Terminals for each Till Point across GLAM were replaced. This was a significant change that not only required a lot of work on the changeover day, but significant planning and collaboration between Gardens & Museums IT and the Commercial Systems Team to ensure the changeover process was as seamless and efficient as possible, taking in to account the number of sites involved and the potential impact on commercial trading.



## Gardens & Museums IT Open Sessions

During February, and continuing in March the Gardens & Museums IT Team have been running IT Open Sessions as an alternative means to offer support and communicate with our colleagues. The sessions have been run without an agenda, so that our colleagues can meet with us and discuss any projects or ongoing issues which they may have, or simply just to have a chat, without the need to arrange an appointment. And in the instance of new starters to potentially meet us for the first time.

Running regular Open Sessions has been something we've been looking to implement for some time, having run very successful sessions during the onset of the Covid Pandemic - in view to preparing and getting you ready for Working From Home.

Thankfully, we're now not dealing with a global pandemic, and although the importance of such instances is perhaps not so pressing, the open sessions do offer lots of benefits, and the option to deliver IT support in a different way. An example of some of the benefits can be found below.

- **An opportunity to meet us face-to-face in an open forum to discuss any matter.**
- **To discuss or get advice on any IT issues or problems which you may have, whether big or small.**
- **To discuss any up-coming projects or innovations within your respective departments and location.**
- **For new members of staff to meet with us and receive an overview of IT within the University and the Gardens & Museums.**
- **To talk through any general IT matter.**

As a new initiative it is under review to ensure that it offers benefits to you, but crucially it offers value to the business. Carrying out the Open Sessions does require a fair amount of background administration (organising dates, booking spaces, arranging resource), and importantly during the sessions the members of the team being available for the session to take place, and not carrying out other work.

Although the Ashmolean session was incredibly fruitful and well received - with around 20 people coming to see us - the other sessions haven't been as well attended. As much as we do want to continue the Open Sessions it is important for them to be seen as beneficial, and therefore it is incredibly important that the sessions are attended and supported. So please do come along if you think that such sessions are beneficial and that you want this initiative to continue.

If you have attended one of the Open Sessions thus far, please do feed back your thoughts, and whether there are any improvements that we can make. Equally, if you didn't attend perhaps ways and means we could make them more appealing.

## Service & Support Statistics – 1<sup>st</sup> November 2022 to 31st January 2023

Quarter 2 of the 2022 to 2023 Academic Year has been a very busy time once more, and although the numbers of requests received are less than in the same period last year (2021/22), they are still much higher than in Quarter 2 for both 2019/20 and 2020/21. In this period we received 97 Audio Visual requests (8% of overall total), and 43 Commercial requests (4% of our overall total), which is a significant increase in the number received. Also throughout Quarter 2 a number of activities took place to improve both the resilience and redundancy of the networks at each location.

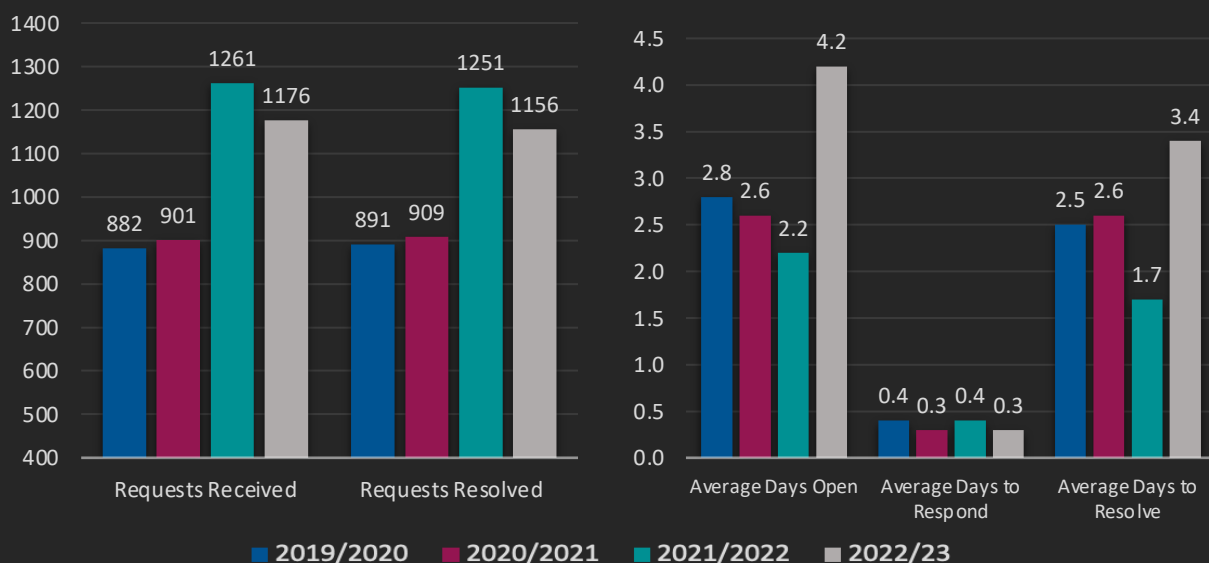
Requests Received  
1176

Requests Resolved  
1156

Avg. Days to Respond  
0.3

Avg. Days to Resolve  
3.4

Support Request Comparison - 2019/2020; 2020/2021; 2021/2022; 2022/2023



Location	Requests	Percentage
Ashmolean Museum	323	28%
Museum of Natural History	99	9%
Pitt Rivers Museum	157	13%
History of Science Museum	48	4%
Botanic Gardens & Arboretum	71	6%
GLAM Divisional Office	99	8%
Bodleian Library	14	1%
All sites - requests and activities which benefit or impact all locations	365	31%

