

Royal Holloway, University of London

Client

Royal Holloway, University of London: users include 8,500 students and 1,500 staff

Challenge

Deliver consistently high service levels and uptime at optimum efficiency levels while controlling IT and related costs – with a small internal team and limited internal resources: *“The business simply cannot operate without effective IT services”*

Solution

Equipment supply, deployment, ongoing services, support and maintenance for a complete mission-critical virtual platform – including virtualised servers, data backup and replication, SAN and more

Benefits

- Greater business agility
- Reacting faster to requirements
- More availability and increased uptime
- Reduced costs – including less headcount and resource required
- Less space, power and cooling helps with costs - and promotes greener IT

ICM helps Royal Holloway create tomorrow’s IT infrastructure

With an outstanding reputation for teaching and research, the college also depends on world-class IT - which is now founded on a virtual platform developed in collaboration with ICM. *“We have a strong partnership with ICM – they’ve helped us to succeed”* says Laura Gibbs, IT Director, Royal Holloway.

A valuable catalyst for change, ICM has provided consistent support to Gibbs’ in-house team: *“Engaging with ICM means we’ve been able to do things more quickly and with greater certainty. Crucially, there’s a significant skills and knowledge transfer, which means we have a truly sustainable model. We’re left with a full understanding and capability of the technology.”*

Virtualisation delivers benefits

Royal Holloway’s platform includes HP Blade servers, HP storage area networking (SAN), backup, VMware virtualisation and integration technology (including VDI virtual desktop infrastructure), and Vizioncore (now Quest) for virtualisation management, all backed by ICM Managed IT Services and consultancy support from ICM Professional Services. *“If our systems don’t run, the business can’t operate,”* Gibbs says.



“We only have a small IT team, so an important part of our strategy is to work with trusted partners, bringing in resources and expertise that enable us to achieve more than would otherwise be possible”

Laura Gibbs IT Director Royal Holloway

“The only thing not on the virtual platform is end user data, people’s documents,” says Huw Michael, Technical Architect. *“Virtually everything to do with IT and the business lives on our virtual platform and SAN – finance data, student data, operational data – and we’re continuing to consolidate.”* Gibbs expects to continue making savings and efficiency gains: *“These days, you need a very good reason for something not to be virtualised. Our rubric is to always ask: can it be virtualised?”*

Managed Hosting & Cloud Services

Business Continuity & Disaster Recovery

Managed IT Services

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Professional Services

Product Supply



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Delivering technology – building in-house skills

"In 2007 we started looking at virtualisation, and already had some limited storage consolidation," says Michael. Royal Holloway wanted to reduce the footprint in its data centre: *"It was the classic situation,"* Michael adds. *"We were running out of space, power and cooling with all the servers in there. We wanted to do new things without having to build a new data centre at that time, or co-locate."* VMware was unable to deliver the services Royal Holloway wanted to deploy around its products: it could provide the reference architecture but not support it. *"We wanted someone to come in and work with us, to help build our architecture, something that would stand up, and help develop our competencies in-house,"* says Gibbs. *"When we talked to ICM, they said they could provide the products and the services. They knew what they were talking about."* Royal Holloway carried out a scoping exercise then bought the equipment for virtualisation plus additional services, with ICM handling deployment. The college also implemented a HP SAN. *"We got a great price, so it wasn't the big capital outlay a SAN would previously have represented,"* Michael says. The next stage was backup and replication. *"Virtualisation, consolidating 250 physical servers down to 20, meant we avoided all the problems around space, power and cooling, and had the opportunity to replace our four or five backup solutions."* By this time, Royal Holloway had built a new data centre, engaging ICM to move all equipment from the old site. Maintenance support was also moved to ICM.

Backup and replication: 'a huge game-changer'

Today, Royal Holloway has two data centres, 1.5 miles apart, a development that led to its backup solution being extended. *"We didn't want to manage physical tape any more. Now, we backup a site overnight and copy across to the other site, with vaulting to tape there, so reducing overheads,"* Michael says. *"That was quite a challenging project, but any issues were dealt with by ICM. The hallmark of a real partner isn't so much how they work when things run smoothly, but how they react and solve the problems that inevitably arise."* The solution now carries out the required backups, rotating virtual tapes and vaulting onto physical tapes – all automated.

These latest deployments represented a major investment by Royal Holloway. Additions to the platform included more SAN capacity, real-time replication and VMware integration technology – to avoid a single point of failure. If a failure occurs on one site, you simply click and everything comes up in the other data centre. *"In terms of failover, we can start running services from the other site in just 60-90 minutes,"* says Michael. In this way, Royal Holloway is moving

beyond 'traditional' disaster recovery to ensure optimum resilience across all production work - *"and that's a huge game changer,"* says Michael. *"You may never need to push that button, but having that capability in place could make all the difference. It's an insurance policy."*

Moving forward with confidence

"We have vastly increased resilience," Gibbs adds. *"Space, power and cooling are no longer issues. We can ensure systems uptime. And we've removed certain manual tasks. The capacity we've gained means we can concentrate on more 'added value' work: we can do so much more, and are more agile. We're better at provisioning. And we certainly saw huge cost savings when we first moved to virtualisation at our former data centre."* But ultimately, she says, *"You can't really place a value on having that resilience, the ability to avoid downtime."* In terms of capital costs, Royal Holloway can now plan more effectively: *"It's clear what we need to do, and further investments required, rather than adding new servers or capacity in an ad hoc way. We're more mature as an organisation, something that's been facilitated by people like ICM. We're much further along the curve in terms of our capability model."*

She adds, *"We trust ICM: it genuinely does care about Royal Holloway. Once we agree a scope, approach and budget, we know ICM will deliver – come hell or high water."*

About Royal Holloway

Royal Holloway is one of the University of London's biggest colleges, and ranked 13th overall in the UK in the 2010-11 Times Higher Education World University Rankings. A world-class institution, with a 135-acre Surrey campus supporting 1,500 staff and 8,500 students.

About ICM

We take a business-led approach to align your business needs to the right IT solution, enabling you to drive innovation and improve service, at a lower cost and with reduced risk to operations. You can choose from individual services or a complete approach: Managed Hosting & Cloud Services; Business Continuity & Disaster Recovery; Managed IT Services; Networking & Unified Communications; Professional Services; and Product Supply. Whatever challenge you need to overcome, ICM makes it possible.

More Information

If you would be interested in learning more about ICM and how we could support your business, please contact us.

- Call 0844 863 3000
- enquiries@icm.co.uk
- icm.co.uk

