Requirements for Remote Services

Background

As part of the ITI Roadmap and IS plan, IS were asked to investigate the provision of remote desktop services to staff and students. Requirements were vague at the time the bids for funding had to be made and there was no guarantee that funding would be approved.

We are now in a position to move this request forward and two initial discovery meetings were held to better understand of the perceived requirements of the service.

The meetings were conducted to explore expected use case scenarios, without the involvement of specific technologies, to increase understanding of the following:-

- Which users will access the service (staff / students / both)?
- How users might access the system (client platform / location).
- What environment do users expect to see? (full desktop/single application window)
- What applications do users need to access?
- Where user data is likely to be stored and how it should be accessed.
- How many concurrent users are likely to use the service?
- Are there specific edge cases that may need to be provisioned in a different manner?

Meeting1 (23rd July) - Paul Clark / Alan Gilchrist/ Mark Wiseman / Tony Weir / Graham Newton

Students - Envisioned a common desktop experience for all students regardless of location, encompassing the same software as currently exists in central labs. Though it would be the Ideal to have fast networks in remote areas this is not always possible and so a remote access solution is seen as desirable. This same off-campus solution would also be applicable to distance learners. Data should be from their home directories, i.e. current infrastructure.

Staff – Some staff in shared areas require access to university environment on non-university owned PCs or networks, e.g. in NHS facilities. A common desktop similar to student is seen as ideal. Some staff are already using an Oracle "VDI" infrastructure for NHS work and so have an expectation level of University provided solution.

Secure data access was moved to another project by agreement between Paul Clark and Tony Weir.

Agree that the priority to address students first.

Paul Clark to provide a minimum application set for a suitable common desktop.

Meeting 2 (20th August) - Fraser Muir, Gareth Poxon, Mark Wiseman, Dave Ross, Graham Newton, Neil Bruce, Maurice Franceschi

Initial comments from Fraser:-

- Making licensed applications accessible from any device.
- Making physical spaces more flexible. I.E. Don't need to equip spaces as labs because they can be transitioned to labs "on the fly" by bringing in a range of BYOD devices.
- Elements of security where both the data and the applications working on the data are held centrally / on-site irrespective of where the end user is accessing them from.

- Required for off-campus / own device / away from desk / remote access

In terms of use case scenarios there was a perceived 90:10 split in favour of a common shared desktop/application set for all staff / students. The 10% use cases beyond a common desktop may require their own (VDI?) desktop and access to the Application Store.

For access students will be using BYOD (possibly tablets / laptops), again with reference of the transitioning of learning spaces to add-hoc labs.

Both on and off campus distance learners will be able to use whatever device is available to them, regardless of platform.

Application licensing was raised as an issue in that common set of applications truly licensed to all university users is very limited. Though various methods exist for enabling license compliance e.g. "only members of a specific Active Directory group may run the application." , there are no existing mechanisms to automatically determine who is and is not entitled to a specific application.

Indicative applications as part of desktop within HSS College include Office / SPSS/ R/ Nvivo.

It still needs to be decided how best to combine O365 (cloud or download) to devices versus delivering such applications via remote services but there was a strong direction from Fraser in providing a clean self-contained environment (all apps and data in same session) separate from users own device installed applications. The perceived advantage being to allow dependent applications to integrate cleanly as well as ensuring a common location for staff or student data.

Fraser to put together a minimum application set for common desktop

Gareth commented that SCE's requirements were much the same as MVM & HSS, some big apps might be required so need to think about physical GPU acceleration.

Gareth to put together any additional software items required for his college.

Summarising the requirements:-

	HSS	MVM	SCE
Which users will access the service (staff / students / both)?	Both	Both but mainly students	Both
How users might access the system (device / location).	BYOD	BYOD / Remote machines	Not known
What environment do they expect to see?	Fixed Windows desktop/ Same as labs (90%); niche / users own desktop (10%)	Fixed Windows desktop/ Same as labs (90%)	Fixed Windows desktop/ Same as labs (90%); some GPU intensive applications
What applications do they need to access?	Tbc but likely to be core set as in labs.	Tbc but likely to be core set as in labs.	tbc
Where the user data is likely to be accessed / stored?	on-site	on-site	on-site
How many concurrent users are likely to use the service?	Not known	Not known	Not known
Are there edge cases that need to be provided separately?	10% will require non-standard	As part of "safe haven" project	for GPU intensive apps

Next steps

1) It is likely, given the split between standard desktop and niche / specialist requirements, that we will phase this project, with phase one delivering the service that will satisfy "90%" of the requirements.

As the required application list has not been submitted we suggest that a good starting point for the fixed Windows desktop would be to provide an application set that mirrors the Open Access Labs (including Office, SPSS, R, Nvivo) as this is likely to be a superset of those required by staff and will be close to the majority of application required for teaching and learning for students. If agreed we will look at each of the applications in that set to ensure that:

- The application license allows them to be delivered via a remote type service.
- The scope of an application licensing in terms of how widely a fixed common desktop can be made available.
- The compatibility between applications to co-exist in a single common desktop.

2) Once we have agreement that we have captured these requirements we would seek to engage an external consultant to advise on the implementation of the project, including the best choice of technologies. As further phases of the project will include addressing the niche requirements described at our meetings it is important that the proposed technical solution is cognisant of these and does not preclude us expanding the service at a future date

3) The operating system hosting the applications needs to be confirmed (as part of the larger project work within Desktop Services) to form part of the deliverables for the project

4) Standard project benefits / objectives / deliverables need to be defined along with what is in scope and what is not in scope.

5) A collective meeting with the identified stakeholders to be organized to discuss the project and ensure that the deliverables defined meet envisioned requirements of the proposed service.

Graham Newton, Mark Wiseman, Dave Ross
Desktop Services
9th October 2015